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Part 6-Mars Stopover Missions Using Venus Swingbys

Supplement A: Tabular Trajectory Data For Zero Day Stopover Time

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Supplement to NASA SP-35
PART 6

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Supplement A: Tabular Trajectory Data For Zero Day Stopover Time

Prepared under contract
for NASA by
Douglas Aircraft Company

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SUPPLEMENT A

TABULAR TRAJECTORY DATA FOR ZERO-DAY STOPOVER TIME

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This is the first of three supplements to the Handbook of Mars Stopover Missions Using Venus Swingbys, Part 6 of NASA SP-35, Planetary Flight Handbook. NASA SP-35, Part 6, contains a general discussion, contour charts and related graphical information. Supplement B contains the tabular trajectory data for 30-day stopover time missions, and Supplement C contains the tabular trajectory data for 60-day stopover time missions.

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Section 4

TABULAR TRAJECTORY DATA FOR ZERO-DAY STOPOVER TIME

4.0 Introduction

The trajectory data are presented chronologically and are organized by holding stopover time, total mission duration, and Mars arrival date constant while varying Earth departure date in increments of 10 days. Next, the Mars arrival date is varied, also in increments of 10 days, followed by variations in total mission duration in increments of 40 days. Smaller increments in mission duration were felt unnecessary because most parameters of interest tend to vary smoothly with mission duration so that simple interpolation between points yields sufficient accuracy for most mission studies. If greater accuracy is required (e.g., for detailed launch window studies) fine grid data are available on the master magnetic tape discussed in the Appendix of NASA SP-35, Part 6.

Occasionally there exist multiple solutions for a given set of the four independent parameters--Earth launch date, Mars arrival date, mission duration, and stopover time. Each of the multiple solutions belongs to a different family and corresponds to a distinct Venus swingby date. When multiple solutions do occur, they are tabulated chronologically in terms of swingby date. The direct leg of the round trip mission is precisely the same for the multiple solutions and is simply repeated for each case.

Unlike the contour charts of Section 3, which present data for only the most favorable family of swingby solutions in each opportunity, the tables of trajectory data that follow contain solutions from several families in many of the opportunities. Any family of solutions located in the date ranges specified in Table 1-2 is represented in the tabular data. The specific round trip missions that are included in the tabulation were selected in the following manner. With the aid of sets of preliminary contour charts and information contained in the literature, a range of mission durations of interest was

defined for each opportunity. These ranges are presented in Table 4-1. Then, the round trip missions consisting of all possible combinations of the direct and swingby trajectories, with passage distances greater than 0.95 Venus radii, were formed for the three stopover times at 40 day increments over the selected ranges in mission duration. As the round trip missions were formed, the total mission velocities for both propulsive and aero braking at Mars were evaluated, and all the trajectory data were stored on tape. The minimum mission velocities were then defined for each mission duration and stopover time and were used to prepare the mission velocity plots of Section 3. A limit to the mission velocity for propulsive braking at Mars was then defined for each stopover time and was established as the lower of the following alternatives; (1) the minimum mission velocity for the shortest mission duration under consideration in each opportunity plus two kilometers per second, or (2) 22 kilometers per second. Finally, the magnetic tape of round trip missions was edited and only those missions for which the propulsive braking mission velocity is less than the predetermined limit are included in the tabulation.

TABLE 4-1

RANGES OF MISSION DURATIONS

OPPORTUNITY	MISSION DURATION (DAYS)	OPPORTUNITY	MISSION DURATION (DAYS)
1975 Inbound	480-680	1988 Inbound	480-680
1978 Outbound	480-720	1990 Outbound	440-680
1978 Inbound	480-680	1990 Inbound	440-640
1980 Outbound	480-720	1993 Outbound	480-720
1982 Inbound	480-680	1995 Inbound	480-640
1984 Outbound	480-680	1997 Outbound	440-720
1984 Inbound	440-640	1997 Inbound	440-680
1986 Outbound	480-680	1999 Outbound	480-720

The trajectory data consists of four printed lines per round trip mission. The first three lines describe each leg of the round trip trajectory in the order that each leg takes place. The fourth line contains various swingby parameters, mission velocities, and lighting conditions at arrival. At the

top of each page the stopover time is printed in the left corner, the opportunity is printed in the center, and the mission duration and first Mars arrival date (both Julian and calendar) is printed on the right. Immediately below this is printed the four line format describing the trajectory data, followed by the trajectory data itself. Missions representing multiple solutions and changes in Earth launch date are separated only by a blank line, whereas any change in Mars arrival date is indicated by a horizontal line. Each different mission duration is begun at the top of a new page. Data are presented for zero-, 30-, and 60-day stopover times. The data for the zero-day stopover time are presented in this section while the 30-day and 60-day data are presented in Sections 5 and 6 (Supplements B and C), respectively.

In the margins of the pages of tabular data are placed symbols beside those missions which were used in the mission velocity plots of Section 3. An asterisk in the margin denotes a mission within the family of solutions selected for graphical presentation which yields the minimum mission velocity for a particular mission duration using propulsive braking at Mars; a circle represents a corresponding case for aerodynamic braking at Mars. There will occasionally exist in some opportunities mission durations for which no mission is specifically indicated as the one used in the mission velocity plots. This is because the particular mission that yielded the point on the mission velocity plot was subsequently deleted from the tabular data because it violated the limit on propulsive braking mission velocity. The fact that such missions are not contained in the tabular data should cause no concern since the high velocities that resulted in their deletion would ultimately have prevented their serious consideration as favorable candidate missions.

Below are listed the symbols used in the format, followed by the definition of the parameter each symbol represents.

Symbol	Definition
LAUNCH	Julian date (minus 240 0000) at Earth launch.
SWNGBY	Julian date (minus 240 0000) at Venus swingby.
ARRIVE	Julian date (minus 240 0000) at Mars arrival.

Symbol	Definition
DEPART	Julian date (minus 240 0000) at Mars departure.
RETURN	Julian date (minus 240 0000) at Earth return.
SPEEDi	Hyperbolic excess speed at the i^{th} event* normalized to the Earth's mean orbital speed. (EMOS)
RAi	Right ascension of hyperbolic excess velocity vector (hyperbolic asymptote) as it emerges from the planet's sphere of influence at the i^{th} event; measured along the local planetary equator eastward from the "vernal equinox," i.e., where the Sun's apparent path rises above the departure planet's equator. For Venus, since the orientation of the planetary North Pole is unknown, the equator has been assumed coplanar with the orbit of Venus, and the "vernal equinox" of Venus is taken in the direction of its orbital perihelion. (DEGREES)
DECLi	Declination of hyperbolic excess velocity vector as it emerges from the planet's sphere of influence at the i^{th} event, measured positively northward and negatively southward from the planet's equator. (DEGREES)
I i	Inclination of transfer orbit to orbit of planet encountered at i^{th} event, measured positive if motion is from South to North at encounter and negative if motion is from North to South at encounter; zero corresponds to motion in the orbit plane in the direction of motion of the planet. (DEGREES)
V i	Heliocentric speed at the i^{th} event normalized to the Earth's mean orbital speed. (EMOS)
PSI i	Heliocentric trajectory path angle at the i^{th} event, measured counterclockwise from the outward heliocentric radius vector to the heliocentric velocity vector at departure and measured clockwise from the inward heliocentric radius vector to the heliocentric velocity vector at arrival. See Figure 4-1. (DEGREES)

*An event consists of either arrival at or departure from a planet. The events are numbered consecutively from one to six in the chronological order in which they occur. Thus, i=1 corresponds to Earth departure, i=2 corresponds to Venus arrival for outbound swingbys and Mars arrival for inbound swingbys, and so on through i=6 which corresponds to Earth arrival.

Symbol	Definition
ECCEN	Eccentricity of heliocentric transfer orbit.
SMA	Semimajor axis of the heliocentric transfer orbit. (AU)
THETi	True anomaly at the i^{th} event measured in the heliocentric transfer trajectory plane; for planetary departure (i.e., i=1, 3, or 5), the angle is reduced to $0 \leq \theta_i \leq 360^\circ$; the true anomaly at arrival equals the true anomaly at departure plus the transfer angle L. See Figure 4-1. (DEGREES)
PERIH	Perihelion distance of the heliocentric transfer orbit. This is the perihelion of the orbit whether or not the vehicle actually passes through it. If the vehicle does not pass through perihelion, a 'D' or 'A' follows the value, indicating that the closest approach to the sun is at departure or arrival, respectively. (AU)
APHEL	Aphelion distance of the heliocentric transfer orbit. This is the aphelion of the orbit whether or not the vehicle actually passes through it. If the vehicle does not pass through aphelion, a 'D' or 'A' follows the value, indicating that the farthest distance from the sun is at departure or arrival, respectively. (AU)
PROP	Total mission velocity requirements if propulsive braking is employed at Mars (i.e., PROP = DVL + DVA + DVD). (KM/SEC)
AERO	Total mission velocity requirements if atmospheric braking is employed at Mars (i.e., AERO = DVL + DVD). (KM/SEC)
DVL	Impulsive velocity requirement to launch out of a 485 KM circular Earth parking orbit. (KM/SEC)
DVA	Impulsive velocity requirement for braking into a 500 KM circular parking orbit about Mars. (KM/SEC)
EVA	Atmospheric entry velocity at a Mars altitude of 300 KM. (KM/SEC)
DVD	Impulsive velocity requirement to depart from a 500 KM circular parking orbit about Mars. (KM/SEC)
EVR	Atmospheric entry velocity at an Earth altitude of 120 KM. (KM/SEC)

Symbol	Definition
TYPE	Three digit flag to facilitate rapid scanning of the data. The digits (starting from the left) correspond to legs 1, 2, and 3, respectively. Each digit indicates whether the heliocentric transfer angle of the corresponding leg is less than 180 degrees (digit = 1) or greater than 180 degrees (digit = 2). (See Section 1 for a discussion of trajectory types.)
SUN A	Angle between the hyperbolic excess velocity vector at Mars arrival and the outward heliocentric radius vector; $0 \leq$ SUN A $\leq 180°$. See Figure 4-2. (DEGREES)
SUN R	Angle between the hyperbolic excess velocity vector at Earth return and the outward heliocentric radius vector; $0 \leq$ SUN R $\leq 180°$. See Figure 4-2. (DEGREES)
KAPPA	Bend angle of the Venus swingby hyperbola, measured between the incoming hyperbolic excess velocity vector as it emerges from Venus' sphere of influence and the outgoing hyperbolic excess velocity vector; $0 \leq$ KAPPA $\leq 180°$. (DEGREES)
-A	Negative semi-major axis of the swingby hyperbola. (VENUS RADII)
E	Eccentricity of the swingby hyperbola.
INC	Inclination of the swingby hyperbola with respect to Venus' equator. Values greater than 90 degrees indicate retrograde motion of the swingby hyperbola; $0 \leq$ INC $\leq 180°$. (DEGREES)
RAP	Right ascension of the swingby hyperbola pericenter measured eastward along the equator from Venus' vernal equinox; $0 \leq$ RAP $\leq 360°$. (DEGREES)
DECLP	Declination of the swingby hyperbola pericenter, positive in the Northern Hemisphere of Venus; $-90° \leq$ DECLP $\leq 90°$. (DEGREES)
ETA	Angle between pericenter of the swingby hyperbola and the inward heliocentric radius vector of Venus. Pericenter occurs on the sunlit face of Venus if ETA is less than 90 degrees; $0 \leq$ ETA $\leq 180°$. See Figure 4-3. An'L' or 'D' follows this quantity indicating light- and dark-side swingbys, respectively. (DEGREES)
PERIC	Pericenter distance of the swingby hyperbola. (VENUS RADII)

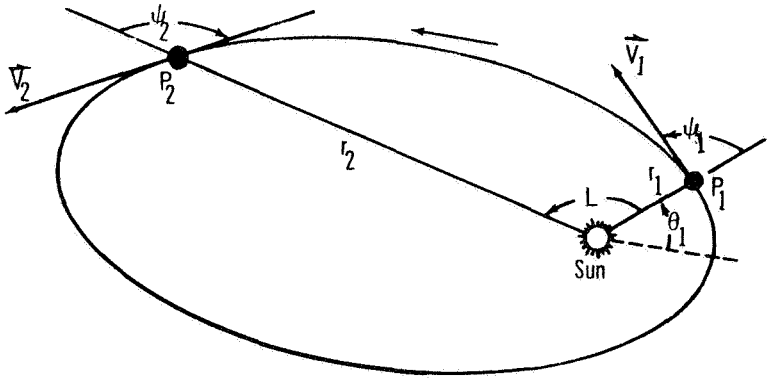


FIGURE 4-1. RELATIONSHIPS IN THE TRANSFER PLANE

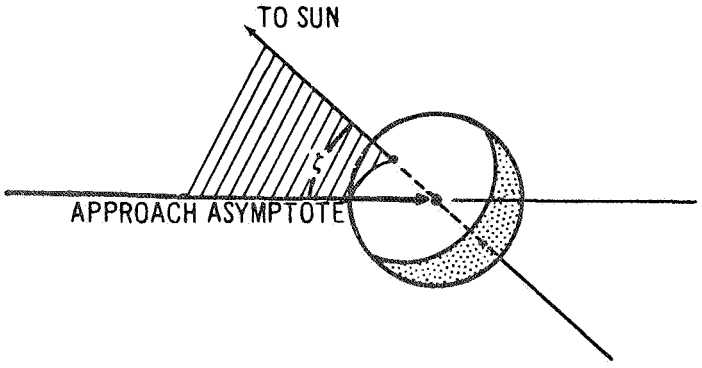


FIGURE 4-2. SUN ANGLE, ζ (SUN A OR SUN R) AT ARRIVAL

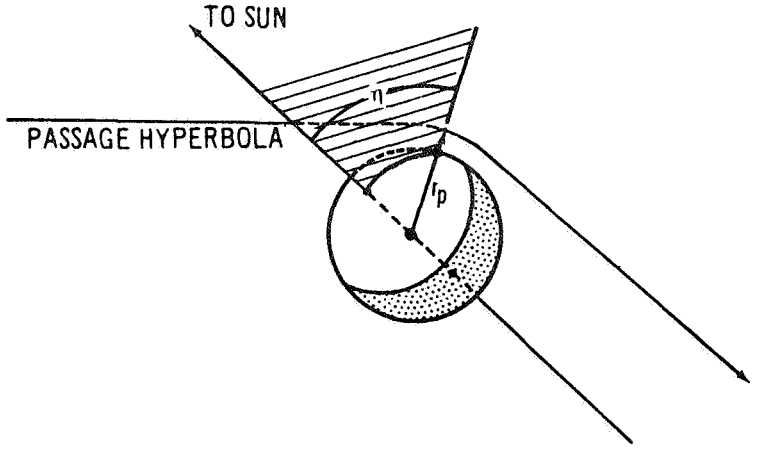


FIGURE 4-3. LIGHTING ANGLE, η (ETA) AT VENUS PASSAGE

1975

INBOUND SWINGBY

4.1

STOPOVER TIME = 0 DAYS — 1975 INBOUND SWINGBY — MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2442830 = 21 FEB 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERTC
MARS ARRIVAL DATE = 2442830 (21 FEB 1976)																				
4-2660	4-2830	.170	88.1	39.6	2.4	1.150	93.1	.337	1.511	347.5	481.6	1.002	2.020A	109.2	.754	-2.4	-13.3	189.7		.208
4-2830	4-3036.0	.203	131.2	23.3	1.7	.564	81.3	.501	1.097	171.1	285.5	.547A	1.646	66.9	1.361	.5	1.1	270.6		.547
4-3036.0	4-3140	.547	281.2	3.3	1.6	1.271	115.0	.450	.871	264.8	490.8	.479	1.262A	115.7	.941	2.1	26.4	71.2		.446
		13.01	8.61	4.28	4.40	7.80	4.33	17.28	1/1/2	15.1	22.8	10.8	.201	10.622	11.8	186.3	-11.6	92.3D		1.933
4-2670	4-2830	.166	82.8	37.7	2.0	1.156	91.2	.344	1.532	355.2	479.6	1.005	2.059A	109.8	.760	-1.9	-12.2	191.8		.214
4-2830	4-3039.7	.191	129.6	24.0	1.6	.574	82.2	.481	1.110	171.4	291.7	.576A	1.644	69.2	1.364	.5	1.3	272.9		.502
4-3039.7	4-3150	.502	287.1	5.0	2.2	1.254	113.1	.412	.840	264.7	495.0	.493	1.186A	112.4	.919	1.6	26.5	78.9		.308
		12.89	8.29	4.24	4.59	7.98	4.05	16.00	1/1/2	12.9	26.0	14.6	.238	7.846	15.0	190.8	-14.6	93.6D		1.632
4-2680	4-2830	.171	75.7	35.6	1.9	1.161	89.0	.352	1.546	3.8	118.3	1.003D	2.090A	110.4	.764	-1.5	-11.1	193.1		.222
4-2830	4-3043.0	.182	128.0	24.5	1.6	.581	82.9	.464	1.121	171.6	297.3	.600A	1.642	71.2	1.367	.5	1.5	274.8		.464
4-3043.0	4-3160	.464	292.5	6.6	2.6	1.239	111.4	.380	.817	264.5	499.7	.506	1.127A	109.1	.900	1.1	26.2	85.7		.335
		12.92	8.14	4.30	4.78	8.16	3.84	14.92	1/1/2	11.6	30.0	18.4	.279	6.270	16.6	194.8	-16.0	94.8D		1.472
MARS ARRIVAL DATE = 2442840 (2 MAR 1976)																				
4-2650	4-2840	.172	88.6	45.9	3.3	1.136	94.3	.311	1.449	341.6	489.8	.998	1.900A	106.6	.731	-3.4	-17.9	186.8		.178
4-2840	4-3032.7	.215	131.4	22.9	1.7	.544	82.9	.528	1.077	173.6	278.1	.509A	1.646	64.1	1.356	.6	1.2	269.2		.603
4-3032.7	4-3130	.603	275.6	1.6	.8	1.296	117.3	.496	.921	265.3	486.4	.464	1.378A	119.5	.974	2.7	25.8	63.3		.315
		12.68	8.02	4.31	3.76	7.16	4.61	16.92	1/1/2	22.4	19.9	6.4	.166	17.918	3.3	182.5	-3.0	90.8D		2.601
4-2660	4-2840	.161	84.9	42.4	2.8	1.142	92.7	.316	1.467	348.8	487.4	1.004	1.931A	107.3	.737	-2.6	-15.4	190.3		.184
4-2840	4-3036.7	.200	129.4	23.6	1.6	.557	83.9	.503	1.094	173.9	284.9	.544A	1.644	66.7	1.360	.6	1.4	272.0		.550
4-3036.7	4-3140	.550	282.1	3.3	1.6	1.274	115.1	.453	.877	265.2	490.1	.480	1.274A	116.1	.946	2.1	26.3	71.7		.451
		12.34	8.44	4.18	3.89	7.29	4.27	17.42	1/1/2	18.7	22.3	10.3	.198	11.192	11.0	187.5	-10.7	92.2D		2.023
4-2670	4-2840	.158	78.7	39.6	2.2	1.147	90.8	.321	1.481	356.7	485.6	1.005	1.957A	107.8	.741	-2.0	-13.7	192.5		.190
4-2840	4-3040.4	.189	127.4	24.3	1.5	.567	84.8	.482	1.108	174.3	291.2	.574A	1.642	69.1	1.364	.7	1.7	274.3		.505
4-3040.4	4-3150	.505	288.1	5.1	2.2	1.256	113.2	.415	.844	265.1	494.2	.494	1.194A	112.7	.922	1.5	26.4	79.5		.393
		12.17	8.13	4.13	4.03	7.43	4.00	16.11	1/1/2	16.3	25.4	14.1	.236	8.137	14.3	192.0	-13.9	93.5D		1.683
4-2680	4-2840	.163	71.1	36.6	2.0	1.151	88.6	.327	1.489	5.6	124.7	1.002D	1.977A	108.3	.744	-1.6	-12.3	193.9		.196
4-2840	4-3043.7	.180	125.5	24.8	1.5	.575	85.5	.465	1.120	174.7	296.9	.599A	1.641	71.1	1.367	.7	1.9	276.2		.466
4-3043.7	4-3160	.466	293.5	6.7	2.7	1.241	111.5	.382	.820	264.9	498.9	.507	1.133A	109.4	.903	1.0	26.0	86.4		.340
		12.17	8.00	4.21	4.17	7.56	3.80	15.00	1/1/2	15.0	29.4	17.9	.277	6.436	16.0	196.0	-15.3	94.8D		1.506
4-2690	4-2840	.181	64.1	33.4	1.8	1.153	86.1	.334	1.489	15.5	124.8	.991D	1.986A	108.7	.743	-1.2	-11.0	194.3		.201
4-2840	4-3046.7	.173	123.7	25.2	1.4	.582	86.0	.452	1.129	175.1	302.0	.619A	1.639	72.8	1.369	.7	2.2	277.6		.433
4-3046.7	4-3170	.433	298.3	8.1	3.0	1.230	110.0	.354	.803	264.7	504.2	.518	1.087A	106.2	.887	.7	25.4	92.0		.292
		12.35	8.07	4.43	4.29	7.68	3.64	14.08	1/1/2	14.6	34.5	21.4	.321	5.382	16.7	199.4	-15.8	96.1D		1.405
4-2700	4-2840	.211	59.2	30.3	1.6	1.153	83.3	.343	1.478	26.7	125.2	.970D	1.985A	109.2	.740	-.9	-9.4	195.8		.206
4-2840	4-3049.2	.167	122.2	25.4	1.3	.587	86.4	.441	1.137	175.4	306.4	.635A	1.639	74.3	1.371	.8	2.5	278.5		.406
4-3049.2	4-3160	.406	302.4	9.2	3.2	1.221	108.8	.331	.789	264.5	510.1	.528	1.051A	103.0	.873	.4	24.8	95.7		.249
		12.78	8.38	4.85	4.41	7.80	3.53	13.33	1/1/2	15.4	41.2	24.6	.365	4.689	16.9	202.1	-15.8	97.4D		1.345
MARS ARRIVAL DATE = 2442850 (12 MAR 1976)																				
4-2650	4-2850	.168	86.3	50.6	3.9	1.130	94.0	.296	1.421	342.6	495.3	1.000	1.841A	104.8	.718	-4.0	-21.5	186.0		.162
4-2850	4-3033.4	.214	129.3	23.3	1.7	.538	85.9	.530	1.076	176.4	277.5	.506A	1.645	63.8	1.355	.7	1.5	270.6		.607
4-3033.4	4-3130	.607	276.5	1.6	.8	1.300	117.4	.500	.929	265.7	485.7	.464	1.394A	119.9	.979	2.7	25.7	63.8		.522
		12.26	8.85	4.26	3.41	6.81	4.59	19.08	1/1/2	27.3	19.4	5.9	.163	19.460	1.8	183.6	-.9	90.8D		3.014
4-2660	4-2850	.155	81.6	45.6	3.0	1.135	92.3	.299	1.434	350.0	493.1	1.005	1.864A	105.4	.722	-2.9	-17.8	190.3		.183
4-2850	4-3037.4	.200	126.9	24.0	1.6	.551	86.9	.504	1.093	176.9	284.5	.542A	1.644	66.6	1.360	.8	1.7	273.3		.554
4-3037.4	4-3140	.554	283.0	3.4	1.6	1.277	115.2	.456	.883	265.6	489.4	.480	1.285A	116.4	.950	2.0	26.3	72.3		.457
		11.84	8.36	4.11	3.48	6.88	4.25	17.55	1/1/2	22.7	21.8	9.8	.196	11.732	10.1	188.6	-9.7	92.2D		2.104
4-2670	4-2850	.152	74.7	41.6	2.8	1.139	90.4	.303	1.444	358.2	491.6	1.006	1.882A	105.9	.725	-2.2	-15.4	192.9		.169
4-2850	4-3041.1	.189	124.5	24.6	1.5	.562	87.6	.483	1.108	177.5	290.9	.573A	1.643	68.9	1.364	.8	2.0	275.6		.507
4-3041.1	4-3150	.507	288.9	5.1	2.2	1.258	113.3	.417	.849	265.4	493.5	.494	1.203A	113.0	.925	1.5	26.3	80.1		.398
		11.64	8.07	4.06	3.57	6.97	4.00	16.22	1/1/2	20.0	24.9	13.7	.233	8.385	13.6	193.1	-13.1	93.6D		1.724
4-2660	4-2850	.158	86.9	37.7	2.1	1.142	88.3	.308	1.448	7.3	131.0	1.001D	1.894A	106.3	.727	-1.7	-13.6	194.3		.174
4-2850	4-3044.4	.180	122.3	25.1	1.4	.571	88.3	.466	1.120	178.0	296.7	.598A	1.643	71.0	1.367	.8	2.3	277.3		.468
4-3044.4	4-3160	.468	294.3	6.7	2.7	1.243	111.6	.384	.823	265.3	498.2	.507	1.140A	109.7	.905	1.0	25.8	87.1		.344
		11.61	7.95	4.14	3.66	7.06	3.81	15.08	1/1/2	18.7	28.8	17.5	.275	6.570	15.3	197.0	-14.6	94.9D		1.531
4-2690	4-2850	.176	60.3	33.7	2.0	1.144	85.8	.315	1.444	17.5	131.5	.989D	1.898A	106.6	.725	-1.3	-11.8	194.7		.177
4-2850	4-3047.3	.174	120.3	25.5	1.3	.578	88.8	.452	1.131	178.5	301.9	.619A	1.642	72.8	1.369	.9	2.7	278.7		.434
4-3047.3	4-3170	.434	299.1	8.1	3.0	1.231	110.1	.355	.805	265.1	503.5	.519	1.091A	106.5	.889	.6	25.1	92.7		.295
		11.78	8.03	4.37	3.75	7.14	3.67	14.14	1/1/2	18.5	33.8	21.1	.319	5.461	16.1	200.3	-15.1	96.2D		1.423
4-2700	4-2850	.206	56.0	30.2	1.8	1.144	83.0	.324	1.430	28.9	132.9	.967D	1.893A	106.9	.721	-.9	-10.0	194.0		.181
4-2850	4-3049.9	.169	118.5	25.7	1.2	.583	89.1	.442	1.139	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	279.6		.407
4-3049.9	4-3160	.407	303.3	9.3	3.3	1.222	108.8	.332	.792	264.9	509.4	.529	1.054A	103.3	.875	.5	24.3	96.6		.252
		12.18	8.35	4.79	3.83	7.23	3.56	13.38	1/1/2	19.5	40.3	24.4	.363	4.738	16.3	203.1	-15.0	97.5D		1.358
4-2710	4-2850	.249	54.2	27.7	1.8	1.141	79.8	.337	1.405	41.6	135.7	.931D	1.880A	107.3	.712	-.8	-7.7	192.1		.186
4-2850	4-3052.0	.166	117.2	25.8	1.2	.587	89.4	.434	1.145	179.2	310.1	.648A	1.642	75.4	1.372	1.0	3.3	280.2		.385
4-3052.0	4-3190	.385	306.7	10.2	3.4	1.215	107.8	.314	.782	264.6	516.0	.536	1.027A	100.1	.864	.1	23.5	98.0		.215
		12.87	8.94	5.45	3.93	7.33	3.49	12.79	1/1/2	21.9	49.1	27.2	.405	4.256	16.2	205.1	-14.6	98.7D		1.318
MARS ARRIVAL DATE = 2442860 (22 MAR 1976)																				
4-2650	4-2860	.169	83.8	56.4	4.7	1.125	93.6	.284	1.399	343.5	500.7	1.002	1.796A	103.0	.707	-4.7	-26.1	184.0		.149
4-2860	4-3034.0	.215	126.6	23.8	1.6	.533	89.3	.532	1.076	179.4	277.1	.503A	1.648	63.6	1.355	.9	1.7	271.9		.611
4-3034.0	4-3130	.611	277.4	1.6	.9	1.303	117.5	.504	.937	266.1	485.1	.465	1.410A	120.2	.983	2.7	25.7	64.3		.528
		12.05	8.90	4.27	3.15	6.55	4.63	19.23	1/1/2	33.4	19.0	5.5	.161	20.906	2.1	184.6	1.3	90.9D		3.206
4-2660	4-2860	.152	78.3	49.2	3.4	1.129	92.0	.286	1.409	351.1	498.7	1.006	1.813A	103.5	.710	-3.2	-20.7	189.6		.149
4-2860	4-3038.0	.202	123.8	24.5	1.5	.548	90.1	.506	1.094	180.1	284.2	.541A	1.648D	66.4	1.360	.9	2.0	274.5		.557
4-3038.0	4-3140	.557	283.8	3.4	1.7	1.280	115.3	.459	.888	266.0	488.7	.480	1.296A	116.7	.954	2.0	26.2	72.8		.462
		11.52	8.38	4.07	3.14	6.54	4.31	17.67	1/1/2	27.4	21.4	9.4	.194	12.187	9.1	189.6	-8.7	92.3D		2.169
4-2670	4-2860	.148	70.8	43.8	2.7	1.133	90.1	.289	1.415	359.5	497.4	1.006	1.825A	104.0	.713	-2.4	-17.4	192.7		.151
4-2860	4-3041.7	.192	121.1	25.1	1.4	.560	90.8	.485	1.110	180.8	290.7	.572A	1.648D	68.8	1.364	.9	2.3	276.6		.510
4-3041.7	4-3150	.510	289.7	5.2	2.3	1.260	113.4	.420	.853	265.8	492.9	.495	1.211A	113.3	.929	1.4	26.1	80.6		.402
		11.28	8.10	4.02	3.19	6.59	4.07	16.31	1/1/2	24.2	24.4	13.4	.231	8.576	12.9	194.0	-12.4	93.6D		1.752
4-2680	4-2860	.155	65.1	38.7	2.3	1.136	88.0	.294	1.416	8.8	137.0	1.000D	1.832A	104.3	.713	-1.8	-14.9	194.3		.154
4-2860	4-3045.0	.184	118.6	25.5	1.3	.569	91.3	.468	1.123	181.5	296.7	.598A	1.649D	71.0	1.367	1.0	2.7	278.3		.469
4-3045.0	4-3160	.469	295.1	6.8	2.8	1.245	111.6	.386	.827	265.6	497.6	.508	1.145A	110.0	.908	.9	25.7	87.6		.347
		11.24	7.99	4.10	3.25	6.65	3.90	15.16	1/1/2	22.8	28.2	17.3	.273	6.662	14.7	197.9	-13.9	95.0D		1.548
4-2690	4-2860	.173	57.0	34.0	2.1	1.137	85.6	.300	1.410	19.2	137.5	.987D	1.833A	104.6	.711	-1.3	-12.7	194.6		.157
4-2860	4-3047.9	.178	116.4	25.8	1.2	.576	91.7	.454	1.134	182.1	302.0	.619A	1.649D	72.8	1.370	1.0	3.0	279.5		.435
4-3047.9	4-3170	.435	299.9	8.2	3.1	1.233	110.1	.356	.807	265.4	502.9	.520	1.095A	106.7	.891	.5	24.9	93.4		.298
		11.40	8.09	4.35	3.30	6.71	3.77	14.20	1/1/2	22.7	33.2	20.9	.317	5.508	15.5	201.2	-14.3	96.3D		1.430
4-2700	4-2860	.204	53.4	30.2	1.9	1.136	82.9	.309	1.396	30.8	139.2	.964D	1.827A	104.8	.705	-.9	-10.4	193.7		.160
4-2860	4-3050.5	.174	114.5	25.9	1.1	.582	92.1	.444	1.143	182.6	306.6	.636A	1.649D	74.3	1.372	1.1	3.4	280.4		.407
4-3050.5	4-3180	.407	304.1	9.4	3.3	1.223	108.8	.333	.793	265.2	508.8	.530	1.057A	103.8	.877	.2	24.1	97.4		.255
		11.78	8.42	4.74	3.36	6.76	3.67	13.42	1/1/2	24.1	39.6	24.3	.362	4.759	15.7	203.8	-14.2	97.7D		1.362
4-2710	4-2860	.245	52.3	27.6	1.8	1.133	79.8	.323	1.371	43.5	142.0	.920D	1.815A	104.9	.696	-.6	-7.8	191.5		.163
4-2860	4-3052.6	.171	113.0	26.0	1.1	.586	92.3	.436	1.149	183.0	310.3	.648A	1.650D	75.5	1.373	1.1	3.8	280.9		.386
4-3052.6	4-3190	.386	307.5	10.2	3.4	1.216	107.8	.314	.783	264.9	515.3	.537	1.029A	100.4	.865	.0	23.2	99.0		.217
		12.44	9.00	5.40	3.44	6.84	3.60	12.82	1/1/2	26.9	48.2	27.1	.405	4.262	15.6	205.9	-13.8	98.9D		1.319
MARS ARRIVAL DATE = 2442870 (1 APR 1976)																				
4-2650	4-2870	.176	81.0	63.7	5.9	1.121	93.4	.274	1.382	344.3	505.9	1.003	1.761A	101.2	.697	-5.8	-32.0	180.2		.142
4-2870	4-3034.6	.221	123.3	24.3	1.6	.532	93.0	.535	1.079	182.6	276.9	.502A	1.655D	63.5	1.356	1.0	2.0	273.0		.618
4-3034.6	4-3130	.615	276.2	1.6	.9	1.307	117.7	.508	.945	266.5	484.4	.465	1.426A	120.5	.988	2.7	25.7	64.7		.534
		12.12	9.12	4.37	3.00	6.41	4.76	19.38	1/1/2	41.0	18.7	5.2	.159	22.088	4.1	185.5	3.7	91.0D		3.353

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2442870
1 APR 1976

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-2660	4-2870	.152	74.8	53.3	3.9	1.125	91.7	.276	1.390	352.1	504.1	1.006	1.773A	101.8	.700	-3.7	-24.2	188.0	.136
4-2870	4-3038.6	.208	120.2	25.0	1.5	.547	93.6	.509	1.098	183.5	284.1	.540A	1.657D	66.3	1.361	1.0	2.3	275.5	.560
4-3038.6	4-3140	.560	284.6	3.5	1.7	1.282	115.4	.462	.894	266.3	488.1	.481	1.307A	117.0	.957	1.9	26.1	73.2	.467
		11.40	8.52	4.07	2.88	6.29	4.46	17.78	1/1/2	32.9	21.0	9.2	.192	12.506	8.1	190.4	-7.6	92.4D	2.207
4-2670	4-2870	.146	67.1	46.1	3.0	1.128	89.8	.278	1.394	.7	143.0	1.006D	1.782A	102.1	.702	-2.6	-19.6	192.0	.136
4-2870	4-3042.2	.199	117.2	25.5	1.4	.559	94.2	.487	1.115	184.4	290.8	.572A	1.658D	68.8	1.365	1.0	2.6	277.5	.512
4-3042.2	4-3150	.512	290.5	5.2	2.3	1.262	113.4	.422	.857	266.1	492.3	.495	1.218A	113.6	.931	1.4	26.0	81.1	.406
		11.12	8.23	4.00	2.88	6.29	4.24	16.40	1/1/2	29.0	24.0	13.2	.229	8.686	12.2	194.8	-11.5	93.7D	1.762
4-2680	4-2870	.152	59.7	39.8	2.5	1.130	87.8	.282	1.393	10.2	142.8	1.000D	1.786A	102.4	.702	-1.9	-16.3	193.8	.136
4-2870	4-3045.5	.192	114.6	25.8	1.3	.569	94.6	.470	1.129	185.2	296.9	.598A	1.660D	70.9	1.369	1.1	3.0	279.1	.471
4-3045.5	4-3160	.471	295.8	6.9	2.8	1.247	111.7	.387	.829	265.9	497.0	.508	1.151A	110.2	.910	.9	25.5	86.1	.351
		11.06	8.15	4.07	2.91	6.32	4.07	15.23	1/1/2	27.3	27.8	17.2	.271	6.700	14.0	198.6	-13.1	95.1D	1.544
4-2690	4-2870	.171	54.2	34.4	2.2	1.131	85.4	.288	1.385	20.7	143.5	.986D	1.785A	102.6	.699	-1.4	-13.6	194.1	.139
4-2870	4-3048.5	.187	112.3	26.0	1.2	.577	95.0	.457	1.140	186.0	302.3	.620A	1.661D	72.8	1.372	1.1	3.4	280.2	.436
4-3048.5	4-3170	.436	300.6	8.3	3.1	1.234	110.1	.358	.810	265.7	502.3	.520	1.099A	107.0	.893	.5	24.8	94.0	.301
		11.20	8.26	4.30	2.95	6.36	3.95	14.25	1/1/2	27.4	32.6	20.9	.316	5.513	14.9	201.8	-13.6	96.5D	1.424
4-2700	4-2870	.202	51.4	30.3	2.0	1.130	82.7	.298	1.370	32.3	145.2	.962D	1.779A	102.7	.693	-1.0	-10.8	193.0	.141
4-2870	4-3051.0	.183	110.4	26.1	1.1	.583	95.2	.446	1.149	186.6	307.0	.637A	1.662D	74.3	1.374	1.2	3.8	281.0	.408
4-3051.0	4-3180	.408	304.8	9.4	3.3	1.224	108.8	.333	.795	265.5	508.2	.530	1.060A	103.8	.878	.2	23.8	98.1	.257
		11.57	8.58	4.72	2.99	6.39	3.87	13.46	1/1/2	29.0	39.0	24.3	.361	4.748	15.1	204.4	-13.5	97.9D	1.354
4-2710	4-2870	.243	50.8	27.5	1.9	1.127	79.7	.313	1.347	45.0	148.0	.925D	1.768A	102.7	.684	-.6	-7.8	190.5	.144
4-2870	4-3053.1	.180	108.9	26.1	1.0	.588	95.4	.438	1.156	187.1	310.8	.650A	1.663D	75.5	1.375	1.2	4.2	281.4	.386
4-3053.1	4-3190	.386	308.2	10.3	3.4	1.217	107.8	.314	.785	265.2	514.7	.538	1.031A	100.6	.867	-.0	23.0	99.9	.219
		12.21	9.16	5.35	3.05	6.45	3.81	12.85	1/1/2	32.3	47.4	27.3	.404	4.240	15.0	206.5	-13.0	99.2D	1.310
MARS ARRIVAL DATE = 2442880 (11 APR 1976)																			
4-2650	4-2880	.195	77.0	73.0	7.7	1.118	93.1	.267	1.368	345.0	511.0	1.003	1.733A	99.6	.690	-7.5	-39.5	173.4	.144
4-2880	4-3035.2	.230	119.6	24.8	1.6	.534	97.0	.538	1.085	186.1	276.9	.501A	1.669D	63.3	1.358	1.1	2.2	273.9	.619
4-3035.2	4-3150	.619	278.9	1.7	.9	1.310	117.8	.512	.954	266.8	483.6	.465	1.442A	120.8	.993	2.6	25.7	65.1	.540
		12.66	9.62	4.63	3.04	6.45	4.99	19.52	1/1/2	50.6	18.3	5.0	.157	22.752	6.4	186.2	6.1	91.2D	3.416
4-2660	4-2880	.155	71.0	58.3	4.6	1.121	91.5	.268	1.375	352.9	509.4	1.007	1.742A	100.0	.692	-4.3	-28.5	185.2	.126
4-2880	4-3039.1	.219	116.4	25.4	1.4	.550	97.4	.512	1.106	187.2	284.3	.540A	1.672D	66.2	1.363	1.1	2.5	276.3	.563
4-3039.1	4-3140	.563	285.3	3.5	1.7	1.285	115.5	.465	.899	266.6	487.6	.481	1.318A	117.2	.961	1.9	26.1	73.6	.472
		11.51	8.81	4.11	2.70	6.11	4.71	17.89	1/1/2	39.4	20.6	9.1	.190	12.630	7.1	191.1	-6.4	92.5D	2.208
4-2670	4-2880	.145	63.6	48.8	3.4	1.124	89.6	.270	1.377	1.7	148.4	1.006D	1.748A	100.4	.693	-2.9	-22.2	190.4	.123
4-2880	4-3042.7	.210	113.3	25.8	1.3	.563	97.8	.491	1.123	188.3	291.1	.572A	1.675D	68.7	1.368	1.2	2.9	276.1	.514
4-3042.7	4-3150	.514	291.2	5.3	2.3	1.264	113.5	.424	.860	266.4	491.8	.495	1.225A	113.8	.934	1.3	25.9	81.5	.410
		11.14	8.50	4.00	2.64	6.05	4.50	16.49	1/1/2	34.3	23.6	13.2	.227	8.690	11.4	195.4	-10.6	93.9D	1.748
4-2680	4-2880	.151	56.7	41.0	2.7	1.126	87.6	.273	1.375	11.3	148.3	.999D	1.751A	100.6	.693	-2.0	-17.9	192.7	.123
4-2880	4-3046.0	.204	110.6	26.0	1.2	.573	98.1	.474	1.138	189.3	297.3	.599A	1.677D	70.9	1.372	1.2	3.3	279.6	.473
4-3046.0	4-3160	.473	296.5	6.9	2.8	1.248	111.7	.389	.832	266.1	496.5	.509	1.155A	110.4	.912	.8	25.4	88.6	.354 *
		11.06	8.42	4.06	2.64	6.06	4.35	15.29	1/1/2	32.3	27.4	17.2	.269	6.669	13.3	199.1	-12.3	95.4D	1.526
4-2690	4-2880	.170	52.0	34.9	2.3	1.127	85.3	.280	1.367	21.9	149.1	.984D	1.749A	100.7	.689	-1.5	-14.4	193.1	.124
4-2880	4-3048.9	.199	108.3	26.1	1.1	.581	98.4	.460	1.150	190.1	302.8	.621A	1.680D	72.8	1.374	1.2	3.7	280.6	.437
4-3048.9	4-3170	.437	301.3	8.3	3.1	1.235	110.2	.359	.812	265.9	501.8	.521	1.103A	107.2	.894	.4	24.6	94.5	.304
		11.20	8.54	4.29	2.66	6.07	4.25	14.30	1/1/2	32.5	32.2	21.1	.314	5.469	14.2	202.3	-12.8	96.8D	1.404
4-2700	4-2880	.200	49.8	30.4	2.1	1.126	82.7	.290	1.352	33.5	150.8	.960D	1.744A	100.7	.684	-1.0	-11.1	191.8	.126
4-2880	4-3051.5	.196	106.4	26.1	1.0	.587	98.6	.450	1.160	190.9	307.6	.638A	1.682D	74.4	1.377	1.3	4.1	281.3	.409
4-3051.5	4-3180	.409	305.4	9.5	3.3	1.225	108.9	.334	.797	265.7	507.7	.531	1.063A	104.0	.880	.1	23.6	98.7	.259
		11.56	8.67	4.70	2.69	6.10	4.18	13.50	1/1/2	34.4	38.4	24.6	.360	4.697	14.5	204.8	-12.7	98.3D	1.332
4-2710	4-2880	.240	49.8	27.6	1.9	1.123	79.7	.305	1.329	46.1	153.5	.923D	1.735A	100.6	.674	-.6	-7.5	189.0	.129
4-2880	4-3053.6	.194	104.9	26.1	.9	.592	98.8	.442	1.168	191.4	311.5	.651A	1.684D	75.6	1.378	1.3	4.5	281.6	.386
4-3053.6	4-3190	.386	308.9	10.3	3.4	1.218	107.8	.315	.786	265.5	514.2	.539	1.033A	100.8	.868	-.1	22.7	100.6	.220
		12.18	9.44	5.32	2.74	6.15	4.12	12.88	1/1/2	38.2	46.7	27.6	.404	4.185	14.4	206.8	-12.2	99.7D	1.266
MARS ARRIVAL DATE = 2442890 (21 APR 1976)																			
4-2660	4-2890	.164	66.3	64.5	5.6	1.119	91.3	.261	1.363	353.6	514.5	1.007	1.719A	98.4	.686	-5.2	-34.1	180.5	.122
4-2890	4-3039.7	.234	112.5	25.7	1.4	.557	101.6	.517	1.116	191.3	284.7	.541A	1.696D	66.2	1.367	1.2	2.8	276.8	.566
4-3039.7	4-3140	.566	286.0	3.6	1.7	1.287	115.6	.468	.904	266.9	487.0	.481	1.328A	117.5	.984	1.9	26.0	74.0	.476
		11.90	9.29	4.21	2.61	6.02	5.09	18.00	1/1/2	47.3	20.3	9.2	.188	12.496	6.0	191.7	-5.1	92.8D	2.161
4-2670	4-2890	.147	60.1	51.9	3.8	1.121	89.5	.263	1.364	2.5	153.6	1.006D	1.723A	98.7	.687	-3.3	-25.4	187.8	.113
4-2890	4-3043.2	.227	109.5	25.9	1.3	.570	101.8	.495	1.137	192.5	291.7	.574A	1.700D	68.7	1.372	1.3	3.1	278.5	.516
4-3043.2	4-3150	.516	291.8	5.4	2.4	1.266	113.6	.426	.864	266.7	491.3	.496	1.232A	114.0	.937	1.3	25.9	81.9	.414
		11.37	8.91	4.01	2.46	5.88	4.90	16.57	1/1/2	40.5	23.2	13.4	.226	8.563	10.5	195.9	-9.6	94.3D	1.706
4-2680	4-2890	.151	54.1	42.6	3.0	1.123	87.4	.267	1.361	12.2	153.6	.998D	1.724A	98.8	.685	-2.2	-19.7	190.9	.112
4-2890	4-3046.5	.221	106.9	26.1	1.2	.580	101.9	.479	1.153	193.7	298.0	.601A	1.704D	71.0	1.375	1.3	3.5	279.8	.474
4-3046.5	4-3160	.474	297.1	7.0	2.8	1.249	111.8	.390	.835	266.4	496.0	.509	1.160A	110.6	.914	.8	25.3	89.0	.357
		11.25	8.82	4.06	2.43	5.85	4.76	15.35	1/1/2	38.0	27.0	17.5	.268	6.556	12.6	199.5	-11.3	95.7D	1.487
4-2690	4-2890	.170	50.1	35.5	2.5	1.123	85.2	.273	1.353	22.9	154.4	.983D	1.722A	98.9	.682	-1.6	-15.3	191.4	.112
4-2890	4-3049.4	.217	104.6	26.1	1.1	.589	102.1	.466	1.166	194.7	303.7	.623A	1.709D	72.9	1.379	1.3	4.0	280.7	.438
4-3049.4	4-3170	.438	301.9	8.4	3.2	1.236	110.2	.360	.813	266.1	501.3	.521	1.106A	107.3	.896	.4	24.4	94.9	.306
		11.39	8.95	4.28	2.43	5.85	4.67	14.35	1/1/2	38.1	31.7	21.5	.313	5.365	13.5	202.6	-11.9	97.3D	1.366
4-2700	4-2890	.199	48.6	30.7	2.2	1.122	82.6	.284	1.338	34.4	156.1	.959D	1.718A	98.8	.676	-1.1	-11.2	190.0	.113
4-2890	4-3051.9	.215	102.8	26.1	1.0	.595	102.3	.456	1.176	195.5	308.5	.640A	1.712D	74.5	1.381	1.4	4.4	281.2	.409
4-3051.9	4-3180	.409	306.0	9.5	3.4	1.226	108.9	.334	.798	265.9	507.2	.531	1.065A	104.1	.881	.1	23.5	99.2	.261
		11.74	9.29	4.68	2.45	5.87	4.61	13.53	1/1/2	40.4	37.9	25.1	.359	4.600	13.9	205.1	-11.8	98.8D	1.293
4-2710	4-2890	.238	49.0	27.7	2.0	1.119	79.7	.299	1.316	46.8	158.6	.922D	1.710A	98.6	.667	-.6	-7.1	187.0	.116
4-2890	4-3054.0	.213	101.5	26.0	.9	.600	102.4	.448	1.184	196.2	312.6	.654A	1.715D	75.8	1.383	1.4	4.8	281.5	.386
4-3054.0	4-3190	.386	309.5	10.4	3.4	1.219	107.8	.315	.787	265.7	513.7	.539	1.035A	101.0	.869	-.1	22.5	101.5	.222
		12.35	9.84	5.28	2.50	5.92	4.56	12.90	1/1/2	44.6	46.1	28.3	.404	4.092	13.9	207.0	-11.3	100.2D	1.248
MARS ARRIVAL DATE = 2442900 (1 MAY 1976)																			
4-2660	4-2900	.181	58.4	72.3	7.2	1.116	91.2	.256	1.354	354.2	519.4	1.007	1.701A	96.8	.681	-6.7	-40.9	172.9	.124
4-2900	4-3040.2	.256	108.9	25.8	1.4	.569	105.9	.523	1.137	195.7	285.6	.543A	1.732D	66.2	1.372	1.4	3.0	277.1	.568
4-3040.2	4-3140	.568	286.6	3.6	1.8	1.289	115.7	.471	.910	267.2	486.5	.481	1.338A	117.7	.967	1.8	26.0	74.4	.481
		12.72	10.05	4.43	2.66	6.07	5.62	18.10	1/1/2	56.6	19.9	9.5	.186	12.060	5.0	192.1	-3.8	93.2D	2.059
4-2670	4-2900	.151	56.5	55.8	4.4	1.119	89.4	.258	1.355	3.1	158.6	1.006D	1.704A	97.0	.681	-3.8	-29.3	183.9	.106
4-2900	4-3043.7	.249	106.0	26.0	1.5	.582	106.0	.502	1.158	197.2	292.8	.576A	1.739D	68.8	1.377	1.4	3.4	278.6	.518
4-3043.7	4-3150	.518	292.4	5.4	2.4	1.268	113.6	.428	.867	266.9	490.8	.496	1.239A	114.2	.939	1.2	25.8	82.3	.417
		11.85	9.51	4.06	2.34	5.76	5.45	16.64	1/1/2	47.5	22.9	13.9	.224	8.282	9.5	196.2	-8.4	94.7D	1.630
4-2680	4-2900	.152	51.8	44.4	3.3	1.120	87.3	.261	1.361	12.9	158.7	.998D	1.704A	97.2	.680	-2.5	-21.7	188.1	.102
4-2900	4-3046.9	.244	103.6	26.0	1.1	.593	106.0	.486	1.175	198.5	299.2	.604A	1.745D	71.1	1.381	1.4	3.8	279.7	.475
4-3046.9	4-3160	.475	297.7	7.0	2.9	1.251	111.8	.391	.837	266.6	495.6	.509	1.165A	110.8	.916	.7	25.2	89.4	.360
		11.67	9.40	4.07	2.27	5.69	5.33	15.41	1/1/2	44.3	26.6	18.1	.266	6.347	11.7	199.7	-10.3	96.3D	1.422
4-2690	4-2900	.169	48.6	36.4	2.6	1.121	85.1	.266	1.343	23.5	159.5	.983D	1.702A	97.1	.677	-1.7	-16.2	189.1	.101
4-2900	4-3049.8	.241	101.5	26.0	1.0	.601	106.0	.473	1.189	199.7	304.9	.626A	1.751D	73.0	1.384	1.4	4.2	280.5	.439
4-3049.8	4-3170	.439	302.4	8.4	3.2	1.237	110.2	.360	.815	266.4	500.9	.521	1.109A	107.5	.897	.3	24.3	95.4	.308
		11.78	9.52	4.28	2.26	5.68	5.24	14.39	1/1/2	44.4	31.5	22.2	.312	5.194	12.7	202.6	-10.9	97.9D	1.306
4-2700	4-2900	.198	47.7	31.1	2.3	1.120	82.6	.279	1.328	35.0	161.1	.956D	1.699A	97.0	.671	-1.1	-11.3	187.7	.102
4-2900	4-3052.3	.236	99.9	25.9	.9	.607	106.1	.464	1.200	200.6	309.9	.644A	1.756D	74.7	1.387	1.4	4.7	280.8	.410
4-3052.3	4-3180	.410	306.5	9.6	3.4	1.227	108.9	.335	.799	266.1	506.8	.532	1.067A	104.3	.882	.0	23.3	99.7	.263
		12.12	9.85	4.66	2.28	5.70	5.18	13.56	1/1/2	46.9	37.4	26.0	.358	4.451	13.2	205.0	-10.9	99.5D	1.237

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2442900
1 MAY 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-2710	4-2900	.236	48.6	27.9	2.0	1.117	79.8	.295	1.308	47.2	163.3	.922D	1.693A	96.7	.662	-.7	-6.6	184.5	.105
4-2900	4-3054.4	.236	98.7	25.8	.8	.612	106.1	.456	1.208	201.3	314.0	.657A	1.760D	76.0	1.389	1.5	5.1	280.9	.386
4-3054.4	4-3190	.386	310.0	10.4	3.5	1.219	107.8	.315	.788	265.9	513.3	.540	1.036A	101.2	.870	-.2	22.3	101.9	.223
		12.72	10.39	5.25	2.33	5.74	5.14	12.92	1/1/2	51.5	45.5	29.3	.403	3.956	13.3	206.9	-10.5	101.0D	1.192
MARS ARRIVAL DATE = 2442910 (11 MAY 1976)																			
4-2670	4-2910	.159	51.9	60.7	5.3	1.117	89.3	.254	1.347	3.6	163.4	1.005D	1.689A	95.5	.678	-4.6	-34.1	178.4	.103
4-2910	4-3044.1	.277	103.1	25.9	1.2	.600	110.3	.512	1.189	202.4	294.3	.561A	1.797D	68.9	1.385	1.5	3.6	278.4	.520
4-3044.1	4-3190	.520	293.0	5.5	2.4	1.270	113.7	.430	.871	267.2	490.3	.496	1.245A	114.4	.942	1.2	25.7	82.7	.421
		12.62	10.33	4.15	2.29	5.71	6.18	16.72	1/1/2	55.6	22.6	14.7	.222	7.842	8.6	196.3	-7.2	99.3D	1.520
4-2660	4-2910	.154	49.6	46.8	3.6	1.118	87.3	.257	1.343	13.4	163.5	.998D	1.689A	95.5	.676	-2.8	-24.2	184.5	.095
4-2910	4-3047.8	.273	100.9	25.9	1.1	.611	110.2	.496	1.207	203.9	300.9	.608A	1.806D	71.3	1.390	1.5	4.1	279.3	.477
4-3047.8	4-3160	.477	298.2	7.1	2.9	1.252	111.8	.393	.839	266.9	495.1	.510	1.169A	111.0	.918	-.7	25.1	89.8	.363
		12.31	10.15	4.09	2.16	5.58	6.06	15.47	1/1/2	51.3	26.3	19.1	.265	6.035	10.6	199.7	-9.2	97.0D	1.352
4-2690	4-2910	.169	47.5	37.5	2.8	1.119	85.1	.264	1.335	24.0	164.3	.982D	1.688A	95.5	.673	-1.8	-17.1	186.0	.093
4-2910	4-3050.2	.270	99.1	25.8	-1.0	.619	110.1	.484	1.222	205.2	306.7	.631A	1.814D	73.2	1.393	1.5	4.5	278.8	.440
4-3050.2	4-3170	.440	302.9	6.5	3.2	1.256	110.2	.361	.917	266.6	500.5	.522	1.112A	107.7	.899	.3	24.2	95.8	.311
		12.39	10.26	4.26	2.13	5.55	5.98	14.43	1/1/2	51.2	31.0	23.3	.310	4.950	11.9	202.5	-9.9	98.7D	1.226
4-2700	4-2910	.197	47.1	31.7	2.4	1.118	82.6	.275	1.321	38.3	165.0	.958D	1.688A	95.5	.667	-1.2	-11.3	184.0	.094
4-2910	4-3052.7	.267	97.6	25.7	-.9	.625	110.0	.475	1.234	206.2	311.7	.648A	1.820D	74.9	1.395	1.5	5.0	280.0	.410
4-3052.7	4-3180	.410	307.1	9.7	3.4	1.228	108.9	.336	.801	266.3	509.4	.532	1.069A	104.5	.883	.0	23.1	100.2	.265
		12.71	10.57	4.65	2.14	5.56	5.92	13.60	1/1/2	55.9	37.0	27.2	.357	4.247	12.8	204.6	-9.9	100.4D	1.161

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 520 DAYS | MARS ARRIVAL DATE = 2442830 | 21 FEB 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2442830 (21 FEB 1976)																				
4-2630	4-2830	.219	89.6	54.2	5.8	1.129	97.5	.317	1.432	326.2	491.1	.976	1.885A	106.8	.729	-8.3	-23.9	173.1	.109	
4-2830	4-3039.7	.191	129.6	24.0	1.6	.574	82.2	.481	1.110	171.4	291.7	.576A	1.644	69.2	1.364	.5	1.3	272.9	.502	
4-3039.7	4-3150	.502	287.1	5.0	2.2	1.254	113.1	.412	.840	264.7	493.0	.493	1.186A	112.4	.919	1.6	26.3	76.9	.300	
		13.05	9.04	4.98	4.01	7.41	4.05	16.00	1/1/2	31.3	26.0	14.6	.238	7.848	15.0	190.8	-14.8	93.8D	1.632	
4-2640	4-2830	.194	91.1	45.9	3.8	1.136	96.2	.323	1.459	334.1	487.5	.988	1.931A	107.7	.738	-4.1	-17.9	182.4	.191	
4-2830	4-3043.0	.182	128.0	24.5	1.6	.581	82.9	.464	1.121	171.8	297.3	.600A	1.642	71.2	1.367	.5	1.5	274.8	.464	
4-3043.0	4-3160	.464	292.5	6.6	2.8	1.239	111.4	.380	.817	264.5	499.7	.506	1.127A	109.1	.900	1.1	26.2	85.7	.335	
		12.49	8.45	4.61	4.04	7.44	3.84	14.92	1/1/2	23.0	30.0	18.4	.279	6.270	16.6	194.8	-16.0	94.8D	1.472	
4-2650	4-2830	.179	90.8	41.9	2.9	1.143	94.8	.330	1.486	340.5	484.3	.996	1.976A	108.5	.747	-3.1	-15.0	186.7	.198	
4-2830	4-3046.0	.174	126.5	24.9	1.5	.587	83.5	.451	1.130	171.9	302.3	.620A	1.640	72.9	1.369	.6	1.8	276.3	.432	
4-3046.0	4-3170	.432	297.3	8.0	3.0	1.228	110.0	.353	.800	264.4	505.0	.518	1.082A	105.9	.884	.7	25.6	91.1	.266	
		12.29	8.08	4.40	4.21	7.60	3.68	14.01	1/1/2	18.2	35.2	21.9	.323	5.276	17.4	198.2	-16.8	98.1D	1.380	
4-2660	4-2830	.170	86.1	39.6	2.4	1.150	93.1	.337	1.511	347.5	481.6	1.002	2.020A	109.2	.754	-2.4	-13.3	189.7	.206	
4-2830	4-3048.5	.169	125.2	25.2	1.5	.592	83.9	.441	1.137	172.2	306.5	.636A	1.638	74.3	1.371	.6	2.0	277.3	.405	
4-3048.5	4-3180	.405	301.4	9.2	3.2	1.220	108.8	.330	.787	264.2	510.9	.527	1.047A	102.7	.871	.4	24.9	94.7	.246	
		12.24	7.84	4.26	4.40	7.80	3.55	13.28	1/1/2	15.1	42.1	25.0	.366	4.618	17.6	201.0	-16.6	97.3D	1.324	
4-2670	4-2830	.166	82.8	37.7	2.0	1.156	91.2	.344	1.532	355.2	479.6	1.005	2.059A	109.8	.760	-1.9	-12.2	191.8	.214	
4-2830	4-3050.5	.165	124.2	25.4	1.4	.596	84.3	.433	1.142	172.4	309.9	.647A	1.636	75.4	1.372	.7	2.3	278.0	.385	
4-3050.5	4-3190	.385	304.7	10.0	3.3	1.213	107.9	.313	.778	263.9	517.6	.534	1.022A	99.5	.860	.2	24.2	95.5	.210	
		12.30	7.71	4.24	4.59	7.98	3.47	12.72	1/1/2	12.9	51.5	27.7	.405	4.181	17.6	203.1	-16.3	98.3D	1.288	
4-2680	4-2830	.171	75.7	35.6	1.9	1.161	89.0	.352	1.546	3.8	118.3	1.003D	2.090A	110.4	.764	-1.5	-11.1	193.1	.222	
4-2830	4-3051.8	.162	123.5	25.5	1.4	.598	84.5	.429	1.146	172.5	312.2	.654A	1.637	76.1	1.373	.7	2.4	278.3	.372	
4-3051.8	4-3200	.372	307.1	10.5	3.4	1.208	107.3	.302	.771	263.5	525.1	.538	1.004A	96.3	.851	.1	23.8	92.5	.182	
		12.49	7.72	4.30	4.78	8.16	3.41	12.34	1/1/2	11.6	64.2	29.7	.434	3.908	17.3	204.5	-15.9	99.0D	1.262	
4-2690	4-2830	.188	68.5	33.0	1.7	1.165	86.5	.360	1.551	13.4	118.1	.993D	2.110A	110.9	.765	-1.2	-10.1	193.6	.229	
4-2830	4-3052.3	.161	123.3	25.5	1.4	.598	84.5	.427	1.147	172.6	312.9	.657A	1.637	76.4	1.373	.7	2.5	278.4	.368	
4-3052.3	4-3210	.368	308.1	10.7	3.4	1.205	107.1	.298	.766	262.6	533.6	.536	.995A	92.7	.843	.0	23.8	84.6	.167	
		12.66	7.92	4.52	4.95	8.33	3.40	12.15	1/1/2	11.1	81.5	30.6	.444	3.788	17.0	205.1	-15.5	99.2D	1.237	
MARS ARRIVAL DATE = 2442840 (2 MAR 1976)																				
4-2640	4-2840	.191	89.8	51.8	4.6	1.130	95.8	.306	1.428	335.0	492.8	.990	1.866A	105.9	.724	-4.9	-22.5	181.2	.175	
4-2840	4-3043.7	.180	125.5	24.8	1.5	.575	85.5	.465	1.120	174.7	296.9	.599A	1.641	71.1	1.367	.7	1.9	276.2	.466	
4-3043.7	4-3160	.466	293.5	6.7	2.7	1.241	111.5	.382	.820	264.9	498.9	.507	1.133A	109.4	.903	1.0	26.0	86.4	.340	
		12.05	8.36	4.56	3.69	7.09	3.80	15.00	1/1/2	28.6	29.4	17.9	.277	6.436	16.0	196.0	-15.3	94.8D	1.506	
4-2650	4-2840	.172	88.6	45.9	3.3	1.136	94.3	.311	1.449	341.6	489.8	.998	1.900A	106.6	.731	-3.4	-17.9	186.8	.178	
4-2840	4-3046.7	.173	123.7	25.2	1.4	.582	86.0	.452	1.129	175.1	302.0	.619A	1.639	72.8	1.369	.7	2.2	277.6	.433	
4-3046.7	4-3170	.433	298.3	8.1	3.0	1.230	110.0	.354	.803	264.7	504.2	.518	1.087A	106.2	.887	.7	25.4	92.0	.292	
		11.71	7.95	4.31	3.76	7.16	3.64	14.08	1/1/2	22.4	34.5	21.4	.321	5.382	16.7	199.4	-15.8	96.1D	1.405	
4-2660	4-2840	.161	84.9	42.4	2.6	1.142	92.7	.316	1.467	348.8	487.4	1.004	1.931A	107.3	.737	-2.6	-15.4	190.3	.184	
4-2840	4-3049.2	.167	122.2	25.4	1.5	.587	86.4	.441	1.137	175.4	306.4	.635A	1.639	74.3	1.371	.6	2.5	276.5	.406	
4-3049.2	4-3160	.406	302.4	9.2	3.2	1.221	108.8	.331	.789	264.5	510.1	.528	1.051A	103.0	.873	.4	24.6	95.7	.249	
		11.60	7.70	4.18	3.89	7.29	3.53	13.33	1/1/2	18.7	41.2	24.6	.365	4.689	16.9	202.1	-15.8	97.4D	1.345	
4-2670	4-2840	.158	78.7	39.6	2.2	1.147	90.8	.321	1.481	356.7	485.6	1.005	1.957A	107.8	.741	-2.0	-13.7	192.5	.190	
4-2840	4-3051.3	.164	121.0	25.6	1.5	.591	86.7	.434	1.143	175.7	309.9	.647A	1.638	75.4	1.372	.8	2.8	279.2	.385	
4-3051.3	4-3190	.385	305.8	10.1	3.3	1.214	107.8	.313	.780	264.3	516.8	.535	1.025A	99.9	.862	.1	23.9	96.8	.212	
		11.61	7.58	4.13	4.03	7.43	3.45	12.76	1/1/2	16.3	50.2	27.4	.405	4.228	16.8	204.2	-15.4	98.5D	1.307	
4-2680	4-2840	.163	71.1	36.6	2.0	1.151	88.6	.327	1.489	5.6	124.7	1.002D	1.977A	108.3	.744	-1.6	-12.3	193.9	.196	
4-2840	4-3052.7	.161	120.1	25.6	1.2	.593	86.9	.429	1.146	175.9	312.4	.655A	1.638	76.2	1.373	.9	3.1	279.5	.371	
4-3052.7	4-3200	.371	308.2	10.6	3.4	1.209	107.2	.302	.773	263.9	524.2	.540	1.006A	96.6	.853	.0	23.4	94.5	.184	
		11.77	7.60	4.21	4.17	7.56	3.39	12.36	1/1/2	15.0	62.6	29.4	.436	3.937	16.5	205.6	-14.9	99.3D	1.280	
4-2690	4-2840	.181	64.1	33.4	1.8	1.153	86.1	.334	1.489	15.5	124.8	.991D	1.986A	108.7	.743	-1.2	-11.0	194.3	.201	
4-2840	4-3053.2	.160	119.8	25.7	1.2	.594	87.0	.427	1.148	176.0	313.3	.658A	1.638	76.5	1.373	.9	3.2	279.6	.366	
4-3053.2	4-3210	.366	309.4	10.7	3.4	1.206	107.0	.297	.768	263.1	532.5	.540	.996A	93.1	.845	-.0	23.2	87.0	.167	
		12.09	7.80	4.43	4.29	7.68	3.38	12.15	1/1/2	14.6	79.3	30.5	.449	3.799	16.2	206.3	-14.4	99.5D	1.256	
4-2700	4-2840	.211	59.2	30.3	1.8	1.153	85.3	.343	1.478	26.7	126.2	.970D	1.985A	109.2	.740	-.9	-9.4	193.8	.206	
4-2840	4-3052.4	.162	120.3	25.6	1.2	.593	86.9	.430	1.146	175.9	311.8	.653A	1.638	76.0	1.373	.8	3.0	279.5	.374	
4-3052.4	4-3220	.374	308.9	10.5	3.4	1.203	107.4	.303	.764	261.5	542.3	.532	.996	89.0	.837	.0	22.9	75.1	.171	
		12.66	8.25	4.65	4.41	7.80	3.41	12.19	1/1/2	15.4	100.3	30.1	.429	3.848	16.0	205.8	-14.4	98.6D	1.221	
MARS ARRIVAL DATE = 2442850 (12 MAR 1976)																				
4-2600	4-2850	.237	78.2	-.8	-5.0	1.103	100.2	.291	1.328	312.4	513.2	.942	1.714A	100.1	.683	4.2	25.2	182.5	.123	
4-2850	4-3029.0	.231	131.5	22.5	1.7	.521	84.8	.560	1.056	175.9	270.1	.464A	1.647	60.8	1.349	.7	1.3	267.5	.667	
4-3029.0	4-3120	.667	269.6	-.2	-.1	1.328	119.8	.550	.994	265.8	482.5	.448	1.541A	123.4	1.013	3.5	24.7	55.0	.592	
		12.91	10.28	5.27	2.63	6.04	5.02	20.82	2/1/2	49.4	17.6	2.6	.135	44.218	34.7	178.1	34.7	89.5L	5.836	
4-2640	4-2850	.195	88.6	59.8	5.9	1.124	95.4	.293	1.404	335.8	498.1	.993	1.816A	104.1	.712	-6.1	-28.4	178.3	.165	
4-2850	4-3044.4	.180	122.3	25.1	1.4	.571	86.3	.466	1.120	178.0	296.7	.598A	1.645	71.0	1.367	.8	2.3	277.3	.468	
4-3044.4	4-3160	.468	294.3	6.7	2.7	1.243	111.6	.384	.823	265.3	498.2	.507	1.140A	109.7	.905	1.0	25.8	87.1	.344	
		11.91	8.44	4.63	3.47	6.87	3.81	15.08	1/1/2	35.8	28.8	17.5	.275	6.570	15.3	197.0	-14.6	94.9D	1.531	
4-2650	4-2850	.168	86.3	50.8	3.9	1.130	94.0	.296	1.421	342.6	495.3	1.000	1.841A	104.8	.718	-4.0	-21.5	186.0	.182	
4-2850	4-3047.3	.174	120.3	25.5	1.3	.578	86.8	.452	1.131	178.5	301.9	.619A	1.642	72.8	1.369	.9	2.7	276.7	.434	
4-3047.3	4-3170	.434	299.1	8.1	3.0	1.231	110.1	.355	.805	265.1	503.5	.519	1.091A	106.5	.889	.6	25.1	92.7	.295	
		11.34	7.93	4.26	3.41	6.81	3.67	14.14	1/1/2	27.3	33.8	21.1	.319	5.461	16.1	200.3	-15.1	96.2D	1.423	
4-2660	4-2850	.155	81.6	45.6	3.0	1.135	92.3	.299	1.434	350.0	493.1	1.005	1.864A	105.4	.722	-2.9	-17.8	190.3	.165	
4-2850	4-3049.9	.169	118.5	25.7	1.2	.583	89.1	.442	1.139	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	279.8	.407	
4-3049.9	4-3180	.407	303.3	9.3	3.3	1.222	108.8	.332	.792	264.9	509.4	.529	1.054A	103.5	.875	.3	24.3	96.8	.252	
		11.14	7.67	4.11	3.48	6.88	3.56	13.38	1/1/2	22.7	40.3	24.4	.363	4.738	16.3	203.1	-15.0	97.5D	1.358	
4-2670	4-2850	.152	74.7	41.6	2.5	1.139	90.4	.303	1.444	358.2	491.6	1.006	1.882A	105.9	.725	-2.2	-15.4	192.9	.189	
4-2850	4-3052.0	.166	117.2	25.8	1.2	.587	89.4	.434	1.143	179.2	310.1	.648A	1.642	75.4	1.372	1.0	3.3	280.2	.365	
4-3052.0	4-3190	.385	306.7	10.2	3.4	1.215	107.8	.314	.782	264.6	516.0	.536	1.027A	100.1	.864	.1	25.5	98.0	.215	
		11.12	7.55	4.06	3.57	6.97	3.49	12.79	1/1/2	20.0	49.1	27.2	.405	4.256	16.2	205.1	-14.6	98.7D	1.318	
4-2680	4-2850	.156	66.9	37.7	2.1	1.142	88.3	.308	1.448	7.3	131.0	1.001D	1.894A	106.3	.727	-1.7	-13.6	194.3	.174	
4-2850	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.5	.371	
4-3053.4	4-3200	.371	309.2	10.7	3.4	1.210	107.2	.301	.775	264.2	523.3	.541	1.008A	96.8	.854	-.1	23.0	95.9	.165	
		11.24	7.58	4.14	3.66	7.06	3.44	12.38	1/1/2	18.7	61.1	29.3	.437	3.950	15.9	206.6	-13.9	99.6D	1.290	
4-2690	4-2850	.176	60.3	33.7	2.0	1.144	85.8	.315	1.444	17.5	131.3	.989D	1.898A	106.6	.725	-1.3	-11.8	194.7	.177	
4-2850	4-3054.1	.162	115.8	25.8	1.1	.591	89.7	.427	1.151	179.6	313.8	.659A	1.642	76.6	1.374	1.0	3.8	280.6	.364	
4-3054.1	4-3210	.364	310.6	10.8	3.4	1.207	106.9	.296	.769	263.5	531.6	.542	.997A	93.5	.846	-.1	22.8	89.1	.167	
		11.53	7.78	4.37	3.75	7.14	3.42	12.15	1/1/2	16.5	77.4	30.5	.453	3.797	15.4	207.3	-13.4	99.9D	1.266	
4-2700	4-2850	.206	56.0	30.2	1.8	1.144	83.0	.324	1.430	28.9	132.9	.967D	1.893A	106.9	.721	-.9	-10.0	194.0	.161	
4-2850	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.5	.371	
4-3053.4	4-3220	.371	310.3	10.5	3.4	1.204	107.3	.301	.765	262.0	541.1	.535	.995	89.5	.839	-.1	22.6	77.6	.166	
		12.05	8.22	4.79	3.83	7.23	3.44	12.16	1/1/2	19.5	96.0	30.3	.437	3.823	15.2	207.0	-13.2	99.2D	1.234	
4-2710	4-2850	.249	54.2	27.7	1.8	1.141	79.8	.337	1.405	41.6	135.7	.951D	1.880A	107.3	.712	-.8	-7.7	192.1	.186	
4-2850	4-3049.9	.169	118.5	25.7	1.2	.583	89.1	.442	1.139	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	279.8	.407	
4-3049.9	4-3230	.407	306.4	9.8	3.5	1.201	109.1	.329	.760	256.5	553.1	.510	1.011	83.7	.831	.3	22.3	83.0	.207	
		12.95	9.02	5.45	3.93	7.33	3.56	12.68	1/1/2	21.9	121.3	27.5	.383	4.204	15.9	204.6	-14.4	96.0D	1.164	
MARS ARRIVAL DATE = 2442860 (22 MAR 1976)																				
4-2600	4-2860	.229	77.6	2.2	-4.3	1.101	100.0	.286	1.320	312.4	517.7	.943	1.697A	98.4	.673	3.5	24.1	180.1	.110	
4-2860	4-3029.7	.233	129.2	23.0	1.7	.515	88.3	.563	1.055	178.7	269.5	.461A	1.649	60.5	1.349	.9	1.5	266.8	.672	
4-3029.7	4-3120	.672	270.5	-.2	-.1	1.332	119.9	.555	1.006	266.2	481.9	.448	1.565A	123.7	1.019	3.5	24.7	55.4	.600	
		12.58	10.18	5.13	2.40	5.82	5.05	21.01	2/1/2	54.0	17.2	2.4	.133	48.449	46.0	178.9	46.0	89.7L	6.307	

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2442660
22 MAR 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	$SPEED1 / $SPEED3 / $SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	$SPEED2 / $SPEED4 / $SPEED6 / PERIC
4-2610	4-2860	.234	63.6	-9.8	-6.7	1.105	98.9	.283	1.337	317.8	313.6	.956	1.716A	99.6	.683	6.1	31.2	191.9	.132
4-2860	4-3034.0	.215	126.6	23.8	1.6	.533	89.3	.532	1.076	179.4	277.1	.503A	1.648	65.6	1.355	.9	1.7	271.9	.611
4-3034.0	4-3130	.611	277.4	1.6	.9	1.303	117.5	.504	.937	266.1	485.1	.465	1.410A	120.2	.983	2.7	25.7	64.3	.526
		12.64	9.84	5.21	2.80	6.21	4.63	19.23	2/1/2	52.6	19.0	5.5	.161	20.906	2.1	164.6	1.3	90.9D	5.206
4-2640	4-2860	.214	66.5	70.0	8.0	1.120	95.1	.282	1.385	336.5	503.3	.994	1.777A	102.3	.702	-8.1	-38.4	172.3	.165
4-2860	4-3045.0	.184	118.6	25.5	1.5	.569	91.3	.468	1.123	181.5	296.7	.598A	1.649D	71.0	1.367	1.0	2.7	278.3	.469
4-3045.0	4-3160	.469	295.1	6.8	2.8	1.245	111.6	.386	.827	265.6	497.6	.508	1.145A	110.0	.908	.9	25.7	87.6	.347
		12.27	8.79	4.90	3.48	6.88	3.90	15.16	1/1/2	45.6	28.2	17.3	.273	6.662	14.7	197.9	-13.9	95.0D	1.545
4-2650	4-2860	.169	83.8	56.4	4.7	1.125	93.6	.284	1.399	343.5	500.7	1.002	1.796A	103.0	.707	-4.7	-26.1	184.0	.149
4-2860	4-3047.9	.178	116.4	25.8	1.2	.576	91.7	.454	1.134	182.1	302.0	.619A	1.649D	72.8	1.370	1.0	3.0	279.5	.435
4-3047.9	4-3170	.435	299.9	8.2	3.1	1.233	110.1	.356	.807	265.4	502.9	.520	1.095A	106.7	.891	.5	24.9	93.4	.298
		11.19	8.04	4.27	3.15	6.55	3.77	14.20	1/1/2	33.4	33.2	20.9	.317	5.506	15.5	201.2	-14.3	96.3D	1.430
4-2660	4-2860	.152	78.3	49.2	3.4	1.129	92.0	.286	1.409	351.1	498.7	1.006	1.813A	103.5	.710	-3.2	-20.7	189.6	.149
4-2860	4-3050.5	.174	114.5	25.9	1.1	.582	92.1	.444	1.143	182.6	306.6	.636A	1.649D	74.3	1.372	1.1	3.4	280.4	.407
4-3050.5	4-3180	.407	304.1	9.4	3.3	1.223	108.6	.333	.793	265.2	508.8	.530	1.057A	103.6	.877	.2	24.1	97.4	.255
		10.88	7.74	4.07	3.14	6.54	3.67	13.42	1/1/2	27.4	39.6	24.3	.362	4.759	15.7	203.8	-14.2	97.7D	1.362
4-2670	4-2860	.148	70.8	43.8	2.7	1.133	90.1	.289	1.415	359.5	497.4	1.006	1.825A	104.0	.713	-2.4	-17.4	192.7	.151
4-2860	4-3052.6	.171	113.0	26.0	1.1	.586	92.3	.436	1.149	183.0	310.3	.648A	1.650D	75.5	1.373	1.1	3.8	280.9	.366
4-3052.6	4-3190	.385	307.5	10.2	3.4	1.216	107.8	.314	.783	264.9	515.3	.537	1.029A	100.4	.865	.0	23.2	99.0	.217
		10.81	7.62	4.02	3.19	6.59	3.60	12.82	1/1/2	24.2	48.2	27.1	.405	4.262	15.6	205.9	-13.8	98.9D	1.319
4-2680	4-2860	.155	63.1	38.7	2.3	1.136	88.0	.294	1.416	8.8	137.0	1.000D	1.832A	104.3	.713	-1.8	-14.9	194.3	.154
4-2860	4-3054.1	.169	112.0	26.0	1.0	.589	92.5	.431	1.154	183.3	313.0	.657A	1.650D	76.3	1.374	1.1	4.1	281.2	.370
4-3054.1	4-3200	.370	310.1	10.7	3.4	1.211	107.1	.301	.776	264.6	522.6	.542	1.010A	97.2	.858	-.1	22.7	97.2	.187
		10.91	7.66	4.10	3.25	6.65	3.56	12.40	1/1/2	22.8	59.9	29.4	.438	3.943	15.2	207.3	-13.1	99.9D	1.290
4-2690	4-2860	.175	57.0	34.0	2.1	1.137	85.6	.300	1.410	19.2	137.5	.987D	1.833A	104.6	.711	-1.3	-12.1	194.6	.157
4-2860	4-3054.8	.168	111.5	26.0	1.0	.590	92.6	.428	1.156	183.5	314.3	.661A	1.650D	76.7	1.375	1.2	4.3	281.3	.363
4-3054.8	4-3210	.363	311.6	10.9	3.4	1.207	106.8	.295	.771	263.9	530.8	.543	.998A	93.8	.847	-.2	22.4	96.9	.168
		11.17	7.87	4.33	3.30	6.71	3.54	12.15	1/1/2	22.7	75.7	30.7	.456	3.777	14.8	208.1	-12.5	100.3D	1.266
4-2700	4-2860	.204	53.4	30.2	1.9	1.136	82.9	.309	1.396	30.8	139.2	.964D	1.827A	104.8	.705	-.9	-10.4	193.7	.160
4-2860	4-3054.8	.169	111.8	26.0	1.0	.590	92.5	.430	1.154	183.4	313.5	.658A	1.650D	76.5	1.375	1.1	4.1	281.2	.368
4-3054.8	4-3220	.368	311.5	10.6	3.4	1.204	107.1	.299	.766	262.5	540.2	.538	.995	89.9	.840	-.2	22.3	79.9	.166
		11.66	8.30	4.74	3.36	6.76	3.55	12.14	1/1/2	24.1	95.9	30.6	.444	3.784	14.5	207.9	-12.2	99.8D	1.237
4-2710	4-2860	.245	52.5	27.6	1.8	1.133	79.8	.323	1.371	43.5	142.0	.928D	1.815A	104.9	.696	-.6	-7.6	191.5	.163
4-2860	4-3051.8	.173	113.9	26.0	1.1	.584	92.2	.440	1.145	182.8	308.1	.641A	1.650D	74.8	1.373	1.1	3.6	280.6	.398
4-3051.8	4-3230	.398	308.5	9.9	3.4	1.202	108.6	.323	.762	259.3	551.7	.516	1.008	84.5	.832	.1	22.2	65.8	.199
		12.48	9.04	5.40	3.44	6.84	3.64	12.56	1/1/2	26.9	118.8	28.2	.379	4.108	14.8	206.0	-13.0	96.9D	1.178

MARS ARRIVAL DATE = 2442870 (1 APR 1976)

4-2600	4-2870	.223	77.2	4.5	-3.7	1.099	99.9	.282	1.314	312.4	522.1	.944	1.685A	96.0	.670	3.0	23.9	177.3	.100
4-2870	4-3030.4	.237	126.3	23.5	1.7	.513	92.3	.567	1.056	181.7	269.1	.458A	1.654D	60.3	1.349	1.0	1.7	270.1	.678
4-3030.4	4-3120	.678	271.5	-.2	-.1	1.336	120.1	.560	1.019	266.6	481.2	.448	1.590A	124.0	1.025	3.5	24.7	55.8	.607
		12.44	10.20	5.04	2.24	5.66	5.16	21.20	2/1/2	59.8	16.8	2.3	.131	50.032	57.0	179.5	57.0	90.1D	6.419
4-2610	4-2870	.219	82.6	-4.4	-5.3	1.103	98.8	.278	1.329	318.0	518.1	.960	1.699A	98.0	.677	4.8	28.5	189.0	.115
4-2870	4-3034.6	.221	123.3	24.3	1.6	.532	93.0	.535	1.079	182.6	276.9	.502A	1.655D	63.5	1.356	1.0	2.0	273.0	.615
4-3034.6	4-3130	.615	278.2	1.6	.9	1.307	117.7	.508	.945	266.5	484.4	.465	1.426A	120.5	.988	2.7	25.7	64.7	.534
		12.21	9.73	4.97	2.49	5.90	4.76	19.38	2/1/2	55.5	18.7	5.2	.159	22.088	4.1	185.5	5.7	91.0D	5.353
4-2650	4-2870	.176	81.0	63.7	5.9	1.121	93.4	.274	1.362	344.3	505.9	1.003	1.761A	101.2	.697	-5.8	-32.0	180.2	.142
4-2870	4-3048.8	.187	112.3	26.0	1.2	.577	95.0	.457	1.140	186.0	302.3	.620A	1.661D	72.8	1.372	1.1	3.4	280.2	.436
4-3048.8	4-3170	.436	300.6	8.3	3.1	1.234	110.1	.358	.810	265.7	502.3	.520	1.099A	107.0	.893	.5	24.8	94.0	.301
		11.32	8.32	4.37	3.00	6.41	3.95	14.25	1/1/2	41.0	32.6	20.9	.316	5.513	14.9	201.8	-13.6	96.5D	1.424
4-2660	4-2870	.152	74.8	53.3	3.9	1.125	91.7	.276	1.390	352.1	504.1	1.006	1.773A	101.8	.700	-3.7	-24.2	188.0	.136
4-2870	4-3051.0	.183	110.4	26.1	1.1	.583	95.2	.446	1.149	186.6	307.0	.637A	1.662D	74.3	1.374	1.2	3.8	281.0	.408
4-3051.0	4-3180	.408	304.8	9.4	3.3	1.224	106.8	.333	.795	265.5	508.2	.530	1.060A	103.8	.878	.2	23.8	98.1	.257
		10.81	7.94	4.07	2.88	6.29	3.87	13.46	1/1/2	32.9	39.0	24.3	.361	4.748	15.1	204.4	-13.5	97.9D	1.354
4-2670	4-2870	.146	67.1	46.1	5.0	1.126	89.8	.278	1.394	.7	143.0	1.006D	1.782A	102.1	.702	-2.6	-19.6	192.0	.136
4-2870	4-3053.1	.180	108.9	26.1	1.0	.586	95.4	.438	1.156	187.1	310.8	.650A	1.663D	75.5	1.375	1.2	4.2	281.4	.386
4-3053.1	4-3190	.386	308.2	10.3	3.4	1.217	107.8	.314	.785	265.2	514.7	.536	1.031A	100.6	.867	-.0	23.0	99.9	.219 *
		10.69	7.81	4.00	2.88	6.29	3.81	12.85	1/1/2	29.0	47.4	27.3	.404	4.240	15.0	206.5	-13.0	99.2D	1.310
4-2660	4-2870	.152	59.7	39.8	2.5	1.130	87.8	.282	1.393	10.2	142.8	1.000D	1.786A	102.4	.702	-1.9	-16.3	193.8	.138
4-2870	4-3054.7	.178	107.8	26.0	.9	.591	95.6	.433	1.161	187.4	313.6	.658A	1.664D	76.4	1.376	1.2	4.5	281.6	.370
4-3054.7	4-3200	.370	310.9	10.8	3.4	1.212	107.1	.301	.777	264.8	522.0	.543	1.011A	97.4	.857	-.2	22.4	98.3	.186
		10.76	7.84	4.07	2.91	6.32	3.77	12.42	1/1/2	27.3	58.9	29.6	.439	3.912	14.7	207.9	-12.3	100.3D	1.279
4-2690	4-2870	.171	54.2	34.4	2.2	1.131	85.4	.288	1.385	20.7	143.5	.986D	1.785A	102.6	.699	-1.4	-13.6	194.1	.139
4-2870	4-3055.5	.176	107.2	26.0	.9	.592	95.7	.431	1.164	187.6	315.1	.663A	1.665D	76.9	1.377	1.3	4.7	281.7	.362
4-3055.5	4-3210	.362	312.4	10.9	3.4	1.208	106.8	.294	.772	264.2	530.1	.545	.999A	94.1	.849	-.3	22.1	92.4	.168
		11.00	8.06	4.30	2.95	6.36	3.76	12.16	1/1/2	27.4	74.3	31.1	.459	3.736	14.2	208.6	-11.6	100.8D	1.255
4-2700	4-2870	.202	51.4	30.3	2.0	1.130	82.7	.298	1.370	32.3	145.2	.962D	1.779A	102.7	.693	-1.0	-10.8	193.0	.141
4-2870	4-3055.1	.178	107.5	26.0	.9	.591	95.6	.432	1.162	187.5	314.4	.661A	1.664D	76.7	1.377	1.3	4.6	281.7	.366
4-3055.1	4-3220	.366	312.5	10.7	3.4	1.205	107.0	.297	.767	262.9	539.3	.540	.995A	90.3	.841	-.2	22.1	81.8	.165
		11.46	8.48	4.72	2.99	6.39	3.76	12.12	1/1/2	29.0	94.2	31.1	.450	3.729	13.8	208.6	-11.2	100.4D	1.226
4-2710	4-2870	.243	50.8	27.5	1.9	1.127	79.7	.313	1.347	45.0	148.0	.925D	1.768A	102.7	.684	-.6	-7.8	190.5	.144
4-2870	4-3052.5	.181	109.3	26.1	1.0	.586	95.4	.440	1.154	186.9	309.7	.646A	1.663D	75.2	1.375	1.2	4.1	281.3	.392
4-3052.5	4-3230	.392	309.8	10.0	3.4	1.203	108.3	.318	.763	260.0	550.5	.521	1.006	85.2	.833	.0	22.0	66.1	.192
		12.22	9.16	5.35	3.05	6.45	3.83	12.48	1/1/2	32.3	116.7	28.9	.391	4.009	13.9	207.0	-11.8	97.8D	1.178

MARS ARRIVAL DATE = 2442880 (11 APR 1976)

4-2600	4-2880	.220	77.1	6.4	-3.3	1.098	99.9	.279	1.310	312.3	526.3	.944	1.676A	95.2	.668	2.7	24.2	173.9	.093
4-2880	4-3031.0	.248	123.0	24.1	1.7	.514	96.8	.570	1.061	185.0	269.0	.458A	1.666D	60.1	1.351	1.1	1.9	271.2	.663
4-3031.0	4-3120	.663	272.1	-.2	-.1	1.341	120.2	.565	1.031	266.9	480.6	.448	1.614A	124.3	1.031	3.5	24.8	56.2	.614
		12.49	10.36	4.99	2.13	5.55	5.37	21.38	2/1/2	66.5	16.5	2.3	.129	48.848	65.5	179.7	65.4	90.4D	6.171
4-2610	4-2880	.210	82.0	-.6	-4.5	1.102	98.7	.274	1.323	318.0	522.6	.960	1.687A	96.4	.672	4.0	27.1	185.9	.103
4-2880	4-3035.2	.230	119.6	24.8	1.6	.534	97.0	.536	1.085	186.1	276.9	.501A	1.669D	63.3	1.358	1.1	2.2	273.9	.619
4-3035.2	4-3130	.619	278.9	1.7	.9	1.310	117.8	.512	.954	266.8	483.8	.465	1.442A	120.8	.993	2.6	25.7	65.1	.540
		12.10	9.82	4.84	2.28	5.70	4.99	19.52	2/1/2	60.0	18.3	5.0	.157	22.752	6.4	186.2	6.1	91.2D	5.416
4-2620	4-2880	.219	86.7	-15.0	-7.1	1.106	97.4	.271	1.336	324.0	519.1	.974	1.699A	97.4	.677	6.8	35.2	196.1	.127
4-2880	4-3039.1	.219	116.4	25.4	1.4	.550	97.4	.512	1.106	187.2	284.3	.540A	1.672D	66.2	1.363	1.1	2.5	276.3	.563
4-3039.1	4-3140	.563	285.3	3.3	1.7	1.285	115.3	.465	.899	266.6	487.6	.481	1.318A	117.2	.961	1.9	26.1	73.6	.472
		12.39	9.66	4.98	2.71	6.12	4.71	17.89	2/1/2	59.7	20.6	9.1	.190	12.630	7.1	191.1	-6.4	92.5D	2.206
4-2650	4-2880	.195	77.0	73.0	7.7	1.118	93.1	.287	1.368	345.0	511.0	1.003	1.733A	99.6	.690	-7.5	-39.5	173.4	.144
4-2880	4-3046.9	.199	108.3	26.1	1.1	.581	98.4	.460	1.150	190.1	302.6	.621A	1.680D	72.8	1.374	1.2	3.7	280.6	.437
4-3046.9	4-3170	.437	301.3	8.3	3.1	1.235	110.2	.359	.812	265.9	501.8	.521	1.103A	107.2	.894	.4	24.6	94.5	.304
		11.92	8.88	4.63	3.04	6.45	4.25	14.30	1/1/2	30.6	32.2	21.1	.314	5.469	14.2	202.3	-12.8	96.8D	1.404
4-2660	4-2880	.155	71.0	58.3	4.6	1.121	91.5	.288	1.375	352.9	509.4	1.007	1.742A	100.0	.692	-4.3	-28.5	185.2	.126
4-2880	4-3051.8	.196	106.4	26.1	1.0	.587	98.6	.450	1.160	190.9	307.6	.636A	1.682D	74.4	1.377	1.3	4.1	281.3	.409
4-3051.8	4-3180	.409	305.4	9.5	3.3	1.225	108.9	.334	.797	265.7	507.7	.531	1.063A	104.0	.880	.1	23.6	96.7	.259
		10.98	8.28	4.11	2.70	6.11	4.16	13.50	1/1/2	39.4	36.4	24.6	.380	4.697	14.6	204.8	-12.7	98.3D	1.332
4-2670	4-2880	.145	63.6	48.8	3.4	1.124	89.6	.270	1.377	1.7	148.4	1.006D	1.748A	100.4	.693	-2.9	-22.2	190.4	.123
4-2880	4-3053.6	.194	104.9	26.1	.9	.592	98.8	.442	1.168	191.4	311.5	.691A	1.684D	75.6	1.378	1.3	4.5	281.6	.386
4-3053.6	4-3190	.386	308.9	10.3	3.4	1.218	107.8	.315	.786	265.5	514.2	.539	1.033A	100.8	.868	-.1	22.7	100.6	.220
		10.76	8.12	4.00	2.64	6.05	4.12	12.68	1/1/2	34.5	46.7	27.8	.404	4.185	14.4	208.8	-12.2	99.7D	1.286

STOPOVER TIME = 0 DAYS — 1975 INBOUND SWINGBY — MISSION DURATION = 920 DAYS
MARS ARRIVAL DATE = 2442860
11 APR 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THETI / THETS / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-2660	4-2660	.151	56.7	41.0	2.7	1.126	87.6	.273	1.375	11.3	148.3	.999D	1.751A	100.6	.693	-2.0	-17.9	192.7	.123
4-2660	4-3055.2	.193	103.9	26.0	.9	.595	98.9	.437	1.173	191.8	314.4	.660A	1.685D	76.6	1.379	1.3	4.9	281.6	.370
4-3055.2	4-3200	.370	311.6	10.9	3.4	1.212	107.1	.301	.776	265.1	521.4	.544	1.012A	97.6	.858	-.2	22.1	99.3	.169
		10.79	8.15	4.06	2.64	6.06	4.09	12.43	1/1/2	32.3	57.9	30.1	.440	3.853	14.1	208.2	-11.5	100.8D	1.255
4-2690	4-2880	.170	52.0	34.9	2.3	1.127	85.3	.280	1.367	21.9	149.1	.984D	1.749A	100.7	.689	-1.5	-14.4	193.1	.124
4-2880	4-3056.0	.192	103.4	25.9	.8	.597	99.0	.434	1.175	192.0	316.0	.665A	1.686D	77.1	1.380	1.4	5.1	281.6	.361
4-3056.0	4-3210	.361	313.2	11.0	3.4	1.208	106.7	.294	.773	264.5	529.5	.546	.999A	94.3	.849	-.3	21.8	93.7	.166
		11.02	8.56	4.29	2.66	6.07	4.07	12.16	1/1/2	32.5	73.1	31.6	.461	3.671	13.7	209.0	-10.8	101.4D	1.231
4-2700	4-2880	.200	49.8	30.4	2.1	1.126	82.7	.290	1.352	33.5	150.8	.980D	1.744A	100.7	.684	-1.0	-11.1	191.8	.126
4-2880	4-3055.8	.192	103.5	25.9	.8	.596	99.0	.435	1.175	192.0	315.6	.663A	1.686D	76.9	1.380	1.4	5.0	281.6	.364
4-3055.8	4-3220	.364	313.4	10.7	3.4	1.206	106.9	.295	.768	263.3	538.6	.541	.995A	90.6	.842	-.3	21.8	83.4	.164
		11.46	8.77	4.70	2.69	6.10	4.08	12.10	1/1/2	34.4	92.7	31.8	.455	3.651	13.2	209.0	-10.3	101.0D	1.206
4-2710	4-2880	.240	49.8	27.6	1.9	1.123	79.7	.305	1.329	46.1	153.5	.923D	1.735A	100.6	.674	-.6	-7.5	189.0	.129
4-2880	4-3053.5	.194	105.0	26.1	.9	.592	98.8	.443	1.167	191.4	311.3	.651A	1.684D	75.6	1.378	1.3	4.5	281.6	.367
4-3053.5	4-3230	.367	311.1	10.0	3.4	1.203	108.1	.314	.764	260.6	549.5	.524	1.004	85.7	.835	-.1	21.8	70.1	.168
		12.18	9.44	5.32	2.74	6.15	4.13	12.41	1/1/2	38.2	114.9	29.7	.402	3.897	13.1	207.7	-10.7	98.7D	1.163

MARS ARRIVAL DATE = 2442890 (21 APR 1976)

4-2600	4-2890	.218	77.0	8.0	-3.0	1.097	99.9	.278	1.307	312.0	530.5	.944	1.670A	93.6	.663	2.4	24.7	170.1	.068
4-2890	4-3031.6	.259	119.4	24.6	1.7	.520	101.2	.575	1.071	188.5	269.1	.455A	1.686D	59.9	1.354	1.3	2.2	272.1	.668
4-3031.6	4-3120	.668	272.9	-.2	-.1	1.345	120.3	.570	1.044	267.3	480.0	.446	1.639A	124.7	1.036	3.5	24.6	56.5	.621
		12.73	10.68	4.96	2.05	5.47	5.72	21.56	2/1/2	73.9	16.2	2.5	.127	45.973	70.0	179.8	69.9	90.6D	5.717
4-2610	4-2890	.204	81.6	2.4	-3.8	1.100	98.6	.272	1.319	317.9	526.9	.960	1.678A	94.6	.668	3.4	26.6	182.4	.094
4-2890	4-3035.6	.245	115.8	25.2	1.5	.540	101.4	.543	1.096	189.9	277.2	.501A	1.691D	65.2	1.361	1.2	2.4	274.7	.623
4-3035.6	4-3130	.623	279.7	1.7	.9	1.313	117.9	.516	.962	267.1	483.3	.465	1.458A	121.0	.997	2.6	25.7	65.5	.546
		12.25	10.11	4.75	2.14	5.56	5.36	19.66	2/1/2	65.8	18.0	5.1	.155	22.645	8.6	186.9	8.3	91.4D	3.358
4-2620	4-2890	.201	85.6	-8.4	-5.6	1.10a	97.3	.267	1.331	324.1	523.5	.975	1.686A	95.8	.673	5.3	32.1	194.3	.109
4-2890	4-3039.7	.234	112.5	25.7	1.4	.557	101.6	.517	1.118	191.3	284.7	.541A	1.696D	66.2	1.367	1.2	2.8	276.8	.586
4-3039.7	4-3140	.566	286.0	3.6	1.7	1.287	115.6	.468	.904	266.9	487.0	.481	1.528A	117.5	.964	1.9	26.0	74.0	.476
		12.19	9.80	4.71	2.39	5.80	5.09	18.00	2/1/2	62.2	20.3	9.2	.188	12.496	6.0	191.7	-5.1	92.8D	2.161
4-2660	4-2890	.164	66.3	64.5	5.6	1.119	91.3	.261	1.363	353.6	514.5	1.007	1.719A	98.4	.686	-5.2	-34.1	180.5	.122
4-2690	4-3051.9	.215	102.8	26.1	1.0	.595	102.3	.456	1.176	195.5	306.5	.640A	1.712D	74.5	1.381	1.4	4.4	281.2	.409
4-3051.9	4-3160	.409	306.0	9.5	3.4	1.226	108.9	.334	.798	265.9	507.2	.531	1.065A	104.1	.881	1.1	23.5	99.2	.261
		11.42	8.81	4.21	2.61	6.02	4.61	13.53	1/1/2	47.3	37.9	25.1	.359	4.600	13.9	205.1	-11.8	98.8D	1.293
4-2670	4-2890	.147	60.1	51.9	3.8	1.121	89.5	.263	1.364	2.5	153.6	1.006D	1.723A	98.7	.687	-3.3	-25.4	187.8	.113
4-2890	4-3054.0	.213	101.5	26.0	.9	.600	102.4	.448	1.184	196.2	312.6	.654A	1.715D	75.8	1.383	1.4	4.8	281.5	.366
4-3054.0	4-3190	.366	309.5	10.4	3.4	1.219	107.8	.315	.787	265.7	513.7	.539	1.035A	101.0	.869	-.1	22.3	101.5	.222
		11.03	8.57	4.01	2.46	5.88	4.56	12.90	1/1/2	40.5	46.1	26.3	.404	4.092	13.9	207.0	-11.3	100.2D	1.246
4-2660	4-2890	.151	54.1	42.6	3.0	1.123	87.4	.267	1.361	12.2	153.6	.998D	1.724A	98.6	.685	-2.2	-19.7	190.9	.112
4-2890	4-3055.6	.211	100.5	25.9	.8	.603	102.4	.443	1.190	196.7	315.6	.663A	1.717D	76.7	1.384	1.4	5.2	281.5	.369
4-3055.6	4-3200	.369	312.2	10.9	3.5	1.213	107.1	.301	.779	265.3	520.9	.545	1.013A	97.8	.859	-.3	21.9	100.2	.190
		11.02	8.59	4.06	2.43	5.85	4.53	12.45	1/1/2	38.0	57.1	30.8	.441	3.760	13.6	208.3	-10.7	101.4D	1.216
4-2690	4-2890	.170	50.1	35.5	2.5	1.123	85.2	.273	1.353	22.9	154.4	.983D	1.722A	98.9	.682	-1.8	-15.3	191.4	.112
4-2890	4-3056.5	.210	100.1	25.8	.8	.605	102.4	.440	1.192	196.8	317.2	.667A	1.717D	77.3	1.384	1.4	5.4	281.5	.360
4-3056.5	4-3210	.360	313.9	11.0	3.4	1.209	106.7	.293	.773	264.7	528.9	.547	1.000A	94.5	.850	-.4	21.6	94.8	.169
		11.22	8.79	4.28	2.43	5.85	4.51	12.17	1/1/2	38.1	72.1	32.5	.463	3.576	13.2	209.1	-10.0	102.1D	1.192
4-2700	4-2890	.199	48.6	30.7	2.2	1.122	82.6	.284	1.338	34.4	156.1	.959D	1.716A	98.8	.678	-1.1	-11.2	190.0	.113
4-2890	4-3056.4	.211	100.1	25.8	.8	.605	102.5	.441	1.192	196.9	317.0	.667A	1.716D	77.2	1.384	1.4	5.4	281.5	.362
4-3056.4	4-3220	.362	314.2	10.7	3.4	1.206	106.8	.294	.769	263.6	536.0	.543	.995A	90.8	.843	-.3	21.6	84.9	.163
		11.65	9.20	4.68	2.45	5.87	4.52	12.09	1/1/2	40.4	91.3	32.8	.459	3.545	12.7	209.1	-9.5	101.8D	1.169
4-2710	4-2890	.236	49.0	27.7	2.0	1.119	79.7	.299	1.316	46.8	158.8	.922D	1.710A	98.6	.667	-.8	-7.1	187.0	.116
4-2890	4-3054.5	.212	101.3	25.9	.9	.600	102.4	.447	1.185	196.3	313.1	.655A	1.715D	76.0	1.383	1.4	4.9	281.5	.363
4-3054.5	4-3230	.363	312.2	10.0	3.3	1.204	107.9	.311	.765	261.1	548.7	.527	1.003	86.1	.836	-.2	21.7	71.8	.164
		12.34	9.84	5.28	2.50	5.92	4.55	12.36	1/1/2	44.6	113.4	30.6	.410	3.765	12.4	208.1	-9.6	99.7D	1.133

MARS ARRIVAL DATE = 2442900 (1 MAY 1976)

4-2610	4-2900	.201	61.5	4.8	-3.3	1.100	98.6	.270	1.316	317.7	531.1	.960	1.671A	93.3	.665	3.0	26.6	178.5	.066
4-2900	4-3036.3	.265	112.2	25.5	1.5	.552	106.0	.549	1.114	194.1	277.9	.503A	1.725D	63.2	1.366	1.4	2.7	275.2	.626
4-3036.3	4-3130	.626	280.4	1.7	.9	1.316	118.0	.520	.969	267.5	482.7	.465	1.474A	121.3	1.001	2.6	25.7	65.8	.551
		12.63	10.58	4.70	2.05	5.47	5.87	19.80	2/1/2	72.6	17.6	5.3	.153	21.636	10.3	187.4	10.0	91.8D	3.184
4-2620	4-2900	.192	85.1	-3.6	-4.6	1.103	97.3	.265	1.326	324.1	527.9	.975	1.677A	94.3	.670	4.4	30.4	190.5	.097
4-2900	4-3040.2	.256	108.9	25.6	1.4	.569	105.9	.523	1.137	195.7	285.6	.543A	1.732D	66.2	1.372	1.4	3.0	277.1	.568
4-3040.2	4-3140	.568	286.6	3.6	1.8	1.289	115.7	.471	.910	267.2	486.5	.481	1.338A	117.7	.987	1.8	26.0	74.4	.481
		12.39	10.19	4.57	2.19	5.62	5.62	18.10	2/1/2	66.8	19.9	9.5	.186	12.060	5.0	192.1	-3.8	93.2D	2.059
4-2630	4-2900	.207	88.1	-20.3	-7.5	1.107	95.9	.261	1.336	330.7	525.0	.988	1.684A	95.2	.674	7.5	39.3	203.1	.124
4-2900	4-3043.7	.249	106.0	26.0	1.3	.562	106.0	.502	1.158	197.2	292.8	.576A	1.739D	68.8	1.377	1.4	3.4	278.6	.518
4-3043.7	4-3190	.518	292.4	5.4	2.4	1.268	113.6	.428	.867	266.9	490.8	.496	1.239A	114.2	.939	1.2	25.6	82.3	.417
		12.89	10.24	4.79	2.65	6.07	5.45	16.64	2/1/2	66.9	22.9	13.9	.224	8.282	9.5	196.2	-0.4	94.7D	1.630
4-2660	4-2900	.161	58.4	72.3	7.2	1.116	91.2	.256	1.354	354.2	519.4	1.007	1.701A	96.6	.681	-6.7	-40.9	172.9	.124
4-2900	4-3052.3	.236	99.9	25.9	.9	.607	106.1	.464	1.200	200.6	309.9	.644A	1.756D	74.7	1.387	1.4	4.7	280.6	.410
4-3052.3	4-3160	.410	306.5	9.6	3.4	1.227	108.9	.335	.799	266.1	506.8	.532	1.067A	104.3	.882	.0	23.3	99.7	.263
		12.28	9.62	4.43	2.66	6.07	5.18	13.56	1/1/2	36.6	37.4	26.0	.358	4.451	13.2	205.0	-10.9	99.5D	1.237
4-2670	4-2900	.151	56.5	55.8	4.4	1.119	89.4	.258	1.355	3.1	156.6	1.006D	1.704A	97.0	.681	-3.8	-29.3	183.9	.106
4-2900	4-3054.4	.236	98.7	25.8	.8	.612	106.1	.456	1.208	201.3	314.0	.657A	1.760D	76.0	1.389	1.5	5.1	280.9	.366
4-3054.4	4-3190	.366	310.0	10.4	3.5	1.219	107.8	.315	.788	265.9	513.3	.540	1.036A	101.2	.870	-.2	22.3	101.9	.223
		11.54	9.20	4.06	2.34	5.76	5.14	12.92	1/1/2	47.5	45.5	29.3	.403	3.956	13.3	206.9	-10.5	101.0D	1.192
4-2680	4-2900	.152	51.8	44.4	3.3	1.120	87.3	.261	1.351	12.9	156.7	.996D	1.704A	97.2	.680	-2.5	-21.7	186.1	.102
4-2900	4-3056.1	.235	97.8	25.7	-.7	.616	106.2	.452	1.214	201.9	317.1	.666A	1.763D	77.0	1.390	1.5	5.5	280.9	.369
4-3056.1	4-3200	.369	312.7	10.9	3.5	1.214	107.1	.301	.780	265.5	520.5	.545	1.015A	98.0	.860	-.3	21.6	101.0	.191
		11.46	9.19	4.07	2.27	5.69	5.12	12.46	1/1/2	44.3	56.4	32.0	.441	3.630	13.1	208.2	-9.8	102.3D	1.160
4-2680	4-2900	.169	48.6	36.4	2.6	1.121	85.1	.268	1.343	23.5	159.5	.983D	1.702A	97.1	.677	-1.7	-16.2	189.1	.101
4-2900	4-3057.0	.234	97.4	25.6	-.7	.617	106.1	.449	1.217	202.1	318.8	.671A	1.763D	77.5	1.390	1.5	5.7	280.8	.360
4-3057.0	4-3210	.360	314.5	11.1	3.4	1.209	106.7	.293	.774	265.0	528.4	.548	1.001A	94.7	.851	-.4	21.3	95.9	.169
		11.63	9.37	4.28	2.26	5.68	5.09	12.17	1/1/2	44.4	71.1	33.7	.465	3.446	12.7	208.9	-9.1	103.0D	1.137
4-2700	4-2900	.198	47.7	31.1	2.3	1.120	82.6	.279	1.328	35.0	161.1	.956D	1.699A	97.0	.671	-1.1	-11.3	187.7	.102
4-2900	4-3056.9	.235	97.4	25.6	-.7	.617	106.1	.449	1.217	202.1	318.7	.671A	1.763D	77.5	1.390	1.5	5.7	280.8	.360
4-3056.9	4-3220	.360	314.9	10.8	3.3	1.206	106.7	.293	.770	263.8	537.4	.544	.996A	91.1	.844	-.4	21.3	86.2	.162
		12.03	9.76	4.66	2.28	5.70	5.09	12.09	1/1/2	46.9	90.1	34.1	.463	3.410	12.2	209.0	-8.6	102.8D	1.115
4-2710	4-2900	.236	48.6	27.9	2.0	1.117	79.8	.295	1.308	47.2	163.3	.922D	1.693A	96.7	.662	-.7	-6.6	184.5	.105
4-2900	4-3055.1	.236	98.4	25.7	.8	.613	106.1	.454	1.210	201.5	315.2	.660A	1.760D	76.4	1.389	1.5	5.3	280.9	.379
4-3055.1	4-3230	.379	315.1	10.1	3.3	1.204	107.7	.308	.766	261.5	547.9	.530	1.002	86.5	.836	-.2	21.5	73.3	.161
		12.70	10.36	5.25	2.33	5.74	5.12	12.32	1/1/2	51.5	112.0	32.2	.418	3.602	11.8	208.2	-8.6	100.8D	1.087

MARS ARRIVAL DATE = 2442910 (11 MAY 1976)

4-2620	4-2910	.186	84.6	.1	-3.8	1.102	97.3	.263	1.323	323.9	532.1	.975	1.671A	92.8	.668	3.8	29.6	186.5	.069
4-2910	4-3040.7	.264	109.8	25.8	1.4	.587	110.5	.531	1.167	200.7	287.1	.547A	1.788D	66.3	1.380	1.5	3.2	277.1	.571
4-3040.7	4-3140	.571	287.3	3.7	1.8	1.292	115.8	.474	.915	267.5	486.0	.482	1.348A	118.0	.971	1.8	25.9	74.7	.485
		12.91	10.84	4.49	2.07	5.50	6.35	18.20	2/1/2	72.6	19.6	10.2	.184	11.297	4.3	192.4	-2.5	93.6D	1.899
4-2630	4-2910	.186	87.0	-12.4	-5.7	1.106	95.9	.258	1.332	330.7	529.3	.988	1.675A	93.7	.671	5.8	35.9	198.3	.105
4-2910	4-3044.1	.277	103.1	25.9	1.2	.600	110.3	.512	1.169	202.4	294.3	.581A	1.797D	68.9	1.385	1.5	3.6	276.4	.520
4-3044.1	4-3180	.520	293.0	5.5	2.4	1.270	113.7	.430	.871	267.2	490.3	.496	1.245A	114.4	.942	1.2	25.7	82.7	.421
		12.99	10.67	4.49	2.32	5.74	6.18	16.72	2/1/2	69.5	22.6	14.7	.222	7.642	8.6	196.5	-7.2	95.3D	1.520

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 320 DAYS
MARS ARRIVAL DATE = 2442910
11 MAY 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / SUN A	THET2 / THET4 / SUN R	PERIH / PERIH / KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / E	V 2 / V 4 / INC	I 2 / I 4 / RAP	DECL2 / DECL4 / DECLP	RA2 / RA4 / ETA	SPEED2 / SPEED4 / PERIC
4-2670	4-2910	.159	51.9	60.7	5.5	1.117	89.3	.254	1.347	3.6	163.4	1.005D	1.689A	95.5	.678	-4.6	-34.1	178.4	.103
4-2910	4-3054.8	.266	96.5	25.6	-.8	.630	110.0	.468	1.243	207.0	315.9	.661A	1.625D	76.3	1.397	1.5	5.4	279.9	.386
4-3054.8	4-3190	.386	310.6	10.5	3.5	1.220	107.8	.315	.789	266.1	512.8	.540	1.038A	101.3	.871	-.2	22.1	102.5	.225
		12.33	10.03	4.15	2.29	5.71	5.88	12.95	1/1/2	55.6	45.0	30.7	.403	3.772	12.6	206.5	-9.5	102.0D	1.117
4-2680	4-2910	.154	49.6	46.8	3.6	1.118	87.3	.257	1.343	13.4	163.5	.998D	1.689A	95.5	.676	-2.8	-24.2	184.5	.095
4-2910	4-3056.5	.265	95.8	25.5	-.7	.633	110.0	.464	1.250	207.6	319.1	.670A	1.629D	77.3	1.398	1.6	5.8	279.7	.368
4-3056.5	4-3200	.369	313.3	11.0	3.5	1.214	107.0	.301	.781	265.7	520.0	.546	1.016A	98.2	.861	-.4	21.4	101.7	.192
		12.11	9.96	4.09	2.16	5.58	5.86	12.47	1/1/2	51.3	55.6	33.6	.442	3.457	12.6	207.8	-8.9	103.4D	1.065
4-2690	4-2910	.169	47.5	37.5	2.8	1.119	85.1	.264	1.335	24.0	164.3	.982D	1.688A	95.5	.673	-1.8	-17.1	186.0	.093
4-2910	4-3057.5	.264	95.4	25.4	-.7	.635	110.0	.461	1.253	207.9	321.0	.676A	1.631D	77.9	1.399	1.6	6.1	279.5	.359
4-3057.5	4-3210	.359	315.1	11.1	3.4	1.210	106.6	.292	.775	265.2	527.9	.549	1.002A	94.9	.852	-.5	21.0	97.0	.170
		12.25	10.12	4.26	2.13	5.55	5.85	12.16	1/1/2	51.2	70.1	35.6	.466	3.276	12.2	206.5	-8.2	104.2D	1.062
4-2700	4-2910	.197	47.1	31.7	2.4	1.118	82.6	.275	1.321	35.3	165.8	.958D	1.685A	95.3	.667	-1.2	-11.3	184.8	.094
4-2910	4-3057.5	.264	95.4	25.4	-.7	.635	110.0	.461	1.253	207.8	321.0	.676A	1.630D	77.9	1.399	1.6	6.0	279.5	.359
4-3057.5	4-3220	.359	315.6	10.8	3.3	1.207	106.7	.292	.771	264.1	536.8	.546	.996A	91.3	.844	-.4	21.1	97.6	.161
		12.63	10.49	4.65	2.14	5.56	5.84	12.06	1/1/2	53.9	88.8	36.0	.467	3.236	11.8	208.7	-7.7	104.1D	1.043
MARS ARRIVAL DATE = 2442920 (21 MAY 1976)																			
4-2660	4-2920	.157	47.4	49.8	4.1	1.117	87.3	.254	1.338	13.6	168.1	.997D	1.678A	94.0	.673	-3.2	-27.2	179.7	.090
4-2920	4-3057.0	.301	94.4	25.2	-.7	.636	114.0	.480	1.301	213.8	321.8	.676A	1.926D	77.6	1.409	1.6	6.1	277.9	.369
4-3057.0	4-3200	.369	314.0	11.1	3.5	1.215	107.0	.301	.782	266.0	519.4	.547	1.017A	98.4	.862	-.4	21.1	102.6	.194
		13.01	10.92	4.13	2.09	5.51	6.79	12.49	1/1/2	58.8	84.8	36.0	.442	3.240	12.1	207.1	-8.0	104.0D	.990

STOPOVER TIME = 0 DAYS

1975 INBOUND SWINGBY

MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2442820
11 FEB 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2442820 (11 FEB 1976)																			
4-2580	4-2820	.269	65.9	6.5	-3.7	1.100	102.6	.311	1.314	302.8	508.9	.905	1.723A	102.4	.690	2.4	19.7	166.3	.131
4-2820	4-3035.2	.207	132.3	23.2	1.8	.573	78.9	.500	1.100	168.4	286.2	.550A	1.651	67.1	1.362	.3	.8	269.0	.543
4-3035.2	4-3140	.543	280.1	5.2	1.5	1.268	114.9	.446	.864	264.4	491.6	.479	1.250A	115.4	.937	2.2	26.3	70.6	.439
		13.03	10.24	5.81	2.79	6.20	4.44	17.14	2/1/2	44.2	23.4	11.4	.204	10.028	12.7	185.0	-12.5	92.4D	1.638
4-2630	4-2820	.219	90.0	46.6	4.4	1.136	98.0	.335	1.465	327.5	485.8	.975	1.955A	108.6	.745	-5.0	-18.0	177.2	.205
4-2820	4-3049.6	.168	126.7	25.3	1.6	.602	82.0	.434	1.143	169.2	310.0	.647A	1.640	75.4	1.372	.5	1.6	276.5	.385
4-3049.6	4-3190	.385	303.5	9.9	3.3	1.212	107.9	.313	.776	263.5	518.6	.533	1.019A	99.2	.858	.3	24.6	94.0	.207
		12.85	8.52	4.98	4.33	7.72	3.54	12.69	1/1/2	24.4	52.9	28.1	.405	4.118	18.4	201.8	-17.4	98.2D	1.263
4-2640	4-2820	.202	92.4	41.3	3.1	1.144	96.7	.343	1.500	333.3	482.0	.985	2.015A	109.6	.755	-3.6	-14.4	182.5	.211
4-2820	4-3050.9	.166	126.2	25.5	1.5	.604	82.2	.430	1.146	169.3	312.1	.654A	1.639	76.1	1.373	.5	1.7	276.9	.373
4-3050.9	4-3200	.373	305.8	10.5	3.4	1.207	107.3	.303	.770	263.0	526.1	.537	1.003A	95.9	.850	.2	24.3	90.4	.181
		12.72	8.21	4.72	4.51	7.90	3.49	12.32	1/1/2	18.5	66.1	30.0	.432	3.865	18.2	203.2	-17.0	98.6D	1.237
4-2650	4-2820	.190	92.9	38.6	2.5	1.153	95.3	.353	1.535	339.5	478.6	.994	2.077A	110.4	.765	-2.8	-12.6	186.1	.221
4-2820	4-3051.2	.165	126.1	25.5	1.5	.604	82.2	.429	1.147	169.3	312.5	.655A	1.639	76.2	1.373	.5	1.7	277.0	.370
4-3051.2	4-3210	.370	306.7	10.6	3.4	1.204	107.2	.300	.765	262.1	534.8	.535	.994A	92.2	.842	.1	24.0	81.9	.166
		12.78	8.02	4.55	4.76	8.15	3.48	12.16	1/1/2	14.6	84.0	30.8	.438	3.765	18.0	205.6	-16.8	98.8D	1.211
4-2660	4-2820	.181	91.1	37.0	2.1	1.161	93.6	.362	1.570	346.2	475.7	1.001	2.139A	111.2	.775	-2.2	-11.5	188.8	.231
4-2820	4-3049.7	.168	126.7	25.4	1.6	.602	82.0	.434	1.144	169.2	310.1	.646A	1.640	75.5	1.372	.5	1.6	276.6	.385
4-3049.7	4-3220	.385	305.3	10.3	3.3	1.201	107.9	.311	.760	260.0	545.1	.524	.997	87.7	.834	.3	23.4	68.7	.179
		12.99	7.97	4.43	5.02	8.40	3.54	12.30	1/1/2	11.9	106.0	29.9	.407	3.874	18.2	202.7	-17.1	97.4D	1.169
MARS ARRIVAL DATE = 2442830 (21 FEB 1976)																			
4-2570	4-2830	.274	58.6	9.9	-2.6	1.092	103.3	.307	1.283	298.2	518.5	.889	1.677A	99.0	.671	1.2	19.6	152.9	.109
4-2830	4-3031.9	.218	132.8	22.6	1.7	.552	80.2	.526	1.081	170.9	278.8	.512A	1.649	64.3	1.357	.5	1.0	267.7	.598
4-3031.9	4-3130	.598	274.7	1.5	.8	1.292	117.1	.492	.912	264.9	487.2	.464	1.361A	119.1	.968	2.8	25.8	62.8	.508
		12.98	10.58	5.90	2.39	5.81	4.69	18.75	2/1/2	59.4	20.4	7.0	.168	16.399	5.0	181.3	-4.8	90.9D	2.587
4-2580	4-2830	.263	65.6	7.8	-3.3	1.097	102.4	.305	1.304	302.7	513.4	.907	1.702A	100.6	.681	2.1	19.7	164.6	.119
4-2830	4-3036.0	.203	131.2	23.3	1.7	.564	81.3	.501	1.097	171.1	285.5	.547A	1.646	66.9	1.361	.5	1.1	270.6	.547
4-3036.0	4-3140	.547	281.2	5.3	1.6	1.271	115.0	.450	.871	264.8	490.8	.479	1.262A	115.7	.941	2.1	26.4	71.2	.446
		12.58	10.05	5.70	2.55	5.97	4.33	17.28	2/1/2	49.9	22.8	10.8	.201	10.622	11.8	186.3	-11.6	92.3D	1.933
4-2590	4-2830	.257	72.7	2.3	-4.7	1.102	101.5	.304	1.327	307.3	508.5	.923	1.731A	102.1	.690	3.6	22.5	175.3	.133
4-2830	4-3039.7	.191	129.6	24.0	1.6	.574	82.2	.481	1.110	171.4	291.7	.576A	1.644	69.2	1.364	.5	1.3	272.9	.502
4-3039.7	4-3150	.502	287.1	5.0	2.2	1.254	113.1	.412	.840	264.7	495.0	.493	1.186A	112.4	.919	1.6	26.5	78.9	.386
		12.48	9.65	5.60	2.83	6.24	4.05	16.00	2/1/2	44.0	26.0	14.6	.238	7.848	15.0	190.8	-14.6	93.6D	1.632
4-2630	4-2830	.219	89.6	54.2	5.8	1.129	97.5	.317	1.432	328.2	491.1	.978	1.885A	106.8	.729	-6.3	-23.9	175.1	.189
4-2830	4-3050.5	.165	124.2	25.4	1.4	.596	84.3	.433	1.142	172.4	309.9	.647A	1.638	75.4	1.372	.7	2.3	278.0	.385
4-3050.5	4-3190	.385	304.7	10.0	3.3	1.213	107.9	.313	.778	263.9	517.6	.534	1.022A	99.5	.860	.2	24.2	95.5	.210
		12.46	8.45	4.98	4.01	7.41	3.47	12.72	1/1/2	31.3	51.5	27.7	.405	4.161	17.6	203.1	-16.3	98.3D	1.288
4-2640	4-2830	.194	91.1	45.9	3.8	1.136	96.2	.323	1.459	334.1	487.5	.988	1.931A	107.7	.738	-4.1	-17.9	182.4	.191
4-2830	4-3051.8	.162	123.5	25.5	1.4	.598	84.5	.429	1.146	172.5	312.2	.654A	1.637	76.1	1.373	.7	2.4	278.3	.372
4-3051.8	4-3200	.372	307.1	10.5	3.4	1.208	107.3	.302	.771	263.5	525.1	.538	1.004A	96.3	.851	.1	25.8	92.5	.182
		12.06	8.02	4.61	4.04	7.44	3.41	12.34	1/1/2	23.0	64.2	29.7	.434	3.908	17.3	204.5	-15.9	99.0D	1.262
4-2650	4-2830	.179	90.8	41.9	2.9	1.143	94.8	.330	1.486	340.5	484.3	.996	1.976A	108.5	.747	-3.1	-15.0	186.7	.198
4-2830	4-3052.3	.161	123.3	25.5	1.4	.598	84.5	.427	1.147	172.6	312.9	.657A	1.637	76.4	1.373	.7	2.5	278.4	.368
4-3052.3	4-3210	.368	308.1	10.7	3.4	1.205	107.1	.298	.766	262.6	533.6	.538	.995A	92.7	.843	.0	25.6	84.6	.167
		12.01	7.80	4.40	4.21	7.60	3.40	12.15	1/1/2	18.2	81.5	30.6	.444	3.788	17.0	205.1	-15.5	99.2D	1.237
4-2660	4-2830	.170	88.1	39.6	2.4	1.150	93.1	.337	1.511	347.5	481.6	1.002	2.020A	109.2	.754	-2.4	-13.3	189.7	.206
4-2830	4-3051.1	.163	123.9	25.5	1.4	.597	84.3	.431	1.144	172.4	311.0	.651A	1.637	75.8	1.372	.7	2.3	278.1	.379
4-3051.1	4-3220	.379	307.2	10.4	3.4	1.202	107.7	.307	.762	260.8	543.6	.528	.996	88.4	.836	.2	23.2	72.1	.174
		12.13	7.72	4.28	4.40	7.80	3.44	12.24	1/1/2	15.1	103.0	30.0	.419	3.864	17.0	204.4	-15.7	98.0D	1.199
4-2670	4-2830	.166	82.8	37.7	2.0	1.156	91.2	.344	1.532	355.2	479.6	1.005	2.059A	109.8	.760	-1.9	-12.2	191.8	.214
4-2830	4-3045.4	.176	126.8	24.8	1.5	.586	83.4	.434	1.128	171.9	301.3	.617A	1.640	72.6	1.369	.6	1.7	276.0	.438
4-3045.4	4-3230	.438	300.8	9.7	3.7	1.199	110.8	.353	.756	255.6	557.4	.489	1.023	80.9	.826	.8	22.5	55.5	.238
		12.54	7.94	4.24	4.59	7.98	3.71	13.15	1/1/2	12.9	128.0	25.9	.314	4.466	18.9	200.2	-17.9	93.3D	1.087
MARS ARRIVAL DATE = 2442840 (2 MAR 1976)																			
4-2570	4-2840	.272	58.7	10.4	-2.5	1.091	103.2	.304	1.278	297.9	522.8	.889	1.667A	97.2	.664	1.1	20.6	149.5	.102
4-2840	4-3032.7	.215	131.4	22.9	1.7	.544	82.9	.528	1.077	173.6	278.1	.509A	1.646	64.1	1.356	.6	1.2	269.2	.603
4-3032.7	4-3130	.603	275.6	1.6	.8	1.296	117.3	.496	.921	265.3	486.4	.464	1.378A	119.5	.974	2.7	25.8	63.3	.515
		12.74	10.47	5.86	2.27	5.69	4.61	18.92	2/1/2	67.2	19.9	6.4	.166	17.918	5.3	182.5	-3.0	90.8D	2.801
4-2580	4-2840	.258	65.5	8.8	-3.0	1.095	102.3	.300	1.297	302.6	517.9	.908	1.686A	98.9	.673	1.8	20.1	162.2	.108
4-2840	4-3036.7	.200	129.4	23.6	1.6	.557	83.9	.503	1.094	173.9	284.9	.544A	1.644	66.7	1.360	.6	1.4	272.0	.550
4-3036.7	4-3140	.550	282.1	5.3	1.6	1.274	115.1	.453	.877	265.2	490.1	.480	1.274A	116.1	.946	2.1	26.3	71.7	.451
		12.26	9.89	5.62	2.37	5.79	4.27	17.42	2/1/2	56.4	22.3	10.3	.198	11.192	11.0	187.5	-10.7	92.2D	2.023
4-2590	4-2840	.249	72.2	4.6	-4.0	1.100	101.3	.298	1.317	307.4	513.1	.925	1.709A	100.4	.682	3.0	21.6	173.5	.119
4-2840	4-3040.4	.189	127.4	24.3	1.5	.567	84.8	.482	1.108	174.3	291.2	.574A	1.642	69.1	1.364	.7	1.7	274.3	.505
4-3040.4	4-3150	.505	288.1	5.1	2.2	1.256	113.2	.415	.844	265.1	494.2	.494	1.194A	112.7	.922	1.5	26.4	79.4	.393
		12.02	9.45	5.46	2.57	5.98	4.00	16.11	2/1/2	48.7	25.4	14.1	.236	8.137	14.3	192.0	-13.9	93.5D	1.663
4-2600	4-2840	.251	79.1	-5.1	-6.2	1.105	100.4	.297	1.338	312.3	508.5	.940	1.736A	101.7	.691	5.4	27.6	184.6	.140
4-2840	4-3043.7	.180	125.5	24.8	1.5	.575	85.5	.465	1.120	174.7	296.9	.599A	1.641	71.1	1.367	.7	1.9	276.2	.466
4-3043.7	4-3160	.466	293.5	6.7	2.7	1.241	111.5	.382	.820	264.9	498.9	.507	1.133A	109.4	.903	1.0	26.0	86.4	.340
		12.24	9.28	5.49	2.95	6.36	3.80	15.00	2/1/2	46.4	29.4	17.9	.277	6.436	16.0	196.0	-15.3	94.8D	1.506
4-2630	4-2840	.234	90.3	65.0	8.0	1.123	97.1	.303	1.406	326.9	496.3	.980	1.831A	105.0	.716	-8.5	-32.1	170.1	.187
4-2840	4-3051.3	.164	121.0	25.6	1.3	.591	86.7	.434	1.143	175.7	309.9	.647A	1.638	75.4	1.372	.8	2.8	279.2	.385
4-3051.3	4-3190	.385	305.8	10.1	3.3	1.214	107.8	.313	.780	264.3	516.8	.535	1.025A	99.9	.862	.1	23.9	96.8	.212
		12.62	8.67	5.22	3.95	7.35	3.45	12.76	1/1/2	41.0	50.2	27.4	.405	4.228	16.8	204.2	-15.4	98.5D	1.307
4-2640	4-2840	.191	89.8	51.8	4.6	1.130	95.8	.306	1.428	335.0	492.8	.990	1.866A	105.9	.724	-4.9	-22.5	181.2	.175
4-2840	4-3052.7	.161	120.1	25.8	1.2	.593	86.9	.429	1.146	175.9	312.4	.655A	1.638	76.2	1.373	.9	3.1	279.5	.371
4-3052.7	4-3200	.371	308.2	10.6	3.4	1.209	107.2	.302	.773	263.9	524.2	.540	1.006A	96.6	.853	.0	23.4	94.3	.184
		11.65	7.96	4.56	3.69	7.09	3.39	12.36	1/1/2	28.6	62.6	29.4	.436	3.937	16.5	205.6	-14.9	99.3D	1.280
4-2650	4-2840	.172	88.6	45.9	3.5	1.136	94.3	.311	1.449	341.6	489.8	.998	1.900A	106.6	.731	-3.4	-17.9	186.8	.178
4-2840	4-3053.2	.160	119.8	25.7	1.2	.594	87.0	.427	1.148	176.0	313.3	.658A	1.638	76.5	1.373	.9	3.2	279.6	.366
4-3053.2	4-3210	.366	309.4	10.7	3.4	1.206	107.0	.297	.768	263.1	532.5	.540	.996A	93.1	.845	-.0	23.2	87.0	.167
		11.45	7.69	4.31	3.76	7.16	3.38	12.15	1/1/2	22.4	79.3	30.5	.449	3.799	16.2	206.3	-14.4	99.5D	1.256
4-2660	4-2840	.161	84.9	42.4	2.6	1.142	92.7	.316	1.467	348.8	487.4	1.004	1.931A	107.3	.737	-2.6	-15.4	190.3	.184
4-2840	4-3052.4	.162	120.5	25.6	1.2	.593	86.9	.430	1.146	175.9	311.8	.653A	1.638	76.0	1.373	.8	3.0	279.5	.374
4-3052.4	4-3220	.374	308.9	10.5	3.4	1.203	107.4	.303	.764	261.5	542.3	.532	.996	89.0	.837	.0	22.9	75.1	.171
		11.47	7.58	4.18	3.89	7.29	3.41	12.19	1/1/2	18.7	100.3	30.1	.429	3.848	16.0	205.8	-14.4	98.6D	1.221
4-2670	4-2840	.158	78.7	39.6	2.2	1.147	90.8	.321	1.481	356.7	485.6	1.005	1.957A	107.8	.741	-2.0	-13.7	192.5	.190
4-2840	4-3048.0	.170	122.9	25.3	1.4	.585	86.2	.446	1.133	175.3	304.3	.628A	1.639	73.6	1.370	.8	2.4	278.1	.419
4-3048.0	4-3230	.419	304.1	9.7	3.6	1.200	109.6	.339	.759	257.3	554.9	.502	1.015	82.6	.829	.5	22.4	59.7	.219
		11.75	7.71	4.13	4.03	7.43	3.58	12.86	1/1/2	16.3	124.2	26.8	.343	4.311	17.2	202.8	-16.0	94.6D	1.135
MARS ARRIVAL DATE = 2442850 (12 MAR 1976)																			
4-2570	4-2850	.271	58.7	10.9	-2.4	1.090	103.2	.303	1.274	297.6	527.0	.888	1.660A	95.5	.659	1.1	21.7	145.6	.097
4-2850	4-3033.4	.214	129.3	23.3	1.7	.538	85.9	.530	1.076	176.4	277.5	.506A	1.645	63.8	1.355	.7	1.5	270.6	.607
4-3033.4	4-3130	.607	276.5	1.6	.8	1.300	117.4	.500	.929	265.7	485.7	.464	1.394A	119.9	.979	2.7	25.7	63.8	.522
		12.63	10.43	5.85	2.20	5.62	4.59	19.08	2/1/2	75.5	19.4	5.9	.163	19.460	1.8	183.6	-.9	90.8D	3.014
4-2580	4-2850	.256	65.4	9.6	-2.8	1.094	102.2	.297	1.291	302.4	522.2	.908	1.675A	97.2	.667	1.7	21.0	159.2	.100
4-2850	4-3037.4	.200	126.9	24.0	1.6	.551	86.9	.504	1.093	176.9	284.5	.542A	1.644	66.6	1.360	.8	1.7	273.3	.554
4-3037.4	4-3140	.554	283.0	5.4	1.6	1.277	116.2	.456	.883	265.8	489.4	.480	1.285A	116.4	.950	2.0	26.3	72.3	.457
		12.07	9.83	5.57	2.24	5.67	4.25	17.55	2/1/2	65.7	21.8	9.8	.196	11.732	10.1	188.6	-9.7	92.2D	2.104

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2442850
12 MAR 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVP	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-2590	4-2850	.243	71.8	6.4	-3.5	1.098	101 2	.293	1.309	307.3	517.6	.926	1.693A	98.7	.675	2.6	21.5	171.3	.106
4-2850	4-3041.1	.189	124.5	24.6	1.5	.562	67.6	.483	1.108	177.5	290.9	.573A	1.643	68.9	1.364	.8	2.0	275.6	.507
4-3041.1	4-3150	.507	288.9	5.1	2.2	1.256	113.3	.417	.849	265.4	493.5	.494	1.203A	113.0	.925	1.5	26.3	80.1	.398
		11.74	9.36	5.36	2.37	5.79	4.00	16.22	2/1/2	54.5	24.9	13.7	.233	6.385	13.6	193.1	-13.1	93.6D	1.724
4-2600	4-2850	.237	78.2	-.8	-5.0	1.103	100.2	.291	1.328	312.4	513.2	.942	1.714A	100.1	.683	4.2	25.2	182.5	.123
4-2850	4-3044.4	.180	122.3	25.1	1.4	.571	66.3	.466	1.120	176.0	296.7	.598A	1.643	71.0	1.367	.6	2.3	277.3	.468
4-3044.4	4-3160	.468	294.3	6.7	2.7	1.243	111.6	.384	.823	265.3	498.2	.507	1.140A	109.7	.905	1.0	25.8	87.1	.344
		11.71	9.06	5.27	2.63	6.04	3.81	15.08	2/1/2	49.4	28.8	17.5	.275	6.570	15.3	197.0	-14.6	94.9D	1.531
4-2610	4-2850	.265	85.5	-16.0	-9.2	1.108	99.1	.290	1.347	317.6	508.9	.957	1.738A	101.3	.690	8.5	36.4	195.0	.160
4-2850	4-3047.8	.174	120.3	25.5	1.3	.578	63.8	.452	1.131	176.5	301.9	.619A	1.642	72.8	1.369	.9	2.7	278.7	.434
4-3047.8	4-3170	.434	299.1	8.1	3.0	1.231	110.1	.355	.805	265.1	503.5	.519	1.091A	106.5	.889	.6	25.1	92.7	.295
		12.73	9.37	5.70	3.36	6.76	3.67	14.14	2/1/2	53.2	33.8	21.1	.319	5.461	16.1	200.3	-15.1	96.2D	1.423
4-2640	4-2850	.195	88.8	39.6	3.9	1.124	95.4	.293	1.404	335.8	498.1	.993	1.616A	104.1	.712	-6.1	-28.4	178.3	.165
4-2850	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.9	.371
4-3053.4	4-3200	.371	309.2	10.7	3.4	1.210	107.2	.301	.775	264.2	523.3	.541	1.008A	96.9	.854	-.1	23.0	95.9	.185
		11.54	8.07	4.63	3.47	6.87	3.44	12.38	1/1/2	35.8	61.1	29.3	.437	3.950	15.9	206.6	-13.9	99.6D	1.290
4-2650	4-2850	.168	86.3	30.6	3.9	1.130	94.0	.296	1.421	342.6	495.3	1.000	1.641A	104.8	.718	-4.0	-21.5	186.0	.162
4-2850	4-3054.1	.162	115.8	25.8	1.1	.591	89.7	.427	1.151	179.6	313.8	.659A	1.642	76.6	1.374	1.0	3.8	280.6	.364
4-3054.1	4-3210	.364	310.6	10.6	3.4	1.207	106.9	.296	.769	263.5	531.6	.542	.997A	93.5	.846	-.1	22.8	89.1	.187
		11.09	7.66	4.26	3.41	6.81	3.42	12.15	1/1/2	27.3	77.4	30.5	.453	3.797	15.4	207.3	-13.4	99.9D	1.266
4-2660	4-2850	.155	81.6	45.6	3.0	1.135	92.3	.299	1.434	350.0	493.1	1.005	1.664A	105.4	.722	-2.9	-17.8	190.3	.165
4-2850	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.5	.371
4-3053.4	4-3220	.371	310.3	10.5	3.4	1.204	107.3	.301	.765	262.0	541.1	.535	.995	89.5	.839	-.1	22.6	77.6	.188
		11.02	7.55	4.11	3.48	6.88	3.44	12.16	1/1/2	22.7	98.0	30.3	.437	3.823	15.2	207.0	-13.2	99.2D	1.254
4-2670	4-2850	.152	74.7	41.6	2.5	1.139	90.4	.303	1.444	358.2	491.6	1.006	1.682A	105.9	.725	-2.2	-15.4	192.9	.169
4-2850	4-3049.9	.169	118.5	25.7	1.2	.583	89.1	.442	1.159	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	279.6	.407
4-3049.9	4-3230	.407	306.4	9.8	3.5	1.201	109.1	.329	.760	258.5	553.1	.510	1.011	83.7	.831	.3	22.3	83.0	.207
		11.20	7.63	4.06	3.57	6.97	3.56	12.68	1/1/2	20.0	121.3	27.5	.363	4.204	15.9	204.6	-14.4	98.0D	1.164

MARS ARRIVAL DATE = 2442860 (22 MAR 1976)

4-2570	4-2860	.272	58.9	11.4	-2.3	1.089	103.3	.303	1.272	297.2	531.0	.687	1.657A	93.9	.654	1.0	22.7	141.4	.095
4-2860	4-3034.0	.215	126.6	23.8	1.6	.533	89.3	.532	1.076	179.4	277.1	.503A	1.648	65.6	1.355	.9	1.7	271.9	.611
4-3034.0	4-3130	.611	277.4	1.6	.9	1.303	117.5	.504	.937	266.1	485.1	.465	1.410A	120.2	.963	2.7	25.7	64.3	.528
		12.64	10.48	5.85	2.16	5.58	4.63	19.23	2/1/2	84.0	19.0	5.5	.161	20.906	2.1	184.6	1.3	90.9D	3.206
4-2580	4-2860	.254	65.4	10.4	-2.6	1.092	102.2	.295	1.287	302.2	526.4	.908	1.667A	95.5	.661	1.5	22.0	155.5	.095
4-2860	4-3038.0	.202	123.8	24.5	1.5	.548	90.1	.506	1.094	180.1	284.2	.541A	1.648D	66.4	1.360	.9	2.0	274.5	.557
4-3038.0	4-3140	.557	283.8	5.4	1.7	1.280	115.3	.459	.888	266.0	488.7	.480	1.296A	116.7	.954	2.0	26.2	72.8	.462
		12.02	9.86	5.55	2.16	5.58	4.31	17.67	2/1/2	71.6	21.4	9.4	.194	12.187	9.1	189.6	-8.7	92.3D	2.169
4-2590	4-2860	.239	71.6	7.6	-3.2	1.096	101.1	.289	1.304	307.2	522.0	.926	1.681A	97.0	.669	2.3	22.0	168.4	.100
4-2860	4-3041.7	.192	121.1	25.1	1.4	.560	90.8	.485	1.110	180.8	290.7	.572A	1.648D	68.8	1.364	.9	2.3	276.8	.510
4-3041.7	4-3150	.510	289.7	5.2	2.3	1.260	113.4	.420	.853	265.8	492.9	.495	1.211A	113.3	.929	1.4	26.1	80.6	.402
		11.60	9.37	5.30	2.23	5.65	4.07	16.31	2/1/2	61.2	24.4	13.4	.231	8.576	12.9	194.0	-12.4	93.6D	1.752
4-2600	4-2860	.229	77.6	2.2	-4.3	1.101	100.0	.286	1.320	312.4	517.7	.943	1.697A	98.4	.676	3.5	24.1	160.1	.110
4-2860	4-3045.0	.184	118.6	25.5	1.3	.569	91.3	.468	1.123	181.5	296.7	.598A	1.649D	71.0	1.367	1.0	2.7	278.3	.469
4-3045.0	4-3160	.469	295.1	6.8	2.8	1.245	111.6	.386	.827	265.6	497.6	.508	1.145A	110.0	.908	.9	25.7	87.6	.347
		11.43	9.03	5.13	2.40	5.82	3.90	15.16	2/1/2	54.0	28.2	17.3	.273	6.662	14.7	197.9	-13.9	95.0D	1.545
4-2610	4-2860	.234	65.6	-9.8	-6.7	1.105	98.9	.283	1.337	317.6	513.6	.958	1.716A	99.6	.683	6.1	31.2	191.9	.132
4-2860	4-3047.9	.176	116.4	25.8	1.2	.576	91.7	.454	1.134	182.1	302.0	.619A	1.649D	72.8	1.370	1.0	3.0	279.5	.435
4-3047.9	4-3170	.435	299.9	8.2	3.1	1.233	110.1	.356	.807	265.4	502.9	.520	1.095A	106.7	.891	.5	24.9	93.4	.298
		11.78	8.98	5.21	2.80	6.21	3.77	14.20	2/1/2	52.8	33.2	20.9	.317	5.508	15.5	201.2	-14.5	96.3D	1.430
4-2640	4-2860	.214	68.3	70.0	8.0	1.120	95.1	.282	1.385	336.5	503.3	.994	1.777A	102.3	.702	-8.1	-36.4	172.5	.165
4-2860	4-3054.1	.169	112.0	26.0	1.0	.589	92.5	.431	1.154	183.3	313.0	.657A	1.650D	76.3	1.374	1.1	4.1	281.2	.370
4-3054.1	4-3200	.370	310.1	10.7	3.4	1.211	107.1	.301	.776	264.6	522.6	.542	1.010A	97.2	.856	-.1	22.7	97.2	.187
		11.93	8.46	4.90	3.48	6.88	3.56	12.40	1/1/2	45.6	59.9	29.4	.438	3.943	15.2	207.3	-13.1	99.9D	1.290
4-2650	4-2860	.169	83.8	56.4	4.7	1.125	93.6	.284	1.399	343.5	500.7	1.002	1.796A	103.0	.707	-4.7	-26.1	184.0	.149
4-2860	4-3054.8	.168	111.5	26.0	1.0	.590	92.6	.428	1.156	183.5	314.3	.661A	1.650D	76.7	1.375	1.2	4.3	281.3	.363
4-3054.8	4-3210	.363	311.6	10.9	3.4	1.207	106.8	.295	.771	263.9	530.8	.543	.998A	93.8	.847	-.2	22.4	90.9	.188
		10.96	7.81	4.27	3.15	6.55	3.54	12.15	1/1/2	33.4	75.7	30.7	.456	3.777	14.8	208.1	-12.5	100.3D	1.266
4-2660	4-2860	.152	76.3	49.2	3.4	1.129	92.0	.286	1.409	351.1	498.7	1.006	1.813A	103.5	.710	-5.2	-20.7	189.6	.149
4-2860	4-3054.3	.169	111.8	26.0	1.0	.590	92.5	.430	1.154	183.4	313.5	.658A	1.650D	76.5	1.375	1.1	4.1	281.2	.368
4-3054.3	4-3220	.368	311.5	10.6	3.4	1.204	107.1	.299	.766	262.5	540.2	.538	.995	89.9	.840	-.2	22.3	79.9	.166
		10.76	7.62	4.07	3.14	6.54	3.55	12.14	1/1/2	27.4	95.9	30.6	.444	3.784	14.5	207.9	-12.2	99.6D	1.237
4-2670	4-2860	.148	70.8	43.8	2.7	1.133	90.1	.289	1.415	359.5	497.4	1.006	1.825A	104.0	.713	-2.4	-17.4	192.7	.151
4-2860	4-3051.3	.173	113.9	26.0	1.1	.584	92.2	.440	1.145	182.8	308.1	.641A	1.650D	74.8	1.373	1.1	3.8	280.6	.398
4-3051.3	4-3230	.398	308.3	9.9	3.4	1.202	108.6	.323	.762	259.3	551.7	.516	1.008	84.5	.832	.1	22.2	85.8	.199
		10.85	7.66	4.02	3.19	6.59	3.64	12.56	1/1/2	24.2	118.8	28.2	.379	4.108	14.8	206.0	-13.0	96.9D	1.178

MARS ARRIVAL DATE = 2442870 (1 APR 1976)

4-2570	4-2870	.273	59.1	11.8	-2.2	1.089	103.4	.304	1.270	296.7	535.0	.885	1.656A	92.2	.650	.9	23.6	137.2	.095
4-2870	4-3034.6	.221	123.3	24.3	1.6	.532	93.0	.535	1.079	182.6	276.9	.502A	1.655D	63.5	1.356	1.0	2.0	273.0	.615
4-3034.6	4-3130	.615	276.2	1.8	.9	1.307	117.7	.508	.945	266.5	484.4	.465	1.426A	120.5	.988	2.7	25.7	64.7	.534
		12.78	10.64	5.88	2.15	5.56	4.76	19.38	2/1/2	92.3	18.7	5.2	.159	22.088	4.1	185.5	3.7	91.0D	3.353
4-2580	4-2870	.254	65.5	11.0	-2.4	1.092	102.2	.294	1.285	301.8	530.5	.907	1.663A	93.9	.657	1.4	23.0	151.4	.091
4-2870	4-3038.6	.208	120.2	25.0	1.5	.547	93.6	.509	1.098	183.5	284.1	.540A	1.657D	66.3	1.361	1.0	2.3	275.5	.560
4-3038.6	4-3140	.560	284.6	3.5	1.7	1.282	115.4	.462	.894	266.3	488.1	.481	1.307A	117.0	.957	1.9	26.1	73.2	.467
		12.10	10.00	5.54	2.10	5.53	4.46	17.78	2/1/2	79.8	21.0	9.2	.192	12.506	8.1	190.4	-7.6	92.4D	2.207
4-2590	4-2870	.237	71.6	8.9	-2.9	1.095	101.1	.287	1.299	307.0	526.2	.926	1.673A	95.4	.664	2.1	22.7	165.0	.093
4-2870	4-3042.2	.199	117.2	25.5	1.4	.559	94.2	.487	1.115	184.4	290.8	.572A	1.658D	68.8	1.365	1.0	2.6	277.5	.512
4-3042.2	4-3160	.512	290.5	6.2	2.3	1.262	113.4	.422	.857	266.1	492.3	.495	1.218A	113.6	.931	1.4	26.0	81.1	.406
		11.63	9.49	5.26	2.13	5.56	4.24	16.40	2/1/2	68.5	24.0	13.2	.229	8.686	12.2	194.8	-11.5	93.7D	1.762
4-2600	4-2870	.223	77.2	4.5	-3.7	1.099	99.9	.282	1.314	312.4	522.1	.944	1.685A	96.8	.670	3.0	23.9	177.3	.100
4-2870	4-3045.8	.192	114.6	25.6	1.3	.569	94.6	.470	1.129	185.2	296.9	.598A	1.660D	70.9	1.369	1.1	3.0	279.1	.471
4-3045.8	4-3160	.471	295.8	6.9	2.8	1.247	111.7	.387	.829	265.9	497.0	.508	1.151A	110.2	.910	.9	25.5	88.1	.351
		11.56	9.12	5.04	2.24	5.66	4.07	15.23	2/1/2	59.8	27.8	17.2	.271	6.700	14.0	198.6	-13.1	95.1D	1.544
4-2610	4-2870	.219	82.6	-4.4	-5.5	1.103	98.8	.278	1.329	318.0	518.1	.980	1.699A	98.0	.677	4.8	28.5	189.0	.115
4-2870	4-3048.8	.187	112.3	26.0	1.2	.577	95.0	.457	1.140	186.0	302.3	.620A	1.661D	72.8	1.372	1.1	3.4	280.2	.436
4-3048.8	4-3170	.436	300.6	8.3	3.1	1.234	110.1	.358	.810	265.7	502.3	.520	1.099A	107.0	.893	.5	24.8	94.0	.301
		11.41	8.93	4.97	2.49	5.90	3.95	14.25	2/1/2	55.5	32.6	20.9	.316	5.513	14.9	201.8	-13.6	96.8D	1.424
4-2620	4-2870	.255	68.7	-24.7	-10.0	1.108	97.6	.276	1.344	323.8	514.5	.973	1.715A	99.0	.683	9.6	40.7	208.1	.156
4-2870	4-3051.0	.183	110.4	26.1	1.1	.583	95.2	.446	1.149	186.6	307.0	.637A	1.662D	74.3	1.374	1.2	3.8	281.0	.408
4-3051.0	4-3180	.408	304.8	9.4	3.3	1.224	108.8	.333	.795	265.5	508.2	.530	1.060A	103.8	.878	.2	23.8	98.1	.257
		12.78	9.43	5.56	3.33	6.73	3.87	13.46	2/1/2	60.3	39.0	24.3	.361	4.748	15.1	204.4	-13.5	97.9D	1.354
4-2650	4-2870	.176	81.0	63.7	5.9	1.121	93.4	.274	1.382	344.3	505.9	1.003	1.781A	101.2	.697	-5.8	-32.0	180.2	.142
4-2870	4-3058.8	.178	107.2	26.0	.9	.592	95.7	.431	1.164	187.8	315.1	.683A	1.665D	76.9	1.377	1.5	4.7	281.7	.362
4-3058.8	4-3210	.362	312.4	10.9	3.4	1.208	106.8	.294	.772	264.2	530.1	.545	.999A	94.1	.849	-.3	22.1	82.4	.186
		11.12	8.12	4.37	3.00	6.41	3.76	12.16	1/1/2	41.0	74.3	31.1	.459	3.736	14.2	208.8	-11.6	100.6D	1.255
4-2660	4-2870	.152	74.8	53.3	3.9	1.125	91.7	.276	1.390	352.1	504.1	1.006	1.773A	101.8	.700	-3.7	-24.2	186.0	.136
4-2870	4-3058.1	.178	107.5	26.0	.9	.591	95.6	.432	1.162	187.5	314.4	.661A	1.664D	76.7	1.377	1.3	4.6	281.7	.366
4-3058.1	4-3220	.366	312.5	10.7	3.4	1.205	107.0	.297	.767	262.9	539.3	.540	.998A	90.3	.841	-.2	22.1	81.8	.185
		10.71	7.83	4.07	2.88	6.29	3.76	12.12	1/1/2	32.9	94.2	31.1	.480	3.729	13.8	208.8	-11.2	100.4D	1.228

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 560 DAYS | MARS ARRIVAL DATE = 2442870 | 1 APR 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-2670	4-2870	.146	67.1	46.1	3.0	1.128	89.8	.278	1.394	.7	143.0	1.006D	1.782A	02.1	.702	-2.6	-19.6	192.0	.136
4-2870	4-3052.8	.181	109.3	26.1	1.0	.586	95.4	.440	1.154	186.9	309.7	.646A	1.663D	75.2	1.375	1.2	4.1	281.3	.392
4-3052.8	4-3230	.392	309.8	10.0	3.4	1.203	108.3	.318	.763	260.0	550.5	.521	1.006	85.2	.833	.0	22.0	68.1	.192
		10.71	7.62	4.00	2.88	6.29	3.65	12.48	1/1/2	29.0	116.7	26.9	.391	4.009	13.9	207.0	-11.8	97.8D	1.178
MARS ARRIVAL DATE = 2442880 (11 APR 1976)																			
4-2580	4-2880	.255	65.6	11.7	-2.3	1.091	102.3	.295	1.283	301.4	534.5	.905	1.661A	92.3	.654	1.3	23.9	147.2	.090
4-2880	4-3039.1	.219	116.4	25.4	1.4	.550	97.4	.512	1.106	187.2	284.3	.540A	1.672D	66.2	1.363	1.1	2.5	276.3	.563
4-3039.1	4-3140	.563	285.3	3.5	1.7	1.285	115.5	.465	.699	266.6	487.6	.481	1.316A	117.2	.961	1.9	26.1	73.6	.472
		12.35	10.26	5.55	2.08	5.51	4.71	17.89	2/1/2	86.1	20.6	9.1	.190	12.630	7.1	191.1	-6.4	92.5D	2.208
4-2590	4-2880	.236	71.6	10.0	-2.7	1.094	101.1	.286	1.296	306.7	530.3	.926	1.667A	93.8	.660	1.9	23.6	161.0	.089
4-2880	4-3042.7	.210	113.3	25.8	1.3	.563	97.8	.491	1.123	188.3	291.1	.572A	1.675D	68.7	1.368	1.2	2.9	278.1	.514
4-3042.7	4-3150	.514	291.2	5.3	2.3	1.264	113.5	.424	.860	266.4	491.8	.495	1.225A	113.8	.934	1.3	25.9	81.5	.410
		11.61	9.74	5.24	2.07	5.49	4.50	16.49	2/1/2	76.4	23.6	13.2	.227	8.690	11.4	195.4	-10.6	93.9D	1.748
4-2600	4-2880	.220	77.1	8.4	-3.3	1.098	99.9	.279	1.310	312.3	526.3	.944	1.676A	95.2	.666	2.7	24.2	173.9	.093
4-2880	4-3046.0	.204	110.6	26.0	1.2	.573	98.1	.474	1.138	189.3	297.3	.599A	1.677D	70.9	1.372	1.2	3.3	279.6	.473
4-3046.0	4-3160	.473	296.5	6.9	2.8	1.248	111.7	.389	.832	266.1	496.5	.509	1.155A	110.4	.912	.6	25.4	86.6	.354
		11.47	9.34	4.99	2.13	5.55	4.35	15.29	2/1/2	66.5	27.4	17.2	.269	6.669	13.3	199.1	-12.3	95.4D	1.526
4-2610	4-2880	.210	82.0	-.6	-4.5	1.102	98.7	.274	1.323	318.0	522.6	.960	1.687A	96.4	.672	4.0	27.1	185.9	.103
4-2880	4-3048.9	.199	108.3	26.1	1.1	.581	98.4	.460	1.150	190.1	302.8	.621A	1.680D	72.8	1.374	1.2	3.7	280.8	.437
4-3048.9	4-3170	.437	301.3	8.3	3.1	1.235	110.2	.359	.812	265.9	501.8	.521	1.103A	107.2	.894	.4	24.6	94.5	.304
		11.37	9.09	4.84	2.28	5.70	4.25	14.30	2/1/2	80.0	32.2	21.1	.314	5.469	14.2	202.3	-12.8	96.8D	1.404
4-2620	4-2880	.219	86.7	-15.0	-7.1	1.106	97.4	.271	1.336	324.0	519.1	.974	1.699A	97.4	.677	6.8	35.2	198.1	.127
4-2880	4-3051.5	.196	106.4	26.1	1.0	.587	98.6	.450	1.160	190.9	307.6	.638A	1.682D	74.4	1.377	1.3	4.1	281.3	.409
4-3051.5	4-3180	.409	305.4	9.5	3.3	1.225	108.9	.334	.797	265.7	507.7	.531	1.063A	104.0	.880	.1	25.6	98.7	.259
		11.86	9.15	4.98	2.71	6.12	4.18	13.50	2/1/2	59.7	38.4	24.6	.360	4.697	14.5	204.8	-12.7	98.3D	1.332
4-2650	4-2880	.195	77.0	73.0	7.7	1.118	93.1	.267	1.366	345.0	511.0	1.003	1.733A	99.6	.690	-7.5	-39.5	173.4	.144
4-2880	4-3056.0	.192	103.4	25.9	.8	.597	99.0	.434	1.175	192.0	316.0	.665A	1.686D	77.1	1.380	1.4	5.1	281.8	.361
4-3056.0	4-3210	.361	313.2	11.0	3.4	1.208	106.7	.294	.773	264.5	529.5	.546	.999A	94.3	.849	-.3	21.8	93.7	.168
		11.74	8.70	4.63	3.04	6.45	4.07	12.16	1/1/2	50.6	73.1	31.6	.461	3.671	13.7	209.0	-10.8	101.4D	1.231
4-2660	4-2880	.155	71.0	58.5	4.6	1.121	91.5	.268	1.375	352.9	509.4	1.007	1.742A	100.0	.692	-4.3	-28.5	185.2	.126
4-2880	4-3055.8	.192	103.5	25.9	.8	.596	99.0	.435	1.175	192.0	315.6	.663A	1.686D	76.9	1.380	1.4	5.0	281.8	.364
4-3055.8	4-3220	.364	313.4	10.7	3.4	1.206	106.9	.295	.768	263.3	536.6	.541	.995A	90.6	.842	-.3	21.8	83.4	.164
		10.88	8.18	4.11	2.70	6.11	4.08	12.10	1/1/2	39.4	92.7	31.8	.455	3.651	13.2	209.0	-10.3	101.0D	1.206
4-2670	4-2880	.145	63.6	48.8	3.4	1.124	89.6	.270	1.377	1.7	148.4	1.006D	1.748A	100.4	.693	-2.9	-22.2	190.4	.123
4-2880	4-3053.5	.194	105.0	26.1	.9	.592	98.8	.443	1.167	191.4	311.3	.651A	1.684D	75.6	1.378	1.3	4.5	281.6	.387
4-3053.5	4-3230	.387	311.1	10.0	3.4	1.203	108.1	.314	.764	260.6	549.5	.524	1.004	85.7	.835	-.1	21.6	70.1	.188
		10.76	8.12	4.00	2.64	6.05	4.13	12.41	1/1/2	34.3	114.9	29.7	.402	3.897	13.1	207.7	-10.7	98.7D	1.163
MARS ARRIVAL DATE = 2442890 (21 APR 1976)																			
4-2580	4-2890	.256	65.9	12.3	-2.2	1.091	102.4	.296	1.282	300.8	536.3	.903	1.662A	90.7	.652	1.3	24.6	143.2	.091
4-2890	4-3039.7	.234	112.5	25.7	1.4	.557	101.6	.517	1.118	191.3	284.7	.541A	1.696D	66.2	1.367	1.2	2.8	276.8	.566
4-3039.7	4-3140	.566	286.0	3.6	1.7	1.287	115.6	.468	.904	266.9	487.0	.481	1.328A	117.5	.964	1.9	26.0	74.0	.476
		12.77	10.67	5.59	2.09	5.52	5.09	18.00	2/1/2	96.1	20.3	9.2	.188	12.496	6.0	191.7	-5.1	92.8D	2.161
4-2590	4-2890	.236	71.7	10.9	-2.5	1.094	101.1	.286	1.295	306.3	534.3	.924	1.665A	92.3	.657	1.8	24.4	156.9	.087
4-2890	4-3043.2	.227	109.5	25.9	1.3	.570	101.9	.495	1.137	192.5	291.7	.574A	1.700D	68.7	1.372	1.3	3.1	278.5	.516
4-3043.2	4-3150	.516	291.8	5.4	2.4	1.266	113.6	.426	.864	266.7	491.3	.496	1.232A	114.0	.937	1.3	25.9	81.9	.414
		12.17	10.14	5.24	2.04	5.46	4.90	16.57	2/1/2	84.5	23.2	13.4	.226	8.563	10.5	195.9	-9.6	94.3D	1.706
4-2600	4-2890	.218	77.0	8.0	-3.0	1.097	99.9	.278	1.307	312.0	530.5	.944	1.670A	93.6	.663	2.4	24.7	170.1	.088
4-2890	4-3046.5	.221	106.9	26.1	1.2	.580	101.9	.479	1.153	193.7	298.0	.601A	1.704D	71.0	1.375	1.3	3.5	279.8	.474
4-3046.5	4-3160	.474	297.1	7.0	2.8	1.249	111.8	.390	.835	266.4	496.0	.509	1.160A	110.6	.914	.8	25.3	89.0	.357
		11.77	9.72	4.96	2.05	5.47	4.76	15.35	2/1/2	73.9	27.0	17.5	.268	6.556	12.6	199.5	-11.3	95.7D	1.487
4-2610	4-2890	.204	81.6	2.4	-3.8	1.100	98.6	.272	1.319	317.9	526.9	.960	1.678A	94.8	.668	3.4	26.6	182.4	.094
4-2890	4-3049.4	.217	104.6	26.1	1.1	.589	102.1	.466	1.166	194.7	303.7	.623A	1.709D	72.9	1.379	1.3	4.0	280.7	.436
4-3049.4	4-3170	.436	301.9	8.4	3.2	1.236	110.2	.360	.813	266.1	501.3	.521	1.106A	107.3	.896	.4	24.4	94.9	.306
		11.57	9.43	4.75	2.14	5.56	4.67	14.35	2/1/2	85.8	31.7	21.5	.313	5.365	13.5	202.6	-11.9	97.3D	1.366
4-2620	4-2890	.201	85.6	-8.4	-5.6	1.104	97.5	.267	1.331	324.1	525.5	.975	1.686A	95.8	.673	5.3	32.1	194.5	.109
4-2890	4-3051.9	.215	102.6	26.1	1.0	.595	102.3	.456	1.176	195.5	308.5	.640A	1.712D	74.5	1.381	1.4	4.4	281.2	.409
4-3051.9	4-3160	.409	306.0	9.5	3.4	1.226	108.9	.334	.798	265.9	507.2	.531	1.065A	104.1	.881	.1	25.5	99.2	.261
		11.71	9.32	4.71	2.39	5.80	4.61	13.53	2/1/2	62.2	37.9	25.1	.359	4.600	13.9	205.1	-11.8	98.8D	1.293
4-2660	4-2890	.164	66.3	64.5	5.6	1.119	91.3	.261	1.363	353.6	514.5	1.007	1.719A	98.4	.686	-5.2	-34.1	180.5	.122
4-2890	4-3056.4	.211	100.1	25.8	.8	.605	102.5	.441	1.192	196.9	317.0	.667A	1.718D	77.2	1.384	1.4	5.4	281.5	.362
4-3056.4	4-3220	.362	314.2	10.7	3.4	1.206	106.8	.294	.769	263.6	536.0	.543	.995A	90.8	.845	-.3	21.6	84.9	.163
		11.33	8.73	4.21	2.61	6.02	4.52	12.09	1/1/2	47.3	91.3	32.8	.459	3.545	12.7	209.1	-9.5	101.8D	1.169
4-2670	4-2890	.147	60.1	51.9	5.8	1.121	89.5	.263	1.364	2.5	153.8	1.006D	1.723A	98.7	.687	-3.3	-25.4	187.8	.113
4-2890	4-3054.8	.212	101.3	25.9	.9	.600	102.4	.447	1.165	196.3	313.1	.655A	1.715D	76.0	1.383	1.4	4.9	281.5	.383
4-3054.8	4-3230	.383	312.2	10.0	3.3	1.204	107.9	.311	.765	261.1	548.7	.527	1.003	86.1	.836	-.2	21.7	71.8	.184
		11.03	8.57	4.01	2.46	5.88	4.55	12.36	1/1/2	40.5	113.4	30.8	.410	3.763	12.4	208.1	-9.8	99.7D	1.133
MARS ARRIVAL DATE = 2442900 (1 MAY 1976)																			
4-2590	4-2900	.237	71.9	11.8	-2.3	1.094	101.3	.287	1.293	305.9	538.2	.923	1.664A	90.7	.655	1.6	25.1	152.7	.086
4-2900	4-3043.7	.249	108.0	26.0	1.3	.582	106.0	.502	1.158	197.2	292.8	.576A	1.739D	68.8	1.377	1.4	3.4	278.6	.518
4-3043.7	4-3150	.518	292.4	5.4	2.4	1.268	113.6	.428	.867	266.9	490.8	.496	1.239A	114.2	.939	1.2	25.8	82.3	.417
		12.74	10.71	5.26	2.03	5.46	5.45	16.64	2/1/2	92.4	22.9	13.9	.224	8.282	9.5	196.2	-8.4	94.7D	1.630
4-2600	4-2900	.217	77.1	9.3	-2.7	1.098	99.9	.277	1.305	311.7	534.5	.943	1.667A	92.1	.660	2.2	25.3	165.9	.084
4-2900	4-3048.9	.244	103.6	26.0	1.1	.593	106.0	.486	1.175	198.5	299.2	.604A	1.745D	71.1	1.381	1.4	3.8	279.7	.475
4-3048.9	4-3160	.475	297.7	7.0	2.9	1.251	111.8	.391	.837	266.6	495.6	.509	1.165A	110.8	.916	.7	25.2	89.4	.360
		12.28	10.27	4.95	2.01	5.43	5.33	15.41	2/1/2	81.6	26.6	18.1	.266	6.347	11.7	199.7	-10.5	96.3D	1.422
4-2610	4-2900	.201	81.5	4.8	-3.3	1.100	98.6	.270	1.316	317.7	531.1	.960	1.671A	93.3	.665	3.0	26.6	178.5	.088
4-2900	4-3049.8	.241	101.5	26.0	1.0	.601	106.0	.473	1.189	199.7	304.9	.626A	1.751D	73.0	1.384	1.4	4.2	280.5	.439
4-3049.8	4-3170	.439	302.4	8.4	3.2	1.237	110.2	.360	.815	266.4	500.9	.521	1.109A	107.5	.897	.3	24.3	95.4	.308
		12.00	9.95	4.70	2.05	5.47	5.24	14.39	2/1/2	72.6	31.5	22.2	.312	5.194	12.7	202.6	-10.9	97.9D	1.306
4-2620	4-2900	.192	85.1	-3.6	-4.6	1.103	97.3	.265	1.326	324.1	527.9	.975	1.677A	94.3	.670	4.4	30.4	190.5	.097
4-2900	4-3052.3	.236	99.9	25.9	.9	.607	106.1	.464	1.200	200.6	309.9	.644A	1.756D	74.7	1.387	1.4	4.7	280.8	.410
4-3052.3	4-3180	.410	306.5	9.6	3.4	1.227	108.9	.335	.799	266.1	506.8	.532	1.067A	104.3	.882	.0	23.3	99.7	.263
		11.95	9.76	4.57	2.19	5.62	5.18	13.56	2/1/2	66.8	37.4	26.0	.358	4.451	13.2	205.0	-10.9	99.5D	1.237
4-2630	4-2900	.207	88.1	-20.3	-7.5	1.107	95.9	.261	1.336	330.7	525.0	.988	1.684A	95.2	.674	7.5	39.3	203.1	.124
4-2900	4-3054.4	.236	98.7	25.8	.8	.612	106.1	.456	1.208	201.3	314.0	.657A	1.760D	76.0	1.389	1.5	5.1	280.9	.386
4-3054.4	4-3190	.386	310.0	10.4	3.5	1.219	107.6	.315	.788	265.9	513.3	.540	1.036A	101.2	.870	-.2	22.3	101.9	.223
		12.56	9.93	4.79	2.65	6.07	5.14	12.92	2/1/2	66.9	45.5	29.3	.403	3.956	13.3	206.9	-10.5	101.0D	1.192
4-2660	4-2900	.181	58.4	72.3	7.2	1.116	91.2	.256	1.354	354.2	519.4	1.007	1.701A	96.8	.681	-6.7	-40.9	172.9	.124
4-2900	4-3056.9	.235	97.4	25.6	-.7	.617	106.1	.449	1.217	202.1	318.7	.671A	1.763D	77.5	1.390	1.5	5.7	280.8	.360
4-3056.9	4-3220	.360	314.9	10.8	3.3	1.206	106.7	.293	.770	263.8	537.4	.544	.996A	91.1	.844	-.4	21.3	86.2	.162
		12.19	9.83	4.43	2.66	6.07	5.09	12.09	1/1/2	56.6	90.1	34.1	.463	3.410	12.2	209.0	-8.6	102.6D	1.115
4-2670	4-2900	.151	56.5	55.8	4.4	1.119	89.4	.258	1.355	3.1	158.6	1.006D	1.704A	97.0	.681	-3.8	-29.3	183.9	.106
4-2900	4-3055.1	.236	98.4	25.7	.8	.613	106.1	.454	1.210	201.5	315.2	.660A	1.760D	76.4	1.389	1.5	5.5	280.9	.379
4-3055.1	4-3230	.379	313.1	10.1	3.3	1.204	107.7	.308	.766	261.5	547.9	.530	1.002	86.5	.836	-.2	21.5	73.3	.181
		11.52	9.18	4.06	2.34	5.76	5.12	12.32	1/1/2	47.5	112.0	32.2	.418	3.602	11.8	208.2	-8.6	100.8D	1.087
4-2680	4-2900	.152	51.8	44.4	3.5	1.120	87.3	.261	1.351	12.9	158.7	.998D	1.704A	97.2	.680	-2.5	-21.7	186.1	.102
4-2900	4-3047.0	.244	103.5	26.0	1.1	.593	106.0	.486	1.175	198.6	299.3	.604A	1.746D	71.1	1.381	1.4	3.8	279.6	.475
4-3047.0	4-3240	.475	304.1	8.9	3.0	1.201	112.4	.383	.759	253.8	563.0	.468	1.050	77.0	.826	.7	22.2	57.6	.281
		11.87	9.40	4.07	2.27	5.69	5.33	13.88	1/1/2	44.3	136.0	24.7	.287	4.667	13.6	203.3	-11.9	92.8D	.978

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 560 DAYS | MARS ARRIVAL DATE = 2442910 | 11 MAY 1976

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2442910 (11 MAY 1976)																			
4-2600	4-2910	.217	77.3	10.5	-2.5	1.096	100.0	.278	1.304	311.2	538.5	.941	1.666A	90.6	.659	2.0	25.8	161.7	.083
4-2910	4-3047.5	.273	100.9	25.9	1.1	.611	110.2	.496	1.207	203.9	300.9	.608A	1.806D	71.3	1.390	1.5	4.1	279.3	.477
4-3047.5	4-3160	.477	298.2	7.1	2.9	1.252	111.8	.393	.839	266.9	495.1	.510	1.169A	111.0	.918	.7	25.1	89.8	.363
		13.00	11.01	4.95	1.99	5.41	6.06	15.47	2/1/2	89.5	26.3	19.1	.265	6.035	10.8	199.7	-9.2	97.00	1.332
4-2610	4-2910	.199	81.6	6.8	-3.0	1.099	98.6	.270	1.314	317.4	535.1	.960	1.668A	91.8	.663	2.7	26.8	174.3	.084
4-2910	4-3050.2	.270	99.1	25.8	-1.0	.619	110.1	.484	1.222	205.2	306.7	.631A	1.814D	73.2	1.393	1.5	4.5	279.8	.440
4-3050.2	4-3170	.440	302.9	8.5	3.2	1.238	110.2	.361	.817	266.6	500.5	.522	1.112A	107.7	.899	.3	24.2	95.8	.311
		12.65	10.66	4.68	1.99	5.42	5.98	14.43	2/1/2	79.9	31.0	23.3	.310	4.950	11.9	202.5	-9.9	98.70	1.226
4-2620	4-2910	.186	84.8	.1	-3.8	1.102	97.3	.263	1.323	323.9	532.1	.975	1.671A	92.8	.666	3.8	29.6	186.3	.089
4-2910	4-3052.7	.267	97.6	25.7	-.9	.625	110.0	.475	1.234	206.2	311.7	.648A	1.820D	74.9	1.395	1.5	5.0	280.0	.410
4-3052.7	4-3180	.410	307.1	9.7	3.4	1.228	108.9	.336	.801	266.3	506.4	.532	1.069A	104.5	.883	.0	23.1	100.2	.265
		12.49	10.41	4.49	2.07	5.50	5.92	13.60	2/1/2	72.6	37.0	27.2	.357	4.247	12.5	204.8	-9.9	100.40	1.161
4-2630	4-2910	.186	87.0	-12.4	-5.7	1.106	95.9	.258	1.332	330.7	529.3	.988	1.675A	93.7	.671	5.8	35.9	198.3	.105
4-2910	4-3054.8	.266	96.5	25.6	-.8	.630	110.0	.468	1.243	207.0	315.9	.661A	1.825D	76.3	1.397	1.5	5.4	279.9	.386
4-3054.8	4-3190	.386	310.6	10.5	3.5	1.220	107.8	.315	.789	266.1	512.8	.540	1.038A	101.3	.871	-.2	22.1	102.5	.225
		12.70	10.38	4.49	2.32	5.74	5.68	12.95	2/1/2	69.5	45.0	30.7	.403	3.772	12.6	206.5	-9.5	102.00	1.117
4-2670	4-2910	.159	51.9	60.7	5.3	1.117	89.3	.254	1.347	3.6	163.4	1.005D	1.689A	95.5	.678	-4.6	-34.1	176.4	.103
4-2910	4-3055.8	.265	96.1	25.5	-.7	.632	110.0	.465	1.247	207.3	317.8	.667A	1.827D	76.9	1.398	1.6	5.6	279.8	.376
4-3055.8	4-3230	.376	314.1	10.1	3.3	1.205	107.6	.308	.767	261.9	547.2	.532	1.001	86.9	.937	-.3	21.3	74.9	.178
		12.31	10.02	4.18	2.29	5.71	5.87	12.26	1/1/2	95.6	110.3	34.2	.425	3.400	11.2	208.0	-7.6	102.20	1.020

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2442810
1 FEB 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2442810 (1 FEB 1976)																			
4-2560	4-2810	.292	51.4	9.8	-2.4	1.091	104.4	.318	1.274	294.3	514.9	.870	1.679A	100.7	.678	.8	18.5	146.3	.120
4-2810	4-3041.4	.191	130.8	24.4	1.8	.597	78.4	.464	1.127	166.0	298.3	.604A	1.650	71.5	1.369	.2	.5	271.7	.460
4-3041.4	4-3160	.460	290.4	6.4	2.6	1.235	111.3	.376	.809	263.7	501.4	.505	1.113A	108.4	.893	1.2	26.6	84.0	.326
		12.87	10.29	C.23	2.58	6.00	4.06	14.73	2/1/2	55.5	31.5	19.6	.284	5.878	18.0	192.1	-17.6	94.9D	1.387
4-2570	4-2810	.283	58.8	8.7	-3.0	1.097	103.6	.317	1.299	298.5	509.5	.887	1.711A	102.5	.689	1.6	18.3	157.5	.131
4-2810	4-3044.3	.184	129.9	24.8	1.8	.602	79.0	.451	1.135	166.1	303.0	.622A	1.647	73.1	1.371	.2	.6	273.1	.429
4-3044.3	4-3170	.429	295.1	7.8	2.9	1.225	109.9	.350	.794	263.5	506.8	.516	1.071A	105.2	.879	.9	26.1	89.1	.280
		12.72	9.94	6.05	2.79	6.20	3.88	13.86	2/1/2	45.9	37.1	23.0	.327	5.009	18.9	195.5	-18.4	96.1D	1.311
4-2580	4-2810	.278	66.3	4.9	-4.2	1.103	102.9	.319	1.327	302.8	504.3	.903	1.750A	104.1	.700	2.9	20.4	167.5	.147
4-2810	4-3046.8	.176	129.1	25.2	1.8	.606	79.5	.442	1.141	166.2	307.0	.637A	1.645	74.4	1.372	.2	.7	274.2	.404
4-3046.8	4-3160	.404	299.1	9.0	3.1	1.217	106.8	.329	.782	263.5	512.8	.525	1.039A	102.0	.867	.6	25.6	92.1	.239
		12.80	9.71	5.96	3.09	6.50	3.75	13.17	2/1/2	39.4	44.5	26.1	.368	4.427	19.3	198.2	-18.6	97.2D	1.263
MARS ARRIVAL DATE = 2442820 (11 FEB 1976)																			
4-2550	4-2820	.303	44.3	9.7	-2.0	1.085	105.1	.319	1.247	289.8	524.6	.850	1.645A	96.9	.660	.3	20.6	129.2	.109
4-2820	4-3038.9	.195	131.0	23.8	1.7	.581	79.8	.480	1.113	168.6	292.2	.578A	1.647	69.4	1.365	.3	.9	271.4	.500
4-3038.9	4-3150	.500	286.1	4.9	2.1	1.251	113.0	.410	.835	264.3	495.8	.493	1.177A	112.0	.915	1.6	26.6	78.2	.363
		12.97	10.59	6.44	2.38	5.80	4.15	15.89	2/1/2	76.0	26.6	15.2	.241	7.540	15.7	189.5	-15.4	93.6D	1.576
4-2560	4-2820	.289	51.5	10.1	-2.3	1.089	104.3	.314	1.268	294.1	519.3	.870	1.665A	98.9	.669	.7	19.5	143.2	.111
4-2820	4-3042.2	.186	129.8	24.3	1.7	.589	80.6	.464	1.123	168.7	297.7	.602A	1.645	71.3	1.368	.4	1.0	273.3	.462
4-3042.2	4-3160	.462	291.5	6.5	2.6	1.237	111.4	.378	.813	264.1	500.5	.506	1.120A	108.8	.897	1.2	26.4	84.9	.331
		12.53	10.11	6.18	2.43	5.84	3.93	14.82	2/1/2	63.2	30.7	18.9	.282	6.081	17.3	193.5	-16.8	94.9D	1.432
4-2570	4-2820	.278	58.7	9.4	-2.8	1.094	103.4	.311	1.290	298.4	514.1	.886	1.691A	100.7	.679	1.4	18.8	155.5	.119
4-2820	4-3045.2	.178	128.6	24.8	1.6	.594	81.2	.451	1.132	168.9	302.6	.621A	1.643	73.0	1.370	.4	1.2	274.8	.430
4-3045.2	4-3170	.430	296.2	7.9	2.9	1.227	109.9	.351	.797	264.0	505.8	.517	1.077A	105.5	.882	.8	25.8	90.2	.284
		12.26	9.72	5.96	2.56	5.98	3.76	13.94	2/1/2	52.3	36.1	22.4	.325	5.151	18.1	196.9	-17.4	96.1D	1.348
4-2580	4-2820	.269	65.9	6.5	-3.7	1.100	102.6	.311	1.314	302.8	508.9	.905	1.723A	102.4	.690	2.4	19.7	166.3	.131
4-2820	4-3047.7	.172	127.5	25.1	1.6	.599	81.6	.441	1.139	169.1	306.7	.636A	1.641	74.4	1.371	.4	1.4	275.8	.405
4-3047.7	4-3180	.405	300.3	9.1	3.2	1.218	108.8	.330	.785	263.8	511.8	.526	1.043A	102.4	.869	.5	25.2	93.5	.242
		12.23	9.44	5.81	2.79	6.20	3.63	13.23	2/1/2	44.2	43.2	25.5	.367	4.530	18.4	199.7	-17.6	97.2D	1.296
4-2590	4-2820	.269	73.5	-1.0	-5.7	1.106	101.8	.313	1.340	307.2	503.9	.921	1.759A	103.9	.701	4.6	24.5	176.7	.151
4-2820	4-3049.6	.168	126.7	25.3	1.6	.602	82.0	.434	1.143	169.2	310.0	.647A	1.640	75.4	1.372	.5	1.6	276.5	.385
4-3049.6	4-3190	.385	303.5	9.9	3.3	1.212	107.9	.313	.776	263.5	516.6	.533	1.019A	99.2	.858	.3	24.6	94.0	.207
		12.53	9.35	5.81	3.16	6.58	3.54	12.69	2/1/2	40.7	52.9	28.1	.405	4.116	18.4	201.8	-17.4	96.2D	1.263
MARS ARRIVAL DATE = 2442830 (21 FEB 1976)																			
4-2550	4-2830	.304	44.6	9.9	-2.0	1.084	105.2	.319	1.244	289.3	528.8	.848	1.641A	95.2	.655	.2	21.6	124.9	.108
4-2830	4-3039.7	.191	129.6	24.0	1.6	.574	82.2	.481	1.110	171.4	291.7	.576A	1.644	69.2	1.364	.5	1.3	272.9	.502
4-3039.7	4-3150	.502	287.1	5.0	2.2	1.254	113.1	.412	.840	264.7	495.0	.493	1.186A	112.4	.919	1.6	26.5	78.9	.366
		12.85	10.51	6.46	2.34	5.76	4.05	16.00	2/1/2	84.8	26.0	14.6	.238	7.848	15.0	190.8	-14.6	93.6D	1.632
4-2560	4-2830	.288	51.6	10.4	-2.2	1.088	104.2	.312	1.263	293.7	523.6	.869	1.657A	97.2	.662	.7	20.5	139.5	.105
4-2830	4-3043.0	.182	128.0	24.5	1.6	.581	82.9	.464	1.121	171.6	297.5	.600A	1.642	71.2	1.367	.5	1.5	274.8	.464
4-3043.0	4-3160	.464	292.5	6.6	2.6	1.239	111.4	.380	.817	264.5	499.7	.506	1.127A	109.1	.900	1.1	26.2	85.7	.335
		12.31	9.99	6.15	2.32	5.74	3.84	14.92	2/1/2	71.4	30.0	18.4	.279	6.270	16.6	194.8	-16.0	94.6D	1.472
4-2570	4-2830	.274	58.6	9.9	-2.6	1.092	103.3	.307	1.283	298.2	518.5	.889	1.677A	99.0	.671	1.2	19.6	152.9	.109
4-2830	4-3046.0	.174	126.5	24.9	1.5	.587	83.5	.451	1.130	171.9	302.3	.620A	1.640	72.9	1.369	.6	1.8	276.3	.432
4-3046.0	4-3170	.432	297.3	8.0	3.0	1.228	110.0	.353	.800	264.4	505.0	.518	1.082A	105.9	.884	.7	25.6	91.1	.288
		11.97	9.57	5.90	2.39	5.81	3.68	14.01	2/1/2	59.4	35.2	21.9	.323	5.276	17.4	198.2	-16.6	96.1D	1.360
4-2580	4-2830	.263	65.6	7.8	-3.3	1.097	102.4	.305	1.304	302.7	513.4	.907	1.702A	100.6	.681	2.1	19.7	164.6	.119
4-2830	4-3048.5	.169	125.2	25.2	1.5	.592	83.9	.441	1.137	172.2	306.5	.636A	1.638	74.3	1.371	.6	2.0	277.3	.405
4-3048.5	4-3180	.405	301.4	9.2	3.2	1.220	108.8	.330	.787	264.2	510.9	.527	1.047A	102.7	.871	.4	24.9	94.7	.246
		11.80	9.25	5.70	2.55	5.97	3.55	13.28	2/1/2	49.9	42.1	25.0	.366	4.618	17.6	201.0	-16.6	97.3D	1.324
4-2590	4-2830	.257	72.7	2.3	-4.7	1.102	101.5	.304	1.327	307.3	508.5	.923	1.731A	102.1	.690	3.6	22.5	175.3	.133
4-2830	4-3050.5	.165	124.2	25.4	1.4	.596	84.3	.433	1.142	172.4	309.9	.647A	1.638	75.4	1.372	.7	2.3	278.0	.385
4-3050.5	4-3190	.385	304.7	10.0	3.3	1.213	107.9	.313	.778	263.9	517.6	.534	1.022A	99.5	.860	.2	24.2	95.5	.210
		11.89	9.06	5.60	2.83	6.24	3.47	12.72	2/1/2	44.0	51.5	27.7	.405	4.181	17.6	203.1	-16.3	98.3D	1.288
4-2600	4-2830	.275	80.8	-11.9	-8.3	1.108	100.7	.306	1.351	312.1	503.8	.938	1.765A	103.5	.700	7.4	32.4	187.0	.165
4-2830	4-3051.8	.162	123.5	25.5	1.4	.598	84.5	.429	1.146	172.5	312.2	.654A	1.637	76.1	1.373	.7	2.4	278.3	.372
4-3051.8	4-3200	.372	307.1	10.5	3.4	1.208	107.3	.302	.771	263.5	525.1	.538	1.004A	96.3	.851	.1	23.8	92.5	.162
		12.81	9.33	5.91	3.48	6.88	3.41	12.34	2/1/2	46.2	64.2	29.7	.434	3.908	17.3	204.5	-15.9	99.0D	1.262
4-2630	4-2830	.219	89.6	54.2	5.8	1.129	97.9	.317	1.432	328.2	491.1	.978	1.885A	106.8	.729	-6.3	-23.9	175.1	.169
4-2830	4-3045.4	.176	126.8	24.8	1.5	.586	83.4	.454	1.128	171.9	301.3	.617A	1.640	72.8	1.369	.6	1.7	276.0	.436
4-3045.4	4-3230	.436	300.8	9.7	3.7	1.199	110.6	.353	.756	255.6	557.4	.489	1.023	80.9	.826	.8	22.5	55.5	.236
		12.70	8.69	4.98	4.01	7.41	3.71	13.15	1/1/2	31.3	128.0	25.9	.314	4.466	18.9	200.2	-17.9	93.3D	1.087
MARS ARRIVAL DATE = 2442840 (2 MAR 1976)																			
4-2550	4-2840	.306	44.8	10.1	-1.9	1.084	105.4	.320	1.243	288.8	532.8	.845	1.641A	93.4	.648	.2	22.4	120.6	.106
4-2840	4-3040.4	.189	127.4	24.3	1.5	.567	84.8	.482	1.108	174.3	291.2	.574A	1.642	69.1	1.364	.7	1.7	274.3	.505
4-3040.4	4-3150	.505	288.1	5.1	2.2	1.256	113.2	.415	.844	265.1	494.2	.494	1.194A	112.7	.922	1.5	26.4	79.5	.393
		12.83	10.50	6.50	2.34	5.76	4.00	16.11	2/1/2	93.3	25.4	14.1	.236	8.137	14.3	192.0	-13.9	93.5D	1.683
4-2560	4-2840	.288	51.8	10.7	-2.1	1.087	104.3	.311	1.260	293.5	527.8	.868	1.651A	95.4	.656	.6	21.6	135.3	.101
4-2840	4-3043.7	.180	125.5	24.8	1.5	.575	85.5	.465	1.120	174.7	296.9	.599A	1.641	71.1	1.367	.7	1.9	276.2	.466
4-3043.7	4-3180	.466	293.5	6.7	2.7	1.241	111.5	.382	.820	264.9	498.9	.507	1.133A	109.4	.903	1.0	26.0	86.4	.340
		12.20	9.95	6.15	2.26	5.68	3.80	15.00	2/1/2	80.0	29.4	17.9	.277	6.436	16.0	196.0	-15.3	94.6D	1.506
4-2570	4-2840	.272	58.7	10.4	-2.5	1.091	103.2	.304	1.278	297.9	522.8	.889	1.667A	97.2	.664	1.1	20.6	149.5	.102
4-2840	4-3046.7	.173	123.7	25.2	1.4	.582	86.0	.452	1.129	175.1	302.0	.619A	1.639	72.8	1.369	.7	2.2	277.6	.433
4-3046.7	4-3170	.433	298.3	8.1	3.0	1.230	110.0	.354	.803	264.7	504.2	.518	1.087A	106.2	.887	.7	25.4	92.0	.292
		11.77	9.50	5.86	2.27	5.69	3.64	14.08	2/1/2	67.2	34.5	21.4	.321	5.382	16.7	199.4	-15.8	96.1D	1.405
4-2580	4-2840	.258	65.5	6.8	-3.0	1.095	102.3	.300	1.297	302.6	517.9	.908	1.686A	98.9	.673	1.8	20.1	162.2	.108
4-2840	4-3049.2	.167	122.2	25.4	1.3	.587	86.4	.441	1.137	175.4	306.4	.635A	1.639	74.3	1.371	.8	2.5	278.5	.406
4-3049.2	4-3180	.406	302.4	9.2	3.2	1.221	108.8	.331	.789	264.5	510.1	.528	1.051A	103.0	.873	.4	24.6	95.7	.249
		11.52	9.15	5.62	2.37	5.79	3.53	13.33	2/1/2	56.4	41.2	24.6	.365	4.689	16.9	202.1	-15.8	97.4D	1.345
4-2590	4-2840	.249	72.2	4.6	-4.0	1.100	101.3	.298	1.317	307.4	513.1	.925	1.709A	100.4	.662	3.0	21.6	173.5	.119
4-2840	4-3051.3	.164	121.0	25.6	1.3	.591	86.7	.434	1.143	175.7	309.9	.647A	1.638	75.4	1.372	.8	2.8	279.2	.385
4-3051.3	4-3190	.385	305.8	10.1	3.3	1.214	107.8	.313	.780	264.3	516.8	.535	1.025A	99.9	.862	.1	23.9	96.8	.212
		11.47	8.90	5.46	2.57	5.98	3.45	12.76	2/1/2	48.7	50.2	27.4	.405	4.226	16.8	204.2	-15.4	98.3D	1.307
4-2600	4-2840	.251	79.1	-5.1	-6.2	1.105	100.4	.297	1.338	312.3	508.5	.940	1.736A	101.7	.691	5.4	27.6	184.6	.140
4-2840	4-3052.7	.161	120.1	25.6	1.2	.593	86.9	.429	1.146	175.9	312.4	.655A	1.638	76.2	1.373	.8	3.1	279.5	.371
4-3052.7	4-3200	.371	306.2	10.6	3.4	1.209	107.2	.302	.773	263.9	524.2	.540	1.006A	96.6	.855	.0	23.4	94.5	.184
		11.84	8.86	5.49	2.95	6.36	3.39	12.36	2/1/2	46.4	62.6	29.4	.436	3.937	16.5	205.6	-14.9	99.3D	1.260
4-2630	4-2840	.234	90.3	65.0	8.0	1.123	97.1	.303	1.406	328.9	496.3	.980	1.831A	105.0	.716	-8.5	-32.1	170.1	.187
4-2840	4-3048.0	.170	122.9	25.3	1.4	.585	86.2	.446	1.133	175.3	304.3	.626A	1.639	73.6	1.370	.8	2.4	278.1	.419
4-3048.0	4-3230	.419	304.1	9.7	3.6	1.200	109.6	.339	.759	257.3	554.9	.502	1.015	82.6	.829	.5	22.4	59.7	.219
		12.75	8.80	5.22	3.95	7.35	3.58	12.86	1/1/2	41.0	124.2	26.8	.343	4.311	17.2	208.8	-16.0	94.6D	1.138
MARS ARRIVAL DATE = 2442850 (12 MAR 1976)																			
4-2550	4-2850	.310	45.1	10.3	-1.9	1.084	105.6	.323	1.242	288.1	536.7	.841	1.643A	91.6	.643	.2	23.0	116.9	.106
4-2850	4-3041.1	.189	124.5	24.6	1.5	.562	87.6	.493	1.108	177.5	290.8	.573A	1.643	68.9	1.364	.8	2.0	278.6	.507
4-3041.1	4-3150	.507	288.9	5.1	2.2	1.258	113.3	.417	.849	265.4	493.5	.494	1.205A	113.0	.925	1.5	26.3	80.1	.398
		12.94	10.86	6.86	2.37	5.79	4.00	16.22	2/1/2	101.4	24.9	13.7	.233	8.568	13.6	193.1	-13.1	93.6D	1.724

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2442650
12 MAR 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-2560	4-2650	.289	52.0	11.0	-2.1	1.086	104.4	.311	1.258	292.9	531.8	.866	1.649A	93.7	.651	.6	22.6	131.1	.100
4-2650	4-3044.4	.180	122.3	25.1	1.4	.571	86.3	.466	1.120	178.0	296.7	.596A	1.643	71.0	1.367	.6	2.3	277.3	.466
4-3044.4	4-3160	.468	294.3	6.7	2.7	1.243	111.6	.384	.823	265.3	498.2	.507	1.140A	109.7	.905	1.0	25.8	87.1	.344
		12.22	9.98	6.17	2.23	5.66	3.81	15.08	2/1/2	88.6	26.8	17.5	.275	6.570	15.3	197.0	-14.6	94.9D	1.531
4-2570	4-2650	.271	58.7	10.9	-2.4	1.090	103.2	.303	1.274	297.6	527.0	.688	1.660A	95.5	.659	1.1	21.7	145.6	.097
4-2650	4-3047.3	.174	120.3	25.5	1.3	.576	88.6	.452	1.131	178.5	301.9	.619A	1.642	72.8	1.369	.9	2.7	278.7	.434
4-3047.3	4-3170	.434	299.1	6.1	3.0	1.231	110.1	.355	.805	265.1	503.5	.519	1.091A	106.5	.889	.6	25.1	92.7	.295
		11.71	9.51	5.85	2.20	5.62	3.67	14.14	2/1/2	75.5	33.8	21.1	.319	5.461	16.1	200.3	-15.1	96.2D	1.423
4-2560	4-2650	.256	65.4	9.6	-2.8	1.094	102.2	.297	1.291	302.4	522.2	.908	1.675A	97.2	.667	1.7	21.0	159.2	.100
4-2650	4-3049.9	.169	118.5	25.7	1.2	.563	89.1	.442	1.139	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	278.8	.407
4-3049.9	4-3180	.407	303.3	9.3	3.3	1.222	106.8	.332	.792	264.9	509.4	.529	1.054A	103.3	.875	.3	24.3	96.8	.252
		11.38	9 13	5.57	2.24	5.67	3.56	13.36	2/1/2	63.7	40.3	24.4	.365	4.738	16.3	203.1	-15.0	97.5D	1.358
4-2590	4-2650	.245	71.8	8.4	-3.5	1.098	101.2	.293	1.309	307.3	517.6	.926	1.693A	98.7	.675	2.6	21.5	171.3	.100
4-2650	4-3052.0	.166	117.2	25.8	1.2	.587	89.4	.434	1.145	179.2	310.1	.648A	1.642	75.4	1.372	1.0	3.3	280.2	.385
4-3052.0	4-3190	.385	306.7	10.2	3.4	1.215	107.8	.314	.782	264.6	516.0	.536	1.027A	100.1	.864	.1	23.5	98.0	.215
		11.22	8.85	5.36	2.37	5.79	3.49	12.79	2/1/2	54.5	49.1	27.2	.405	4.256	16.2	205.1	-14.6	98.7D	1.318
4-2600	4-2650	.237	78.2	-.8	-5.0	1.103	100.2	.291	1.328	312.4	513.2	.942	1.714A	100.1	.683	4.2	25.2	182.5	.123
4-2650	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.5	.371
4-3053.4	4-3200	.371	309.2	10.7	3.4	1.210	107.2	.301	.775	264.2	523.3	.541	1.008A	98.9	.854	-.1	23.0	95.9	.185
		11.33	8.71	5.27	2.63	6.04	3.44	12.38	2/1/2	49.4	61.1	29.3	.437	3.950	15.9	206.6	-13.9	99.6D	1.290
4-2610	4-2650	.265	85.5	-18.0	-9.2	1.108	99.1	.290	1.347	317.6	508.9	.957	1.738A	101.3	.690	6.5	36.4	195.0	.160
4-2650	4-3054.1	.162	115.8	25.8	1.1	.591	89.7	.427	1.151	179.6	313.8	.659A	1.642	76.6	1.374	1.0	3.8	280.6	.364
4-3054.1	4-3210	.364	310.6	10.8	3.4	1.207	106.9	.296	.769	263.5	531.6	.542	.997A	93.5	.846	-.1	22.8	89.1	.167
		12.48	9.12	5.70	3.36	6.76	3.42	12.15	2/1/2	53.2	77.4	30.5	.455	3.797	15.4	207.3	-13.4	99.9D	1.266

MARS ARRIVAL DATE = 2442860 (22 MAR 1976)

4-2560	4-2660	.292	52.2	11.3	-2.0	1.086	104.5	.313	1.257	292.3	535.7	.863	1.650A	92.0	.647	.6	23.4	127.0	.101
4-2660	4-3045.0	.184	118.6	25.5	1.3	.569	91.3	.468	1.123	181.5	296.7	.598A	1.649D	71.0	1.367	1.0	2.7	278.3	.469
4-3045.0	4-3160	.469	295.1	6.8	2.8	1.245	111.6	.386	.827	265.6	497.6	.508	1.145A	110.0	.908	.9	25.7	87.6	.347
		12.36	10.12	6.22	2.25	5.67	3.90	15.16	2/1/2	96.8	28.2	17.3	.273	6.662	14.7	197.9	-13.9	95.0D	1.545
4-2570	4-2660	.272	58.9	11.4	-2.3	1.089	103.3	.303	1.272	297.2	531.0	.887	1.657A	93.9	.654	1.0	22.7	141.4	.095
4-2660	4-3047.9	.178	116.4	25.8	1.2	.576	91.7	.454	1.134	182.1	302.0	.619A	1.649D	72.8	1.370	1.0	3.0	279.5	.435
4-3047.9	4-3170	.435	299.9	6.2	3.1	1.233	110.1	.356	.807	265.4	502.9	.520	1.095A	106.7	.891	.5	24.9	93.4	.298
		11.78	9.62	5.85	2.16	5.58	3.77	14.20	2/1/2	84.0	33.2	20.9	.317	5.508	15.5	201.2	-14.3	96.3D	1.430
4-2580	4-2660	.254	65.4	10.4	-2.6	1.092	102.2	.295	1.287	302.2	526.4	.908	1.667A	95.5	.661	1.5	22.0	155.5	.095
4-2660	4-3050.5	.174	114.5	25.9	1.1	.582	92.1	.444	1.145	182.6	306.6	.636A	1.649D	74.3	1.372	1.1	3.4	280.4	.407
4-3050.5	4-3180	.407	304.1	9.4	3.3	1.223	108.8	.333	.793	265.2	508.8	.530	1.057A	103.6	.877	.2	24.1	97.4	.255
		11.37	9.22	5.55	2.16	5.58	3.67	13.42	2/1/2	71.6	39.6	24.3	.362	4.759	15.7	203.8	-14.2	97.7D	1.362
4-2590	4-2660	.239	71.6	7.8	-3.2	1.096	101.1	.289	1.304	307.2	522.0	.926	1.681A	97.0	.669	2.3	22.0	168.4	.100
4-2660	4-3052.6	.171	113.0	26.0	1.1	.586	92.3	.436	1.149	183.0	310.3	.648A	1.650D	75.5	1.373	1.1	3.8	280.9	.386
4-3052.6	4-3190	.385	307.5	10.2	3.4	1.216	107.8	.314	.783	264.9	515.3	.537	1.029A	100.4	.865	.0	23.2	99.0	.217
		11.13	8.90	5.50	2.23	5.65	3.60	12.82	2/1/2	61.2	46.2	27.1	.405	4.262	15.6	205.9	-13.8	98.9D	1.319
4-2600	4-2660	.229	77.6	2.2	-4.3	1.101	100.0	.286	1.320	312.4	517.7	.943	1.697A	98.4	.676	3.5	24.1	180.1	.110
4-2660	4-3054.1	.169	112.0	26.0	1.0	.589	92.5	.431	1.154	183.3	313.0	.657A	1.650D	76.3	1.374	1.1	4.1	281.2	.370
4-3054.1	4-3200	.370	310.1	10.7	3.4	1.211	107.1	.301	.776	264.6	522.6	.542	1.010A	97.2	.856	-.1	22.7	97.2	.187
		11.09	8.69	5.13	2.40	5.82	3.56	12.40	2/1/2	54.0	59.9	29.4	.436	3.943	15.2	207.3	-13.1	99.9D	1.290
4-2610	4-2660	.234	83.6	-9.8	-6.7	1.105	98.9	.283	1.337	317.8	513.6	.958	1.716A	99.6	.683	6.1	31.2	191.9	.132
4-2660	4-3054.8	.168	111.5	26.0	1.0	.590	92.6	.428	1.156	183.5	314.3	.661A	1.650D	76.7	1.375	1.2	4.3	281.3	.363
4-3054.8	4-3210	.363	311.6	10.9	3.4	1.207	106.8	.295	.771	263.9	530.8	.543	.998A	93.8	.847	-.2	22.4	90.9	.168
		11.55	8.75	5.21	2.60	6.21	3.54	12.15	2/1/2	52.8	75.7	30.7	.456	3.777	14.8	208.1	-12.5	100.3D	1.266

MARS ARRIVAL DATE = 2442870 (1 APR 1976)

4-2560	4-2670	.295	52.5	11.7	-2.0	1.086	104.7	.316	1.257	291.6	539.5	.860	1.653A	90.2	.644	.6	23.9	123.6	.104
4-2670	4-3045.5	.192	114.6	25.8	1.3	.569	94.6	.470	1.129	185.2	296.9	.598A	1.660D	70.9	1.369	1.1	3.0	279.1	.471
4-3045.5	4-3160	.471	295.8	6.9	2.8	1.247	111.7	.387	.829	265.9	497.0	.506	1.151A	110.2	.910	.9	25.5	86.1	.351
		12.66	10.36	6.29	2.30	5.72	4.07	15.23	2/1/2	104.4	27.8	17.2	.271	6.700	14.0	198.6	-13.1	95.1D	1.544
4-2570	4-2670	.273	59.1	11.8	-2.2	1.089	103.4	.304	1.270	296.7	535.0	.885	1.656A	92.8	.650	.9	23.6	137.2	.095
4-2670	4-3048.5	.187	112.3	26.0	1.2	.577	95.0	.457	1.140	186.0	302.3	.620A	1.661D	72.8	1.372	1.1	3.4	280.2	.436
4-3048.5	4-3170	.436	300.6	6.3	3.1	1.234	110.1	.356	.810	265.7	502.3	.520	1.099A	107.0	.893	.5	24.8	94.0	.301
		11.99	9.84	5.86	2.15	5.58	3.95	14.25	2/1/2	92.3	32.6	20.9	.316	5.513	14.9	201.8	-13.6	96.5D	1.424
4-2580	4-2670	.254	65.5	11.0	-2.4	1.092	102.2	.294	1.285	301.8	530.5	.907	1.663A	93.9	.657	1.4	23.0	151.4	.091
4-2670	4-3051.0	.183	110.4	26.1	1.1	.583	95.2	.446	1.149	186.6	307.0	.637A	1.662D	74.3	1.374	1.2	3.8	281.0	.408
4-3051.0	4-3180	.408	304.8	9.4	3.3	1.224	108.8	.333	.795	265.5	508.2	.530	1.060A	103.8	.878	.2	23.8	98.1	.257
		11.51	9.41	5.54	2.10	5.53	3.87	13.46	2/1/2	79.8	39.0	24.3	.361	4.748	15.1	204.4	-13.5	97.9D	1.354
4-2590	4-2670	.237	71.6	8.9	-2.9	1.095	101.1	.287	1.299	307.0	526.2	.926	1.673A	95.4	.664	2.1	22.7	165.0	.093
4-2670	4-3053.1	.180	108.9	26.1	1.0	.588	95.4	.438	1.156	187.1	310.8	.650A	1.663D	75.5	1.375	1.2	4.2	281.4	.386
4-3053.1	4-3190	.386	308.2	10.3	3.4	1.217	107.8	.314	.785	265.2	514.7	.538	1.031A	100.6	.867	-.0	23.0	99.9	.219
		11.20	9.07	5.26	2.13	5.56	3.81	12.85	2/1/2	66.5	47.4	27.3	.404	4.240	15.0	206.5	-13.0	99.2D	1.310
4-2600	4-2670	.223	77.2	4.5	-3.7	1.099	99.9	.282	1.314	312.4	522.1	.944	1.685A	96.8	.670	3.0	23.9	177.3	.100
4-2670	4-3054.7	.178	107.6	26.0	.9	.591	95.6	.433	1.161	187.4	313.6	.658A	1.664D	76.4	1.376	1.2	4.5	281.6	.370
4-3054.7	4-3200	.370	310.9	10.8	3.4	1.212	107.1	.301	.777	264.8	522.0	.543	1.011A	97.4	.857	-.2	22.4	98.3	.186
		11.05	8.81	5.04	2.24	5.66	3.77	12.42	2/1/2	59.8	58.9	29.6	.439	3.912	14.7	207.9	-12.3	100.3D	1.279
4-2610	4-2670	.219	82.6	-4.4	-5.3	1.103	98.8	.278	1.329	318.0	518.1	.960	1.699A	98.0	.677	4.8	26.5	189.0	.115
4-2670	4-3055.5	.178	107.2	26.0	.9	.592	95.7	.431	1.164	187.6	315.1	.663A	1.665D	76.9	1.377	1.3	4.7	281.7	.362
4-3055.5	4-3210	.362	312.4	10.9	3.4	1.208	106.8	.294	.772	264.2	530.1	.545	.999A	94.1	.849	-.3	22.1	92.4	.166
		11.21	8.73	4.97	2.49	5.90	3.76	12.16	2/1/2	55.5	74.3	31.1	.459	3.736	14.2	208.6	-11.6	100.6D	1.255
4-2620	4-2670	.255	88.7	-24.7	-10.0	1.108	97.6	.276	1.344	323.8	514.5	.973	1.715A	99.0	.683	9.6	40.7	202.1	.158
4-2670	4-3055.1	.178	107.5	26.0	.9	.591	95.8	.432	1.162	187.5	314.4	.661A	1.664D	76.7	1.377	1.3	4.6	281.7	.366
4-3055.1	4-3220	.366	312.5	10.7	3.4	1.205	107.0	.297	.767	262.9	539.3	.540	.995A	90.3	.841	-.2	22.1	81.8	.165
		12.65	9.53	5.56	3.33	6.73	3.76	12.12	2/1/2	60.3	94.2	31.1	.450	3.729	13.8	208.6	-11.2	100.4D	1.228

MARS ARRIVAL DATE = 2442880 (11 APR 1976)

4-2570	4-2680	.276	59.4	12.3	-2.1	1.089	103.6	.306	1.270	296.1	538.8	.882	1.658A	90.5	.648	.9	24.2	133.5	.096
4-2680	4-3048.9	.199	106.3	26.1	1.1	.581	98.4	.460	1.150	190.1	302.8	.621A	1.680D	72.8	1.374	1.2	3.7	280.6	.437
4-3048.9	4-3170	.437	301.3	6.3	3.1	1.235	110.2	.359	.812	265.9	501.8	.521	1.103A	107.2	.894	.4	24.6	94.5	.304
		12.36	10.18	5.93	2.18	5.60	4.25	14.30	2/1/2	100.2	32.2	21.1	.314	5.469	14.2	202.3	-12.8	96.8D	1.404
4-2580	4-2680	.255	65.6	11.7	-2.3	1.091	102.3	.295	1.283	301.4	534.5	.905	1.661A	92.3	.654	1.5	23.9	147.2	.090
4-2680	4-3051.5	.196	106.4	26.1	1.0	.587	98.6	.450	1.160	190.9	307.6	.636A	1.682D	74.4	1.377	1.3	4.1	281.3	.409
4-3051.5	4-3180	.409	305.4	9.5	3.3	1.225	108.9	.334	.797	265.7	507.7	.531	1.063A	104.0	.880	.1	23.6	98.7	.259
		11.81	9.73	5.55	2.08	5.51	4.18	13.50	2/1/2	88.1	38.4	24.6	.360	4.697	14.5	204.8	-12.7	98.3D	1.332
4-2590	4-2680	.236	71.8	10.0	-2.7	1.094	101.1	.286	1.298	306.7	530.3	.926	1.667A	93.8	.660	1.9	23.6	161.0	.089
4-2680	4-3053.6	.194	104.9	26.1	.9	.592	98.8	.442	1.168	191.4	311.5	.651A	1.684D	75.8	1.378	1.3	4.5	281.6	.386
4-3053.6	4-3190	.386	308.9	10.3	3.4	1.218	107.8	.315	.786	265.5	514.2	.539	1.033A	100.8	.868	-.1	22.7	100.6	.220
		11.43	9.36	5.24	2.07	5.49	4.12	12.88	2/1/2	78.4	46.7	27.6	.404	4.185	14.4	206.8	-12.2	99.7D	1.286
4-2600	4-2680	.220	77.1	6.4	-3.3	1.098	99.9	.278	1.310	312.3	526.3	.944	1.676A	95.2	.668	2.7	24.2	173.9	.093
4-2680	4-3055.2	.193	103.9	26.0	.9	.595	98.9	.437	1.173	191.8	314.4	.660A	1.685D	76.6	1.379	1.3	4.9	281.8	.370
4-3055.2	4-3200	.370	311.8	10.8	3.4	1.212	107.1	.301	.778	265.1	531.4	.544	1.012A	97.6	.858	-.2	22.1	99.3	.189
		11.20	9.08	4.99	2.13	5.59	4.09	12.43	2/1/2	66.9	57.9	30.1	.440	3.693	14.1	208.2	-11.8	100.8D	1.255
4-2610	4-2680	.210	82.0	-.6	-4.5	1.102	98.7	.274	1.323	318.0	522.6	.960	1.687A	96.4	.672	4.0	27.1	188.9	.103
4-2680	4-3056.0	.192	103.4	25.9	.8	.597	99.0	.434	1.175	192.0	316.0	.663A	1.686D	77.1	1.380	1.4	5.1	281.9	.361
4-3056.0	4-3210	.361	313.2	11.0	3.4	1.208	106.7	.294	.773	264.5	529.5	.548	.999A	94.5	.849	-.3	21.8	93.7	.166
		11.19	8.91	4.84	2.28	5.70	4.07	12.16	2/1/2	80.0	73.1	31.8	.461	3.671	13.7	209.0	-10.8	101.4D	1.231

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2442860
11 APR 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	$SPEED1 / $SPEED3 / $SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	$SPEED2 / $SPEED4 / $SPEED6 PERIC
4-2620	4-2880	.219	86.7	-15.0	-7.1	1.106	97.4	.271	1.336	324.0	519.1	.974	1.699A	97.4	.677	6.8	35.2	198.1	.127
4-2880	4-3055.8	.192	103.5	25.9	.8	.596	99.0	.435	1.175	192.0	315.6	.663A	1.686D	76.9	1.380	1.4	5.0	281.8	.364
4-3055.8	4-3220	.364	313.4	10.7	3.4	1.206	106.9	.295	.768	263.5	538.6	.541	.995A	90.6	.842	-.3	21.8	83.4	.164
		11.76	9.05	4.98	2.71	6.12	4.08	12.10	2/1/2	59.7	92.7	31.8	.455	3.651	13.2	209.0	-10.3	101.00	1.206
MARS ARRIVAL DATE = 2442890 (21 APR 1976)																			
4-2570	4-2890	.280	59.7	12.8	-2.0	1.089	103.8	.309	1.270	295.4	542.4	.678	1.662	88.9	.646	.9	24.6	130.3	.100
4-2890	4-3049.4	.217	104.6	26.1	1.1	.589	102.1	.466	1.166	194.7	303.7	.623A	1.709D	72.9	1.379	1.3	4.0	280.7	.436
4-3049.4	4-3170	.438	301.9	8.4	3.2	1.236	110.2	.360	.813	266.1	501.3	.521	1.106A	107.3	.898	.4	24.4	94.9	.306
		12.90	10.67	6.00	2.23	5.66	4.67	14.35	2/1/2	107.4	31.7	21.9	.313	5.365	13.5	202.8	-11.9	97.30	1.366
4-2580	4-2890	.256	65.9	12.3	-2.2	1.091	102.4	.296	1.282	300.8	538.3	.903	1.662A	90.7	.652	1.3	24.6	143.2	.091
4-2890	4-3051.9	.215	102.8	26.1	1.0	.595	102.3	.456	1.176	195.5	308.5	.640A	1.712D	74.5	1.381	1.4	4.4	281.2	.409
4-3051.9	4-3180	.409	306.0	9.5	3.4	1.226	108.9	.334	.798	265.9	507.2	.531	1.065A	104.1	.881	.1	23.5	99.2	.261
		12.29	10.19	5.39	2.09	5.52	4.61	13.53	2/1/2	96.1	37.9	25.1	.359	4.600	13.9	205.1	-11.6	98.80	1.293
4-2590	4-2890	.236	71.7	10.9	-2.3	1.094	101.1	.286	1.295	306.3	534.3	.924	1.665A	92.3	.657	1.6	24.4	156.9	.087
4-2890	4-3054.0	.213	101.5	26.0	.9	.600	102.4	.448	1.184	196.2	312.6	.654A	1.715D	75.8	1.383	1.4	4.6	281.5	.366
4-3054.0	4-3190	.386	309.5	10.4	3.4	1.219	107.8	.315	.787	265.7	513.7	.539	1.035A	101.0	.869	-.1	22.5	101.3	.222
		11.84	9.80	5.24	2.04	5.46	4.56	12.90	2/1/2	84.5	46.1	28.3	.404	4.092	13.9	207.0	-11.3	100.20	1.246
4-2600	4-2890	.218	77.0	8.0	-3.0	1.097	99.9	.278	1.307	312.0	530.5	.944	1.670A	93.6	.663	2.4	24.7	170.1	.068
4-2890	4-3055.6	.211	100.5	25.9	.8	.603	102.4	.443	1.190	196.7	315.6	.663A	1.717D	76.7	1.384	1.4	5.2	281.5	.369
4-3055.6	4-3200	.369	312.2	10.9	3.3	1.213	107.1	.301	.779	265.3	520.9	.545	1.013A	97.8	.859	-.3	21.9	100.2	.190
		11.54	9.49	4.96	2.08	5.47	4.53	12.45	2/1/2	73.9	57.1	30.8	.441	5.760	13.6	208.3	-10.7	101.40	1.216
4-2610	4-2890	.204	81.6	2.4	-3.8	1.100	98.6	.272	1.319	317.9	526.9	.960	1.678A	94.6	.666	3.4	26.6	182.4	.094
4-2890	4-3056.5	.210	100.1	25.8	.8	.605	102.4	.440	1.192	196.8	317.2	.667A	1.717D	77.3	1.384	1.4	5.4	281.5	.360
4-3056.5	4-3210	.360	313.9	11.0	3.4	1.209	106.7	.293	.773	264.7	528.9	.547	1.000A	94.5	.850	-.4	21.6	94.8	.169
		11.40	9.26	4.75	2.14	5.56	4.51	12.17	2/1/2	65.8	72.1	32.5	.463	3.576	13.2	209.1	-10.0	102.10	1.192
4-2620	4-2890	.201	85.6	-6.4	-5.6	1.104	97.3	.267	1.331	324.1	523.5	.975	1.686A	95.8	.673	5.3	32.1	194.3	.109
4-2890	4-3056.4	.211	100.1	25.8	.8	.605	102.5	.441	1.192	196.9	317.0	.667A	1.718D	77.2	1.384	1.4	5.4	281.5	.362
4-3056.4	4-3220	.362	314.2	10.7	3.4	1.206	106.8	.294	.769	263.6	536.0	.543	.995A	90.8	.843	-.3	21.8	84.9	.163
		11.62	9.23	4.71	2.39	5.80	4.52	12.09	2/1/2	62.2	91.3	32.8	.459	3.545	12.7	209.1	-9.5	101.80	1.169
MARS ARRIVAL DATE = 2442900 (1 MAY 1976)																			
4-2580	4-2900	.259	66.2	13.0	-2.1	1.091	102.6	.298	1.282	300.2	542.1	.900	1.664	89.1	.650	1.2	25.0	139.8	.093
4-2900	4-3052.3	.238	99.9	25.9	.9	.607	106.1	.464	1.200	200.6	309.9	.644A	1.756D	74.7	1.387	1.4	4.7	280.8	.410
4-3052.3	4-3180	.410	306.5	9.6	3.4	1.227	108.9	.335	.799	266.1	506.8	.532	1.067A	104.3	.882	.0	23.3	99.7	.263
		12.95	10.82	5.63	2.13	5.55	5.18	13.56	2/1/2	103.5	37.4	26.0	.358	4.451	13.2	205.0	-10.9	99.50	1.237
4-2590	4-2900	.237	71.9	11.8	-2.3	1.094	101.3	.287	1.293	305.9	536.2	.923	1.664A	90.7	.655	1.6	25.1	152.7	.086
4-2900	4-3054.4	.236	98.7	25.8	.8	.612	106.1	.456	1.208	201.3	314.0	.657A	1.760D	76.0	1.389	1.5	5.1	280.9	.366
4-3054.4	4-3190	.386	310.0	10.4	3.5	1.219	107.8	.315	.788	265.9	513.3	.540	1.036A	101.2	.870	-.2	22.3	101.9	.223
		12.43	10.40	5.26	2.03	5.46	5.14	12.92	2/1/2	92.4	45.5	29.3	.403	3.956	13.3	206.9	-10.5	101.00	1.192
4-2600	4-2900	.217	77.1	9.3	-2.7	1.096	99.9	.277	1.305	311.7	534.5	.943	1.667A	92.1	.660	2.2	25.3	165.9	.084
4-2900	4-3056.1	.235	97.6	25.7	-.7	.616	106.2	.452	1.214	201.9	317.1	.666A	1.763D	77.0	1.390	1.5	5.5	280.9	.369
4-3056.1	4-3200	.369	312.7	10.9	3.5	1.214	107.1	.301	.780	265.5	520.5	.545	1.015A	98.0	.860	-.3	21.6	101.0	.191
		12.07	10.06	4.95	2.01	5.43	5.12	12.46	2/1/2	81.6	56.4	32.0	.441	3.650	13.1	208.2	-9.8	102.30	1.160
4-2610	4-2900	.201	81.5	4.8	-3.5	1.100	98.6	.270	1.316	317.7	531.1	.960	1.671A	93.3	.665	3.0	26.6	178.5	.088
4-2900	4-3057.0	.234	97.4	25.8	-.7	.617	106.1	.449	1.217	202.1	318.8	.671A	1.763D	77.5	1.390	1.5	5.7	280.8	.360
4-3057.0	4-3210	.360	314.5	11.1	3.4	1.209	106.7	.293	.774	265.0	528.4	.548	1.001A	94.7	.851	-.4	21.5	95.9	.169
		11.85	9.80	4.70	2.05	5.47	5.09	12.17	2/1/2	72.6	71.1	33.7	.465	3.446	12.7	208.9	-9.1	103.00	1.137
4-2620	4-2900	.192	85.1	-3.6	-4.8	1.103	97.3	.265	1.326	324.1	527.9	.975	1.677A	94.3	.670	4.4	30.4	190.5	.097
4-2900	4-3056.9	.235	97.4	25.8	-.7	.617	106.1	.449	1.217	202.1	318.7	.671A	1.763D	77.5	1.390	1.5	5.7	280.8	.360
4-3056.9	4-3220	.360	314.9	10.8	3.5	1.206	106.7	.293	.770	263.8	537.4	.544	.996A	91.1	.844	-.4	21.5	86.2	.162
		11.66	9.67	4.57	2.19	5.62	5.09	12.09	2/1/2	66.8	90.1	34.1	.463	3.410	12.2	209.0	-8.6	102.80	1.115
4-2630	4-2900	.207	88.1	-20.5	-7.5	1.107	95.9	.261	1.336	330.7	525.0	.988	1.684A	95.2	.674	7.5	39.3	203.1	.124
4-2900	4-3055.1	.236	98.4	25.7	.8	.613	106.1	.454	1.210	201.5	315.2	.660A	1.760D	76.4	1.389	1.5	5.3	280.9	.379
4-3055.1	4-3230	.379	313.1	10.1	3.3	1.204	107.7	.308	.766	261.5	547.9	.530	1.002	86.5	.836	-.2	21.5	73.3	.181
		12.57	9.91	4.79	2.65	6.07	5.12	12.32	2/1/2	66.9	112.0	32.2	.416	3.602	11.8	208.2	-8.6	100.80	1.087
MARS ARRIVAL DATE = 2442910 (11 MAY 1976)																			
4-2600	4-2910	.217	77.3	10.5	-2.5	1.096	100.0	.278	1.304	311.2	536.5	.941	1.666A	90.6	.659	2.0	28.8	161.7	.083
4-2910	4-3056.8	.265	95.8	25.5	-.7	.633	110.0	.464	1.250	207.6	319.1	.670A	1.829D	77.3	1.398	1.6	5.8	279.7	.369
4-3056.8	4-3200	.369	313.3	11.0	3.5	1.214	107.0	.301	.781	265.7	520.0	.546	1.016A	98.2	.861	-.4	21.4	101.7	.192
		12.80	10.81	4.95	1.99	5.41	5.86	12.47	2/1/2	89.5	55.6	33.6	.442	3.457	12.6	207.8	-8.9	103.40	1.065
4-2610	4-2910	.199	81.6	6.8	-3.0	1.099	98.6	.270	1.314	317.4	533.1	.960	1.668A	91.8	.663	2.7	26.8	174.3	.084
4-2910	4-3057.8	.264	95.4	25.4	-.7	.635	110.0	.461	1.253	207.9	321.0	.670A	1.831D	77.9	1.399	1.6	6.1	279.5	.359
4-3057.8	4-3210	.359	315.1	11.1	3.4	1.210	106.6	.292	.775	265.2	527.9	.549	1.002A	94.9	.852	-.5	21.0	97.0	.170
		12.52	10.52	4.68	1.99	5.42	5.85	12.16	2/1/2	78.9	70.1	33.6	.466	3.276	12.2	208.5	-8.2	104.20	1.062
4-2620	4-2910	.186	84.8	.1	-3.8	1.102	97.3	.265	1.323	323.9	532.1	.975	1.671A	92.8	.668	3.8	29.6	186.3	.089
4-2910	4-3057.8	.264	95.4	25.4	-.7	.635	110.0	.461	1.253	207.8	321.0	.676A	1.830D	77.9	1.399	1.6	6.0	279.5	.359
4-3057.8	4-3220	.359	315.6	10.8	3.3	1.207	106.7	.292	.771	264.1	536.8	.548	.998A	91.3	.844	-.4	21.1	87.6	.161
		12.40	10.33	4.49	2.07	5.50	5.84	12.08	2/1/2	72.6	86.8	36.0	.467	3.236	11.8	208.7	-7.7	104.10	1.043
4-2630	4-2910	.186	87.0	-12.4	-8.7	1.106	95.9	.258	1.332	330.7	529.3	.988	1.678A	93.7	.671	5.8	35.9	198.3	.105
4-2910	4-3058.6	.265	96.1	25.5	-.7	.632	110.0	.465	1.247	207.3	317.8	.667A	1.827D	78.9	1.398	1.6	5.8	279.8	.376
4-3058.8	4-3230	.376	314.1	10.1	3.3	1.205	107.8	.306	.767	261.9	547.2	.532	1.001	86.8	.837	-.3	21.3	74.9	.178
		12.69	10.37	4.49	2.32	5.74	5.87	12.20	2/1/2	69.5	110.5	34.2	.425	3.400	11.2	208.0	-7.6	102.20	1.020

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2442800
22 JAN 1976

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2442800 (22 JAN 1976)																				
4-2550	4-2800	.306	44.0	9.4	-2.0	1.088	105.2	.323	1.257	290.5	516.0	.851	1.664A	100.6	.676	.3	18.6	136.8	.122
4-2800	4-3047.6	.180	129.4	25.8	2.0	.618	77.9	.436	1.149	163.4	310.3	.648A	1.649	75.5	1.374	-.0	-.2	273.1	.386
4-3047.6	4-3190	.386	300.8	9.8	3.3	1.209	107.9	.313	.771	262.5	520.8	.530	1.013A	98.3	.854	.5	25.5	90.2	.202
		12.93	10.31	6.49	2.62	6.04	3.81	12.61	2/1/2	59.3	56.3	29.3	.404	3.953	20.6	198.7	-19.9	98.0D	1.193
4-2560	4-2800	.297	51.4	9.5	-2.5	1.094	104.5	.323	1.263	294.3	510.4	.669	1.697A	102.5	.668	.9	17.8	148.5	.132
4-2800	4-3048.6	.178	129.1	26.0	2.0	.619	78.1	.432	1.151	163.5	312.0	.653A	1.648	76.0	1.375	-.0	-.2	273.5	.376
4-3048.6	4-3200	.376	302.6	10.3	3.4	1.205	107.5	.304	.766	261.9	528.6	.532	.999A	94.9	.845	.4	25.2	85.3	.178
		12.88	10.07	6.31	2.80	6.21	3.76	12.29	2/1/2	48.6	70.8	31.0	.426	3.744	20.6	199.9	-19.9	96.4D	1.168
4-2570	4-2800	.290	59.0	7.9	-3.3	1.100	103.9	.325	1.311	298.6	504.9	.685	1.738A	104.3	.700	1.8	18.3	158.7	.146
4-2800	4-3048.5	.178	129.2	26.0	2.0	.619	78.1	.433	1.151	163.5	311.8	.652A	1.649	75.9	1.375	-.0	-.2	273.4	.377
4-3048.5	4-3210	.377	303.2	10.4	3.4	1.201	107.6	.305	.761	260.7	537.7	.529	.993A	91.0	.838	.4	24.7	75.2	.171
		13.03	9.95	6.18	3.07	6.48	3.77	12.19	2/1/2	40.3	90.0	31.4	.423	3.694	20.6	200.1	-19.9	98.0D	1.139
MARS ARRIVAL DATE = 2442810 (1 FEB 1976)																				
4-2540	4-2810	.318	36.9	8.4	-1.8	1.082	106.0	.326	1.231	286.0	525.9	.630	1.632A	96.6	.657	-.1	20.6	116.8	.114
4-2810	4-3046.8	.178	129.1	25.2	1.8	.606	79.5	.442	1.141	166.2	307.0	.637A	1.645	74.4	1.372	.2	.7	274.2	.404
4-3046.8	4-3180	.404	299.1	9.0	3.1	1.217	108.8	.329	.782	263.3	512.8	.525	1.039A	102.0	.667	.6	25.6	92.1	.239
		12.94	10.48	6.72	2.47	5.88	3.75	13.17	2/1/2	80.8	44.5	26.1	.368	4.427	19.3	198.2	-18.6	97.2D	1.263
4-2550	4-2810	.304	44.2	9.6	-2.0	1.086	105.1	.320	1.251	290.2	520.4	.651	1.652A	98.8	.667	.3	19.6	133.5	.114
4-2810	4-3048.6	.174	128.4	25.5	1.8	.609	79.9	.435	1.146	166.2	310.1	.647A	1.644	75.4	1.373	.2	.8	274.9	.385
4-3048.6	4-3190	.385	302.2	9.9	3.3	1.211	107.9	.313	.774	263.0	519.6	.532	1.016A	98.8	.656	.4	25.1	92.2	.205
		12.59	10.11	6.45	2.47	5.89	3.66	12.65	2/1/2	67.4	54.5	28.7	.405	4.041	19.4	200.3	-18.6	98.1D	1.231
4-2560	4-2810	.292	51.4	9.8	-2.4	1.091	104.4	.318	1.274	294.3	514.9	.670	1.679A	100.7	.678	.8	18.5	146.3	.120
4-2810	4-3049.8	.171	128.1	25.6	1.7	.611	80.1	.431	1.148	166.3	312.0	.654A	1.643	76.0	1.374	.2	.8	275.3	.374
4-3049.8	4-3200	.374	304.3	10.4	3.4	1.206	107.4	.303	.768	262.5	527.3	.535	1.001A	95.4	.848	.3	24.7	88.0	.180
		12.42	9.84	6.23	2.58	6.00	3.61	12.30	2/1/2	55.5	66.3	30.4	.429	3.810	19.3	201.6	-18.4	98.0D	1.208
4-2570	4-2810	.283	58.8	8.7	-3.0	1.097	103.6	.317	1.299	298.5	509.5	.687	1.711A	102.5	.689	1.6	18.3	157.5	.131
4-2810	4-3049.9	.171	128.0	25.6	1.7	.611	80.1	.430	1.148	166.3	312.2	.654A	1.643	76.1	1.374	.2	.8	275.3	.373
4-3049.9	4-3210	.373	305.0	10.5	3.4	1.203	107.4	.302	.763	261.4	536.2	.532	.993A	91.7	.840	.3	24.4	78.7	.169
		12.44	9.66	6.05	2.79	6.20	3.60	12.17	2/1/2	45.9	86.8	31.1	.431	3.735	19.2	202.0	-18.3	98.4D	1.178
4-2580	4-2810	.276	66.3	4.9	-4.2	1.103	102.9	.319	1.327	302.8	504.3	.903	1.750A	104.1	.700	2.9	20.4	167.5	.147
4-2810	4-3048.0	.175	128.7	25.4	1.8	.608	79.7	.437	1.144	166.2	309.0	.644A	1.644	75.1	1.373	.2	.7	274.7	.392
4-3048.0	4-3220	.392	303.1	10.2	3.5	1.200	108.3	.317	.758	259.1	546.9	.518	.999	86.8	.832	.5	23.5	64.8	.186
		12.74	9.65	5.96	3.09	6.50	3.69	12.38	2/1/2	39.4	109.5	29.8	.392	3.685	19.6	200.7	-18.7	96.7D	1.130
MARS ARRIVAL DATE = 2442820 (11 FEB 1976)																				
4-2540	4-2820	.320	37.2	8.5	-1.8	1.081	106.1	.327	1.228	285.5	530.0	.627	1.630A	94.8	.650	-.1	21.4	114.4	.112
4-2820	4-3047.7	.172	127.5	25.1	1.6	.599	81.6	.441	1.139	169.1	306.7	.636A	1.641	74.4	1.371	.4	1.4	275.8	.405
4-3047.7	4-3180	.405	300.3	9.1	3.2	1.218	108.8	.330	.765	263.6	511.8	.526	1.043A	102.4	.669	.5	25.2	93.5	.242
		12.83	10.39	6.76	2.44	5.86	3.63	13.23	2/1/2	89.7	43.2	25.5	.367	4.530	18.4	199.7	-17.6	97.2D	1.296
4-2550	4-2820	.303	44.3	9.7	-2.0	1.085	105.1	.319	1.247	289.8	524.6	.650	1.645A	96.9	.660	.3	20.6	129.2	.109
4-2820	4-3049.6	.168	126.7	25.3	1.6	.602	82.0	.434	1.143	169.2	310.0	.647A	1.640	75.4	1.372	.5	1.6	276.5	.385
4-3049.6	4-3190	.385	303.5	9.9	3.3	1.212	107.9	.313	.776	263.5	518.6	.533	1.019A	99.2	.658	.5	24.6	94.0	.207
		12.36	9.98	6.44	2.36	5.80	3.54	12.69	2/1/2	76.0	52.9	28.1	.405	4.118	18.4	201.8	-17.4	98.2D	1.263
4-2560	4-2820	.289	51.5	10.1	-2.3	1.089	104.3	.314	1.268	294.1	519.3	.670	1.665A	98.9	.669	.7	19.5	143.2	.111
4-2820	4-3050.9	.166	126.2	25.5	1.5	.604	82.2	.430	1.146	169.3	312.1	.654A	1.639	76.1	1.373	.5	1.7	276.9	.373
4-3050.9	4-3200	.373	305.6	10.5	3.4	1.207	107.3	.303	.770	263.0	526.1	.537	1.003A	95.9	.850	.2	24.3	90.4	.181
		12.09	9.66	6.18	2.43	5.84	3.49	12.32	2/1/2	63.2	66.1	30.0	.432	3.865	18.2	203.2	-17.0	98.8D	1.237
4-2570	4-2820	.278	58.7	9.4	-2.8	1.094	103.4	.311	1.290	298.4	514.1	.688	1.691A	100.7	.679	1.4	18.8	155.5	.119
4-2820	4-3051.2	.165	126.1	25.5	1.5	.604	82.2	.429	1.147	169.3	312.5	.655A	1.639	76.2	1.373	.5	1.7	277.0	.370
4-3051.2	4-3210	.370	306.7	10.6	3.4	1.204	107.2	.300	.765	262.1	534.8	.535	.994A	92.2	.842	.1	24.0	81.9	.168
		12.00	9.44	5.96	2.56	5.98	3.48	12.16	2/1/2	52.3	84.0	30.8	.458	3.765	18.0	203.6	-16.8	98.8D	1.211
4-2580	4-2820	.269	65.9	6.5	-3.7	1.100	102.6	.311	1.314	302.8	508.9	.905	1.723A	102.4	.690	2.4	19.7	166.3	.131
4-2820	4-3049.7	.168	126.7	25.4	1.6	.602	82.0	.434	1.144	169.2	310.1	.648A	1.640	75.5	1.372	.5	1.6	276.6	.385
4-3049.7	4-3220	.385	305.3	10.3	3.5	1.201	107.9	.311	.760	260.0	545.1	.524	.997	87.7	.834	.3	23.4	66.7	.179
		12.13	9.35	5.81	2.79	6.20	3.54	12.30	2/1/2	44.2	106.0	29.9	.407	3.674	18.2	202.7	-17.1	97.4D	1.169
MARS ARRIVAL DATE = 2442830 (21 FEB 1976)																				
4-2540	4-2830	.323	37.5	8.7	-1.8	1.081	106.3	.329	1.227	284.9	534.0	.623	1.631A	92.9	.644	-.1	22.0	110.3	.114
4-2830	4-3048.5	.169	125.2	25.2	1.5	.592	83.9	.441	1.137	172.2	306.5	.636A	1.638	74.3	1.371	.6	2.0	277.3	.405
4-3048.5	4-3180	.405	301.4	9.2	3.2	1.220	108.8	.330	.767	264.2	510.9	.527	1.047A	102.7	.671	.4	24.9	94.7	.246
		12.84	10.37	6.82	2.47	5.88	3.55	13.28	2/1/2	98.1	42.1	25.0	.366	4.618	17.6	201.0	-16.6	97.3D	1.324
4-2550	4-2830	.304	44.6	9.9	-2.0	1.084	105.2	.319	1.244	289.3	526.8	.648	1.641A	95.2	.653	.2	21.6	124.9	.106
4-2830	4-3050.5	.165	124.2	25.4	1.4	.596	84.3	.433	1.142	172.4	309.9	.647A	1.638	75.4	1.372	.7	2.3	278.0	.385
4-3050.5	4-3190	.385	304.7	10.0	3.3	1.213	107.9	.313	.778	263.9	517.6	.534	1.022A	99.5	.660	.2	24.2	95.5	.210
		12.26	9.92	6.46	2.34	5.76	3.47	12.72	2/1/2	84.8	51.5	27.7	.405	4.181	17.6	203.1	-16.3	98.3D	1.288
4-2560	4-2830	.288	51.8	10.4	-2.2	1.088	104.2	.312	1.263	293.7	523.6	.669	1.687A	97.2	.662	.7	20.5	139.5	.103
4-2830	4-3051.8	.162	123.5	25.5	1.4	.598	84.5	.429	1.146	172.5	312.2	.654A	1.637	76.1	1.373	.7	2.4	278.3	.372
4-3051.8	4-3200	.372	307.1	10.5	3.4	1.208	107.3	.302	.771	263.5	525.1	.538	1.004A	96.3	.851	.1	25.0	92.5	.162
		11.86	9.57	6.15	2.32	5.74	3.41	12.34	2/1/2	71.4	64.2	29.7	.434	3.908	17.3	204.5	-15.9	99.0D	1.262
4-2570	4-2830	.274	58.6	9.9	-2.6	1.092	103.3	.307	1.283	298.2	518.5	.689	1.677A	99.0	.671	1.2	19.6	152.9	.109
4-2830	4-3052.3	.161	123.3	25.5	1.4	.598	84.5	.427	1.147	172.6	312.9	.657A	1.637	76.4	1.373	.7	2.5	278.4	.368
4-3052.3	4-3210	.368	308.1	10.7	3.4	1.205	107.1	.298	.766	262.6	533.6	.538	.995A	92.7	.843	.0	23.8	84.6	.167
		11.69	9.30	5.90	2.39	5.81	3.40	12.15	2/1/2	59.4	81.5	30.6	.444	3.788	17.0	205.1	-15.5	99.2D	1.237
4-2580	4-2830	.263	65.6	7.8	-3.3	1.097	102.4	.305	1.304	302.7	513.4	.907	1.702A	100.6	.681	2.1	19.7	164.6	.119
4-2830	4-3051.1	.163	123.9	25.5	1.4	.597	84.3	.431	1.144	172.4	311.0	.651A	1.637	75.8	1.372	.7	2.3	278.1	.379
4-3051.1	4-3220	.379	307.2	10.4	3.4	1.202	107.7	.307	.762	260.8	543.6	.528	.996	88.4	.836	.2	23.2	72.1	.174
		11.69	9.14	5.70	2.35	5.97	3.44	12.24	2/1/2	49.9	103.0	30.0	.419	3.864	17.0	204.4	-15.7	98.0D	1.199
4-2590	4-2830	.257	72.7	2.3	-4.7	1.102	101.5	.304	1.327	307.3	508.5	.923	1.731A	102.1	.690	3.6	22.5	175.3	.133
4-2830	4-3045.4	.176	126.8	24.8	1.5	.586	85.4	.454	1.128	171.9	301.3	.617A	1.640	72.8	1.369	.6	1.7	276.0	.438
4-3045.4	4-3230	.438	300.8	9.7	3.7	1.199	110.8	.393	.756	255.6	557.4	.469	1.023	80.9	.826	.8	22.5	55.5	.236
		12.13	9.30	5.60	2.85	6.24	3.71	13.15	2/1/2	44.0	126.0	25.9	.314	4.466	16.9	200.2	-17.9	93.3D	1.087
MARS ARRIVAL DATE = 2442840 (2 MAR 1976)																				
4-2540	4-2840	.327	37.9	8.8	-1.8	1.081	106.6	.333	1.227	284.2	537.8	.619	1.635A	91.1	.640	-.1	22.5	106.9	.117
4-2840	4-3049.2	.167	122.2	25.4	1.3	.587	86.4	.441	1.137	175.4	306.4	.635A	1.639	74.3	1.371	.8	2.5	278.5	.406
4-3049.2	4-3180	.406	302.4	9.2	3.2	1.221	108.8	.331	.789	264.5	510.1	.526	1.051A	103.0	.673	.4	24.6	95.7	.249
		12.97	10.44	6.91	2.53	5.95	3.53	13.33	2/1/2	105.9	41.2	24.6	.365	4.689	16.9	202.1	-15.8	97.4D	1.345
4-2550	4-2840	.306	44.8	10.1	-1.9	1.084	105.4	.320	1.243	288.8	532.8	.645	1.641A	93.4	.648	.2	22.4	120.6	.106
4-2840	4-3051.8	.164	121.0	25.6	1.3	.591	86.7	.434	1.143	175.7	309.9	.647A	1.638	75.4	1.372	.8	2.8	279.2	.385
4-3051.8	4-3190	.385	305.8	10.1	3.3	1.214	107.8	.313	.780	264.3	516.8	.535	1.025A	99.9	.662	.1	25.9	96.6	.212
		12.28	9.94	6.50	2.34	5.76	3.45	12.76	2/1/2	95.3	50.2	27.4	.405	4.228	16.8	204.2	-15.4	98.5D	1.307
4-2560	4-2840	.288	51.8	10.7	-2.1	1.087	104.3	.311	1.260	293.3	527.6	.668	1.661A	95.4	.658	.6	21.6	138.3	.101
4-2840	4-3052.7	.161	120.1	25.6	1.2	.593	86.9	.429	1.146	175.9	312.4	.655A	1.638	76.2	1.373	.9	3.1	279.5	.371
4-3052.7	4-3200	.371	308.2	10.6	3.4	1.206	107.2	.302	.773	263.9	524.2	.540	1.006A	90.6	.853	.0	23.4	94.5	.184
		11.60	9.38	6.18	2.26	5.68	3.39	12.36	2/1/2	80.0	62.6	29.4	.436	3.937	16.5	205.6	-14.9	99.3D	1.280
4-2570	4-2840	.272	58.7	10.4	-2.8	1.091	103.2	.304	1.278	297.9	522.8	.689	1.667A	97.2	.664	1.1	20.6	149.8	.102
4-2840	4-3053.2	.160	119.8	25.7	1.2	.594	87.0	.427	1.146	176.0	313.5	.658A	1.638	76.5	1.373	.9	3.2	279.6	.366
4-3053.2	4-3210	.366	309.4	10.7	3.4	1.208	107.0	.297	.768	263.1	532.5	.540	.998A	93.1	.845	-.0	23.2	87.0	.167
		11.51	9.24	5.86	2.27	5.69	3.38	12.15	2/1/2	97.2	79.3	30.8	.449	3.799	16.2	206.5	-14.4	99.3D	1.286

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2442640
2 MAR 1976

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-2580	4-2840	.258	65.5	8.8	-3.0	1.095	102.3	.300	1.297	302.6	517.9	.908	1.686A	98.9	.673	1.8	20.1	162.2	.108
4-2840	4-3052.4	.162	120.3	25.6	1.2	.593	86.9	.430	1.146	175.9	311.8	.653A	1.638	76.0	1.373	.8	3.0	279.5	.374
4-3052.4	4-3220	.374	308.9	10.5	3.4	1.203	107.4	.303	.764	261.5	542.3	.532	.996	89.0	.837	.0	22.9	75.1	.171
		11.40	9.03	5.62	2.37	5.79	3.41	12.19	2/1/2	56.4	100.3	30.1	.429	3.848	16.0	205.8	-14.4	98.6D	1.221
4-2590	4-2840	.249	72.2	4.6	-4.0	1.100	101.3	.298	1.317	307.4	513.1	.925	1.709A	100.4	.682	3.0	21.6	173.5	.119
4-2840	4-3049.0	.170	122.9	25.3	1.4	.585	86.2	.446	1.133	175.3	304.3	.628A	1.639	73.6	1.370	.8	2.4	278.1	.419
4-3046.0	4-3230	.419	304.1	9.7	3.6	1.200	109.6	.339	.759	257.3	554.9	.502	1.015	82.6	.829	.5	22.4	59.7	.219
		11.60	9.04	5.46	2.57	5.98	3.58	12.86	2/1/2	48.7	124.2	26.8	.343	4.311	17.2	202.8	-16.0	94.8D	1.135
MARS ARRIVAL DATE = 2442850 (12 MAR 1976)																			
4-2550	4-2850	.310	45.1	10.3	-1.9	1.084	105.6	.323	1.242	288.1	536.7	.841	1.643A	91.6	.643	.2	23.0	116.9	.108
4-2850	4-3052.0	.166	117.2	25.8	1.2	.587	89.4	.434	1.145	179.2	310.1	.648A	1.642	75.4	1.372	1.0	3.3	280.2	.385
4-3052.0	4-3190	.385	306.7	10.2	3.4	1.215	107.8	.314	.762	264.6	516.0	.536	1.027A	100.1	.864	.1	23.5	98.0	.215
		12.42	10.05	6.56	2.37	5.79	3.49	12.79	2/1/2	101.4	49.1	27.2	.405	4.256	16.2	205.1	-14.6	98.7D	1.318
4-2560	4-2850	.289	52.0	11.0	-2.1	1.086	104.4	.311	1.258	292.9	531.8	.866	1.649A	93.7	.651	.6	22.6	131.1	.100
4-2850	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.5	.371
4-3053.4	4-3200	.371	309.2	10.7	3.4	1.210	107.2	.301	.775	264.2	523.3	.541	1.008A	96.9	.854	-.1	23.0	95.9	.185
		11.85	9.61	6.17	2.23	5.66	3.44	12.38	2/1/2	88.6	61.1	29.3	.437	3.950	15.9	206.6	-13.9	99.6D	1.290
4-2570	4-2850	.271	58.7	10.9	-2.4	1.090	103.2	.303	1.274	297.6	527.0	.888	1.660A	95.5	.659	1.1	21.7	145.6	.097
4-2850	4-3054.1	.162	115.8	25.8	1.1	.591	89.7	.427	1.151	179.6	313.8	.659A	1.642	76.6	1.374	1.0	3.8	280.6	.364
4-3054.1	4-3210	.364	310.6	10.8	3.4	1.207	106.9	.296	.769	263.5	531.6	.542	.997A	93.5	.846	-.1	22.8	89.1	.167
		11.46	9.27	5.85	2.20	5.62	3.42	12.15	2/1/2	75.5	77.4	30.5	.453	3.797	15.4	207.3	-13.4	99.9D	1.266
4-2580	4-2850	.256	65.4	9.6	-2.8	1.094	102.2	.297	1.291	302.4	522.2	.908	1.675A	97.2	.667	1.7	21.0	159.2	.100
4-2850	4-3053.4	.163	116.2	25.8	1.1	.590	89.6	.429	1.149	179.5	312.6	.656A	1.642	76.3	1.373	1.0	3.6	280.5	.371
4-3053.4	4-3220	.371	310.3	10.5	3.4	1.204	107.3	.301	.765	262.0	541.1	.535	.995	89.5	.839	-.1	22.8	77.6	.168
		11.26	9.01	5.57	2.24	5.67	3.44	12.16	2/1/2	63.7	98.0	30.3	.437	3.823	15.2	207.0	-13.2	99.2D	1.234
4-2590	4-2850	.243	71.8	6.4	-3.5	1.098	101.2	.293	1.309	307.3	517.6	.926	1.693A	98.7	.675	2.6	21.5	171.3	.108
4-2850	4-3049.9	.169	118.5	25.7	1.2	.583	89.1	.442	1.139	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	279.8	.407
4-3049.9	4-3230	.407	306.4	9.8	3.5	1.201	109.1	.329	.760	258.5	553.1	.510	1.011	83.7	.831	.3	22.3	63.0	.207
		11.30	8.92	5.36	2.37	5.79	3.56	12.68	2/1/2	54.5	121.3	27.5	.363	4.204	15.9	204.8	-14.4	96.0D	1.164
MARS ARRIVAL DATE = 2442860 (22 MAR 1976)																			
4-2550	4-2860	.314	45.5	10.6	-1.9	1.084	105.8	.326	1.242	287.4	540.4	.837	1.648	89.8	.640	.2	23.4	113.8	.112
4-2860	4-3052.8	.171	113.0	26.0	1.1	.586	92.3	.436	1.149	183.0	310.3	.648A	1.650D	75.5	1.373	1.1	3.8	280.9	.386
4-3052.8	4-3190	.385	307.5	10.2	3.4	1.216	107.8	.314	.763	264.9	515.3	.537	1.029A	100.4	.865	.0	23.2	99.0	.217
		12.70	10.26	6.65	2.45	5.86	3.60	12.82	2/1/2	108.7	48.2	27.1	.405	4.262	15.6	205.9	-13.8	98.9D	1.319
4-2560	4-2860	.292	52.2	11.3	-2.0	1.086	104.5	.313	1.257	292.3	535.7	.863	1.650A	92.0	.647	.6	23.4	127.0	.101
4-2860	4-3054.1	.169	112.0	26.0	1.0	.589	92.5	.431	1.154	183.3	313.0	.657A	1.650D	76.3	1.374	1.1	4.1	281.2	.370
4-3054.1	4-3200	.370	310.1	10.7	3.4	1.211	107.1	.301	.776	264.6	522.6	.542	1.010A	97.2	.856	-.1	22.7	97.2	.187
		12.03	9.78	6.22	2.25	5.67	3.56	12.40	2/1/2	96.8	59.9	29.4	.438	3.943	15.2	207.3	-13.1	99.9D	1.290
4-2570	4-2860	.272	58.9	11.4	-2.3	1.089	103.3	.303	1.272	297.2	531.0	.887	1.657A	93.9	.654	1.0	22.7	141.4	.095
4-2860	4-3054.8	.168	111.5	26.0	1.0	.590	92.6	.428	1.156	183.5	314.3	.661A	1.650D	76.7	1.375	1.2	4.3	281.3	.363
4-3054.8	4-3210	.363	311.6	10.9	3.4	1.207	106.8	.295	.771	263.9	530.8	.543	.998A	93.8	.847	-.2	22.4	90.9	.168
		11.55	9.39	5.85	2.16	5.58	3.54	12.15	2/1/2	84.0	75.7	30.7	.456	3.777	14.8	208.1	-12.5	100.3D	1.266
4-2580	4-2860	.254	65.4	10.4	-2.6	1.092	102.2	.295	1.287	302.2	526.4	.908	1.667A	95.5	.661	1.5	22.0	155.5	.095
4-2860	4-3054.5	.169	111.8	26.0	1.0	.590	92.5	.430	1.154	183.4	313.5	.658A	1.650D	76.5	1.375	1.1	4.1	281.2	.368
4-3054.5	4-3220	.368	311.5	10.8	3.4	1.204	107.1	.299	.766	262.5	540.2	.538	.995	89.9	.840	-.2	22.3	79.9	.186
		11.26	9.10	5.55	2.16	5.58	3.55	12.14	2/1/2	71.6	95.9	30.6	.444	3.784	14.5	207.9	-12.2	99.8D	1.257
4-2590	4-2860	.239	71.6	7.8	-3.2	1.096	101.1	.289	1.304	307.2	522.0	.926	1.681A	97.0	.669	2.3	22.0	168.4	.100
4-2860	4-3051.3	.173	113.9	26.0	1.1	.584	92.2	.440	1.145	182.8	308.1	.641A	1.650D	74.8	1.373	1.1	3.6	280.6	.398
4-3051.3	4-3230	.398	308.3	9.9	3.4	1.202	108.8	.323	.762	259.3	551.7	.516	1.008	84.5	.832	.1	22.2	65.8	.199
		11.17	8.94	5.30	2.23	5.65	3.64	12.56	2/1/2	61.2	118.8	28.2	.379	4.108	14.8	208.0	-13.0	96.9D	1.178
MARS ARRIVAL DATE = 2442870 (1 APR 1976)																			
4-2560	4-2870	.295	52.5	11.7	-2.0	1.086	104.7	.316	1.257	291.6	539.5	.860	1.653A	90.2	.644	.8	23.9	123.8	.104
4-2870	4-3054.7	.178	107.8	26.0	.9	.591	95.6	.433	1.161	187.4	313.6	.658A	1.664D	76.4	1.376	1.2	4.5	281.6	.370
4-3054.7	4-3200	.370	310.9	10.8	3.4	1.212	107.1	.301	.777	264.6	522.0	.543	1.011A	97.4	.857	-.2	22.4	98.3	.188
		12.35	10.06	6.29	2.30	5.72	3.77	12.42	2/1/2	104.4	58.9	29.6	.439	3.912	14.7	207.9	-12.3	100.3D	1.279
4-2570	4-2870	.273	59.1	11.8	-2.2	1.089	103.4	.304	1.270	296.7	535.0	.885	1.656A	92.2	.650	.9	23.8	137.2	.095
4-2870	4-3055.8	.178	107.2	26.0	.9	.592	95.7	.431	1.164	187.6	315.1	.663A	1.665D	76.9	1.377	1.3	4.7	281.7	.362
4-3055.8	4-3210	.362	312.4	10.9	3.4	1.208	106.8	.294	.772	264.2	530.1	.545	.999A	94.1	.849	-.3	22.1	92.4	.188
		11.79	9.64	5.88	2.15	5.58	3.76	12.16	2/1/2	92.3	74.3	31.1	.459	3.736	14.2	208.6	-11.6	100.8D	1.255
4-2580	4-2870	.254	65.5	11.0	-2.4	1.092	102.2	.294	1.285	301.8	530.5	.907	1.663A	93.9	.657	1.4	23.0	151.4	.091
4-2870	4-3055.1	.178	107.3	26.0	.9	.591	95.6	.432	1.162	187.5	314.4	.661A	1.664D	76.7	1.377	1.3	4.6	281.7	.366
4-3055.1	4-3220	.366	312.5	10.7	3.4	1.205	107.0	.297	.767	262.9	539.3	.540	.995A	90.3	.841	-.2	22.1	81.8	.165
		11.41	9.30	5.54	2.10	5.53	3.76	12.12	2/1/2	79.8	94.2	31.1	.450	3.729	13.8	208.6	-11.2	100.4D	1.226
4-2590	4-2870	.237	71.8	8.9	-2.9	1.095	101.1	.287	1.299	307.0	526.2	.926	1.673A	95.4	.664	2.1	22.7	165.0	.093
4-2870	4-3052.8	.181	109.3	26.1	1.0	.586	95.4	.440	1.154	186.9	309.7	.646A	1.663D	75.2	1.375	1.2	4.1	281.3	.392
4-3052.8	4-3250	.392	309.8	10.0	3.4	1.203	108.3	.318	.763	260.0	550.5	.521	1.006	85.2	.833	.0	22.0	66.1	.192
		11.22	9.08	5.26	2.13	5.56	3.83	12.48	2/1/2	68.5	116.7	28.9	.391	4.009	13.9	207.0	-11.8	97.8D	1.178
MARS ARRIVAL DATE = 2442880 (11 APR 1976)																			
4-2560	4-2880	.300	52.9	12.1	-1.9	1.086	105.0	.320	1.257	290.6	543.1	.855	1.659	88.5	.641	.5	24.2	120.9	.106
4-2880	4-3055.2	.193	103.9	26.0	.9	.595	98.9	.437	1.173	191.8	314.4	.660A	1.685D	76.6	1.379	1.3	4.9	281.8	.370
4-3055.2	4-3200	.370	311.6	10.9	3.4	1.212	107.1	.301	.778	265.1	521.4	.544	1.012A	97.6	.858	-.2	22.1	99.3	.189
		12.84	10.47	6.38	2.37	5.79	4.09	12.43	2/1/2	111.3	57.9	30.1	.440	3.853	14.1	208.2	-11.5	100.8D	1.255
4-2570	4-2880	.276	59.4	12.3	-2.1	1.089	103.6	.306	1.270	296.1	538.8	.882	1.658A	90.5	.648	.9	24.2	133.5	.096
4-2880	4-3056.0	.192	103.4	25.9	.8	.597	99.0	.434	1.175	192.0	316.0	.665A	1.686D	77.1	1.380	1.4	5.1	281.8	.361
4-3056.0	4-3210	.361	313.2	11.0	3.4	1.206	106.7	.294	.773	264.5	529.5	.546	.999A	94.3	.849	-.3	21.8	93.7	.188
		12.18	10.00	5.93	2.18	5.60	4.07	12.16	2/1/2	100.2	73.1	31.8	.461	3.671	13.7	209.0	-10.8	101.4D	1.231
4-2580	4-2880	.255	65.6	11.7	-2.3	1.091	102.3	.295	1.283	301.4	534.5	.905	1.661A	92.3	.654	1.3	23.9	147.2	.090
4-2880	4-3055.8	.192	103.5	25.9	.8	.596	99.0	.435	1.175	192.0	315.6	.663A	1.686D	76.9	1.380	1.4	5.0	281.8	.364
4-3055.8	4-3220	.364	313.4	10.7	3.4	1.206	106.9	.295	.768	265.3	538.6	.541	.995A	90.6	.842	-.3	21.8	83.4	.164
		11.72	9.63	5.55	2.08	5.51	4.08	12.10	2/1/2	88.1	92.7	31.8	.455	3.651	13.2	209.0	-10.3	101.0D	1.206
4-2590	4-2880	.236	71.6	10.0	-2.7	1.094	101.1	.286	1.296	306.7	530.3	.926	1.667A	93.8	.660	1.9	23.6	161.0	.089
4-2880	4-3053.5	.194	103.0	26.1	.9	.592	98.8	.443	1.167	191.4	311.3	.651A	1.684D	75.6	1.378	1.3	4.5	281.6	.387
4-3053.5	4-3230	.387	311.1	10.0	3.4	1.203	108.1	.314	.764	260.6	549.5	.524	1.004	85.7	.835	-.1	21.8	70.1	.188
		11.44	9.37	5.24	2.07	5.49	4.13	12.41	2/1/2	76.4	114.9	29.7	.402	3.697	13.1	207.7	-10.7	98.7D	1.163
MARS ARRIVAL DATE = 2442890 (21 APR 1976)																			
4-2570	4-2890	.280	59.7	12.8	-2.0	1.089	103.8	.309	1.270	295.4	542.4	.878	1.662	88.9	.646	.9	24.6	130.3	.100
4-2890	4-3056.5	.210	100.1	25.8	.8	.605	102.4	.440	1.192	196.8	317.2	.667A	1.717D	77.3	1.384	1.4	5.4	281.5	.360
4-3056.5	4-3210	.360	313.9	11.0	3.4	1.209	106.7	.293	.773	264.7	528.9	.547	1.000A	94.5	.850	-.4	21.6	94.8	.189
		12.74	10.51	6.00	2.23	5.66	4.51	12.17	2/1/2	107.4	72.1	32.5	.463	3.576	13.2	209.1	-10.0	102.1D	1.192
4-2580	4-2890	.256	65.9	12.3	-2.2	1.091	102.4	.296	1.282	300.6	536.3	.903	1.662A	90.7	.652	1.3	24.6	143.2	.091
4-2890	4-3056.4	.211	100.1	25.8	.8	.605	102.5	.441	1.192	196.9	317.0	.667A	1.716D	77.2	1.384	1.4	5.4	281.5	.362
4-3056.4	4-3220	.362	314.2	10.7	3.4	1.206	106.8	.294	.769	263.6	538.0	.543	.995A	90.8	.843	-.3	21.8	84.9	.163
		12.20	10.11	5.59	2.09	5.62	4.52	12.09	2/1/2	96.1	91.3	32.8	.459	3.545	12.7	209.1	-9.5	101.8D	1.169
4-2590	4-2890	.236	71.7	10.9	-2.5	1.094	101.1	.286	1.295	306.3	534.5	.924	1.665A	92.5	.657	1.8	24.4	156.9	.087
4-2890	4-3054.5	.212	101.5	25.9	.8	.600	102.4	.447	1.185	196.3	313.1	.655A	1.715D	76.0	1.383	1.4	4.9	281.5	.383
4-3054.5	4-3230	.383	312.2	10.0	3.3	1.204	107.9	.311	.769	261.1	548.7	.527	1.003	86.1	.836	-.2	21.7	71.6	.184
		11.83	9.79	5.24	2.04	5.46	4.85	12.36	2/1/2	84.5	113.4	30.8	.410	3.765	12.4	208.1	-9.8	99.7D	1.139

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2442900 | 1 MAY 1976

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2442900 (1 MAY 1976)																			
4-2580	4-2900	.259	66.2	13.0	-2.1	1.091	102.6	.298	1.282	300.2	542.1	.900	1.664	69.1	.650	1.2	25.0	139.8	.093
4-2900	4-3056.9	.235	97.4	25.6	-.7	.617	106.1	.449	1.217	202.1	318.7	.671A	1.763D	77.5	1.390	1.5	5.7	280.8	.360
4-3056.9	4-3220	.360	314.9	10.8	3.3	1.206	106.7	.293	.770	263.8	537.4	.544	.996A	91.1	.844	-.4	21.3	86.2	.162
		12.86	10.75	5.65	2.13	5.55	5.09	12.09	2/1/2	103.5	90.1	34.1	.465	3.410	12.2	209.0	-8.6	102.8D	1.115
4-2590	4-2900	.237	71.9	11.6	-2.3	1.094	101.3	.287	1.293	305.9	538.2	.923	1.664A	90.7	.655	1.6	25.1	152.7	.086
4-2900	4-3055.1	.236	98.4	25.7	.8	.613	106.1	.454	1.210	201.5	315.2	.660A	1.760D	76.4	1.389	1.5	5.3	280.9	.379
4-3055.1	4-3230	.379	313.1	10.1	3.3	1.204	107.7	.308	.766	261.5	547.9	.530	1.002	86.5	.836	-.2	21.5	73.3	.161
		12.41	10.38	5.26	2.03	5.46	5.12	12.32	2/1/2	92.4	112.0	32.2	.418	3.602	11.8	208.2	-8.6	100.8D	1.067
4-2600	4-2900	.217	77.1	9.3	-2.7	1.098	99.9	.277	1.305	311.7	534.5	.943	1.667A	92.1	.660	2.2	25.3	165.9	.084
4-2900	4-3047.0	.244	103.5	26.0	1.1	.593	106.0	.466	1.175	198.6	299.3	.604A	1.746D	71.1	1.381	1.4	5.8	279.8	.475
4-3047.0	4-3240	.475	304.1	6.9	3.8	1.201	112.4	.383	.759	255.8	563.0	.466	1.080	77.0	.826	.7	22.2	87.6	.261
		12.26	10.27	4.95	2.01	5.43	5.35	13.69	2/1/2	81.6	136.0	24.7	.267	4.667	13.6	209.3	-11.9	92.8D	.978

STOPOVER TIME = 0 DAYS | 1975 INBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2442810
1 FEB 1976

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2442810 (1 FEB 1976)																			
4-2540	4-2810	.318	36.9	8.4	-1.8	1.082	106.0	.326	1.231	286.0	525.9	.830	1.632A	96.6	.657	-.1	20.6	118.8	.114
4-2810	4-3048.0	.175	128.7	25.4	1.8	.608	79.7	.437	1.144	166.2	309.0	.644A	1.644	75.1	1.373	.2	.7	274.7	.392
4-3048.0	4-3220	.392	303.1	10.2	3.5	1.200	108.3	.317	.758	259.1	546.9	.518	.999	86.8	.832	.5	23.5	64.8	.186
		12.86	10.42	6.72	2.47	5.86	3.69	12.36	2/1/2	80.8	109.5	29.8	.392	3.885	19.6	200.7	-18.7	98.7D	1.130
MARS ARRIVAL DATE = 2442820 (11 FEB 1976)																			
4-2540	4-2820	.320	37.2	8.5	-1.8	1.081	106.1	.327	1.228	285.5	530.0	.827	1.630A	94.8	.650	-.1	21.4	114.4	.112
4-2820	4-3049.7	.168	126.7	25.4	1.6	.602	82.0	.434	1.144	169.2	310.1	.648A	1.640	75.5	1.372	.5	1.6	276.6	.385
4-3049.7	4-3220	.385	305.3	10.3	3.5	1.201	107.9	.311	.760	260.0	545.1	.524	.997	87.7	.834	.3	23.4	66.7	.179
		12.74	10.30	6.76	2.44	5.86	3.54	12.30	2/1/2	89.7	106.0	29.9	.407	3.874	18.2	202.7	-17.1	97.4D	1.169
MARS ARRIVAL DATE = 2442830 (21 FEB 1976)																			
4-2540	4-2830	.323	37.5	8.7	-1.8	1.081	106.3	.329	1.227	284.9	534.0	.823	1.631A	92.9	.644	-.1	22.0	110.3	.114
4-2830	4-3051.1	.163	123.9	25.5	1.4	.597	84.3	.431	1.144	172.4	311.0	.651A	1.637	75.8	1.372	.7	2.3	278.1	.379
4-3051.1	4-3220	.379	307.2	10.4	3.4	1.202	107.7	.307	.762	260.8	543.6	.528	.996	86.4	.836	.2	23.2	72.1	.174
		12.73	10.26	6.82	2.47	5.86	3.44	12.24	2/1/2	98.1	103.0	30.0	.412	3.864	17.0	204.4	-15.7	98.0D	1.199
4-2550	4-2830	.304	44.6	9.9	-2.0	1.084	105.2	.319	1.244	289.3	528.6	.848	1.641A	95.2	.653	.2	21.6	124.9	.106
4-2830	4-3045.4	.176	126.8	24.8	1.5	.586	83.4	.454	1.128	171.9	301.3	.617A	1.640	72.6	1.369	.6	1.7	276.0	.436
4-3045.4	4-3230	.436	300.8	9.7	3.7	1.199	110.6	.353	.756	255.6	557.4	.489	1.023	80.9	.826	.8	22.5	55.5	.238
		12.50	10.16	6.46	2.54	5.76	3.71	13.15	2/1/2	84.8	128.0	25.9	.314	4.466	18.9	200.2	-17.9	93.3D	1.067
MARS ARRIVAL DATE = 2442840 (2 MAR 1976)																			
4-2540	4-2840	.327	37.9	8.8	-1.8	1.081	106.6	.333	1.227	284.2	537.8	.819	1.635A	91.1	.640	-.1	22.5	106.9	.117
4-2840	4-3052.4	.162	120.3	25.6	1.2	.593	86.9	.430	1.146	175.9	311.8	.653A	1.638	76.0	1.373	.8	3.0	279.5	.374
4-3052.4	4-3220	.374	308.9	10.5	3.4	1.203	107.4	.303	.764	261.5	542.3	.532	.996	89.0	.837	.0	22.9	75.1	.171
		12.85	10.32	6.91	2.53	5.95	3.41	12.19	2/1/2	105.9	100.3	30.1	.429	3.848	16.0	205.8	-14.4	98.6D	1.221
4-2550	4-2840	.306	44.8	10.1	-1.9	1.084	105.4	.320	1.243	288.8	532.8	.845	1.641A	93.4	.648	.2	22.4	120.6	.106
4-2840	4-3048.0	.170	122.9	25.3	1.4	.585	86.2	.446	1.133	175.3	304.3	.628A	1.639	73.6	1.370	.6	2.4	278.1	.419
4-3048.0	4-3230	.419	304.1	9.7	3.6	1.200	109.6	.339	.759	257.3	554.9	.502	1.015	82.6	.829	.5	22.4	59.7	.219
		12.41	10.08	6.50	2.54	5.76	3.58	12.86	2/1/2	95.3	124.2	26.8	.343	4.311	17.2	202.8	-16.0	94.8D	1.135
MARS ARRIVAL DATE = 2442850 (12 MAR 1976)																			
4-2550	4-2850	.310	45.1	10.3	-1.9	1.084	105.6	.325	1.242	288.1	536.7	.841	1.643A	91.6	.643	.2	23.0	116.9	.108
4-2850	4-3049.9	.169	116.5	25.7	1.2	.583	89.1	.442	1.139	178.9	306.4	.635A	1.642	74.3	1.371	.9	3.0	279.6	.407
4-3049.9	4-3230	.407	306.4	9.8	3.5	1.201	109.1	.329	.760	256.5	553.1	.510	1.011	83.7	.831	.3	22.3	63.0	.207
		12.50	10.12	6.56	2.37	5.79	3.56	12.68	2/1/2	101.4	121.3	27.5	.363	4.204	15.9	204.6	-14.4	96.0D	1.164
MARS ARRIVAL DATE = 2442860 (22 MAR 1976)																			
4-2550	4-2860	.314	45.5	10.6	-1.9	1.084	105.8	.326	1.242	287.4	540.4	.837	1.645	89.8	.640	.2	23.4	113.8	.112
4-2860	4-3051.8	.173	113.9	26.0	1.1	.584	92.2	.440	1.145	182.8	308.1	.641A	1.650D	74.8	1.373	1.1	3.8	280.8	.398
4-3051.8	4-3230	.398	308.3	9.9	3.4	1.202	108.8	.323	.762	259.8	551.7	.518	1.008	84.5	.832	.1	22.2	65.8	.199
		12.74	10.30	6.65	2.45	5.86	3.64	12.56	2/1/2	108.7	118.8	28.2	.379	4.108	14.8	206.0	-13.0	96.9D	1.178

1978

OUTBOUND SWINGBY

4.2

LAUNCH	SWNGBY	$PEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	$PEED2
SWNGBY	ARRIVE	$PEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	$PEED4
DEPART	RETURN	$PEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	$PEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2443460 (12 NOV 1977)																			
4-3190	4-3309.6	.193	23.4	-36.0	-8.0	.938	96.2	.170	.873	213.4	374.0	.725	1.021D	92.0	1.266	9.6	66.9	237.1	.231
4-3309.6	4-3460	.231	261.3	4.5	.7	1.398	89.2	.421	1.256	2.8	143.6	.728D	1.768A	110.7	.694	1.3	18.1	146.0	.222
4-3460	4-3670	.255	9.5	21.9	5.7	.732	102.9	.273	1.349	221.8	392.6	.981	1.717D	96.8	1.109	-7.2	-58.9	316.9	.215
		14.98	10.20	4.60	4.78	8.17	5.60	12.80	1/1/1	37.9	54.5	64.7	1.131	1.870	79.8	95.5	51.9	95.6D	.984
MARS ARRIVAL DATE = 2443470 (22 NOV 1977)																			
4-3180	4-3304.1	.171	25.7	-36.6	-7.5	.934	94.3	.159	.865	204.0	366.1	.726	1.002D	90.8	1.262	9.6	69.9	245.3	.224
4-3304.1	4-3470	.224	266.2	4.3	.7	1.390	91.3	.407	1.226	355.5	510.0	.727	1.724A	107.4	.672	1.3	19.5	142.9	.193
4-3470	4-3660	.265	14.2	10.6	1.6	.748	106.3	.303	1.414	231.9	380.2	.986	1.842D	96.5	1.126	-3.2	-39.8	304.3	.186
		14.77	10.68	4.30	4.09	7.49	6.38	12.39	1/1/1	46.0	50.8	67.0	1.195	1.813	82.4	96.5	51.5	101.6D	.971
4-3190	4-3309.1	.169	22.2	-35.0	-7.6	.939	96.3	.170	.874	213.7	373.5	.725	1.022D	91.9	1.266	9.3	66.0	237.7	.224
4-3309.1	4-3470	.224	260.8	3.4	.5	1.391	89.2	.406	1.230	2.7	149.3	.728D	1.732A	107.8	.674	1.5	19.6	144.2	.196
4-3470	4-3670	.276	13.6	16.6	3.8	.739	105.4	.297	1.388	228.1	393.9	.976	1.801D	97.6	1.118	-5.5	-48.4	309.9	.210
		14.86	10.70	4.54	4.17	7.56	6.15	12.73	1/1/1	44.9	47.9	64.7	1.202	1.869	79.9	95.2	53.0	95.8D	1.044
4-3200	4-3315.0	.218	22.5	-31.7	-8.2	.944	98.3	.186	.885	222.5	381.5	.720	1.0490	93.3	1.272	9.4	61.5	233.4	.236
4-3315.0	4-3470	.236	254.1	2.6	.4	1.391	86.6	.412	1.230	11.8	149.0	.724D	1.737A	108.1	.674	1.6	19.8	144.9	.200
4-3470	4-3680	.319	7.7	40.6	14.4	.730	104.4	.292	1.363	223.9	399.2	.965	1.761D	98.6	1.112	-15.8	-77.5	336.2	.348
		16.49	12.23	4.96	4.25	7.65	7.27	15.17	1/1/1	44.4	62.4	60.9	1.080	1.973	78.9	91.0	55.3	67.8L	1.051
MARS ARRIVAL DATE = 2443480 (2 DEC 1977)																			
4-3180	4-3303.8	.166	25.0	-36.0	-7.2	.934	94.3	.159	.865	204.0	365.7	.726	1.002D	90.8	1.262	9.4	69.3	245.8	.220
4-3303.8	4-3480	.220	266.2	2.5	.4	1.386	91.3	.398	1.208	355.3	515.0	.727	1.689A	104.7	.656	1.6	21.8	140.5	.174
4-3480	4-3660	.318	16.5	10.5	1.3	.762	109.1	.335	1.475	238.2	389.7	.981	1.970D	97.3	1.139	-2.9	-37.0	301.1	.204
		15.18	11.52	4.26	3.66	7.06	7.26	12.64	1/1/1	53.6	48.2	68.1	1.244	1.785	82.4	96.7	52.7	101.7D	.977
4-3190	4-3308.7	.166	21.3	-34.3	-7.3	.939	96.3	.170	.874	213.8	373.1	.725	1.022D	91.9	1.266	9.0	65.4	238.2	.219
4-3308.7	4-3480	.219	260.9	1.9	.3	1.387	89.3	.399	1.211	2.3	154.4	.728D	1.694A	105.1	.658	1.7	21.7	141.9	.176
4-3480	4-3670	.306	16.8	14.5	2.8	.751	108.1	.326	1.440	234.1	395.2	.970	1.910D	98.4	1.130	-4.3	-42.1	306.0	.221
		15.14	11.42	4.50	3.72	7.12	6.92	12.89	1/1/1	52.6	44.0	65.5	1.257	1.848	79.8	95.5	54.1	96.2D	1.066
4-3200	4-3314.8	.215	21.5	-30.6	-7.9	.944	98.3	.186	.885	222.8	381.0	.721	1.0500	93.3	1.272	9.1	60.6	233.8	.230
4-3314.8	4-3480	.230	254.1	1.4	.2	1.387	86.8	.402	1.211	11.2	154.1	.724D	1.698A	105.4	.656	1.8	21.7	142.6	.179
4-3480	4-3680	.303	15.1	25.0	7.1	.740	107.0	.319	1.406	229.8	400.3	.958	1.854D	99.4	1.122	-8.5	-56.6	315.9	.266
		15.53	11.75	4.91	3.78	7.16	6.84	13.63	1/1/1	51.9	47.6	61.3	1.139	1.962	78.8	91.7	56.2	66.7L	1.096
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3160	4-3311.0	.215	338.2	59.7	11.8	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.3	235.4	.218
4-3311.0	4-3490	.218	258.4	-.3	-.0	1.384	88.4	.393	1.199	5.6	158.9	.727D	1.671A	102.8	.645	2.0	24.2	139.5	.162
4-3490	4-3840	.368	17.2	7.6	.0	.807	113.8	.406	1.672	251.7	379.2	.994	2.351D	95.5	1.176	-1.9	-32.2	294.8	.209
		17.47	14.06	4.92	3.42	6.82	9.14	12.71	2/1/1	60.3	61.5	68.9	1.265	1.767	80.7	91.5	-54.2	91.8D	.971
4-3190	4-3308.8	.164	20.7	-33.7	-7.1	.939	96.3	.170	.874	213.9	372.8	.726	1.022D	91.8	1.267	8.9	64.9	238.6	.215
4-3308.8	4-3490	.215	261.3	-.4	-.1	1.384	89.5	.393	1.199	1.9	159.1	.726D	1.669A	102.5	.645	2.0	24.4	139.0	.161
4-3490	4-3670	.340	19.7	13.7	2.3	.766	110.9	.362	1.509	240.0	396.3	.963	2.055D	99.4	1.144	-5.7	-38.0	303.3	.240
		15.70	12.31	4.48	3.40	6.80	7.83	13.19	1/1/1	60.7	41.3	67.3	1.296	1.804	79.8	96.4	55.3	96.8D	1.043
4-3200	4-3314.1	.212	20.6	-30.1	-7.6	.945	98.4	.186	.886	223.0	380.6	.721	1.051D	93.2	1.273	8.8	60.0	234.0	.225
4-3314.1	4-3490	.225	254.7	-.3	-.0	1.384	87.0	.395	1.198	10.5	158.8	.725D	1.672A	102.8	.644	2.0	24.0	139.7	.164
4-3490	4-3680	.327	19.3	19.7	4.8	.752	109.8	.350	1.463	235.5	401.3	.951	1.975D	100.4	1.134	-6.1	-45.8	310.6	.284
		15.80	12.38	4.87	3.44	6.85	7.48	13.58	1/1/1	60.0	40.8	62.3	1.188	1.932	78.5	93.1	57.2	89.6L	1.107
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3190	4-3308.3	.163	20.4	-33.5	-7.0	.939	96.3	.170	.874	214.0	372.6	.726	1.022D	91.8	1.267	8.8	64.8	238.8	.214
4-3308.3	4-3500	.214	262.2	-3.8	-.6	1.382	89.8	.389	1.191	1.3	163.4	.726D	1.654A	100.0	.634	2.5	27.8	136.0	.152
4-3500	4-3670	.378	22.4	13.6	1.9	.787	113.9	.405	1.605	245.6	397.3	.956	2.255D	100.5	1.161	-3.3	-35.0	301.3	.265
		16.54	13.34	4.46	3.20	6.60	8.68	13.60	1/1/1	69.2	39.3	70.6	1.318	1.730	79.6	97.9	57.1	97.4D	.962
4-3200	4-3313.8	.211	20.0	-29.5	-7.4	.945	98.4	.186	.886	223.2	380.3	.721	1.051D	93.2	1.273	8.6	59.5	234.2	.242
4-3313.8	4-3500	.222	255.7	-2.5	-.4	1.382	87.3	.391	1.190	9.6	163.1	.725D	1.656A	100.3	.634	2.3	26.8	136.5	.153
4-3500	4-3680	.360	23.0	17.6	3.6	.770	112.7	.388	1.540	241.0	402.1	.943	2.137D	101.4	1.149	-4.9	-39.6	307.8	.279
		16.45	13.23	4.65	3.22	6.63	8.38	13.86	1/1/1	68.3	36.9	64.2	1.224	1.681	78.1	95.1	58.4	91.1D	1.079
4-3210	4-3321.8	.230	24.7	-27.8	-8.8	.951	100.4	.206	.899	230.1	388.9	.712	1.086D	94.9	1.279	9.8	55.8	233.4	.253
4-3321.8	4-3500	.255	248.3	-1.6	-.3	1.380	83.8	.398	1.184	21.8	163.5	.713D	1.655A	100.4	.630	2.2	26.2	135.9	.156
4-3500	4-3690	.354	21.8	28.0	8.8	.753	111.3	.373	1.483	236.1	406.7	.930	2.035D	102.2	1.138	-9.7	-53.2	318.4	.324
		16.98	13.69	5.48	3.29	6.69	8.21	14.68	1/1/1	68.7	42.3	58.8	.941	2.037	80.4	85.7	60.7	80.8L	.976
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3200	4-3313.8	.210	19.7	-29.2	-7.3	.945	98.4	.186	.886	223.3	380.1	.721	1.052D	93.1	1.273	8.5	59.2	234.3	.220
4-3313.8	4-3510	.220	256.9	-5.7	-.9	1.380	87.6	.388	1.186	8.7	167.1	.726D	1.646A	97.9	.626	2.6	30.1	133.4	.147
4-3510	4-3680	.399	26.1	16.7	2.9	.792	115.6	.433	1.647	246.3	402.8	.934	2.360D	102.6	1.167	-4.1	-35.4	306.0	.304
		17.39	14.29	4.83	3.10	6.50	9.46	14.31	1/1/1	76.7	34.8	67.4	1.246	1.803	77.8	97.6	59.8	92.5D	1.001
4-3210	4-3320.7	.247	23.7	-26.8	-8.5	.951	100.5	.206	.900	230.8	388.5	.713	1.087D	94.8	1.280	9.1	55.0	233.6	.247
4-3320.7	4-3515	.247	249.7	-3.5	-.8	1.379	84.5	.394	1.181	20.2	167.4	.715D	1.646A	98.0	.623	2.4	28.6	132.6	.149
4-3510	4-3690	.381	26.3	22.7	5.8	.772	114.3	.412	1.567	241.4	407.4	.921	2.213D	103.3	1.184	-6.8	-42.8	314.2	.324
		17.52	14.38	5.43	3.14	6.55	8.95	14.69	1/1/1	78.8	33.1	59.9	.989	2.002	79.4	89.3	61.7	83.1L	.991

STOPOVER TIME = 0 DAYS | 1978 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2443460
12 NOV 1977

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2443460 (12 NOV 1977)																			
4-3190	4-3309.6	.193	23.4	-36.0	-8.0	.938	96.2	.170	.873	213.4	374.0	.725	1.021D	92.0	1.266	9.8	66.9	237.1	.231
4-3309.6	4-3460	.231	261.3	4.5	.7	1.398	89.2	.421	1.258	2.8	143.8	.728D	1.788A	110.7	.694	1.3	18.1	146.0	.222
4-3460	4-3710	.201	30.4	-.5	-3.5	.701	98.4	.271	1.274	204.4	413.4	.929	1.619D	100.6	1.088	2.4	-4.1	316.4	.226
		13.66	8.88	4.60	4.78	8.17	4.26	12.96	1/1/2	37.9	25.0	64.7	1.131	1.87D	79.8	95.5	51.9	95.6D	.984
4-3200	4-3315.6	.222	23.8	-32.8	-8.7	.943	98.2	.186	.884	222.1	382.1	.720	1.048D	93.4	1.272	9.8	62.6	232.9	.244
4-3315.6	4-3460	.244	254.5	3.5	.6	1.398	86.4	.426	1.259	12.0	143.5	.723D	1.796A	111.1	.695	1.5	18.3	146.6	.226
4-3460	4-3720	.186	33.5	2.3	-2.9	.694	97.0	.274	1.257	199.5	418.0	.913	1.601D	101.5	1.084	1.9	-5.1	325.2	.236
		13.66	8.97	5.03	4.89	8.28	3.94	13.15	1/1/2	37.4	20.7	61.2	1.012	1.966	78.8	91.2	54.2	87.3L	.977
MARS ARRIVAL DATE = 2443470 (22 NOV 1977)																			
4-3180	4-3304.1	.171	25.7	-38.6	-7.5	.934	94.3	.159	.865	204.0	366.1	.728	1.002D	90.8	1.262	9.6	69.9	245.3	.224
4-3304.1	4-3470	.224	266.2	4.3	.7	1.390	91.3	.407	1.226	355.5	510.0	.727	1.724A	107.4	.672	1.3	19.5	142.9	.193
4-3470	4-3700	.245	31.2	-6.3	-6.3	.712	102.1	.287	1.315	214.6	409.4	.938	1.693D	100.4	1.099	5.1	5.6	308.5	.240
		13.75	9.66	4.30	4.09	7.49	5.36	13.19	1/1/2	46.0	33.7	67.0	1.195	1.813	82.4	96.5	51.5	101.6D	.971
4-3190	4-3309.1	.189	22.2	-35.0	-7.6	.939	96.3	.170	.874	213.7	373.5	.725	1.022D	91.9	1.266	9.3	66.0	237.7	.224
4-3309.1	4-3470	.224	260.8	3.4	.5	1.391	89.2	.408	1.230	2.7	149.3	.728D	1.732A	107.8	.674	1.5	19.6	144.2	.196
4-3470	4-3710	.224	31.8	-.8	-4.2	.703	100.7	.286	1.293	209.9	414.0	.923	1.663D	101.2	1.094	3.1	-1.7	317.0	.241
		13.54	9.37	4.54	4.17	7.56	4.82	13.20	1/1/2	44.9	25.8	64.7	1.202	1.869	79.9	95.2	53.0	95.8D	1.044
4-3200	4-3315.0	.218	22.5	-31.7	-8.2	.944	98.3	.186	.885	222.5	381.5	.720	1.049D	93.3	1.272	9.4	61.5	233.4	.236
4-3315.0	4-3470	.236	254.1	2.8	.4	1.391	86.6	.412	1.230	11.8	149.0	.724D	1.737A	108.1	.674	1.6	19.8	144.9	.200
4-3470	4-3720	.206	34.3	2.3	-5.3	.694	99.3	.287	1.272	204.8	418.5	.907	1.638D	102.0	1.089	2.3	-3.8	324.5	.250
		13.63	9.37	4.96	4.25	7.65	4.41	13.35	1/1/2	44.4	21.0	60.9	1.080	1.973	78.9	91.0	55.3	87.8L	1.051
MARS ARRIVAL DATE = 2443480 (2 DEC 1977)																			
4-3180	4-3303.8	.168	25.0	-38.0	-7.2	.934	94.3	.159	.865	204.0	365.7	.728	1.002D	90.8	1.262	9.4	69.5	245.8	.220
4-3303.8	4-3480	.220	266.2	2.5	.4	1.386	91.3	.398	1.208	355.3	515.0	.727	1.689A	104.7	.656	1.6	21.8	140.5	.174
4-3480	4-3700	.283	35.6	-10.2	-9.3	.717	104.6	.308	1.345	220.3	410.1	.931	1.759D	101.2	1.107	8.2	14.6	304.0	.281
		14.26	10.59	4.26	3.66	7.06	6.33	13.88	1/1/2	53.8	39.7	68.1	1.244	1.785	82.4	96.7	52.7	101.7D	.977
4-3190	4-3308.7	.186	21.3	-34.3	-7.3	.939	96.3	.170	.874	213.8	373.1	.725	1.022D	91.9	1.266	9.0	65.4	238.2	.219
4-3308.7	4-3480	.219	260.9	1.9	.3	1.387	89.3	.399	1.211	2.3	154.4	.728D	1.694A	105.1	.658	1.7	21.7	141.9	.176
4-3480	4-3710	.250	35.9	-1.4	-5.2	.706	103.2	.304	1.317	215.3	414.6	.916	1.718D	101.9	1.100	4.2	1.5	315.3	.260
		13.69	9.97	4.50	3.72	7.12	5.47	13.52	1/1/2	52.6	27.2	65.5	1.257	1.848	79.8	95.5	54.1	96.2D	1.066
4-3200	4-3314.5	.215	21.5	-30.8	-7.9	.944	98.3	.186	.885	222.8	381.0	.721	1.050D	93.3	1.272	9.1	60.6	233.8	.230
4-3314.5	4-3480	.230	254.1	1.4	.2	1.387	86.8	.402	1.211	11.2	154.1	.724D	1.698A	105.4	.658	1.8	21.7	142.6	.179
4-3480	4-3720	.229	35.8	2.8	-3.7	.696	101.6	.303	1.292	210.1	419.0	.901	1.684D	102.7	1.094	2.9	-2.2	323.3	.265
		13.65	9.87	4.91	3.78	7.18	4.96	13.61	1/1/2	51.9	21.5	61.3	1.139	1.962	78.8	91.7	56.2	88.7L	1.096
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3160	4-3311.0	.215	338.2	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.3	235.4	.218
4-3311.0	4-3490	.218	258.4	-.3	-.0	1.384	88.4	.393	1.199	5.6	156.9	.727D	1.671A	102.6	.645	2.0	24.2	139.5	.162
4-3490	4-3680	.327	19.5	19.7	4.8	.752	109.8	.350	1.463	235.5	401.3	.951	1.975D	100.4	1.134	-6.1	-45.8	310.6	.264
		15.82	12.40	4.92	3.42	6.82	7.48	13.58	2/1/1	60.3	40.6	68.9	1.265	1.767	80.7	91.5	-54.2	91.8D	.971
4-3190	4-3308.5	.184	20.7	-33.7	-7.1	.939	96.3	.170	.874	213.9	372.8	.726	1.022D	91.8	1.267	8.9	64.9	238.6	.215
4-3308.5	4-3490	.215	261.3	-.4	-.1	1.384	89.5	.393	1.199	1.9	159.1	.728D	1.669A	102.5	.645	2.0	24.4	139.0	.161
4-3490	4-3710	.281	36.7	-3.0	-6.6	.713	105.8	.326	1.348	220.6	415.2	.909	1.788D	102.7	1.106	5.9	6.1	312.9	.287
		14.14	10.74	4.48	3.40	6.80	6.26	13.99	1/1/2	60.7	30.0	67.3	1.296	1.804	79.8	96.4	55.3	96.8D	1.043
4-3200	4-3314.1	.212	20.6	-30.1	-7.6	.945	98.4	.186	.886	223.0	380.6	.721	1.051D	93.2	1.273	8.8	60.0	234.0	.225
4-3314.1	4-3490	.225	254.7	-.3	-.0	1.384	87.0	.395	1.198	10.5	156.8	.725D	1.672A	102.8	.644	2.0	24.0	139.7	.164
4-3490	4-3720	.254	37.4	2.5	-4.4	.701	104.2	.322	1.317	215.4	419.5	.894	1.741D	103.4	1.101	3.6	-.3	322.1	.283
		13.91	10.47	4.87	3.44	6.85	5.59	13.93	1/1/2	60.0	22.3	62.3	1.188	1.932	78.5	93.1	57.2	89.8L	1.107
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3150	4-3302.4	.226	337.0	60.8	12.3	.931	89.3	.150	.856	176.2	366.4	.727	.984	90.8	1.257	-9.5	-70.6	242.0	.219
4-3302.4	4-3500	.219	268.6	-7.7	-1.2	1.381	92.1	.389	1.188	352.6	524.2	.726	1.650A	99.6	.635	3.1	31.0	134.9	.153
4-3500	4-3670	.378	22.4	13.6	1.9	.787	113.9	.405	1.605	245.6	397.3	.956	2.255D	100.5	1.161	-3.3	-35.0	301.3	.265
		17.18	13.96	5.08	3.21	6.62	8.88	13.60	2/1/1	71.2	39.3	65.1	1.250	1.859	80.7	100.7	-48.7	106.7D	1.073
4-3160	4-3311.1	.213	338.4	59.6	11.5	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-67.0	235.4	.216
4-3311.1	4-3500	.216	258.9	-3.1	-.5	1.382	88.5	.389	1.191	5.4	163.2	.727D	1.655A	100.2	.634	2.4	27.3	136.4	.152
4-3500	4-3680	.360	23.0	17.6	3.6	.770	112.7	.388	1.540	241.0	402.1	.943	2.137D	101.4	1.149	-4.9	-39.5	307.8	.279
		16.48	13.27	4.89	3.21	6.61	8.38	13.86	2/1/1	68.6	36.9	66.0	1.288	1.837	80.2	92.5	-52.8	92.4D	1.078
4-3190	4-3308.3	.183	20.4	-33.5	-7.0	.939	96.3	.170	.874	214.0	372.6	.726	1.022D	91.8	1.267	8.8	64.6	238.8	.214
4-3308.3	4-3500	.214	262.2	-3.8	-.6	1.382	89.6	.389	1.191	1.3	163.4	.728D	1.654A	100.0	.634	2.5	27.9	136.0	.152
4-3500	4-3710	.321	41.1	-6.6	-10.0	.722	108.5	.351	1.388	225.9	415.8	.900	1.876D	103.6	1.118	9.2	13.9	308.7	.331
		15.00	11.60	4.46	3.20	6.60	7.34	14.82	1/1/2	69.2	35.9	70.6	1.316	1.730	79.6	97.9	57.1	97.4D	.962
4-3200	4-3313.8	.211	20.0	-29.5	-7.4	.945	98.4	.186	.886	223.2	380.3	.721	1.051D	93.2	1.273	8.6	59.5	234.2	.222
4-3313.8	4-3500	.222	255.7	-2.5	-.4	1.382	87.3	.391	1.190	9.6	163.1	.725D	1.656A	100.3	.634	2.3	26.8	136.5	.153
4-3500	4-3720	.283	39.7	2.0	-5.4	.706	106.8	.344	1.349	220.5	419.9	.886	1.813D	104.2	1.109	4.7	2.4	320.6	.306
		14.40	11.16	4.85	3.22	6.63	6.33	14.34	1/1/2	68.3	23.8	64.2	1.224	1.881	78.1	95.1	58.4	91.1D	1.079
4-3210	4-3321.3	.250	24.7	-27.8	-8.8	.951	100.4	.208	.899	230.1	388.9	.712	1.066D	94.9	1.279	9.5	55.9	233.4	.253
4-3321.3	4-3500	.253	248.3	-1.6	-.3	1.380	83.8	.398	1.184	21.8	163.5	.713D	1.655A	100.4	.630	2.2	26.2	135.9	.156
4-3500	4-3730	.259	41.5	6.0	-3.8	.694	105.0	.339	1.315	215.0	424.0	.870	1.760D	104.8	1.102	3.2	-.5	329.0	.307
		14.47	11.18	5.48	3.29	6.69	5.70	14.37	1/1/2	68.7	18.5	58.8	.941	2.037	80.4	85.7	60.7	80.8L	.976
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3160	4-3295.2	.162	36.2	-42.0	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.8	73.5	262.0	.245
4-3295.2	4-3510	.246	274.9	14.5	2.6	1.379	95.0	.390	1.178	342.1	529.6	.718	1.637A	96.5	.621	-.6	17.7	122.7	.143
4-3510	4-3660	.399	26.1	16.7	2.9	.792	115.6	.433	1.647	246.3	402.8	.934	2.360D	102.6	1.167	-4.1	-35.4	306.0	.304
		16.66	13.64	4.18	3.02	6.43	9.46	14.31	1/2/1	82.7	34.6	59.5	.998	2.016	85.9	100.1	49.5	114.7D	1.014
4-3160	4-3311.1	.213	338.5	59.6	11.4	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-66.9	235.5	.216
4-3311.1	4-3510	.216	259.9	-7.1	-1.1	1.381	88.6	.387	1.187	4.9	167.2	.728D	1.646A	97.8	.626	3.0	31.1	133.3	.147
4-3510	4-3680	.399	26.1	16.7	2.9	.792	115.6	.433	1.647	246.3	402.8	.934	2.360D	102.6	1.167	-4.1	-35.4	306.0	.304
		17.44	14.34	4.88	3.10	6.50	9.46	14.31	2/1/1	77.0	34.6	62.0	1.294	1.940	79.5	94.3	-50.5	93.6D	1.217
4-3170	4-3318.4	.219	339.2	58.6	11.7	.927	91.6	.157	.853	188.7	364.1	.720	.987D	93.2	1.256	-9.9	-65.5	233.2	.236
4-3318.4	4-3510	.236	251.7	-4.0	-.7	1.380	85.4	.392	1.183	16.5	167.2	.720D	1.646A	98.0	.624	2.5	29.0	133.0	.148
4-3510	4-3690	.381	26.3	22.7	3.8	.772	114.3	.412	1.567	241.4	407.4	.921	2.213D	103.3	1.154	-6.8	-42.6	314.2	.324
		17.05	13.93	4.98	3.12	6.53	8.95	14.69	2/1/1	76.8	35.1	62.9	1.082	1.917	81.5	84.0	-53.6	80.4L	.992
4-3200	4-3313.8	.210	19.7	-29.2	-7.3	.945	98.4	.186	.886	223.3	380.1	.721	1.052D	93.1	1.273	8.5	59.2	234.3	.220
4-3313.8	4-3510	.220	256.9	-5.7	-.9	1.380	87.6	.388	1.186	8.7	167.1	.726D	1.646A	97.9	.626	2.8	30.1	133.4	.147
4-3510	4-3720	.317	42.6	.7	-7.1	.718	109.6	.370	1.391	225.5	420.3	.877	1.905D	105.2	1.119	6.4	6.2	316.5	.335
		18.15	12.05	4.83	3.10	6.50	7.22	14.92	1/1/2	76.7	26.5	57.4	1.248	1.803	77.8	97.6	59.8	92.5D	1.001
4-3210	4-3320.7	.247	23.7	-26.9	-8.8	.951	100.5	.208	.900	230.5	388.8	.713	1.067D	94.8	1.280	9.1	55.0	233.6	.247
4-3320.7	4-3510	.247	249.7	-3.5	-.6	1.379	84.3	.394	1.181	20.2	167.4	.715D	1.646A	98.0	.623	2.4	28.6	132.6	.149
4-3510	4-3730	.287	43.5	8.0	-4.8	.702	107.8	.361	1.348	220.0	424.3	.862	1.834D	108.7	1.120	4.0	1.0	328.1	.329
		14.99	11.85	5.43	3.14	6.55	6.42	14.78	1/1/2	76.8	19.3	59.8	.989	2.002	79.4	89.3	61.7	83.1L	.991
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3210	4-3320.3	.245	22.9	-26.1	-8.2	.952	100.5	.208	.901	230.8	388.1	.713	1.069D	94.7	1.280	8.8	54.2	233.7	.242
4-3320.3	4-3520	.242	251.4	-6.0	-1.1	1.379	84.6	.392	1.180	18.5	171.0	.717D	1.642A	98.7	.617	2.8	31.3	129.6	.146
4-3520	4-3730	.316	46.0	9.7	-6.5	.715	110.6	.387	1.390	224.8	424.6	.852	1.928D	106.7	1.120	5.1	3.1	326.9	.334
		15.72	12.65	5.40	3.07	6.48	7.25	15.29	1/1/2	84.6	20.7	62.0	1.029	1.943	78.4	93.5	62.7	85.6L	.970

STOPOVER TIME = 0 DAYS — 1978 OUTBOUND SWINGBY — MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2443460
12 NOV 1977

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2443460 (12 NOV 1977)																				
4-3190	4-3309.6	.193	23.4	-36.0	-8.0	.938	96.2	.170	.873	213.4	374.0	.725	1.021D	92.0	1.266	9.6	66.9	237.1		.231
4-3309.6	4-3460	.231	261.3	4.5	.7	1.398	89.2	.421	1.258	2.6	143.8	.728D	1.788A	110.7	.694	1.3	18.1	146.0		.222
4-3460	4-3750	.147	51.3	10.0	-1.9	.671	91.7	.296	1.211	184.2	431.5	.852	1.569D	104.4	1.075	1.3	-1.4	345.1		.266
		12.48	7.70	4.60	4.78	8.17	3.10	13.98	1/1/2	37.9	11.2	64.7	1.131	1.870	79.8	95.5	51.9	95.6D		.984
4-3200	4-3315.6	.222	23.8	-32.8	-8.7	.943	98.2	.186	.884	222.1	382.1	.720	1.048D	93.4	1.272	9.8	62.6	232.9		.244
4-3315.6	4-3460	.244	254.5	3.5	.6	1.398	86.4	.426	1.259	12.0	143.5	.723D	1.796A	111.1	.695	1.5	18.3	146.6		.226
4-3460	4-3760	.138	61.1	12.9	-1.7	.664	89.6	.309	1.197	179.0	436.0	.827	1.567	105.6	1.073	1.2	.8	351.6		.307
		12.84	7.95	5.03	4.89	8.28	2.93	14.36	1/1/2	37.4	8.5	61.2	1.012	1.966	78.8	91.2	54.2	87.3L		.977
MARS ARRIVAL DATE = 2443470 (22 NOV 1977)																				
4-3180	4-3304.1	.171	25.7	-36.6	-7.5	.934	94.3	.159	.865	204.0	366.1	.728	1.002D	90.8	1.262	9.6	69.9	245.5		.224
4-3304.1	4-3470	.224	266.2	4.3	.7	1.390	91.3	.407	1.226	355.5	510.0	.727	1.724A	107.4	.672	1.3	19.5	142.9		.193
4-3470	4-3740	.175	43.0	7.5	-2.3	.676	95.9	.295	1.235	194.4	427.2	.871	1.600D	103.7	1.081	1.6	-2.6	336.0		.276
		12.09	7.99	4 30	4.09	7.49	3.69	13.80	1/1/2	46.0	14.2	67.0	1.195	1.813	82.4	96.5	51.5	101.6D		.971
4-3190	4-3309.1	.189	22.2	-35.0	-7.6	.939	96.3	.170	.874	213.7	373.5	.725	1.022D	91.9	1.266	9.3	66.0	237.7		.224
4-3309.1	4-3470	.224	260.8	3.4	.5	1.391	89.2	.408	1.230	2.7	149.3	.728D	1.732A	107.8	.674	1.5	19.6	144.2		.196
4-3470	4-3750	.161	49.5	10.1	-2.0	.668	93.9	.303	1.219	189.1	431.5	.849	1.568D	104.7	1.078	1.4	-.9	344.8		.292
		12.10	7.93	4.54	4.17	7.56	3.39	14.09	1/1/2	44.9	11.4	64.7	1.202	1.869	79.9	95.2	53.0	95.6D		1.044
4-3200	4-3315.0	.218	22.5	-31.7	-8.2	.944	98.3	.186	.885	222.5	381.5	.720	1.049D	93.3	1.272	9.4	61.5	233.4		.236
4-3315.0	4-3470	.236	254.1	2.8	.4	1.391	86.6	.412	1.230	11.8	149.0	.724D	1.737A	108.1	.674	1.6	19.8	144.9		.200
4-3470	4-3760	.149	56.1	12.7	-1.7	.660	91.7	.314	1.203	183.7	435.9	.825	1.581D	105.8	1.075	1.3	1.3	351.6		.311
		12.35	8.10	4.96	4.25	7.65	3.14	14.44	1/1/2	44.4	8.8	60.9	1.080	1.973	78.9	91.0	55.3	87.8L		1.051
MARS ARRIVAL DATE = 2443480 (2 DEC 1977)																				
4-3160	4-3303.8	.168	25.0	-36.0	-7.2	.934	94.3	.159	.865	204.0	365.7	.728	1.002D	90.8	1.262	9.4	69.3	245.8		.220
4-3303.8	4-3480	.220	266.2	2.5	.4	1.386	91.3	.398	1.208	355.3	515.0	.727	1.689A	104.7	.656	1.6	21.8	140.5		.174
4-3480	4-3740	.193	42.9	7.9	-2.5	.676	98.2	.306	1.248	199.4	427.4	.866	1.630D	104.2	1.085	1.9	-2.0	337.6		.267
		12.03	8.37	4.26	3.66	7.06	4.11	13.99	1/1/2	53.8	14.4	68.1	1.244	1.785	82.4	96.7	52.7	101.7D		.977
4-3190	4-3308.7	.186	21.3	-34.3	-7.3	.939	96.3	.170	.874	213.8	373.1	.725	1.022D	91.9	1.266	9.0	65.4	238.2		.219
4-3308.7	4-3480	.219	260.9	1.9	.3	1.387	89.3	.399	1.211	2.3	154.4	.728D	1.694A	105.1	.658	1.7	21.7	141.9		.176
4-3480	4-3750	.177	48.6	10.3	-2.1	.666	96.2	.312	1.229	194.0	431.6	.845	1.612D	105.1	1.081	1.6	-.4	344.9		.301
		11.96	8.24	4.50	3.72	7.12	3.74	14.25	1/1/2	52.6	11.6	65.5	1.257	1.848	79.8	95.5	54.1	96.2D		1.066
4-3200	4-3314.5	.215	21.5	-30.8	-7.9	.944	98.3	.186	.885	222.8	381.0	.721	1.050D	93.3	1.272	9.1	60.6	233.8		.230
4-3314.5	4-3480	.230	254.1	1.4	.2	1.387	86.8	.402	1.211	11.2	154.1	.724D	1.698A	105.4	.658	1.8	21.7	142.6		.179
4-3480	4-3760	.162	56.0	12.8	-1.8	.657	94.0	.320	1.211	186.5	435.8	.823	1.599D	106.1	1.077	1.5	1.7	351.5		.317
		12.11	8.33	4.91	3.78	7.18	3.41	14.56	1/1/2	51.9	9.0	61.3	1.139	1.962	78.8	91.7	56.2	88.7L		1.096
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																				
4-3160	4-3311.0	.215	336.2	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.3	235.4		.216
4-3311.0	4-3490	.216	258.4	-.3	-.0	1.384	88.4	.393	1.199	5.6	158.9	.727D	1.671A	102.6	.645	2.0	24.2	139.5		.162
4-3490	4-3720	.254	37.4	2.5	-4.4	.701	104.2	.322	1.317	215.4	419.5	.894	1.741D	103.4	1.101	3.6	-.3	322.1		.283
		13.93	10.51	4.92	5.42	6.82	5.59	13.93	2/1/2	60.3	22.3	68.9	1.265	1.767	80.7	91.5	-54.2	91.8D		.971
4-3190	4-3308.5	.184	20.7	-33.7	-7.1	.939	96.3	.170	.874	213.9	372.8	.726	1.022D	91.8	1.267	8.9	64.9	238.6		.215
4-3308.5	4-3490	.215	261.3	-.4	-.1	1.384	89.5	.393	1.199	1.9	159.1	.728D	1.669A	102.5	.645	2.0	24.4	139.0		.161
4-3490	4-3750	.195	48.4	10.6	-2.2	.666	98.6	.323	1.241	198.9	431.8	.840	1.642D	105.6	1.085	1.9	.1	344.2		.311
		12.03	8.63	4.48	3.40	6.80	4.15	14.44	1/1/2	60.7	11.8	67.3	1.296	1.804	79.8	96.4	55.3	96.6D		1.043
4-3200	4-3314.1	.212	20.6	-30.1	-7.6	.945	98.4	.186	.886	223.0	380.6	.721	1.051D	93.2	1.273	8.8	60.0	234.0		.225
4-3314.1	4-3490	.225	254.7	-.3	-.0	1.384	87.0	.395	1.198	10.5	158.8	.725D	1.672A	102.8	.644	2.0	24.0	139.7		.164
4-3490	4-3760	.178	54.9	12.9	-1.9	.656	96.3	.329	1.221	193.3	435.8	.819	1.622D	106.4	1.081	1.7	2.0	351.5		.325
		12.08	8.63	4.87	3.44	6.85	3.76	14.71	1/1/2	60.0	9.3	62.3	1.186	1.932	78.5	93.1	57.2	89.8L		1.107
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																				
4-3150	4-3302.4	.226	337.0	60.6	12.3	.931	89.3	.150	.856	176.2	366.4	.727	.984	90.8	1.257	-9.5	-70.6	242.0		.219
4-3302.4	4-3500	.219	266.6	-7.7	-1.2	1.381	92.1	.389	1.188	352.6	524.2	.726	1.650A	99.6	.633	3.1	31.0	134.9		.153
4-3500	4-3710	.321	41.1	-6.6	-10.0	.722	108.5	.351	1.388	225.9	415.6	.900	1.876D	103.6	1.118	9.2	13.9	308.7		.351
		15.64	12.42	5.08	3.21	6.62	7.34	14.82	2/1/2	71.2	35.9	65.1	1.250	1.859	80.7	100.7	-48.7	106.7D		1.073
4-3160	4-3311.1	.213	338.4	59.6	11.5	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-67.0	235.4		.216
4-3311.1	4-3500	.216	258.9	-3.1	-.5	1.382	88.5	.389	1.191	5.4	163.2	.727D	1.655A	100.2	.634	2.4	27.3	136.4		.152
4-3500	4-3720	.283	39.7	2.0	-5.4	.708	106.8	.344	1.349	220.5	419.9	.886	1.813D	104.2	1.109	4.7	2.4	320.6		.306
		14.43	11.22	4.89	3.21	6.61	6.33	14.34	2/1/2	68.6	23.8	66.0	1.288	1.837	80.2	92.5	-52.8	92.4D		1.078
4-3190	4-3308.5	.183	20.4	-33.5	-7.0	.939	96.3	.170	.874	214.0	372.6	.726	1.022D	91.8	1.267	8.8	64.6	238.8		.214
4-3308.5	4-3500	.214	262.2	-3.8	-.6	1.382	89.6	.389	1.191	1.3	163.4	.728D	1.654A	100.0	.634	2.5	27.9	136.0		.152
4-3500	4-3750	.216	48.8	11.0	-2.4	.668	101.1	.336	1.257	203.7	431.9	.834	1.830D	106.2	1.089	2.1	.5	343.9		.325
		12.30	9.10	4.46	3.20	6.60	4.64	14.68	1/1/2	69.2	12.0	70.6	1.310	1.730	79.6	97.9	57.1	97.4D		.962
4-3200	4-3313.8	.211	20.0	-29.5	-7.4	.945	98.4	.186	.886	223.2	380.3	.721	1.051D	93.2	1.273	8.6	59.5	234.2		.222
4-3313.8	4-3500	.222	255.7	-2.5	-.4	1.382	87.3	.391	1.190	9.6	163.1	.725D	1.656A	100.3	.634	2.3	26.8	136.5		.153
4-3500	4-3760	.196	54.4	13.2	-2.0	.656	96.8	.340	1.233	196.0	435.9	.814	1.652D	106.9	1.084	1.9	2.4	351.1		.335
		12.24	9.02	4.85	3.22	6.63	4.17	14.91	1/1/2	68.3	9.5	64.2	1.224	1.881	78.1	95.1	56.4	91.1D		1.079
4-3210	4-3321.3	.250	24.7	-27.8	-8.8	.951	100.4	.208	.899	230.1	388.9	.712	1.066D	94.9	1.279	9.5	55.9	233.4		.253
4-3321.3	4-3500	.253	248.3	-1.6	-.3	1.380	83.8	.398	1.184	21.8	163.5	.713D	1.655A	100.4	.630	2.2	26.2	135.9		.156
4-3500	4-3770	.178	61.8	15.4	-1.6	.645	96.4	.347	1.211	192.3	439.9	.791	1.631D	107.6	1.080	1.7	4.7	356.2		.349
		12.53	9.24	5.48	3.29	6.69	3.76	15.20	1/1/2	68.7	7.2	58.8	.941	2.037	80.4	85.7	60.7	80.8L		.976
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																				
4-3160	4-3295.2	.162	38.2	-42.0	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.256	10.8	73.5	262.0		.245
4-3295.2	4-3510	.246	274.9	14.5	2.6	1.379	95.0	.390	1.178	342.1	529.6	.718	1.637A	96.5	.621	-.6	17.7	122.7		.143
4-3510	4-3720	.317	42.6	.7	-7.1	.718	109.6	.370	1.391	225.5	420.3	.877	1.905D	105.2	1.119	6.4	6.2	318.5		.335
		14.42	11.40	4.18	3.02	6.43	7.22	14.92	1/2/2	82.7	26.5	59.5	.998	2.016	85.9	100.1	45.5	114.7D		1.014
4-3160	4-3311.1	.213	336.5	59.6	11.4	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-66.9	235.5		.216
4-3311.1	4-3510	.216	259.9	-7.1	-1.1	1.381	88.6	.387	1.187	4.9	167.2	.728D	1.646A	97.8	.626	3.0	31.1	133.3		.147
4-3510	4-3720	.317	42.6	.7	-7.1	.718	109.6	.370	1.391	225.5	420.3	.877	1.905D	105.2	1.119	6.4	6.2	318.5		.335
		15.20	12.10	4.88	3.10	6.50	7.22	14.92	2/1/2	77.0	26.5	62.0	1.294	1.940	79.5	94.3	-50.5	93.6D		1.217
4-3170	4-3316.4	.219	339.2	58.6	11.7	.927	91.6	.157	.853	188.7	384.1	.720	.987D	93.2	1.256	-9.9	-65.5	233.2		.236
4-3316.4	4-3510	.236	251.7	-4.3	-.7	1.380	85.4	.392	1.183	16.5	167.2	.720D	1.646A	98.0	.624	2.5	29.0	133.0		.148
4-3510	4-3750	.287	43.5	8.0	-4.5	.702	107.8	.361	1.348	220.0	424.3	.862	1.834D	105.7	1.110	4.0	1.0	326.1		.328
		14.52	11.40	4.98	3.12	6.53	6.42	14.78	2/1/2	76.6	19.3	62.9	1.082	1.917	81.5	84.0	-53.6	80.4L		.992
4-3200	4-3313.6	.210	19.7	-29.2	-7.3	.945	98.4	.186	.886	223.3	380.1	.721	1.052D	93.1	1.273	8.5	59.2	234.3		.220
4-3313.6	4-3510	.220	256.9	-5.7	-.9	1.380	87.6	.386	1.186	8.7	167.1	.726D	1.646A	97.9	.626	2.6	30.1	133.4		.147
4-3510	4-3760	.216	54.7	13.6	-2.1	.659	101.4	.353	1.249	202.8	436.0	.808	1.669D	107.5	1.089	2.1	2.7	350.9		.347
		12.58	9.49	4.83	3.10	6.50	4.65	15.16	1/1/2	76.7	9.7	67.4	1.246	1.803	77.8	97.6	59.8	92.5D		1.001
4-3210	4-3320.7	.247	23.7	-26.9	-8.5	.951	100.5	.208	.900	230.5	388.5	.713	1.067D	94.8	1.280	9.1	55.0	233.6		.247
4-3320.7	4-3510	.247	249.7	-3.5	-.6	1.379	84.5	.394	1.181	20.2	167.4	.715D	1.646A	98.0	.623	2.4	28.6	132.6		.149
4-3510	4-3770	.196	61.1	15.7	-1.7	.646	99.0	.357	1.223	196.9	439.9	.787	1.659D	108.3	1.084	1.8	4.9	356.1		.359
		12.74	9.60	5.43	3.14	6.55	4.17	15.40	1/1/2	76.8	7.4	59.9	.989	2.002	79.4	89.5	61.7	83.1L		.991
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																				
4-3160	4-3295.2	.162	38.3	-42.2	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.256	10.9	73.7	262.0		.247
4-3295.2	4-3520	.247	276.2	15.1	2.5	1.379	95.2	.391	1.177	341.2	535.3	.717	1.636A	94.3	.615	-.4	19.4	119.4		.142
4-3520	4-3720	.360	46.8	-2.3	-10.2	.732	112.5	.400	1.445	230.4	420.7	.867	2.023D	106.3	1.131	9.8	12.7	314.8		.381
		15.56	12.87	4.19	2.99	6.40	8.37	15.85	1/2/2	90.7	31.8	61.1	.988	1.967	85.6	101.8	46.1	115.4D		.955
4-3160	4-3311.0	.215	336.1	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.4	235.3		.218
4-3311.0	4-3520	.218	261.6	-14.0	-2.2	1.380	88.9	.386	1.185	3.8	171.0	.726D	1.642A	95.6	.620	4.0	30.4	130.9		.147
4-3520	4-3720	.360	46.8	-2.3	-10.2	.732	112.5	.400	1.445	230.4	420.7	.867	2.023D	106.3	1.131	9.8	12.7	314.8		.381
		16.39	13.29	4.92	3.09	6.50	8.37	15.85	2/1/2	88.0	31.8	56.1	1.262	2.128	78.5	96.8	-48.4	99.7D		1.423

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STOPOVER TIME = 0 DAYS | 1978 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2443520
11 JAN 1978

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3170	4-3318.5	.218	339.4	58.5	11.6	.927	91.6	.157	.853	188.7	384.2	.720	.987D	93.2	1.256	-9.6	-65.2	233.3	.234
4-3318.5	4-3520	.234	253.0	-6.6	-1.2	1.379	85.6	.390	1.181	15.7	170.9	.721D	1.642A	95.7	.618	2.9	31.8	129.9	.145
4-3520	4-3730	.318	46.0	5.7	-5.5	.713	110.6	.387	1.390	224.8	424.6	.852	1.928D	106.7	1.120	5.1	3.1	326.9	.354
		15.27	12.21	4.96	3.06	6.47	7.25	15.29	2/1/2	84.5	20.7	60.0	1.097	2.000	80.7	66.2	-52.1	61.3L	1.097
4-3210	4-3320.8	.245	22.9	-26.1	-8.2	.952	100.5	.208	.901	230.8	388.1	.713	1.089D	94.7	1.280	8.8	54.2	233.7	.242
4-3320.8	4-3520	.242	251.4	-6.0	-1.1	1.379	84.8	.392	1.180	16.5	171.0	.717D	1.642A	95.7	.617	2.8	31.3	129.8	.146
4-3520	4-3770	.216	61.1	16.0	-1.8	.649	101.7	.369	1.238	201.5	439.9	.781	1.696D	108.9	1.088	2.0	5.2	357.9	.371
		15.11	10.04	5.40	3.07	6.48	4.64	15.64	1/1/2	84.6	7.6	62.0	1.029	1.943	78.4	93.5	62.7	85.6L	.970

MARS ARRIVAL DATE = 2443530 (21 JAN 1978)

4-3170	4-3300.1	.170	33.5	-42.6	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.8	233.2	.244
4-3300.1	4-3530	.244	275.2	23.9	4.1	1.380	93.7	.388	1.181	346.9	535.8	.723	1.640A	92.7	.613	-2.2	11.7	117.3	.142
4-3530	4-3730	.355	48.9	4.7	-7.0	.729	113.5	.417	1.445	229.6	424.8	.842	2.049D	107.8	1.133	6.7	6.2	325.1	.386
		15.53	12.53	4.29	3.00	6.41	8.23	15.96	1/2/2	95.7	23.1	51.5	1.007	2.311	83.0	104.3	59.9	114.7D	1.320
4-3170	4-3318.6	.218	339.5	58.5	11.6	.927	91.6	.157	.853	188.7	384.2	.719	.987D	93.2	1.256	-9.7	-65.1	233.4	.234
4-3318.6	4-3530	.234	254.6	-10.8	-1.8	1.379	85.9	.389	1.182	14.7	174.4	.722D	1.642A	93.6	.613	3.5	35.0	127.4	.145
4-3530	4-3730	.355	48.9	4.7	-7.0	.729	113.5	.417	1.445	229.6	424.8	.842	2.049D	107.8	1.133	6.7	6.2	325.1	.386
		16.25	13.19	4.95	3.07	6.47	8.23	15.96	2/1/2	91.8	23.1	56.3	1.102	2.121	79.6	89.1	-49.7	82.7L	1.234

MARS ARRIVAL DATE = 2443540 (31 JAN 1978)

4-3170	4-3300.0	.169	33.1	-42.3	-8.1	.932	92.5	.153	.859	194.2	360.0	.728A	.990D	90.0	1.259	10.6	73.5	233.4	.242
4-3300.0	4-3540	.242	277.1	19.3	3.3	1.380	94.0	.390	1.183	345.5	539.1	.721	1.644A	90.6	.610	-1.5	15.6	115.5	.143
4-3540	4-3730	.309	52.7	2.2	-9.9	.748	116.5	.453	1.520	234.2	425.0	.831	2.208D	109.0	1.147	9.6	11.4	322.1	.432
		16.75	13.73	4.27	3.02	6.43	9.46	16.97	1/2/2	102.6	27.5	55.8	1.029	2.136	82.5	106.6	42.2	115.5D	1.169
4-3170	4-3318.4	.220	339.2	58.6	11.7	.927	91.6	.157	.853	188.8	384.1	.720	.987D	93.2	1.256	-9.9	-65.6	233.1	.236
4-3318.4	4-3540	.236	256.7	-17.1	-2.9	1.380	86.3	.389	1.184	13.2	177.6	.725D	1.645A	91.5	.610	4.6	39.3	126.0	.150
4-3540	4-3730	.309	52.7	2.2	-9.9	.748	116.5	.453	1.520	234.2	425.0	.831	2.208D	109.0	1.147	9.6	11.4	322.1	.432
		17.60	14.45	4.98	3.15	6.56	9.46	16.97	2/1/2	98.2	27.5	50.9	1.080	2.325	78.5	92.6	-45.6	84.7L	1.432
4-3180	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.715	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3540	.262	251.1	-9.2	-1.6	1.379	83.2	.397	1.177	24.0	177.9	.710D	1.644A	91.4	.606	3.4	34.4	123.6	.149
4-3540	4-3740	.355	52.7	9.3	-5.3	.724	114.5	.433	1.442	228.4	426.8	.817	2.067D	109.2	1.133	5.2	4.0	333.8	.404
		16.56	13.42	5.17	3.14	6.55	9.25	16.36	2/1/2	98.9	17.8	56.6	.875	2.108	81.1	83.9	-51.4	73.7L	.969

MARS ARRIVAL DATE = 2443550 (10 FEB 1978)

4-3180	4-3305.7	.160	30.3	-42.2	-9.0	.934	94.2	.159	.864	203.5	368.0	.727	1.001D	91.1	1.262	11.1	73.3	242.0	.253
4-3305.7	4-3550	.253	274.8	33.5	5.8	1.381	92.2	.389	1.188	352.3	541.3	.726	1.650	89.2	.609	-4.0	5.3	114.1	.150
4-3550	4-3740	.395	55.6	6.6	-6.7	.744	117.5	.469	1.517	232.9	426.8	.806	2.228D	110.5	1.148	6.7	6.4	332.4	.439
		17.05	13.89	4.56	3.16	6.57	9.33	17.14	1/2/2	106.0	19.7	43.1	.959	2.720	79.1	109.5	55.6	114.1D	1.614
4-3180	4-3325.2	.230	341.4	57.6	12.1	.926	92.9	.164	.853	195.1	391.0	.713	.993D	94.2	1.256	-10.8	-64.3	233.5	.261
4-3325.2	4-3550	.261	253.0	-13.0	-2.5	1.380	83.6	.397	1.181	22.6	180.8	.712D	1.650	89.5	.605	4.0	36.9	122.8	.155
4-3550	4-3740	.395	55.6	6.6	-6.7	.744	117.5	.469	1.517	232.9	426.8	.806	2.228D	110.5	1.148	6.7	6.4	332.4	.439
		17.70	14.49	5.15	3.22	6.63	9.33	17.14	2/1/2	104.5	19.7	53.0	.863	2.242	79.8	87.4	-49.2	74.9L	1.097

STOPOVER TIME = 0 DAYS — 1978 OUTBOUND SWINGBY — MISSION DURATION = 600 DAYS

MARS ARRIVAL DATE = 2443460 — 12 NOV 1977

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERTC	
MARS ARRIVAL DATE = 2443460 (12 NOV 1977)																					
4-3190	4-3309.6	.193	23.4	-36.0	-8.0	.938	96.2	.170	.873	213.4	374.0	.725	1.021D	92.0	1.266	9.6	66.9	237.1	.231		
4-3309.6	4-3460	.231	261.3	4.5	.7	1.398	89.2	.421	1.258	2.8	143.8	.728D	1.788A	110.7	.694	1.3	16.1	146.0	.222		
4-3460	4-3790	.152	103.0	16.8	-1.1	.645	80.8	.380	1.161	164.4	450.8	.720	1.603	110.9	1.069	1.2	6.4	11.6	.399		
		12.59	7.81	4.60	4.78	8.17	3.21	16.24	1/1/2	37.9	3.1	64.7	1.131	1.870	79.8	95.5	51.9	95.6D	.984		
4-3200	4-3315.6	.222	23.8	-32.8	-8.7	.943	98.2	.186	.884	222.1	382.1	.720	1.048D	93.4	1.272	9.8	62.6	232.9	.244		
4-3315.6	4-3460	.244	254.5	3.5	.6	1.398	86.4	.426	1.259	12.0	143.5	.723D	1.796A	111.1	.695	1.5	16.3	146.6	.226		
4-3460	4-3800	.180	116.3	18.7	-.9	.639	76.8	.419	1.151	160.2	456.5	.669	1.634	113.6	1.068	1.3	10.9	18.4	.446		
		13.72	8.83	5.03	4.89	8.28	3.80	17.29	1/1/2	37.4	4.4	61.2	1.012	1.986	78.8	91.2	54.2	87.3L	.977		
MARS ARRIVAL DATE = 2443470 (22 NOV 1977)																					
4-3180	4-3304.1	.171	25.7	-38.6	-7.5	.934	94.3	.159	.865	204.0	366.1	.728	1.002D	90.8	1.262	9.6	69.9	245.3	.224		
4-3304.1	4-3470	.224	266.2	4.3	.7	1.390	91.3	.407	1.226	355.5	510.0	.727	1.724A	107.4	.672	1.5	19.5	142.9	.193		
4-3470	4-3780	.139	83.1	17.6	-1.3	.645	86.4	.349	1.175	173.3	445.0	.766	1.585	108.6	1.071	1.3	6.2	5.3	.360		
		11.32	7.23	4.30	4.09	7.49	2.93	15.41	1/1/2	46.0	4.4	67.0	1.195	1.813	82.4	96.5	51.5	101.6D	.971		
4-3190	4-3309.1	.189	22.2	-35.0	-7.6	.939	96.3	.170	.874	213.7	373.5	.725	1.022D	91.9	1.266	9.8	66.0	237.7	.224		
4-3309.1	4-3470	.224	260.8	3.4	.5	1.391	89.2	.408	1.230	2.7	149.3	.726D	1.732A	107.8	.674	1.5	19.6	144.2	.196		
4-3470	4-3790	.146	98.5	19.1	-1.1	.638	83.2	.375	1.163	168.4	449.9	.727	1.598	110.5	1.069	1.3	6.8	12.1	.392		
		11.79	7.62	4.54	4.17	7.56	3.08	16.10	1/1/2	44.9	3.3	64.7	1.202	1.869	79.9	95.2	53.0	95.6D	1.044		
4-3200	4-3315.0	.218	22.5	-31.7	-8.2	.944	98.3	.186	.885	222.5	381.5	.720	1.049D	93.3	1.272	9.4	61.5	233.4	.236		
4-3315.0	4-3470	.236	254.1	2.6	.4	1.391	86.6	.412	1.230	11.6	149.0	.724D	1.737A	108.1	.674	1.6	19.8	144.9	.200		
4-3470	4-3800	.166	113.4	19.1	-.8	.631	79.4	.409	1.152	163.8	455.2	.681	1.622	112.9	1.068	1.4	11.4	18.9	.433		
		12.71	8.46	4.96	4.25	7.65	3.50	17.01	1/1/2	44.4	4.2	60.9	1.080	1.973	78.9	91.0	55.3	87.8L	1.051		
MARS ARRIVAL DATE = 2443480 (2 DEC 1977)																					
4-3160	4-3303.8	.168	25.0	-38.0	-7.2	.934	94.3	.159	.865	204.0	365.7	.728	1.002D	90.8	1.262	9.4	69.3	245.8	.220		
4-3303.8	4-3480	.220	266.2	2.5	.4	1.386	91.3	.398	1.208	355.3	515.0	.727	1.689A	104.7	.656	1.6	21.8	140.5	.174		
4-3480	4-3780	.143	78.5	17.7	-1.3	.640	88.8	.349	1.179	177.7	444.5	.767	1.591	108.6	1.072	1.4	6.6	5.3	.360		
		10.95	7.28	4.26	3.66	7.06	3.02	15.41	1/1/2	53.8	4.8	68.1	1.244	1.785	82.4	96.7	52.7	101.7D	.977		
4-3190	4-3308.7	.186	21.3	-34.3	-7.3	.939	96.3	.170	.874	213.8	373.1	.725	1.022D	91.9	1.266	9.0	65.4	236.2	.219		
4-3308.7	4-3480	.219	260.9	1.9	.3	1.387	89.3	.399	1.211	2.3	154.4	.728D	1.694A	105.1	.658	1.7	21.7	141.9	.176		
4-3480	4-3790	.144	93.5	19.3	-1.1	.632	85.6	.372	1.165	172.5	449.2	.732	1.598	110.3	1.070	1.4	9.2	12.3	.389		
		11.26	7.54	4.50	3.72	7.12	3.04	16.02	1/1/2	52.6	3.6	65.5	1.257	1.848	79.8	95.5	54.1	96.2D	1.066		
4-3200	4-3314.5	.215	21.5	-30.8	-7.9	.944	98.3	.186	.885	222.8	381.0	.721	1.050D	93.3	1.272	9.1	60.6	233.8	.230		
4-3314.5	4-3480	.230	254.1	1.4	.2	1.387	86.8	.402	1.211	11.2	154.1	.724D	1.698A	105.4	.658	1.8	21.7	142.6	.179		
4-3480	4-3800	.157	109.4	19.5	-.8	.625	81.9	.401	1.153	167.6	454.2	.690	1.615	112.4	1.068	1.4	11.8	19.2	.425		
		11.99	8.21	4.91	3.78	7.18	3.30	16.81	1/1/2	51.9	4.1	61.3	1.139	1.962	78.8	91.7	56.2	88.7L	1.096		
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																					
4-3160	4-3311.0	.215	338.2	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.3	235.4	.218		
4-3311.0	4-3490	.218	258.4	-.3	-.0	1.384	88.4	.393	1.199	5.6	158.9	.727D	1.671A	102.6	.645	2.0	24.2	139.5	.162		
4-3490	4-3760	.178	54.9	12.9	-1.9	.656	96.3	.329	1.221	195.3	435.8	.819	1.622D	106.4	1.081	1.7	2.0	351.3	.325		
		12.09	8.68	4.92	3.42	6.82	3.76	14.71	2/1/2	60.3	9.3	68.9	1.265	1.767	80.7	91.5	-54.2	91.8D	.971		
4-3190	4-3308.5	.184	20.7	-33.7	-7.1	.939	96.3	.170	.874	213.9	372.8	.726	1.022D	91.8	1.267	8.9	64.9	236.6	.215		
4-3308.5	4-3490	.215	261.3	-.4	-.1	1.384	89.5	.393	1.199	1.9	159.1	.728D	1.669A	102.5	.645	2.0	24.4	139.0	.161		
4-3490	4-3790	.147	88.7	19.5	-1.1	.628	88.1	.371	1.169	176.7	448.7	.735	1.603	110.2	1.071	1.5	9.5	12.4	.388		
		10.97	7.57	4.48	3.40	6.80	3.09	16.00	1/1/2	60.7	3.9	67.3	1.296	1.804	79.8	96.4	55.3	96.8D	1.043		
4-3200	4-3314.1	.212	20.6	-30.1	-7.6	.945	98.4	.186	.886	223.0	380.6	.721	1.051D	93.2	1.273	8.8	60.0	234.0	.225		
4-3314.1	4-3490	.225	254.7	-.3	-.0	1.384	87.0	.395	1.198	10.5	156.8	.725D	1.672A	102.8	.644	2.0	24.0	139.7	.164	*	
4-3490	4-3800	.152	104.7	20.1	-.8	.619	84.5	.397	1.155	171.6	453.4	.697	1.613	112.1	1.069	1.5	12.1	19.5	.419	O	
		11.52	8.07	4.87	3.44	6.85	3.20	16.69	1/1/2	60.0	4.1	62.3	1.188	1.932	78.5	93.1	57.2	89.8L	1.107		
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																					
4-3150	4-3302.4	.226	337.0	60.8	12.3	.931	89.3	.150	.856	176.2	366.4	.727	.984	90.8	1.257	-9.5	-70.8	242.0	.219		
4-3302.4	4-3500	.219	268.6	-7.7	-1.2	1.381	92.1	.389	1.188	352.6	524.2	.726	1.650A	99.6	.633	3.1	31.0	134.9	.153		
4-3500	4-3750	.216	48.8	11.0	-2.4	.668	101.1	.336	1.257	203.7	431.9	.634	1.680D	106.2	1.089	2.1	.5	343.9	.323		
		12.93	9.72	5.08	3.21	6.62	4.64	14.68	2/1/2	71.2	12.0	65.1	1.250	1.859	80.7	100.7	-48.7	106.7D	1.073		
4-3160	4-3311.1	.213	338.4	59.6	11.5	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-67.0	235.4	.216		
4-3311.1	4-3500	.216	258.9	-3.1	-.5	1.382	88.5	.389	1.191	5.4	163.2	.727D	1.655A	100.2	.634	2.4	27.3	136.4	.152		
4-3500	4-3760	.196	54.4	13.2	-2.0	.656	98.8	.340	1.233	198.0	435.9	.814	1.652D	106.9	1.084	1.9	2.4	351.1	.335		
		12.27	9.06	4.89	3.21	6.61	4.17	14.91	2/1/2	68.6	9.5	66.0	1.288	1.837	80.2	92.5	-52.8	92.4D	1.078		
4-3190	4-3308.3	.183	20.4	-33.5	-7.0	.939	96.3	.170	.874	214.0	372.6	.726	1.022D	91.8	1.267	8.8	64.6	236.8	.214		
4-3308.3	4-3500	.214	262.2	-3.8	-.6	1.382	89.6	.389	1.191	1.3	163.4	.728D	1.654A	100.0	.634	2.5	27.9	136.0	.152		
4-3500	4-3790	.153	84.3	19.6	-1.1	.624	90.6	.373	1.174	181.0	448.3	.736	1.611D	110.2	1.073	1.6	9.8	12.5	.389		
		10.89	7.69	4.46	3.20	6.60	3.23	16.02	1/1/2	69.2	4.1	70.6	1.318	1.730	79.6	97.9	57.1	97.4D	.982		
4-3200	4-3313.8	.211	20.0	-29.5	-7.4	.945	98.4	.186	.886	223.2	380.3	.721	1.051D	93.2	1.273	8.6	59.5	234.2	.222		
4-3313.8	4-3500	.222	255.7	-2.5	-.4	1.382	87.3	.391	1.190	9.6	163.1	.725D	1.656A	100.3	.634	2.3	26.8	136.5	.153		
4-3500	4-3800	.152	99.8	20.5	-.8	.615	87.2	.395	1.158	175.6	452.8	.701	1.614	111.9	1.070	1.6	12.4	19.7	.416		
		11.27	8.05	4.85	3.22	6.63	3.20	16.63	1/1/2	68.3	4.1	64.2	1.224	1.881	78.1	95.1	58.4	91.1D	1.079		
4-3210	4-3321.3	.250	24.7	-27.8	-6.8	.951	100.4	.208	.899	230.1	386.9	.712	1.066D	94.9	1.279	9.5	55.9	233.4	.253		
4-3321.3	4-3500	.253	248.3	-1.6	-.3	1.380	83.8	.398	1.184	21.8	163.5	.713D	1.655A	100.4	.630	2.2	26.2	135.9	.156		
4-3500	4-3810	.165	116.3	19.9	-.5	.606	83.2	.424	1.143	170.5	457.6	.659	1.627	114.0	1.068	1.8	14.9	27.0	.432		
		12.20	8.91	5.48	3.29	6.69	3.43	17.42	1/1/2	68.7	5.4	58.8	.941	2.037	80.4	85.7	60.7	80.8L	.976		
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																					
4-3160	4-3295.2	.162	38.2	-42.0	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.8	73.5	262.0	.245		
4-3295.2	4-3510	.246	274.9	14.5	2.6	1.379	95.0	.390	1.178	342.1	529.6	.716	1.637A	96.5	.621	-.6	17.7	122.7	.143		
4-3510	4-3760	.216	54.7	13.6	-2.1	.659	101.4	.353	1.249	202.8	436.0	.808	1.689C	107.5	1.089	2.1	2.7	350.8	.347		
		11.66	8.64	4.18	3.02	6.43	4.65	15.16	1/2/2	82.7	9.7	59.5	.998	2.016	85.9	100.1	45.5	114.7D	1.014		
4-3160	4-3311.1	.213	338.5	59.6	11.4	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-66.9	235.5	.216		
4-3311.1	4-3510	.216	259.9	-7.1	-1.1	1.381	88.6	.387	1.187	4.9	167.2	.728D	1.646A	97.8	.626	3.0	31.1	133.3	.147		
4-3510	4-3760	.216	54.7	13.6	-2.1	.659	101.4	.353	1.249	202.8	436.0	.808	1.689D	107.5	1.089	2.1	2.7	350.8	.347		
		12.63	9.54	4.88	3.10	6.50	4.65	15.16	2/1/2	77.0	9.7	62.0	1.294	1.940	79.5	94.3	-50.5	93.6D	1.217		
4-3170	4-3318.4	.219	339.2	58.6	11.7	.927	91.6	.157	.853	188.7	384.1	.720	.987D	93.2	1.256	-9.9	-65.5	235.2	.236		
4-3318.4	4-3510	.236	251.7	-4.0	-.7	1.380	85.4	.392	1.183	16.5	167.2	.720D	1.646A	98.0	.624	2.5	29.0	133.0	.148		
4-3510	4-3770	.196	61.1	15.7	-1.7	.646	99.0	.357	1.223	196.9	439.9	.787	1.659D	108.3	1.084	1.8	4.9	358.1	.359		
		12.27	9.15	4.96	3.12	6.53	4.17	15.40	2/1/2	76.6	7.4	62.9	1.082	1.917	81.5	84.0	-53.6	80.4L	.992		
4-3200	4-3313.6	.210	19.7	-29.2	-7.3	.945	98.4	.186	.886	223.5	380.1	.721	1.052D	93.1	1.273	8.5	59.2	234.3	.220		
4-3313.6	4-3510	.220	256.9	-5.7	-.9	1.380	87.6	.388	1.186	8.7	167.1	.726D	1.646A	97.9	.626	2.6	30.1	133.4	.147		
4-3510	4-3800	.156	95.1	20.9	-.8	.611	89.8	.395	1.162	179.8	452.3	.703	1.621	111.8	1.072	1.6	12.6	19.9	.416		
		11.22	8.12	4.83	3.10	6.50	3.28	16.62	1/1/2	76.7	4.2	67.4	1.246	1.803	77.8	97.6	59.8	92.5D	1.001		
4-3210	4-3320.7	.247	23.7	-26.9	-6.5	.951	100.5	.208	.900	230.5	386.5	.713	1.067D	94.8	1.280	9.1	55.0	233.6	.247		
4-3320.7	4-3510	.247	249.7	-3.5	-.6	1.379	84.3	.394	1.181	20.2	167.4	.715D	1.646A	98.0	.623	2.4	28.6	132.6	.149		
4-3510	4-3810	.159	111.6	20.6	-.5	.601	86.0	.420	1.145	174.4	456.8	.665	1.626	113.7	1.068	1.7	15.2	27.3	.446		
		11.93	8.79	5.43	3.14	6.55	3.36	17.30	1/1/2	76.8	5.2	59.9	.989	2.002	79.4	89.3	61.7	83.1L	.991		
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																					
4-3160	4-3295.2	.162	38.3	-42.2	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.9	73.7	262.0	.247		
4-3295.2	4-3520	.247	276.2	13.1	2.5	1.379	95.2	.391	1.177	341.2	533.3	.717	1.636A	94.3	.615	-.4	19.4	119.4	.142		
4-3520	4-3760	.238	55.5	14.0	-2.2	.663	104.2	.366	1.269	207.4	436.1	.801	1.736D	108.2	1.095	2.3	3.1	350.6	.362		
		12.39	9.40	4.19	2.99	6.40	5.21	15.46	1/2/2	90.7	9.8	61.1	.988	1.967	85.8	101.8	46.1	115.4D	.959		
4-3160	4-3311.0	.215	338.1	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.4	235.3	.218		
4-3311.0	4-3520	.218	261.6	-14.0	-2.2	1.380	88.9	.386	1.185	3.8	171.0	.728D	1.642A	95.6	.620	4.0	36.4	130.9	.147		
4-3520	4-3760	.238	55.5	14.0	-2.2	.663	104.2	.366	1.269	207.4	436.1	.801	1.736D	108.2	1.095	2.3	3.1	350.6	.362		
		13.22	10.13	4.92	3.09	6.50	5.21	15.46	2/1/2	85.0	9.8	56.1	1.262	2.128	78.5	96.8	-46.4	99.7D	1.423		

LAUNCH	SWNGBY	$SPEED1	RA1	DECL1	I 1	V 1	P$I 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	P$I 2	V 2	I 2	DECL2	RA2	$PEED2
SWNGBY	ARRIVE	$PEED3	RA3	DECL3	I 3	V 3	P$I 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	P$I 4	V 4	I 4	DECL4	RA4	$PEED4
DEPART	RETURN	$PEED5	RA5	DECL5	I 5	V 5	P$I 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	P$I 6	V 6	I 6	DECL6	RA6	$PEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3170	4-3318.5	.218	339.4	58.5	11.6	.927	91.6	.157	.853	188.7	364.2	.720	.987D	93.2	1.256	-9.8	-65.2	233.3	.234
4-3318.5	4-3520	.234	253.0	-6.6	-1.2	1.379	85.6	.390	1.161	15.7	170.9	.721D	1.642A	95.7	.618	2.9	31.6	129.9	.145
4-3520	4-3770	.216	61.1	16.0	-1.8	.649	101.7	.369	1.238	201.5	439.9	.761	1.696D	108.9	1.088	2.0	5.2	357.9	.371
		12.66	9.60	4.96	3.06	6.47	4.64	15.64	2/1/2	84.5	7.6	60.0	1.097	2.000	80.7	86.2	-52.1	61.3L	1.097
4-3210	4-3320.5	.245	22.9	-26.1	-8.2	.952	100.5	.208	.901	230.8	388.1	.713	1.089D	94.7	1.280	8.8	54.2	233.7	.242
4-3320.5	4-3520	.242	251.4	-6.0	-1.1	1.379	84.8	.392	1.160	18.5	171.0	.717D	1.642A	95.7	.617	2.8	31.3	129.6	.146
4-3520	4-3610	.161	106.7	21.3	-.5	.598	88.8	.418	1.149	178.4	456.2	.669	1.630	113.5	1.070	1.7	15.4	27.5	.444
		11.85	8.78	5.40	3.07	6.48	3.38	17.25	1/1/2	84.6	5.1	62.0	1.029	1.943	78.4	93.5	62.7	85.6L	.970
									MARS ARRIVAL DATE = 2443530 (21 JAN 1978)										
4-3160	4-3307.9	.294	330.9	62.3	16.6	.930	90.6	.151	.855	183.5	372.4	.726	.984D	91.6	1.257	-14.1	-78.9	228.6	.313
4-3307.9	4-3530	.313	267.4	-52.8	-10.4	1.380	90.5	.385	1.185	358.2	534.7	.728	1.641A	93.3	.615	12.2	59.5	138.5	.199
4-3530	4-3760	.264	56.7	14.4	-2.4	.671	107.0	.387	1.294	212.1	436.2	.794	1.794D	109.0	1.102	2.5	3.4	350.4	.379
		16.36	12.11	6.26	4.25	7.64	5.84	15.81	2/1/2	92.1	10.1	29.3	.615	3.953	81.4	102.3	-21.5	107.4D	1.816
4-3160	4-3309.7	.240	335.1	60.8	13.1	.929	90.5	.151	.855	182.9	374.6	.725	.984D	91.9	1.256	-10.8	-71.8	234.0	.247
4-3309.7	4-3530	.247	264.9	-53.9	-5.7	1.380	89.7	.385	1.185	1.0	174.6	.726D	1.641A	93.4	.615	7.5	48.9	132.0	.164
4-3530	4-3760	.264	56.7	14.4	-2.4	.671	107.0	.387	1.294	212.1	436.2	.794	1.794D	109.0	1.102	2.5	3.4	350.4	.379
		14.59	11.15	5.30	3.45	6.85	5.84	15.81	2/1/2	92.2	10.1	41.2	.989	2.839	78.4	100.7	-33.9	101.6D	1.619
4-3170	4-3300.1	.170	33.5	-42.6	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.6	253.2	.244
4-3300.1	4-3530	.244	275.2	23.9	4.1	1.380	93.7	.388	1.181	346.9	535.8	.723	1.640A	92.7	.613	-2.2	11.7	117.3	.142
4-3530	4-3770	.239	61.6	16.3	-1.9	.654	104.5	.384	1.258	206.1	439.9	.775	1.741D	109.5	1.094	2.2	5.4	357.8	.385
		12.49	9.49	4.29	3.00	6.41	5.20	15.94	1/2/2	95.7	7.8	51.3	1.007	2.311	83.0	104.3	39.9	114.7D	1.520
4-3170	4-3304.4	.318	49.1	-50.8	-17.9	.931	92.3	.152	.858	193.0	365.5	.728	.989D	90.7	1.259	20.3	87.6	207.0	.437
4-3304.4	4-3530	.437	276.3	69.0	17.2	1.380	92.0	.386	1.184	352.9	535.1	.727	1.641A	93.1	.614	-15.4	-23.7	112.1	.228
4-3530	4-3770	.239	61.6	16.3	-1.9	.654	104.5	.384	1.258	206.1	439.9	.775	1.741D	109.5	1.094	2.2	5.4	357.8	385
		16.86	11.92	6.73	4.93	6.32	5.20	15.94	1/2/2	92.4	7.8	20.3	.315	5.681	87.7	122.9	10.7	114.3D	..475
4-3170	4-3318.6	.218	339.5	58.5	11.6	.927	91.6	.157	.853	188.7	364.2	.719	.987D	93.2	1.256	-9.7	-65.1	233.4	.234
4-3318.6	4-3530	.234	254.6	-10.8	-1.8	1.379	85.9	.389	1.182	14.7	174.4	.722D	1.642A	93.6	.613	3.5	35.0	127.4	.145
4-3530	4-3770	.239	61.6	16.3	-1.9	.654	104.5	.384	1.258	206.1	439.9	.775	1.741D	109.5	1.094	2.2	5.4	357.8	.385
		13.22	10.15	4.95	3.07	6.47	5.20	15.94	2/1/2	91.8	7.8	56.3	1.102	2.121	79.8	89.1	-49.7	62.7L	1.234
									MARS ARRIVAL DATE = 2443540 (31 JAN 1978)										
4-3170	4-3300.0	.169	33.1	-42.5	-8.1	.932	92.5	.153	.859	194.2	360.0	.726A	.990D	90.0	1.259	10.6	73.5	253.4	.242
4-3300.0	4-3540	.242	277.1	19.3	3.3	1.380	94.0	.390	1.183	345.5	539.1	.721	1.644A	90.6	.610	-1.5	15.6	115.5	.143
4-3540	4-3770	.264	62.7	16.7	-2.0	.661	107.4	.402	1.282	210.6	440.0	.767	1.798D	110.3	1.101	2.4	5.6	357.7	.402
		13.11	10.10	4.27	3.02	6.43	5.63	16.31	1/2/2	102.6	8.0	55.8	1.029	2.136	82.5	106.6	42.2	115.5D	1.169
4-3170	4-3318.4	.220	339.2	58.6	11.7	.927	91.6	.157	.853	188.8	364.1	.720	.987D	93.2	1.256	-9.9	-65.6	233.1	.236
4-3318.4	4-3540	.236	256.7	-17.1	-2.9	1.380	86.3	.389	1.184	13.2	177.6	.723D	1.645A	91.5	.610	4.6	39.3	126.0	.150
4-3540	4-3770	.264	62.7	16.7	-2.0	.661	107.4	.402	1.282	210.6	440.0	.767	1.798D	110.3	1.101	2.4	5.6	357.7	.402
		13.97	10.81	4.98	3.15	6.56	5.63	16.31	2/1/2	98.2	8.0	50.9	1.080	2.325	78.3	92.6	-45.8	84.7L	1.432
4-3180	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.713	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3540	.262	251.1	-9.2	-1.8	1.379	83.2	.397	1.177	24.0	177.9	.710D	1.644A	91.4	.606	3.4	34.4	123.8	.149
4-3540	4-3780	.237	66.3	18.5	-1.5	.643	104.6	.400	1.245	204.6	443.7	.747	1.743D	110.8	1.093	2.1	7.9	5.1	.408
		13.47	10.53	5.17	3.14	6.55	5.16	16.44	2/1/2	98.9	6.1	56.6	.875	2.108	81.1	83.9	-51.4	73.7L	.969
									MARS ARRIVAL DATE = 2443550 (10 FEB 1978)										
4-3170	4-3300.1	.170	33.4	-42.5	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.7	253.5	.243
4-3300.1	4-3550	.243	279.2	17.1	3.0	1.381	94.4	.392	1.185	344.2	542.1	.720	1.650	88.6	.608	-1.1	17.4	114.1	.146
4-3550	4-3770	.291	64.2	17.1	-2.1	.672	110.4	.423	1.314	215.1	440.0	.758	1.869D	111.2	1.109	2.6	5.9	357.6	.421
		13.92	10.63	4.28	3.08	6.49	6.55	16.74	1/2/2	108.7	8.2	58.5	1.014	2.047	82.1	109.0	43.0	116.6D	1.061
4-3170	4-3317.6	.233	337.5	59.4	12.6	.928	91.7	.156	.854	189.1	383.2	.720	.987D	93.1	1.256	-10.7	-66.2	231.6	.252
4-3317.6	4-3550	.252	259.5	-30.5	-5.3	1.381	87.1	.390	1.187	10.5	180.6	.725D	1.650	89.6	.609	6.9	47.2	127.0	.163
4-3550	4-3770	.291	64.2	17.1	-2.1	.672	110.4	.423	1.314	215.1	440.0	.758	1.869D	111.2	1.109	2.6	5.9	357.6	.421
		15.19	11.75	5.20	3.44	6.84	6.55	16.74	2/1/2	102.9	8.2	41.1	.950	2.852	76.8	97.6	-36.9	86.9L	1.759
4-3180	4-3305.7	.190	30.3	-42.2	-9.0	.934	94.2	.159	.864	203.5	366.0	.727	1.001D	91.1	1.262	11.1	73.3	242.0	.253
4-3305.7	4-3550	.253	274.8	33.5	5.8	1.381	92.2	.389	1.188	352.3	541.3	.726	1.650	89.2	.609	-4.0	5.3	114.1	.150
4-3550	4-3780	.262	69.2	18.8	-1.6	.652	107.6	.417	1.269	209.0	443.6	.740	1.797D	111.6	1.100	2.2	8.1	5.1	.424
		13.50	10.34	4.56	3.16	6.57	5.78	16.80	1/2/2	106.0	6.2	43.1	.939	2.720	79.1	109.5	33.6	114.1D	1.614
4-3180	4-3308.9	.265	41.9	-48.2	-14.2	.933	94.0	.159	.863	202.2	371.6	.726	1.000D	91.6	1.261	16.2	81.2	225.9	.355
4-3308.9	4-3550	.355	272.1	39.6	12.8	1.381	90.9	.388	1.189	356.9	541.0	.728	1.650	89.4	.610	-11.1	-15.6	111.9	.192
4-3550	4-3780	.262	69.2	18.8	-1.6	.652	107.6	.417	1.269	209.0	443.6	.740	1.797D	111.6	1.100	2.2	8.1	5.1	.424
		15.60	11.52	5.74	4.08	7.47	5.78	16.80	1/2/2	101.7	6.2	25.0	.477	4.618	82.4	107.4	16.8	111.3D	1.726
4-3180	4-3325.2	.230	341.4	57.6	12.1	.926	92.9	.164	.853	195.1	391.0	.713	.993D	94.2	1.256	-10.8	-64.3	233.5	.261
4-3325.2	4-3550	.261	253.0	-13.0	-2.5	1.380	83.6	.397	1.181	22.6	180.8	.712D	1.650	89.5	.605	4.0	36.9	122.8	.153
4-3550	4-3780	.262	69.2	18.8	-1.6	.652	107.6	.417	1.269	209.0	443.6	.740	1.797D	111.6	1.100	2.2	8.1	5.1	.424
		14.16	10.94	5.15	3.22	6.63	5.78	16.80	2/1/2	104.5	6.2	53.0	.883	2.242	79.8	87.4	-49.2	74.9L	1.097
									MARS ARRIVAL DATE = 2443560 (20 FEB 1978)										
4-3170	4-3300.2	.172	33.8	-42.9	-8.4	.932	92.5	.153	.859	194.2	360.3	.726	.990D	90.0	1.259	10.9	74.1	253.0	.247
4-3300.2	4-3560	.247	281.4	15.7	2.8	1.382	94.8	.395	1.189	342.9	545.0	.719	1.659	86.7	.607	-.9	18.4	113.3	.151
4-3560	4-3770	.322	66.0	17.5	-2.3	.686	113.5	.447	1.354	219.5	439.9	.749	1.960D	112.2	1.120	2.8	6.1	357.4	.444
		14.86	11.67	4.31	3.18	6.59	7.36	17.25	1/2/2	114.0	8.4	60.6	.987	1.983	81.7	111.6	43.3	117.9D	.971
4-3180	4-3305.1	.182	28.5	-40.9	-8.4	.934	94.3	.159	.865	203.6	367.3	.727	1.002D	91.0	1.262	10.5	72.0	243.3	.241
4-3305.1	4-3560	.241	277.7	24.7	4.2	1.382	92.8	.392	1.191	349.9	544.3	.725	1.658	87.2	.608	-2.4	12.1	113.9	.150
4-3560	4-3780	.290	70.4	19.1	-1.7	.663	110.7	.437	1.299	213.3	443.6	.731	1.866D	112.5	1.108	2.4	8.2	5.1	.443
		14.10	10.95	4.45	3.15	6.56	6.50	17.23	1/2/2	112.1	6.4	51.0	1.033	2.323	78.2	112.7	38.2	115.7D	1.366
4-3180	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.713	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3560	.262	255.1	-18.7	-3.5	1.381	84.1	.398	1.186	20.9	183.6	.711D	1.657	87.6	.605	5.0	40.2	122.8	.159
4-3560	4-3780	.290	70.4	19.1	-1.7	.663	110.7	.437	1.299	213.3	443.6	.731	1.866D	112.5	1.108	2.4	8.2	5.1	.443
		15.03	11.67	5.17	3.36	6.76	6.50	17.23	2/1/2	109.1	6.4	48.0	.875	2.457	78.3	91.4	-45.6	76.6L	1.275
									MARS ARRIVAL DATE = 2443570 (2 MAR 1978)										
4-3180	4-3305.1	.182	28.4	-40.8	-8.3	.934	94.3	.159	.865	203.7	367.2	.727	1.002D	91.0	1.262	10.5	71.9	243.4	.241
4-3305.1	4-3570	.241	280.4	21.1	3.6	1.383	93.3	.395	1.196	348.3	547.1	.724	1.667	85.4	.606	-1.9	14.7	113.9	.154
4-3570	4-3780	.320	72.1	19.4	-1.8	.677	113.9	.460	1.338	217.7	443.9	.722	1.954D	113.5	1.118	2.6	8.4	5.0	.465
		14.99	11.75	4.44	3.24	6.65	7.31	17.74	1/2/2	117.1	6.5	55.0	1.038	2.167	77.7	115.7	39.7	117.2D	1.211
4-3180	4-3324.8	.241	340.1	58.3	12.6	.928	93.0	.164	.853	195.5	390.4	.714	.993D	94.1	1.256	-11.5	-66.2	232.0	.273
4-3324.8	4-3570	.273	257.6	-29.5	-5.6	1.382	84.8	.398	1.192	18.3	186.3	.716D	1.666	85.9	.606	7.0	46.2	125.0	.173
4-3570	4-3780	.320	72.1	19.4	-1.8	.677	113.9	.460	1.338	217.7	443.5	.722	1.954D	113.5	1.118	2.6	8.4	5.0	.465
		16.26	12.64	5.33	3.64	7.04	7.31	17.74	2/1/2	112.0	6.5	39.9	.805	2.932	76.3	96.6	-38.3	79.6L	1.555
									MARS ARRIVAL DATE = 2443580 (12 MAR 1978)										
4-3180	4-3305.2	.183	28.7	-41.0	-8.4	.934	94.3	.159	.865	203.6	367.4	.727	1.002D	91.0	1.262	10.6	72.2	243.1	.243
4-3305.2	4-3580	.243	283.1	18.9	3.3	1.384	93.8	.398	1.200	346.7	549.8	.723	1.676	83.7	.609	-1.8	16.1	114.3	.159
4-3580	4-3780	.354	74.1	18.7	-2.0	.696	117.1	.488	1.389	221.9	443.3	.712	2.087D	114.6	1.130	2.8	8.5	5.0	.491
		16.04	12.89	4.46	3.35	6.76	8.25	18.34	1/2/2	121.4	6.7	57.9	1.020	2.065	77.3	118.8	40.4	118.8D	1.086
4-3190	4-3310.6	.205	29.9	-38.0	-8.6	.936	96.1	.169	.872	213.0	375.1	.725	1.020D	92.2	1.266	10.4	68.7	239.5	.248
4-3310.6	4-3580	.248	277.8	29.9	5.1	1.384	91.5	.395	1.202	354.8	549.2	.727	1.676	84.1	.610	-3.5	8.6	114.3	.160
4-3580	4-3790	.317	78.7	21.0	-1.5	.668	114.1	.473	1.319	215.7	447.0	.695	1.943D	114.7	1.116	2.4	10.8	12.7	.486
		15.34	11.97	4.73	3.37	6.77	7.23	18.22	1/2/2	119.4	5.1	45.8	.994	2.570	72.8	120.0	33.8	116.3D	1.961
4-3190	4-3331.3	.247	344.8	56.7	12.8	.925	94.3	.173	.854	201.5	397.0	.706	1.002D	95.2	1.257	-12.0	-63.4	235.3	.292
4-3331.3	4-3590	.292	256.2	-19.5	-4.1	1.382	82.2	.408	1.190	27.3	189.0	.704D	1.676	83.9	.603	5.3	39.8	122.4	.173
4-3590	4-3790	.317	78.7	21.0	-1.5	.668	114.1	.473	1.319	215.7	447.0	.695	1.943D	114.7	1.116	2.4	10.8	12.7	.486
		16.31	12.66	5.42	3.68	7.08	7.23	18.22	2/1/2	117.6	5.1	48.1	.706	2.594	77.9	93.2	-48.6	71.2L	1.098

STOPOVER TIME = 0 DAYS — 1978 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS

MARS ARRIVAL DATE = 2443470 (22 NOV 1977)

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3160	4-3304.1	.171	25.7	-36.6	-7.5	.934	94.3	.159	.865	204.0	366.1	.728	1.002D	90.8	1.262	9.6	69.9	245.3	.224
4-3304.1	4-3470	.224	266.2	4.3	.7	1.390	91.5	.407	1.226	355.5	510.0	.727	1.724A	107.4	.672	1.3	19.5	142.9	.193
4-3470	4-3820	.254	135.0	17.0	-.2	.620	66.9	.515	1.132	156.7	466.1	.550	1.715	120.2	1.066	1.7	16.0	32.0	.559
		13.97	9.88	4.30	4.09	7.49	5.58	19.99	1/1/2	46.0	9.6	67.0	1.195	1.813	82.4	96.5	51.5	101.6D	.971
4-3190	4-3309.1	.189	22.2	-35.0	-7.6	.939	96.3	.170	.874	213.7	373.5	.725	1.022D	91.9	1.266	9.3	66.0	237.7	.224
4-3309.1	4-3470	.224	260.8	3.4	.5	1.391	89.2	.408	1.230	2.7	149.3	.728D	1.732A	107.8	.674	1.5	19.6	144.2	.196
4-3470	4-3830	.330	141.1	16.1	.5	.615	61.4	.596	1.125	155.1	476.5	.455	1.796	126.0	1.066	2.1	17.8	38.0	.657
		16.28	12.11	4.54	4.17	7.56	7.57	22.48	1/1/2	44.9	13.5	64.7	1.202	1.869	79.9	95.2	53.0	95.8D	1.044
MARS ARRIVAL DATE = 2443480 (2 DEC 1977)																			
4-3160	4-3303.8	.168	25.0	-36.0	-7.2	.934	94.3	.159	.865	204.0	365.7	.728	1.002D	90.8	1.262	9.4	69.3	245.8	.220
4-3303.8	4-3480	.220	266.2	2.5	.4	1.386	91.3	.398	1.208	355.3	515.0	.727	1.689A	104.7	.656	1.6	21.6	140.5	.174
4-3480	4-3820	.227	134.8	17.0	-.2	.611	72.2	.493	1.131	159.5	466.0	.573	1.689	118.7	1.066	1.7	16.5	32.9	.533
		12.84	9.18	4.26	3.66	7.06	4.91	19.35	1/1/2	53.8	8.7	68.1	1.244	1.785	82.4	96.7	52.7	101.7D	.977
4-3190	4-3308.7	.186	21.3	-34.5	-7.3	.939	96.3	.170	.874	213.8	373.1	.725	1.022D	91.9	1.266	9.0	65.4	238.2	.219
4-3308.7	4-3480	.219	260.9	1.9	.3	1.387	89.3	.399	1.211	2.3	154.4	.728D	1.694A	105.1	.658	1.7	21.7	141.9	.176
4-3480	4-3830	.291	142.5	15.6	.2	.606	65.4	.563	1.122	156.9	473.5	.490	1.754	123.7	1.065	2.0	18.4	39.5	.617
		14.77	11.05	4.50	3.72	7.12	6.55	21.44	1/1/2	52.6	12.2	65.5	1.257	1.848	79.8	95.5	54.1	96.2D	1.066
4-3200	4-3314.5	.215	21.5	-30.8	-7.9	.944	98.3	.186	.885	222.8	381.0	.721	1.050D	93.3	1.272	9.1	60.9	233.8	.230
4-3314.5	4-3480	.230	254.1	1.4	.2	1.387	86.8	.402	1.211	11.2	154.1	.724D	1.698A	105.4	.658	1.8	21.7	142.8	.179
4-3480	4-3840	.382	147.0	14.9	.9	.601	56.4	.657	1.116	156.2	482.9	.383	1.848	130.6	1.064	2.5	19.9	44.9	.734
		17.69	13.91	4.91	3.78	7.18	9.00	24.49	1/1/2	51.9	16.6	61.3	1.139	1.962	78.8	91.7	56.2	88.7L	1.096
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3160	4-3311.0	.215	338.2	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.3	235.4	.218
4-3311.0	4-3490	.218	256.4	-.3	-.0	1.384	88.4	.393	1.199	5.6	158.9	.727D	1.671A	102.6	.645	2.0	24.2	139.5	.162
4-3490	4-3600	.152	104.7	20.1	-.8	.619	84.5	.397	1.155	171.6	453.4	.697	1.613	112.1	1.069	1.5	12.1	19.5	.419
		11.53	8.12	4.92	3.42	6.82	3.20	16.69	2/1/2	60.3	4.1	68.9	1.265	1.767	80.7	91.5	-54.2	91.8D	.971
4-3190	4-3308.5	.184	20.7	-33.7	-7.1	.939	96.3	.170	.874	213.9	372.8	.726	1.022D	91.8	1.267	8.9	64.9	236.6	.215
4-3308.5	4-3490	.215	261.3	-.4	-.1	1.384	89.5	.393	1.199	1.9	159.1	.728D	1.669A	102.5	.645	2.0	24.4	139.0	.161
4-3490	4-3830	.260	143.0	15.5	.2	.597	69.1	.537	1.120	159.3	471.1	.519	1.721	121.8	1.064	2.0	18.9	40.4	.584
		13.60	10.20	4.48	3.40	6.80	5.72	20.63	1/1/2	60.7	11.2	67.3	1.296	1.804	79.8	96.4	55.3	96.8D	1.043
4-3200	4-3314.1	.212	20.6	-30.1	-7.6	.945	98.4	.186	.886	223.0	380.6	.721	1.051D	93.2	1.273	8.8	60.0	234.0	.225
4-3314.1	4-3490	.225	254.7	-.3	-.0	1.384	87.0	.395	1.198	10.5	158.8	.725D	1.672A	102.8	.644	2.0	24.0	139.7	.164
4-3490	4-3840	.337	149.2	14.1	.8	.592	61.1	.618	1.112	157.4	479.4	.425	1.799	127.7	1.063	2.4	20.6	46.6	.683
		16.07	12.63	4.87	3.44	6.85	7.75	23.16	1/1/2	60.0	15.0	62.3	1.188	1.932	78.5	93.1	57.2	89.8L	1.107
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3150	4-3302.4	.226	337.0	60.8	12.3	.931	89.3	.150	.856	176.2	366.4	.727	.984	90.6	1.257	-9.5	-70.6	242.0	.219
4-3302.4	4-3500	.219	266.6	-7.7	-1.2	1.381	92.1	.389	1.188	352.6	524.2	.726	1.650A	99.6	.633	3.1	31.0	134.9	.153
4-3500	4-3790	.153	84.3	19.6	-1.1	.624	90.6	.373	1.174	161.0	448.3	.736	1.611D	110.2	1.073	1.6	9.8	12.5	.389
		11.52	8.31	5.08	3.21	6.62	3.23	16.02	2/1/2	71.2	4.1	65.1	1.250	1.859	80.7	100.7	-48.7	106.7D	1.073
4-3160	4-3311.1	.213	338.4	59.6	11.5	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-67.0	235.4	.216
4-3311.1	4-3500	.216	256.9	-3.1	-.5	1.382	88.5	.389	1.191	5.4	163.2	.727D	1.655A	100.2	.634	2.4	27.3	136.4	.152
4-3500	4-3800	.152	99.8	20.5	-.8	.615	87.2	.395	1.158	175.6	452.8	.701	1.614	111.9	1.070	1.6	12.4	19.7	.416
		11.30	8.09	4.89	3.21	6.61	3.20	16.63	2/1/2	68.6	4.1	66.0	1.288	1.837	80.2	92.5	-52.8	92.4D	1.078
4-3190	4-3308.3	.183	20.4	-33.5	-7.0	.939	96.3	.170	.874	214.0	372.6	.726	1.022D	91.8	1.267	8.8	64.6	236.8	.214
4-3308.3	4-3500	.214	262.2	-3.8	-.6	1.382	89.6	.389	1.191	1.3	163.4	.728D	1.654A	100.0	.634	2.5	27.9	136.0	.152
4-3500	4-3830	.233	142.6	15.7	.2	.590	72.6	.515	1.119	162.0	469.1	.542	1.695	120.4	1.063	2.0	19.4	41.2	.559
		12.72	9.53	4.46	3.20	6.60	5.06	19.99	1/1/2	69.2	10.3	70.6	1.316	1.730	79.6	97.9	57.1	97.4D	.962
4-3200	4-3313.8	.211	20.0	-29.5	-7.4	.945	98.4	.186	.886	223.2	380.3	.721	1.051D	93.2	1.273	8.6	59.5	234.2	.222
4-3313.8	4-3500	.222	255.7	-2.5	-.4	1.382	87.3	.391	1.190	9.6	163.1	.725D	1.656A	100.3	.634	2.3	26.8	136.5	.153
4-3500	4-3840	.299	150.5	13.7	.7	.583	65.4	.586	1.109	159.3	476.5	.460	1.759	125.4	1.062	2.3	21.1	47.9	.643
		14.81	11.59	4.85	3.22	6.63	6.74	22.12	1/1/2	66.3	13.8	64.2	1.224	1.881	78.1	95.1	58.4	91.1D	1.079
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3160	4-3295.2	.162	38.2	-42.0	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.8	73.5	262.0	.245
4-3295.2	4-3510	.246	274.9	14.5	2.6	1.379	95.0	.390	1.178	342.1	529.6	.718	1.637A	96.5	.621	-.6	17.7	122.7	.143
4-3510	4-3800	.156	95.1	20.9	-.8	.611	89.8	.395	1.162	179.8	452.3	.703	1.621	111.8	1.072	1.6	12.6	19.9	.416
		10.49	7.47	4.18	3.02	6.43	3.28	16.62	1/2/2	62.7	4.2	59.5	.998	2.016	85.9	100.1	45.5	114.7D	1.014
4-3160	4-3311.1	.213	338.5	59.6	11.4	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-66.9	235.5	.216
4-3311.1	4-3510	.216	259.9	-7.1	-1.1	1.381	88.6	.387	1.187	4.9	167.2	.728D	1.646A	97.8	.626	3.0	31.1	133.3	.147
4-3510	4-3800	.156	95.1	20.9	-.8	.611	89.8	.395	1.162	179.8	452.3	.703	1.621	111.8	1.072	1.6	12.6	19.9	.416
		11.26	8.17	4.88	3.10	6.50	3.28	16.62	2/1/2	77.0	4.2	62.0	1.294	1.940	79.5	94.3	-50.5	93.6D	1.217
4-3170	4-3316.4	.219	339.2	58.6	11.7	.927	91.6	.157	.853	188.7	384.1	.720	.987D	93.2	1.256	-9.9	-65.5	235.2	.236
4-3316.4	4-3510	.236	251.7	-4.0	-.7	1.380	85.4	.392	1.183	16.5	167.2	.720D	1.646A	98.0	.624	2.5	29.0	133.0	.148
4-3510	4-3810	.159	111.6	20.6	-.5	.601	86.0	.420	1.145	174.4	456.8	.665	1.626	113.7	1.068	1.7	15.2	27.3	.446
		11.46	8.34	4.98	3.12	6.53	3.36	17.30	2/1/2	76.6	5.2	62.9	1.282	1.917	81.5	84.0	-53.6	80.4L	.992
4-3200	4-3313.6	.210	19.7	-29.2	-7.5	.945	98.4	.186	.886	223.3	380.1	.721	1.052D	93.1	1.273	8.5	59.2	234.3	.220
4-3313.6	4-3510	.220	256.9	-5.7	-.9	1.380	87.6	.388	1.186	8.7	167.1	.728D	1.646A	97.9	.626	2.8	30.1	133.4	.147
4-3510	4-3840	.267	150.9	13.7	.7	.576	69.3	.559	1.107	161.6	474.2	.488	1.726	123.5	1.061	2.2	21.5	49.0	.611
		13.85	10.75	4.83	3.10	6.90	5.91	21.29	1/1/2	76.7	12.7	67.4	1.246	1.803	77.8	97.6	59.8	92.5D	1.001
4-3210	4-3320.7	.247	23.7	-26.9	-8.5	.951	100.5	.208	.900	230.5	388.5	.713	1.087D	94.8	1.280	9.1	55.0	233.6	.247
4-3320.7	4-3510	.247	249.7	-3.5	-.6	1.379	84.3	.394	1.181	20.2	167.4	.715D	1.646A	98.0	.623	2.4	28.6	132.6	.149
4-3510	4-3850	.346	157.1	11.9	1.3	.569	60.8	.641	1.098	159.6	482.3	.395	1.802	129.5	1.059	2.7	22.9	55.5	.710
		16.57	13.43	5.43	3.14	6.55	8.00	23.87	1/1/2	76.8	16.6	59.9	.989	2.002	79.4	89.3	61.7	83.1L	.991
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3160	4-3295.2	.162	38.3	-42.2	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.9	73.7	262.0	.247
4-3295.2	4-3520	.247	276.2	13.1	2.3	1.379	95.2	.391	1.177	341.2	533.3	.717	1.636A	94.5	.615	-.4	19.4	119.4	.142
4-3520	4-3800	.164	91.1	21.1	-.8	.610	92.6	.397	1.168	184.0	451.9	.704	1.632D	111.9	1.074	1.7	12.8	20.0	.418
		10.65	7.65	4.19	2.99	6.40	3.46	16.67	1/2/2	90.7	4.2	61.1	.988	1.967	85.6	101.8	46.1	115.4D	.955
4-3160	4-3311.0	.215	338.1	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.4	235.3	.218
4-3311.0	4-3520	.218	261.6	-14.0	-2.2	1.380	88.9	.386	1.185	3.8	171.0	.728D	1.642A	95.6	.620	4.0	36.4	130.9	.147
4-3520	4-3800	.164	91.1	21.1	-.8	.610	92.6	.397	1.168	184.0	451.9	.704	1.632D	111.9	1.074	1.7	12.8	20.0	.418
		11.47	8.58	4.92	3.09	6.50	3.46	16.67	2/1/2	65.0	4.2	56.1	1.262	2.128	78.5	96.8	-46.4	95.7D	1.423
4-3170	4-3318.8	.218	339.4	58.5	11.6	.927	91.6	.157	.853	188.7	384.2	.720	.987D	93.2	1.256	-9.8	-65.2	233.5	.234
4-3318.8	4-3520	.234	253.0	-8.8	-1.2	1.379	85.6	.390	1.181	15.7	170.9	.721D	1.642A	95.7	.618	2.9	31.8	129.9	.145
4-3520	4-3810	.161	106.7	21.3	-.5	.598	88.8	.418	1.149	176.4	456.2	.669	1.630	113.5	1.070	1.7	15.4	27.5	.444
		11.40	8.34	4.96	3.06	6.47	3.38	17.25	2/1/2	84.5	5.1	60.0	1.097	2.000	80.7	86.2	-52.1	81.3L	1.097
4-3210	4-3320.3	.245	22.9	-26.1	-8.2	.952	100.5	.208	.901	230.8	388.1	.713	1.089D	94.7	1.280	8.8	54.2	233.7	.242
4-3320.3	4-3520	.242	251.4	-8.0	-1.1	1.379	84.8	.392	1.180	18.5	171.0	.717D	1.642A	95.7	.617	2.8	31.3	129.6	.146
4-3520	4-3850	.308	158.2	11.5	1.2	.561	65.3	.609	1.095	161.4	479.5	.429	1.782	127.1	1.058	2.6	23.3	56.8	.670
		15.45	12.38	5.40	3.07	6.48	8.98	22.80	1/1/2	84.6	15.3	62.0	1.029	1.943	78.4	93.5	62.7	85.6L	.970
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3160	4-3307.9	.294	330.9	62.3	16.6	.930	90.6	.151	.855	183.5	372.4	.726	.984D	91.6	1.257	-14.1	-78.9	228.6	.313
4-3307.9	4-3530	.313	267.4	-52.8	-10.4	1.360	90.5	.365	1.165	358.2	534.7	.726	1.641A	93.3	.615	12.2	59.5	138.5	.199
4-3530	4-3800	.176	87.8	21.3	-.8	.610	95.8	.402	1.175	188.2	451.6	.705	1.646D	112.1	1.076	1.8	13.0	20.1	.423
		14.24	9.99	6.26	4.25	7.64	5.72	16.77	2/1/2	92.1	4.3	29.3	.815	3.995	81.4	102.3	-21.5	107.4D	1.816
4-3160	4-3309.7	.240	335.1	60.8	13.1	.929	90.5	.151	.855	182.9	374.6	.725	.984D	91.9	1.256	-10.8	-71.8	234.0	.247
4-3309.7	4-3530	.247	264.9	-53.9	-8.7	1.360	89.7	.365	1.165	1.0	174.6	.726D	1.641A	93.4	.615	7.5	48.9	132.0	.184
4-3530	4-3800	.176	87.8	21.3	-.8	.610	95.8	.402	1.175	188.2	451.6	.705	1.646D	112.1	1.076	1.8	13.0	20.1	.423
		12.47	9.05	5.30	3.46	6.69	5.72	16.77	2/1/2	92.2	4.3	41.2	.989	2.839	78.4	100.7	-33.9	101.8D	1.819

MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2443470
22 NOV 1977

STOPOVER TIME = 0 DAYS | 1978 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2443530 | 21 JAN 1978

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3170	4-3300.1	.170	33.5	-42.6	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.8	253.2	.244
4-3300.1	4-3530	.244	275.2	23.9	4.1	1.380	93.7	.388	1.181	346.9	535.8	.723	1.640A	92.7	.613	-2.2	11.7	117.3	.142
4-3530	4-3810	.167	102.2	21.8	-.5	.597	91.8	.419	1.154	182.4	455.8	.671	1.638D	113.5	1.072	1.8	15.6	27.7	.445
		10.80	7.80	4.29	3.00	6.41	3.51	17.27	1/2/2	95.7	5.1	51.3	1.007	2.311	83.0	104.3	39.9	114.7D	1.320
4-3170	4-3304.4	.318	49.1	-50.8	-17.9	.931	92.3	.152	.858	193.0	365.5	.728	.989D	90.7	1.259	20.3	87.6	207.0	.437
4-3304.4	4-3530	.437	276.3	69.0	17.2	1.380	92.0	.386	1.184	352.9	535.1	.727	1.641A	93.1	.614	-15.4	-23.7	112.1	.228
4-3530	4-3810	.167	102.2	21.8	-.5	.597	91.8	.419	1.154	182.4	455.8	.671	1.638D	113.5	1.072	1.8	15.6	27.7	.445
		15.17	10.24	6.73	4.93	8.32	3.51	17.27	1/2/2	92.4	5.1	20.3	.315	5.661	87.7	102.9	10.7	114.3D	1.475
4-3170	4-3318.6	.218	339.5	58.5	11.6	.927	91.6	.157	.853	188.7	384.2	.719	.987D	93.2	1.256	-9.7	-65.1	233.4	.234
4-3318.6	4-3530	.234	254.6	-10.8	-1.8	1.379	85.9	.389	1.182	14.7	174.4	.722D	1.642A	93.6	.613	3.5	35.0	127.4	.145
4-3530	4-3810	.167	102.2	21.8	-.5	.597	91.8	.419	1.154	182.4	455.8	.671	1.638D	113.5	1.072	1.8	15.6	27.7	.445
		11.53	8.46	4.95	3.07	6.47	3.51	17.27	2/1/2	91.8	5.1	56.3	1.102	2.121	79.6	89.1	-49.7	82.7L	1.234

MARS ARRIVAL DATE = 2443540 (31 JAN 1978)

4-3170	4-3300.0	.169	33.1	-42.3	-8.1	.932	92.5	.153	.859	194.2	360.0	.728A	.990D	90.0	1.259	10.6	73.5	253.4	.242
4-3300.0	4-3540	.242	277.1	19.3	3.3	1.380	94.0	.390	1.183	345.5	539.1	.721	1.644A	90.6	.610	-1.5	15.6	115.5	.143
4-3540	4-3810	.177	98.4	22.2	-.5	.597	94.8	.422	1.161	186.6	455.4	.671	1.652D	113.6	1.074	1.8	15.7	27.8	.448
		11.01	8.00	4.27	3.02	6.43	3.73	17.34	1/2/2	102.6	5.0	55.8	1.029	2.136	82.5	106.6	42.2	115.5D	1.169
4-3170	4-3318.4	.220	339.2	58.6	11.7	.927	91.6	.157	.853	188.8	384.1	.720	.987D	93.2	1.256	-9.9	-65.6	233.1	.236
4-3318.4	4-3540	.256	256.7	-17.1	-2.9	1.380	86.3	.389	1.184	13.2	177.6	.723D	1.645A	91.5	.610	4.6	39.3	126.0	.150
4-3540	4-3810	.177	98.4	22.2	-.5	.597	94.8	.422	1.161	186.6	455.4	.671	1.652D	113.6	1.074	1.8	15.7	27.8	.448
		11.86	8.71	4.96	3.15	6.56	3.73	17.34	2/1/2	98.2	5.0	50.9	1.080	2.325	78.3	92.6	-45.8	84.7L	1.432
4-3180	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.713	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3540	.262	251.1	-9.2	-1.6	1.379	83.2	.397	1.177	24.0	177.9	.710D	1.644A	91.4	.606	3.4	34.4	123.8	.149
4-3540	4-3820	.171	114.1	21.6	-.2	.583	90.6	.442	1.140	180.8	459.6	.636	1.644D	115.2	1.069	1.8	16.1	35.6	.472
		11.91	8.77	5.17	3.14	6.55	3.60	17.90	2/1/2	98.9	6.4	56.6	.875	2.108	81.1	83.9	-51.4	73.7L	.969

MARS ARRIVAL DATE = 2443550 (10 FEB 1978)

4-3170	4-3300.1	.170	33.4	-42.5	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.7	253.3	.243
4-3300.1	4-3550	.243	279.2	17.1	3.0	1.381	94.4	.392	1.185	344.2	542.1	.720	1.650	88.6	.608	-1.1	17.4	114.1	.146
4-3550	4-3810	.190	95.5	22.4	-.5	.599	97.8	.428	1.170	190.7	455.1	.669	1.671D	113.9	1.077	1.8	15.8	28.0	.454
		11.41	8.32	4.28	3.08	6.49	4.04	17.47	1/2/2	108.7	4.9	58.5	1.014	2.047	82.1	109.0	43.0	116.6D	1.061
4-3170	4-3317.6	.233	337.5	59.4	12.6	.928	91.7	.156	.854	189.1	383.2	.720	.987D	93.1	1.256	-10.7	-66.2	231.6	.252
4-3317.6	4-3550	.252	259.5	-30.5	-5.3	1.381	87.1	.390	1.187	10.5	180.6	.725D	1.650	89.6	.609	6.9	47.2	127.0	.163
4-3550	4-3810	.190	95.5	22.4	-.5	.599	97.8	.428	1.170	190.7	455.1	.669	1.671D	113.9	1.077	1.8	15.8	28.0	.454
		12.68	9.24	5.20	3.44	6.84	4.04	17.47	2/1/2	102.9	4.9	41.1	.950	2.852	76.8	97.6	-36.9	66.9L	1.759
4-3180	4-3305.7	.190	30.3	-42.2	-9.0	.934	94.2	.159	.864	203.5	368.0	.727	1.001D	91.1	1.262	11.1	73.3	242.0	.253
4-3305.7	4-3550	.253	274.8	33.5	5.8	1.381	92.2	.389	1.188	352.3	541.3	.726	1.650	89.2	.609	-4.0	5.3	114.1	.150
4-3550	4-3820	.178	109.8	22.2	-.2	.583	93.8	.443	1.146	184.8	459.2	.638	1.654D	115.2	1.071	1.8	16.2	35.8	.473
		11.48	8.32	4.56	3.16	6.57	3.76	17.93	1/2/2	106.0	6.2	43.1	.939	2.720	79.1	109.5	33.6	114.1D	1.614
4-3180	4-3308.9	.265	41.9	-48.2	-14.2	.933	94.0	.159	.863	202.2	371.6	.726	1.000D	91.6	1.261	16.2	81.2	225.9	.355
4-3308.9	4-3550	.355	272.1	59.6	12.8	1.381	90.9	.388	1.189	356.9	541.0	.728	1.650	89.4	.610	-11.1	-15.6	111.9	.192
4-3550	4-3820	.178	109.8	22.2	-.2	.583	93.8	.443	1.146	184.8	459.2	.638	1.654D	115.2	1.071	1.8	16.2	35.8	.473
		13.58	9.50	5.74	4.08	7.47	3.76	17.93	1/2/2	101.7	6.2	25.0	.477	4.618	82.4	107.4	16.6	111.3D	1.726
4-3180	4-3325.2	.230	341.4	57.6	12.1	.926	92.9	.164	.853	195.1	391.0	.713	.993D	94.2	1.256	-10.6	-64.3	233.5	.261
4-3325.2	4-3550	.261	253.0	-13.0	-2.5	1.380	83.6	.397	1.181	22.6	180.8	.712D	1.650	89.5	.605	4.0	36.9	122.8	.153
4-3550	4-3820	.178	109.8	22.2	-.2	.583	93.8	.443	1.146	184.8	459.2	.638	1.654D	115.2	1.071	1.8	16.2	35.8	.473
		12.14	8.92	5.15	3.22	6.63	3.76	17.93	2/1/2	104.5	6.2	53.0	.883	2.242	79.8	87.4	-49.2	74.9L	1.097

MARS ARRIVAL DATE = 2443560 (20 FEB 1978)

4-3170	4-3300.2	.172	33.8	-42.9	-8.4	.932	92.5	.153	.859	194.2	360.3	.728	.990D	90.0	1.259	10.9	74.1	253.0	.247
4-3300.2	4-3560	.247	281.4	15.7	2.8	1.382	94.8	.395	1.189	342.9	545.0	.719	1.659	86.7	.607	-.9	18.4	113.3	.151
4-3560	4-3810	.208	93.4	22.8	-.5	.603	101.0	.436	1.182	194.9	454.8	.666	1.698D	114.3	1.081	1.9	15.8	28.1	.462
		11.94	8.75	4.31	3.18	6.59	4.44	17.66	1/2/2	114.0	4.9	60.6	.967	1.983	81.7	111.6	45.3	117.9D	.971
4-3180	4-3305.1	.182	28.5	-40.9	-8.4	.934	94.3	.159	.865	203.6	367.3	.727	1.002D	91.0	1.262	10.5	72.0	243.3	.241
4-3305.1	4-3560	.241	277.7	24.7	4.2	1.382	92.8	.392	1.191	349.9	544.3	.725	1.658	87.2	.608	-2.4	12.1	113.9	.150
4-3560	4-3820	.190	106.2	22.7	-.2	.585	97.0	.447	1.154	188.9	458.8	.638	1.671D	115.4	1.074	1.8	16.3	36.0	.477
		11.63	8.47	4.45	3.19	6.56	4.03	18.02	1/2/2	112.1	6.1	51.0	1.035	2.325	78.2	112.7	38.2	119.7D	1.366
4-3180	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.713	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3560	.262	255.1	-18.7	-3.5	1.381	84.1	.398	1.186	20.9	183.6	.714D	1.657	87.6	.605	5.0	40.2	122.6	.159
4-3560	4-3820	.190	106.2	22.7	-.2	.585	97.0	.447	1.154	188.9	458.8	.638	1.671D	115.4	1.074	1.8	16.3	36.0	.477
		12.55	9.20	5.17	3.36	6.78	4.03	18.02	2/1/2	109.1	6.1	48.0	.875	2.457	78.3	91.4	-45.6	78.6L	1.278

MARS ARRIVAL DATE = 2443570 (2 MAR 1978)

4-3180	4-3305.1	.182	28.4	-40.8	-8.5	.934	94.3	.159	.865	203.7	367.2	.727	1.002D	91.0	1.262	10.5	71.9	243.4	.241
4-3305.1	4-3570	.241	280.4	21.1	5.6	1.383	93.3	.395	1.196	348.3	547.1	.724	1.667	85.4	.608	-1.9	14.7	113.9	.154
4-3570	4-3820	.205	103.5	23.0	-.2	.590	100.3	.454	1.165	192.9	458.4	.636	1.694D	115.7	1.078	1.9	16.3	36.2	.484
		12.07	8.83	4.44	3.24	6.65	4.39	18.18	1/2/2	117.1	5.9	55.0	1.038	2.167	77.7	115.7	39.7	117.2D	1.211
4-3180	4-3324.8	.241	340.1	58.3	12.8	.926	93.0	.164	.853	195.5	390.4	.714	.993D	94.1	1.256	-11.5	-66.2	232.0	.273
4-3324.8	4-3570	.273	257.6	-29.5	-5.6	1.382	84.8	.398	1.192	16.3	186.3	.715D	1.666	85.9	.606	7.0	46.2	125.0	.173
4-3570	4-3820	.205	103.5	23.0	-.2	.590	100.3	.454	1.165	192.9	458.4	.636	1.694D	115.7	1.078	1.9	16.3	36.2	.484
		13.36	9.72	5.33	3.64	7.04	4.39	18.18	2/1/2	112.0	5.9	39.9	.805	2.932	76.3	96.6	-38.3	79.6L	1.595

MARS ARRIVAL DATE = 2443580 (12 MAR 1978)

4-3180	4-3305.2	.183	28.7	-41.0	-8.4	.934	94.3	.159	.865	203.6	367.4	.727	1.002D	91.0	1.262	10.6	72.2	243.1	.243
4-3305.2	4-3580	.243	283.1	18.9	3.3	1.384	93.8	.398	1.200	346.7	549.8	.723	1.678	83.7	.609	-1.6	16.1	114.3	.159
4-3580	4-3820	.225	101.7	23.1	-.2	.596	103.7	.463	1.179	197.0	458.1	.633	1.725D	116.1	1.082	1.9	16.3	36.3	.494
		12.66	9.31	4.46	3.35	6.76	4.85	18.41	1/2/2	121.4	5.8	57.9	1.020	2.069	77.3	118.6	40.4	118.8D	1.086
4-3190	4-3310.6	.203	25.9	-38.0	-8.8	.938	96.1	.169	.872	213.0	375.1	.725	1.020D	92.2	1.266	10.4	68.7	235.3	.246
4-3310.6	4-3580	.246	277.8	29.9	5.1	1.384	91.5	.395	1.202	354.6	549.2	.727	1.676	84.1	.610	-3.5	8.6	114.3	.160
4-3580	4-3830	.204	114.2	22.6	-.2	.576	99.5	.475	1.147	190.9	462.1	.605	1.689D	117.1	1.074	1.8	20.6	44.5	.506
		12.46	9.09	4.73	3.37	6.77	4.56	18.71	1/2/2	119.4	7.4	45.8	.994	2.970	72.8	120.0	33.8	118.3D	1.561
4-3190	4-3331.3	.247	344.8	56.7	12.8	.925	94.3	.173	.854	201.5	397.0	.706	1.002D	98.2	1.257	-12.0	-63.4	235.3	.292
4-3331.3	4-3580	.292	256.2	-19.5	-4.1	1.382	82.2	.408	1.190	27.5	189.0	.704D	1.676	83.9	.603	8.3	39.8	122.4	.173
4-3580	4-3830	.204	114.2	22.6	-.2	.576	99.5	.475	1.147	190.9	462.1	.605	1.689D	117.1	1.074	1.8	20.6	44.5	.506
		13.43	9.78	5.42	3.65	7.08	4.56	18.71	2/1/2	117.6	7.4	46.1	.708	2.554	77.9	93.2	-48.6	71.2L	1.098

STOPOVER TIME = 0 DAYS | 1978 OUTBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2443490
12 DEC 1977

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3160	4-3311.0	.215	336.2	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.3	235.4	.216
4-3311.0	4-3490	.218	258.4	-.3	-.0	1.384	88.4	.393	1.199	5.6	156.9	.727D	1.671A	102.6	.645	2.0	24.2	139.5	.162
4-3490	4-3840	.337	149.2	14.1	.6	.592	61.1	.618	1.112	157.4	479.4	.425	1.799	127.7	1.065	2.4	20.6	46.6	.683
		16.09	12.67	4.92	3.42	6.82	7.75	23.16	2/1/2	60.3	15.0	66.9	1.265	1.767	80.7	91.5	-54.2	91.8D	.971
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3150	4-3302.4	.226	337.0	60.6	12.3	.931	89.3	.150	.856	176.2	366.4	.727	.984	90.8	1.257	-9.3	-70.6	242.0	.219
4-3302.4	4-3500	.219	268.6	-7.7	-1.2	1.381	92.1	.389	1.188	352.6	524.2	.726	1.650A	99.6	.633	3.1	31.0	134.9	.193
4-3500	4-3830	.233	142.6	15.7	.2	.590	72.6	.515	1.119	162.0	469.1	.542	1.695	120.4	1.063	2.0	19.4	41.2	.559
		13.36	10.14	5.08	3.21	6.62	5.06	19.99	2/1/2	71.2	10.3	65.1	1.250	1.859	80.7	100.7	-48.7	106.7D	1.073
4-3160	4-3311.1	.213	338.4	59.6	11.5	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-67.0	235.4	.216
4-3311.1	4-3500	.216	258.9	-3.1	-.5	1.382	88.5	.389	1.191	5.4	163.2	.727D	1.655A	100.2	.634	2.4	27.5	136.4	.192
4-3500	4-3840	.299	150.5	13.7	.7	.583	65.4	.586	1.109	159.5	476.5	.460	1.759	125.4	1.062	2.3	21.1	47.9	.643
		14.64	11.63	4.89	3.21	6.61	6.74	22.12	2/1/2	68.6	13.8	66.0	1.288	1.837	80.2	92.5	-52.8	92.4D	1.078
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3160	4-3295.2	.162	38.2	-42.0	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.8	73.5	262.0	.245
4-3295.2	4-3510	.246	274.9	14.5	2.6	1.379	95.0	.390	1.178	342.1	529.6	.718	1.637A	96.5	.621	-.6	17.7	120.7	.143
4-3510	4-3840	.267	150.9	13.7	.7	.576	69.3	.559	1.107	161.6	474.2	.488	1.726	123.5	1.061	2.2	21.5	49.0	.611
		13.12	10.10	4.18	3.02	6.43	5.91	21.29	1/2/2	82.7	12.7	59.5	.998	2.016	85.9	100.1	45.5	114.7D	1.014
4-3160	4-3311.1	.213	338.5	59.6	11.4	.929	90.4	.152	.854	182.4	376.2	.724	.984D	92.1	1.256	-9.1	-66.9	235.5	.216
4-3311.1	4-3510	.216	259.9	-7.1	-1.1	1.381	88.6	.387	1.187	4.9	167.2	.728D	1.646A	97.6	.626	3.0	31.1	133.3	.147
4-3510	4-3840	.267	150.9	13.7	.7	.576	69.3	.559	1.107	161.6	474.2	.488	1.726	123.5	1.061	2.2	21.5	49.0	.611
		13.69	10.60	4.86	3.10	6.50	5.91	21.29	2/1/2	77.0	12.7	62.0	1.294	1.940	79.5	94.3	-50.5	93.6D	1.217
4-3170	4-3318.4	.219	339.2	58.6	11.7	.927	91.6	.157	.853	188.7	384.1	.720	.987D	93.2	1.256	-9.9	-65.8	233.2	.236
4-3318.4	4-3510	.236	251.7	-4.0	-.7	1.380	85.4	.392	1.183	16.5	167.2	.720D	1.646A	98.0	.624	2.5	29.0	133.0	.148
4-3510	4-3850	.346	157.1	11.9	1.3	.569	60.8	.641	1.098	159.6	482.3	.395	1.802	129.5	1.059	2.7	22.9	55.5	.710
		16.10	12.98	4.98	3.12	6.53	8.00	23.87	2/1/2	76.6	16.6	62.9	1.082	1.917	81.5	84.0	-53.6	80.4L	.992
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3160	4-3295.2	.162	38.3	-42.2	-8.0	.930	90.9	.150	.856	185.2	353.6	.727A	.984D	89.2	1.258	10.9	73.7	262.0	.247
4-3295.2	4-3520	.247	276.2	15.1	2.3	1.379	95.2	.391	1.177	341.2	533.3	.717	1.636A	94.3	.615	-.4	19.4	119.4	.142
4-3520	4-3840	.241	150.3	13.9	.6	.569	73.1	.538	1.106	164.2	472.2	.511	1.701	122.0	1.060	2.2	21.8	49.9	.585
		12.44	9.45	4.18	2.99	6.40	5.26	20.64	1/2/2	90.7	11.9	61.1	.988	1.967	85.6	101.8	46.1	115.4D	.955
4-3160	4-3311.0	.215	336.1	59.7	11.6	.929	90.4	.152	.854	182.4	376.1	.724	.984D	92.1	1.256	-9.2	-67.4	235.3	.216
4-3311.0	4-3520	.218	261.6	-14.0	-2.2	1.380	88.9	.386	1.185	3.8	171.0	.728D	1.642A	95.6	.620	4.0	36.4	130.9	.147
4-3520	4-3840	.241	150.3	13.9	.6	.569	73.1	.538	1.106	164.2	472.2	.511	1.701	122.0	1.060	2.2	21.8	49.9	.585
		13.27	10.18	4.92	3.09	6.50	5.26	20.64	2/1/2	85.0	11.9	56.1	1.262	2.128	78.5	96.8	-46.4	95.7D	1.423
4-3170	4-3318.5	.218	339.4	58.5	11.6	.927	91.6	.157	.853	188.7	384.2	.720	.987D	93.2	1.256	-9.8	-65.2	233.3	.234
4-3318.5	4-3520	.234	253.0	-6.8	-1.2	1.379	85.6	.390	1.181	15.7	170.9	.721D	1.642A	95.7	.616	2.9	31.8	129.9	.145
4-3520	4-3850	.308	156.2	11.5	1.2	.561	65.3	.609	1.095	161.4	479.5	.429	1.762	127.1	1.056	2.6	23.3	56.8	.670
		15.00	11.94	4.96	3.06	6.47	6.98	22.80	2/1/2	84.5	15.3	60.0	1.097	2.000	80.7	86.2	-52.1	81.3L	1.097
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3160	4-3307.9	.294	330.9	62.3	16.6	.930	90.6	.151	.855	183.5	372.4	.726	.984D	91.6	1.257	-14.1	-78.9	226.6	.313
4-3307.9	4-3530	.313	267.4	-52.6	-10.4	1.380	90.5	.385	1.185	358.2	534.7	.726	1.641A	95.3	.615	12.2	59.5	138.5	.199
4-3530	4-3840	.220	148.7	14.6	.6	.563	76.8	.521	1.105	167.2	470.7	.529	1.681	120.9	1.060	2.1	22.1	50.6	.565
		15.26	11.01	6.26	4.25	7.64	4.75	20.13	2/1/2	92.1	11.2	29.3	.615	3.953	61.4	102.5	-21.5	107.4D	1.816
4-3160	4-3309.7	.240	335.1	60.8	13.1	.929	90.5	.151	.855	182.9	374.6	.725	.984D	91.9	1.256	-10.8	-71.8	234.0	.247
4-3309.7	4-3530	.247	264.9	-33.9	-5.7	1.380	89.7	.385	1.185	1.0	174.6	.728D	1.641A	93.4	.615	7.5	46.9	132.0	.164
4-3530	4-3840	.220	148.7	14.6	.6	.563	76.8	.521	1.105	167.2	470.7	.529	1.681	120.9	1.060	2.1	22.1	50.6	.565
		13.50	10.05	5.30	3.45	6.85	4.75	20.13	2/1/2	92.2	11.2	41.2	.989	2.839	78.4	100.7	-33.9	101.8D	1.819
4-3170	4-3300.1	.170	33.5	-42.6	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.6	253.2	.244
4-3300.1	4-3530	.244	275.2	23.9	4.1	1.380	93.7	.388	1.181	346.9	535.6	.723	1.640A	92.7	.613	-2.2	11.7	117.3	.142
4-3530	4-3850	.276	156.5	11.5	1.1	.554	69.6	.582	1.093	163.6	477.2	.457	1.729	125.2	1.057	2.4	23.6	56.0	.637
		13.45	10.45	4.29	3.00	6.41	6.16	21.95	1/2/2	95.7	14.3	51.3	1.007	2.311	83.0	104.3	39.9	114.7D	1.320
4-3170	4-3318.6	.218	339.5	58.5	11.6	.927	91.6	.157	.853	188.7	384.2	.719	.987D	93.2	1.256	-9.7	-65.1	233.4	.234
4-3318.6	4-3530	.234	254.6	-10.8	-1.8	1.379	85.9	.389	1.182	14.7	174.4	.722D	1.642A	95.6	.613	3.5	35.0	127.4	.145
4-3530	4-3850	.276	156.5	11.5	1.1	.554	69.6	.582	1.093	163.6	477.2	.457	1.729	125.2	1.057	2.4	23.6	56.0	.637
		14.18	11.11	4.95	3.07	6.47	6.16	21.95	2/1/2	91.8	14.3	56.3	1.102	2.121	79.6	89.1	-49.7	82.7L	1.234
MARS ARRIVAL DATE = 2443540 (31 JAN 1978)																			
4-3170	4-3300.0	.169	33.1	-42.3	-8.1	.932	92.5	.153	.859	194.2	360.0	.728A	.990D	90.0	1.259	10.6	73.5	253.4	.242
4-3300.0	4-3540	.242	277.1	19.3	3.3	1.380	94.0	.390	1.183	345.5	539.1	.721	1.644A	90.6	.610	-1.5	15.6	115.5	.143
4-3540	4-3850	.250	157.8	11.9	1.0	.549	73.7	.561	1.092	166.2	475.4	.480	1.704	123.7	1.056	2.3	23.8	56.9	.610
		12.78	9.76	4.27	3.02	6.43	5.49	21.28	1/2/2	102.6	13.5	55.8	1.029	2.136	82.5	106.6	42.2	115.5D	1.169
4-3170	4-3318.4	.220	339.2	58.6	11.7	.927	91.6	.157	.853	188.8	384.1	.720	.987D	93.2	1.256	-9.9	-65.6	233.1	.236
4-3318.4	4-3540	.236	256.7	-17.1	-2.9	1.380	86.3	.389	1.184	13.2	177.8	.723D	1.645A	91.5	.610	4.6	39.3	126.0	.150
4-3540	4-3850	.250	157.8	11.9	1.0	.549	73.7	.561	1.092	166.2	475.4	.480	1.704	123.7	1.056	2.3	23.8	56.9	.610
		13.63	10.48	4.98	3.15	6.56	5.49	21.28	2/1/2	98.2	13.5	50.9	1.060	2.325	78.3	92.6	-45.8	84.7L	1.432
4-3160	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.713	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3540	.262	251.1	-9.2	-1.8	1.379	83.2	.397	1.177	24.0	177.9	.710D	1.644A	91.4	.608	3.4	34.4	123.6	.149
4-3540	4-3860	.319	165.8	9.0	1.7	.540	65.3	.631	1.080	163.3	482.6	.398	1.763	128.9	1.053	2.8	24.9	66.1	.696
		15.59	12.45	5.17	3.14	6.55	7.28	23.49	2/1/2	98.9	16.9	56.6	.875	2.108	81.1	85.9	-51.4	73.7L	.969
MARS ARRIVAL DATE = 2443550 (10 FEB 1978)																			
4-3170	4-3300.1	.170	33.4	-42.5	-8.2	.932	92.5	.153	.859	194.2	360.1	.728	.990D	90.0	1.259	10.7	73.7	253.3	.243
4-3300.1	4-3550	.243	279.2	17.1	3.0	1.381	94.4	.392	1.185	344.2	542.1	.720	1.650	88.8	.608	-1.1	17.4	114.1	.146
4-3550	4-3850	.230	156.2	12.6	1.0	.544	77.6	.544	1.091	169.2	473.8	.498	1.685	122.5	1.056	2.2	23.9	59.7	.590
		12.35	9.26	4.28	3.08	6.49	4.98	20.76	1/2/2	108.7	12.8	58.5	1.014	2.047	82.1	109.0	43.0	116.6D	1.061
4-3170	4-3317.6	.233	337.5	59.4	12.6	.928	91.7	.156	.854	189.1	383.2	.720	.987D	93.1	1.256	-10.7	-68.2	231.6	.252
4-3317.6	4-3550	.252	259.5	-30.5	-5.3	1.381	87.1	.390	1.187	10.5	180.6	.725D	1.650	89.6	.609	6.9	47.2	127.0	.163
4-3550	4-3850	.230	156.2	12.6	1.0	.544	77.6	.544	1.091	169.2	473.8	.498	1.685	122.5	1.056	2.2	23.9	59.7	.590
		13.62	10.18	5.20	3.44	6.64	4.98	20.76	2/1/2	102.9	12.8	41.1	.950	2.852	76.8	97.6	-36.9	86.9L	1.759
4-3160	4-3305.7	.190	30.3	-42.2	-9.0	.934	94.2	.159	.864	203.5	368.0	.727	1.001D	91.1	1.262	11.1	73.3	242.0	.253
4-3305.7	4-3550	.253	274.8	33.5	5.8	1.381	92.2	.389	1.188	352.3	541.3	.726	1.650	89.2	.609	-4.0	5.3	114.1	.150
4-3550	4-3860	.287	166.0	9.0	1.5	.534	69.9	.605	1.078	165.5	480.3	.426	1.730	126.9	1.052	2.6	25.1	67.2	.662
		14.15	10.99	4.56	3.16	6.57	6.44	22.61	1/2/2	106.0	15.6	43.1	.939	2.720	79.1	109.5	33.6	114.1D	1.614
4-3160	4-3308.9	.265	41.9	-48.2	-14.2	.933	94.0	.159	.863	202.2	371.6	.726	1.000D	91.6	1.261	16.2	81.2	225.9	.355
4-3308.9	4-3550	.355	272.1	59.6	12.8	1.381	90.9	.388	1.189	356.9	541.0	.728	1.650	89.4	.610	-11.1	-15.6	111.9	.192
4-3550	4-3860	.287	166.0	9.0	1.5	.534	69.9	.605	1.078	165.5	480.3	.426	1.730	126.9	1.052	2.6	25.1	67.2	.662
		16.26	12.18	5.74	4.08	7.47	6.44	22.61	1/2/2	101.7	15.6	25.0	.477	4.618	82.4	107.4	16.8	111.3D	1.726
4-3160	4-3326.2	.230	341.4	57.6	12.1	.926	92.9	.164	.853	195.1	391.0	.713	.993D	94.2	1.256	-10.8	-64.3	233.5	.261
4-3326.2	4-3550	.261	253.0	-13.0	-2.5	1.380	83.6	.397	1.181	22.6	180.8	.712D	1.650	89.5	.605	4.0	36.9	122.8	.153
4-3550	4-3860	.287	166.0	9.0	1.5	.534	69.9	.605	1.078	165.5	480.3	.426	1.730	126.9	1.052	2.6	25.1	67.2	.662
		14.61	11.39	5.18	3.22	6.63	6.44	22.61	2/1/2	104.5	15.8	53.0	.883	2.242	78.8	87.4	-49.2	74.9L	1.097
MARS ARRIVAL DATE = 2443560 (20 FEB 1978)																			
4-3170	4-3300.2	.172	33.8	-42.9	-8.4	.932	92.5	.153	.859	194.2	360.3	.728	.990D	90.0	1.259	10.8	74.1	253.0	.247
4-3300.2	4-3560	.247	281.4	15.7	2.8	1.382	94.8	.395	1.189	342.9	545.0	.719	1.659	86.7	.607	-.9	18.4	113.3	.151
4-3560	4-3860	.214	153.8	13.7	.8	.541	81.5	.531	1.098	178.4	472.6	.513	1.671	131.6	1.056	2.1	24.1	60.3	.574
		12.10	8.92	4.31	3.18	6.59	4.60	20.37	1/2/2	114.0	12.2	60.6	.987	1.983	81.7	111.6	43.3	117.9D	.971

STOPOVER TIME = 0 DAYS | 1978 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2443560
20 FEB 1978

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3160	4-3305.1	.182	28.5	-40.9	-8.4	.934	94.3	.159	.865	203.6	367.3	.727	1.002D	91.0	1.262	10.5	72.0	243.3	.241
4-3305.1	4-3560	.241	277.7	24.7	4.2	1.382	92.8	.392	1.191	349.9	544.3	.725	1.656	67.2	.606	-2.4	12.1	113.9	.150
4-3560	4-3660	.261	195.2	9.5	1.4	.530	74.5	.583	1.077	168.1	478.4	.449	1.705	125.4	1.051	2.4	25.2	68.2	.635
		13.36	10.21	4.45	3.15	6.56	5.76	21.91	1/2/2	112.1	15.0	51.0	1.033	2.323	78.2	112.7	36.2	115.7D	1.366
4-3160	4-3325.1	.231	341.3	57.6	12.2	.926	92.9	.164	.853	195.1	390.9	.713	.993D	94.2	1.256	-10.9	-64.5	233.4	.262
4-3325.1	4-3560	.262	255.1	-18.7	-3.5	1.381	84.1	.398	1.186	20.9	183.6	.714D	1.657	67.6	.605	5.0	40.2	122.8	.159
4-3560	4-3660	.261	185.2	9.5	1.4	.530	74.5	.583	1.077	168.1	478.4	.449	1.705	125.4	1.051	2.4	25.2	68.2	.635
		14.29	10.93	5.17	3.36	6.76	5.76	21.91	2/1/2	109.1	15.0	48.0	.875	2.457	78.3	91.4	-45.6	76.6L	1.275

MARS ARRIVAL DATE = 2443570 (2 MAR 1978)

4-3160	4-3305.1	.182	28.4	-40.8	-8.3	.934	94.3	.159	.865	203.7	367.2	.727	1.002D	91.0	1.262	10.5	71.9	243.4	.241
4-3305.1	4-3570	.241	280.4	21.1	5.6	1.383	93.3	.395	1.196	348.3	547.1	.724	1.667	85.4	.608	-1.9	14.7	113.9	.154
4-3570	4-3660	.240	163.5	10.3	1.3	.526	78.6	.566	1.077	171.0	476.9	.468	1.686	124.1	1.051	2.3	25.3	69.0	.614
		12.92	9.66	4.44	3.24	6.65	5.24	21.37	1/2/2	117.1	14.3	55.0	1.036	2.167	77.7	115.7	39.7	117.2D	1.211
4-3160	4-3324.5	.241	340.1	58.3	12.8	.926	93.0	.164	.853	195.5	390.4	.714	.993D	94.1	1.256	-11.5	-66.2	232.0	.273
4-3324.5	4-3570	.273	257.6	-29.5	-5.6	1.382	84.8	.398	1.192	16.5	186.3	.718D	1.666	85.9	.608	7.0	46.2	125.0	.173
4-3570	4-3660	.240	163.5	10.3	1.3	.526	78.6	.566	1.077	171.0	476.9	.468	1.686	124.1	1.051	2.3	25.3	69.0	.614
		14.21	10.57	5.35	3.64	7.04	5.24	21.37	2/1/2	112.0	14.3	39.9	.805	2.932	76.3	86.6	-38.3	79.6L	1.555

MARS ARRIVAL DATE = 2443580 (12 MAR 1978)

4-3160	4-3305.2	.183	28.7	-41.0	-8.4	.934	94.3	.159	.865	203.6	367.4	.727	1.002D	91.0	1.262	10.6	72.2	243.1	.243
4-3305.2	4-3580	.243	283.1	18.9	5.3	1.384	93.6	.398	1.200	346.7	549.8	.723	1.676	83.7	.609	-1.6	16.1	114.3	.159
4-3580	4-3660	.225	160.8	11.5	1.3	.525	82.8	.553	1.078	174.1	475.7	.482	1.673	123.2	1.052	2.2	25.5	69.6	.598
		12.66	9.52	4.46	3.35	6.76	4.86	20.97	1/2/2	121.4	13.7	57.9	1.020	2.065	77.3	118.6	40.4	118.8D	1.066
4-3190	4-3310.6	.205	25.9	-38.0	-8.8	.936	96.1	.169	.872	213.0	375.1	.725	1.020D	92.2	1.266	10.4	68.7	235.5	.248
4-3310.6	4-3580	.246	277.8	29.9	5.1	1.384	91.5	.395	1.202	354.6	549.2	.727	1.676	84.1	.610	-3.5	8.6	114.3	.160
4-3580	4-3670	.273	172.4	6.9	1.8	.511	75.0	.605	1.061	169.7	461.4	.419	1.703	127.0	1.045	2.5	26.1	77.7	.658
		14.16	10.79	4.73	3.37	6.77	6.06	22.51	1/2/2	119.4	16.8	49.8	.994	2.570	78.8	120.0	33.8	116.3D	1.561
4-3190	4-3331.8	.247	344.8	56.7	12.8	.925	94.3	.173	.854	201.8	397.0	.706	1.002D	95.2	1.257	-12.0	-63.4	235.5	.292
4-3331.8	4-3580	.292	256.2	-19.6	-4.1	1.382	82.2	.406	1.190	27.5	189.0	.704D	1.676	83.9	.603	5.3	39.8	122.4	.173
4-3580	4-3670	.273	172.4	6.9	1.8	.511	75.0	.605	1.061	169.7	461.4	.419	1.703	127.0	1.045	2.5	26.1	77.7	.658
		15.15	11.46	5.42	3.65	7.05	6.06	22.51	2/1/2	117.6	16.8	46.1	.706	2.554	77.9	93.2	-48.6	71.2L	1.098

1978

INBOUND SWINGBY

4.3

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2443510
1 JAN 1978

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	$SPEED1 $SPEED3 $SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	$PEED2 $PEED4 $PEED6 PERIC
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3320	4-3510	.422	63.1	10.1	-5.2	1.137	110.7	.459	1.479	289.0	487.5	.801	2.158A	116.8	.748	4.1	8.0	188.7	.303
4-3510	4-3720.8	.166	111.5	28.2	1.6	.595	86.3	.430	1.136	175.1	309.8	.647A	1.625	75.5	1.371	.8	1.6	272.1	.383
4-3720.8	4-3800	.383	267.2	14.1	4.0	1.391	103.3	.454	1.214	316.4	454.1	.663	1.766A	115.1	1.089	-.8	7.1	21.3	.479
		19.30	12.44	8.93	6.86	10.23	3.51	18.05	2/1/1	20.2	2.8	13.4	.409	8.560	111.0	196.3	68.4	74.1L	3.091
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3320	4-3520	.398	82.9	11.6	-4.4	1.126	109.8	.433	1.425	288.8	491.9	.809	2.041A	114.4	.726	3.3	4.3	190.2	.272
4-3520	4-3721.4	.169	107.5	28.0	1.5	.591	89.0	.432	1.138	178.7	309.8	.647A	1.629	75.4	1.371	.6	2.2	273.1	.384
4-3721.4	4-3800	.384	267.8	13.9	3.9	1.394	103.2	.459	1.226	316.8	453.5	.664	1.788A	115.2	1.092	-.7	7.4	21.4	.482
		17.99	11.93	8.40	6.03	9.41	3.56	18.14	2/1/1	22.1	2.4	12.8	.407	8.995	114.0	193.7	65.7	72.7L	3.255
4-3330	4-3520	.414	90.8	4.2	-7.3	1.141	109.5	.452	1.500	292.7	486.3	.822	2.178A	116.4	.749	6.4	8.3	195.9	.308
4-3520	4-3728.1	.160	103.4	28.1	1.3	.602	89.8	.411	1.155	179.7	321.5	.680A	1.629	79.0	1.375	.8	3.3	273.6	.322
4-3728.1	4-3810	.322	275.0	13.7	3.3	1.366	100.9	.395	1.125	320.6	456.7	.660	1.567A	112.3	1.060	.2	12.2	28.6	.419
		19.11	12.12	8.74	6.99	10.37	3.38	16.69	2/1/1	21.9	3.6	10.5	.580	10.943	83.5	236.6	-79.3	86.5L	5.771
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3320	4-3530	.378	82.8	12.6	-3.8	1.116	109.0	.411	1.384	288.7	496.3	.616	1.952A	112.0	.707	2.8	3.1	191.6	.244
4-3530	4-3722.0	.175	103.2	28.0	1.3	.589	92.0	.434	1.143	182.6	310.0	.647A	1.638D	75.4	1.372	.8	2.8	273.8	.385
4-3722.0	4-3800	.385	268.2	13.6	3.8	1.396	103.2	.463	1.236	317.2	453.0	.664	1.808A	115.3	1.096	-.7	7.6	21.6	.486
		16.98	11.66	7.97	5.33	8.71	3.69	16.21	2/1/1	24.6	2.1	12.2	.405	9.424	116.4	191.9	65.5	71.7L	3.414
4-3330	4-3530	.385	90.4	7.5	-5.7	1.130	108.6	.425	1.444	292.6	490.7	.630	2.058A	114.0	.728	4.8	5.3	197.1	.275
4-3530	4-3728.7	.168	99.0	27.8	1.1	.600	92.6	.413	1.160	183.8	321.9	.681A	1.639D	79.1	1.376	1.0	4.0	274.3	.322
4-3728.7	4-3810	.322	275.5	13.5	3.2	1.368	100.8	.398	1.129	321.0	456.2	.660	1.578A	112.4	1.063	.2	12.4	28.7	.422
		17.74	11.63	8.10	6.11	9.48	3.53	16.75	2/1/1	22.4	3.4	9.6	.580	11.945	83.0	235.8	-78.8	86.6L	6.346
4-3340	4-3530	.427	98.7	-8.0	-11.7	1.145	108.3	.444	1.517	296.5	485.2	.844	2.189A	116.0	.750	11.0	15.2	203.5	.326
4-3530	4-3736.5	.162	95.5	26.6	.7	.609	93.1	.397	1.174	184.8	335.2	.708A	1.641D	83.0	1.379	1.3	6.7	271.7	.264
4-3736.5	4-3820	.264	282.4	12.4	2.4	1.346	98.4	.345	1.063	326.4	459.2	.696	1.429A	109.8	1.039	1.2	17.7	35.9	.369
		19.93	12.47	9.05	7.47	10.84	3.42	15.59	2/1/1	28.7	6.1	12.0	.660	9.575	29.9	192.1	-28.1	123.3D	7.379
4-3340	4-3530	.427	98.7	-8.0	-11.7	1.145	108.3	.444	1.517	296.5	485.2	.844	2.189A	116.0	.750	11.0	15.2	203.5	.326
4-3530	4-3752.0	.170	94.2	3.7	-5.5	.615	93.1	.385	1.184	184.9	359.9	.728A	1.641D	90.0	1.380	7.3	41.4	255.9	.267
4-3752.0	4-3820	.267	290.9	9.8	1.9	1.391	96.2	.419	1.229	338.7	447.0	.713	1.744A	112.3	1.098	2.3	21.6	41.1	.433
		20.09	12.65	9.05	7.47	10.84	3.58	16.99	2/1/1	28.7	5.4	44.1	.845	2.664	52.4	160.2	40.8	136.9D	1.406
MARS ARRIVAL DATE = 2443540 (31 JAN 1978)																			
4-3320	4-3540	.362	82.7	13.4	-3.4	1.109	108.3	.392	1.352	288.7	500.8	.822	1.883A	109.6	.691	2.4	2.3	192.7	.219
4-3540	4-3722.5	.185	99.0	27.7	1.3	.590	95.1	.437	1.150	186.7	310.4	.648A	1.652D	75.5	1.375	.9	3.2	274.2	.386
4-3722.5	4-3800	.386	268.7	13.5	3.8	1.398	103.2	.466	1.245	317.5	452.6	.665	1.826A	115.4	1.098	-.6	7.9	21.8	.488
		16.25	11.53	7.62	4.72	8.11	3.92	18.28	2/1/1	27.6	1.9	11.6	.404	9.893	117.8	190.6	62.2	70.9L	3.591
4-3330	4-3540	.363	90.2	9.6	-4.7	1.120	107.8	.403	1.401	292.6	495.2	.837	1.965A	111.7	.710	3.9	3.4	196.3	.246
4-3540	4-3729.1	.179	94.9	27.3	1.0	.601	95.7	.416	1.169	188.1	322.4	.682A	1.655D	79.2	1.378	1.1	4.6	274.4	.322
4-3729.1	4-3810	.322	275.8	13.4	3.2	1.369	100.8	.400	1.135	321.3	455.8	.661	1.590A	112.5	1.065	.3	12.6	28.9	.424
		16.79	11.41	7.63	5.38	8.76	3.78	16.80	2/1/1	24.1	3.3	8.9	.578	12.883	81.2	229.8	-77.4	87.6L	6.873
4-3340	4-3540	.378	97.5	-.0	-7.9	1.133	107.4	.416	1.459	296.6	489.7	.851	2.067A	113.6	.729	7.3	8.7	204.1	.281
4-3540	4-3737.0	.175	91.6	26.0	.6	.610	96.1	.401	1.184	189.2	336.1	.709A	1.658D	83.2	1.381	1.4	7.4	271.4	.264
4-3737.0	4-3820	.264	282.8	12.2	2.4	1.347	98.4	.347	1.067	326.6	458.8	.697	1.438A	109.9	1.040	1.3	17.9	36.0	.371
		17.92	11.64	7.96	6.28	9.65	3.68	15.64	2/1/1	25.3	6.0	12.2	.861	9.431	25.5	191.3	-23.2	126.3D	7.259
4-3340	4-3540	.378	97.5	-.0	-7.9	1.133	107.4	.416	1.459	296.6	489.7	.851	2.067A	113.6	.729	7.3	8.7	204.1	.281
4-3540	4-3754.1	.180	91.5	5.2	-5.4	.615	95.8	.390	1.193	189.2	363.1	.728	1.657D	90.9	1.382	7.3	40.7	253.2	.266
4-3754.1	4-3820	.266	291.5	9.7	1.9	1.398	95.8	.432	1.259	340.5	445.5	.716	1.603A	112.6	1.107	2.4	22.0	41.8	.442
		18.05	11.77	7.96	6.28	9.65	3.81	17.20	2/1/1	25.3	5.8	45.9	.837	2.563	49.8	161.8	38.3	141.2D	1.309
MARS ARRIVAL DATE = 2443550 (10 FEB 1978)																			
4-3320	4-3550	.348	82.6	14.0	-3.1	1.103	107.7	.377	1.328	288.6	505.2	.827	1.826A	107.3	.676	2.2	1.9	193.4	.197
4-3550	4-3722.9	.200	95.1	27.4	1.2	.593	98.6	.441	1.162	191.2	311.1	.650A	1.674D	75.6	1.378	1.1	3.6	274.4	.387
4-3722.9	4-3800	.387	269.1	13.3	3.7	1.400	103.2	.469	1.254	317.8	452.2	.666	1.843A	115.5	1.101	-.5	8.1	21.9	.491
		15.79	11.59	7.33	4.20	7.59	4.26	18.34	2/1/1	31.0	1.7	11.0	.402	10.457	118.1	189.2	61.9	70.5L	3.804
4-3330	4-3550	.345	90.0	11.0	-4.0	1.113	107.1	.384	1.368	292.6	499.7	.843	1.894A	109.3	.694	5.3	2.2	199.4	.221
4-3550	4-3729.5	.195	91.2	26.8	.9	.605	99.0	.421	1.182	192.8	323.3	.684A	1.679D	79.3	1.382	1.2	5.1	274.2	.323
4-3729.5	4-3810	.323	276.2	13.2	3.1	1.371	100.8	.402	1.140	321.6	455.4	.681	1.599A	112.6	1.067	.4	12.7	29.0	.426
		16.16	11.40	7.26	4.76	8.15	4.14	16.85	2/1/1	26.6	3.1	8.4	.578	13.678	76.9	219.2	-74.0	90.1D	7.322
4-3340	4-3550	.349	97.1	4.3	-6.1	1.124	106.6	.394	1.416	296.7	494.3	.858	1.973A	111.2	.712	5.5	5.2	205.1	.249
4-3550	4-3737.8	.191	88.3	25.5	.5	.614	99.2	.406	1.197	194.0	357.2	.711A	1.683D	83.5	1.385	1.5	8.0	270.7	.264
4-3737.8	4-3820	.264	283.1	12.1	2.4	1.349	98.3	.349	1.071	327.2	458.4	.697	1.445A	110.0	1.042	1.3	18.0	36.2	.372
		16.87	11.41	7.35	5.46	8.84	4.06	15.66	2/1/1	25.2	5.8	12.9	.862	8.690	21.3	190.3	-18.5	129.4D	6.798
4-3340	4-3550	.349	97.1	4.3	-6.1	1.124	106.6	.394	1.416	296.7	494.3	.858	1.973A	111.2	.712	5.5	5.2	205.1	.249
4-3550	4-3756.1	.194	89.4	7.2	-5.3	.618	98.6	.396	1.204	193.7	366.2	.727	1.680D	91.8	1.385	7.0	39.0	250.3	.269
4-3756.1	4-3820	.269	292.0	9.5	1.8	1.405	95.4	.444	1.290	342.3	444.1	.718	1.863A	112.9	1.116	2.5	22.3	42.4	.451
		16.93	11.47	7.35	5.46	8.84	4.12	17.40	2/1/1	25.2	6.1	47.4	.829	2.490	46.2	163.9	35.2	144.0D	1.235
4-3400	4-3550	.309	136.3	28.1	2.8	1.216	101.8	.518	1.959	325.0	464.7	.944	2.973A	120.0	.838	-2.5	-19.1	214.7	.386
4-3550	4-3739.5	.190	87.9	25.1	.3	.616	99.3	.404	1.200	194.2	340.5	.715A	1.684D	84.4	1.385	1.6	9.0	269.2	.253
4-3739.5	4-3880	.253	288.0	65.6	10.6	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.5	-29.6	55.9	.164
		19.75	10.59	6.55	9.16	12.52	4.04	12.11	1/1/2	5.5	71.4	54.1	.937	2.060	81.1	256.5	-81.0	76.9L	.994
4-3410	4-3550	.304	139.2	25.9	2.4	1.236	100.4	.551	2.133	330.5	460.5	.957	3.308A	121.1	.863	-1.6	-16.5	217.2	.414
4-3550	4-3743.7	.189	87.4	23.7	-.1	.618	99.2	.400	1.204	194.4	347.4	.723A	1.684D	86.4	1.386	2.0	11.8	265.2	.236
4-3743.7	4-3890	.236	288.1	66.0	9.9	1.256	93.0	.156	.853	337.5	530.1	.720	.986A	91.8	.929	-7.0	-31.4	54.1	.151
		20.31	10.45	6.45	9.66	13.22	4.00	11.96	1/1/2	5.4	80.2	56.4	1.078	2.116	79.2	250.4	-48.6	84.5L	1.204
MARS ARRIVAL DATE = 2443560 (20 FEB 1978)																			
4-3320	4-3560	.337	82.5	14.5	-2.8	1.098	107.2	.364	1.308	288.6	509.6	.832	1.785A	105.0	.667	2.0	1.7	193.8	.176
4-3560	4-3725.3	.220	91.7	27.0	1.1	.601	102.2	.447	1.179	196.0	312.1	.652A	1.707D	75.7	1.382	1.2	4.0	274.1	.387
4-3725.3	4-3800	.387	269.4	13.1	3.7	1.402	103.1	.472	1.262	318.1	451.9	.666	1.857A	115.6	1.103	-.5	8.2	22.0	.493
		15.56	11.63	7.10	5.76	7.16	4.73	18.39	2/1/1	34.9	1.5	10.3	.401	11.186	116.7	187.6	63.3	70.7L	4.084
4-3330	4-3560	.330	89.6	12.0	-5.5	1.106	106.6	.368	1.343	292.7	504.2	.849	1.837A	107.1	.682	2.9	1.4	200.3	.199
4-3560	4-3729.9	.215	88.3	26.4	.9	.613	102.5	.428	1.200	197.8	324.4	.686A	1.714D	79.5	1.386	1.5	5.5	273.6	.323
4-3729.9	4-3810	.323	276.5	13.1	3.1	1.372	100.7	.405	1.145	321.9	455.1	.682	1.608A	112.7	1.066	.4	12.9	29.1	.426
		15.65	11.59	6.96	4.23	7.63	4.63	16.89	2/1/1	29.5	3.0	8.1	.577	14.131	69.8	208.4	-67.6	94.5D	7.873
4-3340	4-3560	.328	96.8	7.0	-4.9	1.116	105.9	.374	1.382	296.9	498.8	.865	1.899A	108.9	.697	4.4	3.1	206.1	.223
4-3560	4-3736.0	.212	85.8	25.1	.4	.622	102.6	.414	1.216	199.2	336.7	.713A	1.720D	83.8	1.389	1.6	8.4	269.4	.264
4-3736.0	4-3820	.264	283.5	12.0	2.4	1.350	98.3	.351	1.075	327.5	457.9	.698	1.453A	110.1	1.044	1.4	18.2	36.4	.375
		16.28	11.48	6.93	4.81	8.19	4.55	15.72	2/1/1	26.6	5.8	14.3	.861	8.041	17.7	189.0	-14.2	132.4D	6.065
4-3340	4-3560	.328	96.8	7.0	-4.9	1.116	105.9	.374	1.382	296.9	498.8	.865	1.899A	108.9	.697	4.4	3.1	206.1	.223
4-3560	4-3737.9	.210	87.7	9.6	-4.9	.623	101.7	.405	1.219	196.3	369.2	.726	1.712D	82.6	1.389	0.6	56.1	247.7	.271
4-3737.9	4-3820	.271	292.2	9.5	1.8	1.411	95.0	.455	1.320	343.9	442.9	.719	1.921A	113.2	1.124	2.6	22.6	43.0	.459
		16.24	11.44	6.93	4.81	8.19	4.51	17.59	2/1/1	26.6	6.5	48.4	.820	2.441	41.6	166.3	31.3	147.7D	1.182
4-3400	4-3560	.281	136.3	30.6	3.2	1.195	100.8	.466	1.781	328.6	469.8	.930	2.611A	117.5	.808	-2.7	-20.8	216.8	.348
4-3560	4-3739.6	.211	85.5	24.8	.3	.623	102.6	.412	1.218	199.3	341.3	.716A	1.720D	84.6	1.390	1.7	9.2	268.1	.256
4-3739.6	4-3880	.256	288.3	66.0	10.7	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.6	-30.0	56.0	.166
		18.61	10.55	6.02	8.06	11.42	4.53	12.13	1/1/2	7.5	71.6	58.4	.918	2.048	80.6	255.0	-60.5	77.7L	.965
4-3410	4-3560	.272	138.8	27.9	2.6	1.211	99.4	.491	1.891	331.3	465.7	.963	2.818A	118.6	.825	-2.0	-19.8	219.4	.369
4-3560	4-3743.8	.210	85.1	23.7	-.1	.625	102.5	.408	1.222	199.5	348.2	.723A	1.721D	86.8	1.390	2.0	11.7	263.9	.239
4-3743.8	4-3890	.239	288.4	66.5	10.1	1.256	93.0	.156	.853	337.7	530.0	.720	.986A	91.8	.929	-7.2	-31.9	54.3	.193
		18.98	10.56	5.86	8.63	11.99	4.49	11.98	1/1/2	4.9	80.3	57.2	1.054	2.090	78.9	248.9	-48.2	89.6L	1.148

STOPOVER TIME = 0 DAYS — 1978 INBOUND SWINGBY — MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2443560
20 FEB 1978

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-3420	4-3560	.265	140.2	26.4	2.2	1.227	97.7	.518	2.019	337.3	461.9	.974	3.063A	119.6	.845	-1.4	-19.3	221.6		.390
4-3560	4-3748.4	.208	85.3	21.9	-.7	.626	102.3	.405	1.223	199.5	355.4	.727A	1.719D	88.7	1.390	2.6	15.6	258.6		.231
4-3748.4	4-3900	.231	288.7	67.6	9.8	1.256	92.4	.153	.854	341.7	537.1	.723	.985A	90.5	.928	-7.2	-34.0	52.3		.151
		19.40	10.19	5.74	9.21	12.58	4.45	11.96	1/1/2	2.9	89.3	55.6	1.131	2.146	77.1	241.8	-44.7	95.5D		1.296
4-3430	4-3560	.260	140.0	25.7	2.0	1.243	95.7	.546	2.168	343.8	458.5	.984	3.352A	120.5	.865	-1.0	-18.9	223.4		.412
4-3560	4-3754.1	.206	86.3	17.2	-2.3	.625	102.0	.404	1.222	198.9	363.9	.728	1.715D	91.1	1.389	4.0	24.1	251.6		.239
4-3754.1	4-3910	.239	289.0	71.0	10.4	1.257	91.7	.152	.856	346.8	543.3	.726	.986	89.4	.928	-8.2	-37.1	52.3		.165
		19.87	10.07	5.66	9.80	13.16	4.42	12.12	1/1/2	1.8	96.5	51.5	1.050	2.303	76.7	235.0	-38.2	108.3D		1.367
MARS ARRIVAL DATE = 2443570 (2 MAR 1978)																				
4-3320	4-3570	.327	82.4	14.9	-2.8	1.093	106.8	.354	1.293	288.6	514.0	.836	1.751A	102.8	.658	1.8	1.9	193.7		.161
4-3570	4-3723.6	.245	89.1	26.8	1.1	.613	106.1	.456	1.205	201.3	313.6	.655A	1.754D	75.9	1.389	1.5	4.4	273.5		.386
4-3723.6	4-3800	.388	269.7	13.0	3.7	1.404	103.1	.475	1.270	318.3	451.6	.667	1.672A	115.7	1.105	-.4	8.4	22.1		.496
		15.65	12.26	6.91	3.39	6.79	5.35	18.45	2/1/1	39.4	1.3	9.4	.400	12.173	113.1	185.3	66.9	71.8L		4.464
4-3330	4-3570	.318	89.7	12.9	-3.2	1.101	106.0	.355	1.323	292.8	506.7	.854	1.792A	104.8	.671	2.5	1.0	200.9		.179
4-3570	4-3730.3	.241	86.1	25.9	.8	.625	106.2	.438	1.226	203.2	326.0	.689A	1.764D	79.8	1.393	1.4	5.9	272.5		.323
4-3730.3	4-3810	.323	276.8	13.0	3.1	1.373	100.7	.407	1.150	322.1	454.8	.682	1.617A	112.6	1.070	.4	13.0	29.2		.430
		15.77	11.98	6.72	3.79	7.18	5.26	16.93	2/1/1	33.0	2.9	8.3	.576	13.876	99.5	199.9	-57.7	101.0D		7.416
4-3340	4-3570	.312	96.5	8.9	-4.2	1.110	105.3	.358	1.356	297.0	503.4	.870	1.841A	106.7	.685	3.7	1.8	207.0		.200
4-3570	4-3738.6	.238	84.0	24.7	.3	.634	106.1	.425	1.243	204.7	340.8	.715A	1.771D	84.3	1.396	1.7	8.9	267.4		.264
4-3738.6	4-3820	.264	283.9	11.8	2.3	1.352	98.2	.354	1.081	328.0	457.4	.698	1.463A	110.2	1.046	1.4	16.4	36.6		.377
		16.04	11.78	6.61	4.26	7.66	5.17	15.77	2/1/1	28.9	5.6	16.5	.862	6.955	14.7	187.5	-10.2	135.6D		5.133
4-3340	4-3570	.312	96.5	8.9	-4.2	1.110	105.3	.358	1.356	297.0	503.4	.870	1.841A	106.7	.685	3.7	1.8	207.0		.200
4-3570	4-3759.3	.231	86.5	12.5	-4.3	.632	104.8	.416	1.239	203.2	371.9	.724	1.754D	93.5	1.393	6.0	32.1	245.3		.272
4-3759.3	4-3820	.272	292.4	9.4	1.8	1.416	94.7	.465	1.346	345.2	442.0	.721	1.971A	113.4	1.130	2.7	22.9	43.5		.465
		15.87	11.61	6.61	4.26	7.66	5.00	17.74	2/1/1	28.9	6.8	49.0	.811	2.412	35.9	168.9	26.4	152.6D		1.145
4-3350	4-3570	.316	102.9	.4	-6.4	1.119	104.6	.364	1.393	301.4	498.5	.886	1.900A	108.4	.699	6.1	5.8	212.7		.227
4-3570	4-3799.4	.189	119.3	28.8	2.5	.575	95.8	.462	1.142	186.8	419.1	.614	1.669D	107.8	1.372	-1.5	-4.3	257.6		.447
4-3799.4	4-3830	.447	270.1	5.7	1.8	1.445	74.8	.561	1.495	43.0	86.4	.656D	2.334A	118.4	1.164	4.5	26.9	50.9		.572
		15.59	10.69	6.68	4.90	8.29	4.02	20.32	2/2/1	28.5	8.1	16.0	.301	7.194	39.0	174.4	-39.0	108.6D		1.865
4-3360	4-3570	.387	109.6	-23.2	-14.4	1.130	103.9	.372	1.435	305.8	493.3	.900	1.969A	110.0	.714	14.3	21.0	219.0		.292
4-3570	4-3809.7	.191	134.4	23.7	2.0	.555	91.4	.491	1.113	181.5	430.2	.567	1.660D	111.6	1.366	-1.2	-3.1	267.2		.520
4-3809.7	4-3840	.520	262.5	2.7	1.1	1.329	67.5	.461	1.002	78.8	115.7	.540D	1.464A	117.4	1.015	4.2	25.5	46.4		.496
		18.78	12.22	8.15	6.57	9.94	4.06	18.46	2/2/1	40.4	15.6	7.4	.222	15.397	129.4	186.7	50.0	84.7L		3.200
4-3410	4-3570	.248	136.2	30.4	2.8	1.191	98.4	.442	1.734	332.2	471.1	.968	2.500A	116.1	.794	-2.1	-21.2	221.5		.330
4-3570	4-3744.0	.235	83.6	23.6	-.1	.636	105.9	.420	1.248	204.9	349.5	.724A	1.771D	86.9	1.396	2.0	11.6	262.0		.242
4-3744.0	4-3890	.242	288.7	67.1	10.2	1.256	92.9	.156	.853	337.8	530.0	.720	.986A	91.8	.929	-7.4	-32.5	54.7		.156
		16.09	10.52	5.41	7.57	10.94	5.11	12.01	1/1/2	6.9	80.4	56.2	1.023	2.055	78.4	246.5	-47.7	87.3L		1.079
4-3420	4-3570	.237	138.9	28.6	2.4	1.204	96.8	.461	1.815	338.5	467.5	.978	2.652A	117.0	.810	-1.5	-20.4	223.7		.348
4-3570	4-3748.6	.233	83.8	22.2	-.6	.636	105.7	.417	1.248	204.8	356.7	.728A	1.768D	89.0	1.398	2.5	14.9	256.6		.235
4-3748.6	4-3900	.235	289.0	66.4	10.0	1.256	92.4	.153	.854	342.0	537.0	.723	.985A	90.5	.928	-7.5	-34.7	52.8		.154 *
		16.35	10.31	5.26	8.05	11.42	5.05	11.99	1/1/2	4.6	89.2	57.4	1.091	2.084	76.9	239.8	-44.5	97.2D		1.182
4-3430	4-3570	.230	136.0	27.9	2.1	1.217	94.8	.481	1.902	345.2	464.3	.987	2.818A	117.9	.825	-1.0	-19.8	225.5		.365
4-3570	4-3754.2	.230	84.8	19.1	-1.8	.635	105.3	.416	1.245	204.1	364.9	.727	1.762D	91.4	1.395	3.5	20.9	250.2		.241
4-3754.2	4-3910	.241	289.1	71.3	10.5	1.257	91.7	.152	.856	347.0	543.2	.726	.986	89.4	.928	-8.4	-37.4	52.5		.167
		16.65	10.13	5.15	8.52	11.88	4.98	12.14	1/1/2	2.8	96.4	55.2	1.031	2.159	76.7	253.8	-39.6	109.0D		1.195
MARS ARRIVAL DATE = 2443580 (12 MAR 1978)																				
4-3320	4-3580	.320	82.4	15.3	-2.4	1.090	106.4	.346	1.281	286.6	516.4	.839	1.724A	100.6	.651	1.7	2.4	193.1		.146
4-3580	4-3724.0	.276	87.1	26.2	1.0	.631	110.1	.469	1.241	207.1	315.6	.660A	1.823D	76.2	1.397	1.3	4.7	272.4		.388
4-3724.0	4-3800	.388	270.1	12.9	3.6	1.405	103.1	.478	1.277	318.6	451.5	.667	1.687A	115.8	1.107	-.4	8.5	22.2		.498
		15.98	12.90	6.76	3.08	6.49	6.14	18.50	2/1/1	44.5	1.1	8.5	.398	13.496	105.7	181.3	74.3	74.7L		4.979
4-3330	4-3580	.308	89.5	13.6	-2.9	1.097	105.6	.344	1.307	292.8	513.1	.858	1.756A	102.6	.662	2.3	1.0	201.0		.162
4-3580	4-3730.7	.272	84.5	25.5	.7	.643	110.0	.452	1.264	209.2	328.2	.693A	1.836D	80.2	1.402	1.5	6.3	270.7		.323
4-3730.7	4-3810	.323	277.1	12.8	3.0	1.374	100.7	.409	1.155	322.4	454.5	.683	1.626A	112.8	1.072	.5	13.2	29.3		.432
		15.98	12.58	6.53	3.41	6.81	6.05	16.97	2/1/1	37.1	2.8	9.1	.575	12.577	46.9	193.7	-45.3	109.1D		6.661
4-3340	4-3580	.299	96.3	10.3	-3.6	1.105	104.8	.345	1.335	297.2	508.0	.875	1.795A	104.5	.674	3.2	1.0	207.6		.180
4-3580	4-3739.6	.268	82.9	24.4	.3	.650	109.7	.439	1.281	210.6	343.7	.718A	1.843D	85.1	1.404	1.8	9.3	264.3		.264
4-3739.6	4-3820	.264	284.5	11.6	2.3	1.354	98.1	.357	1.089	328.7	456.7	.700	1.478A	110.3	1.049	1.5	18.7	36.9		.360
		16.10	12.29	6.36	3.81	7.21	5.94	15.85	2/1/1	31.9	5.5	20.0	.863	5.765	12.5	185.6	-6.4	139.5D		4.110
4-3340	4-3580	.299	96.3	10.3	-3.6	1.105	104.8	.345	1.335	297.2	508.0	.875	1.795A	104.5	.674	3.2	1.0	207.6		.180
4-3580	4-3759.9	.255	85.6	15.7	-3.4	.644	108.2	.430	1.268	208.4	373.7	.722	1.813D	94.1	1.400	5.1	26.8	243.5		.273
4-3759.9	4-3820	.273	292.4	9.4	1.8	1.418	94.5	.469	1.357	345.8	441.6	.721	1.993A	113.4	1.133	2.7	22.9	43.7		.468
		15.78	11.97	6.36	3.81	7.21	5.62	17.81	2/1/1	31.9	6.9	49.3	.806	2.400	28.8	171.7	20.2	159.0D		1.128
4-3350	4-3580	.295	102.6	3.9	-5.1	1.113	104.0	.348	1.366	301.7	502.9	.891	1.841A	106.2	.687	4.8	3.4	213.5		.202
4-3580	4-3799.8	.203	115.8	29.3	2.8	.578	99.2	.467	1.151	190.8	419.1	.614	1.688D	107.8	1.375	-1.7	-5.0	258.0		.432
4-3799.8	4-3830	.452	270.0	5.7	1.8	1.448	74.6	.564	1.499	43.6	86.5	.654D	2.344A	118.6	1.165	4.5	26.9	50.9		.575
		14.92	10.61	6.29	4.31	7.70	4.32	20.39	2/2/1	29.6	8.1	16.0	.295	7.165	41.9	174.3	-41.8	107.5D		1.817
4-3360	4-3580	.317	108.1	-10.9	-9.1	1.122	103.2	.353	1.401	306.3	496.0	.906	1.895A	107.7	.700	9.0	11.9	219.4		.238
4-3580	4-3809.8	.197	129.9	24.9	2.1	.557	95.0	.491	1.119	185.3	429.5	.570	1.669D	111.4	1.367	-1.4	-3.5	267.4		.517
4-3809.8	4-3840	.517	262.5	2.7	1.1	1.329	67.6	.459	1.002	78.3	115.6	.542D	1.462A	117.3	1.015	4.2	25.5	46.4		.494
		16.08	10.90	6.70	5.18	8.56	4.20	18.42	2/2/1	33.9	15.6	8.0	.225	14.403	128.8	188.0	50.4	84.4L		3.010
4-3410	4-3580	.225	137.5	33.3	3.1	1.175	97.6	.402	1.626	333.3	476.5	.973	2.280A	113.7	.768	-2.3	-22.8	223.4		.296
4-3580	4-3744.2	.265	82.7	23.6	-.1	.652	109.5	.435	1.283	210.7	351.1	.725A	1.842D	87.3	1.404	2.0	11.5	259.4		.247
4-3744.2	4-3890	.247	289.2	67.8	10.5	1.257	92.9	.156	.854	338.0	529.9	.721	.987A	91.9	.929	-7.7	-33.3	55.1		.160
		17.60	10.93	5.06	8.67	10.04	5.87	12.06	1/1/2	9.2	80.5	59.7	.982	2.010	77.7	243.4	-47.0	89.6L		.993
4-3420	4-3580	.213	137.4	31.2	2.5	1.186	95.9	.416	1.681	339.8	473.2	.982	2.379A	114.5	.780	-1.6	-21.5	225.8		.311
4-3580	4-3749.0	.262	83.0	22.4	-.6	.631	109.2	.432	1.282	210.4	358.4	.728A	1.837D	89.5	1.404	2.4	14.2	253.9		.241
4-3749.0	4-3900	.241	289.4	69.4	10.4	1.256	92.3	.153	.854	342.4	536.9	.723	.985A	90.6	.928	-7.8	-35.6	53.5		.159
		17.73	10.68	4.89	7.05	10.42	5.79	12.05	1/1/2	6.7	89.1	59.5	1.035	2.015	76.7	237.2	-44.1	99.4D		1.051
4-3430	4-3580	.206	135.5	30.4	2.2	1.196	94.0	.430	1.735	346.7	470.3	.990	2.481A	115.3	.792	-1.1	-20.7	227.6		.325
4-3580	4-3754.6	.258	84.0	20.2	-1.6	.648	108.8	.431	1.277	209.6	366.5	.727	1.826D	92.0	1.402	3.3	18.6	247.9		.248
4-3754.6	4-3910	.248	289.3	72.3	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-38.2	53.2		.172
		17.89	10.46	4.78	7.42	10.80	5.69	12.21	1/1/2	4.9	96.1	58.5	.976	2.048	77.1	232.2	-40.2	110.4D		1.023
4-3440	4-3580	.204	131.4	30.5	2.0	1.205	91.7	.444	1.788	354.3	468.0	.993	2.582A	116.1	.803	-.7	-20.0	228.9		.336
4-3580	4-3762.2	.257	86.7	11.6	-5.1	.642	107.9	.431	1.263	207.7	376.7	.719	1.807D	95.0	1.399	6.7	33.3	241.8		.297
4-3762.2	4-3820	.297	286.6	76.8	13.4	1.259	90.7	.155	.859	354.7	548.6	.728	.990	88.5	.928	-11.8	-42.2	56.9		.220
		18.18	10.40	4.75	7.78	11.15	5.65	12.67	1/1/2	3.5	99.5	49.1	.683	2.407	81.3	230.7	-31.3	123.9D		.962
MARS ARRIVAL DATE = 2443590 (22 MAR 1978)																				
4-3320	4-3590	.314	82.3	15.7	-2.3	1.088	106.2	.339	1.272	288.5	522.7	.841	1.703A	98.5	.645	1.6	3.2	191.8		.133
4-3590	4-3724.4	.314	85.7	25.8	1.0	.636	114.3	.487	1.296	213.5	318.2	.665A	1.926D	76.6	1.409	1.4	5.1	270.7		.389
4-3724.4	4-3800	.389	270.4	12.8	3.6	1.407	103.1	.481	1.288	318.8	450.9	.668	1.905A	115.9	1.110	-.3	8.7	22.3		.500
		16.61	13.78	6.85	2.83	6.24	7.13	18.96	2/1/1	50.3	.9	7.7	.397	14.892	92.2	181.8	67.5	61.2L		5.512
4-3330	4-3590	.300	89.4	14.3	-2.6	1.094	105.3	.335	1.294	292.9	517.5	.861	1.728A	100.5	.655	2.1	1.2	200.6		.147
4-3590	4-3731.2	.309	83.6	25.2	.7	.667	114.0	.471	1.319	215.6	331.1	.698A	1.941D	80.8	1.413	1.5	6.6	268.2		.324
4-3731.2	4-3810	.324	277.6	12.7	3.0	1.376	100.6	.412	1.162	322.8	454.0	.683	1.640A	112.9	1.074	.5	13.4	29.5		.434
		16.49	13.40	6.38	3.09	6.30	7.02	17.03	2/1/1	41.8	2.8	11.0	.574	10.412	34.5	189.2	-32.7	117.3D		3.403
4-3340	4-3590	.288	98.2	11.5	-5.2	1.100	104.4	.333	1.319	297.4	512.5	.879	1.759A	102.5	.666	2.9	.7	207.9		.163
4-3590	4-3741.1	.303	82.4	24.1	.1	.673	113.5	.458	1.334	216.8	348.0	.722A	1.945D	86.2	1.418	1.8	8.9	259.9		.264
4-3741.1	4-3820	.264	285.5	11.3	2.2	1.358	97.9	.364	1.103	329.9	455.4	.701	1.505A	110.6	1.088	1.6	19.1	37.4		.387
		16.44	13.01	6.16	3.42	6.85	6.86	18.98	2/1/1	35.6	5.3	25.3	.862	4.572	11.3	183.3	-3.1	144.5D		3.078

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2443590
22 MAR 1978

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	$PEED1 / $PEED3 / $PEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	$PEED2 / $PEED4 / $PEED6 PERIC
4-3340	4-3590	.288	96.2	11.5	-3.2	1.100	104.4	.333	1.319	297.4	512.5	.679	1.759A	102.3	.666	2.9	.7	207.9	.163
4-3590	4-3758.8	.288	84.8	19.1	-2.2	.663	112.0	.449	1.312	214.4	373.2	.722	1.902D	94.1	1.409	3.8	20.3	242.5	.271
4-3758.8	4-3820	.271	292.3	9.4	1.8	1.414	94.9	.460	1.333	344.5	442.4	.720	1.945A	113.3	1.127	2.6	22.7	43.3	.462
		16.02	12.60	6.16	3.42	6.83	6.44	17.66	2/1/1	35.6	6.7	49.1	.816	2.405	21.0	174.5	12.8	167.2D	1.146
4-3350	4-3590	.280	102.4	6.4	-4.2	1.108	103.5	.334	1.345	302.0	507.6	.696	1.795A	104.0	.677	4.1	2.0	214.1	.181
4-3590	4-3800.0	.220	113.1	29.5	2.8	.585	102.6	.475	1.163	194.8	419.4	.611	1.715D	108.2	1.378	-2.0	-5.8	256.5	.460
4-3800.0	4-3830	.460	269.9	5.7	1.9	1.448	74.2	.569	1.508	44.5	86.8	.650D	2.366A	118.8	1.167	4.5	26.8	50.7	.581
		14.58	10.78	6.01	3.83	7.23	4.74	20.54	2/2/1	31.8	8.0	16.0	.284	7.166	44.9	174.2	-44.9	106.0D	1.750
4-3360	4-3590	.284	107.7	-4.0	-6.6	1.116	102.7	.336	1.374	306.7	502.8	.912	1.636A	105.5	.669	6.6	7.1	219.8	.207
4-3590	4-3809.7	.206	125.9	25.7	2.2	.561	98.7	.494	1.128	189.2	429.1	.570	1.685D	111.4	1.370	-1.6	-3.9	267.8	.519
4-3809.7	4-3840	.519	262.5	2.7	1.1	1.328	67.5	.460	1.002	76.7	115.7	.541D	1.463A	117.4	1.015	4.2	25.5	46.4	.495
		14.96	10.54	6.06	4.42	7.81	4.46	18.45	2/2/1	32.4	15.6	8.5	.223	13.469	128.6	189.3	50.5	84.2L	2.785

MARS ARRIVAL DATE = 2443600 (1 APR 1978)

4-3320	4-3600	.310	82.4	16.1	-2.1	1.085	106.0	.334	1.265	288.4	526.9	.842	1.687A	96.4	.641	1.5	4.3	189.6	.123
4-3600	4-3724.9	.359	85.0	25.5	1.0	.690	116.5	.512	1.378	220.5	321.6	.675A	2.083D	77.2	1.425	1.5	5.4	266.2	.390
4-3724.9	4-3800	.390	270.9	12.6	3.5	1.410	103.0	.485	1.298	319.2	450.4	.668	1.927A	116.0	1.113	-.2	8.9	22.5	.503
		17.56	14.92	6.57	2.64	6.05	8.36	18.64	2/1/1	56.9	.6	7.6	.395	15.026	70.2	202.8	-68.1	93.5D	5.543
4-3330	4-3600	.294	89.4	14.8	-2.4	1.091	105.0	.328	1.265	292.9	521.9	.863	1.706A	98.4	.650	2.0	1.8	199.7	.134
4-3600	4-3731.9	.353	83.3	24.9	.6	.698	116.0	.498	1.401	222.5	334.8	.704A	2.099D	81.7	1.429	1.8	7.0	264.7	.324
4-3731.9	4-3810	.324	278.2	12.5	3.0	1.379	100.6	.416	1.173	323.3	453.3	.684	1.661A	113.1	1.078	.6	13.7	29.7	.436
		17.50	14.46	6.26	2.85	6.25	8.20	17.12	2/1/1	47.2	2.5	14.3	.571	8.006	24.5	185.4	-22.0	124.9D	4.003
4-3340	4-3600	.280	96.0	12.5	-2.8	1.097	104.0	.324	1.306	297.5	517.0	.882	1.729A	100.2	.660	2.6	.7	207.7	.147
4-3600	4-3745.2	.342	82.7	23.5	-.2	.700	117.0	.483	1.406	223.1	336.4	.727A	2.065D	80.6	1.426	2.0	11.1	251.6	.265
4-3745.2	4-3820	.265	288.0	10.6	2.0	1.370	97.4	.383	1.145	333.1	452.2	.706	1.584A	111.2	1.071	1.9	20.1	36.6	.404
		16.99	13.89	6.00	3.10	6.51	7.89	16.34	2/1/1	39.8	5.0	35.6	.859	3.267	11.4	179.6	.8	154.6D	1.947
4-3340	4-3600	.280	96.0	12.5	-2.8	1.097	104.0	.324	1.306	297.5	517.0	.882	1.729A	100.2	.660	2.6	.7	207.7	.147
4-3600	4-3752.5	.333	83.7	22.2	-.9	.694	116.3	.478	1.391	221.9	366.8	.726	2.055D	92.2	1.425	2.6	13.9	244.3	.267
4-3752.5	4-3820	.267	291.1	9.8	1.9	1.393	96.1	.422	1.235	339.2	446.6	.714	1.757A	112.4	1.100	2.3	21.7	41.2	.435
		16.76	13.65	6.00	3.10	6.51	7.66	17.03	2/1/1	39.6	5.5	45.9	.844	2.564	13.9	176.7	5.2	168.2D	1.320
4-3350	4-3600	.269	102.2	6.3	-3.6	1.104	103.1	.325	1.329	302.2	512.2	.900	1.757A	101.9	.670	3.5	1.2	214.4	.163
4-3600	4-3800.7	.241	111.4	29.6	2.9	.594	106.2	.485	1.178	198.9	420.1	.607	1.750D	108.7	1.382	-2.3	-6.3	259.0	.473
4-3800.7	4-3830	.473	269.7	5.6	1.9	1.450	73.5	.576	1.521	45.9	87.2	.645D	2.398A	119.2	1.169	4.6	26.7	50.5	.569
		14.49	11.05	5.80	3.43	6.84	5.26	20.75	2/2/1	34.9	8.0	16.0	.269	7.197	46.1	174.0	-46.1	104.3D	1.666
4-3360	4-3600	.264	107.5	-.5	-5.2	1.111	102.2	.323	1.353	307.1	507.5	.916	1.790A	103.4	.680	5.3	4.3	220.5	.183
4-3600	4-3809.9	.224	122.7	28.2	2.2	.569	102.5	.500	1.139	193.1	429.1	.569	1.709D	111.8	1.373	-1.8	-4.4	268.2	.525
4-3809.9	4-3840	.525	262.5	2.7	1.2	1.328	67.2	.464	1.001	79.5	116.0	.537D	1.465A	117.8	1.015	4.2	25.4	46.2	.499
		14.43	10.56	5.72	3.87	7.27	4.84	18.53	2/2/1	33.2	15.7	9.1	.218	12.645	128.9	190.5	50.0	84.2L	2.536

MARS ARRIVAL DATE = 2443610 (11 APR 1978)

4-3320	4-3610	.307	82.4	16.5	-2.0	1.084	105.9	.331	1.259	286.2	531.1	.843	1.676A	94.4	.636	1.5	5.7	187.1	.115
4-3610	4-3725.7	.413	84.7	25.2	.9	.734	122.7	.548	1.508	228.0	326.1	.682A	2.334D	78.1	1.447	1.6	5.8	264.8	.392
4-3725.7	4-3800	.392	271.6	12.3	3.5	1.413	103.0	.491	1.316	319.8	449.7	.669	1.963A	116.1	1.118	-.1	9.2	22.7	.508
		18.85	16.36	6.51	2.49	5.91	9.85	18.76	2/1/1	64.2	.3	9.3	.392	12.274	45.3	187.0	-45.9	108.8D	4.421
4-3330	4-3610	.289	89.4	15.4	-2.2	1.089	104.8	.323	1.277	292.8	526.2	.865	1.689A	96.4	.646	1.9	2.8	198.1	.123
4-3610	4-3733.3	.405	83.4	24.7	.5	.739	121.9	.534	1.528	229.8	340.0	.711A	2.344D	83.0	1.449	1.7	7.4	259.7	.325
4-3733.3	4-3810	.325	279.3	12.1	2.9	1.384	100.4	.424	1.192	324.3	452.2	.686	1.697A	113.3	1.064	.8	14.1	30.2	.445
		18.41	15.78	6.17	2.83	6.04	9.62	17.27	2/1/1	53.3	2.2	19.8	.568	5.820	16.8	181.8	-13.4	132.3D	2.739
4-3350	4-3610	.259	102.0	9.9	-3.1	1.100	102.8	.313	1.315	302.4	516.8	.903	1.727A	99.8	.664	3.1	.9	214.4	.147
4-3610	4-3801.4	.266	110.3	29.4	3.1	.606	109.8	.499	1.199	202.9	421.0	.601	1.797D	109.4	1.387	-2.6	-6.9	259.8	.489
4-3801.4	4-3830	.489	269.5	5.6	2.0	1.453	72.7	.586	1.540	47.7	87.7	.636D	2.441A	119.8	1.173	4.7	26.6	50.3	.600
		14.63	11.52	5.63	3.10	6.51	5.89	21.03	2/2/1	36.7	7.9	15.6	.251	7.254	51.6	173.7	-51.6	102.4D	1.569

MARS ARRIVAL DATE = 2443620 (21 APR 1978)

4-3330	4-3620	.286	89.4	15.9	-2.0	1.087	104.7	.319	1.271	292.7	530.5	.866	1.676A	94.4	.644	1.8	4.0	195.8	.114
4-3620	4-3735.8	.463	84.0	24.4	.4	.790	125.7	.564	1.731	257.4	347.1	.720A	2.741D	85.5	1.475	1.8	7.9	252.6	.328
4-3735.8	4-3810	.328	281.2	11.5	2.7	1.394	100.2	.441	1.233	326.2	450.0	.689	1.778A	113.8	1.097	1.0	14.9	31.0	.458
		19.63	17.36	6.10	2.47	5.89	11.26	17.58	2/1/1	60.1	2.2	28.4	.559	4.083	12.4	178.1	-7.2	140.9D	1.724
4-3350	4-3620	.252	101.9	11.2	-2.6	1.097	102.5	.306	1.305	302.6	521.3	.906	1.704A	97.8	.660	2.8	.9	213.8	.134
4-3620	4-3802.4	.295	110.4	29.2	3.4	.621	115.4	.515	1.220	207.0	422.1	.594	1.658D	110.2	1.394	-2.9	-7.4	260.3	.510
4-3802.4	4-3830	.510	269.3	5.5	2.0	1.456	71.8	.598	1.564	49.8	88.4	.629D	2.498A	120.4	1.177	4.7	26.8	50.0	.614
		14.98	12.14	5.90	2.65	6.24	6.64	21.58	2/2/1	43.3	7.8	19.7	.231	7.332	55.4	173.4	-55.3	100.4D	1.465

STOPOVER TIME = 0 DAYS — 1978 INBOUND SWINGBY — MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2443190
12 DEC 1977

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3280	4-3490	.437	50.9	13.8	-2.0	1.098	112.6	.434	1.294	275.0	502.5	.732	1.856A	112.0	.691	.3	8.1	163.3	.236
4-3490	4-3719.4	.171	117.6	28.4	1.9	.608	81.5	.430	1.137	168.5	310.2	.648A	1.626	75.6	1.371	.0	.1	269.5	.361
4-3719.4	4-3800	.381	265.8	14.8	4.2	1.385	103.3	.444	1.189	315.4	455.4	.661	1.717A	114.8	1.081	-1.1	6.3	20.9	.470
		17.96	12.86	9.27	5.12	8.51	3.59	17.85	2/1/1	32.8	3.6	15.2	.413	7.583	103.6	208.2	74.3	77.4L	2.720
4-3290	4-3490	.441	56.9	14.6	-2.4	1.112	112.6	.449	1.354	278.6	496.4	.746	1.961A	114.6	.715	.8	6.7	169.7	.266
4-3490	4-3726.1	.159	114.8	29.4	1.9	.617	82.5	.409	1.151	166.9	321.4	.660A	1.622	79.1	1.374	.0	.2	270.7	.321
4-3726.1	4-3810	.321	273.2	14.6	3.5	1.359	101.0	.384	1.100	319.2	458.5	.677	1.522A	111.9	1.051	-.1	11.2	26.0	.410
		16.60	12.72	9.37	5.68	9.26	3.35	16.48	2/1/1	26.5	4.5	14.6	.584	7.868	60.3	218.6	-77.7	89.1L	4.011
4-3300	4-3490	.449	67.0	14.4	-3.1	1.128	112.6	.469	1.429	282.1	490.4	.759	2.099A	117.2	.742	1.7	8.2	175.1	.299
4-3490	4-3733.7	.151	112.3	30.1	1.9	.624	83.3	.393	1.162	169.3	333.9	.706A	1.619	82.7	1.376	.1	.4	269.1	.265
4-3733.7	4-3820	.265	280.3	13.3	2.6	1.339	98.7	.334	1.041	324.3	461.6	.693	1.389A	109.4	1.029	.9	16.7	35.0	.358
		19.47	12.72	9.55	6.75	10.12	3.17	15.37	2/1/1	21.6	6.7	17.0	.858	6.765	49.7	192.5	-48.8	111.4D	4.946
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3280	4-3500	.423	51.1	13.7	-2.0	1.091	112.0	.419	1.269	274.7	506.8	.737	1.801A	109.5	.674	.2	8.0	163.5	.211
4-3500	4-3720.1	.167	114.9	28.3	1.7	.601	83.8	.430	1.136	171.7	310.0	.647A	1.624	75.5	1.371	.3	.9	270.9	.362
4-3720.1	4-3800	.382	266.5	14.5	4.1	1.388	103.3	.449	1.202	315.9	454.7	.662	1.742A	114.9	1.085	-1.0	6.7	21.1	.474
		17.00	12.47	8.95	4.53	7.92	3.52	17.95	2/1/1	37.3	3.2	14.2	.411	8.094	107.6	200.7	71.4	75.6L	2.916
4-3290	4-3500	.424	59.0	14.7	-2.3	1.103	111.8	.429	1.319	278.2	500.7	.752	1.885A	112.1	.695	.7	6.3	170.7	.238
4-3500	4-3726.9	.157	111.6	28.9	1.6	.610	84.7	.409	1.151	172.3	321.3	.680A	1.621	79.0	1.374	.4	1.5	272.0	.321
4-3726.9	4-3810	.321	273.9	14.3	3.4	1.362	101.0	.388	1.108	319.7	457.8	.678	1.538A	112.1	1.055	.0	11.6	28.2	.413
		17.44	12.26	8.97	5.18	8.56	3.30	16.56	2/1/1	30.2	4.1	12.9	.583	8.877	81.7	225.7	-78.5	88.0L	4.593
4-3300	4-3500	.428	67.0	14.7	-2.9	1.117	111.7	.444	1.379	281.8	494.8	.767	1.992A	114.7	.719	1.4	5.4	176.6	.268
4-3500	4-3734.5	.148	108.5	28.7	1.4	.618	85.4	.393	1.163	172.9	334.0	.706A	1.619	82.8	1.376	.6	2.9	270.2	.265
4-3734.5	4-3820	.264	280.9	13.0	2.6	1.341	98.6	.337	1.047	324.9	460.9	.694	1.400A	109.5	1.032	1.0	17.0	35.2	.361
		18.12	12.18	9.06	5.93	9.31	3.13	15.43	2/1/1	24.5	6.5	14.7	.859	7.835	44.3	193.0	-43.2	114.4D	5.873
4-3300	4-3500	.428	67.0	14.7	-2.9	1.117	111.7	.444	1.379	281.8	494.8	.767	1.992A	114.7	.719	1.4	5.4	176.6	.268
4-3500	4-3745.8	.154	103.8	2.7	-5.0	.623	85.8	.381	1.172	173.1	351.6	.726A	1.618	87.7	1.377	6.9	39.0	261.6	.264
4-3745.8	4-3820	.264	288.1	10.5	2.0	1.371	97.3	.384	1.147	333.3	452.0	.706	1.588A	111.3	1.071	1.9	20.2	36.9	.404
		18.23	12.30	9.06	5.93	9.31	3.25	16.36	2/1/1	24.5	5.0	37.0	.861	3.154	55.4	158.5	44.7	135.2D	1.854
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3280	4-3510	.412	51.3	13.7	-2.0	1.086	111.5	.407	1.250	274.4	511.2	.741	1.759A	107.0	.659	.2	8.2	163.1	.190
4-3510	4-3720.8	.166	111.5	28.2	1.6	.595	86.3	.430	1.136	175.1	309.8	.647A	1.625	75.5	1.371	.5	1.6	272.1	.363
4-3720.8	4-3800	.383	267.2	14.1	4.0	1.391	103.5	.454	1.214	316.4	454.1	.663	1.766A	115.1	1.089	-.8	7.1	21.3	.479
		16.24	12.21	8.70	4.03	7.43	3.51	18.05	2/1/1	42.5	2.8	13.4	.409	8.560	111.0	196.3	68.4	74.1L	3.091
4-3290	4-3510	.409	59.1	14.7	-2.2	1.096	111.2	.413	1.292	278.0	505.1	.758	1.826A	109.7	.679	.7	6.1	171.2	.213
4-3510	4-3727.5	.157	107.7	28.5	1.4	.605	87.2	.410	1.152	175.9	321.3	.680A	1.623	79.0	1.374	.6	2.5	273.0	.321
4-3727.5	4-3810	.321	274.5	14.0	3.3	1.364	100.9	.392	1.116	320.2	457.2	.679	1.554A	112.2	1.058	.1	11.9	28.4	.417
		16.52	11.94	8.64	4.58	7.97	3.30	16.63	2/1/1	34.2	3.9	11.6	.582	9.922	82.9	232.3	-79.1	87.0L	5.190
4-3300	4-3510	.410	67.1	14.9	-2.7	1.108	110.9	.424	1.342	281.6	499.1	.773	1.911A	112.2	.700	1.3	4.8	177.8	.240
4-3510	4-3735.8	.150	104.3	27.8	1.1	.613	87.8	.393	1.165	176.8	334.3	.707A	1.622	82.8	1.376	.9	4.6	271.0	.264
4-3735.8	4-3820	.264	281.5	12.8	2.5	1.343	98.6	.340	1.053	325.5	460.3	.695	1.410A	109.6	1.034	1.1	17.3	35.5	.364
		17.03	11.80	8.65	5.23	8.62	3.15	15.49	2/1/1	27.8	6.3	13.2	.860	6.706	59.3	193.0	-37.9	117.4D	6.629
4-3300	4-3510	.410	67.1	14.9	-2.7	1.108	110.9	.424	1.342	281.6	499.1	.773	1.911A	112.2	.700	1.3	4.8	177.8	.240
4-3510	4-3747.7	.157	100.6	2.4	-5.2	.619	88.1	.381	1.174	176.9	354.2	.727A	1.622	88.4	1.378	7.2	40.4	260.2	.265
4-3747.7	4-3820	.265	289.2	10.3	2.0	1.377	97.0	.395	1.172	335.1	450.3	.709	1.636A	111.6	1.080	2.0	20.7	39.6	.414
		17.18	11.95	8.65	5.23	8.62	3.30	16.57	2/1/1	27.8	5.0	39.5	.856	2.957	55.3	158.4	44.0	136.0D	1.676
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3280	4-3520	.403	51.4	13.7	-1.9	1.082	111.1	.398	1.235	274.1	515.4	.744	1.726A	104.5	.647	.2	8.7	161.9	.172
4-3520	4-3721.4	.169	107.5	28.1	1.5	.591	89.0	.432	1.138	178.7	309.8	.647A	1.629	75.4	1.371	.6	2.2	273.1	.364
4-3721.4	4-3800	.384	267.8	13.9	3.9	1.394	103.2	.459	1.226	316.8	455.5	.664	1.768A	115.2	1.092	-.7	7.4	21.4	.482
		15.70	12.07	8.51	3.63	7.03	3.56	18.14	2/1/1	48.5	2.4	12.8	.407	8.995	114.0	193.7	65.7	72.7L	3.255
4-3290	4-3520	.397	59.2	14.7	-2.2	1.090	110.6	.400	1.271	277.7	509.4	.762	1.780A	107.2	.665	.6	6.2	171.2	.192
4-3520	4-3726.1	.160	103.4	28.1	1.3	.602	89.8	.411	1.155	179.7	321.5	.680A	1.629	79.0	1.375	.8	3.3	273.8	.322
4-3726.1	4-3810	.322	275.0	13.7	3.3	1.366	100.9	.395	1.123	320.6	456.7	.680	1.567A	112.3	1.060	.2	12.2	28.6	.419
		15.83	11.76	8.38	4.08	7.47	3.38	16.69	2/1/1	38.9	3.6	10.5	.580	10.943	83.5	236.6	-79.3	86.5L	5.771
4-3300	4-3520	.394	67.1	15.0	-2.5	1.101	110.3	.407	1.314	281.4	503.5	.779	1.848A	109.8	.663	1.2	4.5	178.6	.216
4-3520	4-3735.9	.154	99.8	27.1	.9	.610	90.4	.395	1.168	180.6	334.7	.707A	1.629D	82.9	1.377	1.1	5.8	271.5	.264
4-3735.9	4-3820	.264	281.9	12.6	2.5	1.345	98.5	.343	1.058	326.0	459.7	.695	1.421A	109.7	1.037	1.2	17.5	35.7	.366
		16.19	11.56	8.32	4.63	8.02	3.24	15.54	2/1/1	31.5	6.2	12.3	.860	9.316	34.6	192.7	-33.0	120.3D	7.155
4-3300	4-3520	.394	67.1	15.0	-2.5	1.101	110.3	.407	1.314	281.4	503.5	.779	1.848A	109.8	.663	1.2	4.5	178.6	.216
4-3520	4-3749.8	.162	97.3	2.9	-5.4	.616	90.5	.382	1.178	180.8	356.9	.728A	1.629D	89.2	1.379	7.5	41.1	258.3	.265
4-3749.8	4-3820	.265	290.1	10.0	1.9	1.384	96.6	.406	1.198	336.9	448.7	.711	1.684A	111.9	1.089	2.2	21.1	40.4	.422
		16.35	11.72	8.32	4.63	8.02	3.40	16.76	2/1/1	31.5	5.2	41.8	.855	2.802	54.1	159.2	42.6	137.3D	1.540
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3280	4-3530	.397	51.5	13.7	-1.9	1.078	110.8	.391	1.224	273.8	519.7	.746	1.702A	102.1	.637	.2	9.3	160.0	.157
4-3530	4-3722.0	.175	103.2	28.0	1.3	.589	92.0	.434	1.143	182.6	310.0	.647A	1.638D	75.4	1.372	.8	2.8	273.8	.365
4-3722.0	4-3800	.385	268.2	13.6	3.8	1.396	103.2	.463	1.236	317.2	453.0	.664	1.808A	115.3	1.096	-.7	7.8	21.8	.488
		15.37	12.06	8.37	3.31	6.72	3.69	18.21	2/1/1	54.9	2.1	12.2	.405	9.424	116.4	191.9	65.5	71.7L	3.414
4-3290	4-3530	.388	59.3	14.8	-2.1	1.086	110.2	.390	1.255	277.5	513.8	.766	1.745A	104.8	.653	.6	6.6	170.6	.173
4-3530	4-3728.7	.166	99.0	27.8	1.1	.600	92.6	.413	1.160	183.8	321.9	.681A	1.639D	79.1	1.376	1.0	4.0	274.3	.322
4-3728.7	4-3810	.322	275.5	13.5	3.2	1.368	100.8	.398	1.129	321.0	456.2	.680	1.578A	112.4	1.063	.2	12.4	28.7	.422
		15.37	11.71	8.18	3.66	7.06	3.53	16.75	2/1/1	44.1	3.4	9.6	.580	11.945	83.0	235.8	-78.8	86.6L	6.346
4-3300	4-3530	.382	67.2	15.2	-2.4	1.095	109.7	.393	1.292	281.2	507.9	.784	1.799A	107.4	.669	1.1	4.4	178.9	.194
4-3530	4-3736.8	.162	95.5	26.6	.7	.609	93.1	.397	1.174	184.8	335.2	.708A	1.641D	83.0	1.379	1.3	6.7	271.7	.264
4-3736.8	4-3820	.264	282.4	12.4	2.4	1.346	98.4	.345	1.063	326.4	459.2	.696	1.429A	109.8	1.039	1.2	17.7	35.9	.369
		15.58	11.46	8.04	4.12	7.52	3.42	15.59	2/1/1	35.7	6.1	12.0	.860	9.575	29.9	192.1	-26.1	123.3D	7.379
4-3300	4-3530	.382	67.2	15.2	-2.4	1.095	109.7	.393	1.292	281.2	507.9	.784	1.799A	107.4	.669	1.1	4.4	178.9	.194
4-3530	4-3752.0	.170	94.2	3.7	-5.5	.615	93.1	.385	1.184	184.9	359.9	.728A	1.641D	90.0	1.380	7.3	41.4	255.9	.267
4-3752.0	4-3820	.267	290.9	9.8	1.9	1.391	96.2	.419	1.229	338.7	447.0	.713	1.744A	112.3	1.098	2.3	21.6	41.1	.433
		15.74	11.62	8.04	4.12	7.52	3.56	16.99	2/1/1	35.7	5.4	44.1	.845	2.664	52.4	160.2	40.8	138.9D	1.406
MARS ARRIVAL DATE = 2443540 (31 JAN 1978)																			
4-3280	4-3540	.393	51.7	13.7	-1.9	1.075	110.6	.386	1.216	273.5	523.8	.747	1.684A	99.7	.628	.2	10.7	157.4	.146
4-3540	4-3722.5	.185	99.0	27.7	1.3	.590	95.1	.437	1.150	186.7	310.4	.648A	1.652D	75.5	1.375	.9	3.2	274.2	.366
4-3722.5	4-3800	.386	268.7	13.5	3.8	1.398	103.2	.466	1.245	317.5	452.6	.665	1.826A	115.4	1.098	-.6	7.9	21.8	.488
		15.27	12.20	8.28	3.07	6.48	3.92	18.28	2/1/1	62.2	1.9	11.6	.404	9.893	117.8	190.6	62.2	70.9L	3.591
4-3290	4-3540	.381	59.4	14.8	-2.1	1.082	109.9	.382	1.243	277.2	518.0	.769	1.718A	102.5	.642	.6	7.2	169.2	.158
4-3540	4-3729.1	.179	94.9	27.3	1.0	.601	95.7	.416	1.169	188.1	322.4	.682A	1.655D	79.2	1.378	1.1	4.6	274.4	.322
4-3729.1	4-3810	.322	275.8	13.4	3.2	1.369	100.8	.400	1.135	321.3	455.8	.681	1.590A	112.5	1.065	.3	12.6	28.9	.424
		15.12	11.80	8.02	3.32	6.72	3.78	18.80	2/1/1	50.1	3.3	8.9	.578	12.683	81.2	229.8	-77.4	87.6L	6.873
4-3300	4-3540	.372	67.2	15.3	-2.3	1.090	109.2	.382	1.274	281.0	512.2	.788	1.761A	105.0	.658	1.0	4.8	178.7	.175
4-3540	4-3737.0	.175	91.6	26.0	.6	.610	96.1	.401	1.184	189.2	336.1	.709A	1.658D	83.2	1.381	1.4	7.4	271.4	.264
4-3737.0	4-3820	.264	282.8	12.2	2.4	1.347	96.4	.347	1.067	326.8	458.8	.697	1.438A	109.9	1.040	1.3	17.9	36.0	.371
		15.20	11.51	7.83	3.69	7.09	3.66	15.64	2/1/1	40.6	6.0	12.2	.861	9.431	29.5	191.3	-29.2	126.3D	7.259
4-3300	4-3540	.372	67.2	15.3	-2.3	1.090	109.2	.382	1.274	281.0	512.2	.788	1.761A	105.0	.658	1.0	4.8	178.7	.175
4-3540	4-3754.1	.180	91.5	5.2	-5.4	.615	95.8	.390	1.193	188.2	365.1	.728	1.657D	90.9	1.382	7.3	40.7	253.2	.268
4-3754.1	4-3820	.268	291.5	9.7	1.9	1.398	95.8	.432	1.259	340.8	445.5	.716	1.603A	112.6	1.107	2.4	22.0	41.8	.442
		15.35	11.64	7.83	3.69	7.09	3.81	17.20	2/1/1	40.5	5.8	45.9	.837	2.583	49.8	161.8	38.3	141.2D	1.309

STOPOVER TIME = 0 DAYS — 1978 INBOUND SWINGBY — MISSION DURATION = 320 DAYS
MARS ARRIVAL DATE = 2443540
31 JAN 1978

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-3370	4-3540	.364	124.1	41.4	6.6	1.161	105.7	.479	1.717	309.8	474.0	.695	2.539A	116.5	.797	-6.6	-23.7	201.2	.357
4-3540	4-3743.6	.172	90.4	23.7	-.1	.614	96.2	.393	1.191	189.7	346.9	.722A	1.659D	86.3	1.362	2.0	11.9	265.6	.234
4-3743.6	4-3890	.234	287.9	65.6	9.8	1.256	93.0	.156	.853	337.4	530.2	.720	.986A	91.8	.929	-6.9	-31.0	53.9	.149
		19.59	11.30	7.67	8.29	11.66	3.63	11.94	1/1/2	16.0	80.2	55.8	1.099	2.137	79.4	251.2	-48.6	83.9L	1.250
4-3380	4-3540	.351	127.7	33.4	4.2	1.200	105.0	.508	1.648	314.5	469.1	.909	2.787A	119.9	.822	-4.2	-19.7	206.3	.376
4-3540	4-3748.2	.171	90.3	20.3	-1.0	.615	96.1	.391	1.193	189.6	354.1	.727A	1.659D	88.3	1.383	2.9	16.0	260.6	.227
4-3748.2	4-3900	.226	286.5	66.9	9.6	1.256	92.4	.153	.854	341.5	537.2	.723	.985A	90.5	.926	-7.0	-33.3	51.8	.146
		19.88	11.00	7.39	8.89	12.25	3.60	11.92	1/1/2	9.8	89.4	52.1	1.172	2.276	77.2	243.7	-44.1	93.9D	1.495
4-3380	4-3540	.351	127.7	33.4	4.2	1.200	105.0	.508	1.648	314.5	469.1	.909	2.787A	119.9	.822	-4.2	-19.7	206.3	.376
4-3540	4-3766.1	.175	97.6	42.1	5.2	.610	94.6	.395	1.184	187.1	380.0	.716	1.652D	95.6	1.380	-5.5	-18.9	243.5	.258
4-3766.1	4-3900	.258	260.1	-75.0	-11.4	1.257	89.1	.151	.857	6.6	173.5	.728D	.986A	91.2	.930	13.3	69.4	348.6	.242
		19.98	11.09	7.39	8.69	12.25	3.70	13.22	1/2/1	9.8	87.1	56.7	.905	2.104	85.2	237.4	42.4	116.4D	.999

MARS ARRIVAL DATE = 2443550 (10 FEB 1978)

4-3280	4-3550	.391	51.9	13.6	-1.9	1.073	110.5	.383	1.209	273.1	527.9	.746	1.672A	97.3	.621	.2	12.0	154.0	.137
4-3550	4-3722.9	.200	95.1	27.4	1.2	.593	98.6	.441	1.162	191.2	311.1	.650A	1.674D	75.6	1.378	1.1	5.6	274.4	.387
4-3722.9	4-3800	.387	269.1	13.3	3.7	1.400	103.2	.469	1.254	317.8	452.2	.666	1.843A	115.5	1.101	-.5	8.1	21.9	.491
		15.39	12.49	8.23	2.91	6.32	4.26	18.34	2/1/1	70.2	1.7	11.0	.402	10.457	118.1	189.2	61.9	70.5L	3.804
4-3290	4-3550	.376	59.5	14.9	-2.0	1.079	109.6	.376	1.234	277.0	522.2	.770	1.697A	100.1	.634	.5	8.2	167.2	.145
4-3550	4-3729.5	.195	91.2	26.8	.9	.605	99.0	.421	1.182	192.8	323.3	.684A	1.679D	79.3	1.382	1.2	5.1	274.2	.323
4-3729.5	4-3810	.323	276.2	13.2	3.1	1.371	100.8	.402	1.140	321.6	455.4	.681	1.599A	112.6	1.067	.4	12.7	29.0	.426
		15.10	12.05	7.91	3.05	6.46	4.14	16.85	2/1/1	56.9	3.1	8.4	.378	13.878	76.9	219.2	-74.0	90.1D	7.322
4-3300	4-3550	.364	67.2	15.5	-2.2	1.086	108.9	.373	1.261	280.8	516.5	.791	1.731A	102.7	.648	1.0	5.1	177.9	.159
4-3550	4-3737.5	.191	86.3	25.5	.5	.614	99.2	.406	1.197	194.0	337.2	.711A	1.683D	83.5	1.385	1.5	6.0	270.7	.264
4-3737.5	4-3820	.264	283.1	12.1	2.4	1.349	98.3	.349	1.071	327.2	458.4	.697	1.445A	110.0	1.042	1.3	16.0	36.2	.372
		15.05	11.71	7.66	3.54	6.74	4.06	15.68	2/1/1	45.9	5.8	12.9	.862	8.690	81.3	190.3	-16.5	129.4D	6.798
4-3300	4-3550	.364	67.2	15.5	-2.2	1.086	108.9	.373	1.261	280.8	516.5	.791	1.731A	102.7	.648	1.0	5.1	177.9	.159
4-3550	4-3756.1	.194	89.4	7.2	-5.3	.616	98.6	.396	1.204	193.7	366.2	.727	1.680D	91.8	1.385	7.0	39.0	250.3	.269
4-3756.1	4-3820	.269	292.0	9.5	1.8	1.405	95.4	.444	1.290	342.3	444.1	.718	1.863A	112.9	1.116	2.5	22.3	42.4	.451
		15.12	11.78	7.66	3.34	6.74	4.12	17.40	2/1/1	45.9	6.1	47.4	.829	2.490	46.2	163.9	35.2	144.0D	1.235
4-3370	4-3550	.360	126.9	50.1	9.3	1.165	104.7	.440	1.613	310.1	478.7	.903	2.324A	116.1	.770	-9.4	-30.2	199.8	.333
4-3550	4-3743.7	.189	87.4	23.7	-.1	.618	99.2	.400	1.204	194.4	347.4	.723A	1.684D	86.4	1.386	2.0	11.8	265.2	.236
4-3743.7	4-3890	.236	288.1	66.0	9.9	1.256	93.0	.156	.853	337.5	530.1	.720	.986A	91.8	.929	-7.0	-31.4	54.1	.151
		19.23	11.58	7.58	7.64	11.01	4.00	11.96	1/1/2	22.9	80.2	56.4	1.078	2.116	79.2	250.4	-48.6	84.5L	1.204
4-3380	4-3550	.327	129.0	37.5	5.1	1.181	103.9	.463	1.706	314.8	473.9	.916	2.496A	117.5	.792	-5.1	-22.9	207.7	.342
4-3550	4-3748.2	.167	87.5	21.3	-.8	.619	99.1	.397	1.205	194.4	354.5	.727A	1.684D	86.4	1.386	2.7	16.5	259.9	.228
4-3748.2	4-3900	.228	288.5	67.2	9.8	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.1	-33.5	52.0	.149
		18.78	10.86	6.91	7.90	11.27	3.97	11.93	1/1/2	13.0	89.3	53.9	1.158	2.206	77.5	243.2	-44.6	94.3D	1.397
4-3380	4-3550	.327	129.0	37.5	5.1	1.181	103.9	.463	1.706	314.8	473.9	.916	2.496A	117.5	.792	-5.1	-22.9	207.7	.342
4-3550	4-3763.4	.244	97.6	61.1	14.0	.614	97.9	.399	1.197	192.5	376.6	.720	1.675D	94.7	1.383	-12.4	-54.4	240.7	.363
4-3763.4	4-3900	.363	259.4	-64.2	-16.7	1.257	89.6	.150	.857	2.9	173.9	.728D	.986A	91.1	.930	16.7	70.3	339.7	.328
		20.14	12.24	6.91	7.90	11.27	5.33	14.76	1/2/1	13.0	88.1	30.1	.456	3.048	87.6	236.6	20.5	123.8D	1.298
4-3380	4-3550	.327	129.0	37.5	5.1	1.181	103.9	.463	1.706	314.8	473.9	.916	2.496A	117.5	.792	-5.1	-22.9	207.7	.342
4-3550	4-3764.2	.224	95.9	56.2	11.3	.614	97.8	.399	1.196	192.1	377.6	.719	1.674D	95.0	1.383	-9.7	-45.8	242.0	.323
4-3764.2	4-3900	.323	260.4	-81.2	-14.7	1.257	89.5	.150	.857	4.0	173.7	.728D	.986A	91.1	.930	16.7	70.2	342.0	.295
		19.63	11.73	6.91	7.90	11.27	4.83	14.14	1/2/1	13.0	87.8	36.0	.577	3.239	86.7	237.0	26.1	123.2D	1.293
4-3390	4-3550	.316	132.6	51.6	3.6	1.198	102.9	.489	1.819	319.8	469.2	.930	2.708A	118.8	.815	-3.4	-20.3	211.7	.364
4-3550	4-3754.6	.189	88.7	12.5	-3.5	.616	98.8	.396	1.204	193.9	364.0	.728	1.681D	91.1	1.385	5.3	31.3	252.3	.248
4-3754.6	4-3910	.248	289.3	72.2	10.6	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.926	-8.7	-38.1	55.2	.172
		19.19	10.70	6.69	8.49	11.86	4.01	12.20	1/1/2	6.5	96.1	45.4	.979	2.594	77.2	235.5	-34.2	109.8D	1.360
4-3390	4-3550	.316	132.6	51.6	3.6	1.198	102.9	.489	1.819	319.8	469.2	.930	2.708A	118.8	.815	-3.4	-20.3	211.7	.364
4-3550	4-3758.4	.230	91.8	-9.4	-12.0	.617	98.4	.397	1.202	193.3	369.4	.725	1.679D	92.7	1.385	13.7	60.4	245.3	.377
4-3758.4	4-3910	.377	301.9	84.1	17.4	1.257	91.0	.151	.857	352.1	542.0	.727	.986	89.6	.929	-15.4	-45.7	60.6	.274
		20.17	11.68	6.69	8.49	11.86	4.99	13.76	1/1/2	6.5	95.1	26.8	.423	4.321	84.6	234.1	-15.7	120.0D	1.405

MARS ARRIVAL DATE = 2443560 (20 FEB 1978)

4-3280	4-3560	.390	52.1	13.9	-1.9	1.072	110.6	.382	1.205	272.6	531.9	.745	1.665A	94.9	.616	.2	13.5	150.1	.132
4-3560	4-3723.3	.220	91.7	27.0	1.1	.601	102.2	.447	1.179	196.0	312.1	.652A	1.707D	75.7	1.382	1.2	4.0	274.1	.387
4-3723.3	4-3800	.387	269.4	13.1	3.7	1.402	103.1	.472	1.262	316.1	451.9	.666	1.857A	115.6	1.103	-.5	8.2	22.0	.493
		15.76	12.95	8.22	2.81	6.22	4.73	18.39	2/1/1	76.7	1.5	10.3	.401	11.186	116.7	187.6	63.3	70.7L	4.084
4-3290	4-3560	.372	59.7	15.0	-2.0	1.077	109.5	.372	1.227	276.7	526.3	.770	1.683A	97.8	.627	.5	9.5	164.4	.135
4-3560	4-3729.9	.215	88.3	26.4	.9	.613	102.5	.426	1.200	197.8	324.4	.686A	1.714D	79.5	1.386	1.3	5.5	273.6	.325
4-3729.9	4-3810	.325	276.5	13.1	3.1	1.372	100.7	.405	1.145	321.9	455.1	.682	1.606A	112.7	1.066	.4	12.9	29.1	.428
		15.32	12.46	7.84	2.86	6.27	4.63	16.89	2/1/1	64.3	3.0	8.1	.577	14.131	89.8	208.4	-67.6	94.5D	7.573
4-3300	4-3560	.358	67.3	15.6	-2.1	1.083	108.6	.366	1.251	280.6	520.7	.793	1.708A	100.4	.640	.9	5.9	176.4	.145
4-3560	4-3736.0	.212	85.8	25.1	.4	.622	102.6	.414	1.216	199.2	336.7	.713A	1.720D	83.6	1.389	1.6	8.4	269.4	.264
4-3736.0	4-3820	.264	283.5	12.0	2.4	1.350	98.3	.351	1.075	327.5	457.9	.698	1.453A	110.1	1.044	1.4	16.2	36.4	.375
		15.13	12.08	7.53	3.05	6.46	4.55	15.72	2/1/1	52.1	5.8	14.3	.861	8.041	17.7	189.0	-14.2	132.4D	6.065
4-3300	4-3560	.358	67.3	15.6	-2.1	1.083	108.6	.366	1.251	280.6	520.7	.793	1.708A	100.4	.640	.9	5.9	176.4	.145
4-3560	4-3757.9	.210	87.7	9.6	-4.9	.623	101.7	.405	1.219	198.3	369.2	.726	1.712D	92.6	1.389	6.6	36.1	247.7	.271
4-3757.9	4-3820	.271	292.2	9.5	1.8	1.411	95.0	.455	1.320	343.9	442.9	.719	1.921A	113.2	1.124	2.6	22.6	43.0	.459
		15.09	12.04	7.53	3.05	6.46	4.51	17.59	2/1/1	52.1	6.5	48.4	.820	2.441	41.6	166.3	31.3	147.7D	1.182
4-3360	4-3560	.312	131.5	45.3	6.5	1.165	102.9	.425	1.607	315.3	478.8	.924	2.290A	115.1	.766	-6.4	-27.2	208.2	.313
4-3560	4-3748.4	.208	85.3	21.9	-.7	.626	102.3	.405	1.223	199.5	355.4	.727A	1.719D	88.7	1.390	2.6	15.6	258.6	.231
4-3748.4	4-3900	.231	288.7	67.6	9.8	1.256	92.4	.153	.854	341.7	537.1	.723	.985A	90.5	.926	-7.2	-34.0	52.3	.151
		18.16	11.06	6.61	7.10	10.48	4.45	11.96	1/1/2	17.5	89.3	55.6	1.131	2.146	77.1	241.8	-44.7	95.5D	1.296
4-3390	4-3560	.292	133.3	35.0	4.2	1.180	101.9	.445	1.687	320.3	474.2	.937	2.437A	116.4	.785	-3.9	-22.7	213.4	.328
4-3560	4-3754.1	.206	86.3	17.2	-2.3	.625	102.0	.404	1.222	198.9	363.9	.726	1.715D	91.1	1.389	4.0	24.1	251.6	.239
4-3754.1	4-3910	.239	289.0	71.0	10.4	1.257	91.7	.152	.856	346.8	543.3	.726	.986	89.4	.926	-8.2	-37.1	52.3	.165
		18.16	10.64	6.23	7.52	10.89	4.42	12.12	1/1/2	11.1	96.5	51.5	1.050	2.303	76.7	235.0	-38.2	108.3D	1.367

MARS ARRIVAL DATE = 2443570 (2 MAR 1978)

4-3280	4-3570	.392	52.3	14.0	-1.9	1.071	110.7	.383	1.202	272.1	535.8	.742	1.662A	92.6	.611	.2	14.9	146.1	.131
4-3570	4-3723.6	.245	89.1	26.6	1.1	.613	106.1	.456	1.205	201.3	313.6	.655A	1.754D	75.9	1.389	1.3	4.4	273.5	.388
4-3723.6	4-3800	.388	269.7	13.0	3.7	1.404	103.1	.475	1.270	316.3	451.6	.667	1.872A	115.7	1.105	-.4	8.4	22.1	.496
		16.38	13.61	8.26	2.77	6.19	5.35	18.45	2/1/1	87.3	1.3	9.4	.400	12.173	113.1	185.3	66.9	71.8L	4.464
4-3290	4-3570	.371	59.6	15.2	-1.9	1.075	109.4	.370	1.221	276.3	530.4	.770	1.673A	95.5	.622	.5	11.0	160.9	.126
4-3570	4-3730.3	.241	86.1	25.9	.8	.625	106.2	.436	1.226	203.2	326.0	.689A	1.764D	79.8	1.393	1.4	5.9	272.5	.325
4-3730.3	4-3810	.325	276.8	13.0	3.1	1.373	100.7	.407	1.150	322.1	454.8	.682	1.617A	112.8	1.070	.4	13.0	29.2	.430
		15.79	13.06	7.80	2.73	6.14	5.26	16.93	2/1/1	72.4	2.9	8.3	.376	13.876	89.5	199.9	-57.7	101.0D	7.416
4-3300	4-3570	.353	67.4	15.8	-2.0	1.081	108.4	.361	1.243	280.4	524.9	.794	1.691A	98.2	.634	.9	7.1	174.1	.134
4-3570	4-3736.9	.238	84.0	24.7	.3	.634	106.1	.425	1.243	204.7	340.8	.715A	1.771D	84.3	1.396	1.7	6.9	267.4	.264
4-3736.9	4-3820	.264	283.9	11.8	2.3	1.352	98.2	.354	1.081	328.0	457.4	.698	1.463A	110.2	1.046	1.4	16.4	36.6	.377
		15.44	12.61	7.44	2.84	6.25	5.17	15.77	2/1/1	59.0	5.6	16.5	.862	6.955	14.7	187.8	-10.2	135.6D	5.133
4-3300	4-3570	.353	67.4	15.8	-2.0	1.081	108.4	.361	1.243	280.4	524.9	.794	1.691A	98.2	.634	.9	7.1	174.1	.134
4-3570	4-3758.3	.231	86.5	12.5	-4.3	.632	104.8	.416	1.239	205.2	371.9	.724	1.754D	95.5	1.393	6.0	32.1	245.3	.272
4-3758.3	4-3820	.272	292.4	9.4	1.8	1.416	94.7	.465	1.346	345.2	442.0	.721	1.971A	113.4	1.130	2.7	22.9	43.8	.465
		15.27	12.44	7.44	2.84	6.25	5.00	17.74	2/1/1	59.0	6.8	49.0	.811	2.412	35.9	166.9	26.4	152.6D	1.145
4-3310	4-3570	.339	74.9	15.8	-2.3	1.087	107.6	.356	1.267	284.5	519.5	.816	1.717A	100.6	.645	1.3	4.0	168.0	.149
4-3570	4-3799.4	.189	119.3	20.0	2.5	.575	95.8	.462	1.142	186.8	419.1	.814	1.669D	107.8	1.372	-1.5	-4.3	257.6	.447
4-3799.4	4-3830	.447	270.1	8.7	1.6	1.445	74.8	.561	1.495	45.0	86.4	.858D	2.334A	119.4	1.184	4.9	26.0	30.9	.372
		14.23	11.16	7.15	3.07	6.47	4.02	20.32	2/2/1	48.0	8.1	16.0	.301	7.194	39.0	174.4	-39.0	106.6D	1.065

STOPOVER TIME = 0 DAYS 1978 INBOUND SWINGBY MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2443570
2 MAR 1978

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC	
4-3320	4-3570	.327	82.4	14.9	-2.6	1.093	106.8	.354	1.293	288.6	514.0	.836	1.751A	102.8	.658	1.8	1.9	193.7	.161		
4-3570	4-3809.7	.191	134.4	23.7	2.0	.555	91.4	.491	1.113	181.5	430.2	.567	1.660D	111.6	1.366	-1.2	-3.1	267.2	.520		
4-3809.7	4-3840	.520	262.5	2.7	1.1	1.329	67.5	.461	1.002	78.8	115.7	.540D	1.464A	117.4	1.015	4.2	25.5	46.4	.496		
		14.36	10.97	6.91	3.39	6.79	4.06	18.46	2/2/1	39.4	15.6	7.4	.222	15.397	129.4	186.7	50.0	84.7L	3.200		
4-3380	4-3570	.312	136.5	52.0	8.8	1.153	102.1	.394	1.534	315.9	483.7	.930	2.138A	112.7	.745	-8.6	-33.6	206.9	.292		
4-3570	4-3748.6	.233	83.8	22.2	-.6	.636	105.7	.417	1.248	204.8	356.7	.728A	1.768D	89.0	1.396	2.5	14.9	256.6	.235		
4-3748.6	4-3900	.235	289.0	68.4	10.0	1.256	92.4	.153	.854	342.0	537.0	.723	.985A	90.5	.928	-7.5	-34.7	52.8	.154		
		18.23	11.66	6.61	6.57	9.94	5.05	11.99	1/1/2	24.4	89.2	57.4	1.091	2.064	76.9	239.8	-44.5	97.2D	1.182		
4-3390	4-3570	.274	134.4	39.5	5.0	1.165	101.0	.408	1.594	321.0	479.2	.943	2.244A	114.0	.761	-4.7	-25.8	214.7	.297		
4-3570	4-3754.2	.230	84.6	19.1	-1.8	.635	105.3	.416	1.245	204.1	364.9	.727	1.762D	91.4	1.395	3.5	20.9	250.2	.241		
4-3754.2	4-3910	.241	289.1	71.3	10.5	1.257	91.7	.152	.856	347.0	543.2	.726	.986	89.4	.928	-8.4	-37.4	52.5	.167	*	
		17.57	10.88	5.90	6.69	10.07	4.98	12.14	1/1/2	14.5	96.4	55.2	1.031	2.159	76.7	233.8	-39.6	109.0D	1.195		
4-3450	4-3570	.235	130.1	28.6	1.9	1.240	89.8	.524	2.083	.5	99.8	.992D	3.174A	119.5	.852	-.3	-18.9	228.0	.399		
4-3570	4-3719.5	.248	91.5	26.8	1.2	.603	106.0	.471	1.187	199.8	305.6	.628A	1.747D	73.3	1.385	1.2	3.7	273.1	.435		
4-3719.5	4-3970	.435	291.3	10.8	3.9	1.265	109.4	.364	.863	275.1	586.2	.549	1.177	70.6	.917	.9	16.5	35.5	.348		
		20.11	10.67	5.23	9.44	12.81	5.43	15.17	1/1/2	.6	157.1	19.4	.318	5.930	22.8	195.0	-21.5	98.0D	1.567		

MARS ARRIVAL DATE = 2443580 (12 MAR 1978)

4-3260	4-3580	.395	52.6	14.2	-1.8	1.070	110.9	.385	1.200	271.5	539.6	.737	1.662A	90.2	.608	.2	16.2	142.1	.132		
4-3580	4-3724.0	.276	87.1	26.2	1.0	.631	110.1	.469	1.241	207.1	315.6	.660A	1.823D	76.2	1.597	1.3	4.7	272.4	.366		
4-3724.0	4-3800	.388	270.1	12.9	3.6	1.405	103.1	.478	1.277	318.6	451.3	.667	1.887A	115.8	1.107	-.4	8.5	22.2	.498		
		17.27	14.47	6.33	2.80	6.21	6.14	16.50	2/1/1	95.8	1.1	8.5	.398	17.496	105.7	181.3	74.3	74.7L	4.979		
4-3290	4-3580	.371	80.0	15.3	-1.9	1.074	109.5	.369	1.217	275.9	534.4	.768	1.667A	93.3	.618	.5	12.6	157.1	.124		
4-3580	4-3730.7	.272	84.5	25.5	.7	.643	110.0	.452	1.264	209.2	326.2	.693A	1.836D	80.2	1.402	1.5	6.3	270.7	.323		
4-3730.7	4-3810	.323	277.1	12.8	3.0	1.374	100.7	.409	1.155	322.4	454.5	.683	1.626A	112.8	1.072	.5	13.2	29.3	.432		
		16.51	13.85	7.81	2.66	6.07	6.05	16.97	2/1/1	80.9	2.8	9.1	.575	12.577	46.9	193.7	-45.3	109.1D	6.661		
4-3300	4-3580	.351	67.5	16.0	-2.0	1.079	108.3	.358	1.237	280.1	529.0	.794	1.679A	96.0	.629	.8	8.5	171.2	.125		
4-3580	4-3739.6	.268	82.9	24.4	.3	.650	109.7	.439	1.261	210.6	343.7	.718A	1.843D	85.1	1.404	1.8	9.3	264.3	.264		
4-3739.6	4-3820	.264	284.5	11.6	2.3	1.354	98.1	.357	1.089	328.7	456.7	.700	1.478A	110.3	1.049	1.5	16.7	36.9	.360		
		16.00	13.32	7.39	2.66	6.09	5.94	15.85	2/1/1	66.6	5.5	20.0	.863	5.765	12.5	185.6	-6.4	139.5D	4.110		
4-3300	4-3580	.351	67.5	16.0	-2.0	1.079	108.3	.358	1.237	280.1	529.0	.794	1.679A	96.0	.629	.8	8.5	171.2	.125		
4-3580	4-3759.9	.255	85.6	15.7	-3.4	.644	108.2	.430	1.268	208.4	373.7	.722	1.813D	94.1	1.400	5.1	26.8	243.5	.273		
4-3759.9	4-3820	.273	292.4	9.4	1.8	1.418	94.5	.469	1.357	345.8	441.6	.721	1.993A	113.4	1.133	2.7	22.9	43.7	.468		
		15.68	13.00	7.39	2.68	6.09	5.62	17.81	2/1/1	66.6	6.9	49.3	.806	2.400	28.8	171.7	20.2	159.0D	1.128		
4-3310	4-3580	.334	75.0	16.0	-2.1	1.084	107.3	.350	1.256	284.3	523.7	.818	1.698A	98.4	.639	1.2	4.9	183.2	.133		
4-3580	4-3799.6	.203	115.8	29.3	2.6	.578	99.2	.467	1.151	190.8	419.1	.614	1.688D	107.9	1.375	-1.7	-5.0	256.0	.452		
4-3799.6	4-3830	.452	270.0	5.7	1.6	1.446	74.6	.564	1.499	43.6	86.5	.654D	2.344A	118.6	1.165	4.5	26.9	50.9	.575		
		14.20	11.37	7.04	2.83	6.24	4.32	20.39	2/2/1	54.3	8.1	16.0	.295	7.165	41.9	174.3	-41.8	107.5D	1.817		
4-3320	4-3580	.320	82.4	15.3	-2.4	1.090	106.4	.346	1.261	288.6	518.4	.839	1.724A	100.6	.651	1.7	2.4	193.1	.146		
4-3580	4-3809.6	.197	129.9	24.9	2.1	.557	95.0	.491	1.119	185.3	429.5	.570	1.669D	111.4	1.367	-1.4	-3.5	267.4	.517		
4-3809.6	4-3840	.517	262.5	2.7	1.1	1.329	67.6	.459	1.002	78.5	115.6	.542D	1.462A	117.3	1.015	4.2	25.5	46.4	.494		
		14.04	10.96	6.76	3.08	6.49	4.20	18.42	2/2/1	44.5	15.6	8.0	.225	14.403	128.8	188.0	50.4	84.4L	3.010		
4-3380	4-3580	.353	153.7	64.4	13.7	1.142	101.3	.367	1.480	316.6	488.7	.936	2.023A	110.4	.727	-13.4	-44.1	200.1	.296		
4-3580	4-3749.0	.262	83.0	22.4	-.6	.651	109.2	.432	1.282	210.4	358.4	.728A	1.837D	89.5	1.404	2.4	14.2	253.9	.241		
4-3749.0	4-3900	.241	289.4	69.4	10.4	1.256	92.3	.153	.854	342.4	536.9	.725	.985A	90.6	.928	-7.0	-35.6	53.5	.159		
		19.67	13.21	7.42	6.66	10.03	5.79	12.05	1/1/2	36.5	89.1	59.5	1.035	2.015	76.7	237.2	-44.1	99.4D	1.051		
4-3390	4-3580	.264	136.7	45.6	6.2	1.153	100.2	.378	1.525	321.8	484.4	.949	2.101A	111.6	.740	-5.8	-30.1	215.2	.272		
4-3580	4-3754.6	.258	84.0	20.2	-1.6	.648	108.8	.431	1.277	209.6	366.5	.727	1.826D	92.0	1.402	3.3	18.8	247.9	.248		
4-3754.6	4-3910	.248	289.3	72.3	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-36.2	53.2	.172		
		17.44	11.40	5.72	6.03	9.41	5.69	12.21	1/1/2	19.0	96.1	58.5	.976	2.048	77.1	232.2	-40.2	110.4D	1.023		
4-3400	4-3580	.240	136.6	37.4	4.1	1.164	99.0	.389	1.574	327.4	480.3	.961	2.187A	112.7	.754	-3.5	-25.1	220.3	.282		
4-3580	4-3762.2	.257	86.7	11.6	-5.1	.642	107.9	.431	1.263	207.7	376.7	.719	1.807D	95.0	1.399	6.7	33.3	241.8	.297		
4-3762.2	4-3920	.297	286.6	78.8	13.4	1.259	90.7	.153	.859	354.7	548.6	.726	.990	86.5	.928	-11.8	-42.2	56.9	.220		
		17.26	10.95	5.30	6.30	9.68	5.65	12.87	1/1/2	12.7	99.5	49.1	.683	2.407	81.5	230.7	-31.5	123.9D	.962		
4-3450	4-3580	.211	125.4	30.8	1.9	1.213	89.1	.459	1.833	2.8	106.4	.992D	2.674A	116.8	.811	-.3	-19.4	229.8	.351		
4-3580	4-3717.0	.282	91.0	26.6	1.3	.613	110.3	.495	1.208	204.2	301.5	.610A	1.806D	71.5	1.390	1.3	3.6	271.6	.473		
4-3717.0	4-3970	.473	289.3	10.5	4.2	1.265	111.2	.391	.862	271.1	586.3	.525	1.199	68.9	.916	1.3	17.2	35.2	.377		
		19.26	11.15	4.65	8.13	11.50	6.30	15.77	1/1/2	2.7	157.1	18.7	.269	6.170	22.9	193.4	-21.6	95.6D	1.391		
4-3460	4-3580	.230	118.5	30.9	1.8	1.219	86.1	.474	1.866	12.2	105.8	.982D	2.750A	117.6	.817	.0	-18.8	230.1	.363		
4-3580	4-3748.0	.264	82.8	23.2	-.3	.652	109.4	.434	1.283	210.6	354.0	.727A	1.840D	88.2	1.404	2.1	12.5	257.3	.244		
4-3748.0	4-3980	.244	316.0	13.6	2.7	1.270	100.0	.242	.878	304.4	583.3	.666	1.091	78.6	.925	-1.7	10.9	49.6	.220		
		19.46	10.99	5.15	6.48	11.84	5.84	12.87	1/1/2	2.4	154.5	57.1	1.013	2.095	15.0	196.9	-1.3	138.8D	1.107		

MARS ARRIVAL DATE = 2443590 (22 MAR 1978)

4-3280	4-3590	.400	52.9	14.4	-1.8	1.070	111.2	.390	1.199	270.8	543.3	.732	1.666	87.9	.607	.2	17.3	136.6	.136		
4-3590	4-3724.4	.314	85.7	25.6	1.0	.656	114.3	.487	1.296	213.5	316.2	.665A	1.926D	76.6	1.409	1.4	5.1	270.7	.389		
4-3724.4	4-3800	.389	270.4	12.8	3.6	1.407	103.1	.481	1.286	318.8	450.9	.666	1.905A	115.9	1.110	-.3	8.7	22.3	.500		
		18.47	15.98	8.45	2.89	6.30	7.13	18.56	2/1/1	103.6	.9	7.7	.397	14.882	92.2	181.8	87.5	81.2L	5.812		
4-3290	4-3590	.373	60.2	15.5	-1.8	1.073	109.6	.370	1.215	275.4	538.2	.765	1.665A	91.0	.616	.5	14.1	153.1	.123		
4-3590	4-3731.2	.309	83.8	25.2	.7	.667	114.0	.471	1.319	215.6	331.1	.698A	1.941D	80.8	1.413	1.5	6.6	268.2	.324		
4-3731.2	4-3810	.324	277.6	12.7	3.0	1.376	100.6	.412	1.162	322.8	454.0	.663	1.640A	112.9	1.074	.5	13.4	29.5	.434		
		17.51	14.87	7.85	2.64	6.06	7.02	17.03	2/1/1	89.4	2.6	11.0	.574	10.412	34.5	189.2	-32.7	117.3D	9.403		
4-3300	4-3590	.350	67.6	16.2	-1.9	1.077	108.3	.356	1.232	279.8	533.1	.794	1.671A	93.8	.625	.8	10.1	167.7	.120		
4-3590	4-3741.1	.303	82.4	24.1	.1	.673	113.5	.458	1.334	216.8	348.0	.722A	1.945D	86.2	1.415	1.8	9.9	259.9	.264		
4-3741.1	4-3820	.264	285.5	11.3	2.2	1.358	97.9	.364	1.103	329.9	455.4	.701	1.505A	110.6	1.055	1.6	19.1	37.4	.387		
		16.80	14.22	7.37	2.58	5.99	6.66	15.98	2/1/1	74.8	5.3	25.3	.862	4.572	11.3	183.3	-3.1	144.5D	3.078		
4-3300	4-3590	.350	67.6	16.2	-1.9	1.077	108.3	.356	1.232	279.8	533.1	.794	1.671A	93.8	.625	.8	10.1	167.7	.120		
4-3590	4-3758.6	.268	84.8	19.1	-2.2	.663	112.0	.449	1.312	214.4	373.2	.722	1.902D	94.1	1.409	3.8	20.3	242.5	.271		
4-3758.6	4-3820	.271	292.3	9.4	1.8	1.414	94.9	.460	1.333	344.5	442.4	.720	1.945A	113.3	1.127	2.6	22.7	43.3	.462		
		16.38	13.81	7.37	2.58	5.99	6.44	17.66	2/1/1	74.8	6.7	49.1	.816	2.405	21.0	174.3	12.8	167.2D	1.146		
4-3310	4-3590	.331	75.0	16.3	-2.0	1.082	107.2	.346	1.251	284.1	527.9	.819	1.684A	96.3	.635	1.2	6.2	180.8	.124		
4-3590	4-3800.0	.220	113.1	29.5	2.8	.585	102.6	.475	1.163	194.8	419.4	.611	1.715D	108.2	1.378	-2.0	-5.8	258.5	.460		
4-3800.0	4-3830	.460	269.9	5.7	1.9	1.448	74.2	.569	1.508	44.5	86.8	.650D	2.366A	118.8	1.167	4.5	26.8	50.7	.581		
		14.36	11.71	6.97	2.65	6.06	4.74	20.54	2/2/1	61.4	8.0	16.0	.284	7.166	44.9	174.2	-44.9	106.0D	1.750		
4-3320	4-3590	.314	82.3	15.7	-2.3	1.088	106.2	.339	1.272	288.5	522.7	.841	1.703A	98.5	.645	1.6	3.2	191.8	.133		
4-3590	4-3809.7	.208	125.9	25.7	2.2	.561	98.7	.494	1.128	189.2	429.1	.570	1.685D	111.4	1.370	-1.6	-3.9	267.8	.519		
4-3809.7	4-3840	.519	262.5	2.7	1.1	1.328	67.5	.460	1.002	78.7	115.7	.541D	1.463A	117.4	1.015	4.2	25.5	46.4	.495		
		13.94	11.11	6.85	2.85	6.24	4.46	18.45	2/2/1	50.3	15.6	8.5	.223	13.489	128.6	189.3	50.5	84.2L	2.785		
4-3450	4-3590	.193	120.1	32.8	1.9	1.192	86.5	.409	1.677	5.2	113.2	.991D	2.363A	114.1	.776	-.3	-19.9	231.4	.310		
4-3590	4-3714.7	.323	90.7	26.4	1.4	.631	115.0	.522	1.243	209.0	298.3	.594A	1.893D	69.8	1.399	1.4	3.6	270.3	.311		
4-3714.7	4-3970	.511	287.6	10.2	4.5	1.265	113.0	.418	.861	267.4	586.1	.501	1.221	67.0	.916	1.7	17.7	35.0	.406		
		19.01	11.98	4.59	7.03	10.40	7.39	16.41	1/1/2	5.3	157.0	18.4	.250	6.255	22.4	191.6	-21.2	94.1D	1.208		
4-3460	4-3590	.213	112.7	32.3	1.8	1.196	85.6	.420	1.686	15.1	113.1	.980D	2.396A	114.8	.781	.0	-19.2	231.6	.319		
4-3590	4-3744.2	.301	82.4	23.6	-.1	.673	113.3	.456	1.334	216.8	353.0	.726A	1.842D	87.8	1.415	2.0	11.2	256.3	.255		
4-3744.2	4-3980	.255	314.8	13.2	2.7	1.269	100.5	.248	.878	302.0	583.8	.660	1.096	78.2	.924	-1.6	11.5	49.1	.227		
		16.95	11.66	4.69	7.27	10.64	6.80	12.98	1/1/2	5.4	155.0	57.1	.925	2.093	14.1	196.0	-2.1	136.9D	1.011		

MARS ARRIVAL DATE = 2443600 (1 APR 1978)

4-3280	4-3600	.407	53.3	14.6	-1.8	1.070	111.6	.396	1.199	270.0	546.8	.724	1.673	88.6	.606	.2	18.1	135.8	.144		
4-3600	4-3724.9	.359	85.0	25.8	1.0	.690	118.5	.512	1.378	220.5	321.6	.673A	2.083D	77.2	1.425	1.5	5.4	268.2	.390		
4-3724.9	4-3800	.390	270.9	12.6	3.5	1.410	103.0	.485	1.298	319.2	450.4	.668	1.927A	116.0	1.113	-.2	8.9	22.5	.505		
		19.99	16.96	8.60	3.05	6.44	8.36	18.64	2/1/1	110.6	.6	7.6	.395	15.026	70.2	202.8	-68.1	95.5D	8.543		

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2443600
1 APR 1978

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-3290	4-3600	.376	60.5	15.7	-1.8	1.073	109.8	.375	1.213	274.7	542.0	.761	1.666	88.8	.614	.5	15.4	149.3	.126
4-3600	4-3731.9	.353	83.3	24.9	.6	.698	116.0	.498	1.401	222.5	334.8	.704A	2.099D	81.7	1.429	1.6	7.0	264.7	.324
4-3731.9	4-3810	.324	278.2	12.5	3.0	1.379	100.6	.416	1.173	323.3	453.3	.684	1.661A	113.1	1.078	.6	13.7	29.7	.436
		16.81	16.13	7.92	2.66	6.10	8.20	17.12	2/1/1	97.7	2.5	14.3	.571	8.006	24.3	165.4	-22.0	124.9D	4.003
4-3300	4-3600	.350	67.8	16.4	-1.8	1.077	108.4	.356	1.229	279.3	537.0	.792	1.667A	91.7	.623	.8	11.7	163.8	.117
4-3600	4-3745.2	.342	82.7	23.5	-.2	.700	117.0	.483	1.406	223.1	356.4	.727A	2.085D	88.8	1.428	2.0	11.1	251.6	.265
4-3745.2	4-3820	.265	288.0	10.6	2.0	1.370	97.4	.385	1.145	333.1	452.2	.706	1.584A	111.2	1.071	1.9	20.1	38.8	.404
		17.79	15.27	7.38	2.53	5.94	7.89	16.34	2/1/1	83.2	5.0	35.6	.859	3.267	11.4	179.6	.8	154.8D	1.947
4-3300	4-3600	.350	67.8	16.4	-1.8	1.077	108.4	.356	1.229	279.3	537.0	.792	1.667A	91.7	.623	.8	11.7	163.8	.117
4-3600	4-3752.5	.333	83.7	22.2	-.9	.694	116.3	.478	1.391	221.9	366.8	.726	2.055D	92.2	1.425	2.6	13.9	244.3	.267
4-3752.5	4-3820	.267	291.1	9.8	1.9	1.393	96.1	.422	1.235	339.2	446.6	.714	1.757A	112.4	1.100	2.3	21.7	41.2	.435
		17.56	15.03	7.38	2.53	5.94	7.66	17.03	2/1/1	83.2	5.5	45.9	.844	2.564	13.9	176.7	5.2	168.2D	1.320
4-3310	4-3600	.329	75.1	16.6	-1.9	1.081	107.1	.343	1.246	283.9	532.0	.818	1.674A	94.2	.632	1.1	7.7	177.7	.117
4-3600	4-3800.7	.241	111.4	29.6	2.9	.594	106.2	.485	1.178	198.9	420.1	.607	1.750D	108.7	1.382	-2.3	-6.3	259.0	.473
4-3800.7	4-3830	.473	269.7	5.6	1.9	1.450	73.5	.576	1.521	45.9	87.2	.645D	2.396A	119.2	1.169	4.6	26.7	50.5	.589
		14.72	12.19	6.94	2.52	5.94	5.26	20.75	2/2/1	69.2	8.0	16.0	.269	7.197	48.1	174.0	-48.1	104.3D	1.666
4-3320	4-3600	.310	82.4	16.1	-2.1	1.085	106.0	.334	1.265	288.4	526.9	.842	1.687A	96.4	.641	1.5	4.3	189.8	.123
4-3600	4-3809.9	.224	122.7	26.2	2.2	.569	102.5	.500	1.139	193.1	429.1	.569	1.709D	111.6	1.373	-1.8	-4.4	268.2	.525
4-3809.9	4-3840	.525	262.5	2.7	1.2	1.328	67.2	.464	1.001	79.5	116.0	.537D	1.465A	117.6	1.015	4.2	25.4	46.2	.499
		14.05	11.41	6.57	2.64	6.05	4.84	18.53	2/2/1	56.9	15.7	9.1	.218	12.645	128.9	190.5	50.0	84.2L	2.536
4-3450	4-3600	.180	114.5	34.6	2.0	1.175	87.9	.370	1.572	7.7	120.1	.990D	2.154A	111.5	.752	-.3	-20.4	233.0	.274
4-3600	4-3712.5	.375	90.7	26.2	1.5	.658	120.1	.557	1.302	214.1	295.5	.577A	2.026D	87.9	1.413	1.5	3.5	268.5	.556
4-3712.5	4-3970	.556	266.0	10.0	4.8	1.265	115.2	.449	.860	263.4	585.7	.474	1.247	64.9	.915	2.2	18.3	35.1	.441
		19.29	13.20	4.41	6.09	9.47	8.79	17.17	1/1/2	6.2	156.7	18.5	.195	6.207	21.5	189.8	-20.3	92.5D	1.013
MARS ARRIVAL DATE = 2443610 (11 APR 1978)																			
4-3310	4-3610	.328	75.5	16.9	-1.9	1.080	107.1	.342	1.243	283.5	536.0	.817	1.668A	92.1	.630	1.1	9.4	174.1	.113
4-3610	4-3801.4	.266	110.5	29.4	3.1	.606	109.8	.499	1.199	202.9	421.0	.601	1.797D	109.4	1.367	-2.6	-6.9	259.6	.489
4-3801.4	4-3830	.489	269.5	5.6	2.0	1.453	72.7	.586	1.540	47.7	87.7	.636D	2.441A	119.8	1.173	4.7	26.6	50.3	.600
		15.26	12.61	6.93	2.45	5.86	5.89	21.05	2/2/1	77.4	7.9	15.6	.251	7.254	51.6	173.7	-51.6	102.4D	1.569
MARS ARRIVAL DATE = 2443620 (21 APR 1978)																			
4-3310	4-3620	.329	75.5	17.2	-1.8	1.079	107.2	.343	1.240	283.1	539.9	.815	1.665A	90.1	.629	1.1	11.0	170.3	.111
4-3620	4-3802.4	.295	110.4	29.2	3.4	.621	113.4	.515	1.226	207.0	422.1	.594	1.858D	110.2	1.394	-2.9	-7.4	260.3	.510
4-3802.4	4-3830	.510	269.3	5.5	2.0	1.456	71.8	.598	1.564	49.8	89.4	.629D	2.498A	120.4	1.177	4.7	26.5	50.0	.614
		16.00	13.58	6.95	2.42	5.84	6.64	21.38	2/2/1	85.9	7.8	15.7	.231	7.332	55.4	173.4	-55.3	100.4D	1.468

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2443490
12 DEC 1977

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN 1 / ECCEN 3 / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / E	V 2 / V 4 / INC	I 2 / I 4 / RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3240	4-3490	.455	20.2	5.1	-1.5	1.060	114.3	.426	1.143	261.1	527.4	.655	1.630A	99.0	.612	-1.0	17.7	118.0	.168
4-3490	4-3719.4	.171	117.6	28.4	1.9	.606	81.5	.430	1.137	168.5	310.2	.648A	1.626	75.6	1.371	.0	.1	269.5	.361
4-3719.4	4-3800	.381	265.8	14.8	4.2	1.385	103.3	.444	1.189	315.4	455.4	.661	1.717A	114.8	1.081	-1.1	6.3	20.9	.470
		16.81	13.27	9.68	3.54	6.94	3.59	17.85	2/1/1	77.7	3.6	15.2	.413	7.583	103.6	208.2	74.3	77.4L	2.720
4-3250	4-3490	.444	27.7	7.8	-1.5	1.068	113.5	.420	1.171	264.6	521.2	.679	1.663A	102.7	.629	-.7	15.3	132.9	.173
4-3490	4-3726.1	.159	114.8	29.4	1.9	.617	82.5	.409	1.151	168.9	321.4	.680A	1.622	79.1	1.374	.0	.2	270.7	.321
4-3726.1	4-3810	.321	273.2	14.6	3.5	1.359	101.0	.384	1.100	319.2	456.5	.677	1.522A	111.9	1.051	-.1	11.2	28.0	.410
		16.43	12.78	9.43	3.65	7.05	3.35	16.48	2/1/1	65.3	4.5	14.6	.584	7.668	80.3	218.6	-77.7	89.1L	4.011
4-3260	4-3490	.438	35.3	10.2	-1.6	1.076	113.0	.420	1.205	268.1	514.9	.699	1.711A	106.0	.648	-.5	12.5	145.4	.168
4-3490	4-3733.7	.151	112.3	30.1	1.9	.624	83.3	.393	1.162	169.3	333.9	.706A	1.619	82.7	1.376	.1	.4	269.1	.265
4-3733.7	4-3820	.265	280.3	13.3	2.6	1.339	98.7	.334	1.041	324.3	461.6	.693	1.389A	109.4	1.029	.9	16.7	35.0	.358
		16.44	12.46	9.29	3.98	7.38	3.17	15.37	2/1/1	50.8	6.7	17.0	.858	6.765	49.7	192.5	-48.8	111.4D	4.946
4-3270	4-3490	.435	43.1	12.2	-1.8	1.087	112.8	.425	1.245	271.6	508.6	.717	1.774A	109.1	.668	-.1	10.0	155.4	.209
4-3490	4-3805.1	.254	144.3	19.1	1.9	.601	69.6	.527	1.126	159.1	436.7	.532	1.719	114.6	1.368	-.0	-.0	256.3	.581
4-3805.1	4-3830	.561	266.8	5.3	2.2	1.469	66.5	.639	1.660	56.5	90.7	.596D	2.721A	122.8	1.193	5.0	25.9	48.9	.664
		19.30	14.82	9.24	4.48	7.87	5.56	22.67	2/2/1	40.8	7.7	13.5	.178	8.501	23.4	173.7	-23.2	103.1D	1.334
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3240	4-3500	.456	20.5	5.1	-1.6	1.059	114.4	.427	1.138	260.5	531.5	.652	1.624A	96.2	.603	-1.0	18.5	113.5	.165
4-3500	4-3720.1	.167	114.9	28.3	1.7	.601	83.8	.430	1.136	171.7	310.0	.647A	1.624	75.5	1.371	.3	.9	270.9	.362
4-3720.1	4-3800	.382	266.5	14.5	4.1	1.388	103.3	.449	1.202	315.9	454.7	.662	1.742A	114.9	1.085	-1.0	6.7	21.1	.474
		16.71	13.24	9.71	3.47	6.88	3.52	17.95	2/1/1	66.6	3.2	14.2	.411	8.094	107.6	200.7	71.4	75.6L	2.916
4-3250	4-3500	.441	28.0	7.7	-1.6	1.065	113.4	.417	1.163	264.1	525.4	.678	1.649A	100.0	.618	-.7	16.2	129.2	.163
4-3500	4-3726.9	.157	111.6	28.9	1.6	.610	84.7	.409	1.151	172.3	321.5	.680A	1.621	79.0	1.374	.4	1.5	272.0	.321
4-3726.9	4-3810	.321	273.9	14.3	3.4	1.362	101.0	.388	1.108	319.7	457.8	.678	1.538A	112.1	1.055	.0	11.6	28.2	.413
		16.09	12.66	9.36	3.43	6.83	3.30	16.56	2/1/1	71.7	4.1	12.9	.583	8.677	81.7	225.7	-76.5	86.0L	4.593
4-3260	4-3500	.431	35.6	10.1	-1.7	1.073	112.7	.413	1.193	267.7	519.2	.701	1.685A	103.4	.635	-.5	13.2	143.1	.172
4-3500	4-3734.5	.148	108.5	28.7	1.4	.618	85.4	.393	1.163	172.9	334.0	.706A	1.619	82.8	1.376	.6	2.9	270.2	.265
4-3734.5	4-3820	.264	280.9	13.0	2.6	1.341	98.6	.337	1.047	324.9	460.9	.694	1.400A	109.5	1.052	1.0	17.0	35.2	.361
		15.88	12.26	9.14	3.62	7.02	3.13	15.43	2/1/1	57.9	6.5	14.7	.859	7.835	44.3	193.0	-43.2	114.4D	5.873
4-3260	4-3500	.431	35.6	10.1	-1.7	1.073	112.7	.413	1.193	267.7	519.2	.701	1.685A	103.4	.635	-.5	13.2	143.1	.172
4-3500	4-3745.5	.154	103.8	2.7	-5.0	.623	85.8	.381	1.172	173.1	351.6	.726A	1.618	87.7	1.377	6.9	39.0	261.6	.264
4-3745.5	4-3820	.264	286.1	10.5	2.0	1.371	97.3	.384	1.147	333.3	452.0	.706	1.388A	111.3	1.071	1.9	20.2	38.9	.404
		16.00	12.38	9.14	3.62	7.02	3.25	16.36	2/1/1	57.9	5.0	57.0	.861	3.154	55.4	156.5	44.7	135.2D	1.654
4-3270	4-3500	.425	43.3	12.2	-1.8	1.081	112.5	.413	1.228	271.2	513.0	.720	1.735A	106.6	.654	-.1	10.4	154.5	.189
4-3500	4-3803.7	.229	144.0	19.7	1.9	.593	73.0	.507	1.124	161.8	432.6	.554	1.694	112.8	1.368	-.2	-.4	256.4	.544
4-3803.7	4-3830	.544	269.0	5.4	2.1	1.462	70.2	.618	1.607	53.1	89.5	.614D	2.599A	121.6	1.184	4.9	26.2	49.4	.638
		17.98	13.96	9.00	4.00	7.40	4.96	21.99	2/2/1	46.5	7.7	13.8	.203	8.317	25.0	173.9	-24.8	105.1D	1.485
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3240	4-3510	.460	20.9	5.1	-1.7	1.058	114.7	.431	1.135	259.8	535.4	.646	1.624A	93.4	.595	-1.0	19.2	109.0	.166
4-3510	4-3720.8	.166	111.5	28.2	1.6	.595	86.3	.430	1.136	175.1	309.8	.647A	1.625	75.5	1.371	.5	1.6	272.1	.383
4-3720.8	4-3800	.383	267.2	14.1	4.0	1.391	103.3	.454	1.214	316.4	454.1	.663	1.766A	115.1	1.089	-.8	7.1	21.3	.479
		16.83	13.32	9.82	3.51	6.91	3.51	18.05	2/1/1	95.7	2.8	13.4	.409	8.560	111.0	196.3	68.4	74.1L	3.091
4-3250	4-3510	.441	28.3	7.7	-1.6	1.063	113.5	.416	1.158	263.6	529.5	.676	1.640A	97.4	.609	-.7	17.2	124.9	.157
4-3510	4-3727.5	.157	107.7	28.5	1.4	.605	87.2	.410	1.152	175.9	321.3	.680A	1.623	79.0	1.374	.8	2.5	273.0	.321
4-3727.5	4-3810	.321	274.5	14.0	3.3	1.364	100.9	.392	1.116	320.2	457.2	.679	1.554A	112.2	1.058	.1	11.9	28.4	.417
		15.97	12.66	9.36	3.31	6.71	3.30	16.63	2/1/1	80.6	3.9	11.6	.582	9.922	82.9	232.3	-79.1	87.0L	5.190
4-3260	4-3510	.427	35.8	10.1	-1.7	1.070	112.6	.408	1.184	267.3	523.4	.701	1.667A	100.9	.625	-.4	14.2	140.0	.160
4-3510	4-3735.3	.150	104.3	27.8	1.1	.615	87.8	.393	1.165	176.6	334.3	.707A	1.622	82.8	1.376	.9	4.6	271.0	.264
4-3735.3	4-3820	.264	281.5	12.8	2.5	1.343	98.6	.340	1.053	325.5	460.3	.695	1.410A	109.6	1.034	1.1	17.3	35.5	.364
		15.55	12.19	9.04	3.36	6.76	3.15	15.49	2/1/1	65.8	6.3	13.2	.860	6.706	39.3	193.0	-37.9	117.4D	6.629
4-3260	4-3510	.427	35.8	10.1	-1.7	1.070	112.6	.408	1.184	267.3	523.4	.701	1.667A	100.9	.625	-.4	14.2	140.0	.160
4-3510	4-3747.7	.157	100.6	2.4	-5.2	.619	88.1	.381	1.174	176.9	354.2	.727A	1.622	86.4	1.378	7.2	40.4	260.2	.265
4-3747.7	4-3820	.265	289.2	10.3	2.0	1.377	97.0	.395	1.172	335.1	450.3	.709	1.636A	111.6	1.080	2.0	20.7	39.6	.414
		15.70	12.34	9.04	3.36	6.76	3.30	16.57	2/1/1	65.8	5.0	39.5	.856	2.957	55.3	156.4	44.0	136.0D	1.676
4-3320	4-3510	.422	83.1	10.1	-5.2	1.137	110.7	.459	1.479	289.0	487.5	.801	2.158A	116.8	.748	4.1	6.0	188.7	.303
4-3510	4-3739.2	.147	103.1	26.6	.7	.616	88.0	.388	1.169	176.8	340.7	.716A	1.622	84.6	1.377	1.2	6.9	268.5	.243
4-3739.2	4-3860	.243	286.9	63.9	10.0	1.257	93.6	.161	.854	333.2	522.6	.717	.992A	93.2	.930	-6.9	-27.7	55.1	.156
		18.89	12.03	8.93	6.86	10.25	3.10	12.01	2/1/2	20.2	70.7	56.6	1.020	2.045	60.7	254.8	-52.8	78.1L	1.066
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3240	4-3520	.468	21.3	5.1	-1.7	1.057	115.1	.437	1.134	259.0	539.2	.636	1.629A	90.6	.588	-1.0	19.7	105.2	.172
4-3520	4-3721.4	.169	107.5	28.1	1.5	.591	89.0	.432	1.138	178.7	309.8	.647A	1.629	75.4	1.371	.6	2.2	273.1	.384
4-3721.4	4-3800	.384	267.8	13.9	3.9	1.394	103.2	.459	1.226	316.8	453.5	.664	1.788A	115.2	1.092	-.7	7.4	21.4	.482
		17.17	13.54	9.98	3.63	7.03	3.56	18.14	2/1/1	104.0	2.4	12.8	.407	8.995	114.0	193.7	65.7	72.7L	3.255
4-3230	4-3520	.443	28.6	7.7	-1.7	1.062	113.6	.418	1.154	263.0	533.4	.672	1.637A	94.7	.601	-.7	18.1	120.4	.156
4-3520	4-3728.1	.160	103.4	28.1	1.5	.602	89.8	.411	1.155	179.7	321.5	.680A	1.629	79.0	1.375	.8	3.3	273.8	.322
4-3728.1	4-3810	.322	275.0	13.7	3.3	1.366	100.9	.395	1.123	320.6	456.7	.680	1.567A	112.3	1.060	.2	12.2	28.6	.419
		16.07	12.79	9.41	3.28	6.68	3.38	16.69	2/1/1	89.5	3.6	10.5	.580	10.943	83.5	236.6	-79.3	86.5L	5.771
4-3260	4-3520	.425	36.0	10.1	-1.7	1.067	112.5	.406	1.178	266.8	527.5	.700	1.656A	98.3	.616	-.4	15.3	136.1	.151
4-3520	4-3735.9	.154	99.8	27.1	.9	.610	90.4	.395	1.168	180.6	334.7	.707A	1.629D	82.9	1.377	1.1	5.8	271.5	.264
4-3735.9	4-3820	.264	281.9	12.6	2.5	1.345	98.5	.343	1.058	326.0	459.7	.695	1.421A	109.7	1.037	1.2	17.5	35.7	.366
		15.44	12.25	9.00	3.19	6.60	3.24	15.54	2/1/1	74.2	6.2	12.3	.860	9.316	34.6	192.7	-33.0	120.3D	7.193
4-3260	4-3520	.425	36.0	10.1	-1.7	1.067	112.5	.406	1.178	266.8	527.5	.700	1.656A	98.3	.616	-.4	15.3	136.1	.151
4-3520	4-3749.8	.162	97.3	2.9	-5.4	.616	90.5	.382	1.178	180.8	356.9	.728A	1.629D	89.2	1.379	7.3	41.1	258.3	.265
4-3749.8	4-3820	.265	290.1	10.0	1.9	1.384	96.6	.406	1.198	336.9	448.7	.711	1.684A	111.9	1.089	2.2	21.1	40.4	.422
		15.60	12.41	9.00	3.19	6.60	3.40	16.76	2/1/1	74.2	5.2	41.8	.855	2.802	54.1	159.2	42.6	137.3D	1.540
4-3320	4-3520	.398	82.9	11.6	-4.4	1.126	109.8	.433	1.425	288.8	491.9	.809	2.041A	114.4	.726	3.3	4.3	190.2	.272
4-3520	4-3739.3	.152	98.8	26.1	.6	.612	90.5	.390	1.172	180.8	340.2	.715A	1.629D	84.5	1.378	1.4	7.8	269.3	.246
4-3739.3	4-3860	.246	287.2	64.4	10.2	1.257	93.6	.161	.854	333.3	522.7	.717	.992A	93.2	.930	-7.1	-28.2	55.3	.156
		17.63	11.60	8.40	6.05	9.41	3.20	12.04	2/1/2	22.1	70.9	58.0	.996	2.062	61.1	256.3	-52.2	77.1L	1.056
4-3330	4-3520	.414	90.8	4.2	-7.3	1.141	109.5	.452	1.500	292.7	486.3	.822	2.178A	116.4	.749	6.4	8.3	195.9	.308
4-3520	4-3743.4	.150	98.0	25.5	-.1	.615	90.6	.386	1.176	180.9	346.9	.722A	1.629D	86.4	1.379	2.0	12.2	265.5	.230
4-3743.4	4-3890	.230	287.6	64.9	9.6	1.256	93.0	.156	.853	337.2	530.3	.720	.986A	91.8	.928	-6.7	-30.3	53.4	.146
		18.90	11.90	8.74	6.99	10.37	3.17	11.91	2/1/2	21.9	80.1	54.9	1.138	2.168	79.0	250.3	-48.9	84.3L	1.329
4-3330	4-3520	.414	90.8	4.2	-7.3	1.141	109.5	.452	1.500	292.7	486.3	.822	2.178A	116.4	.749	6.4	8.3	195.9	.308
4-3520	4-3759.4	.156	102.6	40.8	4.3	.615	89.9	.384	1.177	179.9	371.2	.724	1.629	93.1	1.378	-2.5	-15.3	247.1	.227
4-3759.4	4-3890	.227	272.5	-71.6	-9.9	1.259	90.5	.152	.859	357.7	525.1	.726	.990A	92.6	.933	12.3	69.6	356.8	.228
		19.02	12.02	8.74	6.99	10.37	3.29	12.99	2/2/1	21.9	80.2	56.3	1.166	2.053	61.2	235.8	44.7	111.6D	1.226
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3240	4-3530	.477	21.7	5.2	-1.8	1.057	115.6	.445	1.134	258.1	542.9	.629	1.636	87.7	.583	-1.0	20.1	102.2	.181
4-3530	4-3722.0	.175	103.2	28.0	1.3	.589	92.0	.434	1.143	182.6	310.0	.647A	1.638D	75.4	1.372	.8	2.8	273.8	.385
4-3722.0	4-3800	.388	268.2	13.8	3.8	1.396	103.2	.463	1.236	317.2	453.0	.664	1.808A	115.3	1.096	-.7	7.8	21.8	.486
		17.74	13.90	10.21	3.84	7.23	3.69	18.21	2/1/1	111.3	2.1	12.2	.405	9.424	118.4	191.9	69.5	71.7L	3.414
4-3250	4-3530	.448	28.9	7.8	-1.8	1.061	113.9	.422	1.152	262.3	537.3	.666	1.638A	92.0	.595	-.7	19.0	116.3	.156
4-3530	4-3728.7	.168	99.0	27.8	1.1	.600	92.6	.413	1.160	183.8	321.9	.681A	1.639D	79.1	1.376	1.0	4.0	274.3	.382
4-3728.7	4-3810	.322	275.5	13.5	3.2	1.368	100.8	.398	1.129	321.0	456.2	.680	1.579A	112.4	1.063	.2	12.4	28.7	.422
		16.39	13.06	9.82	3.33	6.73	3.53	16.78	2/1/1	98.1	3.4	9.6	.980	11.945	83.0	235.8	-78.8	86.6L	6.346

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2443530
21 JAN 1978

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3260	4-3530	.426	36.3	10.1	-1.8	1.066	112.6	.406	1.173	266.3	531.5	.697	1.649A	95.7	.608	-.4	16.5	131.9	.147
4-3530	4-3736.5	.162	95.5	26.6	.7	.609	93.1	.397	1.174	184.8	335.2	.708A	1.641D	83.0	1.379	1.3	6.7	271.7	.264
4-3736.5	4-3820	.264	282.4	12.4	2.4	1.546	98.4	.345	1.063	326.4	459.2	.696	1.429A	109.8	1.039	1.2	17.7	35.9	.369
		18.54	12.44	9.02	3.10	6.51	3.42	15.59	2/1/1	83.0	6.1	12.0	.860	9.575	29.9	192.1	-28.1	123.3D	7.379
4-3260	4-3530	.426	36.3	10.1	-1.8	1.066	112.6	.406	1.173	266.3	531.5	.697	1.649A	95.7	.608	-.4	16.5	131.9	.147
4-3530	4-3752.0	.170	94.2	3.7	-5.5	.615	93.1	.385	1.184	184.9	359.9	.728A	1.641D	90.0	1.380	7.3	41.4	255.9	.267
4-3752.0	4-3820	.267	290.9	9.8	1.9	1.391	96.2	.419	1.229	338.7	447.0	.713	1.744A	112.3	1.098	2.3	21.8	41.1	.433
		15.70	12.60	9.02	3.10	6.51	3.56	16.99	2/1/1	83.0	5.4	44.1	.845	2.664	52.4	160.2	40.8	138.9D	1.406
4-3520	4-3530	.378	82.8	12.6	-3.8	1.116	109.0	.411	1.384	288.7	496.3	.816	1.952A	112.0	.707	2.8	3.1	191.6	.244
4-3530	4-3739.5	.161	94.7	25.7	.5	.611	93.2	.393	1.178	185.0	340.0	.715A	1.641D	84.4	1.380	1.5	8.3	269.7	.248
4-3739.5	4-3880	.248	287.5	64.8	10.3	1.257	93.6	.161	.854	333.4	522.6	.717	.992A	93.3	.930	-7.2	-28.7	55.5	.160
		16.68	11.35	7.97	5.33	6.71	3.39	12.06	2/1/2	24.6	71.1	57.8	.975	2.068	61.3	257.1	-51.8	76.6L	1.041
4-3330	4-3530	.385	90.4	7.5	-5.7	1.130	106.6	.425	1.444	292.6	490.7	.830	2.058A	114.0	.728	4.8	5.3	197.1	.275
4-3530	4-3743.5	.159	94.0	23.6	-.1	.613	93.3	.389	1.182	185.2	346.8	.722A	1.641D	86.3	1.380	2.0	12.1	265.9	.252
4-3743.5	4-3890	.232	287.8	65.3	9.7	1.256	93.0	.156	.853	337.3	530.3	.720	.986A	91.8	.929	-6.8	-30.6	55.6	.148
		17.56	11.45	8.10	6.11	9.48	3.35	11.92	2/1/2	22.4	80.2	55.3	1.119	2.155	79.3	251.1	-48.9	83.9L	1.293
4-3340	4-3530	.427	98.7	-8.0	-11.7	1.145	108.3	.444	1.517	296.5	485.2	.844	2.189A	116.0	.750	11.0	15.2	203.5	.326
4-3530	4-3748.2	.159	93.8	18.4	-1.4	.615	93.2	.386	1.184	185.1	354.1	.727A	1.641D	88.4	1.380	3.5	20.7	260.6	.227
4-3748.2	4-3900	.227	286.5	67.0	9.6	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.0	-33.4	51.9	.146
		19.85	12.39	9.05	7.47	10.84	3.34	11.93	2/1/2	28.7	89.3	49.6	1.165	2.383	77.0	243.4	-42.6	94.3D	1.611

MARS ARRIVAL DATE = 2443540 (31 JAN 1978)

4-3240	4-3540	.490	22.2	5.3	-1.9	1.057	116.4	.456	1.134	257.0	546.3	.617	1.652	84.8	.579	-1.1	20.5	100.1	.194
4-3540	4-3722.5	.185	99.0	27.7	1.3	.590	95.1	.437	1.150	186.7	310.4	.648A	1.652D	75.5	1.375	.9	3.2	274.2	.386
4-3722.5	4-3800	.386	268.7	13.5	3.8	1.398	103.2	.466	1.245	317.5	452.6	.665	1.826A	115.4	1.098	-.6	7.9	21.6	.488
		16.56	14.43	10.51	4.12	7.52	3.92	16.28	2/1/1	117.8	1.9	11.6	.404	9.893	117.8	190.6	62.2	70.9L	3.991
4-3250	4-3540	.455	29.3	7.9	-1.8	1.061	114.3	.426	1.151	261.5	541.0	.656	1.644	89.5	.590	-.7	19.6	112.7	.164
4-3540	4-3729.1	.179	94.9	27.3	1.0	.601	95.7	.416	1.169	188.1	322.4	.682A	1.655D	79.2	1.378	1.1	4.6	274.4	.322
4-3729.1	4-3810	.322	275.8	13.4	3.2	1.369	100.8	.400	1.135	321.5	455.8	.681	1.590A	112.5	1.065	.3	12.6	28.9	.424
		16.94	13.47	9.69	3.46	6.87	3.78	16.80	2/1/1	106.0	3.3	8.9	.578	12.883	81.2	229.6	-77.4	87.6L	6.873
4-3260	4-3540	.429	36.6	10.1	-1.8	1.065	112.8	.408	1.170	265.7	535.4	.693	1.647A	93.2	.602	-.4	17.6	127.6	.147
4-3540	4-3737.0	.175	91.6	26.0	.6	.610	96.1	.401	1.184	189.2	336.1	.709A	1.658D	83.2	1.381	1.4	7.4	271.4	.264
4-3737.0	4-3820	.264	282.8	12.2	2.4	1.347	98.4	.347	1.067	326.8	458.8	.697	1.438A	109.9	1.040	1.3	17.9	36.0	.371
		15.87	12.77	9.08	3.10	6.51	3.68	15.64	2/1/1	91.8	6.0	12.2	.861	9.431	85.5	191.3	-25.2	126.3D	7.259
4-3260	4-3540	.429	36.6	10.1	-1.8	1.065	112.8	.408	1.170	265.7	535.4	.693	1.647A	93.2	.602	-.4	17.6	127.6	.147
4-3540	4-3754.1	.180	91.5	5.2	-5.4	.615	95.8	.390	1.193	189.2	363.1	.728	1.657D	90.9	1.382	7.3	40.7	255.2	.266
4-3754.1	4-3820	.268	291.5	9.7	1.9	1.398	95.8	.432	1.259	340.5	445.5	.716	1.803A	112.6	1.107	2.4	22.0	41.6	.442
		15.99	12.69	9.08	3.10	6.51	3.61	17.20	2/1/1	91.8	5.6	45.9	.837	2.563	49.8	161.8	38.3	141.2D	1.309
4-3320	4-3540	.362	82.7	13.4	-3.4	1.109	108.3	.392	1.352	288.7	500.6	.822	1.883A	109.6	.691	2.4	2.3	192.7	.219
4-3540	4-3739.4	.174	91.0	25.4	.4	.612	96.1	.397	1.187	189.5	340.1	.715A	1.658D	84.4	1.382	1.6	8.7	269.7	.251
4-3739.4	4-3880	.251	287.7	65.2	10.5	1.257	93.6	.161	.854	333.5	522.6	.717	.992A	93.3	.930	-7.4	-29.2	55.7	.162
		16.00	11.28	7.62	4.72	6.11	3.66	12.08	2/1/2	27.6	71.3	57.9	.956	2.067	61.3	257.2	-51.4	76.5L	1.020
4-3330	4-3540	.363	90.2	9.6	-4.7	1.120	107.8	.403	1.401	292.6	495.2	.837	1.965A	111.7	.710	3.9	3.4	198.3	.246
4-3540	4-3743.6	.172	90.4	23.7	-.1	.614	96.2	.393	1.191	189.7	346.9	.722A	1.659D	86.3	1.382	2.0	11.9	265.8	.254
4-3743.6	4-3890	.234	287.9	65.6	9.8	1.256	93.0	.156	.853	337.4	530.2	.720	.986A	91.6	.929	-6.9	-31.0	55.9	.149
		16.65	11.26	7.63	5.36	8.76	3.63	11.94	2/1/2	24.1	80.2	55.8	1.099	2.137	79.4	251.2	-48.8	83.9L	1.250
4-3340	4-3540	.378	97.5	-.0	-7.9	1.133	107.4	.416	1.459	296.6	489.7	.851	2.067A	113.6	.729	7.3	8.7	204.1	.281
4-3540	4-3748.2	.171	90.3	20.3	-1.0	.615	96.1	.391	1.193	189.6	354.1	.727A	1.659D	88.3	1.383	2.9	18.0	260.6	.227
4-3748.2	4-3900	.226	286.5	66.9	9.6	1.256	92.4	.153	.854	341.5	537.2	.723	.985A	90.5	.928	-7.0	-33.3	51.8	.148
		17.84	11.56	7.96	6.28	9.65	3.60	11.92	2/1/2	25.3	89.4	52.1	1.172	2.276	77.2	243.7	-44.1	93.9D	1.495
4-3340	4-3540	.378	97.5	-.0	-7.9	1.133	107.4	.416	1.459	296.6	489.7	.851	2.067A	113.6	.729	7.3	8.7	204.1	.281
4-3540	4-3766.1	.175	97.6	42.1	5.2	.610	94.6	.395	1.184	187.1	380.0	.716	1.652D	95.6	1.380	-3.5	-18.9	243.5	.258
4-3766.1	4-3900	.258	280.1	-75.0	-11.4	1.257	89.1	.151	.857	6.6	173.5	.728D	.986A	91.2	.930	15.3	69.4	348.6	.242
		17.94	11.66	7.96	6.20	9.65	3.70	13.22	2/2/1	25.3	67.1	56.7	.905	2.104	65.2	257.4	42.4	118.4D	.999

MARS ARRIVAL DATE = 2443550 (10 FEB 1978)

4-3240	4-3550	.506	22.6	5.5	-2.0	1.058	117.3	.470	1.136	255.7	549.5	.602	1.670	81.6	.577	-1.1	20.7	99.1	.210
4-3550	4-3722.9	.200	95.1	27.4	1.2	.593	96.6	.441	1.162	191.2	311.1	.650A	1.674D	75.6	1.376	1.1	3.8	274.4	.387
4-3722.9	4-3800	.387	269.1	13.3	3.7	1.400	103.2	.469	1.254	317.6	452.2	.666	1.843A	115.5	1.101	-.5	8.1	21.9	.491
		19.64	15.19	10.89	4.49	7.88	4.26	18.34	2/1/1	123.2	1.7	11.0	.402	10.457	118.1	189.2	61.9	70.5L	3.804
4-3250	4-3550	.465	29.7	8.0	-1.9	1.061	114.9	.436	1.151	260.6	544.5	.649	1.654	86.5	.587	-.7	20.1	110.0	.174
4-3550	4-3729.5	.195	91.2	26.8	.9	.605	99.0	.421	1.162	192.8	323.3	.684A	1.679D	79.3	1.382	1.2	5.1	274.2	.323
4-3729.5	4-3810	.323	276.2	13.2	3.1	1.371	100.8	.402	1.140	321.6	455.4	.681	1.599A	112.6	1.067	.4	12.7	29.0	.426
		17.73	14.06	9.92	3.67	7.07	4.14	16.85	2/1/1	113.0	3.1	8.4	.578	13.678	76.9	219.2	-74.0	90.1D	7.322
4-3260	4-3550	.434	36.9	10.2	-1.8	1.064	113.1	.412	1.168	265.0	539.2	.687	1.650A	90.6	.597	-.4	18.6	123.7	.150
4-3550	4-3737.5	.191	88.3	25.5	.5	.614	99.2	.406	1.197	194.0	337.2	.711A	1.663D	83.5	1.385	1.5	8.0	270.7	.264
4-3737.5	4-3820	.264	283.1	12.1	2.4	1.349	98.3	.349	1.071	327.2	458.4	.697	1.445A	110.0	1.042	1.3	16.0	36.2	.372
		16.42	13.25	9.20	3.17	6.57	4.06	15.68	2/1/1	100.1	5.8	12.9	.862	8.890	81.3	190.3	-16.5	129.4D	6.798
4-3260	4-3550	.434	36.9	10.2	-1.8	1.064	113.1	.412	1.168	265.0	539.2	.687	1.650A	90.6	.597	-.4	18.6	123.7	.150
4-3550	4-3756.1	.194	89.4	7.2	-5.3	.618	98.6	.396	1.204	193.7	366.2	.727	1.660D	91.8	1.385	7.0	39.0	250.3	.269
4-3756.1	4-3820	.269	292.0	9.5	1.8	1.405	95.4	.444	1.290	342.3	444.1	.718	1.863A	112.9	1.116	2.5	22.3	42.4	.451
		16.48	13.32	9.20	3.17	6.57	4.12	17.40	2/1/1	100.1	6.1	47.4	.829	2.490	46.2	163.9	35.2	144.0D	1.235
4-3320	4-3550	.348	82.6	14.0	-3.1	1.103	107.7	.377	1.328	288.6	505.2	.827	1.828A	107.3	.678	2.2	1.9	193.4	.197
4-3550	4-3739.5	.190	87.9	25.1	.3	.616	99.3	.404	1.200	194.2	340.5	.715A	1.664D	84.4	1.385	1.6	9.0	269.2	.253
4-3739.5	4-3880	.253	288.0	65.6	10.6	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.5	-29.6	55.9	.164
		15.57	11.37	7.33	4.20	7.59	4.04	12.11	2/1/2	31.0	71.4	56.1	.937	2.060	61.1	256.5	-51.0	76.9L	.994
4-3330	4-3550	.345	90.0	11.0	-4.0	1.113	107.1	.384	1.368	292.6	499.7	.843	1.894A	109.3	.694	3.5	2.2	199.4	.221
4-3550	4-3743.7	.189	87.4	25.7	-.1	.618	99.2	.400	1.204	194.4	347.4	.723A	1.664D	86.4	1.386	2.0	11.8	265.2	.236
4-3743.7	4-3890	.236	288.1	66.0	9.9	1.256	93.0	.156	.853	337.5	530.1	.720	.986A	91.8	.929	-7.0	-31.4	54.1	.151
		16.02	11.26	7.26	4.76	8.15	4.00	11.96	2/1/2	26.6	80.2	56.4	1.078	2.116	79.2	250.4	-48.6	84.5L	1.204
4-3340	4-3550	.349	97.1	4.3	-6.1	1.124	106.8	.394	1.416	296.7	494.3	.858	1.973A	111.2	.712	5.5	5.2	205.1	.249
4-3550	4-3748.2	.187	87.5	21.3	-.8	.619	99.1	.397	1.205	194.4	354.5	.727A	1.664D	88.4	1.386	2.7	16.5	259.9	.226
4-3748.2	4-3900	.226	288.5	67.2	9.6	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.1	-33.5	52.0	.149
		16.76	11.32	7.35	5.46	8.84	3.97	11.93	2/1/2	25.2	89.3	53.9	1.158	2.206	77.3	243.2	-44.6	94.3D	1.397
4-3340	4-3550	.349	97.1	4.3	-6.1	1.124	106.6	.394	1.416	296.7	494.3	.858	1.973A	111.2	.712	5.5	5.2	205.1	.249
4-3550	4-3763.4	.244	97.8	61.1	14.0	.614	97.9	.399	1.197	192.3	376.6	.720	1.675D	94.7	1.383	-12.4	-54.4	240.7	.363
4-3763.4	4-3900	.363	259.4	-84.2	-16.7	1.257	89.6	.150	.857	2.9	173.9	.728D	.986A	91.1	.930	18.7	70.3	359.7	.328
		18.14	12.68	7.35	5.46	8.84	5.53	14.76	2/2/1	25.2	88.1	50.1	.456	3.848	87.8	236.8	20.5	123.8D	1.298
4-3340	4-3550	.349	97.1	4.3	-6.1	1.124	106.6	.394	1.416	296.7	494.3	.858	1.973A	111.2	.712	5.5	5.2	205.1	.249
4-3550	4-3764.2	.224	95.9	56.2	11.3	.614	97.8	.399	1.196	192.1	377.6	.719	1.674D	95.0	1.383	-9.7	-45.8	242.0	.323
4-3764.2	4-3900	.323	260.4	-61.2	-14.7	1.257	89.5	.150	.857	4.0	173.7	.728D	.986A	91.1	.930	16.7	70.2	342.0	.295
		17.63	12.18	7.35	5.46	8.84	4.63	14.14	2/2/1	25.2	87.8	36.0	.577	3.259	86.7	257.0	26.1	123.2D	1.293
4-3350	4-3550	.403	104.7	-15.1	-15.0	1.136	106.1	.407	1.471	300.9	489.0	.873	2.069A	113.0	.730	12.6	17.6	211.6	.306
4-3550	4-3754.6	.189	88.7	12.5	-3.5	.618	98.6	.396	1.204	193.9	364.0	.726	1.661D	91.1	1.385	5.5	31.5	252.5	.248
4-3754.6	4-3910	.248	289.3	72.2	10.8	1.257	91.7	.152	.858	347.4	543.1	.726	.986	89.4	.928	-8.7	-38.1	53.2	.172
		19.44	12.92	8.51	6.93	10.30	4.01	12.20	2/1/2	34.2	96.1	45.4	.979	2.594	77.2	235.8	-34.2	109.8D	1.560

MARS ARRIVAL DATE = 2443560 (20 FEB 1978)

4-3230	4-3560	.477	30.2	8.2	-1.9	1.061	115.6	.447	1.152	259.5	547.8	.637	1.667	83.7	.564	-.8	20.5	108.2	.186
4-3560	4-3729.9	.215	88.3	26.4	.8	.613	102.5	.428	1.200	197.8	324.4	.686A	1.714D	79.5	1.386	1.3	5.5	273.6	.323
4-3729.9	4-3810	.323	276.5	13.1	3.1	1.372	100.7	.405	1.145	321.9	455.1	.682	1.608A	112.7	1.068	.4	12.9	29.1	.428
		18.79	14.84	10.21	3.95	7.35	4.63	16.89	2/1/1	119.1	3.0	8.1	.577	14.131	89.8	208.4	-67.8	94.8D	7.873

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2443560
20 FEB 1978

LAUNCH DEPART	ARRIVE SWNGBY	$SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	$SPEED2
SWNGBY	RETURN	$SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	$SPEED4
		PROP	AERO	DVL	I 5	V 5	PSI 5	ECCEN	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3260	4-3560	.441	37.3	10.4	-1.9	1.064	113.5	.418	1.168	264.2	542.8	.679	1.656	88.0	.594	-.4	19.3	120.4	.157
4-3560	4-3736.0	.212	85.8	25.1	.4	.622	102.6	.414	1.216	199.2	336.7	.713A	1.720D	83.8	1.389	1.6	8.4	269.4	.264
4-3736.0	4-3820	.264	283.5	12.0	2.4	1.350	98.3	.351	1.075	327.5	457.9	.698	1.453A	110.1	1.044	1.4	16.2	36.4	.375
		17.21	13.91	9.36	3.31	6.71	4.55	15.72	2/1/1	107.7	5.8	14.3	.861	6.041	17.7	169.0	-14.2	132.4D	6.065
4-3260	4-3560	.441	37.3	10.4	-1.9	1.064	113.5	.418	1.168	264.2	542.8	.679	1.656	88.0	.594	-.4	19.3	120.4	.157
4-3560	4-3757.9	.210	87.7	9.6	-4.9	.623	101.7	.405	1.219	198.5	369.2	.726	1.712D	92.6	1.389	6.6	36.1	247.7	.2 1
4-3757.9	4-3820	.271	292.2	9.5	1.8	1.411	95.0	.455	1.320	343.9	442.9	.719	1.921A	113.2	1.124	2.6	22.6	43.0	.59
		17.18	13.87	9.36	3.31	6.71	4.51	17.59	2/1/1	107.7	6.5	48.4	.820	2.441	41.6	166.3	31.3	147.7D	1 182
4-3320	4-3560	.337	82.5	14.5	-2.8	1.098	107.2	.364	1.308	288.6	509.6	.832	1.785A	105.0	.667	2.0	1.7	193.8	.178
4-3560	4-3739.6	.211	85.5	24.8	.3	.623	102.6	.412	1.218	199.3	341.3	.716A	1.720D	84.6	1.390	1.7	9.2	266.1	.256
4-3739.6	4-3680	.256	288.3	66.0	10.7	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.6	-30.0	56.0	.166
		15.39	11.65	7.10	3.76	7.16	4.53	12.13	2/1/2	34.9	71.6	58.4	.918	2.048	60.6	255.0	-50.5	77.7	.963
4-3330	4-3560	.330	89.6	12.0	-3.5	1.106	106.6	.368	1.343	292.7	504.2	.849	1.837A	107.1	.682	2.9	1.4	200.J	.199
4-3560	4-3743.8	.210	85.1	23.7	-.1	.625	102.5	.408	1.222	199.5	348.2	.723A	1.721D	86.6	1.390	2.0	11.7	263.9	.239
4-3743.8	4-3690	.239	288.4	66.5	10.1	1.256	93.0	.156	.853	337.7	530.0	.720	.986A	91.8	.929	-7.2	-31.9	5.3	.153 *
		15.69	11.46	6.96	4.23	7.63	4.49	11.98	2/1/2	29.5	60.5	57.2	1.054	2.090	78.9	248.9	-48.2	75.6L	1.148
4-3340	4-3560	.328	96.8	7.0	-4.9	1.116	105.9	.374	1.382	296.9	498.8	.865	1.899A	108.9	.697	4.4	3.1	206.1	.223
4-3560	4-3746.4	.208	85.5	21.9	-.7	.626	102.3	.405	1.223	199.5	355.4	.727A	1.719D	86.7	1.390	2.6	15.6	256.6	.231
4-3746.4	4-3900	.231	288.7	67.6	9.8	1.256	92.4	.153	.854	341.7	537.1	.723	.985A	90.5	.928	-7.2	-34.J	52.3	.151
		16.16	11.38	6.93	4.81	8.19	4.45	11.96	2/1/2	26.6	59.3	55.6	1.131	2.146	77.1	241.8	-44.7	95.5D	1.296
4-3350	4-3560	.346	103.4	-5.1	-8.5	1.127	105.3	.384	1.427	301.1	493.6	.880	1.974A	110.7	.713	8.2	9.9	212.0	.258
4-3560	4-3754.1	.206	86.3	17.2	-2.3	.625	102.0	.404	1.222	198.9	363.9	.728	1.715D	91.1	1.389	4.0	24.1	251.8	.239
4-3754.1	4-3910	.239	289.0	71.0	10.4	1.257	91.7	.152	.856	346.8	543.3	.726	.986	89.4	.928	-8.2	-37.1	52.3	.165
		17.37	11.69	7.28	5.68	9.06	4.42	12.12	2/1/2	29.3	96.5	51.5	1.050	2.303	76.7	235.0	-36.2	106.3D	1.367
4-3400	4-3560	.281	136.3	30.6	3.2	1.195	100.8	.466	1.781	325.6	469.8	.950	2.611A	117.5	.805	-2.7	-20.8	216.8	.348
4-3560	4-3701.2	.264	109.6	26.3	1.8	.522	101.0	.572	1.068	188.5	269.3	.457A	1.679D	80.1	1.354	1.1	1.8	264.8	.664
4-3701.2	4-3960	.684	273.4	10.3	6.5	1.263	121.3	.536	.852	252.6	583.0	.395	1.308	59.0	.912	4.5	17.8	26.2	.539
		19.91	11.65	6.02	8.06	11.42	5.83	19.50	1/1/2	7.5	154.5	12.1	.128	9.520	44.9	185.0	-44.2	82.4L	1.094
4-3410	4-3560	.272	138.8	27.9	2.6	1.211	99.4	.491	1.691	331.3	465.7	.963	2.818A	116.6	.825	-2.0	-19.8	219.4	.369
4-3560	4-3722.9	.220	92.0	27.0	1.1	.600	102.2	.449	1.178	195.9	311.4	.650A	1.706D	75.5	1.382	1.2	4.0	274.1	.391
4-3722.9	4-3970	.391	294.1	11.3	3.6	1.265	107.3	.334	.864	280.1	585.8	.576	1.153	72.7	.918	.5	15.7	36.1	.315
		19.23	10.60	5.86	8.63	11.99	4.74	14.52	1/1/2	4.9	156.9	21.1	.393	5.460	21.9	196.9	-20.5	101.4D	1.752
4-3420	4-3560	.265	140.2	26.4	2.2	1.227	97.7	.518	2.019	337.3	461.9	.974	3.063A	119.6	.845	-1.4	-19.3	221.6	.390
4-3560	4-3748.2	.208	85.3	22.0	-.7	.626	102.3	.406	1.223	199.5	355.0	.727A	1.719D	86.6	1.390	2.5	15.4	258.9	.231
4-3748.2	4-3980	.231	317.4	14.5	2.6	1.270	99.3	.234	.879	307.2	582.8	.673	1.085	79.1	.926	-1.9	10.0	50.5	.212
		19.40	10.19	5.74	9.21	12.58	4.45	12.76	1/1/2	2.9	153.9	56.4	1.129	2.116	17.0	197.9	.9	141.2D	1.260

MARS ARRIVAL DATE = 2443570 (2 MAR 1978)

4-3250	4-3570	.492	30.8	8.4	-2.0	1.062	116.4	.460	1.154	258.2	551.0	.623	1.685	80.9	.563	-.8	20.7	107.4	.201
4-3570	4-3730.8	.241	86.1	25.9	.8	.625	106.2	.436	1.226	203.2	326.0	.689A	1.764D	79.8	1.393	1.4	5.9	272.5	.323
4-3730.8	4-3810	.323	276.6	13.0	3.1	1.373	100.7	.407	1.150	322.1	454.6	.682	1.617A	112.8	1.070	.4	13.0	29.2	.430
		20.13	15.83	10.57	4.30	7.69	5.26	16.93	2/1/1	124.3	2.9	8.3	.576	13.676	59.5	199.9	-57.7	101.0D	7.416
4-3260	4-3570	.451	37.7	10.5	-1.9	1.064	114.0	.426	1.168	263.2	546.3	.670	1.666	85.4	.592	-.4	19.9	116.0	.167
4-3570	4-3738.6	.238	84.0	24.7	.3	.634	106.1	.425	1.243	204.7	340.8	.715A	1.771D	84.3	1.396	1.7	8.9	267.4	.264
4-3738.6	4-3820	.264	283.9	11.8	2.3	1.352	98.2	.354	1.081	326.0	457.4	.698	1.463A	110.2	1.046	1.4	18.4	36.8	.377
		18.26	14.75	9.56	3.51	6.91	5.17	15.77	2/1/1	114.5	5.6	16.5	.862	6.955	14.7	187.5	-10.2	135.6D	5.133
4-3260	4-3570	.451	37.7	10.5	-1.9	1.064	114.0	.426	1.168	263.2	546.3	.670	1.666	85.4	.592	-.4	19.9	116.0	.167
4-3570	4-3759.3	.231	86.5	12.5	-4.3	.632	104.8	.416	1.239	203.2	371.9	.724	1.754D	93.5	1.393	6.0	32.1	245.3	.272
4-3759.3	4-3820	.272	292.4	9.4	1.8	1.416	94.7	.465	1.346	345.2	442.0	.721	1.971A	113.4	1.130	2.7	22.9	45.5	.465
		18.09	14.58	9.58	3.51	6.91	5.00	17.74	2/1/1	114.5	6.8	49.0	.811	2.412	35.9	168.9	26.4	152.6D	1.145
4-3270	4-3570	.416	44.9	12.5	-1.9	1.067	112.2	.401	1.184	267.8	541.2	.709	1.659	89.2	.601	-.1	18.0	131.1	.143
4-3570	4-3799.4	.189	119.3	28.8	2.5	.575	95.8	.462	1.142	186.8	419.1	.614	1.669D	107.8	1.372	-1.5	-4.3	257.6	.447
4-3799.4	4-3830	.447	270.1	5.7	1.8	1.445	74.8	.561	1.495	43.0	86.4	.656D	2.334A	118.4	1.164	4.5	26.9	50.9	.572
		15.67	12.65	8.83	3.02	6.43	4.02	20.32	2/2/1	101.9	8.1	16.0	.301	7.194	39.0	174.4	-39.0	108.6D	1.665
4-3280	4-3570	.392	52.3	14.0	-1.9	1.071	110.7	.383	1.202	272.1	535.8	.742	1.662A	92.6	.611	.2	14.9	146.1	.131
4-3570	4-3809.7	.191	134.4	23.7	2.0	.555	91.4	.491	1.113	181.5	430.2	.567	1.660D	111.6	1.366	-1.2	-3.1	267.2	.520
4-3809.7	4-3840	.520	262.5	2.7	1.1	1.329	67.5	.461	1.002	78.8	115.7	.540D	1.464A	117.4	1.015	4.2	25.5	46.4	.496
		15.10	12.32	8.26	2.77	6.19	4.06	18.46	2/2/1	87.3	15.6	7.4	.222	15.397	129.4	186.7	50.0	64.7L	5.200
4-3330	4-3570	.318	89.7	12.9	-3.2	1.101	106.0	.355	1.323	292.8	508.7	.654	1.792A	104.8	.671	2.5	1.0	200.9	.179
4-3570	4-3744.0	.235	85.6	23.6	-.1	.636	105.9	.420	1.248	204.9	349.5	.724A	1.771D	86.9	1.396	2.0	11.6	262.0	.242
4-3744.0	4-3690	.242	288.7	67.1	10.2	1.256	92.9	.156	.853	337.8	530.0	.720	.986A	91.8	.929	-7.4	-32.5	54.7	.156
		15.62	11.65	6.72	3.79	7.18	5.11	12.01	2/1/2	33.0	80.4	58.2	1.023	2.055	78.4	246.5	-47.7	87.3L	1.079
4-3340	4-3570	.312	96.5	8.9	-4.2	1.110	105.3	.358	1.356	297.0	503.4	.870	1.841A	106.7	.685	3.7	1.8	207.0	.200
4-3570	4-3748.6	.233	83.8	22.2	-.6	.636	105.7	.417	1.248	204.8	356.7	.728A	1.768D	89.0	1.396	2.5	14.9	256.6	.235
4-3748.6	4-3900	.235	289.0	66.4	10.0	1.256	92.4	.153	.854	342.0	537.0	.723	.985A	90.5	.928	-7.5	-34.7	52.8	.154
		15.92	11.66	6.61	4.26	7.66	5.05	11.99	2/1/2	26.9	59.2	57.4	1.091	2.084	76.9	239.8	-44.5	97.2D	1.182
4-3350	4-3570	.316	102.9	.4	-6.4	1.119	104.6	.364	1.393	301.4	498.3	.886	1.900A	108.4	.699	6.1	5.8	212.7	.227
4-3570	4-3754.2	.230	84.8	19.1	-1.8	.635	105.3	.416	1.245	204.1	364.9	.727	1.762D	91.4	1.395	3.5	20.9	250.2	.241
4-3754.2	4-3910	.241	289.1	71.3	10.5	1.257	91.7	.152	.856	347.0	543.2	.726	.986	89.4	.928	-8.4	-37.4	52.5	.167
		16.56	11.66	6.68	4.90	8.29	4.98	12.14	2/1/2	28.5	96.4	55.2	1.031	2.159	76.7	233.8	-39.8	109.0D	1.195
4-3400	4-3570	.258	136.4	33.6	3.5	1.178	99.8	.424	1.660	326.4	475.0	.956	2.364A	115.1	.777	-3.0	-22.8	218.7	.313
4-3570	4-3700.1	.291	107.3	26.3	1.9	.525	106.2	.592	1.074	191.9	266.6	.438A	1.711D	58.5	1.356	1.2	1.9	264.4	.717
4-3700.1	4-3960	.717	272.9	10.2	6.9	1.263	122.9	.558	.851	250.2	582.3	.376	1.327	57.4	.912	4.9	10.1	26.5	.565
		19.26	12.13	5.61	7.11	10.48	6.55	20.14	1/1/2	9.9	154.1	11.8	.117	9.747	44.6	184.5	-43.9	81.3L	1.023
4-3410	4-3570	.246	138.2	30.4	2.8	1.191	98.4	.442	1.734	332.2	471.1	.968	2.500A	116.1	.794	-2.1	-21.2	221.5	.330
4-3570	4-3719.5	.248	91.5	26.8	1.2	.603	106.0	.471	1.187	199.8	305.6	.628A	1.747D	73.3	1.385	1.2	3.7	273.1	.435
4-3719.8	4-3970	.435	291.3	10.8	3.9	1.265	109.4	.364	.863	275.1	586.2	.549	1.177	70.6	.917	.9	16.5	35.5	.348
		18.42	10.84	5.41	7.57	10.94	5.43	15.17	1/1/2	6.9	157.1	19.4	.318	5.930	22.8	195.0	-21.5	98.0D	1.567
4-3420	4-3570	.237	138.9	28.6	2.4	1.204	96.8	.461	1.815	336.5	467.5	.978	2.652A	117.0	.810	-1.5	-20.4	223.7	.348
4-3570	4-3747.3	.233	83.7	22.7	-.5	.636	105.8	.418	1.248	204.9	354.7	.727A	1.769D	88.4	1.396	2.5	13.8	256.2	.236
4-3747.3	4-3980	.236	316.9	14.2	2.6	1.270	99.5	.237	.879	306.1	583.0	.671	1.087	78.9	.925	-1.8	10.4	50.0	.215
		16.37	10.32	5.26	8.05	11.42	5.07	12.80	1/1/2	4.6	154.2	56.8	1.081	2.102	16.0	197.6	-.3	140.2D	1.191

MARS ARRIVAL DATE = 2443580 (12 MAR 1978)

4-3260	4-3580	.462	38.2	10.8	-1.9	1.065	114.7	.437	1.169	262.1	549.5	.658	1.680	82.7	.590	-.4	20.2	116.4	.179
4-3580	4-3739.6	.268	82.9	24.4	.3	.650	109.7	.439	1.281	210.6	343.7	.718A	1.843D	85.1	1.404	1.8	9.3	264.3	.264
4-3739.6	4-3820	.264	284.5	11.6	2.3	1.354	98.1	.357	1.089	328.7	456.7	.700	1.478A	110.3	1.049	1.5	18.7	36.9	.380
		19.58	15.80	9.86	3.78	7.18	5.94	15.85	2/1/1	120.3	5.5	20.0	.863	5.763	12.5	185.6	-6.4	139.8D	4.110
4-3260	4-3580	.462	38.2	10.8	-1.9	1.065	114.7	.437	1.169	262.1	549.5	.658	1.680	82.7	.590	-.4	20.2	116.4	.179
4-3580	4-3759.9	.255	85.6	15.7	-3.4	.644	108.2	.430	1.268	206.4	373.7	.722	1.813D	94.1	1.400	5.1	26.6	243.5	.273
4-3759.9	4-3820	.273	292.4	9.4	1.8	1.418	94.5	.469	1.357	345.8	441.6	.721	1.993A	113.4	1.133	2.7	22.9	45.7	.468
		19.26	15.48	9.86	3.78	7.18	5.62	17.81	2/1/1	120.3	6.9	49.3	.806	2.400	28.8	171.7	20.2	159.0D	1.128
4-3270	4-3580	.425	45.3	12.6	-1.9	1.067	112.6	.407	1.184	267.0	544.7	.702	1.666	86.8	.599	-.1	18.8	128.1	.150
4-3580	4-3799.6	.203	115.8	29.3	2.6	.578	99.2	.467	1.151	190.6	419.1	.614	1.668D	107.9	1.375	-1.7	-6.0	258.0	.452
4-3799.6	4-3830	.452	270.0	5.7	1.8	1.446	74.6	.564	1.499	43.6	86.5	.654D	2.344A	118.6	1.165	4.5	26.9	50.9	.575
		16.48	13.32	9.00	3.18	6.57	4.32	20.39	2/2/1	109.3	8.1	16.0	.295	7.165	41.9	174.3	-41.8	107.8D	1.617
4-3280	4-3580	.395	52.6	14.2	-1.8	1.070	110.9	.385	1.200	271.5	539.6	.737	1.662A	90.2	.608	.2	16.2	142.1	.132
4-3580	4-3809.6	.197	129.9	24.9	2.1	.557	95.0	.491	1.119	185.3	429.5	.570	1.669D	111.4	1.367	-1.4	-3.5	267.4	.517
4-3809.6	4-3840	.517	262.5	2.7	1.1	1.329	67.6	.459	1.002	78.5	115.6	.542D	1.462A	117.3	1.015	4.2	25.5	46.4	.494
		15.54	12.53	8.33	2.80	6.21	4.20	18.42	2/2/1	95.8	15.6	8.0	.225	14.403	128.8	186.0	50.4	64.4L	5.010

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2443560
12 MAR 1978

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN 1 ECCEN 3 ECCEN 5 EVR	SMA 1 SMA 3 SMA 5 TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH 1 PERIH 3 PERIH 5 KAPPA	APHEL 1 APHEL 3 APHEL 5 -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-3330	4-3560	.308	89.5	13.6	-2.9	1.097	105.6	.344	1.307	292.8	513.1	.656	1.756A	102.6	.662	2.3	1.0	201.0	.182
4-3560	4-3744.2	.265	82.7	23.6	-.1	.652	109.5	.435	1.283	210.7	351.1	.725A	1.842D	87.3	1.404	2.0	11.5	259.4	.247
4-3744.2	4-3890	.247	289.2	67.8	10.5	1.257	92.9	.156	.854	338.0	529.9	.721	.987A	91.9	.929	-7.7	-35.3	55.1	.160
		15.81	12.40	6.53	3.41	6.81	5.87	12.06	2/1/2	37.1	80.5	59.7	.982	2.010	77.7	243.4	-47.0	89.6L	.993
4-3340	4-3560	.299	96.3	10.3	-3.6	1.105	104.8	.345	1.335	297.2	508.0	.675	1.795A	104.5	.674	3.2	1.0	207.6	.180
4-3560	4-3749.0	.262	83.0	22.4	-.6	.651	109.2	.432	1.282	210.4	358.4	.728A	1.837D	89.5	1.404	2.4	14.2	253.9	.241
4-3749.0	4-3900	.241	289.4	69.4	10.4	1.256	92.3	.153	.854	342.4	536.9	.723	.985A	90.6	.928	-7.8	-35.6	53.5	.159
		15.95	12.15	6.36	3.81	7.21	5.79	12.05	2/1/2	31.9	89.1	59.5	1.035	2.015	76.7	237.2	-44.1	99.4D	1.051
4-3350	4-3560	.295	102.6	3.9	-5.1	1.113	104.0	.348	1.366	301.7	502.9	.691	1.841A	106.2	.687	4.9	3.4	213.3	.202
4-3560	4-3754.6	.256	84.0	20.2	-1.6	.648	108.8	.431	1.277	209.6	366.5	.727	1.826D	92.0	1.402	3.5	16.8	247.9	.248
4-3754.6	4-3910	.248	289.3	72.3	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-36.2	53.2	.172
		16.28	11.98	6.29	4.31	7.70	5.69	12.21	2/1/2	29.6	96.1	58.5	.976	2.048	77.1	232.2	-40.2	110.4D	1.023
4-3360	4-3560	.317	108.1	-10.9	-9.1	1.122	103.2	.353	1.401	306.3	498.0	.906	1.895A	107.7	.700	9.0	11.9	219.4	.238
4-3560	4-3762.2	.257	86.7	11.6	-5.1	.642	107.9	.431	1.263	207.7	376.7	.719	1.807D	95.0	1.399	6.7	33.3	241.8	.297
4-3762.2	4-3920	.297	286.6	76.8	13.4	1.259	90.7	.153	.859	354.7	548.6	.728	.990	88.5	.926	-11.8	-42.2	56.9	.220
		17.53	12.35	6.70	5.18	8.56	5.65	12.87	2/1/2	33.9	99.5	49.1	.683	2.407	81.3	230.7	-31.3	123.9D	.962
4-3410	4-3560	.225	137.5	33.3	3.1	1.175	97.6	.402	1.626	333.3	476.5	.973	2.280A	113.7	.768	-2.3	-22.8	223.4	.296
4-3560	4-3717.0	.282	91.0	26.6	1.3	.615	110.3	.495	1.208	204.2	301.5	.610A	1.806D	71.5	1.390	1.3	3.6	271.8	.473
4-3717.0	4-3970	.473	289.3	10.5	4.2	1.265	111.2	.391	.862	271.1	586.3	.525	1.199	68.9	.916	1.3	17.2	35.2	.377
		18.03	11.37	5.06	6.67	10.04	6.30	15.77	1/1/2	9.2	157.1	18.7	.269	6.170	22.9	193.4	-21.6	95.8D	1.391
4-3420	4-3560	.213	137.4	31.2	2.5	1.186	95.9	.416	1.681	339.8	473.2	.982	2.379A	114.5	.780	-1.6	-21.5	225.6	.311
4-3560	4-3746.0	.264	82.8	23.2	-.3	.652	109.4	.434	1.283	210.6	354.0	.727A	1.840D	88.2	1.404	2.1	12.5	257.3	.244
4-3746.0	4-3980	.244	316.0	13.8	2.7	1.270	100.0	.242	.878	304.4	583.3	.666	1.091	78.6	.925	-1.7	10.9	49.6	.220
		17.76	10.73	4.69	7.05	10.42	5.84	12.87	1/1/2	6.7	154.5	57.1	1.015	2.093	15.0	196.9	-1.3	138.6D	1.107
MARS ARRIVAL DATE = 2443590 (22 MAR 1978)																			
4-3270	4-3590	.434	45.7	12.9	-1.9	1.067	113.1	.415	1.184	266.0	548.1	.692	1.676	84.3	.598	-.1	19.3	125.9	.160
4-3590	4-3800.0	.220	113.1	29.5	2.8	.585	102.6	.475	1.163	194.8	419.4	.611	1.715D	108.2	1.378	-2.0	-5.6	256.5	.460
4-3800.0	4-3830	.460	269.9	5.7	1.9	1.448	74.2	.569	1.508	44.5	86.6	.650D	2.566A	116.6	1.167	4.5	26.8	50.7	.581
		17.31	13.94	9.21	5.36	6.76	4.74	20.54	2/2/1	115.6	8.0	16.0	.284	7.166	44.9	174.2	-44.9	106.0D	1.750
4-3280	4-3590	.400	52.9	14.4	-1.8	1.070	111.2	.390	1.199	270.8	543.3	.732	1.666	87.9	.607	.2	17.3	136.6	.136
4-3590	4-3809.7	.208	125.9	25.7	2.2	.561	98.7	.494	1.128	189.2	429.1	.570	1.685D	111.4	1.370	-1.6	-5.9	267.6	.519
4-3809.7	4-3840	.519	262.5	2.7	1.1	1.328	67.5	.460	1.002	78.7	115.7	.541D	1.465A	117.4	1.015	4.2	25.5	46.4	.495
		15.80	12.91	8.45	2.89	6.30	4.46	18.45	2/2/1	103.6	15.6	8.5	.223	13.489	128.6	189.3	50.5	84.2L	2.785
4-3410	4-3590	.208	136.8	36.8	3.4	1.162	96.8	.369	1.549	334.5	482.1	.977	2.121A	111.3	.746	-2.6	-24.6	225.1	.268
4-3590	4-3714.7	.323	90.7	26.4	1.4	.631	115.0	.522	1.243	209.0	298.3	.594A	1.893D	69.8	1.399	1.4	3.8	270.3	.511
4-3714.7	4-3970	.511	287.6	10.2	4.5	1.265	113.0	.418	.861	267.4	586.1	.501	1.221	67.0	.916	1.7	17.7	35.0	.408
		18.09	12.20	4.81	5.89	9.27	7.39	16.41	1/1/2	11.8	157.0	18.4	.230	6.253	22.4	191.6	-21.2	94.1D	1.208
4-3420	4-3590	.195	135.6	34.1	2.7	1.171	95.1	.379	1.587	341.2	479.0	.986	2.188A	112.1	.756	-1.7	-22.8	227.6	.278
4-3590	4-3744.2	.301	82.4	23.6	-.1	.673	113.3	.456	1.334	216.8	353.0	.726A	1.942D	87.8	1.415	2.0	11.2	256.3	.255
4-3744.2	4-3980	.255	314.8	13.2	2.7	1.269	100.5	.248	.878	302.0	585.8	.660	1.096	78.2	.924	-1.8	11.5	49.1	.227
		17.61	11.41	4.62	6.19	9.57	6.80	12.98	1/1/2	9.1	155.0	57.1	.925	2.093	14.1	196.0	-2.1	136.9D	1.011
MARS ARRIVAL DATE = 2443600 (1 APR 1978)																			
4-3270	4-3600	.446	46.3	15.1	-1.9	1.068	113.8	.426	1.185	264.9	551.4	.681	1.690	81.8	.598	-.1	19.7	124.6	.172
4-3600	4-3800.7	.241	111.4	29.6	2.9	.594	106.2	.485	1.178	196.9	420.1	.607	1.750D	108.7	1.382	-2.3	-6.3	259.0	.473
4-3800.7	4-3830	.473	269.7	5.6	1.9	1.450	73.5	.576	1.521	45.9	87.2	.645D	2.398A	119.2	1.169	4.6	26.7	50.5	.589
		18.35	14.73	9.48	5.62	7.02	5.26	20.75	2/2/1	121.5	8.0	16.0	.269	7.197	46.1	174.0	-46.1	104.3D	1.666
4-3280	4-3600	.407	53.3	14.6	-1.8	1.070	111.6	.396	1.199	270.0	546.8	.724	1.673	85.6	.606	.2	18.1	135.8	.144
4-3600	4-3809.9	.224	122.7	26.2	2.2	.569	102.5	.500	1.139	195.1	429.1	.569	1.709D	111.6	1.373	-1.8	-4.4	268.2	.525
4-3809.9	4-3840	.525	262.5	2.7	1.2	1.328	67.2	.464	1.001	79.5	116.0	.537D	1.465A	117.6	1.015	4.2	25.4	46.2	.499
		16.48	13.45	8.60	5.03	6.44	4.84	18.53	2/2/1	110.8	15.7	9.1	.218	12.645	128.9	190.5	50.0	84.2L	2.538
4-3410	4-3600	.195	136.2	40.9	3.8	1.151	96.1	.342	1.492	333.8	487.7	.981	2.002A	108.9	.729	-3.0	-26.8	226.5	.240
4-3600	4-3712.8	.375	90.7	26.2	1.5	.658	120.1	.557	1.302	214.1	295.5	.577A	2.026D	67.9	1.413	1.5	3.5	268.5	.556
4-3712.8	4-3970	.556	286.0	10.0	4.8	1.265	115.2	.449	.860	263.4	585.7	.474	1.247	64.9	.915	2.2	18.3	35.1	.441
		18.64	13.41	4.62	5.23	8.61	8.79	17.17	1/1/2	14.8	158.7	18.5	.195	8.207	21.5	189.8	-20.3	92.5D	1.013
MARS ARRIVAL DATE = 2443610 (11 APR 1978)																			
4-3270	4-3610	.460	46.9	15.4	-1.9	1.068	114.6	.436	1.187	265.6	554.4	.687	1.707	79.3	.599	-.1	19.8	124.1	.186
4-3610	4-3801.4	.266	110.5	29.4	3.1	.606	109.8	.499	1.198	202.9	421.0	.601	1.787D	109.4	1.387	-2.6	-6.9	259.6	.489
4-3801.4	4-3830	.489	269.5	9.6	2.0	1.455	72.7	.586	1.540	47.7	87.7	.638D	2.441A	119.8	1.173	4.7	26.6	50.3	.600
		19.63	15.69	9.80	5.84	7.33	5.69	21.05	2/2/1	126.5	7.9	15.8	.251	7.254	51.6	173.7	-51.6	102.4D	1.569

STOPOVER TIME = 0 DAYS — 1978 INBOUND SWINGBY — MISSION DURATION = 600 DAYS

MARS ARRIVAL DATE = 2443490 — 12 DEC 1977

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-3230	4-3490	.471	12.8	2.2	-1.5	1.054	115.4	.439	1.118	257.4	533.6	.627	1.609A	95.0	.596	-1.3	19.2	102.1	.175
4-3490	4-3805.1	.234	144.3	19.1	1.9	.601	69.6	.527	1.126	159.1	436.7	.532	1.719	114.6	1.368	-.0	-.0	256.3	.381
4-3805.1	4-3830	.581	266.8	5.3	2.2	1.469	66.5	.639	1.660	56.3	90.7	.598D	2.721A	122.6	1.193	5.0	25.9	48.9	.664
		19.35	15.65	10.07	3.70	7.10	5.58	22.67	2/2/1	92.9	7.7	13.5	.178	8.501	23.4	173.7	-23.2	103.1D	1.334
4-3280	4-3490	.437	50.9	13.8	-2.0	1.098	112.6	.434	1.294	275.0	502.5	.732	1.856A	112.0	.691	.3	8.1	163.3	.236
4-3490	4-3738.9	.147	111.1	30.1	1.8	.627	83.5	.385	1.168	169.5	342.3	.718A	1.618	85.1	1.377	.2	1.0	265.7	.236
4-3738.9	4-3880	.236	286.2	62.7	9.6	1.257	93.7	.161	.854	333.0	522.9	.716	.992A	93.2	.930	-6.5	-26.3	54.6	.151
		17.48	12.36	9.27	5.12	8.51	3.09	11.96	2/1/2	32.8	70.2	63.6	1.080	1.899	79.6	249.9	-55.8	81.4L	.971
4-3280	4-3490	.437	50.9	13.8	-2.0	1.098	112.6	.434	1.294	275.0	502.5	.732	1.856A	112.0	.691	.3	8.1	163.3	.236
4-3490	4-3751.9	.144	111.7	31.4	2.0	.630	83.5	.380	1.173	169.2	362.6	.726	1.618	90.7	1.377	-.1	-.6	251.0	.209
4-3751.9	4-3880	.209	281.5	-65.8	-8.7	1.260	91.6	.158	.862	347.9	517.0	.726	.998A	94.1	.935	11.5	66.2	6.8	.223
		17.43	12.31	9.27	5.12	8.51	3.04	12.92	2/2/1	32.8	72.7	66.7	1.378	1.772	77.1	233.1	53.0	103.0D	1.063
4-3300	4-3490	.449	67.0	14.4	-3.1	1.128	112.6	.469	1.429	282.1	490.4	.759	2.099A	117.2	.742	1.7	6.2	175.1	.299
4-3490	4-3747.1	.145	111.1	32.0	2.2	.630	83.7	.380	1.172	169.4	355.2	.727A	1.618	86.7	1.377	-.2	-1.4	257.0	.211
4-3747.1	4-3900	.211	287.6	63.7	8.7	1.256	92.6	.154	.853	340.2	537.6	.722	.985A	90.4	.928	-6.1	-30.1	49.7	.136
		19.35	12.60	9.55	6.75	10.12	3.05	11.79	2/2/2	21.6	89.8	69.0	1.353	1.766	76.0	236.9	-54.5	96.1D	1.037

MARS ARRIVAL DATE = 2443500 (22 DEC 1977)

4-3230	4-3500	.478	13.2	2.2	-1.6	1.053	115.7	.445	1.116	256.6	537.5	.620	1.612A	92.0	.586	-1.3	19.6	97.9	.160
4-3500	4-3803.7	.229	144.0	19.7	1.9	.593	73.0	.507	1.124	161.8	432.6	.554	1.694	112.8	1.368	-.2	-.4	256.4	.544
4-3803.7	4-3830	.544	269.0	5.4	2.1	1.462	70.2	.618	1.607	53.1	89.5	.614D	2.599A	121.6	1.184	4.9	26.2	49.4	.638
		18.99	15.19	10.23	3.80	7.20	4.96	21.99	2/2/1	101.6	7.7	13.6	.203	8.317	25.0	173.9	-24.8	105.1D	1.465
4-3280	4-3500	.423	51.1	13.7	-2.0	1.091	112.0	.419	1.269	274.7	506.8	.737	1.801A	109.5	.674	.2	8.0	163.5	.211
4-3500	4-3739.0	.145	107.2	27.6	1.1	.621	85.7	.386	1.168	173.1	341.4	.717A	1.619	84.8	1.377	.9	5.1	267.3	.240
4-3739.0	4-3880	.240	286.6	63.3	9.8	1.257	93.6	.161	.854	333.1	522.8	.716	.992A	93.2	.930	-6.7	-27.0	54.9	.154
		16.54	12.01	8.95	4.53	7.92	3.06	11.99	2/1/2	37.3	70.4	59.9	1.048	2.003	80.2	252.7	-53.7	79.9L	1.051
4-3280	4-3500	.423	51.1	13.7	-2.0	1.091	112.0	.419	1.269	274.7	506.8	.737	1.801A	109.5	.674	.2	8.0	163.5	.211
4-3500	4-3751.9	.146	108.7	36.4	3.1	.624	85.7	.380	1.173	172.8	361.4	.726	1.619	90.4	1.377	-1.2	-7.9	252.9	.210
4-3751.9	4-3880	.210	281.6	-66.0	-8.8	1.260	91.6	.156	.862	347.9	517.0	.726	.998A	94.1	.935	11.6	66.3	6.4	.224
		16.56	12.03	8.95	4.53	7.92	3.08	12.94	2/2/1	37.3	72.8	61.4	1.359	1.959	77.3	235.9	49.5	102.3D	1.303
4-3290	4-3500	.424	59.0	14.7	-2.3	1.103	111.8	.429	1.319	276.2	500.7	.752	1.865A	112.1	.695	.7	8.3	170.7	.238
4-3500	4-3743.2	.143	106.1	22.7	-.1	.623	85.8	.382	1.171	173.1	348.0	.723A	1.618	86.7	1.377	2.0	12.4	263.4	.226
4-3743.2	4-3890	.226	287.3	64.2	9.3	1.256	93.1	.156	.853	337.0	530.3	.720	.986A	91.8	.928	-6.5	-29.5	53.0	.143
		17.16	11.98	8.97	5.18	8.56	3.01	11.87	2/1/2	30.2	80.0	64.4	1.175	2.189	77.6	246.5	-48.6	86.5L	1.398
4-3290	4-3500	.424	59.0	14.7	-2.3	1.103	111.8	.429	1.319	276.2	500.7	.752	1.865A	112.1	.695	.7	8.3	170.7	.238
4-3500	4-3745.7	.168	103.1	-5.4	-7.4	.623	85.8	.381	1.172	173.1	352.0	.726A	1.618	87.8	1.377	9.4	48.7	261.9	.298
4-3745.7	4-3890	.298	295.0	74.1	13.2	1.257	92.7	.155	.854	339.7	529.1	.722	.987A	92.0	.929	-10.4	-39.5	58.2	.199
		17.68	12.50	8.97	5.18	8.56	3.53	12.57	2/1/2	30.2	81.9	29.1	.675	3.983	73.3	242.8	-24.8	92.3D	2.015

MARS ARRIVAL DATE = 2443510 (1 JAN 1978)

4-3280	4-3510	.412	51.3	13.7	-2.0	1.086	111.5	.407	1.250	274.4	511.2	.741	1.759A	107.0	.659	.2	8.2	163.1	.190
4-3510	4-3739.2	.147	103.1	26.6	.7	.616	86.0	.388	1.169	176.6	340.7	.716A	1.622	84.6	1.377	1.2	6.9	266.5	.243
4-3739.2	4-3880	.243	286.9	63.9	10.0	1.257	93.6	.161	.854	333.2	522.8	.717	.992A	93.2	.930	-6.9	-27.7	55.1	.156
		15.83	11.80	8.70	4.03	7.43	3.10	12.01	2/1/2	42.5	70.7	58.6	1.020	2.045	80.7	254.8	-52.8	78.1L	1.066
4-3290	4-3510	.409	59.1	14.7	-2.2	1.096	111.2	.413	1.292	278.0	505.1	.758	1.826A	109.7	.679	.7	8.1	171.2	.213
4-3510	4-3743.3	.145	102.1	23.2	-.1	.618	86.1	.384	1.172	176.9	347.3	.723A	1.622	86.5	1.378	2.0	12.3	264.7	.228
4-3743.3	4-3890	.228	287.4	64.6	9.4	1.256	93.0	.156	.853	337.1	530.3	.720	.986A	91.8	.928	-6.6	-29.9	53.3	.145
		16.28	11.70	8.64	4.58	7.97	3.06	11.89	2/1/2	34.2	80.0	54.6	1.156	2.179	78.5	248.8	-48.6	85.2L	1.363
4-3290	4-3510	.409	59.1	14.7	-2.2	1.096	111.2	.413	1.292	278.0	505.1	.758	1.826A	109.7	.679	.7	8.1	171.2	.213
4-3510	4-3759.6	.148	106.8	36.1	3.1	.618	87.4	.383	1.173	175.9	372.0	.724	1.623	93.5	1.377	-1.2	-7.5	246.1	.223
4-3759.6	4-3890	.223	272.1	-71.0	-9.6	1.259	90.3	.152	.859	356.0	525.1	.728	.990A	92.6	.933	12.0	69.5	357.7	.224
		16.34	11.76	8.64	4.58	7.97	3.11	12.94	2/2/1	34.2	80.0	65.6	1.213	1.846	81.0	234.5	48.8	110.8D	1.026

MARS ARRIVAL DATE = 2443520 (11 JAN 1978)

4-3280	4-3520	.403	51.4	13.7	-1.9	1.082	111.1	.398	1.235	274.1	515.4	.744	1.726A	104.5	.647	.2	8.7	161.9	.172
4-3520	4-3739.3	.152	96.8	26.1	.6	.612	90.5	.390	1.172	180.8	340.2	.715A	1.629D	84.5	1.378	1.4	7.8	269.3	.246
4-3739.3	4-3880	.246	287.2	64.4	10.2	1.257	93.6	.161	.854	333.3	522.7	.717	.992A	93.2	.930	-7.1	-28.2	55.3	.158
		15.34	11.71	8.51	3.63	7.03	3.20	12.04	2/1/2	48.3	70.9	58.0	.996	2.062	81.1	256.3	-52.2	77.1L	1.058
4-3290	4-3520	.397	59.2	14.7	-2.2	1.090	110.6	.400	1.271	277.7	509.4	.762	1.780A	107.2	.665	.6	8.2	171.2	.192
4-3520	4-3743.4	.150	98.0	23.5	-.1	.615	90.6	.386	1.176	180.9	346.9	.722A	1.629D	86.4	1.379	2.0	12.2	265.5	.230
4-3743.4	4-3890	.230	287.6	64.9	9.6	1.256	93.0	.156	.853	337.2	530.3	.720	.986A	91.8	.928	-6.7	-30.3	53.4	.146
		15.62	11.55	8.38	4.08	7.47	3.17	11.91	2/1/2	38.0	80.1	54.9	1.138	2.168	79.0	250.3	-48.9	84.3L	1.329
4-3290	4-3520	.397	59.2	14.7	-2.2	1.090	110.6	.400	1.271	277.7	509.4	.762	1.780A	107.2	.665	.6	8.2	171.2	.192
4-3520	4-3759.4	.156	102.6	40.8	4.3	.615	89.9	.384	1.177	179.9	371.2	.724	1.629	93.1	1.378	-2.5	-15.3	247.1	.227
4-3759.4	4-3890	.227	272.5	-71.6	-9.9	1.259	90.3	.152	.859	357.7	525.1	.728	.990A	92.6	.933	12.3	69.6	356.8	.228
		15.74	11.67	8.38	4.08	7.47	3.29	12.99	2/2/1	38.9	80.2	56.3	1.166	2.053	81.2	235.8	44.7	111.5D	1.228

MARS ARRIVAL DATE = 2443530 (21 JAN 1978)

4-3280	4-3530	.397	51.5	13.7	-1.9	1.078	110.8	.391	1.224	273.8	519.7	.746	1.702A	102.1	.637	.2	9.3	160.0	.157
4-3530	4-3739.3	.161	94.7	25.7	.5	.611	93.2	.393	1.178	185.0	340.0	.715A	1.641D	84.4	1.380	1.5	8.3	269.7	.246
4-3739.3	4-3880	.248	287.5	64.8	10.3	1.257	93.6	.161	.854	333.4	522.6	.717	.992A	93.3	.930	-7.2	-28.7	55.5	.160
		15.07	11.76	8.37	3.31	6.72	3.39	12.06	2/1/2	54.9	71.1	57.8	.975	2.068	81.3	257.1	-51.8	76.6L	1.041
4-3290	4-3530	.388	59.3	14.8	-2.1	1.086	110.2	.390	1.255	277.5	513.8	.766	1.745A	104.8	.653	.6	8.6	170.6	.173
4-3530	4-3743.5	.159	94.0	23.6	-.1	.613	93.3	.389	1.182	185.2	346.8	.722A	1.641D	86.3	1.380	2.0	12.1	265.9	.232
4-3743.5	4-3890	.232	287.8	65.3	9.7	1.256	93.0	.156	.853	337.3	530.3	.720	.986A	91.8	.929	-6.8	-30.6	53.6	.148
		15.19	11.53	8.18	3.66	7.06	3.35	11.92	2/1/2	44.1	80.2	55.3	1.119	2.155	79.3	251.1	-48.9	83.9L	1.293
4-3300	4-3530	.382	67.2	15.2	-2.4	1.095	109.7	.393	1.292	281.2	507.9	.784	1.799A	107.4	.669	1.1	4.4	178.9	.194
4-3530	4-3748.2	.159	93.8	18.4	-1.4	.615	93.2	.386	1.184	185.1	354.1	.727A	1.641D	88.4	1.380	3.3	20.7	280.8	.227
4-3748.2	4-3900	.227	288.5	67.0	9.6	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.0	-33.4	51.9	.148
		15.51	11.39	8.04	4.12	7.52	3.34	11.93	2/1/2	35.7	89.3	49.6	1.165	2.383	77.0	243.4	-42.6	94.3D	1.611
4-3300	4-3530	.382	67.2	15.2	-2.4	1.095	109.7	.393	1.292	281.2	507.9	.784	1.799A	107.4	.669	1.1	4.4	178.9	.194
4-3530	4-3754.0	.261	96.6	-21.9	-17.7	.615	93.0	.385	1.184	184.7	362.8	.728	1.640D	90.8	1.380	19.5	73.9	250.8	.480
4-3754.0	4-3900	.480	359.4	65.6	22.4	1.257	91.6	.151	.856	348.1	534.9	.726	.985A	90.9	.929	-20.0	-47.2	62.0	.349
		17.92	13.60	8.04	4.12	7.52	5.76	15.20	2/1/2	35.7	86.7	17.9	.261	6.421	86.3	237.4	-6.7	110.8D	1.413

MARS ARRIVAL DATE = 2443540 (31 JAN 1978)

4-3280	4-3540	.393	51.7	13.7	-1.9	1.075	110.6	.386	1.216	273.5	523.8	.747	1.684A	99.7	.628	.2	10.7	157.4	.146
4-3540	4-3739.4	.174	91.0	25.4	.4	.612	96.1	.397	1.187	189.5	340.1	.715A	1.658D	84.4	1.382	1.6	8.7	269.7	.251
4-3739.4	4-3880	.251	287.7	65.2	10.5	1.257	93.6	.161	.854	333.5	522.6	.717	.992A	93.3	.930	-7.4	-29.2	55.7	.162
		15.01	11.94	8.28	3.07	6.48	3.66	12.08	2/1/2	62.2	71.3	57.9	.956	2.067	81.3	257.2	-51.4	76.5L	1.020
4-3290	4-3540	.381	59.4	14.8	-2.1	1.082	109.9	.382	1.243	277.2	518.0	.769	1.718A	102.5	.642	.6	7.2	169.2	.158
4-3540	4-3743.6	.172	90.4	23.7	-.1	.614	96.2	.393	1.191	189.7	346.9	.722A	1.659D	86.3	1.382	2.0	11.9	265.6	.234
4-3743.6	4-3890	.234	287.9	65.6	9.8	1.256	93.0	.156	.853	337.4	530.2	.720	.986A	91.8	.929	-6.9	-31.0	53.9	.149
		14.97	11.65	8.02	3.32	6.72	3.63	11.94	2/1/2	50.1	80.2	55.6	1.099	2.137	79.4	251.2	-48.8	83.9L	1.250
4-3300	4-3540	.372	67.2	15.3	-2.3	1.090	109.2	.382	1.274	281.0	512.2	.788	1.761A	105.0	.658	1.0	4.6	178.7	.175
4-3540	4-3748.2	.171	90.3	20.3	-1.0	.615	96.1	.391	1.193	189.6	354.1	.727A	1.659D	88.3	1.383	2.9	16.0	280.6	.227
4-3748.2	4-3900	.226	288.5	66.9	9.8	1.256	92.4	.153	.854	341.5	537.2	.723	.985A	90.5	.928	-7.0	-33.3	51.8	.148
		15.12	11.43	7.83	3.69	7.09	3.60	11.92	2/1/2	40.5	89.4	52.1	1.172	2.276	77.2	243.7	-44.1	93.9D	1.495
4-3300	4-3540	.372	67.2	15.3	-2.3	1.090	109.2	.382	1.274	281.0	512.2	.788	1.761A	105.0	.658	1.0	4.6	178.7	.175
4-3540	4-3766.1	.175	97.6	42.1	5.2	.610	94.6	.395	1.184	187.1	380.0	.716	1.652D	95.6	1.380	-3.5	-16.9	243.5	.256
4-3766.1	4-3900	.256	260.1	-75.0	-11.4	1.257	89.1	.151	.857	6.6	173.5	.728D	.986A	91.2	.930	13.3	69.4	348.6	.242
		15.22	11.53	7.83	3.69	7.09	5.70	13.22	2/2/1	40.5	87.1	56.7	.905	2.104	88.2	257.4	42.4	118.4D	.999

STOPOVER TIME = 0 DAYS — 1978 INBOUND SWINGBY — MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2443540
31 JAN 1978

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-3370	4-3540	.364	124.1	41.4	6.6	1.181	105.7	.479	1.717	309.6	474.0	.895	2.539A	116.5	.797	-6.8	-23.7	201.2	.357
4-3540	4-3736.9	.174	91.1	25.5	.4	.612	96.1	.398	1.186	189.4	339.3	.714A	1.658D	84.1	1.382	1.5	8.4	270.1	.253
4-3736.9	4-3970	.253	307.0	14.9	3.0	1.266	100.4	.243	.871	301.5	581.8	.659	1.082	78.8	.923	-1.1	10.8	40.7	.218
		19.63	11.34	7.67	6.29	11.66	3.67	12.84	1/1/2	16.0	153.8	36.7	.938	3.177	16.0	200.5	-10.2	123.4D	2.039
4-3360	4-3540	.351	127.7	33.4	4.2	1.200	105.0	.508	1.848	314.5	469.1	.909	2.787A	119.9	.822	-4.2	-19.7	206.3	.378
4-3540	4-3748.8	.171	90.4	19.5	-1.2	.616	96.0	.390	1.193	189.6	355.2	.727A	1.659D	88.6	1.383	3.1	19.3	259.6	.227
4-3748.8	4-3960	.227	317.8	14.7	2.6	1.270	99.1	.232	.880	308.1	582.6	.676	1.084	79.3	.926	-1.9	9.8	50.5	.210
		19.88	11.00	7.39	8.39	12.25	3.60	12.73	1/1/2	9.8	153.7	55.5	1.168	2.149	19.9	197.5	4.8	142.5D	1.342
MARS ARRIVAL DATE = 2443550 (10 FEB 1978)																			
4-3280	4-3550	.391	51.9	13.8	-1.9	1.073	110.5	.383	1.209	273.1	527.9	.746	1.672A	97.3	.621	.2	12.0	154.0	.137
4-3550	4-3739.5	.190	87.9	25.1	.3	.616	99.3	.404	1.200	194.2	340.5	.715A	1.684D	84.4	1.385	1.6	9.0	269.2	.253
4-3739.5	4-3880	.253	288.0	65.6	10.6	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.5	-29.6	55.9	.164
		15.17	12.27	8.23	2.91	6.32	4.04	12.11	2/1/2	70.2	71.4	58.1	.937	2.060	81.1	256.5	-51.0	76.9L	.994
4-3290	4-3550	.376	59.5	14.9	-2.0	1.079	109.6	.376	1.234	277.0	522.2	.770	1.697A	100.1	.634	.5	8.2	167.2	.145
4-3550	4-3743.7	.189	87.4	23.7	-.1	.618	99.2	.400	1.204	194.4	347.4	.723A	1.684D	86.4	1.386	2.0	11.8	265.2	.236
4-3743.7	4-3890	.236	288.1	66.0	9.9	1.256	93.0	.156	.853	337.5	530.1	.720	.986A	91.8	.929	-7.0	-31.4	54.1	.151
		14.97	11.91	7.91	3.05	6.46	4.00	11.96	2/1/2	56.9	60.2	56.4	1.078	2.116	79.2	250.4	-48.6	84.5L	1.204
4-3300	4-3550	.364	67.2	15.5	-2.2	1.086	108.9	.373	1.261	280.8	516.5	.791	1.731A	102.7	.648	1.0	5.1	177.9	.159
4-3550	4-3748.2	.187	87.5	21.3	-.8	.619	99.1	.397	1.205	194.4	354.5	.727A	1.684D	88.4	1.386	2.7	16.5	259.9	.228
4-3748.2	4-3900	.228	288.5	67.2	9.6	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.1	-33.5	52.0	.149
		14.97	11.63	7.66	3.54	6.74	3.97	11.93	2/1/2	45.9	89.3	53.9	1.158	2.206	77.3	243.2	-44.6	94.3D	1.397
4-3300	4-3550	.364	67.2	15.5	-2.2	1.086	108.9	.373	1.261	280.8	516.5	.791	1.731A	102.7	.648	1.0	5.1	177.9	.159
4-3550	4-3763.4	.244	87.8	61.1	14.0	.614	97.9	.399	1.197	192.3	376.6	.720	1.675D	94.7	1.383	-12.4	-54.4	240.7	.363
4-3763.4	4-3900	.363	259.4	-84.2	-16.7	1.257	89.6	.150	.857	2.9	173.9	.728D	.986A	91.1	.930	16.7	70.3	339.7	.328
		16.33	12.99	7.66	3.54	6.74	5.33	14.76	2/2/1	45.9	88.1	30.1	.456	3.848	87.8	236.8	20.5	123.8D	1.296
4-3300	4-3550	.364	67.2	15.5	-2.2	1.086	108.9	.373	1.261	280.8	516.5	.791	1.731A	102.7	.648	1.0	5.1	177.9	.159
4-3550	4-3764.2	.224	95.9	56.2	11.3	.614	97.6	.399	1.196	192.1	377.6	.719	1.674D	95.0	1.383	-9.7	-45.8	242.0	.325
4-3764.2	4-3900	.323	260.4	-81.2	-14.7	1.257	89.5	.150	.857	4.0	173.7	.728D	.986A	91.1	.930	16.7	70.2	342.0	.295
		15.82	12.48	7.66	3.54	6.74	4.83	14.14	2/2/1	45.9	87.8	36.0	.377	3.259	86.7	257.0	26.1	123.2D	1.293
4-3310	4-3550	.355	75.0	15.2	-2.5	1.094	108.2	.373	1.292	284.7	510.8	.810	1.774A	105.1	.663	1.5	2.9	186.5	.177
4-3550	4-3754.6	.189	88.7	12.5	-3.5	.618	98.8	.396	1.204	193.9	364.0	.728	1.681D	91.1	1.385	5.3	31.3	252.5	.248
4-3754.6	4-3910	.248	289.3	72.2	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-38.1	53.2	.172
		15.20	11.48	7.47	3.73	7.13	4.01	12.20	2/1/2	37.4	96.1	45.4	.979	2.394	77.2	235.5	-34.2	109.5D	1.560
4-3310	4-3550	.355	75.0	15.2	-2.5	1.094	108.2	.373	1.292	284.7	510.8	.810	1.774A	105.1	.663	1.5	2.9	186.5	.177
4-3550	4-3758.4	.230	91.8	-9.4	-12.0	.617	98.4	.397	1.202	193.3	369.4	.725	1.679D	92.7	1.385	13.7	60.4	245.3	.377
4-3758.4	4-3910	.377	301.9	84.1	17.4	1.257	91.0	.151	.857	352.1	542.0	.727	.986	89.6	.929	-15.4	-45.7	60.6	.274
		16.19	12.46	7.47	3.73	7.13	4.99	13.76	2/1/2	37.4	93.1	26.6	.423	4.321	84.6	234.1	-15.7	120.0D	1.405
4-3370	4-3550	.360	128.9	50.1	9.3	1.165	104.7	.440	1.613	310.1	478.7	.903	2.324A	116.1	.770	-9.4	-30.2	199.8	.333
4-3550	4-3734.2	.192	89.3	28.2	.7	.611	99.2	.412	1.192	193.6	331.5	.701A	1.662D	81.8	1.384	1.4	6.5	272.7	.286
4-3734.2	4-3970	.285	303.4	13.6	3.1	1.266	102.0	.263	.869	295.4	583.2	.641	1.098	77.4	.921	-.7	12.4	39.1	.239
		19.31	11.67	7.56	7.64	11.01	4.09	13.18	1/1/2	22.9	155.0	31.0	.737	3.739	16.8	200.3	-13.0	116.0D	2.019
4-3360	4-3550	.327	129.0	37.5	5.1	1.181	103.9	.463	1.706	314.8	473.9	.916	2.496A	117.5	.792	-5.1	-22.9	207.7	.342
4-3550	4-3748.7	.187	87.5	21.0	-.9	.619	99.1	.397	1.205	194.4	355.2	.727A	1.684D	88.6	1.386	2.8	17.2	259.4	.228
4-3748.7	4-3980	.228	317.7	14.7	2.6	1.270	99.1	.232	.879	307.9	582.8	.675	1.084	79.2	.926	-1.9	9.6	50.4	.211
		18.77	10.87	6.91	7.90	11.27	3.97	12.73	1/1/2	13.0	153.7	56.0	1.159	2.151	18.3	197.9	2.6	142.0D	1.310
MARS ARRIVAL DATE = 2443560 (20 FEB 1978)																			
4-3260	4-3560	.390	52.1	13.8	-1.9	1.072	110.6	.382	1.205	272.6	531.9	.745	1.665A	94.9	.616	.2	13.5	150.1	.132
4-3560	4-3739.6	.211	85.5	24.8	.3	.623	102.6	.412	1.218	199.3	341.3	.716A	1.720D	84.6	1.390	1.7	9.2	266.1	.256
4-3739.6	4-3880	.256	288.3	66.0	10.7	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.6	-30.0	56.0	.166
		15.56	12.76	8.22	2.81	6.22	4.53	12.13	2/1/2	78.7	71.6	58.4	.918	2.048	80.6	255.0	-50.5	77.7L	.963
4-3290	4-3560	.372	59.7	15.0	-2.0	1.077	109.5	.372	1.227	276.7	526.3	.770	1.683A	97.8	.627	.5	9.5	164.4	.135
4-3560	4-3743.8	.210	85.1	23.7	-.1	.625	102.5	.408	1.222	199.5	348.2	.723A	1.721D	86.6	1.390	2.0	11.7	263.9	.239
4-3743.8	4-3890	.239	286.4	66.5	10.1	1.256	93.0	.156	.853	337.7	530.0	.720	.986A	91.8	.929	-7.2	-31.9	54.3	.155
		15.19	12.33	7.84	2.86	6.27	4.49	11.98	2/1/2	64.3	80.3	57.2	1.054	2.090	78.9	246.9	-48.2	85.6L	1.148
4-3300	4-3560	.358	67.3	15.6	-2.1	1.083	108.6	.366	1.251	280.6	520.7	.793	1.706A	100.4	.640	.9	5.9	176.4	.145
4-3560	4-3748.4	.208	85.5	21.9	-.7	.626	102.5	.405	1.223	199.5	355.4	.727A	1.719D	88.7	1.390	2.6	15.6	258.6	.231
4-3748.4	4-3900	.231	288.7	67.6	9.8	1.256	92.4	.153	.854	341.7	537.1	.723	.985A	90.5	.928	-7.2	-34.0	52.5	.151
		15.03	11.98	7.53	3.05	6.46	4.45	11.96	2/1/2	52.1	89.5	55.6	1.151	2.146	77.1	241.8	-44.7	95.5D	1.296
4-3310	4-3560	.346	74.9	15.5	-2.4	1.090	107.9	.363	1.278	284.6	515.2	.813	1.742A	102.8	.653	1.4	3.3	186.0	.160
4-3560	4-3754.1	.206	86.3	17.2	-2.3	.625	102.0	.404	1.222	198.9	363.9	.728	1.715D	91.1	1.389	4.0	24.1	261.8	.239
4-3754.1	4-3910	.239	289.0	71.0	10.4	1.257	91.7	.152	.856	346.8	543.3	.726	.986	89.4	.928	-8.2	-37.1	52.5	.165
		15.06	11.70	7.29	3.36	6.77	4.42	12.12	2/1/2	42.3	96.5	51.5	1.050	2.303	76.7	235.0	-38.2	108.5D	1.367
4-3360	4-3560	.312	131.3	43.3	6.5	1.165	102.9	.425	1.607	315.3	478.8	.924	2.290A	115.1	.766	-6.4	-27.2	208.2	.313
4-3560	4-3748.2	.208	85.3	22.0	-.7	.626	102.3	.406	1.223	199.5	355.0	.727A	1.719D	88.6	1.390	2.5	15.4	258.9	.231
4-3748.2	4-3980	.231	317.4	14.5	2.8	1.270	99.3	.234	.879	307.2	582.6	.673	1.085	79.1	.926	-1.9	10.0	50.3	.212
		18.18	11.06	6.81	7.10	10.48	4.45	12.76	1/1/2	17.5	153.9	56.4	1.129	2.116	17.0	197.9	.9	141.2D	1.260
MARS ARRIVAL DATE = 2443570 (2 MAR 1978)																			
4-3290	4-3570	.371	59.8	15.2	-1.9	1.075	109.4	.370	1.221	276.3	530.4	.770	1.673A	95.5	.622	.5	11.0	160.9	.126
4-3570	4-3744.0	.235	83.6	23.6	-.1	.636	105.9	.420	1.248	204.9	349.5	.724A	1.771D	86.9	1.396	2.0	11.6	262.0	.242
4-3744.0	4-3890	.242	288.7	67.1	10.2	1.256	92.9	.156	.853	337.8	530.0	.720	.986A	91.8	.929	-7.4	-32.5	54.7	.156
		15.64	12.91	7.80	2.73	6.14	5.11	12.01	2/1/2	72.4	80.4	58.2	1.023	2.055	78.4	248.5	-47.7	87.3L	1.079
4-3300	4-3570	.353	67.4	15.8	-2.0	1.081	106.4	.361	1.243	280.4	524.9	.794	1.691A	98.2	.634	.9	7.1	174.1	.134
4-3570	4-3748.6	.233	83.8	22.2	-.6	.636	105.7	.417	1.248	204.8	356.7	.726A	1.768D	89.0	1.396	2.5	14.9	256.6	.235
4-3748.6	4-3900	.235	289.0	68.4	10.0	1.256	92.4	.153	.854	342.0	537.0	.723	.985A	90.6	.928	-7.5	-34.7	52.8	.154
		15.35	12.49	7.44	2.84	6.25	5.05	11.99	2/1/2	59.0	89.2	57.4	1.091	2.084	76.9	239.8	-44.5	97.2D	1.102
4-3310	4-3570	.339	74.9	15.8	-2.3	1.087	107.6	.356	1.267	284.5	519.5	.816	1.717A	100.6	.645	1.3	4.0	185.0	.145
4-3570	4-3754.2	.230	86.8	19.1	-1.8	.635	105.3	.416	1.245	204.1	364.9	.727	1.762D	91.4	1.395	3.5	20.9	250.2	.241
4-3754.2	4-3910	.241	289.1	71.3	10.5	1.257	91.7	.152	.856	347.0	543.2	.726	.986	89.4	.928	-8.4	-37.4	52.5	.167
		15.19	12.13	7.15	3.07	6.47	4.98	12.14	2/1/2	48.0	96.4	55.2	1.031	2.159	76.7	233.8	-39.6	109.0D	1.195
4-3380	4-3570	.312	136.5	52.0	8.8	1.153	102.1	.394	1.534	315.9	483.7	.930	2.136A	112.7	.745	-8.8	-33.6	206.9	.292
4-3570	4-3747.3	.233	83.7	22.7	-.5	.636	105.8	.418	1.248	204.9	354.7	.727A	1.769D	88.4	1.396	2.3	13.8	258.2	.236
4-3747.3	4-3980	.236	316.9	14.2	2.6	1.270	99.5	.237	.879	306.1	583.0	.671	1.087	78.9	.925	-1.8	10.4	50.0	.215
		18.25	11.68	6.61	6.57	9.94	5.07	12.80	1/1/2	24.4	154.2	56.6	1.061	2.102	16.0	197.6	-.5	140.2D	1.191
MARS ARRIVAL DATE = 2443580 (12 MAR 1978)																			
4-3290	4-3580	.371	60.0	15.3	-1.9	1.074	109.5	.369	1.217	275.9	534.4	.768	1.667A	93.3	.616	.5	12.6	157.1	.124
4-3580	4-3744.2	.265	82.7	23.6	-.1	.652	109.5	.435	1.283	210.7	351.1	.725A	1.842D	87.3	1.404	2.0	11.5	269.4	.247
4-3744.2	4-3890	.247	289.2	67.8	10.5	1.257	92.9	.156	.854	338.0	529.9	.721	.987A	91.9	.929	-7.7	-33.3	55.1	.160
		16.33	13.66	7.81	2.66	6.07	5.87	12.06	2/1/2	80.9	80.5	59.7	.982	2.010	77.7	243.4	-47.0	89.6L	.993
4-3300	4-3580	.351	67.5	16.0	-2.0	1.079	108.3	.356	1.237	280.1	529.0	.794	1.679A	96.0	.629	.8	8.5	171.2	.125
4-3580	4-3749.0	.262	83.0	22.4	-.6	.651	109.2	.432	1.282	210.4	356.4	.728A	1.837D	89.5	1.404	2.4	14.2	253.9	.241
4-3749.0	4-3900	.241	289.4	69.4	10.4	1.256	92.3	.153	.854	342.4	536.9	.723	.985A	90.6	.928	-7.8	-35.6	53.5	.159
		15.65	13.18	7.39	2.68	6.09	5.79	12.05	2/1/2	66.6	89.1	59.5	1.035	2.015	76.7	237.2	-44.1	99.4D	1.081
4-3310	4-3580	.334	75.0	16.0	-2.1	1.084	107.5	.350	1.258	284.5	523.7	.818	1.698A	98.4	.639	1.2	4.9	183.2	.133
4-3580	4-3754.6	.256	84.0	20.2	-1.6	.649	108.8	.431	1.277	209.8	366.5	.727	1.826D	92.0	1.402	3.5	18.8	247.9	.248
4-3754.6	4-3910	.248	289.5	72.3	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-38.2	53.2	.172
		15.56	12.73	7.04	2.85	6.24	5.69	12.21	2/1/2	54.3	96.1	50.5	.976	2.048	77.1	232.2	-40.2	110.4D	1.023
4-3380	4-3580	.320	92.4	18.3	-2.4	1.090	106.4	.348	1.281	288.6	518.4	.839	1.784A	100.6	.661	1.7	8.4	193.1	.146
4-3580	4-3748.2	.257	86.7	11.6	-3.1	.642	107.9	.431	1.263	207.7	376.7	.719	1.807D	95.0	1.399	6.7	33.3	241.8	.257
4-3748.2	4-3920	.257	296.6	76.8	13.4	1.259	90.7	.155	.859	354.7	548.6	.726	.990	88.9	.928	-11.0	-42.2	56.9	.220
		18.49	12.41	6.76	3.08	6.49	5.65	12.87	2/1/2	44.5	99.5	49.1	.883	2.407	81.5	250.7	-31.5	123.9D	.992

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2443560
12 MAR 1978

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN 1 / ECCEN 3 / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-3560	4-3560	.353	153.7	64.4	13.7	1.142	101.3	.367	1.480	316.6	488.7	.936	2.023A	110.4	.727	-13.4	-44.1	200.1	.296
4-3560	4-3746.0	.264	82.8	23.2	-.5	.652	109.4	.434	1.283	210.6	354.0	.727A	1.840D	66.2	1.404	2.1	12.5	257.3	.244
4-3746.0	4-3980	.244	316.0	15.8	2.7	1.270	100.0	.242	.876	304.4	583.3	.666	1.091	78.6	.925	-1.7	10.9	49.6	.220
		19.92	15.26	7.42	6.66	10.03	5.84	12.87	1/1/2	36.5	154.5	57.1	1.013	2.093	15.0	196.9	-1.5	138.80	1.107
MARS ARRIVAL DATE = 2443600 (1 APR 1978)																			
4-3570	4-3600	.291	111.6	-17.3	-9.6	1.118	101.2	.325	1.379	312.1	503.0	.931	1.827A	104.8	.690	9.8	14.6	226.1	.221
4-3600	4-3712.5	.375	90.7	26.2	1.5	.858	120.1	.557	1.302	214.1	295.5	.577A	2.026D	67.9	1.413	1.5	3.5	268.5	.556
4-3712.5	4-3970	.556	286.0	10.0	4.8	1.265	115.2	.449	.860	265.4	585.7	.474	1.247	64.9	.915	2.2	18.3	35.1	.441
		18.76	15.00	8.21	4.77	8.15	8.78	17.17	2/1/2	39.1	156.7	18.5	.195	8.207	21.5	189.8	-20.5	92.80	1.015

STOPOVER TIME = 0 DAYS — 1978 INBOUND SWINGBY — MISSION DURATION = 640 DAYS; MARS ARRIVAL DATE = 2443490 (12 DEC 1977)

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	$SPEED1 / $SPEED3 / $SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	$SPEED2 / $SPEED4 / $SPEED6 PERIC
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3240	4-3490	.455	20.2	5.1	-1.5	1.060	114.3	.426	1.143	261.1	527.4	.655	1.630A	99.0	.612	-1.0	17.7	116.0	.166
4-3490	4-3736.9	.147	111.1	30.1	1.8	.627	83.5	.385	1.168	169.5	342.3	.718A	1.618	85.1	1.377	.2	1.0	265.7	.236
4-3736.9	4-3880	.236	286.2	62.7	9.6	1.257	93.7	.161	.854	333.0	522.9	.716	.992A	93.2	.930	-6.5	-26.3	54.6	.151
		16.31	12.77	9.66	3.54	6.94	3.09	11.96	2/1/2	77.7	70.2	63.6	1.080	1.899	79.8	249.9	-55.8	81.4L	.971
4-3240	4-3490	.455	20.2	5.1	-1.5	1.060	114.3	.426	1.143	261.1	527.4	.655	1.630A	99.0	.612	-1.0	17.7	116.0	.166
4-3490	4-3751.9	.144	111.7	31.4	2.0	.630	83.5	.380	1.173	169.2	362.6	.728	1.618	90.7	1.377	-.1	-.6	251.0	.209
4-3751.9	4-3880	.209	281.5	-65.8	-8.7	1.260	91.6	.158	.862	347.9	517.0	.726	.998A	94.1	.935	11.5	68.2	6.8	.223
		16.26	12.72	9.68	3.54	6.94	3.04	12.92	2/2/1	77.7	72.7	68.7	1.378	1.772	77.1	253.1	53.0	103.0D	1.063
4-3260	4-3490	.436	35.3	10.2	-1.6	1.076	113.0	.420	1.205	266.1	514.9	.699	1.711A	106.0	.648	-.5	12.5	145.4	.186
4-3490	4-3747.1	.145	111.1	32.0	2.2	.630	83.7	.380	1.172	169.4	355.2	.727A	1.618	88.7	1.377	-.2	-1.4	257.0	.211
4-3747.1	4-3900	.211	287.6	63.7	8.7	1.256	92.6	.154	.853	340.2	537.6	.722	.985A	90.4	.928	-6.1	-30.1	49.7	.136
		16.32	12.34	9.29	3.96	7.38	3.05	11.79	2/2/2	50.8	89.8	69.0	1.353	1.766	76.0	236.9	-54.5	96.1D	1.037
4-3270	4-3490	.435	43.1	12.2	-1.8	1.087	112.8	.425	1.245	271.6	508.6	.717	1.774A	109.1	.688	-.1	10.0	153.4	.209
4-3490	4-3752.0	.144	111.8	31.4	2.0	.630	83.5	.380	1.173	169.2	362.8	.728	1.619	90.8	1.377	-.1	-.6	250.8	.209
4-3752.0	4-3910	.209	288.4	65.4	8.7	1.257	92.1	.153	.855	344.2	543.9	.724	.986	89.3	.928	-6.5	-32.1	48.3	.142
		16.76	12.28	9.24	4.48	7.87	3.04	11.86	2/2/2	40.8	98.4	71.3	1.376	1.715	74.4	230.0	-52.1	105.2D	.984
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3240	4-3500	.456	20.5	5.1	-1.6	1.059	114.4	.427	1.138	260.5	531.5	.652	1.624A	96.2	.603	-1.0	18.5	113.5	.165
4-3500	4-3739.0	.145	107.2	27.6	1.1	.621	85.7	.386	1.168	173.1	341.4	.717A	1.619	84.8	1.377	.9	5.1	267.3	.240
4-3739.0	4-3880	.240	286.6	63.3	9.8	1.257	93.6	.161	.854	333.1	522.8	.716	.992A	93.2	.930	-6.7	-27.0	54.9	.154
		16.25	12.77	9.71	3.47	6.88	3.06	11.99	2/1/2	86.8	70.4	59.9	1.048	2.003	80.2	252.7	-53.7	79.5L	1.051
4-3240	4-3500	.456	20.5	5.1	-1.6	1.059	114.4	.427	1.138	260.5	531.5	.652	1.624A	96.2	.603	-1.0	18.5	113.5	.165
4-3500	4-3751.9	.146	108.7	36.4	3.1	.624	85.7	.380	1.173	172.8	361.4	.728	1.619	90.4	1.377	-1.2	-7.9	252.9	.210
4-3751.9	4-3880	.210	281.6	-66.0	-8.8	1.260	91.6	.158	.862	347.9	517.0	.726	.998A	94.1	.935	11.6	68.3	6.4	.224
		16.27	12.79	9.71	3.47	6.88	3.08	12.94	2/2/1	86.8	72.8	61.4	1.359	1.959	77.3	235.9	49.5	102.3D	1.303
4-3250	4-3500	.441	28.0	7.7	-1.6	1.065	113.4	.417	1.163	264.1	525.4	.678	1.649A	100.0	.618	-.7	16.2	129.2	.163
4-3500	4-3743.2	.143	106.1	22.7	-.1	.623	85.8	.382	1.171	173.1	348.0	.723A	1.618	86.7	1.377	2.0	12.4	263.4	.226
4-3743.2	4-3890	.226	287.3	64.2	9.3	1.256	93.1	.156	.853	337.0	530.3	.720	.986A	91.8	.928	-6.5	-29.5	53.0	.143
		15.61	12.36	9.36	3.43	6.83	3.01	11.87	2/1/2	71.7	80.0	54.4	1.175	2.189	77.8	246.5	-48.6	86.5L	1.398
4-3250	4-3500	.441	28.0	7.7	-1.6	1.065	113.4	.417	1.163	264.1	525.4	.678	1.649A	100.0	.618	-.7	16.2	129.2	.163
4-3500	4-3743.7	.168	103.1	-5.4	-7.4	.623	85.8	.381	1.172	173.1	352.0	.726A	1.618	87.8	1.377	9.4	48.7	261.9	.298
4-3743.7	4-3890	.298	295.0	74.1	13.2	1.257	92.7	.155	.854	339.7	529.1	.722	.987A	92.0	.929	-10.4	-39.3	58.2	.199
		16.53	12.90	9.36	3.43	6.83	3.53	12.57	2/1/2	71.7	81.9	29.1	.675	3.983	78.3	242.8	-24.8	92.3D	2.015
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3240	4-3510	.460	20.9	5.1	-1.7	1.058	114.7	.431	1.135	259.8	535.4	.646	1.624A	93.4	.595	-1.0	19.2	109.0	.166
4-3510	4-3739.2	.147	103.1	26.6	.7	.616	86.0	.388	1.169	176.8	340.7	.716A	1.622	84.6	1.377	1.2	6.9	268.5	.243
4-3739.2	4-3880	.243	286.9	63.9	10.0	1.257	93.6	.161	.854	333.2	522.8	.717	.992A	93.2	.930	-6.9	-27.7	55.1	.156
		16.42	12.91	9.82	3.51	6.91	3.10	12.01	2/1/2	95.7	70.7	58.6	1.020	2.045	80.7	254.8	-52.8	78.1L	1.066
4-3250	4-3510	.441	28.3	7.7	-1.6	1.063	113.5	.416	1.158	263.6	529.5	.676	1.640A	97.4	.609	-.7	17.2	124.9	.157
4-3510	4-3743.3	.145	102.1	23.2	-.1	.618	86.1	.384	1.172	176.9	347.3	.723A	1.622	86.5	1.378	2.0	12.3	264.7	.226
4-3743.3	4-3890	.226	287.4	64.6	9.4	1.256	93.0	.156	.853	337.1	530.3	.720	.986A	91.8	.928	-6.6	-29.9	53.3	.145
		15.72	12.42	9.36	3.51	6.71	3.06	11.89	2/1/2	80.6	80.0	54.6	1.156	2.179	78.5	248.8	-48.8	85.2L	1.363
4-3250	4-3510	.441	28.3	7.7	-1.6	1.063	113.5	.416	1.158	263.6	529.5	.676	1.640A	97.4	.609	-.7	17.2	124.9	.157
4-3510	4-3759.6	.148	106.8	36.1	3.1	.618	87.4	.383	1.173	175.9	372.0	.724	1.623	93.3	1.377	-1.2	-7.5	246.1	.223
4-3759.6	4-3890	.223	272.1	-71.0	-9.6	1.259	90.3	.152	.859	358.0	525.1	.728	.990A	92.6	.933	12.0	69.5	357.7	.224
		15.78	12.47	9.36	3.51	6.71	3.11	12.94	2/2/1	80.6	80.0	65.6	1.213	1.846	81.0	234.5	48.6	110.8D	1.026
4-3510	4-3510	.415	75.1	13.8	-3.5	1.122	110.8	.439	1.403	285.2	493.3	.787	2.019A	114.6	.723	2.2	4.5	183.5	.270
4-3510	4-3694.0	.253	125.8	23.8	1.9	.518	79.9	.584	1.035	172.7	264.5	.430A	1.639	58.4	1.344	.3	.5	255.6	.713
4-3694.0	4-3950	.713	263.3	10.6	7.1	1.260	122.8	.555	.844	249.9	581.9	.376	1.312	57.8	.909	5.7	15.7	17.0	.561
		20.26	14.28	8.73	5.98	9.36	5.55	20.04	2/1/2	23.0	153.2	12.7	.118	9.063	53.1	176.8	-52.5	81.6L	.952
4-3320	4-3510	.422	83.1	10.1	-5.2	1.137	110.7	.459	1.479	289.0	487.5	.801	2.158A	116.8	.748	4.1	6.0	188.7	.303
4-3510	4-3707.5	.199	119.6	26.2	1.8	.565	83.7	.493	1.092	173.5	286.9	.554A	1.631	67.6	1.360	.4	.9	265.6	.533
4-3707.5	4-3960	.535	277.4	10.9	5.0	1.262	114.1	.431	.853	264.7	585.2	.486	1.221	66.3	.913	2.7	16.4	25.5	.420
		20.02	13.16	8.93	6.66	10.23	4.23	16.71	2/1/2	20.2	155.6	15.5	.212	7.432	41.0	186.5	-40.4	88.4L	1.361
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3240	4-3520	.468	21.3	5.1	-1.7	1.057	115.1	.437	1.134	259.0	539.2	.636	1.629A	90.6	.588	-1.0	19.7	105.2	.172
4-3520	4-3739.3	.152	98.8	26.1	.6	.612	90.5	.390	1.172	180.8	340.2	.715A	1.629D	84.5	1.378	1.4	7.8	269.3	.246
4-3739.3	4-3880	.246	287.2	64.4	10.2	1.257	93.6	.161	.854	333.3	522.7	.717	.992A	93.2	.930	-7.1	-28.2	55.3	.158
		16.81	13.18	9.98	3.63	7.05	3.20	12.04	2/1/2	104.0	70.9	58.0	.996	2.062	81.1	256.5	-52.2	77.1L	1.058
4-3250	4-3520	.443	28.6	7.7	-1.7	1.062	113.6	.416	1.154	263.0	533.4	.672	1.637A	94.7	.601	-.7	18.1	120.4	.156
4-3520	4-3743.4	.150	98.0	23.5	-.1	.615	90.6	.386	1.176	180.9	346.9	.722A	1.629D	86.4	1.379	2.0	12.2	265.5	.230
4-3743.4	4-3890	.230	287.6	64.9	9.6	1.256	93.0	.156	.853	337.2	530.3	.720	.986A	91.8	.928	-6.7	-30.3	53.4	.148
		15.86	12.58	9.41	3.28	6.68	3.17	11.91	2/1/2	89.5	80.1	54.9	1.138	2.168	79.0	250.3	-48.9	84.3L	1.329
4-3250	4-3520	.443	28.6	7.7	-1.7	1.062	113.6	.416	1.154	263.0	533.4	.672	1.637A	94.7	.601	-.7	18.1	120.4	.156
4-3520	4-3759.4	.156	102.6	40.6	4.3	.615	89.9	.384	1.177	179.9	371.2	.724	1.629	93.1	1.378	-2.5	-15.3	247.1	.227
4-3759.4	4-3890	.227	272.5	-71.6	-9.9	1.259	90.3	.152	.859	357.7	525.1	.726	.990A	92.6	.933	12.3	69.6	356.8	.226
		15.98	12.70	9.41	3.28	6.66	3.29	12.99	2/2/1	89.5	80.2	58.3	1.166	2.053	81.2	235.8	44.7	111.3D	1.226
4-3320	4-3520	.398	82.9	11.6	-4.4	1.126	109.8	.433	1.425	288.8	491.9	.809	2.041A	114.4	.726	3.3	4.3	190.2	.272
4-3520	4-3705.9	.205	116.2	26.1	1.7	.552	86.2	.506	1.083	176.3	282.6	.533A	1.633	66.0	1.356	.5	1.1	265.5	.565
4-3705.9	4-3960	.565	276.3	10.8	5.3	1.265	115.6	.453	.853	262.0	584.9	.467	1.239	64.8	.913	3.1	16.7	25.9	.445
		18.82	12.79	8.40	6.03	9.41	4.39	17.27	2/1/2	22.1	155.6	14.5	.169	7.945	42.2	186.2	-41.6	86.8L	1.310
4-3330	4-3520	.414	90.8	4.2	-7.3	1.141	109.5	.452	1.500	292.7	486.3	.822	2.178A	116.4	.749	6.4	8.3	195.9	.308
4-3520	4-3742.8	.151	98.1	24.3	.1	.614	90.6	.386	1.175	180.9	345.4	.721A	1.629D	85.9	1.378	1.8	10.8	266.5	.233
4-3742.8	4-3970	.233	309.5	16.1	3.0	1.267	99.3	.230	.872	306.0	560.6	.671	1.073	79.7	.924	-1.4	9.5	41.9	.209
		18.90	11.91	8.74	6.99	10.37	3.17	12.65	2/1/2	21.9	152.7	42.1	1.111	2.785	16.2	199.6	-7.2	130.1D	1.983
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3240	4-3530	.477	21.7	5.2	-1.8	1.057	115.6	.445	1.134	258.1	542.9	.629	1.638	87.7	.583	-1.0	20.1	102.2	.181
4-3530	4-3739.3	.161	94.7	25.7	.J	.611	93.2	.393	1.178	185.0	340.0	.715A	1.641D	84.4	1.380	1.5	8.3	269.7	.248
4-3739.3	4-3880	.248	287.5	64.8	10.3	1.257	93.6	.161	.854	333.4	522.6	.717	.992A	93.3	.930	-7.2	-28.7	55.5	.160
		17.44	13.60	10.21	3.84	7.23	3.39	12.06	2/1/2	111.3	71.1	57.8	.975	2.068	81.3	257.1	-51.8	76.6L	1.041
4-3250	4-3530	.448	28.9	7.8	-1.8	1.061	113.9	.422	1.152	262.3	537.3	.666	1.638A	92.0	.595	-.7	19.0	116.3	.158
4-3530	4-3743.8	.159	94.0	23.6	-.1	.615	93.3	.389	1.182	185.2	346.8	.722A	1.641D	86.3	1.380	2.0	12.1	265.9	.232
4-3743.8	4-3890	.232	287.8	65.3	9.7	1.256	93.0	.156	.853	337.3	530.5	.720	.986A	91.8	.929	-6.8	-30.8	53.6	.148
		16.21	12.88	9.52	3.35	6.73	3.35	11.92	2/1/2	98.1	80.2	55.3	1.119	2.155	79.3	251.1	-48.9	83.9L	1.293
4-3260	4-3530	.426	36.3	10.1	-1.8	1.068	112.6	.406	1.173	266.3	531.5	.697	1.649A	95.7	.606	-.4	16.5	131.9	.147
4-3530	4-3748.2	.159	93.8	18.4	-1.4	.615	93.2	.386	1.184	185.1	354.1	.727A	1.641D	88.4	1.380	3.3	20.7	260.8	.227
4-3748.2	4-3900	.227	288.5	67.0	9.6	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.0	-33.4	51.9	.148
		15.48	12.38	9.02	3.10	6.51	3.34	11.93	2/1/2	83.0	89.3	49.6	1.165	2.383	77.0	243.4	-42.6	94.3D	1.611
4-3260	4-3530	.426	36.3	10.1	-1.8	1.068	112.6	.406	1.173	266.3	531.5	.697	1.649A	95.7	.606	-.4	16.5	131.9	.147
4-3530	4-3754.0	.261	96.6	-21.9	-17.7	.615	93.0	.389	1.184	184.7	362.8	.728	1.640D	90.8	1.380	19.5	73.9	250.8	.480
4-3754.0	4-3900	.480	359.4	65.6	22.4	1.257	91.6	.151	.856	348.1	534.9	.726	.985A	90.9	.929	-20.0	-47.2	62.0	.349
		17.88	14.77	9.02	3.10	6.51	5.76	19.20	2/1/2	83.0	88.7	17.9	.261	6.421	88.3	237.4	-6.7	110.8D	1.413
4-3320	4-3530	.378	82.8	12.6	-5.8	1.116	109.0	.411	1.384	288.7	496.3	.816	1.952A	112.0	.707	2.8	3.1	191.6	.244
4-3530	4-3704.6	.214	116.4	26.1	1.7	.541	89.1	.523	1.075	179.2	276.9	.515A	1.637	64.5	1.356	.6	1.3	265.4	.594
4-3704.6	4-3960	.594	275.5	10.6	5.6	1.263	117.0	.474	.852	259.6	584.6	.449	1.256	63.4	.912	3.4	17.0	25.6	.466
		17.90	12.57	7.97	5.33	8.71	4.61	17.61	2/1/2	24.6	156.4	13.7	.170	8.409	43.2	185.9	-42.6	85.8L	1.261

*

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2443530 | 21 JAN 1978

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	TYPE	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR		SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3330	4-3530	.385	90.4	7.5	-5.7	1.130	108.6	.425	1.444	292.6	490.7	.830	2.058A	114.0	.728	4.8	5.3	197.1	.275
4-3530	4-3741.2	.160	94.3	25.0	.3	.612	93.2	.391	1.180	165.1	343.0	.719A	1.641D	85.2	1.380	1.7	9.7	266.2	.240
4-3741.2	4-3970	.240	308.6	15.7	3.0	1.267	99.7	.235	.872	304.3	581.2	.667	1.077	79.4	.923	-1.3	10.0	41.5	.210
		17.58	11.47	8.10	6.11	9.48	3.37	12.72	2/1/2	22.4	153.1	39.8	1.043	2.936	16.1	200.2	-8.5	127.3D	2.019
4-3340	4-3530	.427	98.7	-8.0	-11.7	1.145	108.3	.444	1.517	296.5	485.2	.844	2.189A	116.0	.750	11.0	15.2	203.5	.326
4-3530	4-3748.6	.159	93.8	17.5	-1.7	.615	93.2	.386	1.184	185.1	354.8	.727A	1.641D	88.6	1.380	3.5	22.0	260.1	.226
4-3748.6	4-3980	.228	317.7	14.6	2.6	1.270	99.1	.233	.879	307.8	582.6	.675	1.084	79.2	.926	-1.9	9.8	50.4	.211
		19.86	12.39	9.05	7.47	10.84	3.35	12.74	2/1/2	28.7	153.8	54.9	1.155	2.170	22.2	196.7	7.6	142.5D	1.352
MARS ARRIVAL DATE = 2443540 (31 JAN 1978)																			
4-3240	4-3540	.490	22.2	5.3	-1.9	1.057	116.4	.456	1.134	257.0	546.3	.617	1.652	84.8	.579	-1.1	20.5	100.1	.194
4-3540	4-3739.4	.174	91.0	25.4	.4	.612	96.1	.397	1.187	189.5	340.1	.715A	1.658D	84.4	1.382	1.6	8.7	269.7	.251
4-3739.4	4-3880	.251	287.7	65.2	10.5	1.257	93.6	.161	.854	333.5	522.6	.717	.992A	93.3	.930	-7.4	-29.2	55.7	.162
		18.30	14.18	10.51	4.12	7.52	3.66	12.08	2/1/2	117.8	71.3	57.9	.956	2.067	81.3	257.2	-51.4	76.5L	1.020
4-3250	4-3540	.455	29.3	7.9	-1.8	1.061	114.3	.428	1.151	261.5	541.0	.658	1.644	89.3	.590	-.7	19.6	112.7	.164
4-3540	4-3743.6	.172	90.4	23.7	-.1	.614	96.2	.393	1.191	189.7	346.9	.722A	1.659D	86.3	1.382	2.0	11.9	265.8	.234
4-3743.6	4-3890	.234	287.9	65.6	9.8	1.256	93.0	.156	.853	337.4	530.2	.720	.986A	91.8	.929	-6.9	-31.0	53.9	.149
		16.78	13.32	9.69	3.46	6.87	3.63	11.94	2/1/2	106.0	80.2	55.8	1.099	2.137	79.4	251.2	-48.8	83.9L	1.250
4-3260	4-3540	.429	36.6	10.1	-1.8	1.065	112.8	.408	1.170	265.7	535.4	.693	1.647A	93.2	.602	-.4	17.6	127.6	.147
4-3540	4-3748.2	.171	90.3	20.3	-1.0	.615	96.1	.391	1.193	189.6	354.1	.727A	1.659D	88.3	1.383	2.9	10.0	260.6	.227
4-3748.2	4-3900	.226	288.5	66.9	9.6	1.256	92.4	.153	.854	341.5	537.2	.723	.985A	90.5	.928	-7.0	-33.3	51.8	.148
		15.78	12.69	9.06	3.10	6.51	3.60	11.92	2/1/2	91.6	89.4	52.1	1.172	2.276	77.2	243.7	-44.1	93.9D	1.495
4-3260	4-3540	.429	36.6	10.1	-1.8	1.065	112.8	.408	1.170	265.7	535.4	.693	1.647A	93.2	.602	-.4	17.6	127.6	.147
4-3540	4-3766.1	.175	97.6	42.1	5.2	.610	94.6	.395	1.184	187.1	380.0	.716	1.652D	95.6	1.380	-3.5	-18.9	243.5	.256
4-3766.1	4-3900	.258	260.1	-75.0	-11.4	1.257	89.1	.151	.857	6.6	173.5	.728D	.986A	91.2	.930	13.3	69.4	348.6	.242
		15.88	12.78	9.08	3.10	6.51	3.70	13.22	2/2/1	91.8	87.1	56.7	.905	2.104	85.2	237.4	42.4	118.4D	.999
4-3320	4-3540	.362	82.7	13.4	-3.4	1.109	108.3	.392	1.352	288.7	500.8	.822	1.883A	109.6	.691	2.4	2.3	192.7	.219
4-3540	4-3703.4	.227	114.3	26.2	1.7	.531	92.5	.538	1.069	182.2	275.4	.494A	1.645D	63.0	1.354	.8	1.5	265.2	.624
4-3703.4	4-3960	.624	274.7	10.5	5.9	1.263	118.4	.495	.852	257.2	584.1	.431	1.274	61.9	.912	3.8	17.3	25.7	.492
		17.24	12.52	7.62	4.72	8.11	4.90	18.36	2/1/2	27.6	155.1	13.0	.154	6.837	44.1	185.6	-43.5	84.4L	1.210
4-3330	4-3540	.363	90.2	9.6	-4.7	1.120	107.8	.403	1.401	292.6	495.2	.837	1.965A	111.7	.710	3.9	3.4	198.3	.246
4-3540	4-3738.9	.174	91.1	25.5	.4	.612	96.1	.398	1.186	189.4	339.3	.714A	1.658D	84.1	1.382	1.5	8.4	270.1	.253
4-3738.9	4-3970	.253	307.0	14.9	3.0	1.266	100.4	.243	.871	301.5	581.6	.659	1.082	78.8	.923	-1.1	10.8	40.7	.218
		16.67	11.30	7.63	5.38	8.76	3.67	12.84	2/1/2	24.1	153.8	36.7	.936	3.177	16.0	200.5	-10.2	123.4D	2.039
4-3340	4-3540	.376	97.5	-.0	-7.9	1.133	107.4	.416	1.459	296.6	489.7	.851	2.067A	113.6	.729	7.3	8.7	204.1	.261
4-3540	4-3748.8	.171	90.4	19.5	-1.2	.616	96.0	.390	1.193	189.6	355.2	.727A	1.659D	88.6	1.383	3.1	19.3	259.8	.227
4-3748.8	4-3980	.227	317.8	14.7	2.6	1.270	99.1	.232	.880	308.1	582.6	.676	1.084	79.3	.926	-1.9	9.8	50.5	.210
		17.84	11.56	7.96	6.28	9.65	3.60	12.73	2/1/2	25.3	153.7	55.5	1.168	2.149	19.9	197.5	4.8	142.5D	1.342
MARS ARRIVAL DATE = 2443550 (10 FEB 1978)																			
4-3240	4-3550	.506	22.8	5.5	-2.0	1.058	117.3	.470	1.136	255.7	549.5	.602	1.670	81.8	.577	-1.1	20.7	99.1	.210
4-3550	4-3739.5	.190	87.9	25.1	.3	.616	99.3	.404	1.200	194.2	340.5	.715A	1.684D	84.4	1.385	1.6	9.0	269.2	.253
4-3739.5	4-3880	.253	288.0	65.6	10.6	1.257	93.6	.161	.854	333.6	522.5	.717	.992A	93.3	.930	-7.5	-29.6	55.9	.164
		19.42	14.93	10.89	4.49	7.88	4.04	12.11	2/1/2	123.2	71.4	58.1	.937	2.060	81.1	256.5	-51.0	76.9L	.994
4-3250	4-3550	.465	29.7	8.0	-1.9	1.061	114.9	.436	1.151	260.6	544.5	.649	1.654	86.5	.587	-.7	20.1	110.0	.174
4-3550	4-3743.7	.189	87.4	23.7	-.1	.618	99.2	.400	1.204	194.4	347.4	.723A	1.684D	86.4	1.386	2.0	11.8	265.2	.236
4-3743.7	4-3890	.236	288.1	66.0	9.9	1.256	93.0	.156	.853	337.5	530.1	.720	.986A	91.8	.929	-7.0	-31.4	54.1	.151
		17.59	13.92	9.92	3.67	7.07	4.00	11.96	2/1/2	113.0	80.2	56.4	1.078	2.116	79.2	250.4	-48.6	84.5L	1.204
4-3260	4-3550	.434	36.9	10.2	-1.8	1.064	113.1	.412	1.168	265.0	539.2	.687	1.650A	90.6	.597	-.4	18.6	123.7	.150
4-3550	4-3748.2	.187	87.5	21.3	-.8	.619	99.1	.397	1.205	194.4	354.5	.727A	1.684D	88.4	1.386	2.7	16.5	259.9	.228
4-3748.2	4-3900	.228	288.5	67.2	9.6	1.256	92.4	.153	.854	341.5	537.1	.723	.985A	90.5	.928	-7.1	-33.5	52.0	.149
		16.33	13.17	9.20	3.17	6.57	3.97	11.93	2/1/2	100.1	89.3	53.9	1.158	2.206	77.3	243.2	-44.6	94.3D	1.397
4-3260	4-3550	.434	36.9	10.2	-1.8	1.064	113.1	.412	1.168	265.0	539.2	.687	1.650A	90.6	.597	-.4	18.6	123.7	.150
4-3550	4-3763.4	.244	97.8	61.1	14.0	.614	97.9	.399	1.197	192.3	376.6	.720	1.675D	94.7	1.383	-12.4	-54.4	240.7	.363
4-3763.4	4-3900	.363	259.4	-84.2	-16.7	1.257	89.6	.150	.857	2.9	173.9	.728D	.986A	91.1	.930	16.7	70.3	339.7	.328
		17.70	14.53	9.20	3.17	6.57	5.33	14.76	2/2/1	100.1	88.1	30.1	.456	3.848	87.6	236.8	20.5	123.8D	1.298
4-3260	4-3550	.434	36.9	10.2	-1.8	1.064	113.1	.412	1.168	265.0	539.2	.687	1.650A	90.6	.597	-.4	18.6	123.7	.150
4-3550	4-3764.2	.224	95.9	56.2	11.3	.614	97.8	.399	1.196	192.1	377.6	.719	1.674D	95.0	1.383	-9.7	-45.8	242.0	.323
4-3764.2	4-3900	.323	260.4	-81.2	-14.7	1.257	89.5	.150	.857	4.0	173.7	.728D	.986A	91.1	.930	16.7	70.2	342.0	.295
		17.19	14.02	9.20	3.17	6.57	4.63	14.14	2/2/1	100.1	87.8	36.0	.577	3.239	86.7	237.0	26.1	123.2D	1.295
4-3270	4-3550	.409	44.3	12.2	-1.8	1.068	111.7	.395	1.188	269.1	533.6	.719	1.656A	94.1	.609	-.1	15.7	139.0	.139
4-3550	4-3754.6	.189	88.7	12.5	-3.5	.618	98.8	.396	1.204	193.9	364.0	.728	1.681D	91.1	1.385	5.3	31.3	252.3	.248
4-3754.6	4-3910	.248	289.3	72.2	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-38.1	53.2	.172
		15.59	12.66	8.65	2.93	6.34	4.01	12.20	2/1/2	85.2	96.1	45.4	.979	2.594	77.2	235.5	-34.2	109.5D	1.560
4-3270	4-3550	.409	44.3	12.2	-1.8	1.068	111.7	.395	1.188	269.1	533.6	.719	1.656A	94.1	.609	-.1	15.7	139.0	.139
4-3550	4-3758.4	.230	91.8	-9.4	-12.0	.617	98.4	.397	1.202	193.3	369.4	.725	1.679D	92.7	1.385	13.7	60.4	245.3	.377
4-3758.4	4-3910	.377	301.9	84.1	17.4	1.257	91.0	.151	.857	352.1	542.0	.727	.986	89.6	.929	-15.4	-45.7	60.6	.274
		16.57	13.64	8.65	2.93	6.34	4.99	13.76	2/1/2	85.2	93.1	26.8	.423	4.321	84.6	234.1	-15.7	120.0D	1.405
4-3320	4-3550	.348	82.6	14.0	-3.1	1.103	107.7	.377	1.328	288.6	505.2	.827	1.828A	107.3	.678	2.2	1.9	193.4	.197
4-3550	4-3702.3	.243	112.0	26.2	1.8	.525	96.5	.555	1.067	185.2	272.2	.475A	1.658D	61.5	1.353	.9	1.7	265.0	.654
4-3702.3	4-3960	.654	274.0	10.4	6.2	1.263	119.9	.515	.852	254.9	583.6	.413	1.291	60.5	.912	4.1	17.6	25.9	.515
		16.83	12.63	7.33	4.20	7.59	5.30	18.92	2/1/2	31.0	154.8	12.5	.141	9.211	44.7	185.4	-44.1	83.4L	1.155
4-3330	4-3550	.345	90.0	11.0	-4.0	1.113	107.1	.384	1.368	292.6	499.7	.843	1.894A	109.3	.694	3.3	2.2	199.4	.221
4-3550	4-3734.2	.192	89.3	26.2	.7	.611	99.2	.412	1.192	193.6	351.5	.701A	1.682D	81.8	1.384	1.4	6.5	272.7	.266
4-3734.2	4-3970	.285	303.4	13.6	3.1	1.266	102.0	.263	.869	295.4	583.2	.641	1.098	77.4	.921	-.7	12.4	39.1	.239
		16.11	11.35	7.26	4.76	8.15	4.09	13.18	2/1/2	26.6	155.0	31.0	.737	3.739	16.8	200.3	-13.0	116.0D	2.019
4-3340	4-3550	.349	97.1	4.3	-6.1	1.124	106.6	.394	1.416	296.7	494.3	.858	1.973A	111.2	.712	5.5	5.2	205.1	.249
4-3550	4-3748.7	.187	87.5	21.0	-.9	.619	99.1	.397	1.205	194.4	355.2	.727A	1.684D	88.6	1.386	2.8	17.2	259.4	.228
4-3748.7	4-3980	.228	317.7	14.7	2.8	1.270	99.1	.232	.879	307.9	582.6	.675	1.084	79.2	.926	-1.9	9.8	50.4	.211
		16.78	11.32	7.35	5.46	8.84	3.97	12.73	2/1/2	25.2	153.7	56.0	1.159	2.131	18.3	197.9	2.6	142.0D	1.310
MARS ARRIVAL DATE = 2443560 (20 FEB 1978)																			
4-3250	4-3560	.477	30.2	8.2	-1.9	1.061	115.6	.447	1.152	259.5	547.9	.637	1.667	83.7	.584	-.8	20.5	108.2	.166
4-3560	4-3743.8	.210	85.1	23.7	-.1	.625	102.5	.408	1.222	199.5	348.2	.723A	1.721D	86.6	1.390	2.0	11.7	263.9	.239
4-3743.8	4-3890	.239	288.4	66.5	10.1	1.256	93.0	.156	.853	337.7	530.0	.720	.986A	91.8	.929	-7.2	-31.9	54.3	.153
		18.65	14.70	10.21	3.95	7.35	4.49	11.96	2/1/2	119.1	80.3	57.2	1.054	2.090	78.9	248.9	-48.2	85.6L	1.148
4-3260	4-3560	.441	37.3	10.4	-1.9	1.064	113.5	.418	1.168	264.2	542.8	.679	1.656	88.0	.594	-.4	19.5	120.4	.157
4-3560	4-3748.4	.208	85.3	21.9	-.7	.626	102.3	.405	1.223	199.5	355.4	.727A	1.719D	88.7	1.390	2.6	15.6	258.6	.231
4-3748.4	4-3900	.231	288.7	67.6	9.8	1.256	92.4	.153	.854	341.7	537.1	.723	.985A	90.5	.928	-7.2	-34.0	52.3	.151
		17.12	13.81	9.36	3.51	6.71	4.45	11.96	2/1/2	107.7	89.3	55.6	1.131	2.146	77.1	241.8	-44.7	95.5D	1.296
4-3270	4-3560	.413	44.6	12.3	-1.8	1.068	111.9	.397	1.185	268.5	537.4	.715	1.656A	91.7	.604	-.1	17.0	134.8	.139
4-3560	4-3754.1	.206	86.3	17.2	-2.3	.625	102.0	.404	1.222	198.9	363.9	.728	1.715D	91.1	1.389	4.0	24.1	251.8	.239
4-3754.1	4-3910	.239	289.0	71.0	10.4	1.257	91.7	.152	.856	346.8	543.3	.726	.986	89.4	.928	-8.2	-37.1	52.3	.165
		16.06	13.13	8.72	2.94	6.35	4.42	12.12	2/1/2	93.8	96.5	51.5	1.050	2.303	76.7	235.0	-36.2	108.3D	1.367
4-3320	4-3560	.357	82.5	14.5	-2.8	1.098	107.2	.364	1.308	288.6	509.6	.832	1.785A	105.0	.667	2.0	1.7	193.8	.178
4-3560	4-3701.2	.264	109.6	26.3	1.8	.522	101.0	.572	1.068	188.5	269.3	.457A	1.679D	60.1	1.354	1.1	1.8	264.8	.684
4-3701.2	4-3960	.684	273.4	10.3	6.5	1.263	121.3	.536	.852	252.6	583.0	.395	1.308	89.0	.912	4.5	17.8	28.2	.539
		16.69	12.93	7.10	3.76	7.16	5.83	19.50	2/1/2	34.9	154.5	12.1	.128	9.520	44.9	185.0	-44.2	82.4L	1.094
4-3330	4-3560	.330	89.8	12.0	-3.5	1.106	106.6	.368	1.343	292.7	504.2	.849	1.837A	107.1	.682	2.9	1.4	200.3	.199
4-3560	4-3722.9	.220	92.0	27.0	1.1	.600	102.2	.449	1.178	195.9	311.4	.650A	1.706D	75.5	1.382	1.2	4.0	274.1	.391
4-3722.9	4-3970	.391	294.1	11.3	5.8	1.265	107.3	.334	.864	280.1	585.8	.576	1.153	72.7	.918	.5	18.7	36.1	.318
		15.93	11.70	6.96	4.23	7.63	4.74	14.52	2/1/2	29.5	156.9	21.1	.393	5.460	21.9	196.9	-20.3	101.4D	1.752

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2443560
20 FEB 1978

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERTC
4-3340	4-3560	.328	96.8	7.0	-4.9	1.116	105.9	.374	1.382	296.9	498.8	.865	1.899A	108.9	.697	4.4	3.1	206.1	.223
4-3560	4-3748.2	.208	85.3	22.0	-.7	.626	102.3	.406	1.223	199.5	355.0	.727A	1.719D	88.6	1.390	2.5	15.4	258.9	.231
4-3748.2	4-3980	.231	317.4	14.5	2.6	1.270	99.3	.234	.879	307.2	582.8	.673	1.085	79.1	.926	-1.9	10.0	50.3	.212
		16.19	11.38	6.93	4.81	8.19	4.45	12.76	2/1/2	26.6	153.9	56.4	1.129	2.116	17.0	197.9	.9	141.2D	1.260
MARS ARRIVAL DATE = 2443570 (2 MAR 1978)																			
4-3250	4-3570	.492	30.8	8.4	-2.0	1.062	116.4	.460	1.154	258.2	551.0	.623	1.685	80.9	.583	-.8	20.7	107.4	.201
4-3570	4-3744.0	.235	83.6	23.6	-.1	.636	105.9	.420	1.248	204.9	349.5	.724A	1.771D	86.9	1.396	2.0	11.6	262.0	.242
4-3744.0	4-3890	.242	288.7	67.1	10.2	1.256	92.9	.156	.853	337.8	530.0	.720	.986A	91.8	.929	-7.4	-32.5	54.7	.156
		19.98	15.68	10.57	4.30	7.69	5.11	12.01	2/1/2	124.3	80.4	58.2	1.023	2.055	78.4	246.5	-47.7	87.3L	1.079
4-3260	4-3570	.451	37.7	10.5	-1.9	1.064	114.0	.426	1.168	263.2	546.3	.670	1.666	85.4	.592	-.4	19.9	118.0	.167
4-3570	4-3748.6	.233	83.8	22.2	-.6	.636	105.7	.417	1.248	204.8	356.7	.728A	1.768D	89.0	1.396	2.5	14.9	256.6	.235
4-3748.6	4-3900	.235	289.0	68.4	10.0	1.256	92.4	.153	.854	342.0	537.0	.723	.985A	90.5	.928	-7.5	-34.7	52.8	.154
		18.14	14.63	9.58	3.51	6.91	5.05	11.99	2/1/2	114.5	89.2	57.4	1.091	2.084	76.9	239.8	-44.5	97.2D	1.182
4-3270	4-3570	.418	44.9	12.5	-1.9	1.067	112.2	.401	1.184	267.8	541.2	.709	1.659	89.2	.601	-.1	18.0	131.1	.143
4-3570	4-3754.2	.230	84.8	19.1	-1.8	.635	105.3	.416	1.245	204.1	364.9	.727	1.762D	91.4	1.395	3.5	20.9	250.2	.241
4-3754.2	4-3910	.241	289.1	71.3	10.5	1.257	91.7	.152	.856	347.0	543.2	.726	.986	89.4	.928	-8.4	-37.4	52.5	.167
		16.84	13.82	8.83	3.02	6.43	4.98	12.14	2/1/2	101.9	96.4	55.2	1.031	2.159	76.7	233.8	-39.6	109.0D	1.195
4-3320	4-3570	.327	82.4	14.9	-2.6	1.093	106.8	.354	1.293	288.6	514.0	.636	1.751A	102.8	.658	1.8	1.9	193.7	.161
4-3570	4-3700.1	.291	107.3	26.3	1.9	.525	106.2	.592	1.074	191.9	266.6	.438A	1.711D	58.5	1.356	1.2	1.9	264.4	.717
4-3700.1	4-3960	.717	272.9	10.2	6.9	1.263	122.9	.556	.851	250.2	582.3	.376	1.327	57.4	.912	4.9	18.1	26.5	.565
		16.84	13.45	6.91	3.39	6.79	6.55	20.14	2/1/2	39.4	154.1	11.8	.117	9.747	44.6	184.5	-43.9	81.5L	1.023
4-3330	4-3570	.318	89.7	12.9	-3.2	1.101	106.0	.355	1.323	292.8	508.7	.854	1.792A	104.8	.671	2.5	1.0	200.9	.179
4-3570	4-3719.5	.248	91.5	26.8	1.2	.603	106.0	.471	1.187	199.8	305.6	.628A	1.747D	73.3	1.385	1.2	3.7	273.1	.435
4-3719.5	4-3970	.435	291.3	10.8	3.9	1.265	109.4	.364	.863	275.1	586.2	.549	1.177	70.6	.917	.9	16.5	55.5	.340
		15.94	12.16	6.72	3.79	7.18	5.43	15.17	2/1/2	33.0	157.1	19.4	.318	5.930	22.8	195.0	-21.5	98.0D	1.567
4-3340	4-3570	.312	96.5	8.9	-4.2	1.110	105.3	.358	1.356	297.0	503.4	.870	1.841A	106.7	.685	3.7	1.8	207.0	.200
4-3570	4-3747.3	.233	83.7	22.7	-.5	.636	105.8	.418	1.248	204.9	354.7	.727A	1.769D	88.4	1.396	2.3	13.8	258.2	.236
4-3747.3	4-3980	.236	316.9	14.2	2.6	1.270	99.5	.237	.879	306.1	583.0	.671	1.087	78.9	.925	-1.8	10.4	50.0	.215
		15.94	11.68	6.61	4.26	7.66	5.07	12.80	2/1/2	28.9	154.2	56.8	1.081	2.102	16.0	197.6	-.3	140.2D	1.191
MARS ARRIVAL DATE = 2443580 (12 MAR 1978)																			
4-3260	4-3580	.462	38.2	10.8	-1.9	1.065	114.7	.437	1.169	262.1	549.5	.658	1.680	82.7	.590	-.4	20.2	116.4	.179
4-3580	4-3749.0	.262	83.0	22.4	-.6	.651	109.2	.432	1.282	210.4	358.4	.728A	1.837D	89.5	1.404	2.4	14.2	253.9	.241
4-3749.0	4-3900	.241	289.4	69.4	10.4	1.256	92.3	.153	.854	342.4	536.9	.723	.985A	90.6	.928	-7.6	-35.6	53.5	.159
		19.43	15.65	9.86	3.78	7.18	5.79	12.05	2/1/2	120.3	89.1	59.5	1.035	2.015	76.7	237.2	-44.1	99.4D	1.051
4-3270	4-3580	.425	45.3	12.6	-1.9	1.067	112.8	.407	1.184	267.0	544.7	.702	1.666	86.8	.599	-.1	18.8	128.1	.150
4-3580	4-3754.6	.258	84.0	20.2	-1.6	.648	108.8	.431	1.277	209.6	366.5	.727	1.826D	92.0	1.402	3.3	16.8	247.9	.248
4-3754.6	4-3910	.248	289.3	72.3	10.8	1.257	91.7	.152	.856	347.4	543.1	.726	.986	89.4	.928	-8.7	-38.2	53.2	.172
		17.84	14.68	9.00	3.16	6.57	5.69	12.21	2/1/2	109.3	96.1	58.5	.976	2.048	77.1	232.2	-40.2	110.4D	1.023
4-3280	4-3580	.395	52.6	14.2	-1.8	1.070	110.9	.385	1.200	271.5	539.6	.737	1.662A	90.2	.608	.2	16.2	142.1	.132
4-3580	4-3762.2	.257	86.7	11.6	-5.1	.642	107.9	.431	1.263	207.7	376.7	.719	1.807D	95.0	1.399	6.7	33.3	241.8	.297
4-3762.2	4-3920	.297	286.6	76.8	13.4	1.259	90.7	.153	.859	354.7	548.6	.728	.990	88.5	.928	-11.8	-42.2	56.9	.220
		16.78	13.98	8.33	2.80	6.21	5.65	12.87	2/1/2	95.8	99.5	49.1	.683	2.407	81.3	230.7	-31.3	123.9D	.962
4-3330	4-3580	.308	89.5	13.6	-2.9	1.097	105.6	.344	1.307	292.8	513.1	.658	1.756A	102.6	.662	2.3	1.0	201.0	.162
4-3580	4-3717.0	.282	91.0	26.6	1.3	.613	110.3	.495	1.208	204.2	301.5	.610A	1.806D	71.5	1.390	1.3	3.6	271.8	.473
4-3717.0	4-3970	.473	289.3	10.5	4.2	1.265	111.2	.391	.862	271.1	586.3	.525	1.199	68.9	.916	1.3	17.2	35.2	.377
		16.24	12.85	6.53	3.41	6.81	6.30	15.77	2/1/2	37.1	157.1	18.7	.269	6.170	22.9	193.4	-21.6	95.8D	1.391
4-3340	4-3560	.299	96.3	10.3	-3.6	1.105	104.8	.345	1.335	297.2	508.0	.875	1.795A	104.5	.674	3.2	1.0	207.6	.180
4-3560	4-3746.0	.264	82.8	23.2	-.3	.652	109.4	.434	1.283	210.6	354.0	.727A	1.840D	88.2	1.404	2.1	12.5	257.3	.244
4-3746.0	4-3980	.244	316.0	13.8	2.7	1.270	100.0	.242	.878	304.4	583.3	.666	1.091	78.6	.925	-1.7	10.9	49.6	.220
		16.00	12.20	6.36	3.81	7.21	5.84	12.87	2/1/2	31.9	154.5	57.1	1.013	2.093	15.0	196.9	-1.3	138.8D	1.107
MARS ARRIVAL DATE = 2443590 (22 MAR 1978)																			
4-3330	4-3590	.300	89.4	14.3	-2.8	1.094	105.3	.335	1.294	292.9	517.6	.661	1.728A	100.8	.655	2.1	1.2	200.6	.147
4-3590	4-3714.7	.323	90.7	26.4	1.4	.631	115.0	.522	1.243	209.0	298.3	.594A	1.893D	69.8	1.399	1.4	3.6	270.3	.511
4-3714.7	4-3970	.511	287.6	10.2	4.5	1.265	113.0	.418	.861	267.4	586.1	.501	1.221	67.0	.916	1.7	17.7	35.0	.406
		16.66	13.77	6.38	3.09	6.50	7.39	16.41	2/1/2	41.8	157.0	18.4	.230	6.253	22.4	191.6	-21.2	94.1D	1.208
4-3340	4-3590	.288	96.2	11.5	-3.2	1.100	104.4	.333	1.319	297.4	512.5	.879	1.759A	102.3	.666	2.9	.7	207.9	.163
4-3590	4-3744.2	.301	82.4	23.6	-.1	.675	113.3	.456	1.334	210.8	353.0	.728A	1.942D	87.8	1.415	2.0	11.2	256.3	.255
4-3744.2	4-3980	.255	314.8	13.2	2.7	1.269	100.5	.248	.878	302.0	583.8	.660	1.096	78.2	.924	-1.6	11.5	49.1	.227
		16.58	12.95	6.16	3.42	6.83	6.80	12.98	2/1/2	35.6	155.0	57.1	.925	2.093	14.1	196.0	-2.1	136.9D	1.011
MARS ARRIVAL DATE = 2443600 (1 APR 1978)																			
4-3330	4-3600	.294	89.4	14.8	-2.4	1.091	105.0	.329	1.289	292.9	521.9	.663	1.706A	98.4	.680	2.0	1.8	199.7	.134
4-3600	4-3712.5	.375	90.7	26.2	1.5	.686	120.1	.587	1.302	214.1	295.5	.577A	2.026D	67.9	1.413	1.5	3.5	268.8	.556
4-3712.5	4-3970	.556	286.0	10.0	4.8	1.265	119.2	.449	.860	263.4	585.7	.474	1.247	64.9	.915	2.2	18.3	35.1	.441
		17.68	15.05	6.26	2.85	6.25	8.78	17.17	2/1/2	47.2	156.7	18.8	.198	6.207	21.8	189.8	-20.3	92.8D	1.013

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2443490 (12 DEC 1977)																			
4-3230	4-3490	.471	12.8	2.2	-1.5	1.054	115.4	.439	1.118	257.4	533.6	.627	1.609A	95.0	.596	-1.5	19.2	102.1	.175
4-3490	4-3752.0	.144	111.8	31.4	2.0	.630	83.5	.380	1.173	169.2	362.8	.728	1.619	90.8	1.377	-.1	-.6	250.8	.209
4-3752.0	4-3910	.209	288.4	65.4	8.7	1.257	92.1	.153	.855	344.2	543.9	.724	.986	89.3	.928	-6.5	-32.1	48.3	.142
		16.81	13.11	10.07	3.70	7.10	3.04	11.86	2/2/2	92.9	98.4	71.3	1.376	1.715	74.4	230.0	-52.1	105.2D	.984
4-3270	4-3490	.435	43.1	12.2	-1.8	1.087	112.8	.425	1.245	271.6	508.6	.717	1.774A	109.1	.668	-.1	10.0	155.4	.209
4-3490	4-3696.2	.244	126.0	24.2	1.9	.554	75.8	.551	1.061	167.7	272.4	.477A	1.646	61.7	1.353	.0	.0	255.3	.649
4-3696.2	4-3950	.649	264.5	10.9	6.4	1.260	119.6	.510	.844	254.7	583.1	.414	1.275	60.9	.909	4.9	15.3	16.5	.510
		19.04	14.56	9.24	4.48	7.87	5.33	16.78	2/1/2	40.8	153.9	14.2	.143	8.084	49.9	176.3	-49.4	65.6L	1.012
4-3280	4-3490	.437	50.9	13.8	-2.0	1.098	112.6	.434	1.294	275.0	502.5	.732	1.836A	112.0	.691	.3	8.1	163.3	.236
4-3490	4-3711.5	.189	121.0	27.0	1.9	.394	80.0	.462	1.116	166.0	297.2	.600A	1.631	71.3	1.367	.0	.1	266.0	.463
4-3711.5	4-3960	.463	280.6	11.4	4.4	1.262	110.7	.381	.855	271.4	585.4	.529	1.180	69.7	.914	1.9	15.6	25.8	.365
		16.39	13.27	9.27	5.12	8.51	4.01	15.53	2/1/2	32.8	156.0	16.4	.281	6.257	38.5	187.8	-37.9	92.5D	1.476
4-3290	4-3490	.441	58.9	14.6	-2.4	1.112	112.6	.449	1.354	278.6	496.4	.746	1.961A	114.6	.715	.8	6.7	169.7	.266
4-3490	4-3743.8	.153	112.9	41.6	4.6	.629	83.7	.381	1.171	169.5	350.0	.725A	1.618	87.2	1.377	-2.6	-16.4	261.1	.226
4-3743.8	4-3970	.226	310.3	16.6	3.0	1.267	98.9	.226	.873	307.7	560.4	.675	1.070	80.0	.924	-1.5	9.0	42.4	.201
		16.46	12.60	9.37	5.88	9.26	5.23	12.59	2/2/2	26.5	152.3	58.7	1.182	2.039	35.4	195.8	-35.4	126.2D	1.228
4-3290	4-3490	.441	58.9	14.6	-2.4	1.112	112.6	.449	1.354	278.6	496.4	.746	1.961A	114.6	.715	.8	6.7	169.7	.266
4-3490	4-3746.4	.145	111.1	32.2	2.2	.630	83.7	.380	1.172	169.5	354.2	.727A	1.618	88.4	1.377	-.3	-1.7	257.8	.212
4-3746.4	4-3970	.212	312.0	17.8	3.0	1.267	98.2	.218	.874	311.1	579.6	.663	1.065	80.5	.925	-1.8	7.9	43.4	.193
		16.30	12.42	9.37	5.88	9.26	5.06	12.48	2/2/2	26.5	151.4	56.8	1.339	2.102	22.7	197.6	-20.6	134.7D	1.476
4-3300	4-3490	.449	67.0	14.4	-3.1	1.128	112.6	.469	1.429	282.1	490.4	.759	2.099A	117.2	.742	1.7	6.2	175.1	.299
4-3490	4-3752.2	.144	111.8	31.4	2.0	.630	83.5	.380	1.173	169.2	363.0	.728	1.619	90.8	1.377	-.1	-.6	250.7	.209
4-3752.2	4-3980	.209	319.7	16.0	2.6	1.270	98.1	.222	.881	312.5	581.7	.685	1.076	80.0	.927	-2.2	8.4	51.5	.200
		19.34	12.59	9.55	6.75	10.12	5.04	12.58	2/2/2	21.6	152.6	70.1	1.375	1.742	17.3	196.8	-14.4	145.8D	1.021
MARS ARRIVAL DATE = 2443500 (22 DEC 1977)																			
4-3270	4-3500	.425	43.3	12.2	-1.8	1.081	112.3	.413	1.228	271.2	513.0	.720	1.735A	106.6	.654	-.1	10.4	154.5	.189
4-3500	4-3695.1	.248	126.1	23.9	1.9	.536	77.6	.567	1.048	170.2	268.4	.453A	1.642	60.0	1.348	.2	.3	255.5	.681
4-3695.1	4-3950	.681	263.9	10.7	6.8	1.260	121.2	.533	.844	252.2	582.6	.394	1.294	59.3	.909	5.3	15.5	16.7	.535
		16.43	14.43	9.00	4.00	7.40	5.42	19.41	2/1/2	46.5	153.6	15.4	.130	6.561	51.5	176.5	-50.9	82.5L	.982
4-3280	4-3500	.423	51.1	13.7	-2.0	1.091	112.0	.419	1.269	274.7	506.8	.737	1.801A	109.5	.674	.2	8.0	163.5	.211
4-3500	4-3709.2	.193	120.6	26.5	1.8	.579	81.7	.478	1.103	170.7	291.6	.576A	1.631	69.3	1.363	.2	.5	265.8	.500
4-3709.2	4-3960	.500	276.8	11.1	4.7	1.262	112.5	.407	.854	267.7	585.4	.506	1.202	67.9	.913	2.4	16.1	25.6	.394
		17.59	13.06	8.95	4.53	7.92	4.11	16.14	2/1/2	37.3	155.9	16.7	.241	6.879	39.8	187.0	-39.2	90.2D	1.414
4-3290	4-3500	.424	59.0	14.7	-2.3	1.103	111.8	.429	1.319	278.2	500.7	.752	1.885A	112.1	.695	.7	6.3	170.7	.236
4-3500	4-3743.8	.143	105.9	21.5	-.4	.623	85.8	.382	1.171	173.1	348.7	.724A	1.618	86.9	1.377	2.3	14.3	263.0	.226
4-3743.8	4-3970	.226	310.2	16.6	3.0	1.267	99.0	.227	.873	307.5	580.4	.675	1.071	79.9	.924	-1.5	9.1	42.5	.201
		17.16	11.98	8.97	5.18	8.56	3.01	12.60	2/1/2	30.2	152.4	45.5	1.174	2.567	17.0	197.4	-2.9	134.5D	1.665
4-3300	4-3500	.428	67.0	14.7	-2.9	1.117	111.7	.444	1.379	281.8	494.8	.767	1.992A	114.7	.719	1.4	5.4	176.6	.268
4-3500	4-3745.2	.149	104.4	8.0	-3.6	.623	85.8	.381	1.172	173.1	351.2	.725A	1.618	87.6	1.377	3.5	32.4	261.6	.248
4-3745.2	4-3980	.248	315.5	13.6	2.7	1.269	100.2	.244	.878	303.4	583.5	.664	1.093	78.4	.925	-1.7	11.1	49.4	.223
		18.12	12.19	9.06	5.93	9.31	3.13	12.92	2/1/2	24.5	154.8	52.5	.976	2.262	33.2	190.7	19.9	139.4D	1.231
MARS ARRIVAL DATE = 2443510 (1 JAN 1978)																			
4-3270	4-3510	.418	43.5	12.1	-1.8	1.077	111.9	.405	1.214	270.8	517.2	.722	1.706A	104.0	.641	-.1	11.0	152.8	.172
4-3510	4-3694.0	.253	125.8	23.8	1.9	.518	79.9	.584	1.055	172.7	264.5	.430A	1.639	58.4	1.344	.3	.5	255.8	.713
4-3694.0	4-3950	.713	265.3	10.6	7.1	1.260	122.8	.555	.844	249.9	581.9	.376	1.312	57.8	.909	5.7	15.7	17.0	.561
		16.00	14.38	8.83	3.62	7.02	5.55	20.04	2/1/2	52.9	153.2	12.7	.118	9.065	53.1	176.8	-52.5	81.6L	.952
4-3280	4-3510	.412	51.5	13.7	-2.0	1.086	111.5	.407	1.250	274.4	511.2	.741	1.759A	107.0	.659	.2	8.2	163.1	.190
4-3510	4-3707.8	.199	119.6	26.2	1.8	.565	83.7	.493	1.092	173.5	286.9	.554A	1.631	67.6	1.360	.4	.9	265.8	.533
4-3707.8	4-3960	.533	277.4	10.9	5.0	1.262	114.1	.431	.853	264.7	583.2	.486	1.221	66.3	.913	2.7	16.4	25.5	.420
		16.96	12.93	8.70	4.03	7.43	4.25	16.71	2/1/2	42.5	155.8	19.5	.212	7.432	41.0	186.9	-40.4	88.4L	1.361
4-3290	4-3510	.409	59.1	14.7	-2.2	1.096	111.2	.413	1.292	278.0	505.1	.758	1.826A	109.7	.679	.7	6.1	171.2	.213
4-3510	4-3743.3	.145	102.1	23.2	-.1	.618	86.1	.384	1.172	176.9	347.3	.723A	1.622	86.5	1.378	2.0	12.2	264.7	.226
4-3743.3	4-3970	.226	310.0	16.5	3.0	1.267	99.1	.228	.873	307.1	580.5	.674	1.071	79.9	.924	-1.5	9.2	42.2	.202
		16.28	11.70	8.64	4.58	7.97	3.06	12.61	2/1/2	34.2	152.5	44.0	1.156	2.668	16.5	198.7	-5.5	132.9D	1.929
4-3300	4-3510	.410	67.1	14.9	-2.7	1.108	110.9	.424	1.342	281.6	499.1	.773	1.911A	112.2	.700	1.3	4.8	177.8	.240
4-3510	4-3746.8	.146	101.1	11.5	-2.9	.619	86.1	.381	1.174	176.9	352.9	.726A	1.622	86.0	1.378	4.8	28.7	261.0	.239
4-3746.8	4-3980	.239	316.5	14.0	2.7	1.270	99.7	.239	.879	305.5	583.1	.669	1.066	78.8	.925	-1.8	10.5	49.8	.217
		17.00	11.76	8.65	5.25	8.62	3.12	12.83	2/1/2	27.8	154.3	53.3	1.056	2.230	28.9	193.3	15.4	141.0D	1.299
MARS ARRIVAL DATE = 2443520 (11 JAN 1978)																			
4-3280	4-3520	.403	51.4	13.7	-1.9	1.082	111.1	.398	1.235	274.1	515.4	.744	1.726A	104.5	.647	.2	8.7	161.9	.178
4-3520	4-3705.9	.205	118.2	26.1	1.7	.552	86.2	.508	1.083	176.3	282.6	.553A	1.633	66.0	1.358	.5	1.1	265.5	.565
4-3705.9	4-3960	.565	276.3	10.8	5.3	1.263	115.6	.453	.853	262.0	584.9	.467	1.239	64.8	.913	3.1	16.7	25.5	.445
		16.53	12.90	8.51	3.63	7.03	4.39	17.27	2/1/2	48.3	155.6	14.5	.189	7.943	42.2	186.2	-41.6	86.8L	1.310
4-3290	4-3520	.397	59.2	14.7	-2.2	1.090	110.6	.400	1.271	277.7	509.4	.762	1.780A	107.2	.665	.6	6.2	171.2	.192
4-3520	4-3742.5	.151	98.1	24.3	.1	.614	90.6	.386	1.175	180.9	345.4	.721A	1.629D	85.9	1.378	1.8	10.8	266.5	.233
4-3742.5	4-3970	.233	309.5	16.1	3.0	1.267	99.3	.230	.872	306.0	580.8	.671	1.073	79.7	.924	-1.4	9.5	41.9	.205
		15.63	11.55	8.38	4.08	7.47	3.17	12.65	2/1/2	38.9	152.7	42.1	1.111	2.765	16.2	199.6	-7.2	130.1D	1.983
4-3300	4-3520	.394	67.1	15.0	-2.5	1.101	110.3	.407	1.314	281.4	503.5	.779	1.848A	109.8	.683	1.2	4.5	178.6	.216
4-3520	4-3747.9	.151	97.5	14.8	-2.2	.616	90.5	.383	1.178	180.9	354.1	.727A	1.629D	88.4	1.379	4.1	25.2	260.5	.232
4-3747.9	4-3980	.232	317.3	14.4	2.6	1.270	99.3	.235	.879	306.9	582.8	.673	1.066	79.1	.925	-1.9	10.1	50.2	.213
		16.13	11.50	8.32	4.63	8.02	3.19	12.77	2/1/2	31.5	154.0	54.1	1.117	2.197	25.2	195.3	11.2	142.1D	1.037
MARS ARRIVAL DATE = 2443530 (21 JAN 1978)																			
4-3280	4-3530	.397	51.5	13.7	-1.9	1.078	110.8	.391	1.224	273.8	519.7	.746	1.702A	102.1	.637	.2	9.5	160.0	.157
4-3530	4-3704.6	.214	116.4	26.1	1.7	.541	89.1	.523	1.075	179.2	278.9	.513A	1.637	64.5	1.356	.6	1.3	265.4	.594
4-3704.6	4-3960	.594	275.5	10.6	5.6	1.263	117.0	.474	.852	259.6	584.6	.449	1.256	63.4	.912	3.4	17.0	25.6	.468
		16.29	12.98	8.37	3.51	6.72	4.61	17.81	2/1/2	54.9	155.4	13.7	.170	8.409	43.2	185.9	-42.6	89.5L	1.261
4-3290	4-3530	.388	59.3	14.8	-2.1	1.086	110.2	.390	1.255	277.5	513.8	.766	1.745A	104.8	.653	.6	6.8	170.6	.173
4-3530	4-3741.2	.160	94.3	25.0	.3	.612	93.2	.391	1.180	185.1	343.0	.719A	1.641D	85.2	1.380	1.7	9.7	268.2	.240
4-3741.2	4-3970	.240	308.6	15.7	3.0	1.267	99.7	.235	.872	304.3	581.2	.667	1.077	79.4	.923	-1.5	10.0	41.5	.210
		15.20	11.55	8.18	3.66	7.06	3.37	12.72	2/1/2	44.1	153.1	39.8	1.043	2.936	18.1	200.2	-8.5	127.3D	2.019
4-3300	4-3530	.382	67.2	15.2	-2.4	1.095	109.7	.393	1.292	281.2	507.9	.784	1.799A	107.4	.669	1.1	4.4	178.9	.194
4-3530	4-3748.6	.159	93.6	17.5	-1.7	.615	93.2	.386	1.184	185.1	354.8	.727A	1.641D	88.6	1.380	3.5	22.0	260.1	.228
4-3748.6	4-3980	.228	317.7	14.6	2.6	1.270	99.1	.233	.879	307.6	582.6	.675	1.064	79.2	.926	-1.9	9.8	50.4	.211
		15.51	11.39	8.04	4.12	7.52	3.35	12.74	2/1/2	35.7	153.8	54.9	1.155	2.170	22.2	196.7	7.6	142.5D	1.352
MARS ARRIVAL DATE = 2443540 (31 JAN 1978)																			
4-3280	4-3540	.393	51.7	13.7	-1.9	1.075	110.6	.386	1.216	273.5	523.8	.747	1.684A	99.7	.628	.2	10.7	157.4	.146
4-3540	4-3703.4	.227	114.3	26.2	1.7	.531	92.5	.538	1.069	182.2	275.4	.494A	1.645D	63.0	1.354	.6	1.5	265.2	.624
4-3703.4	4-3960	.624	274.7	10.5	5.9	1.263	118.4	.495	.852	257.2	584.1	.431	1.274	61.9	.912	3.8	17.3	25.7	.492
		16.25	13.18	8.28	3.07	6.48	4.90	18.36	2/1/2	62.2	155.1	13.0	.154	8.837	44.1	185.6	-45.5	84.4L	1.210
4-3290	4-3540	.381	59.4	14.8	-2.1	1.082	109.9	.382	1.243	277.2	518.0	.769	1.716A	102.5	.642	.6	7.2	169.2	.158
4-3540	4-3738.9	.174	91.1	25.5	.4	.612	96.1	.398	1.186	189.4	339.3	.714A	1.638D	84.1	1.382	1.5	8.4	270.1	.253
4-3738.9	4-3970	.253	307.0	14.9	3.0	1.266	100.4	.245	.871	301.5	581.8	.659	1.082	78.8	.925	-1.1	10.8	40.7	.218
		15.00	11.68	8.02	3.32	6.72	3.67	12.84	2/1/2	50.1	153.8	36.7	.936	3.177	16.0	200.5	-10.2	123.4D	2.039
4-3300	4-3540	.372	67.2	15.5	-2.5	1.090	109.2	.382	1.274	281.0	512.2	.788	1.761A	105.0	.658	1.0	4.6	178.7	.178
4-3540	4-3748.8	.171	90.4	19.5	-1.2	.616	96.0	.390	1.193	189.6	355.2	.727A	1.639D	88.6	1.383	3.1	19.3	259.8	.227
4-3748.8	4-3980	.227	317.8	14.7	2.6	1.270	99.1	.232	.880	308.1	582.6	.676	1.064	79.3	.926	-1.9	9.8	50.5	.210
		15.12	11.43	7.83	3.69	7.09	3.80	12.73	2/1/2	40.8	153.7	55.5	1.168	2.149	19.9	197.5	4.8	142.8D	1.342

STOPOVER TIME = 0 DAYS | 1978 INBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2443550
10 FEB 1978

LAUNCH	ARRIVE	$PEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	$PEED2
DEPART	$WNGBY	$PEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	$PEED4
$WNGBY	RETURN	$PEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	$PEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2443550 (10 FEB 1978)																			
4-3280	4-3550	.391	51.9	13.8	-1.9	1.073	110.5	.383	1.209	273.1	527.9	.746	1.672A	97.3	.621	.2	12.0	154.0	.137
4-3550	4-3702.3	.243	112.0	26.2	1.8	.525	96.5	.555	1.067	185.2	272.2	.475A	1.658D	61.5	1.353	.9	1.7	265.0	.654
4-3702.3	4-3960	.654	274.0	10.4	6.2	1.263	119.9	.515	.852	254.9	563.6	.413	1.291	60.5	.912	4.1	17.6	25.9	.515
		16.44	13.83	8.23	2.91	6.32	5.30	16.92	2/1/2	70.2	154.8	12.5	.141	9.211	44.7	165.4	-44.1	63.4L	1.155
4-3290	4-3550	.376	59.5	14.9	-2.0	1.079	109.6	.376	1.234	277.0	522.2	.770	1.697A	100.1	.634	.5	8.2	167.2	.145
4-3550	4-3734.2	.192	89.3	26.2	.7	.611	99.2	.412	1.192	193.6	331.5	.701A	1.682D	61.8	1.384	1.4	6.5	272.7	.266
4-3734.2	4-3970	.285	303.4	13.6	3.1	1.266	102.0	.263	.869	295.4	563.2	.641	1.098	77.4	.921	-.7	12.4	39.1	.239
		19.05	12.00	7.91	3.05	6.46	4.09	13.18	2/1/2	56.9	155.0	31.0	.737	3.739	16.8	200.3	-13.0	116.0D	2.019
4-3300	4-3550	.364	67.2	15.5	-2.2	1.086	108.9	.373	1.261	280.6	516.5	.791	1.731A	102.7	.648	1.0	5.1	177.9	.159
4-3550	4-3746.7	.187	87.5	21.0	-.9	.619	99.1	.397	1.205	194.4	355.2	.727A	1.664D	66.6	1.386	2.8	17.2	259.4	.226
4-3746.7	4-3960	.228	317.7	14.7	2.6	1.270	99.1	.232	.879	307.9	582.6	.675	1.084	79.2	.926	-1.9	9.8	30.4	.211
		14.96	11.63	7.66	3.34	6.74	3.97	12.73	2/1/2	45.9	153.7	36.0	1.159	2.151	18.3	197.9	2.6	142.0D	1.310
MARS ARRIVAL DATE = 2443560 (20 FEB 1978)																			
4-3280	4-3560	.390	52.1	13.9	-1.9	1.072	110.6	.382	1.205	272.6	531.9	.745	1.665A	94.9	.616	.2	13.5	150.1	.132
4-3560	4-3701.2	.264	109.6	26.3	1.8	.522	101.0	.572	1.068	188.5	269.3	.457A	1.679D	60.1	1.354	1.1	1.8	264.8	.664
4-3701.2	4-3960	.684	273.4	10.3	6.5	1.263	121.3	.536	.852	252.6	563.0	.395	1.308	59.0	.912	4.5	17.8	28.2	.539
		16.86	14.06	8.22	2.81	6.22	5.83	19.50	2/1/2	78.7	154.5	12.1	.128	9.320	44.9	165.0	-44.2	62.4L	1.094
4-3290	4-3560	.372	59.7	15.0	-2.0	1.077	109.5	.372	1.227	276.7	526.3	.770	1.683A	97.8	.627	.5	9.5	164.4	.135
4-3560	4-3722.9	.220	92.0	27.0	1.1	.600	102.2	.449	1.178	195.9	311.4	.650A	1.706D	75.5	1.382	1.2	4.0	274.1	.391
4-3722.9	4-3970	.391	294.1	11.3	3.6	1.265	107.3	.334	.864	280.1	565.8	.576	1.153	72.7	.918	.5	15.7	36.1	.315
		19.43	12.37	7.84	2.86	6.27	4.74	14.52	2/1/2	64.3	156.9	21.1	.393	5.460	21.9	196.9	-20.3	101.4D	1.752
4-3300	4-3560	.358	67.5	15.6	-2.1	1.083	108.6	.366	1.251	280.6	520.7	.793	1.708A	100.4	.640	.9	5.9	176.4	.145
4-3560	4-3748.2	.208	85.5	22.0	-.7	.626	102.3	.406	1.223	199.5	355.0	.727A	1.719D	66.6	1.390	2.5	15.4	256.9	.231
4-3748.2	4-3980	.231	317.4	14.5	2.6	1.270	99.3	.234	.879	307.2	582.8	.673	1.085	79.1	.926	-1.9	10.0	30.3	.212
		15.04	11.98	7.53	3.05	6.46	4.45	12.76	2/1/2	52.1	153.9	36.4	1.129	2.116	17.0	197.9	.9	141.2D	1.260
MARS ARRIVAL DATE = 2443570 (2 MAR 1978)																			
4-3280	4-3570	.392	52.5	14.0	-1.9	1.071	110.7	.383	1.202	272.1	535.8	.742	1.662A	92.6	.611	.2	14.9	146.1	.131
4-3570	4-3700.1	.291	107.3	26.3	1.9	.525	106.2	.592	1.074	191.9	266.6	.436A	1.711D	58.5	1.356	1.2	1.9	264.4	.717
4-3700.1	4-3960	.717	272.9	10.2	6.9	1.263	122.9	.556	.851	250.2	562.5	.376	1.327	57.4	.912	4.9	18.1	26.5	.565
		17.58	14.80	8.26	2.77	6.19	6.55	20.14	2/1/2	87.3	154.1	11.8	.117	9.747	44.6	164.5	-43.9	61.5L	1.023
4-3290	4-3570	.371	59.8	15.2	-1.9	1.075	109.4	.370	1.221	276.3	530.4	.770	1.673A	95.5	.622	.5	11.0	160.9	.126
4-3570	4-3719.5	.248	91.5	26.8	1.2	.603	106.0	.471	1.187	199.8	305.6	.628A	1.747D	73.5	1.385	1.2	3.7	273.1	.455
4-3719.5	4-3970	.435	291.5	10.8	5.9	1.265	109.4	.364	.863	275.1	566.2	.549	1.177	70.6	.917	.9	16.5	35.5	.346
		15.96	13.24	7.80	2.73	6.14	5.43	15.17	2/1/2	72.4	157.1	19.4	.318	5.930	22.8	195.0	-21.5	98.0D	1.567
4-3300	4-3570	.353	67.4	15.8	-2.0	1.081	108.4	.361	1.243	280.4	524.9	.794	1.691A	98.2	.634	.9	7.1	174.1	.134
4-3570	4-3747.3	.233	83.7	22.7	-.5	.636	105.8	.418	1.248	204.9	354.7	.727A	1.769D	68.4	1.396	2.3	13.8	258.2	.236
4-3747.3	4-3980	.236	316.9	14.2	2.6	1.270	99.5	.237	.879	306.1	583.0	.671	1.087	78.9	.925	-1.8	10.4	30.0	.215
		15.34	12.51	7.44	2.84	6.25	5.07	12.80	2/1/2	59.0	154.2	36.6	1.081	2.102	16.0	197.6	-.3	140.2D	1.191
MARS ARRIVAL DATE = 2443580 (12 MAR 1978)																			
4-3290	4-3580	.371	60.0	15.3	-1.9	1.074	109.5	.369	1.217	275.9	534.4	.768	1.667A	93.3	.618	.5	12.6	157.1	.124
4-3580	4-3717.0	.262	91.0	26.6	1.3	.613	110.3	.495	1.208	204.2	301.5	.611A	1.686D	71.5	1.390	1.3	3.6	271.8	.473
4-3717.0	4-3970	.473	289.3	10.5	4.2	1.265	111.2	.391	.862	271.1	566.3	.525	1.199	68.9	.916	1.5	17.2	35.2	.377
		16.76	14.11	7.81	2.66	6.07	6.30	15.77	2/1/2	80.9	157.1	18.7	.269	6.170	22.9	193.4	-21.6	95.8D	1.391
4-3300	4-3580	.351	67.5	16.0	-2.0	1.079	108.3	.358	1.237	280.1	529.0	.794	1.679A	96.0	.629	.8	8.5	171.2	.125
4-3580	4-3746.0	.264	82.8	23.2	-.5	.652	109.4	.434	1.265	210.6	354.0	.727A	1.640D	68.2	1.404	2.1	12.5	257.3	.244
4-3746.0	4-3980	.244	316.0	13.8	2.7	1.270	100.0	.242	.878	304.4	583.3	.666	1.091	78.6	.925	-1.7	10.9	49.8	.220
		15.90	13.23	7.59	2.68	6.09	5.84	12.87	2/1/2	66.6	154.5	37.1	1.013	2.093	15.0	196.9	-1.3	138.8D	1.107
MARS ARRIVAL DATE = 2443590 (22 MAR 1978)																			
4-3290	4-3590	.373	60.2	15.5	-1.8	1.073	109.6	.370	1.215	275.4	536.2	.765	1.665A	91.0	.616	.5	14.1	153.1	.123
4-3590	4-3714.7	.323	90.7	26.4	1.4	.631	115.0	.522	1.243	209.0	298.3	.594A	1.693D	69.6	1.399	1.4	5.6	270.5	.511
4-3714.7	4-3970	.511	287.6	10.2	4.5	1.265	113.0	.418	.861	267.4	566.1	.501	1.221	67.0	.916	1.7	17.7	35.0	.406
		17.88	15.24	7.85	2.64	6.06	7.39	16.41	2/1/2	89.4	157.0	18.4	.230	6.253	22.4	191.6	-21.2	94.1D	1.208
4-3300	4-3590	.350	67.6	16.2	-1.9	1.077	108.3	.356	1.232	279.8	533.1	.794	1.671A	93.8	.625	.8	10.1	167.7	.120
4-3590	4-3744.2	.301	82.4	23.6	-.1	.673	113.3	.456	1.334	216.8	353.0	.726A	1.942D	67.8	1.415	2.0	11.2	256.3	.256
4-3744.2	4-3980	.255	314.8	13.2	2.7	1.268	100.5	.248	.878	302.0	583.6	.660	1.096	76.2	.924	-1.6	11.5	49.1	.227
		16.74	14.16	7.57	2.58	5.99	6.80	12.98	2/1/2	74.8	155.0	37.1	.925	2.093	14.1	196.0	-2.1	136.9D	1.011
MARS ARRIVAL DATE = 2443600 (1 APR 1978)																			
4-3290	4-3600	.376	60.8	15.7	-1.8	1.073	109.8	.373	1.213	274.7	542.0	.761	1.666	89.8	.614	.5	15.4	149.3	.126
4-3600	4-3712.8	.375	90.7	26.2	1.5	.656	120.1	.557	1.302	214.1	295.5	.577A	2.026D	67.9	1.413	1.5	3.9	268.5	.556
4-3712.8	4-3970	.556	286.0	10.0	4.8	1.265	115.2	.449	.860	263.4	565.7	.474	1.247	64.9	.915	2.2	18.3	35.1	.441
		19.59	16.71	7.92	2.68	6.10	8.79	17.17	2/1/2	97.7	156.7	18.8	.195	6.207	21.8	189.8	-20.3	98.8D	1.013

1980

OUTBOUND SWINGBY

4.4

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS | MARS ARRIVAL DATE = 2444120 | 3 SEP 1979

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / APHEL / KAPPA	PSI 2 / PSI 4 / PSI 6 / -A	V 2 / V 4 / V 6 / E	I 2 / I 4 / I 6 / INC	DECL2 / DECL4 / DECL6 / RAP	RA2 / RA4 / RA6 / DECLP	SPEED2 / SPEED4 / SPEED6 / ETA	/ / / PERIC
MARS ARRIVAL DATE = 2444120 (3 SEP 1979)																				
4-3840	4-3996.1	.169	315.3	.4	3.2	.862	93.8	.275	.778	190.1	452.4	.565	.992D	105.5	1.210	.7	2.5	195.4	.326	
4-3996.1	4-4120	.326	234.1	3.9	.9	1.393	79.5	.444	1.238	34.7	142.4	.688D	1.788A	112.7	.705	1.4	22.1	132.3	.249	
4-4120	4-4320	.149	81.6	17.4	-1.4	.661	82.2	.356	1.151	165.4	271.5	.742A	1.561	70.6	1.068	-.8	-1.9	1.2	.371	
		12.88	7.42	4.27	5.48	8.84	3.15	15.65	2/1/1	37.8	177.7	38.6	.564	3.023	4.1	124.9	-2.2	108.9D	1.142	
4-3850	4-3997.0	.189	310.9	-2.0	3.4	.869	96.9	.282	.784	198.3	451.8	.563	1.005D	105.9	1.214	.1	.3	197.0	.334	
4-3997.0	4-4120	.334	233.7	3.8	.9	1.393	79.0	.446	1.235	36.4	142.7	.684D	1.786A	112.7	.704	1.5	22.2	132.0	.250	
4-4120	4-4330	.130	76.5	16.7	-1.3	.677	83.5	.317	1.182	165.6	281.6	.807A	1.556	73.7	1.075	-.9	-.6	5.8	.320	
		12.78	7.31	4.54	5.48	8.86	2.77	14.61	2/1/1	38.0	173.7	36.8	.538	3.167	5.9	125.6	-5.5	108.2D	1.165	
4-3860	4-3998.7	.219	310.2	-3.5	3.6	.877	99.9	.295	.791	205.6	451.6	.557	1.024D	106.6	1.219	-.6	-1.9	199.8	.351	
4-3998.7	4-4120	.351	233.2	3.6	.9	1.392	78.0	.450	1.229	39.6	143.3	.676D	1.782A	112.8	.701	1.5	22.4	131.5	.252	
4-4120	4-4340	.116	70.7	16.2	-1.1	.690	84.6	.285	1.207	166.1	292.0	.863A	1.551	76.6	1.081	-1.0	.2	10.0	.274	
		13.00	7.48	4.97	5.52	8.91	2.51	13.75	2/1/1	38.6	168.2	33.8	.489	3.436	9.4	126.6	-9.3	106.4D	1.191	
MARS ARRIVAL DATE = 2444130 (13 SEP 1979)																				
4-3830	4-3997.7	.167	326.3	4.4	3.3	.854	89.8	.279	.773	179.5	454.3	.557	.989	105.9	1.206	1.3	4.4	196.9	.334	
4-3997.7	4-4130	.334	232.7	3.2	.8	1.384	78.6	.432	1.199	38.4	148.8	.680D	1.717A	109.6	.678	1.5	23.5	129.5	.220	
4-4130	4-4310	.175	84.1	18.5	-1.6	.627	82.4	.411	1.110	168.9	260.0	.654A	1.567	66.4	1.055	-.9	-3.5	357.2	.440	
		12.68	7.94	4.25	4.74	8.13	3.69	17.15	2/1/1	45.7	174.4	35.8	.540	3.253	4.4	124.7	2.0	106.3D	1.218	
4-3840	4-3997.1	.169	317.1	1.1	3.3	.861	93.4	.276	.777	189.1	452.9	.563	.991D	105.8	1.209	.7	2.5	196.7	.328	
4-3997.1	4-4130	.328	232.9	3.3	.8	1.384	79.0	.431	1.201	37.3	148.6	.683D	1.718A	109.6	.679	1.5	23.4	129.8	.220	
4-4130	4-4320	.150	79.4	17.5	-1.4	.650	83.8	.362	1.147	168.9	270.0	.731A	1.563	70.1	1.066	-1.0	-1.9	1.9	.360	
		12.17	7.44	4.27	4.73	8.12	3.17	15.84	2/1/1	45.5	177.5	36.2	.558	3.222	3.3	124.9	-1.3	107.4D	1.240	
4-3850	4-3997.9	.187	312.2	-1.5	3.4	.867	96.6	.282	.782	197.4	452.3	.561	1.003D	105.9	1.213	.1	.3	198.2	.335	
4-3997.9	4-4130	.335	232.7	3.2	.8	1.384	78.5	.433	1.198	38.8	148.9	.680D	1.716A	109.6	.678	1.5	23.5	129.5	.220	
4-4130	4-4330	.132	73.6	16.8	-1.2	.668	85.1	.322	1.179	169.4	280.4	.800A	1.559	73.3	1.075	-1.0	-.7	6.5	.326	
		12.05	7.31	4.51	4.74	8.13	2.80	14.74	2/1/1	45.8	174.1	34.6	.535	3.364	5.1	125.6	-4.6	106.8D	1.265	
4-3860	4-3999.5	.216	311.2	-3.2	3.6	.875	99.6	.295	.789	204.7	452.0	.556	1.022D	106.6	1.217	-.6	-1.8	200.8	.351	
4-3999.5	4-4130	.351	232.5	3.0	.8	1.383	77.6	.437	1.193	41.8	149.4	.671D	1.714A	109.6	.675	1.6	23.7	128.8	.222	
4-4130	4-4340	.119	67.1	16.3	-1.0	.682	86.1	.289	1.207	170.3	291.1	.858A	1.555	76.3	1.081	-1.1	.1	10.6	.278	
		12.28	7.49	4.93	4.79	8.16	2.55	13.84	2/1/1	46.4	168.5	31.9	.489	3.641	8.8	126.7	-8.8	105.3D	1.291	
4-3870	4-4001.7	.252	313.1	-3.8	3.8	.885	102.5	.313	.799	211.3	451.9	.548	1.049D	107.6	1.224	-1.3	-3.9	204.2	.374	
4-4001.7	4-4130	.374	232.1	2.7	.8	1.381	76.3	.443	1.184	46.2	150.2	.659D	1.709A	109.7	.670	1.6	24.0	127.9	.225	
4-4130	4-4350	.110	60.6	16.1	-.8	.693	87.0	.263	1.230	171.4	302.0	.907A	1.552	78.9	1.088	-1.2	.0	14.2	.236	
		12.77	7.92	5.52	4.85	8.24	2.40	13.12	2/1/1	47.4	161.9	28.6	.431	4.051	13.6	128.0	-13.6	102.9D	1.314	
MARS ARRIVAL DATE = 2444140 (23 SEP 1979)																				
4-3830	4-3998.8	.169	328.5	5.1	3.3	.853	89.4	.281	.772	178.4	454.9	.554	.989	106.0	1.206	1.3	4.4	198.3	.337	
4-3998.8	4-4140	.337	232.5	2.5	.6	1.378	78.2	.424	1.174	40.6	154.3	.676D	1.672A	106.6	.657	1.6	25.0	126.2	.198	
4-4140	4-4310	.178	82.1	18.3	-1.6	.615	84.5	.421	1.105	172.3	256.3	.640A	1.569	65.8	1.053	-1.1	-3.4	358.0	.451	
		12.25	8.04	4.27	4.21	7.61	3.77	17.40	2/1/1	54.1	173.6	34.0	.530	3.417	4.8	125.1	3.2	105.0D	1.281	
4-3840	4-3998.0	.169	318.8	1.8	3.3	.859	93.1	.277	.776	188.1	453.4	.561	.990D	105.7	1.208	.7	2.4	197.9	.330	
4-3998.0	4-4140	.330	232.5	2.6	.6	1.378	78.6	.423	1.176	39.2	154.1	.679D	1.674A	106.6	.658	1.6	24.9	126.5	.197	
4-4140	4-4320	.154	76.7	17.6	-1.4	.640	85.8	.369	1.144	172.7	268.7	.722A	1.566	69.6	1.065	-1.1	-1.9	2.6	.368	
		11.70	7.50	4.27	4.19	7.59	3.24	16.02	2/1/1	53.8	177.1	34.5	.553	3.369	2.7	125.2	-.3	106.3D	1.309	
4-3850	4-3998.7	.186	313.5	-1.0	3.4	.866	96.3	.282	.781	196.5	452.7	.560	1.001D	106.0	1.212	.1	.3	199.2	.336	
4-3998.7	4-4140	.336	232.5	2.5	.6	1.378	78.2	.424	1.174	40.4	154.3	.676D	1.673A	106.6	.657	1.6	25.0	126.2	.198	
4-4140	4-4330	.136	70.3	16.8	-1.2	.660	86.9	.327	1.179	173.5	279.4	.794A	1.564	73.0	1.074	-1.1	-.7	7.0	.333	
		11.58	7.37	4.49	4.21	7.61	2.88	14.86	2/1/1	54.1	174.3	33.1	.533	3.506	4.1	125.9	-3.9	105.9D	1.335	
4-3860	4-4000.2	.214	312.2	-2.8	3.6	.874	99.3	.295	.787	204.0	452.4	.555	1.019D	106.6	1.216	-.5	-1.8	201.8	.351	
4-4000.2	4-4140	.351	232.1	2.4	.6	1.377	77.4	.428	1.169	43.4	154.8	.668D	1.670A	106.6	.654	1.6	25.2	125.5	.200	
4-4140	4-4340	.124	63.4	16.2	-1.0	.675	87.8	.292	1.208	174.8	290.5	.855A	1.561	76.0	1.081	-1.2	-.1	11.0	.283	
		11.80	7.55	4.90	4.25	7.65	2.65	13.92	2/1/1	54.7	168.7	30.6	.488	3.788	8.0	127.0	-8.0	104.5D	1.362	
4-3870	4-4002.4	.250	313.9	-3.6	3.8	.883	102.3	.313	.797	210.6	452.3	.547	1.046D	107.6	1.223	-1.2	-3.9	205.1	.373	
4-4002.4	4-4140	.373	232.0	2.2	.6	1.375	76.1	.435	1.161	47.6	155.5	.656D	1.667A	106.6	.650	1.7	25.4	124.5	.203	
4-4140	4-4350	.116	56.7	15.9	-.7	.687	88.6	.266	1.232	176.2	301.7	.905A	1.560	78.8	1.086	-1.3	-.2	14.4	.239	
		12.31	7.98	5.47	4.32	7.71	2.51	13.17	2/1/1	55.7	162.0	27.5	.432	4.210	12.9	128.4	-12.8	102.3D	1.386	
4-3880	4-4005.0	.291	317.6	-3.5	4.1	.894	105.3	.336	.809	216.5	452.2	.538	1.081D	108.8	1.231	-2.0	-5.8	209.2	.402	
4-4005.0	4-4140	.402	232.1	1.9	.6	1.372	74.4	.444	1.150	52.7	156.6	.639D	1.661A	106.6	.644	1.7	25.7	123.0	.206	
4-4140	4-4360	.112	50.6	16.3	-.4	.696	89.2	.246	1.252	177.7	313.0	.944A	1.559	81.2	1.090	-1.5	-1.6	17.1	.201	
		13.06	8.64	6.21	4.42	7.81	2.44	12.60	2/1/1	57.1	153.9	24.1	.372	4.784	18.9	130.0	-18.8	99.6D	1.406	
MARS ARRIVAL DATE = 2444150 (3 OCT 1979)																				
4-3830	4-3999.8	.171	330.3	5.8	3.3	.852	88.9	.284	.770	177.3	455.5	.552	.989	106.2	1.205	1.3	4.3	199.6	.340	
4-3999.8	4-4150	.340	232.4	1.8	.5	1.374	77.8	.420	1.156	42.5	159.3	.672D	1.645A	103.8	.640	1.7	26.5	122.2	.182	
4-4150	4-4310	.184	79.6	18.4	-1.6	.604	86.8	.430	1.101	175.8	256.9	.627A	1.574	65.1	1.051	-1.2	-3.3	356.7	.462	
		12.05	8.20	4.31	3.85	7.25	3.90	17.66	2/1/1	62.9	172.9	32.6	.519	3.538	5.5	125.8	4.4	104.0D	1.318	
4-3840	4-3998.9	.168	320.4	2.4	3.3	.858	92.7	.278	.774	187.2	453.8	.559	.990D	105.8	1.207	.7	2.4	199.0	.332	
4-3998.9	4-4150	.332	232.5	1.9	.5	1.374	78.3	.417	1.161	40.6	159.0	.676D	1.646A	103.8	.642	1.7	26.4	122.7	.181	
4-4150	4-4320	.160	75.6	17.6	-1.4	.631	87.9	.376	1.143	176.6	267.7	.713A	1.573	69.1	1.065	-1.2	-1.9	3.2	.397	
		11.46	7.63	4.27	3.82	7.22	3.36	16.19	2/1/1	62.5	176.7	33.5	.547	3.472	2.4	125.8	.9	105.5D	1.352	
4-3850	4-3999.4	.185	314.7	-.5	3.4	.865	96.0	.283	.779	195.7	453.1	.559	1.000D	106.0	1.211	.1	.3	200.3	.337	
4-3999.4	4-4150	.337	232.5	1.9	.5	1.374	78.0	.419	1.159	41.6	159.1	.674D	1.645A	103.8	.641	1.7	26.5	122.4	.182	
4-4150	4-4330	.143	66.8	16.8	-1.2	.653	88.9	.332	1.180	177.8	278.8	.788A	1.571	72.7	1.073	-1.2	-.8	7.4	.336	
		11.33	7.49	4.48	3.84	7.24	3.01	14.98	2/1/1	62.7	174.4	32.2	.530	3.603	3.0	126.4	-2.8	105.2D	1.360	
4-3860	4-4000.9	.212	313.1	-2.4	3.5	.872	99.0	.295	.786	203.2	452.8	.554	1.017D	106.6	1.215	-.5	-1.8	202.7	.351	
4-4000.9	4-4150	.351	232.3	1.7	.5	1.373	77.2	.423	1.155	44.4	159.6	.666D	1.643A	103.7	.638	1.7	26.6	121.7	.183	
4-4150	4-4340	.132	59.7	16.1	-1.0	.670	89.8	.296	1.212	179.5	290.5	.852A	1.571	75.8	1.083	-1.3	-.3	11.2	.287	
		11.55	7.67	4.67	3.88	7.28	2.80	13.99	2/1/1	63.3	168.7	29.8	.488	3.886	6.9	127.5	-6.9	103.9D	1.408	
4-3870	4-4003.0	.247	314.6	-3.3	3.8	.881	102.0	.312	.795	209.9	452.6	.547	1.043D	107.5	1.221	-1.2	-3.8	206.1	.373	
4-4003.0	4-4150	.373	232.3	1.6	.4	1.371	76.0	.430	1.147	48.4	160.3	.654D	1.640A	103.7	.634	1.7	26.8	120.6	.186	
4-4150	4-4350	.126	53.1	15.7	-.7	.683	90.5	.269	1.238	181.3	301.9	.904A	1.571D	78.7	1.088	-1.4	-.5	14.4	.242	
		12.06	8.11	5.42	3.95	7.35	2.68	13.21	2/1/1	64.4	161.8	26.6	.433	4.313	11.9	129.0	-11.8	101.9D	1.433	
4-3880	4-4005.8	.288	318.2	-3.3	4.0	.892	105.0	.335	.807	215.8	452.6	.537	1.077D	108.7	1.229	-2.0	-5.7	210.1	.401	
4-4005.8	4-4150	.401	232.6	1.4	.4	1.368	74.4	.439	1.137	53.5	161.2	.638D	1.636A	103.8	.628	1.8	27.0	119.1	.191	
4-4150	4-4360	.122	47.5	15.9	-.4	.692	91.0	.249	1.258	183.1	313.5	.945A	1.572D	81.2	1.092	-1.6	-1.9	16.8	.203	
		12.82	8.77	6.15	4.05	7.45	2.62	12.62	2/1/1	65.7	153.5	23.6	.373	4.896	17.9	130.7	-17.8	99.2D	1.455	
MARS ARRIVAL DATE = 2444160 (13 OCT 1979)																				
4-3830	4-4000.9	.174	332.4	6.5	3.4	.851	88.4	.287	.769	176.1	456.1	.549	.990	106.4	1.204	1.3	4.3	201.1	.344	
4-4000.9	4-4160	.344	233.0	1.1	.3	1.371	77.5	.416	1.148	45.6	163.7	.669D	1.628A	101.1	.627	1.8	27.9	118.0	.172	
4-4160	4-4310	.193	76.7	18.4	-1.6	.595	89.6	.440	1.099	179.5	255.8	.615A	1.583	64.4	1.051	-1.4	-3.3	359.2	.475	
		12.06	8.45	4.34	3.62	7.02	4.10	17.92	2/1/1	71.7	172.3	32.0	.508	3.625	6.4	126.7	5.7	103.2D	1.334	
4-3840	4-3999.8	.169	322.1	5.0	3.3	.857	92.4	.279	.773	186.2	454.3	.557	.989D	105.9	1.207	.7	2.4	200.2	.333	
4-3999.8	4-4160	.333	233.0	1.2	.3	1.372	78.1	.415	1.152	41.6	163.4	.674D	1.629A	101.1	.628	1.8	27.9	118.6	.170	
4-4160	4-4320	.169	70.4	17.6	-1.4	.625	90.4	.383	1.144	180.7	266.9	.705A	1.583D	66.7	1.065	-1.3	-2.0	3.6	.408	
		11.42	7.85	4.27	3.59	6.99	3.56	16.37	2/1/1	71.2	176.3	32.8	.541	3.539	2.8	126.6	2.1	104.8D	1.373	
4-3830	4-4000.2	.165	316.0	-.0	3.4	.863	85.7	.263	.778	194.8	453.5	.557	.998D	106.0	1.210	.1	.3	201.3	.338	
4-4000.2	4-4160	.338	233.0	1.2	.3	1.371	77.9	.416	1.150	42.4	163.5	.672D	1.629A	101.1	.628	1.8	27.9	118.4	.171	
4-4160	4-4330	.153	63.3	16.7	-1.2	.648	91.2	.337	1.184	182.4	278.5	.785A	1.583D	72.4	1.076	-1.3	-1.0	7.6	.344	*
		11.28	7.66	4.46	3.60	7.00	3.22	15.09	2/1/1	71.4	174.3	31.7	.528	3.662	1.7	127.2	-1.6	104.8D	1.404	

STOPOVER TIME = .0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 480 DAYS; MARS ARRIVAL DATE = 2444160 13 OCT 1979

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE RETURN	$PEED1 $PEED3 $PEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	$PEED2 $PEED4 $PEED6 PERIC
4-3660	4-4001.6	.210	314.1	-2.0	3.5	.871	98.8	.294	.784	202.4	453.1	.553	1.015D	106.6	1.214	-.5	-1.8	203.7	.351
4-4001.6	4-4160	.351	232.9	1.1	.3	1.370	77.1	.420	1.146	45.0	163.9	.665D	1.627A	101.0	.626	1.8	28.0	117.7	.173
4-4160	4-4340	.143	56.4	15.9	-.9	.666	91.9	.301	1.218	184.5	290.5	.851A	1.585D	75.7	1.085	-1.4	-.6	11.2	.291
		11.50	7.86	4.84	3.64	7.04	3.02	14.06	2/1/1	72.0	168.5	29.4	.487	3.942	5.7	128.3	-5.7	103.6D	1.434
4-3670	4-4003.7	.244	315.4	-3.0	3.7	.879	101.8	.311	.793	209.1	453.0	.546	1.040D	107.5	1.220	-1.2	-3.8	207.0	.372
4-4003.7	4-4160	.372	233.0	1.0	.3	1.369	75.9	.427	1.139	46.9	164.6	.653D	1.625A	100.9	.622	1.6	28.1	116.5	.176
4-4160	4-4350	.138	50.1	15.5	-.7	.680	92.5	.274	1.246	186.8	302.5	.905A	1.587D	78.6	1.090	-1.5	-.9	14.2	.244
		12.01	8.30	5.38	3.71	7.11	2.92	13.25	2/1/1	73.0	161.5	26.5	.433	4.368	10.6	129.8	-10.5	101.6D	1.460
4-3680	4-4006.3	.284	318.8	-3.1	4.0	.890	104.8	.333	.805	215.1	452.9	.536	1.073D	108.7	1.228	-1.9	-5.7	211.0	.400
4-4006.3	4-4160	.400	233.4	.9	.3	1.366	74.3	.436	1.130	53.9	165.4	.637D	1.622A	100.8	.616	1.8	28.2	115.0	.181
4-4160	4-4360	.135	45.0	15.5	-.4	.690	93.0	.254	1.268	188.9	314.4	.946A	1.589D	81.3	1.094	-1.6	-2.4	16.3	.204
		12.77	8.95	6.08	3.82	7.21	2.87	12.64	2/1/1	74.3	152.7	23.3	.375	4.953	16.6	131.5	-16.4	99.1D	1.483
MARS ARRIVAL DATE = 2444170 (23 OCT 1979)																			
4-3630	4-4002.1	.178	334.6	7.2	3.4	.849	87.9	.290	.768	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348
4-4002.1	4-4170	.348	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.166
4-4170	4-4310	.206	75.7	18.4	-1.7	.589	92.8	.451	1.100	183.4	254.9	.605A	1.596D	63.8	1.051	-1.5	-3.5	359.7	.485
		12.29	8.80	4.39	3.49	6.89	4.41	18.21	2/1/1	80.3	171.9	31.5	.495	3.689	7.5	127.9	7.1	102.5D	1.332
4-3640	4-4000.7	.169	325.9	3.7	3.3	.856	92.0	.281	.772	185.2	454.8	.555	.988D	106.0	1.206	.7	2.4	201.5	.336
4-4000.7	4-4170	.336	233.9	.4	.1	1.370	76.0	.413	1.147	42.3	167.4	.672D	1.621A	98.6	.619	1.9	29.2	114.5	.164
4-4170	4-4320	.182	67.1	17.5	-1.4	.620	93.3	.391	1.149	185.1	266.6	.699A	1.598D	68.2	1.067	-1.4	-2.1	3.8	.413
		11.58	8.13	4.27	3.45	6.85	3.85	16.56	2/1/1	79.7	176.1	32.5	.534	3.579	5.8	127.6	3.5	104.4D	1.377
4-3650	4-4001.1	.182	317.4	.5	3.4	.862	95.4	.284	.776	193.9	453.9	.556	.997D	106.1	1.209	.1	.3	202.4	.339
4-4001.1	4-4170	.339	233.9	.4	.1	1.370	77.8	.414	1.146	42.9	167.5	.671D	1.620A	98.6	.618	1.9	29.2	114.4	.164
4-4170	4-4330	.167	60.2	16.5	-1.2	.645	93.8	.343	1.192	187.4	278.7	.782A	1.601D	72.1	1.079	-1.4	-1.2	7.6	.350
		11.41	7.96	4.44	3.46	6.86	3.51	15.21	2/1/1	79.8	174.1	31.4	.524	3.691	.4	128.1	-.2	104.4D	1.411
4-3660	4-4002.4	.208	315.2	-1.6	3.5	.869	98.5	.294	.782	201.6	453.5	.552	1.013D	106.7	1.213	-.5	-1.6	204.7	.351
4-4002.4	4-4170	.351	233.9	.4	.1	1.369	77.0	.418	1.142	45.3	167.9	.664D	1.619A	98.5	.616	1.9	29.2	113.7	.166
4-4170	4-4340	.158	53.5	15.8	-.9	.664	94.4	.306	1.226	190.0	291.1	.852A	1.604D	75.6	1.088	-1.4	-.9	11.0	.294
		11.63	8.13	4.80	3.50	6.90	3.32	14.12	2/1/1	80.4	168.1	29.2	.487	3.964	4.4	129.2	-4.3	103.3D	1.442
4-3670	4-4004.5	.241	316.2	-2.7	3.7	.878	101.5	.311	.791	208.3	453.4	.545	1.036D	107.5	1.219	-1.2	-3.8	208.0	.372
4-4004.5	4-4170	.372	234.0	.4	.1	1.368	75.9	.425	1.135	49.1	168.4	.653D	1.618A	98.3	.612	1.9	29.2	112.7	.170
4-4170	4-4350	.153	47.8	15.3	-.6	.679	94.8	.279	1.258	192.7	303.6	.907A	1.609D	78.6	1.094	-1.5	-1.4	13.6	.246
		12.14	8.56	5.33	3.57	6.98	3.23	13.28	2/1/1	81.5	160.6	26.4	.434	4.385	9.3	130.7	-9.1	101.5D	1.470
4-3680	4-4007.0	.281	319.5	-2.9	4.0	.888	104.5	.332	.802	214.4	453.3	.536	1.069D	108.7	1.227	-1.9	-5.6	212.0	.399
4-4007.0	4-4170	.399	234.5	.3	.1	1.365	74.4	.435	1.126	53.9	169.1	.637D	1.616A	98.1	.606	1.9	29.1	111.3	.175
4-4170	4-4360	.151	43.3	15.3	-.3	.689	95.2	.259	1.281	195.1	315.8	.949A	1.613D	81.3	1.098	-1.6	-3.0	15.3	.205
		12.89	9.21	6.02	3.68	7.08	3.19	12.65	2/1/1	82.5	151.6	23.2	.377	4.966	15.1	132.5	-14.8	99.0D	1.494
MARS ARRIVAL DATE = 2444180 (2 NOV 1979)																			
4-3630	4-4003.4	.182	337.0	8.0	3.5	.848	87.3	.294	.766	173.6	457.4	.541	.991	106.8	1.202	1.3	4.2	204.3	.353
4-4003.4	4-4160	.353	235.0	-.3	-.1	1.369	76.9	.419	1.140	45.8	171.5	.663D	1.617A	96.0	.608	2.0	30.1	110.2	.164
4-4160	4-4310	.224	70.8	18.3	-1.7	.585	96.5	.462	1.106	187.6	254.4	.595A	1.616D	63.1	1.053	-1.6	-3.4	.0	.498
		12.72	9.28	4.44	3.44	6.85	4.84	18.51	2/1/1	88.3	171.6	31.1	.481	3.736	8.8	129.4	8.5	101.6D	1.317
4-3640	4-4001.8	.170	325.9	4.4	3.3	.854	91.6	.282	.770	184.1	455.3	.553	.988D	106.1	1.205	.7	2.4	202.8	.338
4-4001.8	4-4160	.338	235.0	-.4	-.1	1.370	77.8	.414	1.144	42.8	171.1	.671D	1.618A	96.2	.611	2.0	30.2	110.9	.161
4-4160	4-4320	.200	64.2	17.4	-1.4	.619	96.5	.400	1.158	189.9	266.6	.695A	1.620D	67.8	1.070	-1.6	-2.3	3.9	.422
		11.93	8.54	4.28	3.39	6.79	4.26	16.76	2/1/1	87.7	175.9	32.3	.527	3.597	5.0	128.8	4.9	103.9D	1.367
4-3650	4-4001.9	.181	319.0	1.1	3.4	.861	95.0	.284	.775	193.0	454.3	.554	.995D	106.2	1.208	.1	.3	203.6	.340
4-4001.9	4-4160	.340	235.0	-.4	-.1	1.370	77.7	.414	1.144	43.2	171.1	.670D	1.618A	96.2	.611	2.0	30.2	110.8	.161
4-4160	4-4330	.185	57.4	16.4	-1.2	.645	96.7	.350	1.204	192.8	279.3	.782A	1.626D	71.9	1.083	-1.5	-1.6	7.4	.355
		11.73	8.34	4.43	3.39	6.80	3.91	15.32	2/1/1	87.8	173.8	31.4	.521	3.696	1.2	129.3	1.2	104.2D	1.405
4-3660	4-4003.2	.205	316.3	-1.2	3.5	.867	98.2	.294	.781	200.7	453.9	.551	1.010D	106.7	1.212	-.5	-1.6	205.8	.352
4-4003.2	4-4160	.352	235.0	-.3	-.1	1.369	77.0	.418	1.140	45.5	171.4	.664D	1.617A	96.1	.608	2.0	30.1	110.2	.163
4-4160	4-4340	.176	51.3	15.7	-.9	.665	97.0	.313	1.243	195.9	292.3	.854A	1.632D	75.5	1.092	-1.5	-1.4	10.5	.297
		11.93	8.49	4.77	3.44	6.84	3.72	14.18	2/1/1	88.3	167.4	29.3	.486	3.959	3.0	130.4	-2.8	103.2D	1.437
4-3670	4-4005.2	.236	317.1	-2.4	3.7	.876	101.2	.310	.789	207.5	453.8	.544	1.033D	107.5	1.218	-1.2	-3.7	209.0	.372
4-4005.2	4-4160	.372	235.2	-.3	-.1	1.367	75.9	.425	1.134	49.1	171.9	.653D	1.616A	95.9	.605	2.0	30.0	109.3	.167
4-4160	4-4350	.172	46.2	15.2	-.6	.680	97.3	.286	1.275	199.0	305.2	.910A	1.639D	78.7	1.099	-1.6	-2.0	12.7	.248
		12.43	8.91	5.28	3.51	6.92	3.63	13.31	2/1/1	89.0	159.5	26.4	.435	4.371	7.8	131.8	-7.5	101.4D	1.466
4-3680	4-4007.8	.277	320.2	-2.7	3.9	.886	104.2	.331	.800	213.6	453.7	.535	1.064D	108.7	1.225	-1.9	-5.5	213.0	.399
4-4007.8	4-4160	.399	235.7	-.3	-.1	1.365	74.4	.434	1.126	53.8	172.5	.637D	1.615A	95.7	.599	2.0	29.9	108.1	.172
4-4160	4-4360	.170	42.2	15.2	-.3	.691	97.5	.267	1.299	201.8	317.7	.952A	1.646D	81.5	1.103	-1.7	-3.7	14.0	.206
		13.17	9.54	5.95	3.62	7.03	3.59	12.66	2/1/1	90.1	150.1	23.3	.379	4.942	13.4	133.7	-13.1	99.1D	1.492
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																			
4-3640	4-4002.9	.171	328.1	5.2	3.4	.853	91.2	.284	.769	182.9	455.9	.550	.987D	106.2	1.204	.7	2.3	204.3	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	43.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4320	.222	61.6	17.3	-1.5	.622	100.0	.409	1.173	195.2	267.2	.693A	1.653D	67.3	1.075	-1.7	-2.6	3.7	.432
		12.46	9.09	4.29	3.39	6.79	4.79	16.97	2/1/1	95.0	175.8	32.3	.516	3.600	6.4	130.2	6.4	103.6D	1.347
4-3650	4-4002.9	.180	320.6	1.8	3.4	.859	94.7	.285	.773	191.9	454.8	.553	.994D	106.2	1.207	.1	.3	204.9	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.144	43.3	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4330	.207	55.2	16.4	-1.2	.649	99.9	.359	1.223	198.7	280.5	.784A	1.662D	71.7	1.089	-1.6	-2.0	7.0	.362
		12.23	8.84	4.41	3.39	6.79	4.43	15.45	2/1/1	95.0	173.2	31.5	.517	3.683	2.8	130.6	2.8	104.0D	1.367
4-3660	4-4004.1	.203	317.6	-.7	3.5	.866	97.8	.294	.779	199.7	454.3	.550	1.008D	106.7	1.211	-.5	-1.7	206.9	.352
4-4004.1	4-4190	.352	236.4	-1.1	-.3	1.369	77.0	.419	1.141	45.4	174.7	.664D	1.619A	93.8	.603	2.1	30.9	107.4	.163
4-4190	4-4340	.199	49.6	15.7	-.9	.670	99.9	.322	1.265	202.4	294.1	.858A	1.672D	75.4	1.098	-1.6	-2.0	9.6	.301
		12.41	8.97	4.74	3.43	6.84	4.23	14.25	2/1/1	95.4	166.4	29.5	.484	3.934	1.9	131.6	-1.2	103.1D	1.421
4-3670	4-4006.1	.235	318.1	-2.0	3.7	.874	100.9	.310	.787	206.6	454.2	.543	1.030D	107.5	1.216	-1.2	-3.7	210.1	.372
4-4006.1	4-4190	.372	236.6	-1.0	-.3	1.368	75.9	.425	1.136	48.9	175.1	.653D	1.618A	93.6	.599	2.1	30.7	106.8	.167
4-4190	4-4350	.195	45.1	15.3	-.6	.685	100.0	.295	1.299	205.9	307.4	.919A	1.682D	78.8	1.105	-1.6	-2.8	11.5	.250
		12.68	9.37	5.23	3.51	6.91	4.14	13.34	2/1/1	96.1	158.0	26.7	.436	4.334	8.3	133.1	-9.8	101.4D	1.452
MARS ARRIVAL DATE = 2444200 (22 NOV 1979)																			
4-3640	4-4004.0	.172	330.4	6.0	3.4	.851	90.7	.286	.767	181.7	456.5	.547	.987D	106.4	1.203	.7	2.3	205.8	.344
4-4004.0	4-4200	.344	237.9	-2.1	-.5	1.371	77.6	.417	1.146	43.6	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4320	.251	59.5	17.2	-1.5	.630	104.0	.422	1.197	200.9	268.3	.692A	1.701D	66.9	1.083	-1.8	-3.0	3.3	.443
		13.24	9.81	4.51	3.44	6.84	5.49	17.22	2/1/1	101.5	175.8	32.3	.509	3.591	7.9	131.8	7.9	103.3D	1.316
4-3650	4-4003.9	.179	322.4	2.5	3.4	.857	94.3	.286	.772	190.9	455.3	.551	.992D	106.3	1.206	.1	.3	206.2	.343
4-4003.9	4-4200	.343	237.9	-2.1	-.5	1.371	77.6	.416	1.147	43.4	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4330	.234	53.6	16.4	-1.2	.658	103.3	.370	1.251	205.2	282.4	.787A	1.714D	71.5	1.097	-1.7	-2.6	6.2	.369
		12.92	9.49	4.40	3.43	6.83	5.09	15.59	2/1/1	101.5	172.3	31.8	.512	3.656	4.5	132.1	4.4	103.6D	1.361
4-3660	4-4005.0	.201	319.0	-.2	3.5	.864	97.5	.294	.777	198.8	454.8	.548	1.006D	106.7	1.210	-.5	-1.7	208.2	.353
4-4005.0	4-4200	.353	237.9	-2.0	-.5	1.370	77.0	.420	1.144	45.3	177.7	.664D	1.624A	91.6	.599	2.3	31.5	105.3	.168
4-4200	4-4340	.226	46.5	15.7	-.9	.679	103.0	.354	1.296	209.5	296.6	.864A	1.728D	75.4	1.107	-1.7	-2.7	8.4	.308
		13.05	9.58	4.71	3.47	6.87	4.87	14.33	2/1/1	101.8	165.0	29.8	.483	3.893	2.0	133.1	.5	103.1D	1.397

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS | MARS ARRIVAL DATE = 2444110 | 24 AUG 1979

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2444110 (24 AUG 1979)																				
4-3830	4-3995.1	.163	321.3	2.7	3.2	.858	90.6	.274	.776	182.2	452.9	.563	.989D	105.5	1.208	1.3	4.5	193.5	.326
4-3995.1	4-4110	.326	236.0	4.6	1.1	1.406	80.1	.464	1.295	31.5	135.6	.694D	1.896A	115.9	.738	1.4	21.0	134.0	.287
4-4110	4-4350	.105	68.2	15.9	-1.0	.709	84.2	.257	1.229	162.6	303.4	.913A	1.545	79.4	1.085	-1.0	.5	13.0	.226
		12.93	6.51	4.20	6.42	9.80	2.31	13.00	2/1/1	30.7	161.3	42.4	.565	2.766	4.9	124.8	-.1	110.4D	.997
4-3840	4-3994.9	.170	313.1	-.4	3.2	.864	94.2	.274	.780	191.4	451.8	.567	.994D	105.4	1.211	.7	2.5	193.8	.324
4-3994.9	4-4110	.324	236.2	4.6	1.1	1.406	80.3	.464	1.298	31.1	135.6	.695D	1.897A	115.9	.738	1.4	21.0	134.1	.286
4-4110	4-4360	.097	62.6	17.0	-.6	.716	84.9	.238	1.244	163.2	313.8	.948A	1.541	81.6	1.086	-1.3	-.9	16.2	.194
		12.89	6.47	4.28	6.41	9.79	2.19	12.49	2/1/1	30.7	153.6	42.3	.571	2.770	4.8	125.1	-2.9	111.1D	1.011
4-3850	4-3995.9	.191	309.2	-2.7	3.4	.871	97.3	.282	.786	199.4	451.3	.564	1.007D	105.8	1.215	.1	.3	195.6	.334
4-3995.9	4-4110	.333	235.6	4.5	1.1	1.406	79.7	.466	1.293	33.0	135.8	.691D	1.895A	116.0	.737	1.4	21.1	133.9	.288
4-4110	4-4370	.092	57.0	20.8	.0	.721	85.5	.224	1.256	163.8	324.1	.975A	1.538	83.7	1.089	-1.9	-5.4	19.0	.166
		13.15	6.68	4.57	6.45	9.82	2.11	12.13	2/1/1	30.9	143.8	40.2	.540	2.912	6.5	125.9	-6.0	110.1D	1.034
MARS ARRIVAL DATE = 2444120 (3 SEP 1979)																				
4-3820	4-3999.1	.189	335.8	6.6	3.4	.849	85.6	.295	.770	169.4	456.6	.543	.998	106.9	1.205	1.9	6.1	197.9	.355
4-3999.1	4-4120	.355	233.1	3.5	.9	1.391	77.7	.451	1.227	40.5	143.5	.674D	1.781A	112.8	.700	1.5	22.5	131.3	.252
4-4120	4-4340	.116	70.7	16.2	-1.1	.690	84.6	.285	1.207	166.1	292.0	.663A	1.551	76.6	1.081	-1.0	.2	10.0	.274
		12.59	7.05	4.54	5.54	8.92	2.51	13.75	2/1/1	38.8	168.2	35.1	.476	3.317	6.6	125.2	4.3	104.4D	1.104
4-3830	4-3996.8	.165	324.1	3.6	3.2	.856	90.3	.277	.774	180.7	453.7	.560	.989D	105.7	1.207	1.3	4.4	195.4	.330
4-3996.8	4-4120	.330	233.9	3.9	.9	1.393	79.3	.445	1.237	35.5	142.5	.686D	1.787A	112.7	.704	1.4	22.2	132.2	.249
4-4120	4-4350	.106	64.5	16.1	-.9	.701	85.5	.260	1.228	166.9	302.5	.909A	1.546	79.1	1.085	-1.1	.2	13.7	.232
		12.05	6.56	4.22	5.47	8.85	2.34	13.07	2/1/1	37.9	161.7	38.4	.552	3.038	4.5	124.6	.9	108.0D	1.124
4-3840	4-3996.1	.169	315.3	.4	3.2	.862	93.8	.275	.778	190.1	452.4	.565	.992D	105.5	1.210	.7	2.5	195.4	.326
4-3996.1	4-4120	.326	234.1	3.9	.9	1.393	79.5	.444	1.238	34.7	142.4	.686D	1.788A	112.7	.705	1.4	22.1	132.3	.249
4-4120	4-4360	.099	58.5	17.0	-.5	.708	86.2	.240	1.245	167.8	313.2	.946A	1.545	81.4	1.088	-1.4	-1.1	16.8	.197
		11.96	6.50	4.27	5.46	8.84	2.23	12.54	2/1/1	37.8	153.9	38.6	.564	3.023	4.1	124.9	-2.2	108.9D	1.142
4-3850	4-3997.0	.189	310.9	-2.0	3.4	.869	96.9	.282	.784	198.3	451.8	.563	1.005D	105.9	1.214	.1	.3	197.0	.334
4-3997.0	4-4120	.334	233.7	3.8	.9	1.393	79.0	.446	1.235	36.4	142.7	.684D	1.786A	112.7	.704	1.5	22.2	132.0	.250
4-4120	4-4370	.095	52.8	19.8	.0	.714	86.7	.226	1.258	168.6	323.7	.974A	1.542	83.5	1.089	-1.9	-5.1	19.2	.167
		12.16	6.70	4.54	5.48	8.86	2.16	12.15	2/1/1	38.0	144.2	36.8	.538	3.167	5.9	125.6	-5.5	108.2D	1.165
4-3860	4-3998.7	.219	310.2	-3.5	3.6	.877	99.9	.295	.791	205.6	451.6	.557	1.024D	106.6	1.219	-.6	-1.9	199.8	.351
4-3998.7	4-4120	.351	233.2	3.6	.9	1.392	78.0	.450	1.229	39.6	143.3	.676D	1.782A	112.8	.701	1.5	22.4	131.5	.252
4-4120	4-4380	.094	46.6	27.7	1.2	.718	87.1	.216	1.267	169.3	334.0	.994A	1.541	85.5	1.090	-3.0	-15.0	22.2	.149
		12.65	7.12	4.97	5.52	8.91	2.15	11.93	2/1/1	38.6	131.0	33.8	.489	3.436	9.4	126.6	-9.3	106.4D	1.191
MARS ARRIVAL DATE = 2444130 (13 SEP 1979)																				
4-3820	4-4000.6	.196	338.2	7.3	3.5	.848	84.9	.301	.769	167.9	457.5	.537	1.000	107.3	1.204	1.9	6.0	199.9	.363
4-4000.6	4-4130	.363	232.2	2.8	.8	1.381	76.9	.440	1.188	44.1	149.8	.665D	1.711A	109.7	.672	1.6	23.9	128.3	.223
4-4130	4-4340	.119	67.1	16.3	-1.0	.682	86.1	.289	1.207	170.3	291.1	.658A	1.555	76.3	1.081	-1.1	.1	10.6	.278
		12.01	7.19	4.64	4.82	8.21	2.55	13.84	2/1/1	46.9	166.5	32.4	.457	3.589	7.4	125.6	5.7	102.4D	1.183
4-3830	4-3997.7	.167	326.5	4.4	3.3	.854	89.8	.279	.773	179.5	454.3	.557	.989	105.9	1.206	1.3	4.4	196.9	.334
4-3997.7	4-4130	.334	232.7	3.2	.8	1.384	78.6	.432	1.199	38.4	148.8	.680D	1.717A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4350	.110	60.6	16.1	-.8	.693	87.0	.263	1.230	171.4	302.0	.907A	1.552	78.9	1.086	-1.2	.0	14.2	.236
		11.39	6.65	4.25	4.74	8.13	2.40	13.12	2/1/1	45.7	161.9	35.8	.540	3.253	4.4	124.7	2.0	106.3D	1.218
4-3840	4-3997.1	.169	317.1	1.1	3.3	.861	93.4	.276	.777	189.1	452.9	.563	.991D	105.6	1.209	.7	2.5	196.7	.328
4-3997.1	4-4130	.328	232.9	3.3	.8	1.384	79.0	.431	1.201	37.3	148.6	.683D	1.718A	109.6	.679	1.5	23.4	129.8	.220
4-4130	4-4360	.104	54.4	16.7	-.5	.702	87.6	.243	1.248	172.6	312.9	.945A	1.550	81.3	1.089	-1.5	-1.3	17.1	.199
		11.51	6.58	4.27	4.73	8.12	2.31	12.57	2/1/1	45.5	154.0	36.2	.558	3.222	5.3	124.9	-1.3	107.4D	1.240
4-3850	4-3997.9	.167	312.2	-1.5	3.4	.867	96.6	.282	.782	197.4	452.3	.561	1.003D	105.9	1.213	.1	.3	196.2	.335
4-3997.9	4-4130	.335	232.7	3.2	.8	1.384	78.5	.433	1.198	38.8	148.9	.680D	1.716A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4370	.101	48.8	18.7	.0	.708	88.1	.228	1.261	173.7	323.6	.973A	1.549	83.5	1.090	-1.9	-5.0	19.2	.169
		11.51	6.77	4.31	4.74	8.13	2.26	12.17	2/1/1	45.8	144.2	34.6	.535	3.364	5.1	125.6	-4.8	106.6D	1.265
4-3860	4-3999.5	.216	311.2	-3.2	3.6	.875	99.6	.295	.789	204.7	452.0	.556	1.022D	106.6	1.217	-.6	-1.6	200.6	.351
4-3999.5	4-4130	.351	232.3	3.0	.8	1.383	77.6	.437	1.193	41.8	149.4	.671D	1.714A	109.6	.675	1.6	23.7	128.8	.222
4-4130	4-4380	.100	43.5	24.0	.9	.712	88.5	.218	1.271	174.5	334.1	.994A	1.548	85.4	1.091	-2.7	-13.0	21.1	.148
		11.97	7.18	4.93	4.79	8.18	2.24	11.92	2/1/1	46.4	131.5	31.9	.489	3.641	8.8	126.7	-8.8	105.3D	1.291
4-3870	4-4001.7	.252	313.1	-3.8	3.8	.885	102.5	.313	.799	211.3	451.9	.548	1.049D	107.6	1.224	-1.3	-3.9	204.2	.374
4-4001.7	4-4130	.374	232.1	2.7	.8	1.381	76.3	.443	1.184	46.2	150.2	.659D	1.709A	109.7	.670	1.6	24.0	127.9	.225
4-4130	4-4390	.108	35.8	36.6	3.3	.715	88.6	.212	1.278	174.9	344.1	1.007A	1.548	87.2	1.091	-5.0	-31.4	26.8	.151
		12.74	7.88	5.52	4.85	8.24	2.36	11.96	2/1/1	47.4	114.1	28.6	.431	4.051	13.6	126.0	-13.6	102.9D	1.314
MARS ARRIVAL DATE = 2444140 (23 SEP 1979)																				
4-3820	4-4002.1	.204	340.4	8.0	3.6	.846	84.2	.307	.767	166.5	458.4	.532	1.003	107.6	1.203	1.9	6.0	201.7	.371
4-4002.1	4-4140	.371	232.0	2.2	.8	1.375	76.2	.434	1.162	47.1	155.5	.657D	1.687A	106.6	.650	1.7	25.4	124.5	.202
4-4140	4-4340	.124	63.4	16.2	-1.0	.675	87.8	.292	1.208	174.8	290.5	.855A	1.561	76.0	1.081	-1.2	-.1	11.0	.263
		11.71	7.40	4.75	4.31	7.70	2.65	13.92	2/1/1	55.6	168.7	30.4	.436	3.813	8.4	126.3	7.2	100.9D	1.231
4-3830	4-3998.8	.169	328.3	5.1	3.3	.853	89.4	.281	.772	178.4	454.9	.554	.989	106.0	1.206	1.3	4.4	198.3	.337
4-3998.8	4-4140	.337	232.3	2.5	.8	1.378	78.2	.424	1.174	40.6	154.3	.676D	1.672A	106.6	.657	1.6	25.0	126.2	.198
4-4140	4-4350	.116	56.7	15.9	-.7	.687	88.6	.266	1.232	176.2	301.7	.905A	1.560	78.8	1.086	-1.3	-.2	14.4	.239
		11.00	6.79	4.27	4.21	7.61	2.51	13.17	2/1/1	54.1	162.0	34.0	.530	3.417	4.8	125.1	3.2	105.0D	1.261
4-3840	4-3998.0	.169	318.8	1.8	3.3	.859	93.1	.277	.776	188.1	453.4	.561	.990D	105.7	1.208	.7	2.4	197.9	.330
4-3998.0	4-4140	.330	232.5	2.6	.8	1.378	78.8	.423	1.176	39.2	154.1	.679D	1.674A	106.6	.658	1.6	24.9	126.5	.197
4-4140	4-4360	.112	50.6	16.5	-.4	.696	89.2	.246	1.252	177.7	313.0	.944A	1.559	81.2	1.090	-1.5	-1.6	17.1	.201
		10.90	6.71	4.27	4.19	7.59	2.44	12.60	2/1/1	53.8	153.9	34.5	.553	3.369	2.7	125.2	-.3	106.3D	1.309
4-3850	4-3998.7	.188	315.5	-1.0	3.4	.866	98.3	.282	.781	196.5	452.7	.560	1.001D	106.0	1.212	.1	.3	199.2	.338
4-3998.7	4-4140	.338	232.3	2.5	.8	1.378	78.2	.424	1.174	40.4	154.3	.676D	1.673A	106.6	.657	1.6	25.0	126.2	.198
4-4140	4-4370	.110	45.5	17.8	.0	.703	89.7	.231	1.266	179.0	324.0	.974A	1.559	83.5	1.092	-1.9	-5.0	18.9	.170
		11.11	6.89	4.49	4.21	7.61	2.40	12.18	2/1/1	54.1	144.0	33.1	.533	3.506	4.1	125.9	-3.9	105.9D	1.335
4-3860	4-4000.2	.214	312.2	-2.8	3.6	.874	99.3	.295	.787	204.0	452.4	.555	1.019D	106.6	1.216	-.5	-1.8	201.8	.351
4-4000.2	4-4140	.351	232.1	2.4	.8	1.377	77.4	.428	1.169	43.4	154.8	.668D	1.670A	106.6	.654	1.6	25.2	125.5	.200
4-4140	4-4380	.109	41.0	21.4	.8	.707	90.0	.221	1.277	180.0	334.6	.994A	1.559D	85.5	1.093	-2.5	-11.9	19.9	.147
		11.54	7.29	4.90	4.25	7.65	2.39	11.92	2/1/1	54.7	131.4	30.6	.488	3.788	8.0	127.0	-8.0	104.9D	1.362
4-3870	4-4002.4	.250	313.9	-3.6	3.8	.883	102.3	.313	.797	210.6	452.3	.547	1.048D	107.6	1.223	-1.2	-3.9	205.1	.373
4-4002.4	4-4140	.373	232.0	2.2	.8	1.375	76.1	.435	1.161	47.6	155.5	.656D	1.667A	106.6	.650	1.7	25.4	124.5	.203
4-4140	4-4390	.112	35.9	30.2	2.3	.710	90.1	.215	1.283	180.5	344.7	1.008A	1.559D	87.3	1.093	-3.9	-25.7	22.2	.141
		12.23	7.90	5.47	4.52	7.71	2.43	11.85	2/1/1	55.7	115.5	27.5	.432	4.210	12.9	126.4	-12.8	102.3D	1.386
MARS ARRIVAL DATE = 2444150 (3 OCT 1979)																				
4-3820	4-4003.7	.212	342.7	8.6	3.7	.845	83.4	.314	.766	165.0	459.4	.526	1.006	108.1	1.202	2.0	5.9	203.7	.380
4-4003.7	4-4150	.380	232.4	1.5	.4	1.370	75.6	.432	1.145	49.7	160.5	.650D	1.639A	103.7	.633	1.7	26.9	120.2	.187
4-4150	4-4340	.132	59.7	16.1	-1.0	.670	89.8	.296	1.212	179.5	290.5	.652A	1.571	75.8	1.083	-1.3	-.3	11.2	.287
		11.65	7.68	4.86	3.97	7.37	2.80	13.99	2/1/1	64.7	168.7	28.9	.417	4.002	9.6	127.5	8.8	99.5D	1.253
4-3830	4-3999.8	.171	330.3	5.6	3.3	.852	88.9	.284	.770	177.3	455.5	.552	.989	106.2	1.205	1.3	4.3	199.6	.340
4-3999.8	4-4150	.340	232.4	1.8	.8	1.374	77.8	.420	1.158	42.3	159.3	.672D	1.645A	103.8	.640	1.7	26.8	122.2	.182
4-4150	4-4380	.126	53.1	18.7	-.7	.683	90.5	.269	1.236	181.3	301.9	.904A	1.571D	78.7	1.088	-1.4	-.8	14.4	.242
		10.84	6.99	4.31	3.85	7.25	2.68	13.21	2/1/1	62.9	161.8	32.6	.519	5.538	5.5	125.8	4.4	104.0D	1.318
4-3840	4-3998.9	.188	320.4	2.4	3.3	.858	92.7	.278	.774	187.2	453.8	.559	.990D	105.8	1.207	.7	2.4	199.0	.338
4-3998.9	4-4150	.332	232.5	1.9	.8	1.374	76.5	.417	1.161	40.0	159.0	.676D	1.646A	103.8	.642	1.7	26.4	122.7	.181
4-4150	4-4360	.122	47.5	15.9	-.4	.692	91.0	.249	1.258	183.1	313.5	.945A	1.572D	81.2	1.092	-1.6	-1.9	16.6	.203
		10.71	6.89	4.27	3.82	7.22	2.62	12.62	2/1/1	62.5	153.5	33.5	.547	5.472	2.4	125.6	.9	105.9D	1.352

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2444150
3 OCT 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3650	4-3999.4	.185	314.7	-.5	3.4	.865	96.0	.283	.779	195.7	453.1	.559	1.000D	106.0	1.211	.1	.3	200.3	.337
4-3999.4	4-4150	.337	232.5	1.9	.5	1.374	76.0	.419	1.159	41.6	159.1	.674D	1.645A	103.8	.641	1.7	26.5	122.4	.162
4-4150	4-4370	.121	42.6	17.0	.0	.699	91.4	.235	1.274	184.7	324.7	.975A	1.573D	83.5	1.094	-1.9	-5.2	16.2	.171
		10.91	7.07	4.48	3.84	7.24	2.59	12.19	2/1/1	62.7	143.3	32.2	.930	3.603	3.0	126.4	-2.8	105.2D	1.380
4-3660	4-4000.9	.212	313.1	-2.4	3.5	.872	99.0	.295	.786	203.2	452.8	.554	1.017D	106.6	1.215	-.5	-1.8	202.7	.351
4-4000.9	4-4150	.351	232.3	1.7	.5	1.373	77.2	.423	1.155	44.4	159.6	.666D	1.643A	103.7	.638	-1.7	26.6	121.7	.163
4-4150	4-4380	.120	39.1	19.6	.6	.704	91.7	.225	1.284	185.8	335.5	.995A	1.573D	85.6	1.095	-2.4	-11.5	18.6	.147
		11.33	7.45	4.87	3.66	7.28	2.56	11.92	2/1/1	63.3	130.7	29.8	.488	3.886	6.9	127.5	-6.9	103.9D	1.408
4-3670	4-4003.0	.247	314.6	-3.3	3.6	.881	102.0	.312	.795	209.9	452.6	.547	1.043D	107.5	1.221	-1.2	-3.8	206.1	.373
4-4003.0	4-4150	.373	232.3	1.6	.4	1.371	76.0	.430	1.147	46.4	160.3	.654D	1.640A	103.7	.634	1.7	26.8	120.6	.186
4-4150	4-4390	.121	35.4	25.4	1.8	.706	91.8	.219	1.291	186.4	345.6	1.008A	1.574D	87.4	1.095	-3.4	-22.7	16.9	.137
		11.98	8.03	5.42	3.95	7.35	2.60	11.81	2/1/1	64.4	115.3	26.8	.433	4.313	11.9	129.0	-11.8	101.9D	1.433
4-3680	4-4005.6	.286	318.2	-3.3	4.0	.892	105.0	.335	.807	215.8	452.6	.537	1.077D	108.7	1.229	-2.0	-5.7	210.1	.401
4-4005.6	4-4150	.401	232.6	1.4	.4	1.368	74.4	.439	1.137	53.5	161.2	.636D	1.636A	103.6	.628	1.8	27.0	119.1	.191
4-4150	4-4400	.132	29.2	39.9	4.6	.708	91.7	.216	1.294	186.5	355.1	1.015A	1.574D	89.1	1.095	-6.2	-42.6	25.0	.156
		13.01	8.95	6.15	4.05	7.45	2.61	12.04	2/1/1	65.7	98.6	23.6	.373	4.896	17.9	130.7	-17.8	99.2D	1.455

MARS ARRIVAL DATE = 2444160 (13 OCT 1979)

4-3620	4-4005.8	.223	345.3	9.3	3.8	.843	82.4	.323	.764	163.3	460.5	.518	1.011	108.6	1.201	2.0	5.9	206.0	.391
4-4005.8	4-4160	.391	233.2	.9	.3	1.367	74.9	.433	1.133	52.2	165.1	.642D	1.623A	100.6	.618	1.8	28.1	115.6	.179
4-4160	4-4340	.143	56.4	15.9	-.9	.666	91.9	.301	1.218	184.5	290.5	.851A	1.585D	75.7	1.085	-1.4	-.6	11.2	.291
		11.65	8.07	5.04	3.76	7.18	3.02	14.06	2/1/1	73.9	168.5	27.7	.393	4.180	11.0	129.0	10.4	98.1D	1.251
4-3630	4-4000.9	.174	332.4	6.5	3.4	.851	88.4	.287	.769	176.1	456.1	.549	.990	106.4	1.204	1.3	4.3	201.1	.344
4-4000.9	4-4160	.344	233.0	1.1	.3	1.371	77.5	.416	1.148	43.6	163.7	.669D	1.628A	101.1	.627	1.8	27.9	118.0	.172
4-4160	4-4350	.136	50.1	15.5	-.7	.680	92.5	.274	1.246	186.8	302.5	.905A	1.587D	78.6	1.090	-1.5	-.9	14.2	.244
		10.88	7.26	4.34	3.62	7.02	2.92	13.25	2/1/1	71.7	161.3	32.0	.508	3.625	6.4	126.7	5.7	103.2D	1.334
4-3640	4-3999.8	.169	322.1	3.0	3.3	.857	92.4	.279	.773	186.2	454.3	.557	.989D	105.9	1.207	.7	2.4	200.2	.333
4-3999.8	4-4160	.333	233.0	1.2	.3	1.372	76.1	.415	1.152	41.6	163.4	.674D	1.629A	101.1	.629	1.8	27.9	116.6	.170
4-4160	4-4360	.135	45.0	15.5	-.4	.690	93.0	.254	1.268	188.9	314.4	.946A	1.589D	81.5	1.094	-1.6	-2.4	16.3	.204
		10.72	7.14	4.27	3.59	6.99	2.87	12.64	2/1/1	71.2	152.7	32.8	.541	3.539	2.8	126.6	2.1	104.6D	1.373
4-3650	4-4000.2	.163	316.0	-.0	3.4	.863	95.7	.263	.778	194.8	453.5	.557	.998D	106.0	1.210	.1	.3	201.3	.338
4-4000.2	4-4160	.338	233.0	1.2	.3	1.371	77.9	.416	1.150	42.4	163.5	.672D	1.629A	101.1	.628	1.8	27.9	118.4	.171
4-4160	4-4370	.134	41.0	16.4	.0	.697	93.3	.239	1.284	190.7	325.8	.976A	1.591D	83.6	1.097	-1.9	-5.6	17.2	.171
		10.91	7.31	4.46	3.60	7.00	2.85	12.20	2/1/1	71.4	142.3	31.7	.528	3.662	1.7	127.2	-1.6	104.6D	1.404
4-3660	4-4001.6	.210	314.1	-2.0	3.5	.871	98.8	.294	.784	202.4	453.1	.553	1.015D	106.6	1.214	-.5	-1.8	203.7	.351
4-4001.6	4-4160	.351	232.9	1.1	.3	1.370	77.1	.420	1.146	45.0	163.9	.665D	1.627A	101.0	.626	1.8	28.0	117.7	.173
4-4160	4-4360	.134	37.9	16.4	.6	.701	93.5	.230	1.295	191.9	336.7	.997A	1.593D	85.7	1.098	-2.3	-11.4	16.9	.148
		11.32	7.68	4.84	3.64	7.04	2.84	11.92	2/1/1	72.0	129.4	29.4	.487	3.942	5.7	126.3	-5.7	103.6D	1.434
4-3670	4-4003.7	.244	315.4	-3.0	3.7	.879	101.8	.311	.793	209.1	453.0	.546	1.040D	107.5	1.220	-1.2	-3.8	207.0	.372
4-4003.7	4-4160	.372	233.0	1.0	.3	1.369	75.9	.427	1.139	48.9	164.6	.653D	1.625A	100.9	.622	1.8	28.1	116.5	.176
4-4160	4-4390	.134	35.2	22.4	1.4	.704	93.6	.225	1.301	192.5	346.9	1.009A	1.593D	87.6	1.098	-3.0	-21.0	15.9	.135
		11.93	8.22	5.38	3.71	7.11	2.84	11.79	2/1/1	73.0	114.1	26.5	.433	4.368	10.6	129.8	-10.5	101.6D	1.460
4-3680	4-4006.8	.284	318.8	-3.1	4.0	.890	104.8	.333	.805	215.1	452.9	.536	1.073D	108.7	1.228	-1.9	-5.7	211.0	.400
4-4006.8	4-4160	.400	233.4	.9	.3	1.366	74.3	.436	1.130	53.9	165.4	.637D	1.622A	100.8	.616	1.8	28.2	115.0	.181
4-4160	4-4400	.136	31.7	31.2	3.3	.705	93.5	.222	1.304	192.3	356.3	1.015A	1.593D	89.3	1.098	-4.8	-36.2	17.3	.143
		12.61	9.00	6.08	3.82	7.21	2.91	11.87	2/1/1	74.3	98.0	23.3	.375	4.953	16.6	131.5	-16.4	99.1D	1.483

MARS ARRIVAL DATE = 2444170 (23 OCT 1979)

4-3620	4-4007.7	.239	348.2	10.0	3.9	.841	81.1	.335	.762	161.3	462.0	.507	1.017	109.4	1.200	2.1	5.8	206.7	.406
4-4007.7	4-4170	.406	234.6	.3	.1	1.365	74.0	.437	1.124	55.1	169.3	.633D	1.615A	98.1	.605	1.9	29.1	110.9	.176
4-4170	4-4340	.158	53.5	15.8	-.9	.664	94.4	.306	1.228	190.0	291.1	.852A	1.604D	75.6	1.088	-1.4	-.9	11.0	.294
		12.52	8.61	5.29	3.71	7.11	3.32	14.12	2/1/1	82.8	168.1	26.4	.364	4.372	12.5	131.0	12.1	96.7D	1.227
4-3630	4-4002.1	.178	334.6	7.2	3.4	.849	87.9	.290	.768	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348
4-4002.1	4-4170	.348	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.186
4-4170	4-4380	.153	47.8	15.3	-.6	.679	94.8	.279	1.258	192.7	303.6	.907A	1.609D	78.6	1.094	-1.5	-1.4	13.6	.246
		11.11	7.62	4.39	3.49	6.89	3.23	13.26	2/1/1	80.3	160.6	31.5	.495	3.669	7.5	127.9	7.1	102.5D	1.332
4-3640	4-4000.7	.169	323.9	5.7	3.3	.856	92.0	.281	.772	185.2	454.8	.555	.988D	106.0	1.206	.7	2.4	201.5	.336
4-4000.7	4-4170	.336	233.9	.4	.1	1.370	78.0	.413	1.147	42.3	167.4	.672D	1.621A	98.6	.619	1.9	29.2	114.5	.164
4-4170	4-4360	.151	43.3	15.3	-.3	.689	95.2	.259	1.281	195.1	315.6	.949A	1.613D	81.3	1.098	-1.6	-3.0	15.3	.205
		10.91	7.46	4.27	3.45	6.85	3.19	12.65	2/1/1	79.7	151.6	32.5	.534	3.579	3.8	127.6	3.5	104.4D	1.377
4-3650	4-4001.1	.182	317.4	.5	3.4	.862	95.4	.284	.776	193.9	453.9	.556	.997D	106.1	1.209	.1	.3	202.4	.339
4-4001.1	4-4170	.339	233.9	.4	.1	1.370	77.8	.414	1.146	42.9	167.5	.671D	1.620A	98.6	.618	1.9	29.2	114.4	.164
4-4170	4-4370	.151	39.8	16.0	.0	.696	95.4	.246	1.298	197.1	327.4	.979A	1.617D	83.7	1.101	-1.9	-6.2	15.7	.172
		11.07	7.61	4.44	3.46	6.86	3.17	12.21	2/1/1	79.8	140.8	31.4	.524	3.691	.4	128.1	-.2	104.4D	1.411
4-3660	4-4002.4	.208	315.2	-1.6	3.5	.869	98.5	.294	.782	201.6	453.5	.552	1.013D	106.7	1.213	-.5	-1.8	204.7	.351
4-4002.4	4-4170	.351	233.9	.4	.1	1.369	77.0	.418	1.142	45.3	167.9	.664D	1.619A	98.5	.616	1.9	29.2	113.7	.186
4-4170	4-4380	.150	37.3	17.6	.5	.701	95.5	.237	1.309	198.4	336.4	.998A	1.619D	85.9	1.102	-2.2	-11.6	14.7	.148
		11.46	7.96	4.60	3.50	6.90	3.18	11.93	2/1/1	80.4	127.5	29.2	.487	3.964	4.4	129.2	-4.3	103.3D	1.442
4-3670	4-4004.5	.241	316.2	-2.7	3.7	.878	101.5	.311	.791	208.3	453.4	.545	1.036D	107.5	1.219	-1.2	-3.8	208.0	.372
4-4004.5	4-4170	.372	234.0	.4	.1	1.368	75.9	.425	1.135	49.1	168.4	.653D	1.618A	98.5	.612	1.9	29.2	112.7	.170
4-4170	4-4390	.149	35.5	20.5	1.2	.704	95.5	.232	1.315	198.9	348.5	1.010A	1.620D	87.8	1.102	-2.8	-20.2	12.7	.135
		12.05	8.48	5.53	3.57	6.98	3.15	11.79	2/1/1	81.3	112.1	26.4	.434	4.385	9.3	130.7	-9.1	101.3D	1.470
4-3680	4-4007.0	.281	319.5	-2.9	4.0	.888	104.5	.332	.802	214.4	453.3	.536	1.069D	108.7	1.227	-1.9	-5.6	212.0	.399
4-4007.0	4-4170	.399	234.5	.3	.1	1.365	74.4	.435	1.126	53.9	169.1	.637D	1.616A	98.1	.608	1.9	29.1	111.5	.175
4-4170	4-4400	.150	33.2	26.4	2.5	.704	95.3	.229	1.317	198.6	357.7	1.015A	1.618D	89.6	1.101	-4.0	-32.3	11.6	.137
		12.86	9.18	6.02	3.68	7.08	3.16	11.81	2/1/1	82.5	96.2	23.2	.377	4.966	15.1	132.5	-14.8	99.0D	1.494

MARS ARRIVAL DATE = 2444180 (2 NOV 1979)

4-3620	4-4010.8	.263	352.0	10.9	4.2	.838	79.0	.354	.760	158.5	464.1	.491	1.029	110.6	1.198	2.2	5.7	212.5	.432
4-4010.8	4-4180	.432	236.6	-.2	-.1	1.362	72.6	.447	1.115	59.3	173.3	.617D	1.613A	95.3	.592	2.0	29.6	106.6	.179
4-4180	4-4340	.176	51.3	15.7	-.9	.665	97.0	.313	1.243	195.9	292.3	.854A	1.632D	73.5	1.092	-1.5	-1.4	10.5	.297
		13.21	9.43	5.71	3.78	7.18	3.72	14.18	2/1/1	91.5	167.4	24.8	.322	4.655	14.3	133.9	14.0	94.6D	1.176
4-3630	4-4003.4	.182	337.0	8.0	3.5	.848	87.3	.294	.766	173.6	457.4	.541	.991	106.8	1.202	1.3	4.2	204.3	.353
4-4003.4	4-4180	.353	235.0	-.3	-.1	1.369	76.9	.419	1.140	45.8	171.5	.663D	1.617A	96.0	.608	2.0	30.1	110.2	.184
4-4180	4-4350	.172	46.2	15.2	-.6	.680	97.3	.286	1.275	199.0	305.2	.910A	1.639D	76.7	1.099	-1.6	-2.0	12.7	.248
		11.52	8.07	4.44	3.44	6.85	3.63	13.31	2/1/1	88.3	159.5	31.1	.481	3.736	6.8	129.4	8.5	101.8D	1.317
4-3640	4-4001.6	.170	325.9	4.4	3.3	.854	91.6	.282	.770	184.1	455.3	.553	.988D	106.1	1.205	.7	2.4	202.6	.338
4-4001.6	4-4180	.338	235.0	-.4	-.1	1.370	77.8	.414	1.144	42.8	171.1	.671D	1.618A	96.2	.611	2.0	30.2	110.9	.181
4-4180	4-4360	.170	42.2	15.2	-.3	.691	97.5	.267	1.299	201.6	317.7	.952A	1.646D	81.5	1.103	-1.7	-3.7	14.0	.206
		11.26	7.87	4.26	3.39	6.79	3.59	12.66	2/1/1	87.7	150.1	32.3	.527	3.597	5.0	128.8	4.9	103.9D	1.367
4-3650	4-4001.9	.181	319.0	1.1	3.4	.861	95.0	.284	.775	193.0	454.3	.554	.995D	106.2	1.208	.1	.3	203.6	.340
4-4001.9	4-4180	.340	235.0	-.4	-.1	1.370	77.7	.414	1.144	43.2	171.1	.670D	1.618A	96.2	.611	2.0	30.2	110.6	.181
4-4180	4-4370	.169	39.3	15.8	.0	.698	97.6	.254	1.316	205.9	329.5	.982A	1.651D	84.0	1.105	-1.9	-7.1	13.8	.175
		11.39	8.00	4.43	3.39	6.80	3.57	12.22	2/1/1	87.8	138.7	31.4	.521	3.698	1.2	129.3	1.2	104.2D	1.405
4-3660	4-4003.2	.205	316.3	-1.2	3.5	.867	98.2	.294	.781	200.7	453.9	.551	1.010D	106.7	1.212	-.5	-1.8	205.6	.352
4-4003.2	4-4180	.352	235.0	-.3	-.1	1.369	77.0	.418	1.140	45.5	171.4	.664D	1.617A	96.1	.606	2.0	30.1	110.2	.183
4-4180	4-4360	.168	37.2	17.1	.5	.703	97.7	.246	1.327	205.2	340.4	1.001A	1.654D	86.2	1.106	-2.1	-12.4	12.0	.149
		11.76	8.32	4.77	3.44	6.84	3.55	11.94	2/1/1	88.3	125.0	29.3	.486	3.959	3.0	130.4	-2.8	103.2D	1.437
4-3670	4-4005.2	.238	317.1	-2.4	3.7	.876	101.2	.310	.789	207.5	453.8	.544	1.033D	107.5	1.218	-1.2	-3.7	209.0	.372
4-4005.2	4-4180	.372	235.2	-.3	-.1	1.367	75.9	.425	1.134	49.1	171.9	.653D	1.616A	95.9	.605	2.0	30.0	109.3	.187
4-4180	4-4390	.167	35.8	19.4	1.1	.705	97.6	.241	1.333	209.6	350.4	1.011A	1.654D	88.1	1.106	-2.6	-20.0	9.1	.136
		12.32	8.80	5.28	3.51	6.92	3.52	11.80	2/1/1	89.0	109.5	26.4	.435	4.371	7.8	131.8	-7.5	101.4D	1.466

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2444160
2 NOV 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3680	4-4007.8	.277	320.2	-2.7	3.9	.886	104.2	.331	.800	213.6	453.7	.535	1.064D	108.7	1.225	-1.9	-5.5	213.0	.399
4-4007.8	4-4160	.399	235.7	-.3	-.1	1.365	74.4	.434	1.126	53.8	172.5	.637D	1.615A	95.7	.599	2.0	29.9	108.1	.172
4-4160	4-4400	.166	34.5	23.5	2.1	.705	97.4	.239	1.333	205.1	359.5	1.015A	1.652D	89.9	1.105	-3.5	-29.9	6.4	.136
		13.08	9.45	5.95	3.62	7.03	3.50	11.80	2/1/1	90.1	93.7	23.3	.379	4.942	13.4	133.7	-13.1	99.10	1.492
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																			
4-3830	4-4004.8	.187	339.6	8.8	3.5	.846	86.7	.298	.765	172.1	458.2	.537	.993	107.1	1.201	1.3	4.2	206.2	.360
4-4004.8	4-4190	.360	236.5	-1.1	-.3	1.369	76.6	.421	1.139	46.8	174.9	.660D	1.619A	93.7	.601	2.1	30.8	107.1	.164
4-4190	4-4350	.195	45.1	15.3	-.6	.685	100.0	.295	1.299	205.9	307.4	.915A	1.682D	78.8	1.105	-1.6	-2.8	11.5	.250
		12.11	8.65	4.51	3.46	6.56	4.14	13.34	2/1/1	95.7	158.0	30.7	.465	3.774	10.1	131.1	10.0	101.2D	1.290
4-3840	4-4002.9	.171	328.1	5.2	3.4	.853	91.2	.284	.769	182.9	455.9	.550	.987D	106.2	1.204	.7	2.3	204.3	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	43.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4360	.192	41.7	15.3	-.3	.696	100.0	.277	1.324	208.9	320.1	.957A	1.691D	81.7	1.110	-1.7	-4.7	12.1	.207
		11.77	8.58	4.29	3.39	6.79	4.09	12.68	2/1/1	95.0	148.1	32.3	.518	3.600	8.4	130.2	8.4	103.8D	1.347
4-3850	4-4002.9	.160	320.6	1.8	3.4	.859	94.7	.285	.773	191.9	454.8	.553	.994D	106.2	1.207	.1	.3	204.9	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.144	43.3	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4370	.191	39.3	15.8	.0	.705	100.1	.266	1.341	211.0	331.9	.985A	1.698D	84.2	1.112	-1.9	-8.1	11.3	.174
		11.86	8.47	4.41	3.39	6.79	4.06	12.23	2/1/1	95.0	136.1	31.5	.517	3.683	8.8	130.6	8.8	104.0D	1.367
4-3860	4-4004.1	.203	317.6	-.7	3.5	.866	97.8	.294	.779	199.7	454.3	.550	1.008D	106.7	1.211	-.5	-1.7	206.9	.352
4-4004.1	4-4190	.352	236.4	-1.1	-.3	1.369	77.0	.419	1.141	45.4	174.7	.664D	1.619A	93.8	.603	2.1	30.9	107.4	.163
4-4190	4-4360	.189	37.7	16.9	.4	.707	100.0	.258	1.352	212.2	342.7	1.003A	1.700D	86.5	1.113	-2.1	-13.3	6.7	.151
		12.19	8.76	4.74	3.43	6.84	4.02	11.95	2/1/1	95.4	121.9	29.5	.484	3.934	1.9	131.6	-1.2	103.1D	1.421
4-3870	4-4006.1	.255	318.1	-2.0	3.7	.874	100.9	.310	.787	206.6	454.2	.543	1.030D	107.5	1.216	-1.2	-3.7	210.1	.372
4-4006.1	4-4190	.372	236.6	-1.0	-.3	1.368	75.9	.425	1.136	48.9	175.1	.653D	1.618A	93.6	.599	2.1	30.7	106.8	.167
4-4190	4-4390	.187	36.6	18.7	1.0	.709	99.8	.253	1.356	212.4	352.5	1.012A	1.699D	86.5	1.112	-2.5	-20.2	5.0	.136
		12.71	9.20	5.23	3.51	6.91	3.97	11.82	2/1/1	96.1	106.1	26.7	.436	4.334	6.5	133.1	-5.8	101.4D	1.452
MARS ARRIVAL DATE = 2444200 (22 NOV 1979)																			
4-3830	4-4006.5	.194	342.5	9.6	3.6	.844	85.9	.304	.763	170.4	459.1	.531	.995	107.5	1.200	1.3	4.2	208.3	.367
4-4006.5	4-4200	.367	238.1	-1.8	-.5	1.369	76.2	.424	1.140	47.9	176.0	.656D	1.624A	91.5	.596	2.2	31.2	104.8	.168
4-4200	4-4350	.221	44.6	15.4	-.6	.694	102.9	.308	1.332	213.4	310.2	.921A	1.742D	78.9	1.114	-1.7	-3.7	9.7	.252
		12.69	9.36	4.60	3.53	6.93	4.76	13.36	2/1/1	102.2	156.1	30.4	.446	3.810	11.5	133.0	11.4	100.5D	1.295
4-3840	4-4004.0	.172	330.4	6.0	3.4	.851	90.7	.286	.767	181.7	456.5	.547	.987D	106.4	1.203	.7	2.3	205.8	.344
4-4004.0	4-4200	.344	237.9	-2.1	-.5	1.371	77.6	.417	1.146	43.6	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4360	.218	41.7	15.5	-.3	.705	102.8	.292	1.356	216.4	323.1	.962A	1.754D	81.9	1.118	-1.7	-5.9	9.7	.209
		12.44	9.00	4.31	3.44	6.84	4.69	12.71	2/1/1	101.5	145.5	32.3	.509	3.591	7.9	131.8	7.9	103.3D	1.318
4-3850	4-4003.9	.179	322.4	2.5	3.4	.857	94.3	.286	.772	190.9	455.3	.551	.992D	106.3	1.206	.1	.3	206.2	.343
4-4003.9	4-4200	.343	237.9	-2.1	-.5	1.371	77.6	.416	1.147	43.4	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4370	.216	39.7	15.9	.0	.711	102.6	.261	1.375	218.5	334.8	.989A	1.761D	84.6	1.120	-1.9	-9.4	8.1	.176
		12.47	9.04	4.40	3.43	6.83	4.64	12.26	2/1/1	101.5	132.8	31.8	.512	3.656	4.5	132.1	4.4	103.8D	1.361
4-3860	4-4005.0	.201	319.0	-.2	3.5	.864	97.5	.294	.777	198.8	454.8	.548	1.006D	106.7	1.210	-.5	-1.7	208.2	.353
4-4005.0	4-4200	.353	237.9	-2.0	-.5	1.370	77.0	.420	1.144	45.3	177.7	.664D	1.624A	91.6	.599	2.3	31.5	105.3	.165
4-4200	4-4360	.213	38.5	16.9	.4	.714	102.4	.274	1.364	219.5	345.4	1.005A	1.763D	86.9	1.120	-2.1	-14.4	4.9	.154
		12.76	9.29	4.71	3.47	6.87	4.58	11.99	2/1/1	101.8	116.1	29.8	.483	3.893	2.0	133.1	.5	103.1D	1.397
4-3870	4-4006.9	.232	319.1	-1.6	3.6	.872	100.5	.309	.784	205.7	454.6	.542	1.027D	107.5	1.215	-1.2	-3.7	211.2	.371
4-4006.9	4-4200	.371	238.2	-1.8	-.5	1.369	76.0	.428	1.139	48.7	178.1	.654D	1.624A	91.4	.595	2.2	31.2	104.7	.168
4-4200	4-4390	.210	37.6	18.4	.9	.715	102.2	.269	1.366	219.4	354.9	1.013A	1.759D	88.9	1.119	-2.4	-20.6	.4	.142
		13.23	9.69	5.18	3.55	6.95	4.50	11.87	2/1/1	102.3	102.2	27.0	.436	4.278	4.9	134.5	-4.0	101.5D	1.429
MARS ARRIVAL DATE = 2444210 (2 DEC 1979)																			
4-3840	4-4008.5	.174	332.9	6.9	3.4	.849	90.1	.289	.768	180.3	457.1	.544	.987D	106.6	1.202	.7	2.3	207.8	.347
4-4008.5	4-4210	.347	239.6	-3.0	-.6	1.372	77.4	.419	1.150	43.9	180.4	.667D	1.652	89.7	.597	2.4	32.1	104.3	.167
4-4210	4-4360	.248	42.1	15.7	-.3	.717	105.6	.311	1.405	224.4	326.4	.968A	1.842D	82.2	1.129	-1.6	-7.3	9.8	.212
		13.27	9.78	4.33	3.51	6.92	5.42	12.75	2/1/1	107.3	142.3	32.5	.498	3.575	9.5	133.6	9.5	103.0D	1.283
4-3850	4-4008.0	.178	324.4	3.2	3.4	.856	93.9	.287	.770	189.7	455.8	.548	.9910	106.4	1.205	.1	.3	207.6	.344
4-4008.0	4-4210	.344	239.8	-3.0	-.6	1.372	77.6	.418	1.150	43.5	180.4	.669D	1.652	89.7	.597	2.4	32.1	104.4	.166
4-4210	4-4370	.244	40.5	16.2	.0	.723	108.3	.301	1.420	226.2	337.9	.993A	1.848D	84.9	1.130	-1.9	-10.9	4.4	.180
		13.23	9.72	4.39	3.50	6.90	5.33	12.30	2/1/1	107.2	128.9	32.1	.507	3.618	6.2	133.7	6.1	103.7D	1.328

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2444110
24 AUG 1979

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / PSI 2 / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2444110 (24 AUG 1979)																				
4-3820	4-3997.4	.182	332.9	5.8	3.3	.851	86.4	.289	.772	171.1	455.6	.549	.996	106.5	1.206	1.8	6.2	195.7	.347
4-3997.4	4-4110	.347	255.0	4.2	1.1	1.405	78.7	.469	1.288	35.9	136.3	.684D	1.892A	116.1	.735	1.4	21.3	133.5	.269
4-4110	4-4380	.092	49.4	33.9	1.8	.725	85.8	.214	1.265	164.3	334.2	.994A	1.536	85.5	1.090	-3.6	-19.1	24.1	.152
		13.05	6.56	4.44	6.49	9.87	2.12	11.97	2/1/1	31.3	129.2	39.1	.498	2.988	6.2	125.1	2.9	107.1D	.990
4-3840	4-3994.9	.170	313.1	-.4	3.2	.864	94.2	.274	.780	191.4	451.8	.567	.994D	105.4	1.211	.7	2.5	193.8	.324
4-3994.9	4-4110	.324	236.2	4.6	1.1	1.406	80.3	.464	1.296	31.1	135.6	.695D	1.897A	115.9	.738	1.4	21.0	134.1	.266
4-4110	4-4400	.115	61.0	-18.7	-5.7	.729	86.1	.204	1.274	164.5	353.7	1.014A	1.535	88.9	1.069	4.0	34.1	346.8	.130
		13.18	6.77	4.28	6.41	9.79	2.49	11.73	2/1/2	30.7	102.1	42.3	.571	2.770	4.8	125.1	-2.9	111.1D	1.011
4-3850	4-3995.9	.191	309.2	-2.7	3.4	.871	97.3	.282	.786	199.4	451.3	.564	1.007D	105.8	1.215	.1	.3	195.8	.334
4-3995.9	4-4110	.333	235.6	4.5	1.1	1.406	79.7	.466	1.293	33.0	135.8	.691D	1.895A	116.0	.737	1.4	21.1	133.9	.268
4-4110	4-4410	.098	58.5	-8.0	-3.6	.729	86.0	.204	1.278	164.1	362.7	1.016	1.535	90.5	1.089	2.0	16.8	347.7	.110
		13.22	6.77	4.57	6.45	9.82	2.20	11.56	2/1/2	30.9	87.6	40.2	.540	2.912	6.5	125.9	-6.0	110.1D	1.034
MARS ARRIVAL DATE = 2444120 (3 SEP 1979)																				
4-3820	4-3999.1	.189	335.8	6.6	3.4	.849	85.6	.295	.770	189.4	456.6	.543	.998	106.9	1.205	1.9	6.1	197.9	.355
4-3999.1	4-4120	.355	233.1	3.5	.9	1.391	77.7	.451	1.227	40.5	143.5	.674D	1.781A	112.8	.700	1.5	22.5	131.3	.252
4-4120	4-4380	.094	46.6	27.7	1.2	.718	87.1	.216	1.267	169.3	334.0	.994A	1.541	85.5	1.090	-3.0	-15.0	22.2	.149
		12.23	6.69	4.54	5.54	8.92	2.15	11.93	2/1/1	38.8	131.0	35.1	.476	3.317	6.6	125.2	4.3	104.4D	1.104
4-3830	4-3996.5	.165	324.1	3.6	3.2	.856	90.3	.277	.774	180.7	453.7	.560	.989D	105.7	1.207	1.3	4.4	195.4	.330
4-3996.5	4-4120	.330	233.9	3.9	.9	1.393	79.3	.445	1.237	35.5	142.5	.686D	1.787A	112.7	.704	1.4	22.2	132.2	.249
4-4120	4-4390	.124	30.7	55.6	6.3	.721	87.3	.209	1.274	169.6	343.9	1.007A	1.540	87.2	1.090	-8.0	-43.5	37.5	.187
		12.53	6.87	4.22	5.47	8.85	2.64	12.41	2/1/1	37.9	109.3	38.4	.552	3.038	4.5	124.6	.9	108.0D	1.124
4-3850	4-3997.0	.189	310.9	-2.0	3.4	.869	96.9	.282	.784	198.3	451.8	.563	1.005D	105.9	1.214	.1	.3	197.0	.334
4-3997.0	4-4120	.334	233.7	3.8	.9	1.393	79.0	.446	1.235	36.4	142.7	.684D	1.786A	112.7	.704	1.5	22.2	132.0	.250
4-4120	4-4410	.111	57.0	-14.8	-5.0	.723	87.2	.205	1.278	169.1	362.6	1.016	1.541	90.4	1.090	3.4	27.4	342.3	.122
		12.44	6.98	4.54	5.48	8.86	2.42	11.66	2/1/2	38.0	87.9	36.8	.538	3.167	5.9	125.6	-5.5	106.2D	1.165
4-3860	4-3998.7	.219	310.2	-3.5	3.6	.877	99.9	.295	.791	205.6	451.6	.557	1.024D	106.6	1.219	-.6	-1.9	199.8	.351
4-3998.7	4-4120	.351	233.2	3.6	.9	1.392	78.0	.450	1.229	39.6	143.3	.676D	1.782A	112.8	.701	1.5	22.4	131.5	.252
4-4120	4-4420	.100	56.4	-6.9	-5.5	.723	87.0	.207	1.278	168.2	371.2	1.013	1.542	91.9	1.089	2.0	13.4	342.2	.116
		12.73	7.21	4.97	5.52	8.91	2.24	11.61	2/1/2	38.6	72.4	33.8	.489	3.436	9.4	126.6	-9.3	106.4D	1.191
MARS ARRIVAL DATE = 2444130 (13 SEP 1979)																				
4-3820	4-4000.6	.196	338.2	7.3	3.5	.848	84.9	.301	.769	187.9	457.5	.537	1.000	107.3	1.204	1.9	6.0	199.9	.363
4-4000.6	4-4130	.363	232.2	2.8	.8	1.381	76.9	.440	1.188	44.1	149.8	.665D	1.711A	109.7	.672	1.8	23.9	128.3	.223
4-4130	4-4380	.100	45.5	24.0	.9	.712	88.5	.218	1.271	174.5	334.1	.994A	1.548	85.4	1.091	-2.7	-13.0	21.1	.148
		11.70	6.88	4.64	4.82	8.21	2.24	11.92	2/1/1	46.9	131.5	32.4	.457	3.589	7.4	125.6	5.7	102.4D	1.183
4-3830	4-3997.7	.167	326.3	4.4	3.3	.854	89.8	.279	.773	179.5	454.3	.557	.989	105.9	1.206	1.3	4.4	196.9	.334
4-3997.7	4-4130	.334	232.7	3.2	.8	1.384	78.6	.432	1.199	38.4	148.8	.660D	1.717A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4390	.108	35.8	38.6	3.5	.715	88.6	.212	1.278	174.9	344.1	1.007A	1.548	87.2	1.091	-5.0	-31.4	26.8	.151
		11.55	6.81	4.25	4.74	8.13	2.36	11.96	2/1/1	45.7	114.1	35.8	.540	3.253	4.4	124.7	2.0	106.3D	1.218
4-3850	4-3997.9	.187	312.2	-1.5	3.4	.867	96.6	.282	.782	197.4	452.3	.561	1.003D	105.9	1.213	.1	.3	198.2	.335
4-3997.9	4-4130	.335	232.7	3.2	.8	1.384	78.5	.433	1.198	38.6	148.9	.660D	1.716A	109.6	.676	1.5	23.5	129.5	.220
4-4130	4-4410	.142	58.4	-24.8	-8.0	.717	88.6	.208	1.282	174.5	362.9	1.016	1.548	90.5	1.091	6.4	43.6	330.3	.157
		12.25	7.51	4.51	4.74	8.13	3.00	12.03	2/1/2	45.8	88.1	34.6	.535	3.364	5.1	125.6	-4.8	106.8D	1.265
4-3860	4-3999.8	.216	311.2	-3.2	3.6	.875	99.6	.295	.789	204.7	452.0	.556	1.022D	106.6	1.217	-.6	-1.8	200.8	.351
4-3999.8	4-4130	.351	232.3	3.0	.8	1.383	77.6	.437	1.193	41.8	149.4	.671D	1.714A	109.6	.675	1.6	23.7	128.8	.222
4-4130	4-4420	.112	54.5	-11.3	-4.5	.717	88.3	.209	1.281	175.4	371.3	1.013	1.549	92.0	1.090	3.0	21.0	338.2	.124
		12.15	7.36	4.93	4.79	8.16	2.43	11.68	2/1/2	46.4	73.3	31.9	.489	3.641	8.8	126.7	-8.8	105.3D	1.291
4-3870	4-4001.7	.252	313.1	-3.8	3.8	.885	102.5	.313	.799	211.3	451.9	.548	1.049D	107.6	1.224	-1.3	-3.9	204.2	.374
4-4001.7	4-4130	.374	232.1	2.7	.8	1.381	76.3	.443	1.184	46.2	150.2	.659D	1.709A	109.7	.670	1.8	24.0	127.9	.225
4-4130	4-4430	.103	55.5	-4.9	-3.4	.715	87.8	.213	1.279	171.9	379.3	1.007	1.550	93.4	1.089	2.0	10.2	339.1	.120
		12.66	7.81	5.52	4.65	8.24	2.29	11.71	2/1/2	47.4	59.3	28.6	.431	4.051	13.6	126.0	-13.6	102.9D	1.314
MARS ARRIVAL DATE = 2444140 (23 SEP 1979)																				
4-3820	4-4002.1	.204	340.4	8.0	3.6	.846	84.2	.307	.767	186.5	456.4	.532	1.003	107.6	1.203	1.9	6.0	201.7	.371
4-4002.1	4-4140	.371	232.0	2.2	.8	1.375	76.2	.434	1.162	47.1	155.5	.657D	1.667A	106.6	.650	1.7	25.4	124.5	.202
4-4140	4-4380	.109	41.0	21.4	.8	.707	90.0	.221	1.277	180.0	334.6	.994A	1.559D	85.5	1.093	-2.5	-11.9	19.9	.147
		11.44	7.13	4.75	4.31	7.70	2.39	11.92	2/1/1	55.6	131.4	30.4	.436	3.813	8.4	126.3	7.2	100.9D	1.231
4-3830	4-3998.8	.169	328.3	5.1	3.3	.853	89.4	.281	.772	178.4	454.9	.554	.989	106.0	1.206	1.3	4.4	198.3	.337
4-3998.8	4-4140	.337	232.3	2.5	.8	1.378	78.2	.424	1.174	40.6	154.3	.676D	1.672A	106.6	.657	1.8	25.0	126.2	.198
4-4140	4-4390	.112	35.9	30.2	2.3	.710	90.1	.215	1.283	180.5	344.7	1.008A	1.559D	87.3	1.093	-3.9	-25.7	22.2	.141
		10.92	6.71	4.27	4.21	7.61	2.43	11.85	2/1/1	54.1	115.5	34.0	.530	3.417	4.8	125.1	3.2	105.0D	1.281
4-3840	4-3998.0	.169	318.8	1.8	3.3	.859	93.1	.277	.776	188.1	453.4	.561	.990D	105.7	1.208	.7	2.4	197.9	.330
4-3998.0	4-4140	.330	232.5	2.6	.8	1.378	78.6	.423	1.178	39.2	154.1	.679D	1.674A	106.6	.658	1.6	24.9	126.5	.197
4-4140	4-4400	.152	21.9	56.1	8.3	.712	90.1	.212	1.287	180.4	354.1	1.014A	1.559D	89.0	1.093	-9.8	-53.4	40.6	.209
		11.65	7.48	4.27	4.19	7.59	3.19	12.71	2/1/1	53.8	97.2	34.5	.553	3.369	2.7	125.2	-.3	106.3D	1.309
4-3860	4-4000.2	.214	312.2	-2.8	3.6	.874	99.3	.295	.787	204.0	452.4	.555	1.019D	106.6	1.216	-.5	-1.8	201.8	.351
4-4000.2	4-4140	.351	232.1	2.4	.8	1.377	77.4	.428	1.169	43.4	154.8	.668D	1.670A	106.6	.654	1.8	25.2	125.5	.200
4-4140	4-4420	.131	54.5	-17.2	-6.2	.711	89.7	.212	1.286	178.8	371.7	1.013	1.559	92.0	1.091	4.8	31.5	331.4	.143
		11.94	7.68	4.90	4.25	7.65	2.78	11.87	2/1/2	54.7	74.7	30.6	.488	3.788	8.0	127.0	-8.0	104.5D	1.362
4-3870	4-4002.4	.250	313.9	-3.6	3.8	.883	102.5	.313	.797	210.6	452.3	.547	1.046D	107.6	1.223	-1.2	-3.9	205.1	.373
4-4002.4	4-4140	.373	232.0	2.2	.8	1.375	76.1	.435	1.161	47.6	155.5	.656D	1.667A	106.6	.650	1.7	25.4	124.5	.203
4-4140	4-4430	.114	53.6	-7.7	-4.1	.710	89.2	.216	1.283	177.2	379.6	1.006	1.559	93.4	1.090	2.8	15.5	336.3	.134
		12.26	7.94	5.47	4.32	7.71	2.47	11.78	2/1/2	55.7	60.1	27.5	.432	4.210	12.9	128.4	-12.8	102.3D	1.386
4-3880	4-4005.0	.291	317.6	-5.5	4.1	.894	105.3	.336	.809	216.5	452.2	.538	1.081D	108.8	1.231	-2.0	-5.8	209.2	.402
4-4005.0	4-4140	.402	232.1	1.9	.8	1.372	74.4	.444	1.150	52.7	156.6	.639D	1.661A	106.6	.644	1.7	25.7	123.0	.206
4-4140	4-4440	.106	56.0	-2.4	-3.2	.708	88.6	.221	1.278	175.1	387.0	.996	1.560	94.8	1.090	2.0	7.8	338.6	.144
		12.96	8.55	6.21	4.42	7.81	2.34	11.88	2/1/2	57.1	48.5	24.1	.372	4.784	18.9	130.0	-18.8	99.6D	1.406
MARS ARRIVAL DATE = 2444150 (3 OCT 1979)																				
4-3820	4-4003.7	.212	342.7	8.8	3.7	.845	83.4	.314	.766	185.0	459.4	.526	1.006	108.1	1.202	2.0	5.9	203.7	.380
4-4003.7	4-4150	.380	232.4	1.5	.4	1.370	75.6	.432	1.145	49.7	160.5	.650D	1.639A	103.7	.633	1.7	26.9	120.2	.187
4-4150	4-4380	.120	39.1	19.6	.6	.704	91.7	.225	1.264	185.8	335.5	.995A	1.573D	85.6	1.095	-2.4	-11.5	18.6	.147
		11.43	7.46	4.88	3.97	7.37	2.58	11.92	2/1/1	64.7	130.7	28.9	.417	4.002	9.6	127.5	8.8	99.5D	1.253
4-3830	4-3999.8	.171	330.3	5.8	3.3	.852	88.9	.284	.770	177.3	455.5	.552	.989	106.2	1.205	1.3	4.3	199.6	.340
4-3999.8	4-4150	.340	232.4	1.8	.5	1.374	77.8	.420	1.158	42.3	159.3	.672D	1.645A	103.8	.640	1.7	26.5	122.2	.182
4-4150	4-4390	.121	35.4	25.4	1.8	.706	91.8	.219	1.291	186.4	345.6	1.008A	1.574D	87.4	1.095	-3.4	-22.7	18.9	.137
		10.76	6.91	4.31	3.85	7.25	2.60	11.61	2/1/1	62.9	115.3	32.8	.519	3.538	5.5	125.8	4.4	104.0D	1.318
4-3840	4-3998.9	.166	320.4	2.4	3.3	.858	92.7	.278	.774	187.2	453.8	.559	.990D	105.8	1.207	.7	2.4	199.0	.332
4-3998.9	4-4150	.332	232.5	1.9	.5	1.374	78.3	.417	1.161	40.6	159.0	.676D	1.646A	103.8	.642	1.7	26.4	122.7	.181
4-4150	4-4400	.132	29.2	39.9	4.6	.708	91.7	.216	1.294	186.3	353.1	1.015A	1.574D	89.1	1.095	-6.2	-42.6	25.0	.158
		10.90	7.06	4.27	3.82	7.22	2.81	12.04	2/1/1	62.5	98.6	33.5	.547	3.472	2.4	125.8	.9	105.8D	1.352
4-3860	4-4000.9	.212	313.1	-2.4	3.5	.872	99.0	.295	.786	203.2	452.8	.554	1.017D	106.6	1.215	-.5	-1.8	202.7	.351
4-4000.9	4-4150	.351	232.3	1.7	.5	1.373	77.2	.423	1.155	44.4	159.6	.666D	1.643A	103.7	.638	1.7	26.6	121.7	.183
4-4150	4-4420	.172	57.8	-26.1	-10.0	.707	91.2	.217	1.292	184.4	372.4	1.012	1.572D	92.2	1.093	8.8	45.9	317.9	.194
		12.38	8.49	4.87	3.88	7.28	3.63	12.50	2/1/2	63.3	77.9	29.8	.486	3.886	6.9	127.5	-6.9	103.9D	1.408
4-3870	4-4003.0	.247	314.6	-3.3	3.8	.881	102.0	.312	.795	209.9	452.6	.547	1.043D	107.5	1.221	-1.2	-3.8	206.1	.373
4-4003.0	4-4150	.373	232.3	1.8	.4	1.371	76.0	.430	1.147	48.4	160.3	.654D	1.640A	103.7	.634	1.7	26.8	120.6	.186
4-4150	4-4430	.129	53.0	-11.2	-5.2	.705	90.7	.220	1.288	182.6	380.1	1.006	1.571D	93.6	1.092	4.0	22.3	332.0	.146
		12.12	8.17	5.42	3.85	7.35	2.75	11.90	2/1/2	64.4	61.5	28.8	.433	4.313	11.9	129.0	-11.8	101.9D	1.433

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2444150
3 OCT 1979

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	$SPEED1 / $SPEED3 / $SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THETE / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	$SPEED2 / $SPEED4 / $SPEED6 PERIC
4-3660	4-4005.6	.288	316.2	-3.3	4.0	.892	105.0	.335	.807	215.8	452.6	.537	1.077D	108.7	1.229	-2.0	-5.7	210.1	.401
4-4005.6	4-4150	.401	232.6	1.4	.4	1.368	74.4	.439	1.137	53.5	161.2	.638D	1.636A	103.6	.628	1.8	27.0	119.1	.191
4-4150	4-4440	.117	54.1	-4.2	-3.8	.703	90.1	.224	1.283	180.5	367.5	.995	1.571D	94.9	1.091	2.8	11.4	336.6	.149
		12.72	8.67	6.15	4.05	7.45	2.52	11.94	2/1/2	65.7	49.2	23.6	.373	4.896	17.9	130.7	-17.8	99.2D	1.455
MARS ARRIVAL DATE = 2444160 (13 OCT 1979)																			
4-3820	4-4005.8	.223	345.3	9.3	5.8	.843	82.4	.323	.764	163.3	460.5	.518	1.011	108.6	1.201	2.0	5.9	206.0	.391
4-4005.8	4-4160	.391	233.2	.9	.3	1.367	74.9	.433	1.133	52.2	165.1	.642D	1.623A	100.8	.618	1.8	28.1	115.6	.179
4-4160	4-4380	.134	37.9	18.4	.6	.701	93.5	.230	1.295	191.9	336.7	.997A	1.593D	85.7	1.098	-2.3	-11.4	16.9	.148
		11.66	7.88	5.04	3.78	7.18	2.84	11.92	2/1/1	73.9	129.4	27.7	.393	4.180	11.0	129.0	10.4	98.1D	1.251
4-3830	4-4000.9	.174	332.4	6.5	5.4	.851	88.4	.287	.769	176.1	456.1	.549	.990	106.4	1.204	1.3	4.3	201.1	.344
4-4000.9	4-4160	.344	233.0	1.1	.3	1.371	77.5	.418	1.148	43.6	163.7	.669D	1.628A	101.1	.627	1.8	27.9	118.0	.172
4-4160	4-4390	.134	35.2	22.4	1.4	.704	93.6	.225	1.301	192.5	346.9	1.009A	1.593D	87.6	1.098	-3.0	-21.0	15.9	.135
		10.60	7.18	4.34	3.62	7.02	2.84	11.79	2/1/1	71.7	114.1	32.0	.508	3.625	6.4	126.7	5.7	103.2D	1.334
4-3840	4-3999.8	.169	322.1	3.0	3.3	.857	92.4	.279	.773	186.2	454.3	.557	.989D	105.9	1.207	.7	2.4	200.2	.333
4-3999.8	4-4160	.333	233.0	1.2	.3	1.372	76.1	.415	1.152	41.6	163.4	.674D	1.629A	101.1	.629	1.8	27.9	118.6	.170
4-4160	4-4400	.138	31.7	31.2	3.3	.705	93.5	.222	1.304	192.3	356.3	1.015A	1.593D	89.3	1.098	-4.8	-36.2	17.3	.143
		10.77	7.18	4.27	3.59	6.99	2.91	11.87	2/1/1	71.2	98.0	32.8	.541	3.539	2.8	126.6	2.1	104.8D	1.373
4-3850	4-4000.2	.183	316.0	-.0	3.4	.863	95.7	.283	.778	194.8	453.5	.557	.998D	106.0	1.210	.1	.3	201.3	.338
4-4000.2	4-4160	.338	233.0	1.2	.3	1.371	77.9	.416	1.150	42.4	163.5	.672D	1.629A	101.1	.628	1.8	27.9	118.4	.171
4-4160	4-4410	.183	20.8	55.9	10.1	.705	93.2	.221	1.304	191.5	364.8	1.016	1.592D	90.9	1.097	-11.5	-60.9	39.0	.237
		11.93	8.35	4.46	3.60	7.00	3.87	13.13	2/1/1	71.4	86.9	31.7	.928	3.662	1.7	127.2	-1.6	104.6D	1.404
4-3870	4-4003.7	.244	315.4	-3.0	3.7	.879	101.6	.311	.793	209.1	453.0	.546	1.040D	107.5	1.220	-1.2	-3.8	207.0	.372
4-4003.7	4-4160	.372	233.0	1.0	.3	1.369	75.9	.427	1.139	46.9	164.6	.653D	1.625A	100.9	.622	1.8	28.1	116.5	.176
4-4160	4-4430	.153	54.2	-16.3	-7.2	.702	92.4	.225	1.296	188.2	360.8	1.004	1.567D	93.8	1.094	6.0	31.6	325.2	.170
		12.30	8.59	5.36	3.71	7.11	3.21	12.18	2/1/2	73.0	84.3	26.5	.433	4.368	10.6	129.6	-10.5	101.6D	1.460
4-3880	4-4006.3	.284	316.8	-3.1	4.0	.890	104.8	.333	.805	215.1	452.9	.536	1.073D	108.7	1.226	-1.9	-5.7	211.0	.400
4-4006.3	4-4160	.400	233.4	.9	.3	1.366	74.3	.436	1.130	53.9	165.4	.637D	1.622A	100.8	.616	1.8	28.2	115.0	.181
4-4160	4-4440	.131	53.3	-6.2	-4.5	.699	91.7	.229	1.290	185.7	387.8	.994	1.583D	95.1	1.093	3.5	15.8	333.8	.156
		12.67	8.86	6.08	3.82	7.21	2.77	12.04	2/1/2	74.3	50.3	23.3	.375	4.953	16.6	131.5	-16.4	99.1D	1.483
MARS ARRIVAL DATE = 2444170 (23 OCT 1979)																			
4-3820	4-4007.7	.239	348.2	10.0	3.9	.841	81.1	.335	.762	161.3	462.0	.507	1.017	109.4	1.200	2.1	5.8	208.7	.406
4-4007.7	4-4170	.406	234.6	.3	.1	1.365	74.0	.437	1.124	55.1	169.3	.653D	1.615A	98.1	.605	1.9	29.1	110.9	.176
4-4170	4-4380	.150	37.3	17.6	.5	.701	95.5	.237	1.309	198.4	336.4	.998A	1.619D	85.9	1.102	-2.2	-11.6	14.7	.148
		12.16	8.45	5.29	3.71	7.11	3.16	11.93	2/1/1	82.8	127.3	26.4	.364	4.372	12.5	131.0	12.1	96.7D	1.227
4-3830	4-4002.1	.176	334.6	7.2	5.4	.849	87.9	.290	.768	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348
4-4002.1	4-4170	.348	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.166
4-4170	4-4390	.149	35.3	20.5	1.2	.704	95.5	.232	1.315	198.9	348.5	1.010A	1.620D	87.8	1.102	-2.6	-20.2	12.7	.135
		11.02	7.53	4.39	3.49	6.89	3.15	11.79	2/1/1	80.3	112.1	31.5	.495	3.889	7.5	127.9	7.1	102.5D	1.332
4-3840	4-4000.7	.169	323.9	3.7	3.3	.856	92.0	.281	.772	185.2	454.6	.555	.988D	106.0	1.206	.7	2.4	201.5	.336
4-4000.7	4-4170	.336	233.9	.4	.1	1.370	76.0	.413	1.147	42.3	167.4	.672D	1.621A	98.6	.619	1.9	29.2	114.5	.164
4-4170	4-4400	.150	33.2	26.4	2.5	.704	95.3	.229	1.317	198.6	357.7	1.015A	1.618D	89.6	1.101	-4.0	-32.5	11.6	.137
		10.88	7.43	4.27	3.45	6.85	3.16	11.81	2/1/1	79.7	96.2	32.5	.534	3.579	3.8	127.6	3.5	104.4D	1.377
4-3850	4-4001.1	.182	317.4	.5	3.4	.862	95.4	.284	.776	193.9	453.9	.556	.997D	106.1	1.209	.1	.3	202.4	.339
4-4001.1	4-4170	.339	233.9	.4	.1	1.370	77.8	.414	1.146	42.9	167.5	.671D	1.620A	98.6	.618	1.9	29.2	114.4	.164
4-4170	4-4410	.162	26.7	40.4	5.9	.704	95.0	.228	1.315	197.6	366.2	1.015	1.616D	91.2	1.100	-7.2	-50.6	18.4	.175
		11.31	7.86	4.44	3.46	6.86	3.41	12.25	2/1/1	79.8	84.1	31.4	.524	3.691	.4	126.1	-.2	104.4D	1.411
4-3870	4-4004.5	.241	316.2	-2.7	3.7	.878	101.5	.311	.791	208.3	453.4	.545	1.036D	107.5	1.219	-1.2	-3.8	208.0	.372
4-4004.5	4-4170	.372	234.0	.4	.1	1.368	75.9	.425	1.135	49.1	166.4	.653D	1.618A	98.5	.612	1.9	29.2	112.7	.170
4-4170	4-4430	.199	58.7	-24.6	-11.5	.700	94.1	.232	1.305	193.9	361.8	1.003	1.608D	94.0	1.097	10.4	44.3	312.2	.231
		13.15	9.57	5.53	3.57	6.98	4.24	13.04	2/1/2	81.3	70.0	26.4	.434	4.585	9.3	130.7	-9.1	101.5D	1.470
4-3860	4-4007.0	.261	319.5	-2.9	4.0	.888	104.5	.332	.802	214.4	453.3	.536	1.069D	108.7	1.227	-1.9	-5.6	212.0	.399
4-4007.0	4-4170	.399	234.5	.5	.1	1.365	74.4	.435	1.126	53.9	169.1	.637D	1.616A	98.1	.606	1.9	29.1	111.5	.175
4-4170	4-4440	.148	53.8	-9.1	-5.7	.696	93.4	.235	1.298	191.2	388.6	.993	1.603D	95.3	1.095	4.8	21.6	329.8	.173
		12.83	9.15	6.02	3.68	7.08	3.13	12.21	2/1/2	82.5	52.2	23.2	.377	4.966	15.1	132.5	-14.8	99.0D	1.494
MARS ARRIVAL DATE = 2444180 (2 NOV 1979)																			
4-3820	4-4010.8	.263	352.0	10.9	4.2	.838	79.0	.354	.780	158.5	464.1	.491	1.029	110.6	1.198	2.2	5.7	212.5	.432
4-4010.8	4-4180	.432	236.6	-.2	-.1	1.362	72.6	.447	1.115	59.3	173.3	.617D	1.613A	95.3	.592	2.0	29.6	106.6	.179
4-4180	4-4380	.168	57.2	17.1	.5	.703	97.7	.246	1.327	205.2	340.4	1.001A	1.654D	86.2	1.106	-2.1	-12.4	12.0	.149
		13.03	9.26	5.71	3.78	7.18	3.55	11.94	2/1/1	91.3	125.0	24.8	.322	4.655	14.3	133.9	14.0	94.6D	1.178
4-3830	4-4003.4	.182	337.0	8.0	3.5	.848	87.3	.294	.766	173.6	457.4	.541	.991	106.8	1.202	1.3	4.2	204.3	.353
4-4003.4	4-4180	.353	235.0	-.3	-.1	1.369	76.9	.419	1.140	45.8	171.3	.663D	1.617A	96.0	.608	2.0	30.1	110.2	.164
4-4180	4-4390	.167	35.8	19.4	1.1	.705	97.6	.241	1.333	205.5	350.4	1.011A	1.654D	88.1	1.106	-2.6	-20.0	9.1	.136
		11.41	7.96	4.44	3.44	6.85	3.52	11.80	2/1/1	88.3	109.5	31.1	.481	3.736	6.8	129.4	6.5	101.8D	1.317
4-3840	4-4001.8	.170	325.9	4.4	3.3	.854	91.6	.282	.770	184.1	455.3	.553	.988D	106.1	1.205	.7	2.4	202.8	.338
4-4001.8	4-4180	.338	235.0	-.4	-.1	1.370	77.8	.414	1.144	42.8	171.1	.671D	1.618A	96.2	.611	2.0	30.2	110.9	.161
4-4180	4-4400	.166	34.5	23.5	2.1	.705	97.4	.239	1.333	205.1	359.5	1.015A	1.652D	89.9	1.105	-3.5	-29.9	6.4	.136
		11.17	7.78	4.28	3.39	6.79	3.50	11.80	2/1/1	87.7	93.7	32.3	.527	3.597	5.0	128.8	4.9	103.9D	1.367
4-3850	4-4001.9	.181	319.0	1.1	3.4	.861	95.0	.284	.775	193.0	454.3	.554	.995D	106.2	1.208	.1	.3	203.6	.340
4-4001.9	4-4180	.340	235.0	-.4	-.1	1.370	77.7	.414	1.144	43.2	171.1	.670D	1.618A	96.2	.611	2.0	30.2	110.8	.161
4-4180	4-4410	.169	32.4	32.2	4.2	.704	97.0	.236	1.331	203.9	367.8	1.014	1.647D	91.5	1.104	-5.5	-43.4	7.9	.157
		11.38	7.99	4.45	3.39	6.80	3.56	12.02	2/1/1	87.8	81.0	31.4	.521	3.696	1.2	129.3	1.2	104.2D	1.405
4-3860	4-4003.2	.205	316.3	-1.2	3.5	.867	98.2	.294	.781	200.7	453.9	.551	1.010D	106.7	1.212	-.5	-1.8	205.8	.352
4-4003.2	4-4180	.352	235.0	-.3	-.1	1.369	77.0	.418	1.140	45.5	171.4	.664D	1.617A	96.1	.608	2.0	30.1	110.2	.163
4-4180	4-4420	.216	24.2	56.2	12.0	.702	96.5	.238	1.329	201.9	375.3	1.010	1.641D	92.9	1.102	-13.2	-65.6	32.8	.271
		12.90	9.46	4.77	3.44	6.84	4.09	13.70	2/1/1	88.3	78.3	29.3	.486	3.959	3.0	130.4	-2.8	103.2D	1.437
4-3880	4-4007.8	.277	320.2	-2.7	3.9	.886	104.2	.331	.800	213.6	453.7	.535	1.064D	108.7	1.225	-1.9	-5.5	213.0	.399
4-4007.8	4-4180	.399	235.7	-.5	-.1	1.365	74.4	.434	1.126	53.8	172.5	.637D	1.615A	95.7	.599	2.0	29.9	108.1	.172
4-4180	4-4440	.174	55.8	-13.5	-7.8	.695	95.2	.243	1.308	196.8	389.4	.991	1.626D	93.6	1.098	6.9	29.7	323.8	.200
		13.26	9.63	5.95	3.62	7.03	3.66	12.57	2/1/2	90.1	55.9	23.3	.379	4.942	13.4	133.7	-13.1	99.1D	1.492
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																			
4-3830	4-4004.8	.187	339.8	8.8	3.5	.846	86.7	.298	.765	172.1	458.2	.537	.993	107.1	1.201	1.3	4.2	206.2	.360
4-4004.8	4-4190	.360	236.5	-1.1	-.3	1.369	76.6	.421	1.139	46.8	174.9	.660D	1.619A	93.7	.601	2.1	30.8	107.1	.164
4-4190	4-4390	.187	36.6	18.7	1.0	.709	99.8	.253	1.358	212.4	352.5	1.012A	1.699D	88.5	1.112	-2.5	-20.2	8.0	.138
		11.94	8.48	4.51	3.46	6.86	3.97	11.82	2/1/1	95.7	106.1	30.7	.485	3.774	10.1	131.1	10.0	101.2D	1.290
4-3840	4-4002.9	.171	328.1	5.2	3.4	.853	91.2	.284	.769	182.9	455.9	.550	.987D	106.2	1.204	.7	2.3	204.3	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	43.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4400	.185	35.9	21.8	1.8	.708	99.5	.251	1.355	211.7	361.4	1.015	1.695D	90.3	1.111	-3.2	-28.4	1.4	.138
		11.60	8.21	4.29	3.39	6.79	3.91	11.82	2/1/1	95.0	90.5	32.3	.516	3.600	6.4	130.2	6.4	103.6D	1.347
4-3850	4-4002.9	.180	320.6	1.8	3.4	.859	94.7	.285	.773	191.9	454.8	.553	.994D	106.2	1.207	.1	.3	204.9	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.144	43.3	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4410	.184	34.9	27.6	3.5	.706	99.1	.249	1.350	210.2	369.5	1.013	1.687D	91.8	1.109	-4.5	-38.4	.6	.152
		11.59	8.30	4.41	3.39	6.79	3.89	11.87	2/1/1	95.0	77.7	31.5	.517	3.683	2.8	130.6	2.9	104.0D	1.387
4-3860	4-4004.1	.203	317.6	-.7	3.5	.866	97.8	.294	.778	199.7	454.3	.550	1.006D	106.7	1.211	-.5	-1.7	206.9	.352
4-4004.1	4-4190	.352	236.4	-1.1	-.3	1.369	77.0	.419	1.141	45.4	174.7	.664D	1.619A	93.8	.603	2.1	30.9	107.4	.163
4-4190	4-4420	.195	31.8	41.2	7.1	.704	98.6	.248	1.343	206.1	376.8	1.008	1.677D	93.8	1.106	-6.2	-54.1	9.0	.201
		12.32	8.89	4.74	3.43	6.84	4.15	12.60	2/1/1	95.4	71.8	29.5	.484	3.934	1.9	131.8	-1.2	105.1D	1.421
MARS ARRIVAL DATE = 2444200 (22 NOV 1979)																			
4-3830	4-4006.8	.184	342.8	9.6	3.6	.844	85.9	.304	.763	170.4	459.1	.531	.995	107.5	1.200	1.3	4.2	208.3	.367
4-4006.8	4-4200	.367	238.1	-1.6	-.5	1.369	76.2	.424	1.140	47.9	176.0	.656D	1.624A	91.5	.596	2.2	31.2	104.8	.168
4-4200	4-4390	.210	37.8	18.4	.9	.715	102.2	.269	1.386	219.4	354.9	1.013A	1.759D	88.9	1.119	-2.4	-20.6	.4	.142
		12.64	9.11	4.60	3.53	6.93	4.50	11.87	2/1/1	108.2	102.2	30.4	.446	3.610	11.6	135.0	11.4	100.5D	1.255

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2444200
22 NOV 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3840	4-4004.0	.172	330.4	6.0	3.4	.851	90.7	.286	.767	181.7	456.5	.547	.987D	106.4	1.203	.7	2.3	205.8	.344
4-4004.0	4-4200	.344	237.9	-2.1	-.5	1.371	77.6	.417	1.146	43.6	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4400	.206	37.5	20.6	1.6	.714	101.6	.266	1.363	218.4	363.5	1.015	1.751D	90.7	1.117	-2.9	-27.3	356.3	.142
		12.16	8.72	4.31	3.44	6.84	4.41	11.86	2/1/1	101.5	86.9	32.3	.509	3.591	7.9	131.8	7.9	103.3D	1.318
4-3850	4-4003.9	.179	322.4	2.5	3.4	.857	94.3	.286	.772	190.9	455.3	.551	.992D	106.3	1.206	.1	.3	206.2	.343
4-4003.9	4-4200	.343	237.9	-2.1	-.5	1.371	77.6	.416	1.147	43.4	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4410	.203	37.1	24.9	2.7	.711	101.3	.264	1.375	216.7	371.3	1.012	1.739D	92.4	1.115	-3.9	-34.8	354.5	.153
		12.16	8.73	4.40	3.43	6.83	4.32	11.98	2/1/1	101.5	74.2	31.8	.512	3.656	4.5	132.1	4.4	103.6D	1.361
4-3860	4-4005.0	.201	319.0	-.2	3.5	.864	97.5	.294	.777	198.8	454.8	.548	1.006D	106.7	1.210	-.5	-1.7	208.2	.353
4-4005.0	4-4200	.353	237.9	-2.0	-.5	1.370	77.0	.420	1.144	43.3	177.7	.664D	1.624A	91.6	.599	2.3	31.5	105.3	.165
4-4200	4-4420	.203	36.0	33.3	5.1	.707	100.7	.263	1.365	214.3	378.4	1.006	1.724D	93.8	1.112	-6.1	-45.6	358.0	.182
		12.52	9.04	4.71	3.47	6.87	4.34	12.34	2/1/1	101.8	66.6	29.8	.483	3.693	2.0	133.1	.5	103.1D	1.397
									MARS ARRIVAL DATE = 2444210 (2 DEC 1979)										
4-3840	4-4005.3	.174	332.9	6.9	3.4	.849	90.1	.289	.765	180.3	457.1	.544	.987D	106.6	1.202	.7	2.3	207.5	.347
4-4005.3	4-4210	.347	239.6	-3.0	-.6	1.372	77.4	.419	1.150	43.9	180.4	.667D	1.632	89.7	.597	2.4	32.1	104.3	.167
4-4210	4-4400	.231	39.2	20.3	1.4	.722	104.2	.285	1.419	225.2	365.7	1.014	1.824D	91.3	1.126	-2.7	-26.6	351.2	.150
		12.86	9.33	4.35	3.51	6.92	5.00	11.94	2/1/1	107.3	83.0	32.5	.498	3.575	9.5	133.6	9.5	103.0D	1.283
4-3850	4-4005.0	.176	324.4	3.2	3.4	.856	93.9	.287	.770	189.7	455.8	.549	.991D	106.4	1.205	.1	.3	207.6	.344
4-4005.0	4-4210	.344	239.5	-3.0	-.6	1.372	77.6	.418	1.150	43.3	180.4	.669D	1.632	89.7	.597	2.4	32.1	104.4	.166
4-4210	4-4410	.225	39.3	23.4	2.3	.716	103.7	.282	1.408	223.2	373.2	1.010	1.805D	92.9	1.122	-3.5	-32.1	349.1	.159
		12.75	9.25	4.39	3.50	6.90	4.86	12.05	2/1/1	107.2	70.7	32.1	.507	3.618	6.2	133.7	6.1	103.7D	1.328
4-3860	4-4006.0	.199	320.4	.4	3.5	.862	97.1	.295	.775	197.7	455.3	.547	1.003D	106.6	1.209	-.5	-1.7	209.4	.354
4-4006.0	4-4210	.354	239.6	-2.9	-.6	1.371	77.1	.421	1.148	43.1	180.6	.664D	1.632	89.6	.596	2.4	31.9	104.1	.168
4-4210	4-4420	.221	39.2	29.0	4.0	.713	103.0	.280	1.393	220.5	380.1	1.003	1.783D	94.3	1.119	-4.0	-38.5	350.8	.190
		12.97	9.43	4.67	3.54	6.94	4.75	12.31	2/1/1	107.4	62.4	30.2	.491	3.640	5.3	134.6	5.2	103.1D	1.366

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 600 DAYS

MARS ARRIVAL DATE = 2444110 (24 AUG 1979)

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3620	4-3997.4	.182	332.9	5.8	3.3	.851	86.4	.289	.772	171.1	455.6	.549	.996	106.5	1.206	1.8	6.2	195.7	.347
4-3997.4	4-4110	.347	235.0	4.2	1.1	1.405	78.7	.469	1.288	35.9	136.3	.684D	1.692A	116.1	.735	1.4	21.3	133.5	.269
4-4110	4-4420	.093	59.2	-3.2	-2.9	.729	85.8	.205	1.275	163.2	371.4	1.013	1.537	91.9	1.088	1.3	7.7	344.5	.112
		13.07	6.57	4.44	6.49	9.87	2.13	11.57	2/1/2	31.3	71.6	39.1	.498	2.988	6.2	125.1	2.9	107.1D	.990
4-3630	4-3995.1	.163	321.5	2.7	3.2	.858	90.8	.274	.776	182.2	452.9	.563	.989D	105.5	1.208	1.3	4.5	193.5	.326
4-3995.1	4-4110	.326	236.0	4.6	1.1	1.406	80.1	.464	1.295	31.5	135.6	.694D	1.696A	115.9	.738	1.4	21.0	134.0	.267
4-4110	4-4430	.091	61.9	.1	-2.6	.729	85.4	.210	1.275	161.9	379.6	1.006	1.54D	93.4	1.088	1.0	2.4	342.1	.122
		12.72	6.30	4.20	6.42	9.80	2.10	11.67	2/1/2	30.7	57.8	42.4	.565	2.766	4.9	124.8	-.1	110.4D	.997
4-3640	4-3994.9	.170	313.1	-.4	3.2	.864	94.2	.274	.780	191.4	451.8	.567	.994D	105.4	1.211	.7	2.5	193.8	.324
4-3994.9	4-4110	.324	236.2	4.6	1.1	1.406	80.3	.464	1.296	31.1	135.6	.695D	1.697A	115.9	.736	1.4	21.0	134.1	.266
4-4110	4-4440	.091	66.2	2.9	-2.3	.727	84.8	.216	1.270	160.3	387.5	.996	1.545	94.8	1.087	.9	-.4	341.5	.138
		12.79	6.56	4.28	6.41	9.79	2.09	11.82	2/1/2	30.7	46.5	42.3	.571	2.770	4.8	125.1	-2.9	111.1D	1.011
4-3650	4-3995.9	.191	309.2	-2.7	3.4	.871	97.3	.282	.786	199.4	451.3	.564	1.007D	105.8	1.215	.1	.5	195.6	.334
4-3995.9	4-4110	.333	235.6	4.5	1.1	1.406	79.7	.466	1.293	33.0	135.8	.691D	1.695A	116.0	.737	1.4	21.1	133.9	.266
4-4110	4-4450	.092	72.0	5.6	-2.2	.726	84.0	.225	1.267	158.3	395.1	.981	1.552	96.2	1.087	.8	-1.7	342.8	.158
		13.13	6.68	4.57	6.45	9.82	2.11	12.04	2/1/2	30.9	37.6	40.2	.540	2.912	8.5	125.9	-6.0	110.1D	1.034

MARS ARRIVAL DATE = 2444120 (3 SEP 1979)

4-3620	4-3999.1	.189	335.8	6.8	3.4	.849	85.6	.295	.770	169.4	456.6	.543	.998	106.9	1.205	1.9	6.1	197.9	.335
4-3999.1	4-4120	.355	233.1	3.5	.9	1.391	77.7	.451	1.227	40.5	143.5	.674D	1.781A	112.8	.700	1.5	22.5	131.3	.252
4-4120	4-4420	.100	56.4	-6.9	-3.5	.725	87.0	.207	1.278	168.2	371.2	1.013	1.542	91.9	1.089	2.0	13.4	342.2	.116
		12.32	6.78	4.54	5.54	8.92	2.24	11.61	2/1/2	38.8	72.4	35.1	.476	3.317	6.6	125.2	4.3	104.4D	1.104
4-3630	4-3996.8	.165	324.1	3.6	3.2	.856	90.3	.277	.774	180.7	453.7	.560	.989D	105.7	1.207	1.3	4.4	195.4	.330
4-3996.8	4-4120	.330	233.9	3.9	.9	1.393	79.3	.445	1.237	35.5	142.5	.686D	1.787A	112.7	.704	1.4	22.2	132.2	.249
4-4120	4-4430	.098	58.4	-2.3	-2.9	.722	86.5	.211	1.275	166.8	378.4	1.007	1.544	93.3	1.088	1.5	8.0	341.0	.124
		11.86	6.39	4.22	5.47	8.85	2.17	11.68	2/1/2	37.9	58.6	38.4	.552	3.038	4.5	124.6	.9	108.0D	1.124
4-3640	4-3996.1	.169	315.3	.4	3.2	.862	93.8	.275	.778	190.1	452.4	.565	.992D	105.5	1.210	.7	2.5	195.4	.326
4-3996.1	4-4120	.326	234.1	3.9	.9	1.393	79.5	.444	1.238	34.7	142.4	.686D	1.788A	112.7	.705	1.4	22.1	132.3	.249
4-4120	4-4440	.093	62.3	1.1	-2.5	.720	85.9	.217	1.272	165.0	387.1	.996	1.548	94.7	1.088	1.2	2.0	341.0	.139
		11.87	6.41	4.27	5.46	8.84	2.13	11.83	2/1/2	37.8	47.3	38.6	.564	3.023	4.1	124.9	-2.2	108.9D	1.142
4-3650	4-3997.0	.169	310.9	-2.0	3.4	.869	96.9	.282	.784	198.3	451.8	.563	1.005D	105.9	1.214	.1	.3	197.0	.334
4-3997.0	4-4120	.334	233.7	3.6	.9	1.393	79.0	.446	1.235	36.4	142.7	.684D	1.786A	112.7	.704	1.5	22.2	132.0	.250
4-4120	4-4450	.092	67.8	4.1	-2.3	.718	85.2	.225	1.268	162.9	394.5	.982	1.553	96.1	1.088	1.0	.1	342.6	.157
		12.14	6.66	4.54	5.48	8.86	2.12	12.03	2/1/2	38.0	38.3	36.6	.538	3.187	5.9	125.6	-5.5	108.2D	1.165
4-3660	4-3998.7	.219	310.2	-3.5	3.6	.877	99.9	.295	.791	205.6	451.6	.557	1.024D	106.6	1.219	-.6	-1.9	199.6	.351
4-3998.7	4-4120	.351	233.2	3.6	.9	1.392	78.0	.450	1.229	39.6	143.5	.676D	1.782A	112.8	.701	1.5	22.4	131.5	.252
4-4120	4-4460	.094	74.9	6.9	-2.1	.716	84.2	.236	1.263	160.5	401.7	.965	1.561	97.6	1.087	.9	-.3	345.4	.179
		12.64	7.11	4.97	5.52	8.91	2.14	12.29	2/1/2	38.6	31.1	33.8	.489	3.436	9.4	126.6	-9.3	106.4D	1.191

MARS ARRIVAL DATE = 2444130 (13 SEP 1979)

4-3620	4-4000.6	.196	338.2	7.3	3.5	.848	84.9	.301	.769	167.9	457.5	.537	1.000	107.3	1.204	1.9	6.0	199.9	.363
4-4000.6	4-4130	.363	232.2	2.8	.8	1.381	76.9	.440	1.188	44.1	149.8	.665D	1.711A	109.7	.672	1.6	23.9	128.3	.223
4-4130	4-4420	.112	54.5	-11.3	-4.5	.717	88.5	.209	1.281	173.4	371.3	1.013	1.549	92.0	1.090	3.0	21.0	338.2	.124
		11.89	7.07	4.64	4.82	8.21	2.43	11.68	2/1/2	46.9	73.3	32.4	.457	3.589	7.4	125.6	5.7	102.4D	1.183
4-3630	4-3997.7	.167	326.3	4.4	3.3	.854	89.8	.279	.773	179.5	454.3	.557	.989	105.9	1.206	1.3	4.4	196.9	.334
4-3997.7	4-4130	.334	232.7	3.2	.8	1.384	78.6	.432	1.199	38.4	148.8	.680D	1.717A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4430	.103	55.5	-4.9	-3.4	.715	87.8	.213	1.279	171.9	379.3	1.007	1.550	93.4	1.089	2.0	10.2	339.1	.128
		11.27	6.54	4.25	4.74	8.13	2.29	11.71	2/1/2	45.7	59.3	35.8	.540	3.253	4.4	124.7	2.0	106.3D	1.218
4-3640	4-3997.1	.169	317.1	1.1	3.3	.861	93.4	.276	.777	189.1	452.9	.563	.991D	105.6	1.209	.7	2.5	196.7	.328
4-3997.1	4-4130	.328	232.9	3.3	.8	1.384	79.0	.431	1.201	37.3	148.6	.683D	1.718A	109.6	.679	1.5	23.4	129.8	.220
4-4130	4-4440	.098	58.7	-.7	-2.8	.714	87.2	.218	1.275	170.0	386.9	.996	1.553	94.7	1.089	1.6	4.7	340.1	.140
		11.21	6.46	4.27	4.73	8.12	2.21	11.84	2/1/2	45.5	48.0	36.2	.556	3.222	3.5	124.9	-1.3	107.4D	1.240
4-3650	4-3997.9	.167	312.2	-1.5	3.4	.867	96.6	.282	.782	197.4	452.3	.561	1.003D	105.9	1.213	.1	.3	196.2	.335
4-3997.9	4-4130	.335	232.7	3.2	.8	1.384	78.5	.433	1.198	36.8	148.9	.680D	1.716A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4450	.096	63.8	2.7	-2.5	.712	86.5	.226	1.270	167.7	394.2	.983	1.557	96.1	1.088	1.3	2.0	342.1	.158
		11.43	6.69	4.51	4.74	8.13	2.17	12.04	2/1/2	45.8	39.0	34.6	.535	3.364	5.1	125.6	-4.8	106.8D	1.265
4-3660	4-3999.5	.216	311.2	-3.2	3.6	.875	99.6	.295	.789	204.7	452.0	.556	1.022D	106.6	1.217	-.6	-1.8	200.8	.351
4-3999.5	4-4130	.351	232.3	3.0	.8	1.383	77.6	.437	1.193	41.8	149.4	.671D	1.714A	109.6	.675	1.6	23.7	128.6	.222
4-4130	4-4460	.095	70.7	5.8	-2.2	.709	85.5	.236	1.264	165.1	401.2	.966	1.562	97.5	1.088	1.1	1.1	345.3	.178
		11.88	7.09	4.93	4.79	8.18	2.16	12.29	2/1/2	46.4	31.7	31.9	.489	3.641	8.8	126.7	-8.8	105.3D	1.291
4-3670	4-4001.7	.252	313.1	-3.8	3.6	.885	102.5	.313	.799	211.3	451.9	.548	1.049D	107.8	1.224	-1.3	-3.9	204.2	.374
4-4001.7	4-4130	.374	232.1	2.7	.8	1.381	76.3	.443	1.184	46.2	150.2	.659D	1.709A	109.7	.670	1.6	24.0	127.9	.225
4-4130	4-4470	.096	79.1	8.6	-2.0	.706	84.3	.246	1.256	162.3	408.0	.945	1.570	99.0	1.088	1.0	1.3	349.2	.202
		12.55	7.69	5.52	4.85	8.24	2.18	12.60	2/1/2	47.4	25.8	28.6	.431	4.051	13.6	128.0	-13.8	102.9D	1.314

MARS ARRIVAL DATE = 2444140 (23 SEP 1979)

4-3620	4-4002.1	.204	340.4	8.0	3.6	.846	84.2	.307	.767	166.5	458.4	.532	1.003	107.6	1.203	1.9	6.0	201.7	.371
4-4002.1	4-4140	.371	232.0	2.2	.6	1.375	76.2	.434	1.182	47.1	153.3	.657D	1.667A	106.6	.650	1.7	25.4	124.5	.202
4-4140	4-4420	.131	54.5	-17.2	-6.2	.711	89.7	.212	1.286	178.8	371.7	1.013	1.559	92.0	1.091	4.8	31.5	331.4	.143
		11.84	7.53	4.75	4.31	7.70	2.78	11.87	2/1/2	55.6	74.7	30.4	.458	3.813	8.4	126.3	7.2	100.9D	1.231
4-3630	4-3998.8	.169	328.3	5.1	3.3	.853	89.4	.281	.772	178.4	454.9	.554	.989	106.0	1.206	1.3	4.4	198.3	.337
4-3998.8	4-4140	.337	232.3	2.5	.6	1.378	78.2	.424	1.174	40.6	154.3	.676D	1.672A	106.8	.657	1.6	25.0	126.2	.198
4-4140	4-4430	.114	55.6	-7.7	-4.1	.710	89.2	.216	1.283	177.2	379.6	1.006	1.559	93.4	1.090	2.8	15.5	336.3	.134
		10.96	6.74	4.27	4.21	7.61	2.47	11.78	2/1/2	54.1	60.1	34.0	.530	3.417	4.6	125.1	3.2	105.0D	1.261
4-3640	4-3998.0	.169	316.8	1.8	3.3	.859	93.1	.277	.776	188.1	453.4	.561	.990D	105.7	1.208	.7	2.4	197.9	.330
4-3998.0	4-4140	.330	232.5	2.6	.6	1.378	78.6	.423	1.176	39.2	154.1	.679D	1.674A	106.9	.658	1.6	24.9	126.5	.197
4-4140	4-4440	.106	56.0	-2.4	-3.2	.708	88.6	.221	1.278	175.1	387.0	.996	1.560	94.8	1.090	2.0	7.8	338.6	.144
		10.80	6.61	4.27	4.19	7.59	2.54	11.88	2/1/2	53.8	48.5	34.5	.553	3.369	2.7	125.2	-.3	106.3D	1.309
4-3650	4-3998.7	.186	313.5	-1.0	3.4	.866	96.3	.282	.781	196.5	452.7	.560	1.001D	106.0	1.212	.1	.3	199.2	.336
4-3998.7	4-4140	.336	232.3	2.5	.6	1.378	78.2	.424	1.174	40.4	154.3	.676D	1.673A	106.8	.657	1.6	25.0	126.2	.198
4-4140	4-4450	.101	60.4	1.5	-2.7	.706	87.6	.228	1.273	172.8	394.1	.983	1.563	96.1	1.089	1.6	4.1	341.4	.160
		10.97	6.76	4.49	4.21	7.61	2.26	12.06	2/1/2	54.1	39.5	33.1	.533	3.506	4.1	125.9	-3.9	105.9D	1.335
4-3660	4-4000.2	.214	312.2	-2.6	3.6	.874	99.3	.295	.787	204.0	452.4	.555	1.019D	106.6	1.216	-.5	-1.6	201.6	.351
4-4000.2	4-4140	.351	232.1	2.4	.6	1.377	77.4	.428	1.169	43.4	154.8	.668D	1.670A	106.6	.654	1.6	25.2	125.5	.200
4-4140	4-4460	.098	66.7	4.8	-2.4	.703	86.9	.237	1.266	169.6	400.9	.966	1.566	97.5	1.088	1.4	2.6	344.9	.179
		11.38	7.11	4.90	4.25	7.65	2.21	12.29	2/1/2	54.7	32.3	30.6	.488	3.788	8.0	127.0	-8.0	104.5D	1.362
4-3670	4-4002.4	.250	313.9	-3.6	3.6	.883	102.3	.313	.797	210.6	452.3	.547	1.046D	107.6	1.223	-1.2	-3.9	205.1	.373
4-4002.4	4-4140	.373	232.0	2.2	.6	1.375	76.1	.435	1.161	47.6	155.5	.656D	1.667A	106.6	.650	1.7	25.4	124.6	.203
4-4140	4-4470	.097	74.8	7.8	-2.1	.700	85.7	.246	1.260	166.8	407.5	.947	1.572	98.8	1.088	1.2	2.5	349.1	.201
		11.96	7.66	5.47	4.32	7.71	2.19	12.59	2/1/2	55.7	26.3	27.5	.432	4.210	12.9	128.4	-12.8	102.3D	1.386
4-3680	4-4003.0	.291	317.6	-3.5	4.1	.894	105.3	.336	.809	216.5	452.2	.538	1.081D	108.6	1.231	-2.0	-5.6	209.2	.402
4-4003.0	4-4140	.402	232.1	1.9	.6	1.372	74.4	.444	1.150	52.7	156.6	.639D	1.661A	106.6	.644	1.7	25.7	123.0	.206
4-4140	4-4480	.099	84.6	10.5	-1.9	.697	84.4	.263	1.252	163.6	414.0	.923	1.581	100.4	1.088	1.1	3.2	353.8	.226
		12.84	8.43	6.21	4.42	7.81	2.22	12.96	2/1/2	57.1	21.3	24.1	.372	4.784	18.9	130.0	-18.8	99.6D	1.406

MARS ARRIVAL DATE = 2444150 (3 OCT 1979)

4-3620	4-4003.7	.212	342.7	8.8	3.7	.845	83.4	.314	.766	165.0	459.4	.526	1.006	108.1	1.202	2.0	5.9	203.7	.380
4-4003.7	4-4150	.380	232.4	1.5	.4	1.370	75.8	.432	1.145	49.7	160.5	.650D	1.639A	105.7	.633	1.7	26.9	120.2	.187
4-4150	4-4420	.172	57.8	-26.1	-10.0	.707	91.2	.217	1.292	184.4	378.4	1.012	1.572D	92.2	1.093	8.8	45.9	317.9	.194
		12.47	8.80	4.88	3.97	7.37	3.65	12.80	2/1/2	64.7	17.9	26.9	.417	4.002	9.6	127.5	8.8	99.5D	1.253

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS

MARS ARRIVAL DATE = 2444150
3 OCT 1979

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-3630	4-3999.8	.171	330.3	5.8	3.3	.652	88.9	.284	.770	177.3	455.5	.552	.989	106.2	1.205	1.3	4.3	199.6	.340	
4-3999.8	4-4150	.340	232.4	1.8	.5	1.374	77.8	.420	1.158	42.3	159.3	.672D	1.645A	103.8	.640	1.7	26.5	122.2	.182	
4-4150	4-4430	.129	53.0	-11.2	-5.2	.705	90.7	.220	1.288	182.6	380.1	1.006	1.571D	93.6	1.092	4.0	22.3	332.0	.146	
		10.90	7.05	4.31	3.85	7.25	2.75	11.90	2/1/2	62.9	61.5	32.8	.519	3.538	5.5	125.8	4.4	104.0D	1.318	
4-3640	4-3998.9	.168	320.4	2.4	3.3	.658	92.7	.278	.774	187.2	453.8	.559	.990D	105.8	1.207	.7	2.4	199.0	.332	
4-3998.9	4-4150	.332	232.5	1.9	.5	1.374	78.3	.417	1.161	40.6	159.0	.676D	1.646A	103.8	.642	1.7	26.4	122.7	.181	
4-4150	4-4440	.117	54.1	-4.2	-3.8	.703	90.1	.224	1.283	180.3	387.3	.995	1.571D	94.9	1.091	2.6	11.4	336.6	.149	*
		10.62	6.79	4.27	3.82	7.22	2.52	11.94	2/1/2	62.5	49.2	33.5	.547	3.472	2.4	125.8	.9	105.5D	1.352	
4-3650	4-3999.4	.185	314.7	-.5	3.4	.665	96.0	.283	.779	195.7	453.1	.559	1.000D	106.0	1.211	.1	.3	200.3	.337	
4-3999.4	4-4150	.337	232.5	1.9	.5	1.374	78.0	.419	1.159	41.6	159.1	.674D	1.645A	103.8	.641	1.7	26.5	122.4	.182	
4-4150	4-4450	.110	57.7	.4	-3.0	.700	89.3	.231	1.277	177.6	394.2	.982	1.571	96.2	1.090	2.0	6.3	340.3	.163	
		10.71	6.87	4.48	3.84	7.24	2.40	12.10	2/1/2	62.7	40.0	32.2	.530	3.603	3.0	126.4	-2.8	105.2D	1.360	
4-3660	4-4000.9	.212	313.1	-2.4	3.5	.672	99.0	.295	.786	203.2	452.8	.554	1.017D	106.6	1.215	-.5	-1.8	202.7	.351	
4-4000.9	4-4150	.351	232.5	1.7	.5	1.373	77.2	.423	1.155	44.4	159.6	.666D	1.643A	103.7	.638	1.7	26.6	121.7	.183	
4-4150	4-4460	.104	63.2	4.0	-2.6	.697	88.3	.239	1.270	174.7	400.8	.966	1.573	97.5	1.089	1.7	4.1	344.5	.181	
		11.06	7.18	4.87	3.88	7.28	2.51	12.32	2/1/2	63.3	32.7	29.8	.488	3.886	6.9	127.5	-6.9	103.9D	1.408	
4-3670	4-4003.0	.247	314.6	-3.3	3.8	.681	102.0	.312	.795	209.9	452.6	.547	1.043D	107.5	1.221	-1.2	-3.6	206.1	.373	
4-4003.0	4-4150	.373	232.5	1.6	.4	1.371	76.0	.430	1.147	48.4	160.3	.654D	1.640A	103.7	.634	1.7	26.8	120.6	.186	
4-4150	4-4470	.101	70.7	7.1	-2.2	.694	87.2	.249	1.262	171.5	407.2	.947	1.577	98.9	1.089	1.5	3.6	348.8	.201	
		11.62	7.67	5.42	3.95	7.35	2.25	12.60	2/1/2	64.4	26.8	26.8	.433	4.313	11.9	129.0	-11.8	101.9D	1.433	
4-3680	4-4005.6	.288	316.2	-3.3	4.0	.692	105.0	.335	.807	215.8	452.6	.537	1.077D	108.7	1.229	-2.0	-5.7	210.1	.401	
4-4005.6	4-4150	.401	232.6	1.4	.4	1.368	74.4	.439	1.137	53.5	161.2	.636D	1.636A	103.6	.628	1.6	27.0	119.1	.191	
4-4150	4-4430	.100	80.2	10.0	-2.0	.690	85.8	.262	1.254	168.1	413.4	.925	1.183	100.3	1.088	1.3	4.2	353.8	.225	
		12.43	8.38	6.15	4.05	7.45	2.23	12.94	2/1/2	65.7	21.8	23.6	.373	4.896	17.9	130.7	-17.8	99.2D	1.455	

MARS ARRIVAL DATE = 2444160 (13 OCT 1979)

4-3630	4-4000.9	.174	332.4	6.5	3.4	.651	88.4	.287	.769	176.1	456.1	.549	.990	106.4	1.204	1.3	4.3	201.1	.344	
4-4000.9	4-4160	.344	233.0	1.1	.5	1.371	77.5	.416	1.148	43.6	163.7	.669D	1.628A	101.1	.627	1.8	27.9	118.0	.172	
4-4160	4-4430	.153	54.2	-16.3	-7.2	.702	92.4	.225	1.296	188.2	380.8	1.004	1.587D	93.8	1.094	6.0	31.6	325.2	.170	
		11.17	7.56	4.34	3.62	7.02	3.21	12.18	2/1/2	71.7	64.3	32.0	.508	3.625	6.4	126.7	5.7	103.2D	1.334	
4-3640	4-3999.8	.169	322.1	3.0	3.3	.657	92.4	.279	.773	186.2	454.3	.557	.989D	105.9	1.207	.7	2.4	200.2	.333	
4-3999.8	4-4160	.333	233.0	1.2	.3	1.372	78.1	.415	1.152	41.6	163.4	.674D	1.629A	101.1	.629	1.8	27.9	118.6	.170	
4-4160	4-4440	.131	53.3	-6.2	-4.5	.699	91.7	.229	1.290	185.7	387.8	.994	1.585D	95.1	1.093	3.5	15.8	333.8	.158	
		10.63	7.04	4.27	3.59	6.99	2.77	12.04	2/1/2	71.2	50.3	32.8	.541	3.539	2.8	126.6	2.1	104.6D	1.373	
4-3650	4-4000.2	.183	316.0	-.0	3.4	.663	95.7	.283	.778	194.8	453.5	.557	.998D	106.0	1.210	.1	.3	201.3	.338	
4-4000.2	4-4160	.338	233.0	1.2	.3	1.371	77.9	.416	1.150	42.4	163.5	.672D	1.629A	101.1	.628	1.8	27.9	118.4	.171	
4-4160	4-4450	.120	55.8	-.7	-3.4	.696	90.9	.235	1.282	182.8	394.5	.981	1.583D	96.4	1.092	2.5	8.8	336.8	.166	
		10.64	7.04	4.46	3.60	7.00	2.58	12.16	2/1/2	71.4	40.5	31.7	.528	3.662	1.7	127.2	-1.6	104.6D	1.404	
4-3660	4-4001.6	.210	314.1	-2.0	3.5	.671	98.8	.294	.784	202.4	453.1	.553	1.015D	106.6	1.214	-.5	-1.8	203.7	.351	
4-4001.6	4-4160	.351	232.9	1.1	.3	1.370	77.1	.420	1.146	45.0	163.9	.665D	1.627A	101.0	.626	1.8	28.0	117.7	.173	
4-4160	4-4460	.113	60.5	3.3	-2.8	.692	89.9	.242	1.274	179.6	400.9	.966	1.583	97.6	1.091	2.0	5.7	343.5	.184	
		10.92	7.28	4.84	3.64	7.04	2.45	12.36	2/1/2	72.0	33.2	29.4	.487	3.942	5.7	128.3	-5.7	103.6D	1.434	
4-3670	4-4003.7	.244	315.4	-3.0	3.7	.679	101.8	.311	.793	209.1	453.0	.546	1.040D	107.5	1.220	-1.2	-3.6	207.0	.372	
4-4003.7	4-4160	.372	233.0	1.0	.3	1.369	75.9	.427	1.139	48.9	164.6	.653D	1.625A	100.9	.622	1.8	28.1	116.5	.176	
4-4160	4-4470	.107	67.2	6.6	-2.4	.689	88.7	.252	1.265	176.2	407.1	.947	1.584	98.9	1.090	1.7	4.8	348.4	.203	
		11.44	7.73	5.38	3.71	7.11	2.35	12.63	2/1/2	73.0	27.2	26.5	.433	4.368	10.6	129.8	-10.5	101.6D	1.460	
4-3680	4-4006.3	.284	318.8	-3.1	4.0	.690	104.8	.333	.805	215.1	452.9	.536	1.073D	108.7	1.228	-1.9	-5.7	211.0	.400	
4-4006.3	4-4160	.400	233.4	.9	.3	1.366	74.3	.436	1.130	53.9	165.4	.637D	1.622A	100.8	.616	1.8	28.2	115.0	.181	
4-4160	4-4480	.103	76.0	9.6	-2.0	.684	87.4	.263	1.257	172.6	413.1	.926	1.587	100.3	1.089	1.5	5.1	353.6	.225	
		12.19	8.37	6.08	3.82	7.21	2.29	12.95	2/1/2	74.3	22.3	23.3	.375	4.953	16.6	131.5	-16.4	99.1D	1.483	
4-3690	4-4009.5	.330	325.7	-2.5	4.3	.903	107.9	.361	.821	220.5	452.9	.525	1.117D	110.1	1.236	-2.7	-7.3	215.6	.435	
4-4009.5	4-4160	.435	234.2	.8	.3	1.363	72.5	.449	1.117	59.6	166.4	.616D	1.619A	100.6	.608	1.8	28.2	113.2	.187	
4-4160	4-4490	.103	86.8	12.1	-1.8	.680	85.8	.278	1.247	168.9	419.1	.901	1.594	101.8	1.089	1.4	6.2	359.1	.249	
		13.19	9.23	6.96	3.96	7.35	2.28	13.34	2/1/2	75.9	17.9	20.1	.318	5.720	23.9	133.5	-23.6	96.1D	1.501	

MARS ARRIVAL DATE = 2444170 (23 OCT 1979)

4-3630	4-4002.1	.178	334.6	7.2	3.4	.649	87.9	.290	.766	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348	
4-4002.1	4-4170	.348	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.186	
4-4170	4-4430	.199	58.7	-24.6	-11.5	.700	94.1	.232	1.305	193.9	381.8	1.003	1.608D	94.0	1.097	10.4	44.3	312.2	.231	
		12.12	8.63	4.39	3.49	6.89	4.24	13.04	2/1/2	80.3	70.0	31.5	.495	3.689	7.5	127.9	7.1	102.5D	1.332	
4-3640	4-4000.7	.169	323.9	3.7	3.3	.656	92.0	.281	.772	185.2	454.6	.555	.988D	106.0	1.206	.7	2.4	201.5	.336	
4-4000.7	4-4170	.336	233.9	.4	.1	1.370	78.0	.413	1.147	42.3	167.4	.672D	1.621A	98.6	.619	1.9	29.2	114.5	.164	
4-4170	4-4440	.148	53.6	-9.1	-5.7	.696	93.4	.235	1.298	191.2	388.6	.993	1.603D	95.3	1.095	4.8	21.6	329.8	.173	
		10.85	7.40	4.27	3.45	6.85	3.13	12.21	2/1/2	79.7	52.2	32.5	.534	3.579	3.8	127.8	3.5	104.4D	1.377	
4-3650	4-4001.1	.182	317.4	.5	3.4	.662	95.4	.284	.776	193.9	453.9	.556	.997D	106.1	1.209	.1	.3	202.4	.339	
4-4001.1	4-4170	.339	233.9	.4	.1	1.370	77.8	.414	1.146	42.9	167.5	.671D	1.620A	98.6	.618	1.9	29.2	114.4	.164	
4-4170	4-4450	.133	54.9	-1.8	-4.0	.693	92.5	.240	1.289	188.1	395.0	.980	1.599D	96.6	1.094	3.1	11.7	336.9	.175	
		10.72	7.27	4.44	3.46	6.86	2.82	12.25	2/1/2	79.8	41.3	31.4	.524	3.691	.4	128.1	-.2	104.4D	1.411	
4-3660	4-4002.4	.208	315.2	-1.6	3.5	.669	98.5	.294	.782	201.6	453.5	.552	1.013D	106.7	1.213	-.5	-1.8	204.7	.351	
4-4002.4	4-4170	.351	233.9	.4	.1	1.369	77.0	.418	1.142	45.3	167.9	.664D	1.619A	98.5	.616	1.9	29.2	113.7	.166	
4-4170	4-4460	.123	58.7	2.7	-3.1	.689	91.5	.247	1.280	184.7	401.2	.964	1.595D	97.6	1.092	2.4	7.5	342.4	.189	
		10.94	7.44	4.80	3.50	6.90	2.63	12.43	2/1/2	80.4	33.6	29.2	.487	3.964	4.4	129.2	-4.3	103.3D	1.442	
4-3670	4-4004.5	.241	316.2	-2.7	3.7	.678	101.5	.311	.791	208.3	453.4	.545	1.036D	107.5	1.219	-1.2	-3.6	206.0	.372	
4-4004.5	4-4170	.372	234.0	.4	.1	1.368	75.9	.425	1.135	49.1	168.4	.653D	1.618A	98.3	.612	1.9	29.2	112.7	.170	
4-4170	4-4470	.115	64.5	6.3	-2.6	.684	90.4	.255	1.270	181.1	407.2	.946	1.594D	99.0	1.091	2.0	6.0	347.8	.207	
		11.40	7.82	5.33	3.57	6.98	2.49	12.67	2/1/2	81.3	27.6	26.4	.434	4.385	9.3	130.7	-9.1	101.5D	1.470	
4-3680	4-4007.0	.281	319.5	-2.9	4.0	.668	104.5	.332	.802	214.4	453.3	.536	1.069D	108.7	1.227	-1.9	-5.6	212.0	.399	
4-4007.0	4-4170	.399	234.5	.3	.1	1.365	74.4	.435	1.126	53.9	169.1	.637D	1.616A	98.1	.606	1.9	29.1	111.3	.175	
4-4170	4-4480	.109	72.3	9.3	-2.2	.680	89.0	.265	1.260	177.3	413.0	.926	1.594	100.4	1.090	1.7	6.0	353.3	.227	
		12.09	8.40	6.02	3.66	7.08	2.36	12.97	2/1/2	82.5	22.7	23.2	.377	4.986	15.1	132.5	-14.8	99.0D	1.494	
4-3690	4-4010.0	.326	324.5	-2.4	4.2	.901	107.6	.359	.818	219.7	453.3	.524	1.111D	110.1	1.237	-2.7	-7.2	216.6	.433	
4-4010.0	4-4170	.433	235.3	.3	.1	1.362	72.3	.447	1.115	59.6	170.0	.616D	1.613A	97.9	.599	1.9	29.0	109.6	.181	
4-4170	4-4490	.105	82.4	11.9	-1.8	.675	87.4	.278	1.250	173.3	418.7	.902	1.598	101.7	1.089	1.6	6.9	359.1	.249	
		13.03	9.20	6.87	3.83	7.23	2.33	13.34	2/1/2	83.9	18.4	20.1	.320	5.730	22.1	134.6	-21.8	96.2D	1.515	

MARS ARRIVAL DATE = 2444180 (2 NOV 1979)

4-3640	4-4001.8	.170	325.9	4.4	3.3	.654	91.6	.282	.770	184.1	455.3	.553	.988D	106.1	1.205	.7	2.4	202.8	.338	
4-4001.8	4-4180	.338	235.0	-.4	-.1	1.370	77.8	.414	1.144	42.8	171.1	.671D	1.616A	96.2	.611	2.0	30.2	110.9	.161	
4-4180	4-4440	.174	55.6	-13.5	-7.8	.695	95.2	.243	1.308	196.8	389.4	.991	1.626D	95.6	1.098	6.9	29.7	323.6	.200	
		11.35	7.96	4.28	3.39	6.79	3.08	12.57	2/1/2	87.7	55.9	32.3	.527	3.597	5.0	128.8	4.9	103.9D	1.367	
4-3650	4-4001.9	.181	319.0	1.1	3.4	.661	95.0	.284	.775	193.0	454.3	.554	.995D	106.2	1.208	.1	.3	203.6	.340	
4-4001.9	4-4180	.340	235.0	-.4	-.1	1.370	77.7	.414	1.144	43.2	171.1	.670D	1.616A	96.2	.611	2.0	30.2	110.8	.161	
4-4180	4-4450	.149	54.9	-3.5	-4.8	.691	94.3	.247	1.298	193.5	395.7	.978	1.619D	96.6	1.096	4.0	15.3	334.4	.186	
		10.96	7.56	4.43	3.39	6.80	3.13	12.39	2/1/2	87.8	42.5	31.4	.521	3.696	1.2	129.3	1.2	104.2D	1.405	
4-3660	4-4003.2	.205	316.3	-1.2	3.5	.667	98.2	.294	.781	200.7	453.9	.551	1.010D	106.7	1.212	-.5	-1.8	205.8	.352	
4-4003.2	4-4180	.352	235.0	-.3	-.1	1.369	77.0	.418	1.140	45.5	171.4	.664D	1.617A	96.1	.608	2.0	30.1	110.2	.163	
4-4180	4-4460	.136	57.7	2.2	-3.5	.686	93.3	.252	1.287	189.9	401.6	.962	1.612D	98.0	1.094	2.9	9.4	341.1	.196	
		11.08	7.64	4.77	3.44	6.84	2.87	12.52	2/1/2	88.3	34.1	29.3	.486	3.959	3.0	130.4	-2.8	103.2D	1.437	
4-3670	4-4005.2	.238	317.1	-2.4	3.7	.676	101.2	.310	.789	207.5	453.8	.544	1.033D	107.5	1.218	-1.2	-3.7	209.0	.372	
4-4005.2	4-4180	.372	235.2	-.3	-.1	1.367	75.9	.425	1.134	49.1	171.9	.653D	1.616A	95.9	.605	2.0	30.0	109.3	.167	
4-4180	4-4470	.126	62.6	6.0	-2.8	.681	92.1	.260	1.276	186.0	407.4	.945	1.607D	99.2	1.093	2.3	7.2	347.0	.211	
		11.48	7.96	5.28	3.51	6.92	2.68	12.74	2/1/2	89.0	27.9	26.4	.435	4.371	7.8	131.8	-7.5	101.4D	1.466	

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 600 DAYS; MARS ARRIVAL DATE = 2444180 = 2 NOV 1979

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN 1 / ECCEN 3 / ECCEN 5 EVR	SMA 1 / SMA 3 / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH 1 / PERIH 3 / PERIH KAPPA	APHEL 1 / APHEL 3 / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-3680	4-4007.8	.277	320.2	-2.7	3.9	.686	104.2	.331	.800	213.6	453.7	.535	1.064D	108.7	1.225	-1.9	-5.5	213.0	.399
4-4007.8	4-4180	.399	255.7	-.5	-.1	1.365	74.4	.434	1.126	53.8	172.5	.637D	1.615A	95.7	.599	2.0	29.9	108.1	.172
4-4180	4-4480	.117	69.5	9.1	-2.3	.676	90.7	.269	1.265	182.0	413.0	.925	1.603D	100.5	1.091	1.9	6.9	352.9	.230
		12.11	8.48	5.95	3.62	7.03	2.53	13.02	2/1/2	90.1	25.0	23.3	.379	4.942	13.4	133.7	-13.1	99.1D	1.492
4-3690	4-4010.8	.321	324.9	-2.2	4.2	.698	107.3	.357	.814	219.0	453.7	.524	1.105D	110.0	1.235	-2.6	-7.1	217.6	.432
4-4010.8	4-4180	.432	236.6	-.2	-.1	1.362	72.6	.446	1.115	59.3	173.5	.617D	1.613A	95.3	.592	2.0	29.6	106.6	.179
4-4180	4-4490	.111	78.6	11.9	-1.9	.670	89.2	.280	1.253	177.9	418.5	.902	1.605	101.8	1.090	1.7	7.6	356.9	.251
		12.96	9.21	6.79	3.78	7.17	2.42	13.56	2/1/2	91.3	18.8	20.2	.323	5.697	20.2	135.8	-19.6	96.3D	1.516
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																			
4-3640	4-4002.9	.171	328.1	5.2	3.4	.853	91.2	.284	.769	182.9	455.9	.550	.987D	106.2	1.204	.7	2.3	204.3	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	43.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4440	.222	60.5	-21.2	-12.5	.695	97.2	.253	1.322	202.4	390.5	.988	1.655D	96.0	1.101	11.4	41.0	312.0	.263
		12.47	9.09	4.29	3.39	6.79	4.79	13.58	2/1/2	95.0	63.0	32.5	.518	3.600	6.4	130.2	6.4	103.8D	1.547
4-3650	4-4002.9	.160	320.6	1.8	3.4	.859	94.7	.285	.773	191.9	454.8	.553	.994D	106.2	1.207	.1	.3	204.9	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.144	43.3	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4450	.169	55.9	-5.6	-6.0	.690	96.2	.255	1.309	198.9	396.4	.975	1.644D	97.2	1.099	5.3	20.2	330.9	.202
		11.36	7.97	4.41	3.39	6.79	3.55	12.61	2/1/2	95.0	44.6	31.5	.517	3.683	2.8	130.6	2.8	104.0D	1.387
4-3660	4-4004.1	.203	317.6	-.7	3.5	.866	97.8	.294	.779	199.7	454.3	.550	1.008D	106.7	1.211	-.5	-1.7	206.9	.352
4-4004.1	4-4190	.352	236.4	-1.1	-.3	1.369	77.0	.419	1.141	45.4	174.7	.664D	1.619A	93.8	.603	2.1	30.9	107.4	.163
4-4190	4-4460	.151	57.6	1.4	-4.1	.684	95.2	.260	1.297	195.1	402.2	.960	1.634D	98.3	1.097	3.5	11.8	339.4	.205
		11.34	7.91	4.74	3.43	6.84	3.17	12.65	2/1/2	95.4	34.9	29.5	.484	3.934	1.9	131.6	-1.2	103.1D	1.421
4-3670	4-4006.1	.235	318.1	-2.0	3.7	.874	100.9	.310	.787	206.6	454.2	.543	1.030D	107.5	1.216	-1.2	-3.7	210.1	.372
4-4006.1	4-4190	.372	236.6	-1.0	-.3	1.368	75.9	.425	1.136	46.9	175.1	.653D	1.618A	93.6	.599	2.1	30.7	106.6	.167
4-4190	4-4470	.136	61.5	5.8	-3.1	.679	93.9	.266	1.284	191.0	407.7	.943	1.625D	99.5	1.095	2.7	8.6	346.1	.218
		11.86	8.15	5.23	3.51	6.91	2.92	12.84	2/1/2	96.1	28.3	26.7	.436	4.334	6.3	133.1	-5.8	101.4D	1.452
4-3680	4-4008.6	.274	321.0	-2.4	3.9	.883	103.9	.330	.797	212.7	454.1	.534	1.060D	108.6	1.224	-1.9	-5.5	214.0	.398
4-4008.6	4-4190	.398	237.2	-.9	-.3	1.366	74.5	.434	1.128	53.5	175.7	.636D	1.616A	93.3	.594	2.1	30.4	105.5	.172
4-4190	4-4480	.127	67.5	9.1	-2.5	.673	92.6	.274	1.271	186.8	413.1	.923	1.618D	100.6	1.093	2.2	7.8	352.4	.234
		12.23	8.60	5.89	3.62	7.02	2.72	13.09	2/1/2	96.9	23.3	23.6	.380	4.691	11.7	135.0	-11.2	99.2D	1.480
4-3690	4-4011.8	.317	325.5	-2.0	4.1	.895	107.0	.355	.811	218.2	454.1	.523	1.100D	110.0	1.233	-2.6	-7.0	218.6	.430
4-4011.8	4-4190	.430	238.1	-.8	-.3	1.363	72.8	.446	1.118	58.9	176.3	.619D	1.617A	93.0	.587	2.0	30.1	104.3	.179
4-4190	4-4490	.119	75.5	11.9	-2.0	.667	91.0	.283	1.258	182.5	418.5	.901	1.615D	101.9	1.092	1.9	6.5	356.6	.254
		13.04	9.26	6.70	3.78	7.18	2.56	13.41	2/1/2	98.0	19.1	20.5	.325	5.630	18.2	137.1	-17.7	96.5D	1.505
MARS ARRIVAL DATE = 2444200 (22 NOV 1979)																			
4-3650	4-4003.9	.179	322.4	2.5	3.4	.857	94.3	.286	.772	190.9	455.3	.551	.992D	106.3	1.206	.1	.3	206.2	.343
4-4003.9	4-4200	.343	237.9	-2.1	-.5	1.371	77.6	.416	1.147	43.4	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4450	.195	58.2	-9.5	-6.1	.691	98.2	.266	1.324	204.4	397.3	.972	1.676D	97.6	1.103	7.5	27.0	325.6	.230
		11.99	8.56	4.40	3.43	6.83	4.16	13.03	2/1/2	101.5	46.6	31.8	.512	3.656	4.5	132.1	4.4	103.6D	1.561
4-3660	4-4005.0	.201	319.0	-.2	3.5	.864	97.5	.294	.777	198.8	454.8	.548	1.006D	106.7	1.210	-.5	-1.7	208.2	.353
4-4005.0	4-4200	.353	237.9	-2.0	-.5	1.370	77.0	.420	1.144	45.5	177.7	.664D	1.624A	91.6	.599	2.3	31.5	105.3	.165
4-4200	4-4460	.168	56.2	.3	-4.8	.684	97.1	.269	1.309	200.4	402.8	.957	1.660D	98.7	1.100	4.4	14.7	337.3	.217
		11.72	8.25	4.71	3.47	6.87	3.54	12.83	2/1/2	101.8	36.1	29.8	.483	3.893	2.0	133.1	.5	103.1D	1.397
4-3670	4-4006.9	.232	319.1	-1.8	3.6	.872	100.5	.309	.784	205.7	454.6	.542	1.027D	107.5	1.215	-1.2	-3.7	211.2	.371
4-4006.9	4-4200	.371	238.2	-1.8	-.5	1.369	76.0	.426	1.139	48.7	178.1	.654D	1.624A	91.4	.595	2.2	31.2	104.7	.166
4-4200	4-4470	.153	61.2	5.5	-3.5	.678	95.9	.273	1.293	196.1	408.2	.940	1.647D	99.8	1.098	3.1	10.1	345.0	.226
		11.94	8.39	5.18	3.55	6.95	3.21	12.96	2/1/2	102.3	28.8	27.0	.436	4.278	4.9	134.5	-4.0	101.5D	1.429
4-3680	4-4009.4	.270	321.8	-2.1	3.8	.881	103.5	.329	.794	211.8	454.5	.535	1.056D	108.6	1.222	-1.9	-5.4	215.1	.397
4-4009.4	4-4200	.397	238.8	-1.6	-.5	1.367	74.6	.435	1.131	53.1	176.5	.639D	1.624A	91.1	.591	2.2	30.8	103.8	.174
4-4200	4-4480	.140	66.3	9.1	-2.7	.671	94.5	.280	1.279	191.7	413.4	.921	1.636D	100.9	1.095	2.5	8.7	351.7	.240
		12.43	8.77	5.82	3.66	7.06	2.95	13.19	2/1/2	103.1	23.6	24.0	.382	4.819	10.0	136.4	-9.3	99.3D	1.458
4-3690	4-4012.4	.312	326.2	-1.6	4.0	.892	106.6	.354	.808	217.3	454.5	.522	1.094D	109.9	1.231	-2.6	-6.9	219.7	.428
4-4012.4	4-4200	.428	239.6	-1.4	-.4	1.365	72.9	.447	1.122	56.3	179.1	.620D	1.623A	90.7	.584	2.1	30.4	102.6	.181
4-4200	4-4490	.129	73.3	11.9	-2.1	.665	92.9	.286	1.264	187.2	418.5	.900	1.628D	102.1	1.093	2.1	8.9	358.2	.258
		13.17	9.36	6.61	3.82	7.22	2.74	13.48	2/1/2	103.9	19.3	20.6	.327	5.536	16.1	138.6	-15.5	96.7D	1.486
MARS ARRIVAL DATE = 2444210 (2 DEC 1979)																			
4-3650	4-4005.0	.178	324.4	3.2	3.4	.856	93.9	.287	.770	189.7	455.8	.549	.991D	106.4	1.205	.1	.3	207.6	.344
4-4005.0	4-4210	.344	239.5	-3.0	-.8	1.372	77.6	.418	1.150	43.3	180.4	.669D	1.632	89.7	.597	2.4	32.1	104.4	.166
4-4210	4-4450	.241	62.9	-16.4	-12.4	.694	100.4	.279	1.341	209.9	398.3	.988	1.715D	98.1	1.107	11.8	36.0	315.8	.291
		13.16	9.66	4.38	3.50	6.90	5.27	14.06	2/1/2	107.2	56.1	32.1	.507	3.618	6.2	135.7	6.1	103.7D	1.328
4-3660	4-4006.0	.199	320.4	.4	3.5	.862	97.1	.295	.775	197.7	455.3	.547	1.003D	106.8	1.209	-.5	-1.7	209.4	.354
4-4006.0	4-4210	.354	239.6	-2.9	-.6	1.371	77.1	.421	1.148	45.1	180.6	.664D	1.632	89.6	.596	2.4	31.9	104.1	.166
4-4210	4-4460	.169	59.5	-1.6	-6.0	.686	99.2	.280	1.323	205.7	403.6	.953	1.694D	99.1	1.104	5.6	16.6	334.4	.234
		12.23	8.69	4.67	3.54	6.94	4.01	13.09	2/1/2	107.4	36.2	30.2	.481	3.840	3.3	134.6	2.2	103.1D	1.366
4-3670	4-4007.8	.229	320.2	-1.2	3.6	.870	100.2	.309	.782	204.7	455.0	.541	1.024D	107.5	1.214	-1.2	-3.6	212.4	.371
4-4007.8	4-4210	.371	239.9	-2.6	-.7	1.370	76.1	.427	1.143	48.3	180.8	.659D	1.632	89.4	.593	2.4	31.6	103.5	.172
4-4210	4-4470	.169	61.6	5.0	-4.0	.679	97.9	.283	1.306	201.2	406.7	.936	1.675D	100.2	1.101	3.7	11.9	343.6	.236
		12.31	8.70	5.13	3.62	7.02	3.56	13.13	2/1/2	107.8	29.5	27.5	.436	4.210	3.9	136.0	-2.2	101.6D	1.400
4-3680	4-4010.8	.266	322.7	-1.8	3.8	.879	103.2	.328	.792	210.8	455.0	.532	1.051D	108.6	1.220	-1.8	-5.3	216.2	.396
4-4010.8	4-4210	.396	240.5	-2.3	-.7	1.366	74.7	.436	1.136	52.6	181.2	.641D	1.632	89.1	.588	2.3	31.1	102.8	.177
4-4210	4-4480	.154	65.8	9.0	-3.0	.671	96.5	.288	1.288	196.6	413.7	.918	1.659D	101.2	1.098	2.9	9.7	351.0	.248
		12.72	8.99	5.75	3.73	7.13	3.24	13.32	2/1/2	108.4	23.9	24.4	.384	4.731	8.3	137.9	-7.3	99.3D	1.431
MARS ARRIVAL DATE = 2444220 (12 DEC 1979)																			
4-3660	4-4007.0	.197	322.0	1.1	3.5	.880	98.7	.295	.773	196.6	455.8	.545	1.001D	106.8	1.207	-.5	-1.7	210.8	.354
4-4007.0	4-4220	.354	241.4	-3.9	-1.0	1.373	77.1	.423	1.153	44.8	183.2	.665D	1.641	87.7	.594	2.6	32.4	103.6	.172
4-4220	4-4460	.216	61.9	-4.8	-6.0	.690	101.4	.295	1.342	210.9	404.4	.948	1.736D	99.6	1.109	7.7	24.2	330.1	.262
		12.93	9.30	4.64	3.63	7.03	4.65	13.54	2/1/2	112.3	41.9	30.7	.479	3.778	5.0	136.3	4.1	103.2D	1.330
4-3670	4-4008.8	.226	321.5	-.7	3.6	.867	99.8	.308	.780	203.7	455.5	.539	1.020D	107.5	1.212	-1.2	-3.6	213.7	.371
4-4008.8	4-4220	.371	241.7	-3.5	-1.0	1.372	76.1	.429	1.148	47.8	183.4	.656D	1.641	87.4	.592	2.5	31.9	103.2	.176
4-4220	4-4470	.188	62.6	4.2	-4.7	.681	100.1	.294	1.321	206.5	409.3	.932	1.710D	100.8	1.105	4.5	14.2	341.9	.250
		12.78	9.07	5.08	3.71	7.11	3.99	13.35	2/1/2	112.7	30.7	28.0	.436	4.131	5.6	137.7	-.2	101.6D	1.387
4-3680	4-4011.8	.286	325.7	-1.5	3.7	.876	102.6	.327	.789	209.9	455.4	.531	1.047D	108.6	1.219	-1.8	-5.3	217.4	.395
4-4011.8	4-4220	.395	242.4	-3.0	-.9	1.370	74.8	.438	1.142	52.0	183.7	.642D	1.642	87.1	.587	2.4	31.4	102.6	.181
4-4220	4-4480	.170	66.0	8.9	-3.3	.672	98.6	.297	1.301	201.6	414.1	.914	1.680D	101.6	1.101	3.3	10.9	350.1	.256
		13.09	9.27	5.68	3.82	7.22	3.59	13.48	2/1/2	113.1	24.4	24.9	.385	4.632	8.7	139.5	-5.2	99.7D	1.399

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS; MARS ARRIVAL DATE = 2444110 (24 AUG 1979)

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2444110 (24 AUG 1979)																				
4-3820	4-3997.4	.182	332.9	5.8	3.3	.851	86.4	.289	.772	171.1	455.6	.549	.996	106.5	1.206	1.8	8.2	195.7	.347
4-3997.4	4-4110	.347	235.0	4.2	1.1	1.405	78.7	.469	1.288	35.9	136.3	.684D	1.892A	116.1	.735	1.4	21.3	133.5	.269
4-4110	4-4460	.095	79.0	8.2	-2.0	.724	83.0	.237	1.262	156.1	402.5	.963	1.561	97.8	1.067	.7	-1.8	345.3	.181
		13.10	6.61	4.44	6.49	9.87	2.16	12.32	2/1/2	31.3	30.3	39.1	.498	2.988	6.2	125.1	2.9	107.1D	.990
4-3830	4-3995.1	.163	321.3	2.7	3.2	.858	90.8	.274	.776	182.2	452.9	.563	.989D	105.5	1.208	1.3	4.5	193.5	.326
4-3995.1	4-4110	.326	236.0	4.6	1.1	1.406	80.1	.464	1.295	31.5	135.6	.694D	1.896A	115.9	.738	1.4	21.0	134.0	.267
4-4110	4-4470	.102	87.0	10.5	-1.9	.721	81.6	.252	1.257	153.7	409.7	.940	1.573	99.4	1.087	.7	-1.1	348.9	.207
		12.88	6.46	4.20	6.42	9.80	2.27	12.68	2/1/2	30.7	24.2	42.4	.565	2.766	4.9	124.8	-.1	110.4D	.997
4-3840	4-3994.9	.170	313.1	-.4	3.2	.864	94.2	.274	.780	191.4	451.8	.567	.994D	105.4	1.211	.7	2.5	193.8	.324
4-3994.9	4-4110	.324	236.2	4.6	1.1	1.406	80.3	.464	1.296	31.1	135.6	.695D	1.897A	115.9	.738	1.4	21.0	134.1	.266
4-4110	4-4460	.112	95.4	12.6	-1.8	.719	80.3	.271	1.251	151.2	416.9	.912	1.590	101.2	1.087	.6	.2	353.2	.237
		13.14	6.73	4.28	6.41	9.79	2.45	13.14	2/1/2	30.7	19.0	42.3	.571	2.770	4.8	125.1	-2.9	111.1D	1.011
MARS ARRIVAL DATE = 2444120 (3 SEP 1979)																				
4-3820	4-3999.1	.189	335.8	6.6	3.4	.849	85.6	.295	.770	169.4	456.6	.543	.998	106.9	1.205	1.9	6.1	197.9	.355
4-3999.1	4-4120	.355	233.1	3.5	.9	1.391	77.7	.451	1.227	40.5	143.5	.674D	1.781A	112.8	.700	1.5	22.5	131.3	.252
4-4120	4-4460	.094	74.9	6.9	-2.1	.716	84.2	.236	1.263	160.5	401.7	.965	1.561	97.6	1.067	.9	-.3	345.4	.179
		12.22	6.66	4.54	5.54	8.92	2.14	12.29	2/1/2	38.8	31.1	35.1	.476	3.317	6.6	125.2	4.3	104.4D	1.104
4-3830	4-3996.5	.165	324.1	3.6	3.2	.856	90.3	.277	.774	180.7	453.7	.560	.989D	105.7	1.207	1.3	4.4	195.4	.330
4-3996.5	4-4120	.330	233.9	3.9	.9	1.393	79.3	.445	1.237	35.5	142.5	.686D	1.787A	112.7	.704	1.4	22.2	132.2	.249
4-4120	4-4470	.098	83.3	9.5	-1.9	.714	83.0	.250	1.257	157.9	408.7	.943	1.571	99.2	1.087	.8	.1	349.1	.204
		11.89	6.42	4.22	5.47	8.85	2.20	12.63	2/1/2	37.9	25.0	38.4	.552	3.038	4.5	124.6	.9	106.0D	1.124
4-3840	4-3996.1	.169	315.3	.4	3.2	.862	93.8	.275	.778	190.1	452.4	.565	.992D	105.5	1.210	.7	2.5	195.4	.326
4-3996.1	4-4120	.326	234.1	3.9	.9	1.393	79.5	.444	1.238	34.7	142.4	.688D	1.788A	112.7	.705	1.4	22.1	132.3	.249
4-4120	4-4480	.105	92.5	11.8	-1.8	.711	81.6	.267	1.251	155.2	415.7	.917	1.565	100.8	1.087	.8	1.2	353.5	.232
		12.06	6.60	4.27	5.46	8.84	2.33	13.05	2/1/2	37.8	19.9	38.6	.564	3.023	4.1	124.9	-2.2	108.9D	1.142
4-3850	4-3997.0	.189	310.9	-2.0	3.4	.869	96.9	.282	.784	198.3	451.8	.563	1.005D	105.9	1.214	.1	.3	197.0	.334
4-3997.0	4-4120	.334	233.7	3.8	.9	1.393	79.0	.446	1.235	36.4	142.7	.684D	1.786A	112.7	.704	1.5	22.2	132.0	.250
4-4120	4-4490	.118	101.8	13.6	-1.7	.708	79.8	.288	1.245	152.3	422.6	.886	1.604	102.7	1.088	.8	2.8	356.4	.264
		12.56	7.08	4.54	5.48	8.86	2.55	13.59	2/1/2	38.0	15.3	36.8	.538	3.167	5.9	125.6	-5.5	108.2D	1.165
MARS ARRIVAL DATE = 2444130 (13 SEP 1979)																				
4-3820	4-4000.6	.196	330.2	7.3	3.5	.848	84.9	.301	.769	167.9	457.5	.537	1.000	107.3	1.204	1.9	6.0	199.9	.363
4-4000.6	4-4130	.363	232.2	2.8	.8	1.381	76.9	.440	1.188	44.1	149.8	.665D	1.711A	109.7	.672	1.6	23.9	128.3	.223
4-4130	4-4460	.095	70.7	5.8	-2.2	.709	85.5	.236	1.264	165.1	401.2	.966	1.562	97.5	1.088	1.1	1.1	345.3	.178
		11.61	6.79	4.64	4.82	8.21	2.16	12.29	2/1/2	46.9	31.7	32.4	.457	3.589	7.4	125.6	5.7	102.4D	1.183
4-3830	4-3997.7	.167	326.3	4.4	3.3	.854	89.8	.279	.773	179.5	454.3	.557	.989	105.9	1.206	1.3	4.4	196.9	.334
4-3997.7	4-4130	.334	232.7	3.2	.8	1.384	78.6	.432	1.199	38.4	148.8	.680D	1.717A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4470	.096	79.1	8.6	-2.0	.706	84.3	.248	1.258	162.3	408.0	.945	1.570	99.0	1.088	1.0	1.3	349.2	.202
		11.16	6.42	4.25	4.74	8.13	2.18	12.60	2/1/2	45.7	25.8	35.8	.540	3.253	4.4	124.7	2.0	106.3D	1.218
4-3840	4-3997.1	.169	317.1	1.1	3.3	.861	93.4	.276	.777	189.1	452.9	.563	.991D	105.6	1.209	.7	2.5	196.7	.328
4-3997.1	4-4130	.328	232.9	3.3	.8	1.384	79.0	.431	1.201	37.3	148.6	.683D	1.718A	109.6	.679	1.5	23.4	129.8	.220
4-4130	4-4480	.101	86.9	11.1	-1.8	.704	82.9	.264	1.251	159.4	414.7	.921	1.582	100.6	1.088	1.0	2.3	353.8	.228
		11.25	6.52	4.27	4.73	8.12	2.25	12.99	2/1/2	45.5	20.6	36.2	.556	3.222	3.3	124.9	-1.3	107.4D	1.240
4-3850	4-3997.9	.187	312.2	-1.5	3.4	.867	96.6	.282	.782	197.4	452.3	.561	1.003D	105.9	1.213	.1	.3	198.2	.335
4-3997.9	4-4130	.335	232.7	3.2	.8	1.384	78.5	.433	1.198	36.8	148.9	.680D	1.716A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4490	.110	99.1	13.1	-1.7	.700	81.3	.284	1.245	156.3	421.4	.892	1.598	102.4	1.088	.9	3.7	358.8	.258
		11.66	6.92	4.51	4.74	8.13	2.41	13.48	2/1/2	45.8	16.1	34.6	.535	3.364	5.1	125.6	-4.8	106.8D	1.265
4-3860	4-3999.5	.216	311.2	-3.2	3.6	.875	99.6	.295	.789	204.7	452.0	.556	1.022D	106.6	1.217	-.6	-1.6	200.8	.351
4-3999.5	4-4130	.351	232.5	3.0	.8	1.383	77.6	.437	1.193	41.8	149.4	.671D	1.714A	109.6	.675	1.6	23.7	128.6	.222
4-4130	4-4500	.126	109.1	14.4	-1.5	.697	79.2	.308	1.238	153.4	428.1	.856	1.619	104.4	1.088	.9	5.5	4.1	.293
		12.41	7.62	4.93	4.79	8.18	2.68	14.10	2/1/2	46.4	12.0	31.9	.489	3.641	8.8	126.7	-8.8	105.3D	1.291
MARS ARRIVAL DATE = 2444140 (23 SEP 1979)																				
4-3820	4-4002.1	.204	340.4	8.0	3.6	.846	84.2	.307	.767	166.5	456.4	.532	1.003	107.6	1.203	1.9	6.0	201.7	.371
4-4002.1	4-4140	.371	232.0	2.2	.6	1.375	76.2	.434	1.162	47.1	155.5	.657D	1.667A	106.6	.650	1.7	25.4	124.5	.202
4-4140	4-4460	.098	66.7	4.8	-2.4	.703	86.9	.237	1.266	169.8	400.9	.966	1.566	97.5	1.088	1.4	2.6	344.9	.179
		11.27	6.96	4.75	4.31	7.70	2.21	12.29	2/1/2	55.6	32.3	30.4	.438	3.813	8.4	126.3	7.2	100.9D	1.231
4-3830	4-3998.8	.169	328.3	5.1	3.3	.853	89.4	.281	.772	178.4	454.9	.554	.989	106.0	1.206	1.3	4.4	198.3	.337
4-3998.8	4-4140	.337	232.3	2.5	.6	1.378	78.2	.424	1.174	40.6	154.3	.676D	1.672A	106.6	.657	1.6	25.0	126.2	.198
4-4140	4-4470	.097	74.6	7.8	-2.1	.700	85.7	.248	1.260	166.8	407.5	.947	1.572	98.9	1.088	1.2	2.5	349.1	.201
		10.68	6.47	4.27	4.21	7.61	2.19	12.59	2/1/2	54.1	26.3	34.0	.530	3.417	4.8	125.1	3.2	105.0D	1.281
4-3840	4-3998.0	.169	318.8	1.8	3.3	.859	93.1	.277	.776	188.1	453.4	.561	.990D	105.7	1.208	.7	2.4	197.9	.330
4-3998.0	4-4140	.330	232.5	2.6	.6	1.378	78.6	.423	1.176	39.2	154.1	.679D	1.674A	106.6	.658	1.6	24.9	126.5	.197
4-4140	4-4480	.099	84.6	10.5	-1.9	.697	84.4	.263	1.252	163.6	414.0	.923	1.581	100.4	1.088	1.1	3.2	353.8	.226
		10.66	6.49	4.27	4.19	7.59	2.22	12.96	2/1/2	53.8	21.3	34.5	.533	3.369	2.7	125.2	-.3	106.3D	1.309
4-3850	4-3998.7	.186	313.5	-1.0	3.4	.866	96.3	.282	.781	196.5	452.7	.560	1.001D	106.0	1.212	.1	.3	199.2	.336
4-3998.7	4-4140	.336	232.3	2.5	.6	1.378	78.2	.424	1.174	40.4	154.3	.676D	1.673A	106.6	.657	1.6	25.0	126.2	.198
4-4140	4-4490	.105	95.5	12.7	-1.7	.693	82.7	.280	1.245	160.4	420.4	.896	1.594	102.1	1.088	1.1	4.6	359.0	.253
		11.03	6.81	4.49	4.21	7.61	2.32	13.41	2/1/2	54.1	16.8	33.1	.533	3.506	4.1	125.9	-3.9	105.9D	1.335
4-3860	4-4000.2	.214	312.2	-2.8	3.6	.874	99.3	.295	.787	204.0	452.4	.555	1.019D	106.6	1.216	-.5	-1.8	201.8	.351
4-4000.2	4-4140	.351	232.1	2.4	.6	1.377	77.4	.428	1.169	43.4	154.8	.668D	1.670A	106.6	.654	1.6	25.2	125.5	.200
4-4140	4-4500	.117	106.6	14.2	-1.5	.690	80.8	.303	1.237	157.2	426.9	.863	1.612	104.0	1.088	1.1	6.3	4.5	.286
		11.67	7.42	4.90	4.25	7.65	2.52	13.97	2/1/2	54.7	12.8	30.6	.488	3.788	8.0	127.0	-8.0	104.5D	1.362
4-3870	4-4002.4	.250	313.9	-3.8	3.8	.883	102.3	.313	.797	210.8	452.3	.547	1.046D	107.8	1.223	-1.2	-3.9	205.1	.373
4-4002.4	4-4140	.373	232.0	2.2	.6	1.375	76.1	.435	1.161	47.6	155.5	.656D	1.667A	106.6	.650	1.7	25.4	124.5	.203
4-4140	4-4510	.136	116.8	15.0	-1.3	.686	78.4	.330	1.230	154.0	433.6	.824	1.636	106.2	1.088	1.1	8.2	10.2	.323
		12.66	8.34	5.47	4.32	7.71	2.87	14.68	2/1/2	55.7	9.0	27.5	.432	4.210	12.9	128.4	-12.8	102.3D	1.386
MARS ARRIVAL DATE = 2444150 (3 OCT 1979)																				
4-3820	4-4003.7	.212	342.7	8.6	3.7	.845	83.4	.314	.766	165.0	459.4	.526	1.006	108.1	1.202	2.0	5.9	203.7	.380
4-4003.7	4-4150	.380	232.4	1.5	.4	1.370	75.6	.432	1.145	49.7	160.5	.650D	1.639A	103.7	.633	1.7	26.9	120.2	.187
4-4150	4-4460	.104	63.2	4.0	-2.6	.697	88.3	.239	1.270	174.7	400.8	.966	1.573	97.5	1.089	1.7	4.1	344.3	.181
		11.16	7.18	4.88	3.97	7.37	2.31	12.32	2/1/2	64.7	32.7	28.9	.417	4.002	9.6	127.5	8.8	99.5D	1.253
4-3830	4-3999.8	.171	330.3	5.8	3.3	.852	88.9	.284	.770	177.3	455.5	.552	.989	106.2	1.205	1.3	4.3	199.6	.340
4-3999.8	4-4150	.340	232.4	1.8	.5	1.374	77.8	.420	1.158	42.3	159.3	.672D	1.645A	103.8	.640	1.7	26.5	122.2	.182
4-4150	4-4470	.101	70.7	7.1	-2.2	.694	87.2	.249	1.262	171.5	407.2	.947	1.577	98.9	1.089	1.5	3.6	348.8	.201
		10.40	6.55	4.31	3.85	7.25	2.25	12.60	2/1/2	62.9	26.8	32.8	.519	3.538	5.5	125.8	4.4	104.0D	1.318
4-3840	4-3998.9	.168	320.4	2.4	3.3	.858	92.7	.278	.774	187.2	453.8	.559	.990D	105.8	1.207	.7	2.4	199.0	.332
4-3998.9	4-4150	.332	232.5	1.9	.5	1.374	78.3	.417	1.161	40.6	159.0	.676D	1.646A	103.8	.642	1.7	26.4	122.7	.181
4-4150	4-4480	.100	80.2	10.0	-2.0	.690	85.8	.262	1.254	168.1	413.4	.925	1.583	100.3	1.088	1.3	4.2	353.8	.225
		10.32	6.50	4.27	3.82	7.22	2.23	12.94	2/1/2	62.5	21.8	33.5	.547	3.472	2.4	125.8	.9	105.5D	1.352
4-3850	4-3999.4	.185	314.7	-.5	3.4	.865	96.0	.283	.779	195.7	453.1	.559	1.000D	106.0	1.211	.1	.3	200.5	.337
4-3999.4	4-4150	.337	232.5	1.9	.5	1.374	78.0	.419	1.159	41.6	159.1	.674D	1.645A	103.8	.641	1.7	26.5	122.4	.182
4-4150	4-4490	.102	91.3	12.4	-1.7	.686	84.2	.278	1.246	164.6	419.6	.899	1.593	101.9	1.088	1.2	5.4	359.1	.251
		10.59	6.75	4.46	3.84	7.24	2.26	13.36	2/1/2	62.7	17.4	32.2	.530	3.603	3.0	126.4	-2.8	105.2D	1.360
4-3860	4-4000.9	.212	313.1	-2.4	3.5	.872	99.0	.293	.788	203.2	452.8	.554	1.017D	106.8	1.215	-.5	-1.8	202.7	.351
4-4000.9	4-4150	.351	232.3	1.7	.5	1.373	77.2	.423	1.155	44.4	159.6	.666D	1.643A	103.7	.636	1.7	26.8	121.7	.183
4-4150	4-4500	.110	103.2	14.0	-1.5	.682	82.3	.298	1.238	161.1	425.9	.868	1.607	103.6	1.088	1.2	7.0	4.8	.280
		11.16	7.26	4.87	3.86	7.26	2.41	13.87	2/1/2	63.3	13.5	29.8	.488	3.886	6.9	127.5	-6.9	103.9D	1.408

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2444150 | 3 OCT 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SHA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SHA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3670	4-4003.0	.247	314.6	-3.3	3.8	.881	102.0	.312	.795	209.9	452.6	.547	1.043D	107.5	1.221	-1.2	-3.8	206.1	.373
4-4003.0	4-4150	.373	232.3	1.6	.4	1.371	76.0	.430	1.147	48.4	160.3	.654D	1.640A	103.7	.634	1.7	26.8	120.6	.166
4-4150	4-4510	.125	114.7	14.9	-1.3	.679	80.1	.323	1.229	157.7	432.3	.832	1.627	105.7	1.086	1.2	8.9	10.6	.315
		12.05	6.10	5.42	3.95	7.35	2.67	14.52	2/1/2	64.4	9.8	26.6	.433	4.313	11.9	129.0	-11.8	101.9D	1.433
MARS ARRIVAL DATE = 2444160 (13 OCT 1979)																			
4-3820	4-4005.5	.223	345.3	9.3	3.8	.843	82.4	.323	.784	163.3	460.5	.518	1.011	108.6	1.201	2.0	5.9	206.0	.391
4-4005.5	4-4160	.391	233.2	.9	.3	1.367	74.9	.433	1.133	52.2	165.1	.642D	1.623A	100.8	.618	1.8	28.1	115.6	.179
4-4160	4-4460	.113	60.5	3.3	-2.8	.692	89.9	.242	1.274	179.6	400.9	.966	1.583	97.6	1.091	2.0	5.7	343.5	.184
		11.27	7.49	5.04	3.76	7.16	2.45	12.36	2/1/2	73.9	33.2	27.7	.393	4.160	11.0	129.0	10.4	98.1D	1.251
4-3830	4-4000.9	.174	332.4	6.5	3.4	.851	88.4	.287	.769	176.1	456.1	.549	.990	106.4	1.204	1.3	4.3	201.1	.344
4-4000.9	4-4160	.344	233.0	1.1	.3	1.371	77.5	.418	1.148	43.6	163.7	.669D	1.628A	101.1	.627	1.8	27.9	116.0	.172
4-4160	4-4470	.107	67.2	8.6	-2.4	.639	88.7	.252	1.265	176.2	407.1	.947	1.584	98.9	1.090	1.7	4.8	346.4	.203
		10.31	6.69	4.34	3.62	7.02	2.35	12.63	2/1/2	71.7	27.2	32.0	.508	3.625	6.4	126.7	5.7	103.2D	1.334
4-3840	4-3999.8	.169	322.1	5.0	3.3	.857	92.4	.279	.773	186.2	454.5	.557	.989D	105.9	1.207	.7	2.4	200.2	.333
4-3999.8	4-4160	.333	233.0	1.2	.3	1.372	78.1	.415	1.152	41.6	163.4	.674D	1.629A	101.1	.629	1.8	27.9	116.6	.170
4-4160	4-4480	.103	76.0	9.6	-2.0	.684	87.4	.263	1.257	172.6	413.1	.926	1.587	100.3	1.089	1.5	5.1	353.6	.225
		10.14	6.56	4.27	3.59	6.99	2.29	12.95	2/1/2	71.2	22.3	32.6	.541	3.539	2.8	126.6	2.1	104.8D	1.373
4-3850	4-4000.2	.183	316.0	-.0	3.4	.863	95.7	.283	.778	194.6	453.5	.557	.998D	106.0	1.210	.1	.3	201.3	.338
4-4000.2	4-4160	.338	233.0	1.2	.3	1.371	77.9	.416	1.150	42.4	163.5	.672D	1.629A	101.1	.628	1.8	27.9	116.4	.171
4-4160	4-4490	.103	86.8	12.1	-1.6	.660	85.6	.276	1.247	168.9	419.1	.901	1.594	101.8	1.089	1.4	6.2	359.1	.249
		10.34	6.74	4.46	3.60	7.00	2.28	13.34	2/1/2	71.4	17.9	31.7	.528	3.662	1.7	127.2	-1.6	104.8D	1.404
4-3860	4-4001.6	.210	314.1	-2.0	3.5	.871	98.6	.294	.784	202.4	453.1	.553	1.015D	106.6	1.214	-.5	-1.8	203.7	.351
4-4001.6	4-4160	.351	232.9	1.1	.3	1.370	77.1	.420	1.146	45.0	163.9	.665D	1.627A	101.0	.626	1.8	28.0	117.7	.173
4-4160	4-4500	.107	99.1	14.0	-1.5	.676	83.9	.296	1.238	165.2	425.1	.872	1.605	103.4	1.088	1.3	7.7	4.9	.277
		10.83	7.19	4.84	3.64	7.04	2.35	13.81	2/1/2	72.0	14.1	29.4	.487	3.942	5.7	128.3	-5.7	103.6D	1.434
4-3870	4-4003.7	.244	315.4	-3.0	3.7	.879	101.8	.311	.793	209.1	453.0	.546	1.040D	107.5	1.220	-1.2	-3.8	207.0	.372
4-4003.7	4-4160	.372	233.0	1.0	.3	1.369	75.9	.427	1.139	48.9	164.8	.653D	1.625A	100.9	.622	1.8	28.1	116.5	.176
4-4160	4-4510	.117	111.7	15.0	-1.3	.672	81.8	.318	1.229	161.5	431.2	.838	1.621	105.3	1.086	1.3	9.6	10.9	.309
		11.62	7.91	5.38	3.71	7.11	2.53	14.39	2/1/2	73.0	10.5	26.5	.433	4.368	10.6	129.8	-10.5	101.6D	1.480
4-3880	4-4006.3	.264	318.8	-3.1	4.0	.890	104.8	.333	.805	215.1	452.9	.536	1.073D	108.7	1.228	-1.9	-5.7	211.0	.400
4-4006.3	4-4160	.400	233.4	.9	.3	1.366	74.5	.436	1.130	55.9	165.4	.637D	1.622A	100.8	.616	1.8	28.2	115.0	.181
4-4160	4-4520	.136	123.3	15.1	-1.1	.667	79.2	.347	1.221	158.0	437.5	.798	1.644	107.5	1.088	1.3	11.6	17.0	.346
		12.78	8.96	6.08	3.82	7.21	2.88	15.13	2/1/2	74.3	7.2	25.3	.375	4.953	16.8	131.5	-16.4	99.1D	1.483
MARS ARRIVAL DATE = 2444170 (23 OCT 1979)																			
4-3820	4-4007.7	.239	348.2	10.0	3.9	.841	81.1	.335	.782	161.3	462.0	.507	1.017	109.4	1.200	2.1	5.8	208.7	.406
4-4007.7	4-4170	.406	234.6	.3	.1	1.365	74.0	.437	1.124	55.1	169.3	.633D	1.615A	98.1	.605	1.9	29.1	110.9	.176
4-4170	4-4460	.123	58.7	2.7	-3.1	.689	91.5	.247	1.280	184.7	401.2	.964	1.595D	97.8	1.092	2.4	7.5	342.4	.189
		11.63	7.92	5.29	3.71	7.11	2.63	12.43	2/1/2	82.8	33.6	26.4	.364	4.372	12.5	131.0	12.1	96.7D	1.227
4-3830	4-4002.1	.178	334.6	7.2	3.4	.849	87.9	.290	.768	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348
4-4002.1	4-4170	.348	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.166
4-4170	4-4470	.115	64.5	6.3	-2.6	.684	90.4	.255	1.270	181.1	407.2	.946	1.594D	99.0	1.091	2.0	6.0	347.8	.207
		10.37	6.88	4.39	3.49	6.89	2.49	12.67	2/1/2	80.3	27.6	31.5	.495	3.689	7.5	127.9	7.1	102.5D	1.332
4-3840	4-4000.7	.189	325.9	3.7	3.3	.856	92.0	.281	.772	185.2	454.8	.555	.988D	106.0	1.206	.7	2.4	201.5	.336
4-4000.7	4-4170	.336	233.9	.4	.1	1.370	78.0	.413	1.147	42.3	167.4	.672D	1.621A	98.6	.619	1.9	29.2	114.5	.164
4-4170	4-4480	.109	72.3	9.3	-2.2	.680	89.0	.265	1.260	177.3	413.0	.926	1.594	100.4	1.090	1.7	6.0	353.5	.227
		10.11	6.66	4.27	3.45	6.85	2.38	12.97	2/1/2	79.7	22.7	32.5	.534	3.579	3.8	127.6	3.5	104.4D	1.377
4-3850	4-4001.1	.182	317.4	.5	3.4	.862	95.4	.284	.776	193.9	453.9	.556	.997D	106.1	1.209	.1	.3	202.4	.339
4-4001.1	4-4170	.339	233.9	.4	.1	1.370	77.8	.414	1.146	42.9	167.5	.671D	1.620A	98.6	.618	1.9	29.2	114.4	.164
4-4170	4-4490	.105	82.4	11.9	-1.8	.675	87.4	.278	1.250	173.3	418.7	.902	1.598	101.7	1.089	1.6	6.9	359.1	.249
		10.23	6.77	4.44	3.46	6.86	2.33	13.34	2/1/2	79.8	18.4	31.4	.524	3.691	.4	126.1	-.2	104.4D	1.411
4-3860	4-4002.4	.208	315.2	-1.6	3.5	.869	98.5	.294	.782	201.6	453.5	.552	1.013D	106.7	1.213	-.5	-1.8	204.7	.351
4-4002.4	4-4170	.351	233.9	.4	.1	1.369	77.0	.418	1.142	45.3	167.9	.664D	1.619A	98.5	.616	1.9	29.2	113.7	.166
4-4170	4-4500	.106	94.6	14.0	-1.6	.670	85.6	.295	1.240	169.4	424.5	.873	1.605	103.3	1.089	1.5	8.4	5.0	.275
		10.64	7.14	4.80	3.50	6.90	2.34	13.77	2/1/2	80.4	14.6	29.2	.487	3.964	4.4	129.2	-4.3	103.3D	1.442
4-3870	4-4004.5	.241	316.2	-2.7	3.7	.878	101.5	.311	.791	208.3	453.4	.545	1.036D	107.5	1.219	-1.2	-3.8	206.0	.372
4-4004.5	4-4170	.372	234.0	.4	.1	1.368	75.9	.425	1.135	49.1	168.4	.653D	1.618A	98.3	.612	1.9	29.2	112.7	.170
4-4170	4-4510	.115	107.9	15.2	-1.3	.665	83.5	.315	1.230	165.4	430.3	.843	1.617	105.0	1.088	1.4	10.2	11.1	.304
		11.35	7.78	5.33	3.57	6.98	2.45	14.31	2/1/2	81.3	11.1	26.4	.434	4.385	9.3	130.7	-9.1	101.5D	1.470
4-3880	4-4007.0	.281	319.5	-2.9	4.0	.886	104.5	.332	.802	214.4	453.3	.536	1.069D	108.7	1.227	-1.9	-5.6	212.0	.399
4-4007.0	4-4170	.399	234.5	.3	.1	1.365	74.4	.435	1.126	53.9	169.1	.637D	1.616A	98.1	.606	1.9	29.1	111.3	.175
4-4170	4-4520	.127	120.8	15.3	-1.1	.660	81.0	.340	1.221	161.6	436.3	.805	1.636	107.0	1.086	1.4	12.1	17.4	.338
		12.40	8.72	6.02	3.68	7.08	2.70	14.97	2/1/2	82.5	7.9	25.2	.377	4.966	15.1	132.5	-14.8	99.0D	1.494
MARS ARRIVAL DATE = 2444180 (2 NOV 1979)																			
4-3820	4-4010.8	.263	352.0	10.9	4.2	.838	79.0	.354	.780	158.5	464.1	.491	1.028	110.8	1.198	2.2	8.7	212.5	.432
4-4010.8	4-4180	.432	236.6	-.2	-.1	1.362	72.6	.447	1.115	59.3	173.3	.617D	1.613A	95.3	.592	2.0	29.6	108.6	.179
4-4180	4-4460	.136	57.7	2.2	-3.5	.686	93.3	.252	1.287	189.9	401.6	.982	1.612D	98.0	1.094	2.9	9.4	341.1	.196
		12.36	8.58	5.71	3.78	7.18	2.87	12.52	2/1/2	91.3	34.1	24.8	.322	4.655	14.3	133.9	14.0	94.6D	1.178
4-3830	4-4003.4	.182	337.0	8.0	3.5	.848	87.3	.294	.766	173.6	457.4	.541	.991	106.8	1.202	1.3	4.2	204.3	.353
4-4003.4	4-4180	.353	235.0	-.3	-.1	1.369	76.9	.419	1.140	45.8	171.5	.663D	1.617A	96.0	.608	2.0	30.1	110.2	.164
4-4180	4-4470	.126	62.6	6.0	-2.8	.681	92.1	.260	1.276	186.0	407.4	.945	1.607D	99.2	1.093	2.3	7.2	347.0	.211
		10.56	7.12	4.44	3.44	6.85	2.68	12.74	2/1/2	88.3	27.9	31.1	.481	3.736	8.8	129.4	8.5	101.8D	1.317
4-3840	4-4001.8	.170	325.9	4.4	3.3	.854	91.6	.282	.770	184.1	455.5	.553	.988D	106.1	1.205	.7	2.4	202.8	.338
4-4001.8	4-4180	.338	235.0	-.4	-.1	1.370	77.8	.414	1.144	42.8	171.1	.671D	1.618A	96.2	.611	2.0	30.2	110.9	.161
4-4180	4-4480	.117	69.5	9.1	-2.3	.676	90.7	.269	1.265	182.0	413.0	.929	1.605D	100.5	1.091	1.9	6.9	352.9	.230
		10.20	6.81	4.26	3.39	6.79	2.53	13.02	2/1/2	87.7	23.0	32.3	.527	3.597	5.0	126.8	4.9	103.9D	1.367
4-3850	4-4001.9	.181	319.0	1.1	3.4	.861	95.0	.284	.775	193.0	454.3	.554	.995D	106.2	1.208	.1	.3	203.6	.340
4-4001.9	4-4180	.340	235.0	-.4	-.1	1.370	77.7	.414	1.144	43.2	171.1	.670D	1.618A	96.2	.611	2.0	30.2	110.8	.161
4-4180	4-4490	.111	78.8	11.9	-1.9	.670	89.2	.280	1.253	177.9	418.5	.902	1.605	101.8	1.090	1.7	7.6	358.9	.251
		10.24	6.85	4.43	3.39	6.80	2.42	13.36	2/1/2	87.8	18.8	31.4	.521	3.696	1.2	129.3	1.2	104.2D	1.405
4-3860	4-4003.2	.205	316.3	-1.2	3.5	.867	98.2	.294	.781	200.7	453.9	.551	1.010D	106.7	1.212	-.5	-1.8	205.8	.352
4-4003.2	4-4180	.352	235.0	-.3	-.1	1.369	77.0	.418	1.140	45.5	171.4	.664D	1.617A	96.1	.606	2.0	30.1	110.2	.163
4-4180	4-4500	.108	90.1	14.1	-1.6	.665	87.4	.295	1.242	173.7	424.1	.876	1.606	103.2	1.089	1.6	8.9	5.0	.274
		10.58	7.14	4.77	3.44	6.84	2.57	13.76	2/1/2	88.3	15.0	29.3	.486	3.959	3.0	130.4	-2.8	103.2D	1.437
4-3870	4-4005.2	.238	317.1	-2.4	3.7	.876	101.2	.310	.789	207.5	453.8	.544	1.033D	107.5	1.218	-1.2	-3.7	209.0	.372
4-4005.2	4-4180	.372	235.2	-.3	-.1	1.367	75.9	.425	1.134	49.1	171.9	.653D	1.616A	95.9	.605	2.0	30.0	109.3	.167
4-4180	4-4510	.110	103.5	15.4	-1.3	.660	85.3	.313	1.231	169.5	429.7	.846	1.616	104.8	1.089	1.5	10.7	11.3	.301
		11.21	7.69	5.28	3.51	6.92	2.41	14.25	2/1/2	89.0	11.6	26.4	.435	4.371	7.8	131.8	-7.5	101.4D	1.466
4-3880	4-4007.8	.277	320.2	-2.7	3.9	.886	104.2	.331	.800	213.6	453.7	.535	1.064D	108.7	1.225	-1.9	-5.5	213.0	.399
4-4007.8	4-4180	.399	235.7	-.3	-.1	1.365	74.4	.434	1.126	53.8	172.5	.637D	1.615A	95.7	.599	2.0	29.9	108.1	.172
4-4180	4-4520	.120	117.4	15.7	-1.1	.654	82.9	.335	1.221	165.4	435.4	.812	1.630	106.7	1.088	1.5	12.7	17.7	.332
		12.16	8.53	5.95	3.62	7.03	2.58	14.85	2/1/2	90.1	8.5	23.3	.379	4.942	15.4	133.7	-15.1	99.1D	1.492
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																			
4-3830	4-4004.8	.187	339.6	8.8	3.5	.846	86.7	.298	.765	172.1	458.2	.537	.993	107.1	1.201	1.3	4.2	206.2	.360
4-4004.8	4-4190	.360	236.3	-1.1	-.3	1.369	76.6	.421	1.139	46.8	174.9	.660D	1.619A	93.7	.601	2.1	30.6	107.1	.164
4-4190	4-4470	.138	61.5	8.8	-3.1	.679	93.9	.266	1.284	191.0	407.7	.943	1.625D	99.5	1.095	2.7	8.8	346.1	.218
		10.89	7.43	4.91	3.46	6.86	2.92	12.84	2/1/2	95.7	28.3	30.7	.465	3.774	10.1	131.1	10.0	101.2D	1.290
4-3840	4-4002.9	.171	328.1	5.2	3.4	.853	91.2	.284	.769	182.9	455.9	.550	.987D	106.2	1.204	.7	2.3	204.5	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	43.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4480	.127	67.5	9.1	-2.5	.675	92.6	.274	1.271	186.8	413.1	.925	1.618D	100.6	1.093	2.2	7.8	352.4	.234
		10.40	7.01	4.29	3.39	6.79	2.72	13.09	2/1/2	95.0	23.3	32.3	.518	3.600	8.4	130.2	8.4	103.6D	1.347

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS

MARS ARRIVAL DATE = 2444190

12 NOV 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3650	4-4002.9	.180	320.6	1.8	3.4	.859	94.7	.285	.773	191.9	454.8	.553	.994D	106.2	1.207	.1	.3	204.9	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.144	45.3	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4490	.119	75.5	11.9	-2.0	.867	91.0	.283	1.258	182.5	418.5	.901	1.615D	101.9	1.092	1.9	8.3	358.6	.254
		10.36	6.97	4.41	3.39	6.79	2.56	13.41	2/1/2	95.0	19.1	31.5	.517	3.683	2.8	130.6	2.8	104.0D	1.387
4-3660	4-4004.1	.203	317.6	-.7	3.5	.866	97.8	.294	.779	199.7	454.3	.550	1.006D	106.7	1.211	-.5	-1.7	206.9	.352
4-4004.1	4-4190	.352	236.4	-1.1	-.3	1.369	77.0	.419	1.141	45.4	174.7	.664D	1.619A	93.8	.603	2.1	30.9	107.4	.163
4-4190	4-4500	.113	66.1	14.2	-1.7	.661	89.2	.296	1.246	178.1	423.8	.877	1.614	103.2	1.090	1.7	9.5	4.9	.275
		10.62	7.19	4.74	3.43	6.84	2.45	13.78	2/1/2	95.4	15.4	29.5	.484	3.934	1.9	131.6	-1.2	103.1D	1.421
4-3670	4-4006.1	.235	316.1	-2.0	3.7	.874	100.9	.310	.787	206.6	454.2	.543	1.030D	107.5	1.216	-1.2	-3.7	210.1	.372
4-4006.1	4-4190	.372	236.6	-1.0	-.3	1.368	75.9	.425	1.136	46.9	175.1	.653D	1.618A	93.6	.599	2.1	30.7	106.8	.167
4-4190	4-4510	.111	98.9	15.7	-1.4	.655	87.1	.312	1.234	173.7	429.2	.849	1.619	104.7	1.089	1.6	11.2	11.4	.300
		11.17	7.66	5.23	3.51	6.91	2.43	14.23	2/1/2	96.1	12.1	26.7	.436	4.334	6.3	133.1	-5.6	101.4D	1.492
4-3680	4-4008.6	.274	321.0	-2.4	3.9	.883	103.9	.330	.797	212.7	454.1	.534	1.060D	108.6	1.224	-1.9	-5.5	214.0	.398
4-4008.6	4-4190	.398	237.2	-.9	-.3	1.366	74.5	.434	1.128	53.5	175.7	.636D	1.618A	93.3	.594	2.1	30.4	105.5	.172
4-4190	4-4520	.116	113.2	16.2	-1.1	.649	84.6	.332	1.222	169.3	434.6	.816	1.628	106.4	1.088	1.6	13.1	18.0	.326
		12.02	8.40	5.89	3.62	7.02	2.51	14.77	2/1/2	96.9	9.0	25.6	.360	4.891	11.7	135.0	-11.2	99.2D	1.480
4-3690	4-4011.5	.317	325.5	-2.0	4.1	.895	107.0	.355	.811	218.2	454.1	.523	1.100D	110.0	1.233	-2.6	-7.0	218.6	.430
4-4011.5	4-4190	.430	236.1	-.8	-.3	1.365	72.8	.446	1.118	58.9	176.3	.619D	1.617A	93.0	.587	2.0	30.1	104.3	.179
4-4190	4-4530	.130	127.2	15.5	-.8	.643	82.0	.358	1.211	165.1	440.4	.778	1.644	108.4	1.068	1.6	15.2	24.7	.362
		13.24	9.46	6.70	3.78	7.18	2.76	15.46	2/1/2	98.0	6.3	20.5	.325	5.630	18.2	137.1	-17.7	96.5D	1.505

MARS ARRIVAL DATE = 2444200 (22 NOV 1979)

4-3630	4-4006.5	.194	342.5	9.6	3.6	.844	85.9	.304	.763	170.4	459.1	.531	.995	107.5	1.200	1.3	4.2	208.3	.367
4-4006.5	4-4200	.367	238.1	-1.6	-.5	1.369	76.2	.424	1.140	47.9	176.0	.656D	1.624A	91.5	.596	2.2	31.2	104.8	.168
4-4200	4-4470	.153	61.2	5.5	-3.5	.678	95.9	.273	1.293	196.1	408.2	.940	1.647D	99.8	1.098	3.1	10.1	345.0	.226
		11.34	7.61	4.60	3.53	6.93	3.21	12.96	2/1/2	102.2	28.8	30.4	.446	3.810	11.5	133.0	11.4	100.8D	1.255
4-3640	4-4004.0	.172	330.4	6.0	3.4	.851	90.7	.286	.767	181.7	456.5	.547	.987D	106.4	1.203	.7	2.3	205.6	.344
4-4004.0	4-4200	.344	237.9	-2.1	-.5	1.371	77.6	.417	1.146	43.6	177.6	.669D	1.624A	91.7	.600	2.3	31.6	108.7	.163
4-4200	4-4480	.140	66.3	9.1	-2.7	.671	94.5	.280	1.279	191.7	413.4	.921	1.636D	100.9	1.095	2.5	8.7	351.7	.240
		10.70	7.27	4.31	3.44	6.84	2.95	13.19	2/1/2	101.5	23.6	32.3	.509	3.591	7.9	131.8	7.9	103.3D	1.318
4-3650	4-4003.9	.179	322.4	2.5	3.4	.857	94.5	.286	.772	190.9	455.3	.551	.992D	106.3	1.206	.1	.3	206.2	.343
4-4003.9	4-4200	.343	237.9	-2.1	-.5	1.371	77.6	.416	1.147	43.4	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4490	.129	73.3	11.9	-2.1	.665	92.9	.288	1.264	187.2	416.5	.900	1.628D	102.1	1.093	2.1	8.9	356.2	.256
		10.58	7.14	4.40	3.43	6.83	2.74	13.48	2/1/2	101.5	19.3	31.8	.512	3.656	4.5	132.1	4.4	103.6D	1.361
4-3660	4-4005.0	.201	319.0	-.2	3.5	.864	97.5	.294	.777	198.8	454.8	.548	1.006D	106.7	1.210	-.5	-1.7	208.2	.353
4-4005.0	4-4200	.353	237.9	-2.0	-.5	1.370	77.0	.420	1.144	45.3	177.7	.664D	1.624A	91.6	.599	2.3	31.5	105.3	.165
4-4200	4-4500	.120	82.7	14.3	-1.7	.658	91.1	.299	1.250	182.6	423.6	.876	1.624D	103.3	1.092	1.9	10.0	4.8	.278
		10.76	7.29	4.71	3.47	6.87	2.58	13.82	2/1/2	101.8	15.7	29.8	.483	3.893	2.0	133.1	.5	103.1D	1.397
4-3670	4-4006.9	.232	319.1	-1.6	3.6	.872	100.5	.309	.784	205.7	454.6	.542	1.027D	107.5	1.215	-1.2	-3.7	211.2	.371
4-4006.9	4-4200	.371	238.2	-1.8	-.5	1.369	76.0	.426	1.139	46.7	176.1	.654D	1.624A	91.4	.595	2.2	31.2	104.7	.168
4-4200	4-4510	.115	94.6	16.1	-1.4	.651	89.1	.313	1.237	177.9	428.8	.850	1.624	104.7	1.090	1.8	11.6	11.4	.300
		11.22	7.67	5.18	3.55	6.95	2.49	14.23	2/1/2	102.3	12.4	27.0	.436	4.278	4.9	134.5	-4.0	101.8D	1.429
4-3680	4-4009.4	.270	321.8	-2.1	3.8	.881	103.5	.329	.794	211.8	454.5	.533	1.056D	108.6	1.222	-1.9	-5.4	213.1	.397
4-4009.4	4-4200	.397	238.6	-1.6	-.5	1.367	74.6	.435	1.131	53.1	176.5	.639D	1.624A	91.1	.591	2.2	30.8	103.8	.174
4-4200	4-4520	.116	108.8	16.8	-1.1	.645	86.7	.331	1.224	175.4	434.1	.819	1.629	106.3	1.089	1.7	13.5	18.1	.326
		11.98	8.32	5.82	3.66	7.06	2.50	14.73	2/1/2	103.1	9.4	24.0	.382	4.819	10.0	136.4	-9.5	99.3D	1.458
4-3690	4-4012.4	.312	326.2	-1.6	4.0	.892	106.6	.354	.808	217.3	454.5	.522	1.094D	109.9	1.231	-2.6	-6.9	219.7	.428
4-4012.4	4-4200	.428	239.8	-1.4	-.4	1.365	72.9	.447	1.122	58.3	179.1	.620D	1.623A	90.7	.584	2.1	30.4	102.8	.181
4-4200	4-4530	.124	123.6	16.2	-.8	.638	84.1	.353	1.212	168.9	439.5	.784	1.640	108.1	1.068	1.7	15.6	25.0	.356
		13.08	9.27	6.61	3.82	7.22	2.65	15.34	2/1/2	103.9	6.8	20.8	.327	5.536	16.1	138.6	-15.5	98.7D	1.486

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4-3630	4-4006.3	.202	345.7	10.5	3.7	.842	84.9	.311	.761	168.5	460.2	.524	.998	107.9	1.199	1.4	4.1	210.7	.376
4-4006.3	4-4210	.376	240.0	-2.5	-.7	1.370	75.8	.429	1.142	49.2	180.9	.652D	1.632	89.3	.592	2.3	31.5	103.4	.173
4-4210	4-4470	.169	61.6	5.0	-4.0	.679	97.9	.263	1.306	201.2	408.7	.936	1.675D	100.2	1.101	3.7	11.9	343.6	.236
		11.93	8.29	4.75	3.64	7.04	3.56	13.13	2/1/2	108.0	29.5	30.1	.425	3.854	12.9	135.2	12.9	99.7D	1.212
4-3640	4-4005.3	.174	332.9	6.9	3.4	.849	90.1	.289	.765	180.3	457.1	.544	.987D	106.6	1.202	.7	2.3	207.5	.347
4-4005.3	4-4210	.347	239.6	-3.0	-.8	1.372	77.4	.419	1.150	43.9	180.4	.667D	1.632	89.7	.597	2.4	32.1	104.3	.167
4-4210	4-4480	.154	65.8	9.0	-3.0	.671	96.5	.288	1.288	196.6	413.7	.918	1.659D	101.2	1.098	2.9	9.7	351.0	.246
		11.09	7.58	4.33	3.51	6.92	3.24	13.32	2/1/2	107.3	23.9	32.5	.498	3.575	9.5	135.6	9.5	103.0D	1.283
4-3650	4-4003.0	.178	324.4	3.2	3.4	.856	93.9	.287	.770	189.7	455.8	.549	.991D	106.4	1.205	.1	.3	207.6	.344
4-4003.0	4-4210	.344	239.5	-3.0	-.8	1.372	77.6	.418	1.150	45.3	180.4	.669D	1.632	89.7	.597	2.4	32.1	104.4	.166
4-4210	4-4490	.141	71.9	12.0	-2.3	.663	94.9	.294	1.272	191.9	418.7	.897	1.646D	102.3	1.096	2.4	9.6	357.8	.264
		10.87	7.37	4.39	3.50	6.90	2.98	13.58	2/1/2	107.2	19.6	32.1	.507	3.618	6.2	133.7	6.1	103.7D	1.328
4-3660	4-4006.0	.199	320.4	.4	3.5	.862	97.1	.295	.775	197.7	455.3	.547	1.003D	106.8	1.209	-.5	-1.7	209.4	.354
4-4006.0	4-4210	.354	239.6	-2.9	-.8	1.371	77.1	.421	1.148	45.1	180.6	.664D	1.632	89.6	.596	2.4	31.9	104.1	.168
4-4210	4-4500	.130	80.1	14.5	-1.8	.656	93.1	.303	1.256	187.1	423.6	.875	1.637D	103.5	1.093	2.1	10.3	4.6	.281
		10.98	7.44	4.67	3.54	6.94	2.76	13.89	2/1/2	107.4	15.9	30.2	.481	3.840	3.3	134.6	2.2	103.1D	1.366
4-3670	4-4007.8	.229	320.2	-1.2	3.6	.870	100.2	.309	.782	204.7	455.0	.541	1.024D	107.5	1.214	-1.2	-3.6	212.4	.371
4-4007.8	4-4210	.371	239.9	-2.6	-.7	1.370	76.1	.427	1.143	48.3	180.8	.655D	1.632	89.4	.593	2.4	31.8	103.5	.172
4-4210	4-4510	.122	90.9	16.3	-1.4	.648	91.0	.315	1.241	182.3	428.6	.850	1.632D	104.7	1.092	1.9	12.0	11.3	.302
		11.35	7.74	5.13	3.62	7.02	2.61	14.27	2/1/2	107.8	12.7	27.5	.436	4.210	3.9	136.0	-2.2	101.6D	1.400
4-3680	4-4010.3	.266	322.7	-1.8	3.8	.879	103.2	.328	.792	210.9	455.0	.532	1.051D	108.6	1.220	-1.8	-5.3	216.2	.396
4-4010.3	4-4210	.396	240.5	-2.5	-.7	1.368	74.7	.436	1.136	52.6	181.2	.641D	1.632	89.1	.588	2.3	31.1	102.8	.177
4-4210	4-4520	.118	104.3	17.3	-1.1	.641	86.8	.331	1.227	177.5	433.6	.821	1.632	106.2	1.090	1.8	13.9	18.2	.325
		12.02	8.29	5.75	3.73	7.13	2.54	14.72	2/1/2	108.4	9.8	24.4	.384	4.731	8.3	137.9	-7.3	99.5D	1.431
4-3690	4-4013.2	.308	327.0	-1.6	3.9	.890	106.3	.352	.805	216.4	454.9	.521	1.088D	109.9	1.229	-2.5	-6.8	220.8	.427
4-4013.2	4-4210	.427	241.5	-2.0	-.6	1.366	73.0	.448	1.127	57.7	181.7	.622D	1.632	88.6	.582	2.2	30.6	102.0	.184
4-4210	4-4530	.122	119.3	17.0	-.8	.634	86.1	.351	1.213	172.8	438.8	.788	1.638	107.9	1.088	1.7	15.9	25.2	.353
		13.02	9.13	6.52	3.89	7.28	2.61	15.27	2/1/2	109.1	7.2	21.2	.330	5.426	14.0	140.1	-13.2	97.0D	1.460

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4-3630	4-4010.5	.214	349.3	11.5	3.7	.840	83.7	.320	.759	166.3	461.5	.516	1.002	108.5	1.198	1.4	4.1	213.5	.381
4-4010.5	4-4220	.388	242.2	-3.2	-.9	1.371	75.2	.435	1.144	50.8	183.7	.646D	1.642	87.2	.589	2.4	31.5	102.7	.179
4-4220	4-4470	.188	62.6	4.2	-4.7	.681	100.1	.294	1.321	206.3	409.3	.932	1.710D	100.6	1.105	4.5	14.2	341.9	.250
		12.67	8.89	4.90	3.79	7.18	3.99	13.35	2/1/2	113.0	30.7	29.6	.398	3.920	14.3	137.7	14.3	98.7D	1.163
4-3640	4-4006.7	.176	335.7	7.9	3.4	.848	89.5	.292	.764	178.8	457.8	.541	.987	106.8	1.201	.7	2.3	209.3	.352
4-4006.7	4-4220	.352	241.4	-3.9	-1.0	1.373	77.2	.422	1.153	44.3	183.1	.666D	1.641	87.7	.595	2.6	32.4	103.7	.172
4-4220	4-4480	.170	66.0	8.9	-3.3	.672	98.6	.297	1.301	201.6	414.1	.914	1.668D	101.6	1.101	3.3	10.9	350.1	.256
		11.58	7.96	4.57	3.62	7.02	3.59	13.48	2/1/2	112.3	24.4	32.7	.466	3.555	11.1	135.5	11.1	102.7D	1.243
4-3650	4-4006.1	.178	326.5	4.0	3.4	.854	93.4	.288	.768	188.5	456.4	.547	.989D	106.5	1.204	.1	.3	209.1	.346
4-4006.1	4-4220	.346	241.4	-4.1	-1.1	1.375	77.6	.421	1.155	43.3	183.1	.669D	1.641	87.8	.596	2.6	32.6	103.8	.171
4-4220	4-4490	.155	71.2	12.1	-2.5	.664	97.0	.302	1.282	196.7	418.9	.894	1.669D	102.6	1.098	2.6	10.3	357.5	.271
		11.25	7.65	4.38	3.60	7.00	3.27	13.71	2/1/2	112.1	19.8	32.9	.501	3.573	8.1	135.5	7.8	103.7D	1.290
4-3660	4-4007.0	.197	322.0	1.1	3.5	.860	98.7	.298	.773	196.6	455.8	.545	1.001D	106.8	1.207	-.5	-1.7	210.8	.354
4-4007.0	4-4220	.354	241.4	-3.9	-1.0	1.373	77.1	.423	1.153	44.8	183.2	.665D	1.641	87.7	.594	2.6	32.4	103.6	.172
4-4220	4-4500	.142	78.4	14.6	-1.9	.655	95.1	.309	1.263	191.7	423.7	.875	1.654D	103.7	1.096	2.8	11.0	4.5	.287
		11.27	7.65	4.64	3.63	7.05	2.99	13.99	2/1/2	112.3	16.2	30.7	.479	3.778	5.0	136.5	4.1	103.2D	1.330
4-3670	4-4008.8	.226	321.5	-.7	3.6	.867	99.8	.308	.780	203.7	455.5	.539	1.020D	107.5	1.212	-1.2	-3.6	213.7	.371
4-4008.8	4-4220	.371	241.7	-3.5	-1.0	1.372	76.1	.429	1.148	47.8	183.4	.656D	1.641	87.4	.592	2.5	31.9	103.2	.176
4-4220	4-4510	.131	86.0	16.6	-1.5	.647	93.1	.319	1.246	186.7	428.5	.849	1.644D	104.9	1.093	2.0	12.4	11.2	.309
		11.86	7.85	5.08	3.71	7.11	2.78	14.33	2/1/2	112.7	13.0	28.0	.436	4.131	3.6	137.7	-.2	101.8D	1.387

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2444220
12 DEC 1979

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-3880	4-4011.2	.262	323.7	-1.5	3.7	.676	102.8	.327	.769	209.9	455.4	.531	1.047D	108.6	1.219	-1.8	-5.3	217.4	.395
4-4011.2	4-4220	.395	242.4	-3.0	-.9	1.370	74.8	.438	1.142	52.0	183.7	.642D	1.642	87.1	.587	2.4	31.4	102.6	.181
4-4220	4-4520	.123	100.2	17.8	-1.1	.639	90.9	.332	1.230	181.7	433.3	.822	1.639D	106.2	1.091	1.9	14.2	16.2	.326
		12.13	8.32	5.68	3.82	7.22	2.64	14.74	2/1/2	113.1	10.1	24.9	.385	4.632	8.7	139.5	-5.2	99.7D	1.399
4-3890	4-4014.1	.303	327.8	-1.4	3.9	.887	105.9	.350	.801	215.5	455.4	.520	1.082D	109.8	1.227	-2.5	-6.7	221.9	.425
4-4014.1	4-4220	.425	243.4	-2.6	-.9	1.368	73.2	.449	1.133	57.0	184.1	.624D	1.642	86.6	.582	2.3	30.8	101.9	.187
4-4220	4-4530	.122	114.8	17.8	-.8	.631	88.3	.350	1.215	176.8	438.3	.791	1.640	107.7	1.089	1.8	16.2	25.3	.351
		13.02	9.05	6.43	3.97	7.37	2.62	15.23	2/1/2	113.7	7.5	21.7	.332	5.301	12.0	141.8	-10.9	97.3D	1.429
MARS ARRIVAL DATE = 2444230 (22 DEC 1979)																			
4-3840	4-4008.2	.180	338.7	8.9	3.5	.846	88.8	.296	.762	177.3	458.6	.537	.987	107.0	1.200	.7	2.3	211.3	.357
4-4008.2	4-4230	.357	243.4	-4.9	-1.3	1.374	77.1	.426	1.158	44.7	185.7	.665D	1.652	85.8	.594	2.8	32.7	103.8	.177
4-4230	4-4480	.189	66.8	8.7	-3.8	.675	100.8	.309	1.316	206.5	414.6	.910	1.723D	102.1	1.106	3.8	12.2	349.0	.270
		12.16	8.41	4.41	3.75	7.14	4.00	13.68	2/1/2	116.6	25.0	32.9	.473	5.535	12.8	137.6	12.7	102.3D	1.199
4-3850	4-4007.3	.177	328.8	4.9	3.4	.852	92.9	.290	.766	187.2	457.0	.544	.988D	106.6	1.203	.1	.3	210.7	.349
4-4007.3	4-4230	.349	243.3	-5.2	-1.3	1.375	77.5	.423	1.160	43.2	185.6	.669D	1.651	85.9	.595	2.8	33.0	104.0	.176
4-4230	4-4490	.171	71.2	12.2	-2.7	.666	99.1	.312	1.294	201.5	419.2	.891	1.697D	103.0	1.102	3.0	11.0	356.7	.280
		11.70	7.99	4.38	3.71	7.11	3.61	13.87	2/1/2	116.4	20.1	33.0	.495	5.522	10.0	137.4	9.7	103.6D	1.248
4-3860	4-4008.0	.194	323.7	1.7	3.4	.858	96.3	.295	.771	195.4	456.3	.543	.999D	106.9	1.206	-.5	-1.7	212.2	.355
4-4008.0	4-4230	.355	243.4	-4.9	-1.3	1.374	77.1	.426	1.158	44.4	185.7	.665D	1.652	85.8	.594	2.8	32.7	103.8	.177
4-4230	4-4500	.156	77.5	14.8	-2.1	.656	97.3	.317	1.273	196.3	423.8	.870	1.676D	104.0	1.098	2.5	11.5	4.0	.294
		11.63	7.89	4.61	3.74	7.14	3.27	14.12	2/1/2	116.6	16.4	31.3	.476	5.709	7.0	138.1	6.0	103.3D	1.290
4-3870	4-4009.7	.222	322.8	-.2	3.5	.865	99.4	.308	.778	202.6	456.0	.538	1.017D	107.6	1.211	-1.1	-3.6	215.0	.371
4-4009.7	4-4230	.371	243.7	-4.4	-1.2	1.373	76.2	.431	1.154	47.3	185.8	.657D	1.652	85.6	.591	2.7	32.2	103.5	.180
4-4230	4-4510	.142	85.9	16.9	-1.6	.647	95.3	.325	1.254	191.2	428.4	.847	1.661D	105.1	1.095	2.1	12.8	11.1	.310
		11.84	8.02	5.03	3.81	7.21	3.00	14.42	2/1/2	116.8	13.2	28.6	.436	4.045	4.5	139.4	1.8	102.0D	1.329
4-3880	4-4012.1	.238	324.7	-1.1	3.7	.874	102.4	.326	.786	208.9	455.9	.530	1.043D	108.5	1.217	-1.8	-5.2	218.7	.394
4-4012.1	4-4230	.394	244.3	-3.9	-1.2	1.372	74.9	.439	1.148	51.4	186.1	.644D	1.653	85.3	.587	2.6	31.6	103.0	.185
4-4230	4-4520	.131	96.8	18.2	-1.8	.638	93.0	.335	1.236	186.0	433.1	.821	1.650D	106.3	1.093	2.0	14.5	16.2	.329
		12.32	8.40	5.61	3.92	7.32	2.79	14.79	2/1/2	117.2	10.3	25.5	.387	4.526	5.6	141.2	-3.1	100.0D	1.363
4-3890	4-4015.0	.298	328.6	-1.1	3.8	.884	105.5	.349	.798	214.5	455.9	.520	1.076D	109.8	1.225	-2.4	-6.7	223.1	.424
4-4015.0	4-4230	.424	245.3	-3.3	-1.1	1.370	73.5	.451	1.140	56.2	186.4	.627D	1.654	84.8	.582	2.5	30.9	102.5	.192
4-4230	4-4530	.126	110.5	18.5	-.8	.629	90.5	.350	1.219	180.9	437.9	.792	1.646D	107.7	1.090	1.9	16.5	25.5	.351
		13.10	9.02	6.34	4.07	7.47	2.69	15.23	2/1/2	117.7	7.8	22.3	.335	5.167	10.0	143.5	-8.6	97.6D	1.395
MARS ARRIVAL DATE = 2444240 (1 JAN 1980)																			
4-3840	4-4009.8	.184	341.9	9.9	3.5	.844	88.1	.300	.760	175.5	459.5	.532	.988	107.3	1.198	.7	2.2	213.4	.362
4-4009.8	4-4240	.362	245.5	-5.8	-1.6	1.376	76.8	.430	1.163	45.2	186.1	.663D	1.664	84.0	.593	2.9	32.9	104.5	.184
4-4240	4-4480	.210	68.0	8.1	-4.4	.660	103.1	.323	1.336	211.5	415.1	.904	1.767D	102.6	1.111	4.6	14.0	347.7	.284
		12.84	8.95	4.47	3.89	7.28	4.49	13.95	2/1/2	120.3	26.0	33.0	.458	5.518	14.5	139.9	14.3	101.9D	1.152
4-3850	4-4008.8	.177	331.3	5.8	3.4	.850	92.4	.292	.764	185.8	457.6	.541	.987D	106.7	1.201	.1	.3	212.4	.351
4-4008.8	4-4240	.351	245.3	-6.3	-1.7	1.376	77.5	.426	1.166	43.1	187.9	.669D	1.663	84.2	.595	3.0	33.3	104.7	.181
4-4240	4-4490	.189	71.8	12.2	-3.0	.669	101.4	.323	1.309	206.3	419.6	.886	1.753D	103.5	1.106	3.3	11.8	356.1	.291
		12.23	8.39	4.38	3.84	7.24	4.01	14.07	2/1/2	120.2	20.5	33.5	.487	5.467	12.0	139.4	11.6	103.6D	1.203
4-3860	4-4009.1	.192	325.6	2.5	3.4	.856	95.8	.296	.769	194.2	456.8	.541	.997D	106.9	1.205	-.5	-1.7	213.7	.356
4-4009.1	4-4240	.356	245.4	-6.1	-1.6	1.376	77.2	.428	1.165	44.1	188.0	.666D	1.663	84.1	.594	3.0	33.1	104.6	.182
4-4240	4-4500	.171	77.2	15.0	-2.2	.658	99.5	.326	1.285	201.0	424.0	.866	1.705D	104.4	1.102	2.7	11.9	3.6	.302
		12.06	8.20	4.58	3.86	7.26	3.62	14.28	2/1/2	120.2	16.6	31.9	.473	5.634	9.0	140.1	8.1	103.4D	1.247
4-3870	4-4010.8	.219	324.2	.3	3.5	.863	99.0	.308	.775	201.5	456.5	.537	1.014D	107.6	1.209	-1.1	-3.5	216.3	.371
4-4010.8	4-4240	.371	245.7	-5.5	-1.5	1.375	76.3	.433	1.161	46.8	188.1	.638D	1.664	83.9	.592	2.9	32.5	104.4	.185
4-4240	4-4510	.155	84.6	17.1	-1.8	.648	97.5	.332	1.263	195.7	428.5	.844	1.682D	105.4	1.098	2.3	13.1	10.9	.316
		12.18	8.25	4.98	3.93	7.32	3.27	14.54	2/1/2	120.5	13.3	29.3	.436	3.954	6.1	141.3	3.9	102.2D	1.288
4-3880	4-4013.1	.253	325.8	-.7	3.6	.871	102.0	.325	.783	207.9	456.4	.529	1.038D	108.5	1.215	-1.8	-5.2	220.0	.394
4-4013.1	4-4240	.394	246.3	-4.8	-1.4	1.374	75.1	.441	1.155	50.7	188.4	.645D	1.665	83.5	.586	2.7	31.8	104.0	.190
4-4240	4-4520	.142	94.3	18.8	-1.2	.636	95.2	.340	1.242	190.5	433.0	.820	1.665D	106.3	1.095	2.1	14.7	18.2	.333
		12.56	8.53	5.53	4.05	7.43	3.00	14.87	2/1/2	120.8	10.5	26.2	.388	4.413	5.2	143.1	-.9	100.3D	1.324
4-3890	4-4015.9	.293	329.5	-.8	3.7	.881	105.1	.347	.795	213.5	456.3	.519	1.071D	109.7	1.223	-2.4	-6.6	224.4	.422
4-4015.9	4-4240	.422	247.5	-4.1	-1.3	1.372	73.5	.452	1.148	55.4	188.6	.629D	1.667	83.0	.583	2.6	31.0	103.6	.197
4-4240	4-4530	.133	106.7	19.1	-.8	.628	92.7	.352	1.224	185.1	437.6	.792	1.655D	107.7	1.092	1.9	16.7	25.5	.353
		13.24	9.06	6.24	4.18	7.58	2.81	15.26	2/1/2	121.1	8.0	22.9	.337	5.027	8.3	145.3	-6.3	98.0D	1.357
MARS ARRIVAL DATE = 2444250 (11 JAN 1980)																			
4-3850	4-4009.9	.176	333.9	6.8	3.4	.848	91.8	.294	.762	184.4	458.3	.536	.986D	106.9	1.200	.1	.3	214.1	.354
4-4009.9	4-4250	.354	247.4	-7.6	-2.0	1.378	77.4	.430	1.172	43.0	190.2	.669D	1.676	82.5	.596	3.3	33.6	106.1	.187
4-4250	4-4490	.209	72.8	12.1	-3.5	.675	103.6	.337	1.329	211.1	420.0	.881	1.777D	104.0	1.111	3.8	12.9	355.3	.305
		12.84	8.87	4.39	3.97	7.37	4.49	14.32	2/1/2	123.4	21.0	34.1	.479	3.409	14.1	141.6	13.5	103.5D	1.155
4-3860	4-4010.3	.191	327.6	3.3	3.4	.854	95.4	.297	.767	193.0	457.4	.539	.995D	107.0	1.204	-.5	-1.8	215.2	.358
4-4010.3	4-4250	.358	247.5	-7.4	-2.0	1.378	77.2	.431	1.171	43.7	190.2	.667D	1.676	82.4	.595	3.2	33.4	106.0	.188
4-4250	4-4500	.189	77.6	15.1	-2.4	.663	101.9	.338	1.300	205.7	424.3	.861	1.740D	104.9	1.106	3.0	12.3	3.2	.313
		12.56	8.57	4.56	3.99	7.38	4.02	14.48	2/1/2	123.4	16.8	32.7	.470	3.556	11.3	142.1	10.2	103.6D	1.200
4-3870	4-4011.8	.216	325.7	.9	3.5	.861	98.5	.308	.773	200.3	457.0	.535	1.011D	107.6	1.208	-1.1	-3.5	217.8	.372
4-4011.8	4-4250	.372	247.8	-6.7	-1.8	1.377	76.4	.436	1.166	46.2	190.3	.659D	1.677	82.2	.593	3.1	32.8	105.8	.191
4-4250	4-4510	.171	84.0	17.3	-1.7	.651	99.8	.341	1.275	200.2	428.6	.840	1.709D	105.8	1.101	2.5	13.4	10.7	.325
		12.59	8.54	4.93	4.05	7.45	3.61	14.70	2/1/2	123.6	13.5	30.1	.435	3.857	8.1	143.3	6.1	102.5D	1.244
4-3880	4-4014.1	.249	327.0	-.3	3.6	.868	101.6	.324	.781	206.8	456.9	.528	1.034D	108.5	1.214	-1.7	-5.1	221.3	.393
4-4014.1	4-4250	.393	248.4	-5.8	-1.7	1.376	75.2	.443	1.163	50.0	190.5	.647D	1.678	81.9	.590	2.9	32.0	105.5	.195
4-4250	4-4520	.155	92.5	18.8	-1.3	.639	97.6	.347	1.251	194.7	433.0	.817	1.665D	106.8	1.097	2.2	15.0	18.1	.339
		12.68	8.72	5.46	4.15	7.55	3.26	14.99	2/1/2	123.9	10.7	26.9	.389	4.297	5.8	145.0	1.3	100.6D	1.283
MARS ARRIVAL DATE = 2444260 (21 JAN 1980)																			
4-3860	4-4011.4	.189	329.7	4.1	3.4	.852	94.9	.298	.765	191.7	457.9	.537	.993D	107.1	1.202	-.5	-1.6	216.8	.359
4-4011.4	4-4260	.359	249.6	-8.8	-2.3	1.380	77.3	.434	1.178	43.2	192.3	.667D	1.690	80.9	.597	3.5	33.8	107.9	.194
4-4260	4-4500	.209	78.4	15.2	-2.7	.669	104.3	.351	1.320	210.3	424.6	.856	1.783D	105.4	1.111	3.3	13.1	2.7	.326
		13.14	9.02	4.54	4.12	7.52	4.48	14.72	2/1/2	126.2	17.1	33.5	.466	3.471	13.6	144.3	12.5	103.8D	1.151
4-3870	4-4012.9	.213	327.3	1.5	3.4	.858	98.1	.308	.771	199.1	457.5	.533	1.008D	107.6	1.206	-1.1	-3.5	219.2	.372
4-4012.9	4-4260	.372	249.9	-7.9	-2.2	1.379	76.5	.436	1.175	45.6	192.4	.660D	1.690	80.6	.595	3.4	33.1	107.8	.196
4-4260	4-4510	.189	84.1	17.5	-1.9	.656	102.2	.352	1.289	204.6	428.8	.836	1.743D	106.2	1.105	2.7	13.7	10.5	.335
		13.06	8.88	4.86	4.18	7.57	4.00	14.90	2/1/2	126.4	13.7	30.9	.434	3.757	10.3	145.4	8.4	102.8D	1.198
4-3880	4-4015.1	.245	328.3	.2	3.5	.866	101.2	.323	.778	205.6	457.4	.526	1.030D	108.5	1.212	-1.7	-5.1	222.7	.393
4-4015.1	4-4260	.393	250.5	-6.8	-2.0	1.378	75.3	.446	1.170	49.3	192.5	.649D	1.692	80.3	.592	3.1	32.2	107.4	.201
4-4260	4-4520	.170	91.6	19.1	-1.3	.643	100.0	.355	1.262	199.2	433.0	.814	1.711D	107.1	1.100	2.3	15.2	18.0	.347
		13.26	8.98	5.39	4.26	7.67	3.59	15.14	2/1/2	126.6	10.8	27.7	.390	4.178	7.1	147.0	3.7	101.9D	1.240

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 660 DAYS | MARS ARRIVAL DATE = 2444120 | 3 SEP 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2444120 (3 SEP 1979)																			
4-3620	4-3999.1	.189	335.8	6.6	3.4	.649	85.6	.295	.770	169.4	456.6	.543	.998	106.9	1.205	1.9	6.1	197.9	.355
4-3999.1	4-4120	.355	233.1	3.5	.9	1.391	77.7	.451	1.227	40.5	143.5	.674D	1.781A	112.8	.700	1.5	22.5	131.3	.252
4-4120	4-4500	.137	110.5	14.6	-1.5	.705	77.7	.316	1.239	149.8	429.6	.848	1.630	104.9	1.088	.6	4.6	3.6	.302
		12.98	7.44	4.54	5.54	8.92	2.90	14.27	2/1/2	38.8	11.0	35.1	.476	3.317	6.6	125.2	4.3	104.4D	1.104
4-3630	4-3996.5	.165	324.1	3.6	3.2	.856	90.3	.277	.774	180.7	453.7	.560	.989D	105.7	1.207	1.3	4.4	195.4	.330
4-3996.5	4-4120	.330	233.9	3.9	.9	1.393	79.3	.445	1.237	35.5	142.5	.686D	1.787A	112.7	.704	1.4	22.2	132.2	.249
4-4120	4-4510	.164	116.1	15.6	-1.4	.702	75.0	.350	1.232	147.4	437.0	.801	1.664	107.6	1.089	.8	6.6	8.9	.348
		13.15	7.68	4.22	5.47	8.85	3.46	15.16	2/1/2	37.9	7.0	38.4	.552	3.038	4.5	124.6	.9	108.0D	1.124
MARS ARRIVAL DATE = 2444130 (13 SEP 1979)																			
4-3620	4-4000.6	.196	336.2	7.3	3.5	.848	84.9	.301	.769	167.9	457.5	.537	1.000	107.3	1.204	1.9	6.0	199.9	.363
4-4000.6	4-4130	.363	232.2	2.8	.8	1.381	76.9	.440	1.188	44.1	149.8	.665D	1.711A	109.7	.672	1.6	23.9	126.3	.223
4-4130	4-4500	.126	109.1	14.4	-1.5	.697	79.2	.308	1.238	153.4	428.1	.856	1.619	104.4	1.088	.9	5.5	4.1	.293
		12.14	7.32	4.64	4.82	8.21	2.66	14.10	2/1/2	46.9	12.0	32.4	.457	3.589	7.4	125.6	5.7	102.4D	1.163
4-3630	4-3997.7	.167	326.3	4.4	3.3	.854	89.8	.279	.773	179.5	454.3	.557	.989	105.9	1.206	1.3	4.4	196.9	.334
4-3997.7	4-4130	.334	232.7	3.2	.8	1.384	78.6	.432	1.199	38.4	146.8	.680D	1.717A	109.6	.678	1.5	23.5	129.5	.220
4-4130	4-4510	.149	117.9	15.2	-1.4	.694	76.7	.339	1.231	150.6	435.1	.813	1.649	106.8	1.089	1.0	7.4	9.6	.334
		12.12	7.38	4.25	4.74	8.13	3.13	14.89	2/1/2	45.7	8.1	35.8	.540	3.255	4.4	124.7	2.0	106.3D	1.218
4-3640	4-3997.1	.169	317.1	1.1	3.3	.861	93.4	.276	.777	189.1	452.9	.563	.991D	105.6	1.209	.7	2.5	196.7	.328
4-3997.1	4-4130	.326	232.9	3.3	.8	1.384	79.0	.431	1.201	37.3	146.6	.683D	1.718A	109.6	.679	1.5	23.4	129.8	.220
4-4130	4-4520	.181	125.3	15.5	-1.2	.691	73.6	.379	1.224	148.1	442.5	.760	1.689	109.7	1.089	1.0	9.5	15.2	.305
		12.82	8.09	4.27	4.73	8.12	3.82	15.95	2/1/2	45.5	4.5	36.2	.556	3.222	5.3	124.9	-1.5	107.4D	1.240
MARS ARRIVAL DATE = 2444140 (23 SEP 1979)																			
4-3620	4-4002.1	.204	340.4	8.0	3.6	.846	84.2	.307	.767	166.5	458.4	.532	1.003	107.6	1.203	1.9	6.0	201.7	.371
4-4002.1	4-4140	.371	232.0	2.2	.8	1.375	76.2	.434	1.182	47.1	155.5	.657D	1.667A	106.6	.650	1.7	25.4	124.8	.202
4-4140	4-4500	.117	106.6	14.2	-1.5	.690	80.8	.303	1.237	157.2	426.9	.863	1.612	104.0	1.088	1.1	6.3	4.5	.286
		11.58	7.27	4.75	4.51	7.70	2.52	13.97	2/1/2	55.6	12.8	30.4	.436	3.813	8.4	126.3	7.2	100.9D	1.231
4-3630	4-3998.8	.169	328.3	5.1	3.3	.853	89.4	.281	.772	178.4	454.9	.554	.989	106.0	1.206	1.3	4.4	198.3	.337
4-3998.8	4-4140	.337	232.3	2.5	.8	1.378	78.2	.424	1.174	40.6	154.3	.676D	1.672A	106.6	.657	1.6	25.0	126.2	.198
4-4140	4-4510	.136	116.8	15.0	-1.3	.686	78.4	.330	1.230	154.0	433.6	.824	1.636	106.2	1.088	1.1	8.2	10.2	.323
		11.56	7.15	4.27	4.21	7.61	2.87	14.68	2/1/2	54.1	9.0	34.0	.530	3.417	4.8	125.1	3.2	105.0D	1.281
4-3640	4-3998.0	.169	316.8	1.8	3.3	.859	93.1	.277	.776	188.1	453.4	.561	.990D	105.7	1.208	.7	2.4	197.9	.330
4-3998.0	4-4140	.330	232.5	2.6	.8	1.378	78.6	.423	1.176	39.2	154.1	.679D	1.674A	106.6	.656	1.6	24.9	126.6	.197
4-4140	4-4520	.163	125.5	15.2	-1.1	.683	75.5	.366	1.223	151.2	440.5	.776	1.670	108.8	1.089	1.1	10.2	16.0	.309
		11.90	7.70	4.27	4.19	7.59	3.43	15.61	2/1/2	55.6	5.5	34.5	.553	3.369	2.7	125.2	-.3	106.3D	1.309
4-3650	4-3998.7	.166	313.5	-1.0	3.4	.866	96.3	.282	.781	196.5	452.7	.560	1.001D	106.0	1.212	.1	.3	199.2	.336
4-3998.7	4-4140	.336	232.3	2.5	.8	1.378	78.2	.424	1.174	40.4	154.3	.676D	1.673A	106.6	.657	1.6	25.0	126.2	.198
4-4140	4-4530	.201	132.5	15.2	-.9	.679	71.8	.411	1.216	148.8	448.1	.716	1.716	112.1	1.089	1.2	12.3	21.7	.426
		13.00	8.79	4.49	4.21	7.61	4.29	16.85	2/1/2	54.1	3.0	33.1	.533	3.506	4.1	125.9	-3.9	105.9D	1.355
MARS ARRIVAL DATE = 2444150 (3 OCT 1979)																			
4-3620	4-4003.7	.212	342.7	8.6	3.7	.845	83.4	.314	.766	165.0	459.4	.526	1.006	108.1	1.202	2.0	5.9	203.7	.380
4-4003.7	4-4150	.380	232.4	1.5	.4	1.370	75.6	.452	1.145	49.7	160.5	.650D	1.639A	103.7	.633	1.7	26.9	120.2	.187
4-4150	4-4500	.110	103.2	14.0	-1.5	.682	82.3	.298	1.238	161.1	425.9	.868	1.607	103.6	1.088	1.2	7.0	4.8	.280
		11.26	7.29	4.88	3.97	7.37	2.41	13.87	2/1/2	64.7	13.5	28.9	.417	4.002	9.8	127.5	8.8	99.3D	1.253
4-3630	4-3999.8	.171	330.3	5.8	3.3	.852	88.9	.284	.770	177.3	455.5	.552	.989	106.2	1.205	1.3	4.3	199.6	.340
4-3999.8	4-4150	.340	232.4	1.8	.5	1.374	77.8	.420	1.156	42.3	159.3	.672D	1.645A	103.8	.640	1.7	26.5	122.2	.182
4-4150	4-4510	.125	114.7	14.9	-1.3	.679	80.1	.323	1.229	157.7	432.3	.832	1.627	105.7	1.088	1.2	8.9	10.6	.315
		10.63	6.98	4.31	3.85	7.25	2.67	14.52	2/1/2	62.9	9.8	32.8	.519	3.536	5.5	125.8	4.4	104.0D	1.318
4-3640	4-3998.9	.168	320.4	2.4	3.3	.856	92.7	.278	.774	187.2	453.8	.559	.990D	105.8	1.207	.7	2.4	199.0	.332
4-3998.9	4-4150	.332	232.5	1.9	.5	1.374	78.3	.417	1.161	40.6	159.0	.676D	1.646A	103.6	.642	1.7	26.4	122.7	.181
4-4150	4-4520	.148	124.9	15.0	-1.1	.675	77.3	.355	1.222	154.5	436.9	.788	1.655	108.1	1.088	1.2	10.9	16.6	.356
		11.21	7.39	4.27	3.82	7.22	3.12	15.34	2/1/2	62.5	6.4	33.5	.547	3.472	2.4	125.8	-.9	105.9D	1.382
4-3650	4-3999.4	.165	314.7	-.5	3.4	.865	96.0	.283	.779	195.7	453.1	.559	1.000D	106.0	1.211	.1	.3	200.3	.337
4-3999.4	4-4150	.337	232.5	1.9	.5	1.374	78.0	.419	1.159	41.6	159.1	.674D	1.645A	103.8	.641	1.7	26.5	122.4	.182
4-4150	4-4530	.181	133.2	14.8	-.9	.671	73.9	.396	1.214	151.7	446.0	.734	1.694	111.0	1.089	1.3	13.0	22.6	.407
		12.15	8.31	4.48	3.84	7.24	3.83	16.43	2/1/2	62.7	3.7	32.2	.530	3.603	3.0	126.4	-2.8	105.2D	1.380
MARS ARRIVAL DATE = 2444160 (13 OCT 1979)																			
4-3620	4-4005.5	.223	345.3	9.3	3.8	.843	82.4	.323	.764	163.3	460.5	.516	1.011	108.6	1.201	2.0	5.9	206.0	.391
4-4005.5	4-4160	.391	233.2	.9	.3	1.367	74.9	.433	1.133	52.2	165.1	.642D	1.623A	100.8	.618	1.8	28.1	119.6	.179
4-4160	4-4500	.107	99.1	14.0	-1.5	.676	83.9	.296	1.238	165.2	425.1	.872	1.605	103.4	1.088	1.3	7.7	4.9	.277
		11.17	7.39	5.04	3.78	7.18	2.35	13.81	2/1/2	73.9	14.1	27.7	.393	4.180	11.0	129.0	10.4	98.1D	1.251
4-3630	4-4000.9	.174	332.4	6.5	3.4	.851	88.4	.287	.769	176.1	456.1	.549	.990	106.4	1.204	1.3	4.3	201.1	.344
4-4000.9	4-4160	.344	233.0	1.1	.3	1.371	77.5	.418	1.148	43.6	163.7	.669D	1.628A	101.1	.627	1.8	27.9	118.0	.172
4-4160	4-4510	.117	111.7	15.0	-1.3	.672	81.8	.316	1.229	161.5	431.2	.836	1.621	105.3	1.088	1.3	9.6	10.9	.309
		10.49	6.88	4.34	3.62	7.02	2.53	14.39	2/1/2	71.7	10.5	32.0	.508	3.625	6.4	126.7	5.7	103.2D	1.334
4-3640	4-3999.8	.169	322.1	3.0	3.3	.857	92.4	.279	.773	186.2	454.3	.557	.989D	105.9	1.207	.7	2.4	200.2	.333
4-3999.8	4-4160	.333	233.0	1.2	.3	1.372	78.1	.415	1.152	41.6	163.4	.674D	1.629A	101.1	.629	1.8	27.9	116.6	.170
4-4160	4-4520	.136	123.5	15.1	-1.1	.667	79.2	.347	1.221	158.0	437.5	.798	1.644	107.5	1.088	1.3	11.6	17.0	.346
		10.74	7.15	4.27	3.39	6.99	2.88	15.13	2/1/2	71.2	7.2	32.8	.541	3.539	2.8	126.6	2.1	104.8D	1.373
4-3650	4-4000.2	.163	316.0	-.0	3.4	.863	95.7	.283	.778	194.8	453.5	.557	.998D	106.0	1.210	.1	.3	201.3	.338
4-4000.2	4-4160	.338	233.0	1.2	.3	1.371	77.9	.416	1.150	42.4	163.5	.672D	1.629A	101.1	.628	1.8	27.9	118.4	.171
4-4160	4-4530	.164	133.0	14.8	-.8	.663	76.0	.383	1.213	154.7	444.2	.749	1.676	110.1	1.088	1.4	13.8	23.2	.392
		11.51	7.91	4.46	3.60	7.00	3.45	16.09	2/1/2	71.4	4.4	31.7	.528	3.662	1.7	127.2	-1.6	104.6D	1.404
4-3660	4-4001.6	.210	314.1	-2.0	3.5	.871	98.8	.294	.784	202.4	453.1	.553	1.015D	106.6	1.214	-.5	-1.8	203.7	.351
4-4001.6	4-4160	.351	232.9	1.1	.3	1.370	77.1	.420	1.146	45.0	163.9	.665D	1.627A	101.0	.626	1.8	28.0	117.7	.173
4-4160	4-4540	.203	140.6	14.0	-.6	.659	72.1	.429	1.205	152.0	451.4	.668	1.722	113.4	1.088	1.5	15.6	29.4	.449
		12.82	9.17	4.84	3.64	7.04	4.34	17.37	2/1/2	72.0	3.5	29.4	.487	3.942	5.7	128.3	-5.7	103.6D	1.434
MARS ARRIVAL DATE = 2444170 (23 OCT 1979)																			
4-3620	4-4007.7	.239	348.2	10.0	3.9	.841	81.1	.335	.762	161.3	462.0	.507	1.017	109.4	1.200	2.1	5.8	208.7	.406
4-4007.7	4-4170	.406	234.6	.3	.1	1.365	74.0	.437	1.124	55.1	169.3	.633D	1.615A	98.1	.605	1.9	29.1	110.9	.176
4-4170	4-4500	.106	94.6	14.0	-1.6	.670	85.6	.295	1.240	169.4	424.5	.875	1.605	103.3	1.089	1.5	8.4	5.0	.275
		11.34	7.62	5.29	3.71	7.11	2.34	13.77	2/1/2	82.8	14.6	26.4	.364	4.372	12.5	131.0	12.1	96.7D	1.227
4-3630	4-4002.1	.178	334.6	7.2	3.4	.849	87.9	.290	.766	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348
4-4002.1	4-4170	.348	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.166
4-4170	4-4510	.113	107.9	15.2	-1.3	.665	83.5	.315	1.230	165.4	430.3	.843	1.617	105.0	1.088	1.4	10.2	11.1	.304
		10.32	6.85	4.38	3.49	6.89	2.45	14.31	2/1/2	80.3	11.1	31.5	.495	3.689	7.5	127.9	7.1	102.5D	1.332
4-3640	4-4000.7	.169	323.9	5.7	3.3	.856	92.0	.281	.772	185.2	454.8	.555	.988D	106.0	1.206	.7	2.4	201.5	.336
4-4000.7	4-4170	.336	233.9	.4	.1	1.370	78.0	.413	1.147	42.3	167.4	.672D	1.621A	98.6	.619	1.9	29.2	114.5	.164
4-4170	4-4520	.127	120.8	15.3	-1.1	.660	81.0	.340	1.221	161.6	436.3	.805	1.636	107.0	1.088	1.4	12.1	17.4	.338
		10.42	6.98	4.27	3.45	6.85	2.70	14.97	2/1/2	79.7	7.9	32.5	.534	3.579	3.8	127.6	3.5	104.4D	1.377
4-3650	4-4001.1	.182	317.4	.5	3.4	.862	95.4	.284	.776	193.9	453.9	.556	.997D	106.1	1.209	.1	.3	202.4	.339
4-4001.1	4-4170	.339	233.9	.4	.1	1.370	77.8	.414	1.146	42.9	167.5	.671D	1.620A	98.6	.618	1.9	29.2	114.4	.164
4-4170	4-4530	.150	132.0	14.7	-.8	.656	78.0	.372	1.211	158.0	442.7	.761	1.662	109.4	1.088	1.5	14.2	23.8	.379
		11.06	7.60	4.44	3.46	6.66	3.15	15.82	2/1/2	79.6	5.1	31.4	.524	3.691	.4	128.1	-.2	104.4D	1.411
4-3660	4-4002.4	.208	315.2	-1.6	3.5	.869	98.5	.294	.782	201.6	453.5	.552	1.013D	106.7	1.213	-.5	-1.8	204.7	.351
4-4002.4	4-4170	.351	233.9	.4	.1	1.369	77.0	.418	1.142	45.5	167.9	.664D	1.619A	98.5	.616	1.9	29.2	113.7	.166
4-4170	4-4540	.184	141.0	13.7	-.5	.651	74.5	.413	1.203	154.9	449.5	.706	1.700	112.4	1.088	1.6	16.2	30.2	.430
		12.19	8.69	4.80	3.80	6.90	3.88	16.94	2/1/2	80.4	3.7	29.2	.487	3.964	4.4	129.2	-4.3	103.3D	1.442

STOPOVER TIME = 0 DAYS — 1980 OUTBOUND SWINGBY — MISSION DURATION = 680 DAYS; MARS ARRIVAL DATE = 2444180 2 NOV 1979

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2444180 (2 NOV 1979)																				
4-3820	4-4010.6	.263	352.0	10.9	4.2	.838	79.0	.354	.760	158.5	464.1	.491	1.029	110.6	1.198	2.2	5.7	212.5	.432
4-4010.6	4-4160	.432	236.6	-.2	-.1	1.362	72.6	.447	1.115	59.3	173.3	.617D	1.613A	95.3	.592	2.0	29.6	106.6	.179
4-4160	4-4500	.108	90.1	14.1	-1.6	.665	87.4	.295	1.242	173.7	424.1	.876	1.608	103.2	1.089	1.6	8.9	5.0	.274
		11.65	8.08	5.71	3.78	7.18	2.37	13.76	2/1/2	91.3	15.0	24.6	.322	4.655	14.3	133.9	14.0	94.6D	1.178
4-3830	4-4003.4	.182	337.0	8.0	5.5	.848	87.3	.294	.766	173.6	457.4	.541	.991	106.8	1.202	1.3	4.2	204.3	.353
4-4003.4	4-4160	.353	235.0	-.3	-.1	1.369	76.9	.419	1.140	45.6	171.5	.663D	1.617A	96.0	.608	2.0	30.1	110.2	.164
4-4160	4-4510	.110	103.5	15.4	-1.3	.660	85.3	.313	1.231	169.5	429.7	.846	1.616	104.8	1.089	1.5	10.7	11.3	.301
		10.30	6.85	4.44	3.44	6.85	2.41	14.25	2/1/2	88.3	11.6	31.1	.481	3.736	8.8	129.4	8.5	101.8D	1.317
4-3840	4-4001.8	.170	325.9	4.4	5.3	.854	91.6	.282	.770	184.1	455.5	.553	.988D	106.1	1.205	.7	2.4	202.8	.338
4-4001.8	4-4160	.338	235.0	-.4	-.1	1.370	77.8	.414	1.144	42.6	171.1	.671D	1.618A	96.2	.611	2.0	30.2	110.9	.161
4-4160	4-4520	.120	117.4	15.7	-1.1	.654	82.9	.335	1.221	165.4	435.4	.812	1.630	106.7	1.088	1.5	12.7	17.7	.332
		10.25	6.86	4.28	3.39	6.79	2.58	14.85	2/1/2	87.7	8.5	32.3	.527	3.597	5.0	128.8	4.9	103.9D	1.367
4-3850	4-4001.9	.181	319.0	1.1	5.4	.861	95.0	.284	.775	193.0	454.5	.554	.995D	106.2	1.208	.1	.3	203.6	.340
4-4001.9	4-4160	.340	235.0	-.4	-.1	1.370	77.7	.414	1.144	43.2	171.1	.670D	1.618A	96.2	.611	2.0	30.2	110.8	.161
4-4160	4-4530	.138	130.1	15.0	-.8	.649	80.0	.364	1.211	161.5	441.4	.770	1.652	108.8	1.086	1.5	14.7	24.3	.370
		10.75	7.35	4.43	3.39	6.80	2.93	15.61	2/1/2	87.8	5.8	31.4	.521	3.696	1.2	129.3	1.2	104.2D	1.405
4-3860	4-4003.2	.205	316.3	-1.2	5.5	.867	98.2	.294	.781	200.7	453.9	.551	1.010D	106.7	1.212	-.5	-1.8	205.8	.352
4-4003.2	4-4160	.352	235.0	-.3	-.1	1.369	77.0	.418	1.140	45.5	171.4	.664D	1.617A	96.1	.608	2.0	30.1	110.2	.163
4-4160	4-4540	.167	140.6	13.7	-.5	.644	76.6	.400	1.201	157.9	447.8	.720	1.683	111.5	1.087	1.6	16.7	30.9	.415
		11.75	8.29	4.77	3.44	6.84	3.52	16.60	2/1/2	88.3	4.0	29.3	.486	3.959	3.0	130.4	-2.8	103.2D	1.457
4-3870	4-4005.2	.238	317.1	-2.4	5.7	.876	101.2	.310	.789	207.5	453.8	.544	1.033D	107.5	1.218	-1.2	-3.7	209.0	.372
4-4005.2	4-4160	.372	235.2	-.3	-.1	1.367	75.9	.425	1.134	49.1	171.9	.653D	1.616A	95.9	.605	2.0	30.0	109.3	.167
4-4160	4-4550	.207	148.5	12.5	-.2	.639	72.3	.447	1.193	154.9	454.8	.659	1.726	114.9	1.087	1.7	18.6	37.4	.473
		13.25	9.72	5.28	3.51	6.92	4.43	17.91	2/1/2	89.0	4.7	26.4	.435	4.371	7.8	131.8	-7.5	101.4D	1.486
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																				
4-3830	4-4004.8	.187	339.6	8.8	5.5	.846	86.7	.298	.765	172.1	458.2	.537	.993	107.1	1.201	1.3	4.2	206.2	.360
4-4004.8	4-4190	.360	236.5	-1.1	-.3	1.369	76.6	.421	1.139	46.8	174.9	.660D	1.619A	93.7	.601	2.1	30.8	107.1	.164
4-4190	4-4510	.111	98.9	15.7	-1.4	.655	87.1	.312	1.234	173.7	429.2	.849	1.619	104.7	1.089	1.6	11.2	11.4	.300
		10.40	6.94	4.51	3.46	6.86	2.43	14.23	2/1/2	95.7	12.1	30.7	.465	3.774	10.1	131.1	10.0	101.2D	1.290
4-3840	4-4002.9	.171	326.1	5.2	5.4	.853	91.2	.284	.769	182.9	455.8	.550	.987D	106.2	1.204	.7	2.3	204.3	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	45.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161 *
4-4190	4-4520	.116	113.2	16.2	-1.1	.649	84.8	.332	1.222	169.3	434.6	.816	1.628	106.4	1.088	1.6	13.1	18.0	.328 O
		10.20	6.81	4.29	3.39	6.79	2.51	14.77	2/1/2	95.0	9.0	32.3	.518	3.600	6.4	130.2	6.4	103.6D	1.347
4-3850	4-4002.9	.180	320.6	1.8	5.4	.859	94.7	.285	.773	191.9	454.8	.553	.994D	106.2	1.207	.1	.3	204.9	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.144	43.5	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4530	.130	127.2	15.5	-.8	.645	82.0	.358	1.211	165.1	440.4	.778	1.644	108.4	1.088	1.6	15.2	24.7	.362
		10.56	7.17	4.41	3.39	6.79	2.76	15.46	2/1/2	95.0	6.3	31.5	.517	3.683	2.8	130.8	2.8	104.0D	1.387
4-3860	4-4004.1	.203	317.6	-.7	5.5	.866	97.8	.294	.779	199.7	454.5	.550	1.008D	106.7	1.211	-.5	-1.7	206.9	.352
4-4004.1	4-4190	.352	236.4	-1.1	-.3	1.369	77.0	.419	1.141	45.4	174.7	.664D	1.619A	93.8	.603	2.1	30.9	107.4	.163
4-4190	4-4540	.153	139.3	14.0	-.5	.638	78.7	.390	1.201	161.2	446.4	.732	1.669	110.8	1.087	1.7	17.2	31.4	.403
		11.40	7.96	4.74	3.43	6.84	3.22	16.33	2/1/2	95.4	4.3	29.5	.484	3.934	1.9	131.6	-1.2	103.1D	1.421
4-3870	4-4006.1	.235	318.1	-2.0	5.7	.874	100.9	.310	.787	206.6	454.2	.543	1.030D	107.5	1.216	-1.2	-3.7	210.1	.372
4-4006.1	4-4190	.372	236.6	-1.0	-.3	1.368	75.9	.425	1.136	48.9	175.1	.653D	1.618A	93.6	.599	2.1	30.7	106.6	.167
4-4190	4-4550	.188	148.7	12.4	-.2	.632	74.8	.432	1.191	157.6	453.0	.677	1.705	113.8	1.086	1.8	19.1	38.2	.454
		12.72	9.21	5.23	3.51	6.91	3.98	17.47	2/1/2	96.1	4.4	26.7	.436	4.334	6.3	133.1	-5.8	101.4D	1.452
MARS ARRIVAL DATE = 2444200 (22 NOV 1979)																				
4-3830	4-4006.8	.194	342.5	9.6	5.6	.844	85.9	.304	.763	170.4	459.1	.531	.995	107.5	1.200	1.3	4.2	208.3	.367
4-4006.8	4-4200	.367	236.1	-1.8	-.5	1.369	76.2	.424	1.140	47.9	178.0	.656D	1.624A	91.5	.596	2.2	31.2	104.8	.168
4-4200	4-4510	.115	94.6	16.1	-1.4	.651	89.1	.313	1.237	177.9	428.8	.850	1.624	104.7	1.090	1.8	11.6	11.4	.300
		10.62	7.09	4.80	3.53	6.93	2.49	14.25	2/1/2	102.2	12.4	30.4	.446	3.810	11.5	135.0	11.4	100.9D	1.255
4-3840	4-4004.0	.172	330.4	6.0	5.4	.851	90.7	.286	.767	181.7	456.5	.547	.987D	106.4	1.203	.7	2.3	205.8	.344
4-4004.0	4-4200	.344	237.9	-2.1	-.5	1.371	77.6	.417	1.146	43.6	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4520	.116	108.8	16.8	-1.1	.645	86.7	.331	1.224	173.4	434.1	.819	1.629	106.5	1.089	1.7	13.5	18.1	.328
		10.25	6.81	4.31	3.44	6.84	2.50	14.73	2/1/2	101.5	9.4	32.3	.509	3.591	7.9	131.8	7.9	103.3D	1.318
4-3850	4-4003.9	.179	322.4	2.5	5.4	.857	94.3	.286	.772	190.9	455.5	.551	.992D	106.3	1.206	.1	.3	206.2	.343
4-4003.9	4-4200	.343	237.9	-2.1	-.5	1.371	77.6	.416	1.147	43.4	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4530	.124	123.6	16.2	-.8	.638	84.1	.353	1.212	168.9	439.5	.784	1.640	108.1	1.088	1.7	15.6	25.0	.356
		10.49	7.06	4.40	3.43	6.83	2.65	15.34	2/1/2	101.5	6.8	31.8	.512	3.656	4.5	132.1	4.4	103.8D	1.361
4-3860	4-4005.0	.201	319.0	-.2	5.5	.864	97.5	.294	.777	198.6	454.6	.548	1.006D	106.7	1.210	-.5	-1.7	208.2	.353
4-4005.0	4-4200	.353	237.9	-2.0	-.5	1.370	77.0	.420	1.144	45.3	177.7	.664D	1.624A	91.6	.599	2.3	31.5	105.3	.165
4-4200	4-4540	.142	137.1	14.6	-.5	.632	80.9	.382	1.200	164.7	445.2	.742	1.659	110.3	1.087	1.7	17.6	31.9	.393
		11.18	7.71	4.71	3.47	6.87	3.00	16.12	2/1/2	101.8	4.7	29.8	.483	3.893	2.0	133.1	.5	103.1D	1.387
4-3870	4-4006.9	.232	319.1	-1.6	5.6	.872	100.5	.309	.784	205.7	454.6	.542	1.027D	107.5	1.215	-1.2	-3.7	211.2	.371
4-4006.9	4-4200	.371	238.2	-1.8	-.5	1.369	76.0	.426	1.139	48.7	178.1	.654D	1.624A	91.4	.595	2.2	31.2	104.7	.168
4-4200	4-4550	.171	148.1	12.5	-.2	.626	77.2	.419	1.190	160.6	451.4	.691	1.668	112.9	1.086	1.8	19.5	36.9	.439
		12.35	8.80	5.18	3.55	6.95	3.61	17.12	2/1/2	102.3	4.3	27.0	.436	4.278	4.9	134.5	-4.0	101.5D	1.429
MARS ARRIVAL DATE = 2444210 (2 DEC 1979)																				
4-3830	4-4008.3	.202	345.7	10.5	5.7	.842	84.9	.311	.761	168.5	460.2	.524	.998	107.9	1.199	1.4	4.1	210.7	.376
4-4008.3	4-4210	.376	240.0	-2.5	-.7	1.370	75.8	.429	1.142	49.2	180.9	.652D	1.632	89.3	.592	2.3	31.5	103.4	.173
4-4210	4-4510	.122	90.9	16.3	-1.4	.648	91.0	.315	1.241	182.3	428.6	.850	1.632D	104.7	1.092	1.9	12.0	11.3	.302
		10.97	7.33	4.73	3.64	7.04	2.61	14.27	2/1/2	108.0	12.7	30.1	.425	3.854	12.9	135.2	12.9	99.7D	1.212
4-3840	4-4005.3	.174	332.9	6.9	5.4	.849	90.1	.289	.765	180.3	457.1	.544	.987D	106.6	1.202	.7	2.3	207.5	.347
4-4005.3	4-4210	.347	239.6	-3.0	-.8	1.372	77.4	.419	1.150	43.9	180.4	.667D	1.632	89.7	.597	2.4	32.1	104.3	.167
4-4210	4-4520	.118	104.3	17.3	-1.1	.641	88.6	.331	1.227	177.5	433.6	.821	1.632	106.2	1.090	1.8	13.9	18.2	.325
		10.39	6.88	4.38	3.51	6.92	2.54	14.72	2/1/2	107.3	9.8	32.5	.498	3.575	9.5	133.6	9.5	103.0D	1.283
4-3850	4-4005.0	.178	324.4	3.2	5.4	.856	93.9	.287	.770	189.7	455.8	.549	.991D	106.4	1.205	.1	.3	207.8	.344
4-4005.0	4-4210	.344	239.5	-3.0	-.8	1.372	77.8	.418	1.150	43.3	180.4	.669D	1.632	89.7	.597	2.4	32.1	104.4	.166
4-4210	4-4530	.122	119.3	17.0	-.8	.634	86.1	.351	1.213	172.8	438.8	.788	1.638	107.9	1.088	1.7	15.9	25.2	.353
		10.50	7.00	4.39	3.50	6.90	2.61	15.27	2/1/2	107.2	7.2	32.1	.507	3.618	6.2	133.7	6.1	103.7D	1.328
4-3860	4-4006.0	.199	320.4	.4	5.5	.862	97.1	.295	.775	197.7	455.3	.547	1.003D	106.8	1.209	-.5	-1.7	209.4	.354
4-4006.0	4-4210	.354	239.6	-2.9	-.8	1.371	77.1	.421	1.148	45.1	180.6	.664D	1.632	89.6	.596	2.4	31.9	104.1	.168
4-4210	4-4540	.134	134.0	15.4	-.5	.627	83.1	.376	1.201	166.3	444.3	.749	1.652	109.8	1.087	1.7	17.9	32.3	.386
		11.06	7.52	4.67	3.54	6.94	2.85	15.96	2/1/2	107.4	5.1	30.2	.481	3.840	3.3	134.6	2.2	103.1D	1.366
4-3870	4-4007.8	.229	320.2	-1.2	5.6	.870	100.2	.309	.782	204.7	455.0	.541	1.024D	107.5	1.214	-1.2	-3.6	212.4	.371
4-4007.8	4-4210	.371	239.9	-2.6	-.7	1.370	76.1	.427	1.143	46.3	180.6	.655D	1.632	89.4	.593	2.4	31.6	103.5	.172
4-4210	4-4550	.158	146.7	13.0	-.2	.621	79.6	.409	1.189	164.1	450.1	.703	1.675	112.2	1.086	1.8	19.9	39.4	.426
		12.07	8.46	5.15	3.62	7.02	3.33	16.85	2/1/2	107.8	4.3	27.5	.436	4.210	3.9	136.0	-2.2	101.6D	1.400
MARS ARRIVAL DATE = 2444220 (12 DEC 1979)																				
4-3830	4-4010.5	.214	349.3	11.5	5.7	.840	83.7	.320	.759	166.3	461.6	.516	1.002	108.5	1.198	1.4	4.1	213.5	.386
4-4010.5	4-4220	.386	242.2	-3.2	-.9	1.371	75.2	.435	1.144	50.8	183.7	.646D	1.642	87.2	.589	2.4	31.5	102.7	.179
4-4220	4-4510	.131	88.0	16.6	-1.5	.647	93.1	.319	1.246	186.7	428.5	.849	1.644D	104.9	1.093	2.0	12.4	11.2	.305
		11.46	7.67	4.90	3.79	7.18	2.76	14.33	2/1/2	113.0	13.0	29.6	.398	3.920	14.3	137.7	14.3	98.7D	1.163
4-3840	4-4008.7	.176	338.7	7.9	5.4	.848	89.5	.292	.764	178.8	457.8	.541	.987	106.8	1.201	.7	2.3	209.3	.352
4-4008.7	4-4220	.352	241.4	-3.9	-1.0	1.373	77.2	.422	1.183	44.3	183.1	.666D	1.641	87.7	.595	2.6	32.4	103.7	.178
4-4220	4-4520	.125	100.2	17.8	-1.1	.639	90.9	.352	1.230	181.7	433.3	.822	1.639D	106.2	1.091	1.9	14.2	18.2	.326
		10.63	7.01	4.97	3.62	7.02	2.84	14.74	2/1/2	112.3	10.1	32.7	.486	3.888	11.1	135.5	11.1	102.7D	1.243

STOPOVER TIME = 0 DAYS

1980 OUTBOUND SWINGBY

MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2444220
12 DEC 1979

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-3850	4-4006.1	.178	326.5	4.0	3.4	.854	93.4	.288	.768	188.5	456.4	.547	.989D	106.5	1.204	.1	.3	209.1	.346
4-4006.1	4-4220	.346	241.4	-4.1	-1.1	1.373	77.6	.421	1.155	43.3	183.1	.669D	1.641	87.8	.596	2.6	32.6	103.8	.171
4-4220	4-4550	.122	114.8	17.8	-.8	.631	86.3	.350	1.215	176.8	436.3	.791	1.640	107.7	1.089	1.8	16.2	25.3	.351
		10.60	7.00	4.38	3.60	7.00	2.62	15.23	2/1/2	112.1	7.5	32.5	.501	3.573	6.1	135.5	7.8	103.7D	1.290
4-3860	4-4007.0	.197	322.0	1.1	3.5	.860	96.7	.295	.773	196.6	455.8	.545	1.001D	106.8	1.207	-.5	-1.7	210.8	.354
4-4007.0	4-4220	.354	241.4	-3.9	-1.0	1.373	77.1	.423	1.153	44.8	183.2	.665D	1.641	87.7	.594	2.6	32.4	103.6	.172
4-4220	4-4540	.130	130.2	16.3	-.5	.623	85.3	.372	1.202	172.0	443.5	.755	1.648	109.5	1.087	1.8	18.2	32.6	.361
		11.03	7.40	4.64	3.63	7.03	2.76	15.85	2/1/2	112.3	5.4	30.7	.479	3.778	5.0	136.3	4.1	103.2D	1.330
4-3870	4-4008.8	.226	321.5	-.7	3.6	.867	99.8	.308	.780	203.7	455.5	.539	1.020D	107.5	1.212	-1.2	-3.6	213.7	.371
4-4008.8	4-4220	.371	241.7	-3.5	-1.0	1.372	76.1	.429	1.148	47.8	183.4	.656D	1.641	87.4	.592	2.5	31.9	103.2	.176
4-4220	4-4550	.148	144.3	13.8	-.2	.616	81.9	.401	1.189	167.5	449.0	.713	1.665	111.7	1.086	1.8	20.2	39.9	.417
		11.89	8.19	5.08	3.71	7.11	3.11	16.63	2/1/2	112.7	4.4	28.0	.436	4.131	5.6	137.7	-.2	101.6D	1.367
4-3880	4-4011.2	.262	323.7	-1.5	3.7	.876	102.8	.327	.789	209.9	455.4	.531	1.047D	108.6	1.219	-1.8	-5.3	217.4	.395
4-4011.2	4-4220	.395	242.4	-3.0	-.9	1.370	74.8	.438	1.142	52.0	183.7	.642D	1.642	87.1	.587	2.4	31.4	102.6	.181
4-4220	4-4560	.177	155.7	11.0	.2	.609	77.9	.438	1.177	163.4	454.9	.662	1.692	114.4	1.084	1.9	21.9	47.3	.462
		13.24	9.42	5.68	3.82	7.22	3.75	17.65	2/1/2	113.1	5.1	24.9	.385	4.632	6.7	139.5	-5.2	99.7D	1.399
MARS ARRIVAL DATE = 2444230 (22 DEC 1979)																			
4-3830	4-4013.8	.231	353.5	12.5	3.9	.837	82.1	.334	.756	165.7	463.2	.503	1.009	109.4	1.196	1.4	4.0	217.0	.406
4-4013.8	4-4230	.406	244.7	-3.6	-1.1	1.371	74.3	.444	1.145	53.3	186.2	.637D	1.653	85.1	.585	2.5	31.3	102.8	.188
4-4230	4-4510	.142	85.9	16.9	-1.6	.647	95.3	.325	1.254	131.2	428.4	.847	1.661D	105.1	1.095	2.1	12.8	11.1	.310
		12.14	8.16	5.16	3.98	7.38	3.00	14.42	2/1/2	117.4	13.2	28.7	.364	4.035	15.6	140.8	15.6	97.4D	1.106
4-3840	4-4008.2	.180	338.7	8.9	3.5	.846	88.8	.296	.762	177.5	458.6	.537	.987	107.0	1.200	.7	2.3	211.3	.357
4-4008.2	4-4230	.357	243.4	-4.9	-1.3	1.374	77.1	.426	1.158	44.7	185.7	.665D	1.652	85.8	.594	2.8	32.7	103.8	.177
4-4230	4-4520	.131	96.8	18.2	-1.2	.638	93.0	.335	1.236	166.0	433.1	.821	1.650D	106.3	1.093	2.0	14.5	18.2	.329
		10.95	7.20	4.41	3.75	7.14	2.79	14.79	2/1/2	116.6	10.3	32.9	.473	3.535	12.8	137.6	12.7	102.3D	1.199
4-3850	4-4007.3	.177	328.8	4.9	3.4	.852	92.9	.290	.766	187.2	457.0	.544	.988D	106.6	1.203	.1	.3	210.7	.349
4-4007.3	4-4230	.349	243.3	-5.2	-1.3	1.375	77.5	.423	1.160	43.2	185.6	.669D	1.651	85.9	.595	2.8	33.0	104.0	.176
4-4230	4-4530	.126	110.5	18.5	-.8	.629	90.5	.350	1.219	180.9	437.9	.792	1.646D	107.7	1.090	1.9	16.5	25.5	.351
		10.78	7.07	4.38	3.71	7.11	2.69	15.23	2/1/2	116.4	7.8	33.0	.495	3.522	10.0	137.4	9.7	103.6D	1.248
4-3860	4-4008.0	.194	323.7	1.7	3.4	.858	96.3	.295	.771	195.4	456.3	.543	.999D	106.9	1.206	-.5	-1.7	212.2	.355
4-4008.0	4-4230	.355	243.4	-4.9	-1.3	1.374	77.1	.426	1.158	44.4	185.7	.665D	1.652	85.8	.594	2.8	32.7	103.8	.177
4-4230	4-4540	.128	126.0	17.4	-.5	.620	87.6	.369	1.203	175.9	442.9	.759	1.648	109.3	1.088	1.8	18.5	32.8	.377
		11.08	7.34	4.61	3.74	7.14	2.73	15.78	2/1/2	116.6	5.7	31.3	.476	3.709	7.0	138.1	6.0	103.3D	1.290
4-3870	4-4009.7	.222	322.8	-.2	3.5	.865	99.4	.308	.778	202.6	456.0	.538	1.017D	107.6	1.211	-1.1	-3.6	215.0	.371
4-4009.7	4-4230	.371	243.7	-4.4	-1.2	1.373	76.2	.431	1.154	47.3	185.8	.657D	1.652	85.6	.591	2.7	32.2	103.5	.180
4-4230	4-4550	.140	141.1	14.8	-.2	.612	84.3	.395	1.189	171.1	448.1	.720	1.658	111.3	1.086	1.8	20.4	40.3	.409
		11.80	7.99	5.03	3.81	7.21	2.96	16.47	2/1/2	116.8	4.5	28.6	.436	4.045	4.5	139.4	1.8	102.0D	1.329
4-3880	4-4012.1	.258	324.7	-1.1	3.7	.874	102.4	.326	.786	208.9	455.9	.530	1.043D	108.5	1.217	-1.8	-5.2	216.7	.394
4-4012.1	4-4230	.394	244.3	-3.9	-1.2	1.372	74.9	.439	1.148	51.4	186.1	.644D	1.653	85.3	.587	2.6	31.6	103.0	.185
4-4230	4-4560	.164	154.1	11.6	.2	.605	80.4	.427	1.176	166.7	453.7	.674	1.679	113.7	1.084	1.9	22.2	47.8	.449
		12.98	9.06	5.61	5.92	7.32	3.46	17.37	2/1/2	117.2	4.9	25.5	.387	4.526	5.6	141.2	-3.1	100.0D	1.363
MARS ARRIVAL DATE = 2444240 (1 JAN 1980)																			
4-3830	4-4017.6	.264	359.5	13.7	4.1	.833	79.3	.361	.752	159.7	466.0	.481	1.023	111.1	1.194	1.6	4.0	222.4	.440
4-4017.6	4-4240	.440	248.0	-3.7	-1.3	1.371	72.6	.459	1.143	56.2	188.8	.618D	1.668	82.7	.580	2.5	30.6	103.3	.201
4-4240	4-4510	.155	84.6	17.1	-1.6	.648	97.5	.352	1.263	195.7	428.5	.844	1.682D	105.4	1.098	2.3	13.1	10.9	.316
		13.27	8.99	5.72	4.26	7.68	3.27	14.54	2/1/2	121.3	13.3	26.8	.311	4.318	16.8	145.2	16.8	95.0D	1.030
4-3840	4-4009.8	.184	341.9	9.9	3.5	.844	88.1	.300	.760	175.5	459.5	.532	.988	107.3	1.198	.7	2.2	213.4	.362
4-4009.8	4-4240	.362	245.5	-5.8	-1.6	1.376	76.8	.430	1.163	45.2	186.1	.663D	1.664	84.0	.593	2.9	32.9	104.5	.184
4-4240	4-4520	.142	94.3	16.6	-1.2	.638	95.2	.340	1.242	190.5	433.0	.820	1.665D	106.5	1.095	2.1	14.7	18.2	.333
		11.35	7.46	4.47	3.89	7.28	3.00	14.87	2/1/2	120.3	10.5	33.0	.458	3.518	14.5	139.9	14.3	101.9D	1.152
4-3850	4-4008.5	.177	331.3	5.6	3.4	.850	92.4	.292	.764	185.8	457.6	.541	.987D	106.7	1.201	.1	.3	212.4	.351
4-4008.5	4-4240	.351	245.3	-6.3	-1.7	1.376	77.5	.426	1.166	43.1	187.9	.669D	1.663	84.2	.595	3.0	33.3	104.7	.181
4-4240	4-4530	.133	106.7	19.1	-.8	.628	92.7	.352	1.224	185.1	437.6	.792	1.655D	107.7	1.092	1.9	16.7	25.5	.353
		11.03	7.19	4.38	3.84	7.24	2.81	15.26	2/1/2	120.2	8.0	33.5	.487	3.467	12.0	139.4	11.6	103.6D	1.203
4-3860	4-4009.1	.192	325.6	2.5	3.4	.856	95.8	.296	.769	194.2	456.8	.541	.997D	106.9	1.205	-.5	-1.7	213.7	.356
4-4009.1	4-4240	.356	245.4	-6.1	-1.6	1.376	77.2	.428	1.165	44.1	188.0	.666D	1.663	84.1	.594	3.0	33.1	104.6	.182
4-4240	4-4540	.130	121.5	18.4	-.5	.619	89.9	.369	1.206	179.9	442.4	.761	1.651	109.2	1.089	1.8	18.7	33.0	.376
		11.20	7.34	4.56	3.86	7.26	2.76	15.75	2/1/2	120.2	6.0	31.9	.473	3.634	9.0	140.1	8.1	103.4D	1.247
4-3870	4-4010.8	.219	324.2	.3	3.5	.863	99.0	.308	.775	201.5	456.5	.537	1.014D	107.6	1.209	-1.1	-3.5	216.3	.371
4-4010.8	4-4240	.371	245.7	-5.5	-1.5	1.375	76.3	.433	1.161	46.8	188.1	.658D	1.664	83.9	.592	2.9	32.5	104.4	.185
4-4240	4-4550	.136	137.3	16.0	-.2	.610	86.7	.391	1.191	174.8	447.3	.726	1.656	111.0	1.086	1.8	20.6	40.6	.404
		11.79	7.86	4.98	3.93	7.32	2.88	16.36	2/1/2	120.5	4.6	29.3	.436	3.954	6.1	141.3	3.9	102.2D	1.286
4-3880	4-4013.1	.253	325.8	-.7	3.6	.871	102.0	.325	.783	207.9	456.4	.529	1.038D	108.5	1.215	-1.8	-5.2	220.0	.394
4-4013.1	4-4240	.394	246.3	-4.8	-1.4	1.374	75.1	.441	1.155	50.7	188.4	.645D	1.665	83.5	.588	2.7	31.8	104.0	.190
4-4240	4-4560	.154	151.6	12.6	.2	.601	83.0	.419	1.176	170.1	452.6	.683	1.669	113.1	1.084	1.9	22.4	48.3	.439
		12.81	8.78	5.53	4.03	7.43	3.24	17.14	2/1/2	120.8	4.7	26.2	.388	4.413	5.2	143.1	-.9	100.3D	1.324
MARS ARRIVAL DATE = 2444250 (11 JAN 1980)																			
4-3840	4-4011.6	.190	345.4	11.0	3.5	.842	87.2	.306	.758	173.6	460.4	.526	.989	107.7	1.197	.7	2.2	215.8	.370
4-4011.6	4-4250	.370	247.7	-6.7	-1.9	1.377	76.5	.435	1.168	45.9	190.3	.660D	1.677	82.2	.593	3.1	32.9	105.8	.190
4-4250	4-4520	.155	92.5	18.8	-1.3	.639	97.6	.347	1.251	194.7	433.0	.817	1.685D	106.8	1.097	2.2	15.0	18.1	.339
		11.85	7.81	4.55	4.04	7.44	3.26	14.99	2/1/2	123.6	10.7	33.1	.440	3.509	16.1	142.4	15.9	101.5D	1.104
4-3850	4-4009.9	.178	333.9	6.8	3.4	.848	91.8	.294	.762	184.4	458.3	.538	.986D	106.9	1.200	.1	.3	214.1	.354
4-4009.9	4-4250	.354	247.4	-7.6	-2.0	1.378	77.4	.430	1.172	43.0	190.2	.669D	1.676	82.5	.596	3.3	33.6	106.1	.187
4-4250	4-4530	.142	103.6	19.6	-.9	.629	95.1	.356	1.230	189.3	437.4	.792	1.668D	107.9	1.094	2.0	16.9	25.6	.356
		11.36	7.39	4.39	3.97	7.37	3.00	15.33	2/1/2	123.4	8.2	34.1	.479	3.409	14.1	141.6	13.5	103.5D	1.155
4-3860	4-4010.3	.191	327.6	3.3	3.4	.854	95.4	.297	.767	193.0	457.4	.539	.995D	107.0	1.204	-.5	-1.6	215.2	.358
4-4010.3	4-4250	.358	247.5	-7.4	-2.0	1.378	77.2	.431	1.171	43.7	190.2	.667D	1.676	82.4	.595	3.2	33.4	106.0	.188
4-4250	4-4540	.135	117.4	19.2	-.5	.618	92.3	.370	1.211	183.9	442.0	.783	1.658D	109.2	1.090	1.9	18.8	33.2	.376
		11.40	7.41	4.56	3.99	7.38	2.85	15.76	2/1/2	123.4	6.2	32.7	.470	3.356	11.3	142.1	10.2	103.6D	1.200
4-3870	4-4011.8	.216	325.7	.9	3.5	.861	98.5	.308	.773	200.3	457.0	.535	1.011D	107.6	1.208	-1.1	-3.5	217.9	.372
4-4011.8	4-4250	.372	247.8	-6.7	-1.8	1.377	76.4	.436	1.168	46.2	190.3	.659D	1.677	82.2	.593	3.1	32.8	105.8	.191
4-4250	4-4550	.135	133.0	17.2	-.2	.608	89.2	.389	1.193	178.7	446.7	.729	1.657	110.8	1.087	1.8	20.8	40.9	.401
		11.85	7.80	4.93	4.05	7.45	2.87	16.29	2/1/2	123.6	4.8	30.1	.435	3.857	6.1	143.5	6.1	102.5D	1.244
4-3880	4-4014.1	.249	327.0	-.3	3.6	.868	101.6	.324	.781	206.8	456.9	.528	1.034D	108.5	1.214	-1.7	-5.1	221.3	.393
4-4014.1	4-4250	.393	248.4	-5.8	-1.7	1.376	75.2	.443	1.163	50.0	190.5	.647D	1.678	81.9	.590	2.9	32.0	105.5	.195
4-4250	4-4560	.147	148.3	13.8	.2	.599	85.6	.413	1.177	173.7	451.8	.691	1.663	112.7	1.084	1.9	22.5	48.7	.432
		12.72	8.56	5.46	4.15	7.55	3.10	16.98	2/1/2	123.9	4.6	26.9	.389	4.297	5.8	145.0	1.3	100.6D	1.283
MARS ARRIVAL DATE = 2444260 (21 JAN 1980)																			
4-3840	4-4013.6	.197	349.2	12.1	3.6	.839	86.2	.313	.755	171.5	461.5	.519	.992	108.1	1.196	.7	2.2	218.4	.379
4-4013.6	4-4260	.379	250.1	-7.5	-2.1	1.379	76.1	.441	1.174	46.8	192.5	.657D	1.691	80.5	.594	3.3	32.6	107.5	.198
4-4260	4-4520	.170	91.6	19.1	-1.3	.643	100.0	.355	1.262	199.2	433.0	.814	1.711D	107.1	1.100	2.3	15.2	18.0	.347
		12.45	8.24	4.65	4.21	7.60	3.59	15.14	2/1/2	126.5	10.8	33.1	.419	3.515	17.6	145.1	17.3	100.9D	1.055
4-3850	4-4011.2	.179	336.7	7.8	3.4	.846	91.2	.296	.780	182.8	458.9	.535	.986D	107.1	1.199	.1	.3	216.0	.358
4-4011.2	4-4260	.358	249.6	-8.9	-2.4	1.380	77.4	.433	1.179	42.9	192.3	.668D	1.689	80.9	.597	3.6	33.9	107.9	.194
4-4260	4-4530	.154	101.3	20.0	-.9	.631	97.5	.362	1.238	193.6	437.3	.790	1.686D	108.1	1.096	2.1	17.0	25.6	.361
		11.76	7.65	4.40	4.12	7.51	3.25	15.44	2/1/2	126.2	8.4	34.7	.470	3.350	16.2	143.9	15.6	103.8D	1.105
4-3860	4-4011.4	.189	329.7	4.1	3.4	.852	94.9	.298	.785	191.7	457.8	.537	.993D	107.1	1.202	-.5	-1.6	218.8	.359
4-4011.4	4-4260	.359	249.6	-8.8	-2.3	1.380	77.5	.434	1.178	43.2	192.3	.667D	1.690	80.9	.597	3.5	33.8	107.9	.194
4-4260	4-4540	.143	113.8	19.9	-.5	.619	94.7	.373	1.216	188.0	441.7	.783	1.670D	109.3	1.092	1.9	19.0	33.3	.379
		11.67	7.55	4.54	4.12	7.52	3.01	15.81	2/1/2	126.2	6.3	33.5	.466	3.471	13.6	144.3	12.8	103.8D	1.151

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2444260
21 JAN 1980

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3870	4-4012.9	.213	327.3	1.5	3.4	.858	98.1	.308	.771	199.1	457.5	.533	1.008D	107.6	1.206	-1.1	-3.5	219.2	.372
4-4012.9	4-4260	.372	249.9	-7.9	-2.2	1.379	76.5	.438	1.175	45.6	192.4	.660D	1.690	80.6	.595	3.4	33.1	107.6	.196
4-4260	4-4550	.136	128.7	18.4	-.2	.608	91.6	.388	1.197	182.6	446.3	.732	1.661D	110.7	1.088	1.9	20.9	41.1	.400
		11.98	7.80	4.88	4.18	7.57	2.92	16.27	2/1/2	126.4	4.9	30.9	.434	3.757	10.3	145.4	8.4	102.8D	1.198
4-3880	4-4015.1	.245	328.3	.2	3.5	.866	101.2	.323	.778	205.6	457.4	.526	1.030D	108.5	1.212	-1.7	-5.1	222.7	.393
4-4015.1	4-4260	.395	250.5	-6.8	-2.0	1.378	75.3	.446	1.170	49.3	192.5	.649D	1.692	80.3	.592	3.1	32.2	107.4	.201
4-4260	4-4560	.144	144.5	15.2	.2	.597	88.2	.409	1.179	177.3	451.1	.696	1.661	112.4	1.084	1.9	22.7	49.1	.427
		12.70	8.42	5.39	4.28	7.67	3.03	16.87	2/1/2	126.6	4.6	27.7	.390	4.178	7.1	147.0	3.7	101.0D	1.240
								MARS ARRIVAL DATE = 2444270 (31 JAN 1980)											
4-3840	4-4016.0	.208	353.6	13.3	3.6	.836	84.9	.322	.753	169.0	462.8	.510	.995	108.7	1.194	.8	2.2	221.5	.391
4-4016.0	4-4270	.391	252.7	-8.1	-2.4	1.381	75.6	.447	1.179	48.3	194.5	.652D	1.706	78.8	.596	3.4	32.5	109.6	.206
4-4270	4-4520	.188	91.3	19.2	-1.4	.648	102.4	.366	1.276	203.6	433.0	.810	1.743D	107.5	1.104	2.4	15.4	17.9	.356
		13.19	8.79	4.81	4.40	7.79	3.98	15.33	2/1/2	129.0	10.9	32.7	.394	3.552	18.8	148.1	18.5	100.1D	1.005
4-3850	4-4012.7	.180	339.7	8.9	3.4	.844	90.5	.299	.758	181.3	459.7	.531	.985D	107.3	1.198	.1	.3	217.9	.362
4-4012.7	4-4270	.362	251.8	-10.3	-2.8	1.382	77.3	.437	1.186	42.9	194.4	.668D	1.703	79.4	.600	3.8	34.2	110.1	.200
4-4270	4-4530	.169	99.9	20.3	-.9	.634	99.9	.370	1.249	197.9	437.2	.787	1.710D	108.4	1.099	2.1	17.1	25.6	.368
		12.25	7.98	4.42	4.27	7.66	3.56	15.58	2/1/2	128.6	8.5	35.4	.460	3.290	18.4	146.4	17.6	103.6D	1.053
4-3860	4-4012.6	.187	331.8	4.9	3.4	.850	94.4	.299	.763	190.4	458.5	.535	.991D	107.2	1.201	-.5	-1.6	218.3	.361
4-4012.6	4-4270	.361	251.8	-10.4	-2.8	1.382	77.3	.437	1.186	42.8	194.4	.668D	1.703	79.4	.600	3.9	34.2	110.1	.200
4-4270	4-4540	.154	111.0	20.4	-.5	.621	97.2	.378	1.224	192.2	441.5	.762	1.686D	109.5	1.094	2.0	19.1	33.4	.363
		12.02	7.76	4.52	4.26	7.66	3.24	15.89	2/1/2	128.6	6.4	34.4	.461	3.363	16.2	146.6	14.9	104.1D	1.099
4-3870	4-4014.0	.210	329.0	2.2	3.4	.856	97.6	.308	.768	197.9	458.1	.532	1.005D	107.7	1.205	-1.1	-3.4	220.7	.373
4-4014.0	4-4270	.373	252.1	-9.4	-2.6	1.382	76.6	.441	1.183	45.0	194.4	.662D	1.704	79.2	.598	3.7	33.5	109.9	.202
4-4270	4-4550	.145	124.7	19.3	-.2	.609	94.2	.390	1.202	186.6	445.9	.733	1.670D	110.7	1.090	1.9	21.0	41.5	.401
		12.20	7.88	4.84	4.31	7.71	3.05	16.29	2/1/2	128.8	4.9	31.8	.433	3.692	12.7	147.6	10.8	103.1D	1.149
4-3880	4-4016.2	.241	329.6	.7	3.5	.863	100.7	.323	.775	204.5	457.9	.525	1.025D	108.5	1.210	-1.7	-5.0	224.1	.392
4-4016.2	4-4270	.392	252.7	-8.0	-2.3	1.381	75.5	.446	1.178	48.5	194.5	.651D	1.706	78.8	.595	3.4	32.4	109.6	.206
4-4270	4-4560	.144	140.3	16.5	.2	.597	90.8	.408	1.182	181.1	450.5	.700	1.663D	112.2	1.085	1.8	22.7	49.4	.425
		12.77	8.36	5.32	4.41	7.80	3.04	16.81	2/1/2	129.0	4.5	28.5	.391	4.057	9.1	149.1	6.0	101.3D	1.195
								MARS ARRIVAL DATE = 2444280 (10 FEB 1980)											
4-3850	4-4014.2	.182	342.8	10.0	3.4	.842	89.8	.303	.756	179.6	460.4	.527	.985	107.5	1.196	.1	.3	219.9	.366
4-4014.2	4-4280	.366	254.2	-11.8	-3.2	1.384	77.2	.440	1.193	42.9	196.3	.667D	1.718	77.9	.603	4.2	34.4	112.7	.207
4-4280	4-4530	.186	99.2	20.5	-1.0	.640	102.5	.379	1.262	202.2	437.2	.783	1.741D	108.8	1.103	2.2	17.2	25.6	.377
		12.81	8.39	4.45	4.42	7.82	3.94	15.77	2/1/2	130.7	8.6	36.1	.449	3.230	20.7	149.0	19.7	103.6D	1.000
4-3860	4-4013.8	.186	334.1	5.8	3.4	.848	93.8	.300	.761	189.1	459.1	.533	.989D	107.3	1.200	-.5	-1.6	220.0	.363
4-4013.8	4-4280	.363	254.1	-12.2	-3.2	1.384	77.4	.439	1.193	42.3	196.3	.669D	1.718	77.9	.603	4.2	34.7	112.7	.206
4-4280	4-4540	.166	109.0	20.8	-.5	.625	99.8	.384	1.233	196.4	441.3	.759	1.707D	109.8	1.097	2.0	19.1	33.4	.389
		12.45	8.03	4.50	4.41	7.80	3.53	16.02	2/1/2	130.6	6.5	35.4	.456	3.287	19.0	149.1	17.5	104.4D	1.043
4-3870	4-4015.1	.207	330.7	2.9	3.4	.854	97.2	.308	.766	196.7	458.6	.530	1.002D	107.7	1.203	-1.1	-3.4	222.2	.373
4-4015.1	4-4260	.373	254.4	-11.0	-3.0	1.384	76.8	.443	1.191	44.3	196.4	.663D	1.719	77.7	.602	4.0	33.8	112.5	.206
4-4260	4-4550	.154	121.3	20.1	-.2	.612	96.8	.394	1.208	190.7	445.6	.733	1.684D	110.8	1.092	1.9	21.0	41.4	.404
		12.49	8.04	4.79	4.45	7.85	3.24	16.36	2/1/2	130.8	5.0	32.8	.431	3.542	15.5	149.8	13.5	103.5D	1.097
4-3860	4-4017.2	.237	331.0	1.2	3.4	.860	100.3	.322	.772	203.3	456.4	.523	1.021D	108.5	1.208	-1.7	-5.0	225.6	.392
4-4017.2	4-4280	.392	255.0	-9.4	-2.7	1.383	75.7	.450	1.187	47.8	196.4	.653D	1.720	77.4	.599	3.7	32.6	112.2	.212
4-4280	4-4560	.148	136.1	17.8	.2	.599	93.4	.408	1.186	185.0	450.0	.702	1.669D	112.2	1.087	1.8	22.8	49.6	.424
		12.91	8.37	5.26	4.54	7.93	3.11	16.80	2/1/2	131.1	4.4	29.5	.391	3.951	11.4	151.3	8.8	101.8D	1.147
								MARS ARRIVAL DATE = 2444290 (20 FEB 1980)											
4-3880	4-4015.0	.186	336.5	8.7	3.5	.846	95.5	.302	.759	187.8	459.7	.530	.986D	107.4	1.198	-.5	-1.8	221.8	.365
4-4015.0	4-4290	.365	256.5	-14.5	-3.8	1.386	77.6	.442	1.201	41.7	198.2	.670D	1.732	76.8	.607	4.7	35.2	115.7	.213
4-4290	4-4540	.184	107.8	21.1	-.6	.631	102.4	.393	1.246	200.7	441.2	.756	1.735D	110.1	1.101	2.1	18.2	33.8	.397
		12.95	8.39	4.49	4.56	7.95	3.90	16.20	2/1/2	132.3	6.6	36.7	.451	3.178	22.1	151.7	20.3	104.9D	.982
4-3870	4-4016.2	.204	332.5	5.6	3.5	.852	96.7	.306	.764	195.5	459.1	.528	.990D	107.8	1.202	-1.1	-3.4	223.6	.374
4-4016.2	4-4290	.374	256.6	-12.9	-3.5	1.386	76.9	.445	1.199	43.6	198.2	.668D	1.733	76.4	.606	4.4	34.3	115.8	.214
4-4290	4-4550	.167	118.7	20.6	-.2	.616	99.4	.399	1.217	194.8	445.5	.731	1.703D	111.1	1.094	1.9	21.0	41.6	.409
		12.86	8.27	4.76	4.60	7.99	3.51	16.47	2/1/2	132.6	5.0	34.0	.430	3.422	18.5	152.4	16.3	104.1D	1.040
4-3860	4-4016.3	.233	332.4	1.6	3.4	.858	99.8	.322	.770	202.1	456.9	.522	1.018D	108.5	1.207	-1.7	-4.9	227.0	.392
4-4016.3	4-4290	.392	257.2	-10.9	-3.2	1.385	75.8	.452	1.195	47.0	198.3	.655D	1.738	76.1	.603	4.0	32.9	115.1	.217
4-4290	4-4560	.185	138.3	16.8	.2	.602	90.2	.410	1.192	188.0	448.6	.703	1.680D	112.2	1.089	1.8	22.8	49.8	.426
		13.14	8.46	5.19	4.67	8.06	3.27	16.83	2/1/2	132.9	4.4	30.5	.392	3.803	14.0	153.6	11.2	102.3D	1.098

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 720 DAYS
MARS ARRIVAL DATE = 2444160
13 OCT 1979

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2444160 (13 OCT 1979)																			
4-3820	4-4005.5	.223	345.3	9.3	3.8	.843	82.4	.323	.764	163.3	460.5	.518	1.011	106.6	1.201	2.0	5.9	206.0	.391
4-4005.5	4-4160	.391	233.2	.9	.3	1.367	74.9	.433	1.135	52.2	165.1	.642D	1.623A	100.6	.618	1.8	26.1	115.6	.179
4-4160	4-4540	.203	140.6	14.0	-.6	.659	72.1	.429	1.205	152.0	451.4	.688	1.722	113.4	1.088	1.5	15.6	29.4	.449
		13.16	9.38	5.04	3.78	7.18	4.34	17.37	2/1/2	73.9	3.5	27.7	.393	4.160	11.0	129.0	10.4	98.10	1.291
MARS ARRIVAL DATE = 2444170 (23 OCT 1979)																			
4-3820	4-4007.7	.239	348.2	10.0	3.9	.841	81.1	.335	.762	161.3	462.0	.507	1.017	109.4	1.200	2.1	5.8	208.7	.406
4-4007.7	4-4170	.406	234.6	.3	.1	1.365	74.0	.437	1.124	55.1	169.3	.633D	1.615A	98.1	.605	1.9	29.1	110.9	.176
4-4170	4-4540	.184	141.0	13.7	-.5	.651	74.3	.413	1.203	154.9	449.5	.706	1.700	112.4	1.088	1.6	16.2	30.2	.430
		12.88	9.17	5.29	3.71	7.11	3.88	16.94	2/1/2	82.8	3.7	26.4	.364	4.372	12.5	131.0	12.1	98.7D	1.227
4-3830	4-4002.1	.178	334.6	7.2	3.4	.849	87.9	.290	.768	174.9	456.7	.545	.990	106.6	1.203	1.3	4.3	202.6	.348
4-4002.1	4-4170	.346	233.9	.4	.1	1.369	77.2	.417	1.143	44.7	167.8	.666D	1.620A	98.5	.617	1.9	29.2	113.9	.166
4-4170	4-4550	.230	147.6	12.8	-.2	.647	69.8	.467	1.195	152.4	457.0	.637	1.753	116.1	1.088	1.7	18.1	36.5	.496
		12.86	9.37	4.39	3.49	6.89	4.99	18.45	2/1/2	80.3	5.2	31.5	.495	3.669	7.5	127.9	7.1	102.9D	1.332
MARS ARRIVAL DATE = 2444180 (2 NOV 1979)																			
4-3820	4-4010.8	.263	352.0	10.9	4.2	.838	79.0	.354	.760	158.5	464.1	.491	1.029	110.6	1.198	2.2	5.7	212.5	.432
4-4010.8	4-4180	.432	236.6	-.2	-.1	1.362	72.6	.447	1.115	59.3	173.3	.617D	1.613A	95.3	.592	2.0	29.6	106.6	.179
4-4180	4-4540	.167	140.6	13.7	-.5	.644	76.6	.400	1.201	157.9	447.8	.720	1.683	111.5	1.087	1.6	16.7	30.9	.415
		13.00	9.22	5.71	3.78	7.18	3.52	16.60	2/1/2	91.3	4.0	24.8	.322	4.655	14.3	133.9	14.0	94.6D	1.178
4-3830	4-4003.4	.182	337.0	8.0	3.5	.848	87.3	.294	.766	173.6	457.4	.541	.991	106.8	1.202	1.3	4.2	204.3	.353
4-4003.4	4-4180	.353	235.0	-.3	-.1	1.369	76.9	.419	1.140	45.8	171.5	.663D	1.617A	96.0	.606	2.0	30.1	110.2	.164
4-4180	4-4550	.207	148.5	12.5	-.2	.639	72.3	.447	1.193	154.9	454.8	.659	1.726	114.9	1.087	1.7	18.6	37.4	.473
		12.32	8.88	4.44	3.44	6.85	4.43	17.91	2/1/2	88.3	4.7	31.1	.481	3.736	8.8	129.4	8.5	101.6D	1.317
MARS ARRIVAL DATE = 2444190 (12 NOV 1979)																			
4-3830	4-4004.8	.187	339.6	8.8	3.5	.846	86.7	.298	.765	172.1	458.2	.537	.993	107.1	1.201	1.3	4.2	206.2	.360
4-4004.8	4-4190	.360	236.5	-1.1	-.3	1.369	76.6	.421	1.139	46.8	174.9	.660D	1.619A	93.7	.601	2.1	30.8	107.1	.164
4-4190	4-4550	.188	148.7	12.4	-.2	.632	74.8	.432	1.191	157.8	453.0	.677	1.705	113.8	1.086	1.8	19.1	38.2	.454
		11.95	8.49	4.51	3.46	6.86	3.98	17.47	2/1/2	95.7	4.4	30.7	.465	3.774	10.1	131.1	10.0	101.2D	1.290
4-3840	4-4002.9	.171	328.1	5.2	3.4	.853	91.2	.284	.769	182.9	455.9	.550	.987D	106.2	1.204	.7	2.3	204.3	.341
4-4002.9	4-4190	.341	236.3	-1.2	-.3	1.370	77.7	.415	1.145	43.2	174.5	.670D	1.619A	93.9	.605	2.1	31.0	107.9	.161
4-4190	4-4560	.236	155.6	10.9	.2	.627	69.9	.486	1.182	155.0	460.3	.606	1.757	117.6	1.086	2.0	20.8	44.9	.519
		12.81	9.42	4.29	3.39	6.79	5.13	19.02	2/1/2	95.0	6.7	32.3	.518	3.600	6.4	130.2	6.4	103.6D	1.347
MARS ARRIVAL DATE = 2444200 (22 NOV 1979)																			
4-3830	4-4006.5	.194	342.5	9.6	3.6	.844	85.9	.304	.763	170.4	459.1	.531	.995	107.5	1.200	1.5	4.2	206.3	.367
4-4006.5	4-4200	.367	236.1	-1.8	-.5	1.369	76.2	.424	1.140	47.9	178.0	.656D	1.624A	91.5	.596	2.2	31.2	104.8	.168
4-4200	4-4550	.171	148.1	12.5	-.2	.626	77.2	.419	1.190	160.8	451.4	.691	1.688	112.9	1.086	1.8	19.5	38.9	.439
		11.75	8.22	4.60	3.53	6.93	3.61	17.12	2/1/2	102.2	4.3	30.4	.446	3.810	11.5	133.0	11.4	100.5D	1.255
4-3840	4-4004.0	.172	330.4	6.0	3.4	.851	90.7	.286	.767	181.7	456.5	.547	.987D	106.4	1.203	.7	2.3	205.6	.344
4-4004.0	4-4200	.344	237.9	-2.1	-.5	1.371	77.6	.417	1.146	43.6	177.6	.669D	1.624A	91.7	.600	2.3	31.6	105.7	.163
4-4200	4-4560	.213	156.4	10.6	.2	.621	72.6	.467	1.180	157.6	458.2	.629	1.730	116.3	1.085	1.9	21.2	45.8	.496
		12.32	8.89	4.31	3.44	6.84	4.57	18.47	2/1/2	101.5	6.0	32.3	.509	3.591	7.9	131.8	7.9	103.3D	1.318
MARS ARRIVAL DATE = 2444210 (2 DEC 1979)																			
4-3830	4-4006.3	.202	345.7	10.5	3.7	.842	84.9	.311	.761	168.5	460.2	.524	.998	107.9	1.199	1.4	4.1	210.7	.376
4-4006.3	4-4210	.376	240.0	-2.5	-.7	1.370	75.8	.429	1.142	49.2	180.9	.652D	1.632	89.3	.592	2.3	31.5	103.4	.173
4-4210	4-4550	.158	146.7	13.0	-.2	.621	79.6	.409	1.189	164.1	450.1	.703	1.675	112.2	1.086	1.8	19.9	39.4	.426
		11.69	8.05	4.73	3.64	7.04	3.33	16.85	2/1/2	108.0	4.3	30.1	.425	3.854	12.9	135.2	12.9	99.7D	1.212
4-3840	4-4005.3	.174	332.9	6.9	3.4	.849	90.1	.289	.765	180.3	457.1	.544	.987D	106.6	1.202	.7	2.3	207.5	.347
4-4005.3	4-4210	.347	239.6	-3.0	-.8	1.372	77.4	.419	1.150	43.9	180.4	.667D	1.632	89.7	.597	2.4	32.1	104.3	.167
4-4210	4-4560	.194	156.4	10.7	.2	.614	75.3	.451	1.178	160.4	456.4	.647	1.709	115.3	1.084	1.9	21.6	46.6	.477
		11.97	8.45	4.33	3.51	6.92	4.12	18.02	2/1/2	107.3	5.5	32.5	.498	3.575	9.5	133.6	9.5	103.0D	1.283
4-3850	4-4005.0	.178	324.4	5.2	3.4	.856	93.9	.287	.770	189.7	455.8	.549	.991D	106.4	1.205	.1	.3	207.6	.344
4-4005.0	4-4210	.344	239.5	-3.0	-.8	1.372	77.6	.418	1.150	43.3	180.4	.669D	1.632	89.7	.597	2.4	32.1	104.4	.166
4-4210	4-4570	.244	163.4	8.7	.6	.609	70.0	.506	1.168	157.4	463.6	.578	1.759	119.1	1.083	2.1	23.1	53.6	.543
		13.21	9.71	4.39	3.50	6.90	5.32	19.60	2/1/2	107.2	8.2	32.1	.507	3.618	6.2	133.7	6.1	103.7D	1.328
MARS ARRIVAL DATE = 2444220 (12 DEC 1979)																			
4-3830	4-4010.5	.214	349.3	11.5	3.7	.840	83.7	.320	.759	166.3	461.5	.516	1.002	108.5	1.198	1.4	4.1	213.5	.388
4-4010.5	4-4220	.388	242.2	-3.2	-.9	1.371	75.2	.435	1.144	50.8	183.7	.646D	1.642	87.2	.589	2.4	31.5	102.7	.179
4-4220	4-4550	.148	144.3	13.6	-.2	.616	81.9	.401	1.189	167.5	449.0	.713	1.665	111.7	1.086	1.8	20.2	39.9	.417
		11.79	8.01	4.90	3.79	7.18	3.11	16.63	2/1/2	113.0	4.4	29.6	.398	3.920	14.3	137.7	14.3	98.7D	1.163
4-3840	4-4006.7	.176	335.7	7.9	3.4	.848	89.5	.292	.764	178.8	457.8	.541	.987	106.8	1.201	.7	2.3	209.3	.352
4-4006.7	4-4220	.352	241.4	-3.9	-1.0	1.373	77.2	.422	1.153	44.3	183.1	.666D	1.641	87.7	.595	2.6	32.4	103.7	.172
4-4220	4-4560	.177	155.7	11.0	.2	.609	77.9	.438	1.177	163.4	454.9	.662	1.692	114.4	1.084	1.9	21.9	47.3	.482
		11.74	8.11	4.37	3.62	7.02	3.75	17.65	2/1/2	112.3	5.1	32.7	.486	3.555	11.1	135.5	11.1	102.7D	1.243
4-3850	4-4006.1	.178	326.5	4.0	3.4	.854	93.4	.288	.768	188.5	456.4	.547	.989D	106.5	1.204	.1	.3	209.1	.346
4-4006.1	4-4220	.346	241.4	-4.1	-1.1	1.373	77.6	.421	1.155	43.3	183.1	.669D	1.641	87.8	.596	2.6	32.6	103.8	.171
4-4220	4-4570	.221	164.1	8.5	.6	.603	73.0	.486	1.186	160.0	461.6	.599	1.733	117.6	1.082	2.1	23.4	54.5	.520
		12.74	9.14	4.38	3.60	7.00	4.76	19.03	2/1/2	112.1	7.4	32.5	.501	3.573	8.1	135.5	7.8	103.7D	1.290
MARS ARRIVAL DATE = 2444230 (22 DEC 1979)																			
4-3830	4-4013.3	.231	353.5	12.5	3.9	.837	82.1	.334	.756	163.7	463.2	.503	1.009	109.4	1.196	1.4	4.0	217.0	.406
4-4013.3	4-4230	.406	244.7	-3.6	-1.1	1.371	74.3	.444	1.145	53.3	186.2	.637D	1.653	85.1	.585	2.5	31.3	102.8	.188
4-4230	4-4550	.140	141.1	14.8	-.2	.612	84.3	.395	1.189	171.1	448.1	.720	1.658	111.3	1.086	1.8	20.4	40.3	.409
		12.11	8.13	5.16	3.98	7.38	2.96	16.47	2/1/2	117.4	4.5	28.7	.364	4.035	15.6	140.8	15.6	97.4D	1.106
4-3840	4-4008.2	.180	336.7	8.9	3.5	.846	88.8	.296	.762	177.3	458.6	.537	.987	107.0	1.200	.7	2.3	211.3	.357
4-4008.2	4-4230	.357	243.4	-4.9	-1.3	1.374	77.1	.426	1.158	44.7	185.7	.665D	1.652	85.8	.594	2.8	32.7	103.8	.177
4-4230	4-4560	.164	154.1	11.6	.2	.605	80.4	.427	1.176	166.7	453.7	.674	1.679	113.7	1.084	1.9	22.2	47.8	.449
		11.61	7.87	4.41	3.75	7.14	3.46	17.37	2/1/2	116.6	4.9	32.9	.473	3.535	12.8	137.6	12.7	102.3D	1.199
4-3850	4-4007.3	.177	328.8	4.9	3.4	.852	92.9	.290	.766	187.2	457.0	.544	.988D	106.6	1.203	.1	.3	210.7	.349
4-4007.3	4-4230	.349	243.3	-5.2	-1.3	1.375	77.5	.423	1.160	43.2	185.6	.669D	1.651	85.9	.595	2.8	33.0	104.0	.176
4-4230	4-4570	.201	164.0	8.6	.5	.597	75.8	.470	1.164	162.7	459.9	.617	1.711	116.7	1.081	2.0	23.7	55.3	.500
		12.38	8.67	4.38	3.71	7.11	4.29	18.56	2/1/2	116.4	6.8	33.0	.495	3.522	10.0	137.4	9.7	103.6D	1.248
MARS ARRIVAL DATE = 2444240 (1 JAN 1980)																			
4-3830	4-4017.6	.264	359.5	13.7	4.1	.833	79.3	.361	.752	159.7	466.0	.481	1.023	111.1	1.194	1.6	4.0	222.4	.440
4-4017.6	4-4240	.440	248.0	-3.7	-1.3	1.371	72.6	.459	1.143	58.2	188.8	.618D	1.668	82.7	.580	2.5	30.6	103.3	.201
4-4240	4-4550	.136	137.3	16.0	-.2	.610	86.7	.391	1.191	174.8	447.3	.726	1.656	111.0	1.086	1.8	20.6	40.6	.404
		12.88	8.60	5.72	4.28	7.68	2.88	16.36	2/1/2	121.3	4.6	26.8	.311	4.318	16.8	145.2	16.8	95.0D	1.030
4-3840	4-4009.8	.184	341.9	9.9	3.5	.844	88.1	.300	.760	175.5	459.5	.532	.988	107.3	1.198	.7	2.2	213.4	.362
4-4009.8	4-4240	.362	245.5	-5.8	-1.6	1.376	76.8	.430	1.163	45.2	188.1	.663D	1.664	84.0	.593	2.9	32.9	104.5	.184
4-4240	4-4560	.154	151.6	12.6	.2	.601	83.0	.419	1.176	170.1	452.6	.683	1.669	113.1	1.084	1.9	22.4	48.3	.439
		11.60	7.71	4.47	3.89	7.28	3.24	17.14	2/1/2	120.3	4.7	33.0	.456	3.518	14.5	139.9	14.3	101.9D	1.152
4-3850	4-4008.5	.177	331.3	5.8	3.4	.850	92.4	.292	.764	185.8	457.6	.541	.987D	106.7	1.201	.1	.3	212.4	.351
4-4008.5	4-4240	.351	245.3	-6.3	-1.7	1.376	77.5	.426	1.166	43.1	187.9	.669D	1.663	84.2	.595	3.0	33.3	104.7	.181
4-4240	4-4570	.185	163.2	9.1	.5	.593	78.6	.456	1.163	165.8	458.4	.632	1.694	115.6	1.081	2.0	23.9	56.0	.484
		12.13	8.29	4.38	3.84	7.24	3.91	18.18	2/1/2	120.2	6.3	33.5	.487	3.467	12.0	139.4	11.6	103.6D	1.203
MARS ARRIVAL DATE = 2444250 (11 JAN 1980)																			
4-3840	4-4011.6	.190	345.4	11.0	3.5	.842	87.2	.306	.758	173.6	460.4	.526	.989	107.7	1.197	.7	2.2	215.8	.370
4-4011.6	4-4250	.370	247.7	-6.7	-1.9	1.377	76.5	.435	1.168	45.9	190.3	.660D	1.677	82.2	.593	3.1	32.9	105.8	.190
4-4250	4-4560	.147	148.3	13.8	.2	.599	85.6	.413	1.177	175.7	451.8	.691	1.663	112.7	1.084	1.9	22.5	48.7	.432
		11.69	7.65	4.55	4.04	7.44	3.10	16.98	2/1/2	123.6	4.6	33.1	.440	3.509	16.1	142.4	15.9	101.9D	1.104

STOPOVER TIME = 0 DAYS | 1980 OUTBOUND SWINGBY | MISSION DURATION = 720 DAYS
MARS ARRIVAL DATE = 2444250
11 JAN 1980

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-3850	4-4009.9	.178	333.9	6.8	3.4	.848	91.8	.294	.762	184.4	458.3	.538	.986D	106.9	1.200	.1	.3	214.1	.354
4-4009.9	4-4230	.354	247.4	-7.6	-2.0	1.378	77.4	.430	1.172	43.0	190.2	.669D	1.676	82.5	.596	3.3	33.6	106.1	.187
4-4250	4-4570	.171	161.5	9.9	.5	.590	81.4	.446	1.163	169.0	457.2	.644	1.681	115.1	1.081	1.9	24.1	56.6	.471
		11.97	6.00	4.39	3.97	7.37	3.62	17.88	2/1/2	123.4	5.9	34.1	.479	3.409	14.1	141.6	13.5	103.5D	1.115
4-3860	4-4010.3	.191	327.6	3.3	3.4	.854	95.4	.297	.767	193.0	457.4	.539	.995D	107.0	1.204	-.5	-1.6	215.2	.356
4-4010.3	4-4250	.358	247.5	-7.4	-2.0	1.378	77.2	.431	1.171	43.7	190.2	.667D	1.676	82.4	.595	3.2	33.4	106.0	.188
4-4250	4-4580	.210	171.5	6.4	.9	.582	76.4	.489	1.150	164.8	463.2	.588	1.711	118.2	1.078	2.1	25.3	64.4	.522
		15.03	9.05	4.56	3.99	7.38	4.49	19.08	2/1/2	123.4	8.2	32.7	.470	3.556	11.3	142.1	10.2	103.6D	1.200
MARS ARRIVAL DATE = 2444260 (21 JAN 1980)																			
4-3840	4-4013.6	.197	349.2	12.1	3.6	.839	86.2	.313	.755	171.5	461.5	.519	.992	108.1	1.196	.7	2.2	218.4	.379
4-4013.6	4-4260	.379	250.1	-7.5	-2.1	1.379	76.1	.441	1.174	46.8	192.5	.657D	1.691	80.5	.594	3.3	32.8	107.5	.198
4-4260	4-4560	.144	144.5	15.2	.2	.597	88.2	.409	1.179	177.3	451.1	.696	1.661	112.4	1.084	1.9	22.7	49.1	.427
		11.90	7.69	4.65	4.21	7.60	3.03	16.87	2/1/2	126.5	4.6	33.1	.419	3.515	17.6	145.1	17.3	100.9D	1.055
4-3850	4-4011.2	.179	336.7	7.8	3.4	.846	91.2	.296	.760	182.8	458.9	.535	.986D	107.1	1.199	.1	.3	216.0	.358
4-4011.2	4-4260	.358	249.6	-8.9	-2.4	1.380	77.4	.433	1.179	42.9	192.3	.668D	1.689	80.9	.597	3.6	33.9	107.9	.194
4-4260	4-4570	.162	158.9	11.0	.5	.588	84.1	.438	1.163	172.4	456.2	.654	1.672	114.5	1.081	1.9	24.2	57.1	.461
		11.91	7.80	4.40	4.12	7.51	3.40	17.65	2/1/2	126.2	5.6	34.7	.470	3.350	16.2	143.9	15.6	103.5D	1.105
4-3860	4-4011.4	.189	329.7	4.1	3.4	.852	94.9	.298	.765	191.7	457.9	.537	.993D	107.1	1.202	-.5	-1.6	216.8	.359
4-4011.4	4-4260	.359	249.6	-8.8	-2.3	1.380	77.3	.434	1.178	43.2	192.3	.667D	1.690	80.9	.597	3.5	33.8	107.9	.194
4-4260	4-4580	.193	170.6	6.9	.9	.578	79.4	.475	1.148	167.8	461.6	.603	1.694	117.2	1.077	2.0	25.4	65.1	.505
		12.76	8.63	4.54	4.12	7.52	4.10	18.69	2/1/2	126.2	7.7	33.5	.466	3.471	13.6	144.3	12.5	103.8D	1.151
MARS ARRIVAL DATE = 2444270 (31 JAN 1980)																			
4-3840	4-4016.0	.208	353.6	13.3	3.6	.836	84.9	.322	.753	169.0	462.8	.510	.995	108.7	1.194	.8	2.2	221.5	.391
4-4016.0	4-4270	.391	252.7	-8.1	-2.4	1.381	75.6	.447	1.179	48.3	194.5	.652D	1.706	78.8	.596	3.4	32.5	109.6	.206
4-4270	4-4560	.144	140.3	16.5	.2	.597	90.8	.408	1.182	181.1	450.5	.700	1.663D	112.2	1.085	1.8	22.7	49.4	.425
		12.25	7.85	4.81	4.40	7.79	3.04	16.81	2/1/2	129.0	4.5	32.7	.394	3.552	18.8	148.1	18.5	100.1D	1.005
4-3850	4-4012.7	.180	339.7	8.9	3.4	.844	90.5	.299	.758	181.3	459.7	.531	.985D	107.3	1.198	.1	.3	217.9	.362
4-4012.7	4-4270	.362	251.8	-10.3	-2.8	1.382	77.3	.437	1.186	42.9	194.4	.668D	1.703	79.4	.600	3.8	34.2	110.1	.200
4-4270	4-4570	.155	155.6	12.4	.5	.586	86.9	.432	1.164	175.9	455.3	.662	1.666	114.1	1.081	1.9	24.3	57.5	.454
		11.95	7.68	4.42	4.27	7.66	3.26	17.48	2/1/2	128.6	5.4	35.4	.460	3.290	16.4	146.4	17.6	103.6D	1.053
4-3860	4-4012.6	.187	331.8	4.9	3.4	.850	94.4	.299	.765	190.4	458.5	.535	.991D	107.2	1.201	-.5	-1.6	216.3	.361
4-4012.6	4-4270	.361	251.8	-10.4	-2.8	1.382	77.3	.437	1.186	42.8	194.4	.668D	1.703	79.4	.600	3.9	34.2	110.1	.200
4-4270	4-4580	.180	168.8	7.8	.8	.576	82.4	.464	1.148	171.0	460.6	.616	1.661	116.5	1.077	2.0	25.5	65.7	.492
		12.56	8.31	4.52	4.26	7.66	3.80	18.37	2/1/2	128.6	7.2	34.4	.461	3.383	16.2	146.6	14.9	104.1D	1.099
MARS ARRIVAL DATE = 2444280 (10 FEB 1980)																			
4-3840	4-4019.1	.225	359.0	14.5	3.7	.833	83.1	.336	.750	165.9	464.6	.498	1.002	109.6	1.192	.8	2.2	225.5	.409
4-4019.1	4-4280	.409	255.6	-8.2	-2.5	1.382	74.7	.456	1.183	50.7	196.4	.643D	1.722	77.1	.597	3.4	31.8	112.0	.215
4-4280	4-4560	.148	136.1	17.8	.2	.599	93.4	.408	1.186	185.0	450.0	.702	1.669D	112.2	1.087	1.8	22.8	49.6	.424
		12.81	8.19	5.07	4.62	8.01	3.11	16.80	2/1/2	131.2	4.4	31.6	.360	3.652	19.6	151.6	19.3	98.8D	.954
4-3850	4-4014.2	.182	342.8	10.0	3.4	.842	89.8	.303	.756	179.6	460.4	.527	.985	107.5	1.196	.1	.3	219.9	.366
4-4014.2	4-4280	.366	254.2	-11.8	-3.2	1.384	77.2	.440	1.193	42.9	196.3	.667D	1.718	77.9	.603	4.2	34.4	112.7	.207
4-4280	4-4570	.152	151.7	13.9	.5	.587	89.7	.428	1.166	179.6	454.6	.667	1.665	113.8	1.082	1.8	24.3	57.9	.449
		12.08	7.65	4.45	4.42	7.82	3.21	17.37	2/1/2	130.7	5.1	36.1	.449	3.230	20.7	149.0	19.7	103.6D	1.000
4-3860	4-4013.8	.186	334.1	5.8	3.4	.846	93.8	.300	.761	189.1	459.1	.533	.989D	107.3	1.200	-.5	-1.6	220.0	.363
4-4013.8	4-4280	.363	254.1	-12.2	-3.2	1.384	77.4	.439	1.193	42.3	196.3	.669D	1.718	77.9	.603	4.2	34.7	112.7	.206
4-4280	4-4580	.170	166.1	9.1	.8	.575	85.4	.455	1.148	174.4	459.6	.625	1.672	115.9	1.077	1.9	25.5	66.3	.482
		12.49	8.08	4.50	4.41	7.80	3.58	18.13	2/1/2	130.6	6.8	35.4	.456	3.287	19.0	149.1	17.5	104.4D	1.043
MARS ARRIVAL DATE = 2444290 (20 FEB 1980)																			
4-3860	4-4015.0	.186	336.3	6.7	3.3	.846	93.3	.302	.759	187.8	459.7	.530	.988D	107.4	1.198	-.5	-1.6	221.5	.365
4-4015.0	4-4290	.365	256.3	-14.3	-3.8	1.386	77.6	.442	1.201	41.7	198.2	.670D	1.732	76.8	.607	4.7	35.2	115.7	.213
4-4290	4-4580	.164	162.8	10.5	.3	.576	88.3	.449	1.150	178.0	458.8	.653	1.667	115.5	1.078	1.8	25.5	66.7	.475
		12.50	7.94	4.49	4.56	7.95	3.45	17.96	2/1/2	132.3	6.4	36.7	.451	3.178	22.1	151.7	20.5	104.9D	.982
MARS ARRIVAL DATE = 2444300 (1 MAR 1980)																			
4-3870	4-4017.2	.202	334.2	4.3	3.3	.850	96.3	.309	.762	194.4	459.6	.526	.997D	107.8	1.201	-1.1	-3.3	225.0	.378
4-4017.2	4-4300	.375	258.9	-15.5	-4.2	1.388	77.2	.447	1.207	42.6	200.1	.667D	1.748	75.2	.611	5.0	34.9	118.8	.220
4-4300	4-4590	.179	173.2	6.8	1.1	.564	86.7	.473	1.133	176.3	462.9	.596	1.669	117.3	1.075	1.8	26.5	75.7	.501
		13.25	8.80	4.72	4.78	8.14	3.78	18.59	2/1/2	134.0	8.0	35.4	.427	3.286	22.1	155.1	19.7	104.9D	.977

1982

INBOUND SWINGBY

4.5

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 480 DAYS | MARS ARRIVAL DATE = 2445170 | 19 JUL 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2445170 (19 JUL 1982)																			
4-4990	4-5170	.157	152.3	7.3	-.5	1.108	82.8	.240	1.240	38.5	162.2	.943D	1.538A	95.4	.717	2.1	-12.1	301.3	.176
4-5170	4-5360.7	.301	286.6	-26.9	-1.9	.593	78.8	.499	1.032	168.3	277.5	.517A	1.547	65.1	1.336	1.3	2.8	37.6	.560
4-5360.7	4-5470	.560	47.5	3.0	1.5	1.248	116.7	.465	.837	257.9	499.0	.448	1.226A	115.2	.686	-3.9	-17.1	201.5	.414
		14.63	10.91	4.13	3.72	7.12	6.78	16.57	1/1/2	35.2	28.4	9.9	.192	11.627	3.1	312.6	-1.1	89.1L	2.040
4-5000	4-5170	.191	152.7	8.2	-.5	1.102	80.3	.255	1.223	50.9	164.4	.911D	1.534A	95.2	.709	2.0	-13.2	298.6	.177
4-5170	4-5364.2	.287	287.0	-27.4	-2.1	.603	79.7	.478	1.044	168.3	283.2	.545A	1.544	67.2	1.341	1.3	3.2	40.2	.516
4-5364.2	4-5480	.518	53.0	1.6	.8	1.236	114.9	.433	.814	258.1	503.2	.462	1.167A	111.6	.665	-3.7	-19.9	207.2	.364
		14.73	10.99	4.56	3.75	7.15	6.43	15.49	1/1/2	37.8	32.0	12.9	.224	8.910	6.6	316.3	6.1	91.0D	1.774
MARS ARRIVAL DATE = 2445180 (29 JUL 1982)																			
4-4990	4-5180	.156	149.9	6.3	-.8	1.103	82.7	.233	1.225	40.3	169.3	.940D	1.510A	95.2	.718	2.2	-10.7	299.2	.157
4-5180	4-5362.0	.297	289.5	-26.6	-1.9	.591	80.0	.500	1.018	169.7	275.8	.509A	1.526	64.7	1.331	1.1	2.4	40.7	.565
4-5362.0	4-5470	.565	49.3	3.0	1.5	1.254	116.9	.470	.847	258.7	497.6	.449	1.245A	115.9	.694	-3.9	-17.5	202.6	.425
		14.12	10.81	4.12	3.31	6.71	6.69	16.82	1/1/2	42.4	27.4	8.6	.188	13.312	5.1	315.2	-4.3	88.7L	2.317
4-5000	4-5180	.189	151.1	7.5	-.7	1.097	80.3	.248	1.208	52.4	171.2	.909D	1.508A	92.9	.710	2.1	-12.2	296.2	.159
4-5180	4-5365.6	.283	289.8	-27.1	-2.0	.602	81.0	.477	1.031	169.9	281.6	.539A	1.523	66.9	1.336	1.1	2.7	43.3	.522
4-5365.6	4-5480	.522	54.8	1.8	.9	1.240	115.1	.437	.822	258.9	501.6	.463	1.181A	112.4	.671	-3.7	-20.2	208.5	.374
		14.19	10.86	4.54	3.34	6.74	6.32	15.70	1/1/2	45.4	30.7	11.6	.221	9.891	4.8	318.9	4.2	90.7D	1.961
4-5010	4-5180	.228	153.5	7.7	-.7	1.089	77.7	.269	1.186	64.8	173.4	.867D	1.506A	92.4	.699	2.0	-13.8	292.0	.162
4-5180	4-5366.8	.271	290.0	-27.6	-2.2	.611	81.8	.459	1.043	170.0	286.9	.564A	1.521	68.8	1.341	1.2	3.1	45.4	.485
4-5366.8	4-5490	.485	59.9	.5	.2	1.230	113.4	.408	.804	259.1	506.4	.476	1.131A	108.9	.653	-3.5	-22.7	213.7	.326
		14.53	11.13	5.12	3.40	6.81	6.01	14.74	1/1/2	49.4	34.9	14.7	.256	7.826	10.3	322.4	10.1	92.3D	1.747
MARS ARRIVAL DATE = 2445190 (8 AUG 1982)																			
4-4990	4-5190	.156	148.1	4.8	-1.1	1.100	82.7	.227	1.214	41.5	175.9	.938D	1.490A	91.2	.721	2.4	-9.1	296.2	.142
4-5190	4-5363.3	.293	292.0	-26.3	-1.9	.589	81.5	.501	1.004	171.3	274.0	.501A	1.506	64.3	1.326	.9	1.9	43.7	.571
4-5363.3	4-5470	.571	51.0	3.1	1.6	1.260	117.1	.475	.857	259.5	496.3	.450	1.264A	116.6	.902	-4.0	-17.8	203.6	.436
		13.71	10.71	4.11	3.00	6.41	6.60	17.07	1/1/2	50.5	26.4	7.4	.184	15.489	9.0	317.7	-8.6	88.3L	2.671
4-5000	4-5190	.187	149.9	6.5	-.9	1.094	80.4	.243	1.199	53.3	177.5	.908D	1.489A	90.8	.714	2.2	-11.1	292.9	.144
4-5190	4-5366.9	.278	292.2	-26.8	-2.0	.601	82.4	.477	1.018	171.5	280.0	.532A	1.504	66.5	1.332	1.0	2.2	46.3	.527
4-5366.9	4-5480	.527	56.6	1.9	.9	1.245	115.2	.441	.830	259.7	500.4	.464	1.197A	113.1	.678	-3.7	-20.6	209.8	.383
		13.75	10.72	4.51	3.03	6.44	6.20	15.91	1/1/2	53.8	29.5	10.3	.217	11.094	2.8	321.4	2.0	90.3D	2.186
4-5010	4-5190	.225	152.9	6.9	-.9	1.086	77.8	.264	1.178	65.3	179.3	.867D	1.489A	90.2	.704	2.0	-13.1	288.5	.148
4-5190	4-5370.2	.266	292.4	-27.2	-2.1	.611	83.2	.458	1.030	171.8	285.5	.559A	1.502	68.5	1.337	1.0	2.5	48.5	.486
4-5370.2	4-5490	.488	61.8	.5	.2	1.234	113.5	.411	.810	259.9	504.9	.478	1.143A	109.6	.659	-3.5	-23.0	215.2	.335
		14.06	10.95	5.06	3.11	6.52	5.88	14.91	1/1/2	58.1	33.4	13.4	.252	8.564	8.8	324.9	8.7	92.0D	1.910
4-5020	4-5190	.267	156.6	6.4	-.8	1.075	75.0	.293	1.152	77.1	181.1	.815D	1.489	89.6	.690	1.9	-15.0	283.3	.155
4-5190	4-5373.2	.256	292.4	-27.7	-2.2	.619	83.8	.442	1.041	172.0	290.4	.581A	1.500	70.3	1.341	1.0	2.9	50.4	.455
4-5373.2	4-5500	.455	66.4	-1.0	-.4	1.225	112.1	.385	.795	260.1	510.0	.489	1.101A	106.1	.644	-3.2	-25.0	219.6	.292
		14.67	11.41	5.78	3.26	6.67	5.63	14.08	1/1/2	63.5	38.4	16.5	.290	6.975	13.5	328.2	13.5	93.4D	1.734
MARS ARRIVAL DATE = 2445200 (18 AUG 1982)																			
4-4980	4-5200	.131	145.2	-2.9	-1.9	1.102	84.8	.212	1.218	30.7	180.8	.959D	1.476	89.8	.731	3.2	-3.6	294.5	.132
4-5200	4-5360.7	.308	293.7	-25.6	-1.8	.572	82.0	.531	.973	172.8	265.8	.456A	1.489	61.2	1.314	.7	1.3	43.6	.629
4-5360.7	4-5460	.629	46.5	4.1	2.3	1.285	119.4	.520	.907	260.0	491.4	.435	1.379A	120.7	.959	-4.3	-15.0	197.9	.506
		13.63	10.83	3.85	2.80	6.21	6.99	18.69	1/1/2	57.5	22.9	4.0	.152	28.428	43.5	317.7	-43.4	85.7L	4.170
4-4990	4-5200	.155	146.6	2.5	-1.5	1.098	82.7	.223	1.207	42.0	181.9	.938D	1.476	89.4	.726	2.7	-7.0	292.4	.131
4-5200	4-5364.6	.289	294.0	-26.0	-1.9	.588	83.0	.502	.990	173.0	272.3	.494A	1.487	63.8	1.321	.7	1.5	46.8	.577
4-5364.6	4-5470	.577	52.7	3.1	1.6	1.266	117.3	.481	.868	260.2	495.0	.451	1.265A	117.2	.910	-4.1	-18.1	204.6	.447
		13.39	10.60	4.10	2.79	6.20	6.49	17.32	1/1/2	59.5	25.4	6.3	.161	16.324	14.7	320.3	-14.6	87.9L	3.127
4-5000	4-5200	.185	149.1	5.0	-1.2	1.092	80.5	.238	1.192	53.6	183.3	.908D	1.477	89.0	.719	2.4	-9.8	289.0	.133
4-5200	4-5366.3	.274	294.2	-26.5	-2.0	.601	83.9	.477	1.006	173.3	278.4	.526A	1.485	66.2	1.327	.8	1.7	49.3	.531
4-5366.3	4-5480	.531	58.4	1.9	.9	1.251	115.4	.445	.839	260.4	499.0	.465	1.212A	113.8	.685	-3.8	-20.9	210.8	.393
		13.40	10.57	4.49	2.83	6.24	6.08	16.12	1/1/2	62.9	28.4	9.1	.213	12.576	2.0	323.9	-.9	90.0L	2.466
4-5010	4-5200	.221	152.5	5.8	-1.1	1.085	78.0	.260	1.173	65.1	184.7	.869D	1.478	88.3	.709	2.1	-12.2	284.8	.138
4-5200	4-5371.6	.261	294.2	-27.0	-2.1	.611	84.7	.457	1.019	173.6	284.1	.554A	1.484	68.3	1.333	.8	2.0	51.8	.491
4-5371.6	4-5490	.491	63.6	.5	.2	1.238	113.6	.414	.817	260.7	503.5	.479	1.155A	110.3	.665	-3.5	-23.2	216.7	.344
		13.67	10.76	5.01	2.92	6.33	5.75	15.09	1/1/2	67.3	32.1	12.2	.249	9.428	7.0	327.4	6.9	91.7D	2.099
4-5020	4-5200	.262	156.5	5.6	-1.0	1.074	75.3	.287	1.149	76.6	186.1	.819D	1.479	87.6	.697	1.9	-14.5	279.4	.146
4-5200	4-5374.6	.250	294.1	-27.5	-2.1	.620	85.3	.440	1.030	174.0	289.2	.577A	1.483	70.0	1.337	.8	2.2	53.4	.457
4-5374.6	4-5500	.457	68.3	-1.0	-.4	1.229	112.1	.387	.801	260.9	508.4	.491	1.110A	106.8	.649	-3.2	-25.2	221.5	.299
		14.24	11.16	5.68	3.08	6.49	5.49	14.22	1/1/2	72.4	36.8	15.3	.288	7.528	12.5	330.7	12.2	93.2D	1.878
MARS ARRIVAL DATE = 2445210 (28 AUG 1982)																			
4-4980	4-5210	.134	142.6	-8.6	-2.6	1.100	84.6	.209	1.213	30.9	186.6	.959D	1.466	88.3	.737	3.9	.9	290.1	.127
4-5210	4-5361.9	.305	295.4	-25.4	-1.9	.570	83.8	.534	.959	174.5	263.9	.447A	1.471	60.6	1.308	.6	1.0	46.5	.637
4-5361.9	4-5460	.637	46.2	4.2	2.4	1.292	119.6	.527	.922	260.8	490.2	.436	1.408A	121.4	.948	-4.4	-15.4	198.6	.516
		13.49	10.79	3.66	2.70	6.12	6.91	18.99	1/1/2	67.2	22.1	3.6	.148	31.820	62.9	322.4	-62.7	86.1L	4.572
4-4990	4-5210	.155	145.4	-.6	-1.9	1.097	82.8	.220	1.203	42.0	187.5	.938D	1.467	87.9	.732	3.1	-4.4	288.1	.125
4-5210	4-5365.9	.286	295.6	-25.8	-1.9	.567	84.8	.503	.978	174.8	270.6	.486A	1.470	63.4	1.316	.6	1.1	49.8	.583
4-5365.9	4-5470	.583	54.4	3.2	1.6	1.272	117.5	.487	.879	261.0	493.7	.451	1.307A	117.9	.918	-4.1	-16.4	205.5	.458
		13.16	10.49	4.10	2.67	6.08	6.39	17.58	1/1/2	69.1	24.5	5.2	.177	21.923	23.0	322.9	-22.9	87.4L	3.697
4-5000	4-5210	.183	148.5	3.0	-1.5	1.091	80.6	.235	1.189	53.3	188.6	.910D	1.469	87.4	.725	2.6	-8.2	284.8	.127
4-5210	4-5369.6	.269	295.8	-26.3	-2.0	.601	85.7	.477	.994	175.2	276.8	.519A	1.468	65.8	1.323	.6	1.3	52.2	.536
4-5369.6	4-5480	.536	60.1	1.9	.9	1.256	115.5	.450	.848	261.2	497.7	.466	1.229A	114.4	.892	-3.8	-21.1	212.0	.403
		13.13	10.42	4.45	2.70	6.12	5.97	16.34	1/1/2	72.5	27.3	8.0	.209	14.421	4.9	326.3	-4.6	89.7L	2.808
4-5010	4-5210	.217	152.3	4.4	-1.3	1.084	76.5	.255	1.172	64.5	189.7	.872D	1.471	86.7	.717	2.3	-11.2	280.5	.132
4-5210	4-5373.0	.256	295.4	-28.8	-2.0	.612	86.4	.456	1.008	175.7	282.7	.548A	1.467	68.0	1.329	.6	1.5	54.5	.495
4-5373.0	4-5490	.495	65.4	.5	.2	1.243	113.8	.417	.824	261.4	502.1	.480	1.168A	110.9	.671	-3.5	-23.5	218.0	.353
		13.57	10.57	4.94	2.80	6.21	5.62	15.27	1/1/2	76.8	30.8	11.0	.246	10.444	5.0	329.9	4.9	91.9D	2.319
4-5020	4-5210	.256	156.7	4.5	-1.2	1.074	75.7	.282	1.150	75.6	190.7	.825D	1.474	85.9	.705	2.0	-13.8	275.7	.141
4-5210	4-5376.0	.245	295.2	-27.3	-2.1	.621	87.0	.438	1.019	176.1	288.0	.572A	1.466	69.8	1.334	.6	1.8	56.4	.459
4-5376.0	4-5500	.459	70.4	-1.0	-.4	1.233	112.2	.389	.806	261.7	507.0	.493	1.120A	107.5	.654	-3.2	-25.4	223.1	.307
		13.00	10.92	5.57	2.98	6.39	5.35	14.37	1/1/2	81.5	35.2	14.1	.285	8.155	10.8	333.2	10.8	92.9D	2.037
4-5030	4-5210	.298	164.3	3.8	-1.1	1.063	72.9	.315	1.123	86.3	191.3	.769D	1.477	84.9	.690	1.8	-16.0	270.8	.155
4-5210	4-5378.7	.236	295.0	-27.7	-2.1	.628	87.4	.425	1.029	176.5	292.6	.592A	1.466	71.4	1.338	.6	1.8	57.9	.430
4-5378.7	4-5510	.430	74.4	-2.6	-1.0	1.225	110.9	.365	.793	261.9	512.5	.504	1.063A	104.0	.641	-2.9	-27.0	226.9	.266
		14.76	11.50	6.36	3.26	6.66	5.13	13.62	1/1/2	86.3	41.0	17.1	.325	6.721	15.1	336.2	15.1	94.1D	1.860
MARS ARRIVAL DATE = 2445220 (7 SEP 1982)																			
4-4980	4-5220	.142	139.2	-17.1	-3.9	1.099	84.9	.207	1.210	30.6	192.0	.960D	1.460	86.9	.743	5.0	7.2	285.2	.129
4-5220	4-5363.1	.303	296.5	-25.3	-1.9	.567	85.9	.537	.946	176.5	262.1	.438A	1.455	60.1	1.303	.4	.7	49.4	.645
4-5363.1	4-5460	.645	49.8	4.3	2.5	1.299	119.9	.535	.938	261.5	489.0	.436	1.439A	122.1	.958	-4.5	-15.7	199.4	.531
		13.56	10.80	3.96	2.75	6.17	6.84	19.30	1/1/2	77.3	21.4	3.7	.145	31.285	83.8	341.4	-83.4	87.1L	4.382
4-4990	4-5220	.155	144.1	-5.0	-2.6	1.096	82.9	.217	1.201	41.5	192.7	.940D	1.461	86.5	.739	3.6	-1.0	283.7	.123
4-5220	4-5367.2	.288	296.5	-25.8	-1.9	.586	86.8	.505	.966	176.9	268.9	.478A	1.454	63.0	1.312	.4	.7	52.4	.590
4-5367.2	4-5470	.590	56.0	3.2	1.7	1.278	117.7	.493	.891	261.7	492.5	.452	1.350A	118.6	.926	-4.2	-18.7	206.4	.470
		13.04	10.41	4.10	2.63	6.05	6.31	17.84	1/1/2	78.8	23.7	4.4	.173	26.079	34.6	325.6	-34.5	87.1L	4.336
4-5000	4-5220	.180	148.1	.4	-2.0	1.091	80.8	.232	1.188	52.5	193.3	.913D	1.464	86.0	.733	2.9	-8.2	280.7	.124
4-5220	4-5370.9	.265	296.3	-26.3	-2.0	.601	87.6	.476	.983	177.4	275.4	.513A	1.453	65.5	1.319	.4	.8	55.1	.541
4-5370.9	4-5480	.541	61.6	2.0	.9	1.261	115.7	.455	.857	262.0	496.4	.467	1.246A	115.1	.899	-3.9	-21.4	213.1	.413
		12.94	10.29	4.42	2.65	6.07	5.87	16.56	1/1/2	82.0	26.4	6.9	.205	18.878	9.8	328.7	-9.5	89.4L	3.220

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2445220
7 SEP 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5010	4-5220	.212	152.3	2.6	-1.6	1.084	76.6	.252	1.172	63.4	194.3	.877D	1.467	85.3	.725	2.4	-10.1	276.8	.130
4-5220	4-5374.3	.251	295.9	-26.8	-2.0	.613	88.3	.456	.998	177.9	281.4	.543A	1.452	67.7	1.525	.4	.9	57.3	.498
4-5374.3	4-5490	.499	67.2	.5	.2	1.247	113.9	.421	.831	262.2	500.7	.481	1.181A	111.6	.877	-3.5	-23.7	219.3	.362
		13.14	10.38	4.87	2.76	6.17	5.51	15.45	1/1/2	86.0	29.7	9.9	.242	11.627	2.5	332.2	2.4	91.2D	2.971
4-5020	4-5220	.249	157.0	3.2	-1.4	1.075	76.1	.277	1.152	74.1	194.9	.833D	1.470	84.4	.714	2.1	-13.1	272.4	.139
4-5220	4-5377.4	.240	295.5	-27.2	-2.0	.623	88.8	.437	1.010	178.5	286.9	.568A	1.452	69.6	1.531	.4	1.1	59.2	.462
4-5377.4	4-5500	.482	72.0	-1.0	-.4	1.237	112.5	.392	.812	262.4	505.6	.494	1.130A	108.1	.860	-3.2	-25.6	224.7	.315
		13.63	10.69	5.46	2.94	6.35	5.22	14.51	1/1/2	90.5	33.6	13.0	.282	8.647	9.2	335.6	9.2	92.7D	2.211
4-5030	4-5220	.291	161.9	2.7	-1.3	1.064	73.4	.308	1.127	84.5	195.3	.780D	1.474	83.4	.701	1.8	-15.6	268.2	.153
4-5220	4-5380.1	.231	295.1	-27.7	-2.1	.631	89.3	.423	1.020	179.0	291.7	.589A	1.452	71.2	1.535	.4	1.2	60.7	.431
4-5380.1	4-5510	.431	76.3	-2.6	-1.0	1.228	110.9	.366	.798	262.6	511.0	.506	1.090A	104.7	.846	-2.9	-27.2	226.9	.273
		14.44	11.21	6.20	3.23	6.64	5.00	13.73	1/1/2	94.4	39.2	16.0	.323	7.169	13.8	338.7	13.8	93.9D	1.994

MARS ARRIVAL DATE = 2445230 (17 SEP 1982)

4-4980	4-5230	.165	133.2	-29.8	-6.1	1.099	85.1	.205	1.209	29.9	197.0	.961D	1.456	85.7	.750	7.2	16.4	280.5	.147
4-5230	4-5364.4	.301	296.9	-25.3	-1.9	.565	88.3	.541	.935	178.6	260.4	.429A	1.441	59.6	1.298	.2	.3	52.2	.653
4-5364.4	4-5460	.653	51.4	4.4	2.5	1.306	120.1	.542	.954	262.2	487.8	.437	1.472A	122.7	.966	-4.6	-16.0	200.1	.544
		14.12	11.03	4.23	3.09	6.50	6.60	19.61	1/1/2	86.4	20.7	4.2	.141	27.549	101.1	331.3	76.8	88.5L	3.747
4-4990	4-5230	.156	142.3	-11.4	-3.5	1.096	83.2	.215	1.200	40.5	197.5	.942D	1.458	85.4	.746	4.5	3.5	279.6	.127
4-5230	4-5368.4	.280	296.6	-25.8	-1.9	.585	89.1	.508	.955	179.1	267.4	.470A	1.440	62.6	1.307	.2	.3	55.2	.596
4-5368.4	4-5470	.596	57.6	3.5	1.7	1.264	117.9	.499	.903	262.5	491.2	.453	1.354A	119.2	.934	-4.3	-19.0	207.2	.461
		13.08	10.38	4.14	2.70	6.12	6.24	18.10	1/1/2	88.0	22.8	3.9	.169	29.727	50.0	328.6	-49.9	97.1L	4.859
4-5000	4-5230	.178	147.6	-3.1	-2.5	1.091	81.1	.229	1.189	51.2	198.1	.916D	1.461	84.8	.740	3.3	-3.8	277.0	.125
4-5230	4-5372.1	.262	296.1	-26.3	-1.9	.602	89.8	.479	.974	179.8	274.0	.507A	1.440	63.2	1.316	.2	.4	57.8	.546
4-5372.1	4-5480	.546	63.5	2.0	1.0	1.266	115.8	.459	.866	262.7	495.1	.466	1.264A	115.7	.906	-3.9	-21.6	214.1	.423 *
		12.86	10.18	4.39	2.66	6.09	5.79	16.78	1/1/2	91.0	25.4	5.9	.202	19.338	15.8	331.0	-15.8	89.1L	3.697
4-5010	4-5230	.208	152.4	.4	-2.0	1.085	78.9	.248	1.174	61.9	198.6	.883D	1.465	84.1	.733	2.7	-8.7	273.6	.130
4-5230	4-5375.6	.248	295.5	-26.8	-2.0	.615	90.4	.456	.989	180.5	280.2	.538A	1.440D	67.4	1.322	.2	.4	60.1	.502
4-5375.6	4-5490	.502	68.9	.5	.2	1.252	114.0	.425	.859	262.9	499.4	.483	1.195A	112.2	.883	-3.5	-23.9	220.5	.371
		13.00	10.22	4.80	2.77	6.18	5.42	15.64	1/1/2	94.6	28.6	8.8	.238	12.971	.8	334.5	-.7	91.1D	2.853
4-5020	4-5230	.242	157.4	1.6	-1.7	1.077	76.5	.272	1.155	72.4	198.9	.841D	1.469	83.2	.724	2.5	-12.3	269.9	.140
4-5230	4-5378.7	.236	294.9	-27.3	-2.0	.626	90.9	.437	1.003	181.1	285.8	.565A	1.440D	69.4	1.328	.2	.5	61.9	.464
4-5378.7	4-5500	.464	73.8	-1.0	-.4	1.240	112.3	.394	.818	263.2	504.2	.496	1.141A	108.7	.865	-3.2	-25.8	226.2	.323
		13.44	10.48	5.35	2.96	6.37	5.13	14.66	1/1/2	98.4	32.5	12.0	.279	9.593	7.4	337.9	7.4	92.6D	2.395
4-5030	4-5230	.282	162.5	1.4	-1.5	1.066	74.0	.301	1.133	82.5	199.0	.792D	1.474	82.2	.712	1.9	-15.1	266.3	.154
4-5230	4-5381.5	.227	294.5	-27.7	-2.0	.634	91.3	.422	1.013	181.8	290.9	.586A	1.441D	71.1	1.335	.2	.5	63.4	.433
4-5381.5	4-5510	.435	76.1	-2.7	-1.0	1.231	110.9	.366	.803	263.4	509.5	.507	1.098A	105.3	.850	-2.9	-27.3	230.7	.279
		14.19	10.94	6.04	3.25	6.65	4.90	13.85	1/1/2	101.9	37.6	15.1	.321	7.631	12.5	341.0	12.4	93.8D	2.130

MARS ARRIVAL DATE = 2445240 (27 SEP 1982)

4-4990	4-5240	.166	139.1	-20.8	-5.0	1.096	83.4	.213	1.201	39.1	201.9	.945D	1.457	84.3	.753	5.9	10.0	276.3	.139
4-5240	4-5369.6	.279	295.9	-26.0	-1.9	.586	91.6	.511	.947	181.7	265.9	.463A	1.430D	62.1	1.304	-.0	-.0	57.8	.603
4-5369.6	4-5470	.603	59.2	3.4	1.8	1.291	118.1	.505	.916	263.2	490.0	.453	1.379A	119.8	.942	-4.4	-19.5	208.0	.492
		13.42	10.49	4.26	2.94	6.35	6.22	18.37	1/1/2	95.8	22.1	3.7	.165	30.987	67.4	332.5	-67.3	87.5L	4.960
4-5000	4-5240	.178	146.8	-6.0	-3.2	1.092	81.4	.227	1.191	49.6	202.3	.921D	1.461	83.8	.748	4.0	-.6	274.2	.130
4-5240	4-5373.4	.261	295.1	-26.5	-1.9	.604	92.3	.481	.966	182.5	272.7	.501A	1.431D	64.8	1.313	-.0	-.0	60.4	.551
4-5373.4	4-5480	.551	65.1	2.0	1.0	1.272	116.0	.465	.876	263.4	493.9	.469	1.263A	116.3	.913	-3.9	-21.9	215.0	.433
		12.91	10.14	4.38	2.77	6.19	5.75	17.00	1/1/2	99.0	24.5	5.2	.198	22.207	23.9	335.2	-23.9	88.9L	4.195
4-5010	4-5240	.203	152.5	-2.5	-2.4	1.086	79.3	.244	1.177	60.0	202.6	.890D	1.465	83.1	.742	3.0	-7.0	271.4	.134
4-5240	4-5376.8	.246	294.2	-27.0	-1.9	.618	92.8	.457	.983	183.3	279.1	.534A	1.431D	67.2	1.320	-.0	-.1	62.6	.506
4-5376.8	4-5490	.506	70.5	.5	.2	1.256	114.1	.429	.846	263.6	498.1	.484	1.209A	112.8	.889	-3.5	-24.1	221.6	.379
		12.96	10.12	4.74	2.84	6.25	5.38	15.82	1/1/2	102.4	27.5	8.0	.235	14.412	4.4	336.6	-4.4	90.9D	3.148
4-5020	4-5240	.235	157.8	-.4	-2.0	1.078	77.0	.267	1.160	70.2	202.7	.851D	1.470	82.2	.734	2.5	-11.4	268.3	.143
4-5240	4-5380.0	.234	293.2	-27.5	-1.9	.630	93.2	.437	.997	184.2	285.0	.561A	1.432D	69.2	1.326	-.0	-.1	64.4	.467
4-5380.0	4-5500	.467	75.5	-1.1	-.4	1.244	112.4	.397	.824	263.9	502.9	.497	1.151A	109.5	.870	-3.2	-25.9	227.5	.330
		13.34	10.32	5.24	3.02	6.43	5.09	14.81	1/1/2	105.7	31.3	11.1	.276	10.359	5.2	340.0	5.2	92.5D	2.579
4-5030	4-5240	.273	163.2	-.1	-1.8	1.069	74.6	.294	1.140	80.1	202.6	.804D	1.475	81.2	.723	2.0	-14.6	265.4	.157
4-5240	4-5382.8	.225	292.3	-27.9	-1.9	.639	93.6	.421	1.009	184.9	290.2	.584A	1.433D	71.0	1.331	-.0	-.1	65.9	.434
4-5382.8	4-5510	.434	78.9	-2.7	-1.0	1.235	110.9	.370	.807	264.1	508.2	.509	1.106A	105.9	.854	-2.8	-27.3	232.4	.286
		14.04	10.73	5.87	3.31	6.71	4.86	13.97	1/1/2	108.7	36.1	14.2	.319	8.079	10.9	343.2	10.8	93.8D	2.256

MARS ARRIVAL DATE = 2445250 (7 OCT 1982)

4-4990	4-5250	.203	131.7	-34.7	-8.2	1.097	83.7	.212	1.203	37.3	206.0	.949D	1.458	83.5	.761	9.0	19.7	274.4	.171
4-5250	4-5370.8	.281	294.1	-26.3	-2.0	.589	94.8	.514	.941	184.6	264.8	.457A	1.424D	61.8	1.302	-.2	-.4	60.3	.610
4-5370.8	4-5470	.610	60.8	3.5	1.8	1.297	118.3	.512	.930	263.9	488.8	.454	1.406A	120.4	.951	-4.4	-19.8	206.8	.504
		14.62	11.01	4.73	3.61	7.01	6.28	18.64	1/1/2	100.6	21.4	3.9	.162	29.304	82.9	342.4	-82.7	88.2L	4.578
4-5000	4-5250	.180	145.2	-15.0	-4.4	1.093	81.8	.224	1.194	47.6	206.2	.926D	1.462	82.9	.756	5.0	3.9	272.4	.141
4-5250	4-5374.6	.263	293.0	-26.8	-1.9	.607	95.2	.484	.961	185.6	271.8	.496A	1.428D	64.5	1.311	-.2	-.5	62.8	.557
4-5374.6	4-5480	.557	66.7	2.1	1.0	1.277	116.1	.470	.886	264.1	492.7	.470	1.302A	116.9	.920	-4.0	-22.1	215.9	.443
		13.19	10.22	4.42	2.97	6.38	5.80	17.22	1/1/2	105.5	23.7	4.6	.194	24.683	33.5	335.3	-33.5	88.8L	4.597
4-5010	4-5250	.199	152.3	-6.4	-3.1	1.087	79.8	.241	1.182	57.8	206.3	.897D	1.466	82.3	.751	3.5	-4.8	270.1	.140
4-5250	4-5378.1	.246	291.7	-27.3	-1.9	.623	95.5	.458	.979	186.6	276.4	.530A	1.427D	67.0	1.319	-.2	-.5	64.9	.510
4-5378.1	4-5490	.510	72.1	.6	.2	1.261	114.2	.432	.854	264.3	496.9	.485	1.223A	113.4	.895	-3.5	-24.2	222.6	.388
		13.06	10.10	4.68	2.96	6.37	5.42	16.00	1/1/2	109.1	26.6	7.5	.231	15.800	8.7	338.5	-8.7	90.9D	3.421
4-5020	4-5250	.228	156.3	-2.9	-2.4	1.080	77.6	.262	1.166	67.8	206.2	.861D	1.471	81.4	.743	2.7	-10.2	267.6	.148
4-5250	4-5381.2	.236	290.4	-27.8	-1.9	.635	95.9	.436	.994	187.6	284.4	.559A	1.429D	69.1	1.325	-.2	-.6	66.7	.470
4-5381.2	4-5500	.470	77.1	-1.1	-.4	1.248	112.5	.400	.830	264.6	501.6	.498	1.162A	109.9	.875	-3.1	-26.0	228.7	.337
		13.37	10.25	5.12	3.12	6.52	5.13	14.96	1/1/2	112.1	30.2	10.4	.272	11.057	2.8	342.0	2.7	92.5D	2.739
4-5030	4-5250	.263	163.9	-1.8	-2.0	1.071	75.2	.287	1.147	77.5	205.9	.817D	1.477	80.4	.734	2.2	-14.0	265.2	.161
4-5250	4-5364.0	.227	289.2	-28.2	-1.9	.645	96.1	.421	1.007	188.5	289.9	.583A	1.431D	70.9	1.331	-.2	-.7	68.1	.436
4-5364.0	4-5510	.436	81.5	-2.8	-1.0	1.238	111.0	.372	.812	264.8	506.9	.510	1.114A	106.4	.859	-2.8	-27.4	233.9	.292
		14.00	10.61	5.71	3.39	6.79	4.90	14.08	1/1/2	114.7	34.8	13.6	.317	8.469	9.1	345.1	9.0	93.8D	2.365

MARS ARRIVAL DATE = 2445260 (17 OCT 1982)

4-4970	4-5260	.151	192.8	55.7	6.4	1.102	87.7	.196	1.217	14.3	209.7	.978D	1.455	83.3	.773	-5.4	-55.7	279.0	.136
4-5260	4-5363.7	.340	293.8	-25.5	-2.1	.540	98.4	.601	.888	185.7	248.6	.355A	1.421D	54.4	1.276	-.5	-.7	57.0	.749
4-5363.7	4-5490	.749	49.5	5.7	5.8	1.362	123.4	.622	1.113	264.3	481.2	.420	1.806A	128.1	1.044	-5.6	-13.7	194.6	.659
		14.76	11.89	4.06	2.87	6.28	7.83	22.52	2/1/2	107.3	17.1	9.9	.107	11.643	139.3	334.0	40.4	93.3D	1.141
4-5000	4-5260	.194	141.3	-25.5	-6.4	1.094	82.3	.222	1.198	45.2	209.8	.932D	1.464	82.2	.764	6.9	10.7	271.9	.160
4-5260	4-5375.8	.269	289.6	-27.2	-2.0	.614	98.5	.487	.960	189.2	271.2	.493A	1.427D	64.3	1.311	-.4	-.9	65.0	.562
4-5375.8	4-5480	.562	68.2	2.1	1.0	1.282	116.3	.475	.897	264.6	491.5	.471	1.323A	117.4	.927	-4.0	-22.3	216.7	.453
		13.95	10.58	4.61	3.37	6.76	5.96	17.45	1/1/2	109.7	22.9	4.4	.190	25.918	43.4	337.2	-43.4	89.0L	4.745
4-5010	4-5260	.197	151.7	-11.6	-3.8	1.089	80.3	.237	1.187	55.2	209.8	.905D	1.468	81.6	.759	4.3	-1.7	269.8	.149
4-5260	4-5379.2	.254	288.2	-27.6	-1.9	.630	98.7	.461	.979	190.4	278.0	.528A	1.430D	66.8	1.319	-.4	-1.0	67.0	.514
4-5379.2	4-5490	.514	73.7	.6	.3	1.265	114.3	.437	.862	265.0	495.7	.486	1.238A	113.9	.901	-3.5	-24.4	223.6	.396
		13.58	10.24	4.65	3.14	6.54	5.59	16.18	1/1/2	114.6	25.7	6.8	.228	16.840	13.4	340.3	-13.4	91.0D	3.609
4-5020	4-5260	.222	156.6	-6.1	-2.9	1.082	76.1	.257	1.173	65.1	209.6	.872D	1.474	80.7	.752	3.1	-8.7	267.7	.154
4-5260	4-5382.4	.243	286.5	-28.0	-1.9	.645	98.8	.440	.995	191.6	284.2	.558A	1.433D	69.0	1.326	-.4	-1.1	68.7	.473
4-5382.4	4-5500	.473	78.6	-1.1	-.4	1.252	112.5	.403	.836	265.5	500.4	.499	1.173A	110.4	.880	-3.1	-26.1	229.9	.348
		13.56	10.31	5.02	3.25	6.65	5.29	15.10	1/1/2	117.7	29.1	9.9	.269	11.561	1.1	343.7	-.1	92.7D	2.843
4-5030	4-5260	.254	164.7	-4.0	-2.4	1.074	75.9	.281	1.156	74.7	209.1	.831D	1.480	79.7	.744	2.4	-13.2	265.8	.166
4-5260	4-5385.2	.234	285.0	-28.4	-1.8	.654	99.0	.423	1.009	192.7	289.9	.582A	1.436D	70.8	1.332	-.4	-1.2	70.1	.437
4-5385.2	4-5510	.437	83.1	-2.8	-1.1	1.241	111.0	.374	.817	265.5	505.7	.512	1.122A	106.9	.863	-2.7	-27.4	235.3	.298
		14.11	10.62	5.54	3.50	6.90	5.07	14.20	1/1/2	120.0	33.5	13.2	.314	8.726	7.2	346.8	6.9	94.0D	2.427

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2445270
27 OCT 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445270 (27 OCT 1982)																			
4-4970	4-5270	.126	169.4	47.4	4.6	1.102	88.1	.196	1.219	11.9	213.4	.980D	1.459	82.6	.779	-3.9	-47.4	275.9	.131
4-5270	4-5365.0	.354	291.0	-25.9	-2.2	.548	103.4	.609	.868	189.0	247.8	.348A	1.429D	53.8	1.276	-.7	-1.0	59.4	.761
4-5365.0	4-5490	.761	51.1	6.0	4.0	1.373	123.7	.634	1.150	265.1	480.0	.421	1.879A	126.8	1.058	-5.8	-14.1	195.1	.676
		14.83	12.04	3.61	2.79	6.20	8.23	22.96	2/1/2	115.7	16.8	10.8	.104	10.625	139.8	337.3	39.8	93.4D	.999
4-5010	4-5270	.201	149.8	-19.8	-5.3	1.091	80.8	.234	1.193	52.4	213.0	.914D	1.472	81.0	.767	5.6	3.0	270.4	.163
4-5270	4-5380.4	.268	283.8	-27.9	-1.9	.642	102.2	.465	.985	194.9	276.1	.527A	1.443D	66.6	1.322	-.6	-1.5	66.8	.516
4-5380.4	4-5490	.516	75.2	.6	.3	1.270	114.4	.441	.870	265.7	494.6	.486	1.253A	114.4	.907	-3.6	-24.5	224.5	.405
		14.06	10.63	4.70	3.43	6.83	5.93	16.37	1/1/2	118.3	24.8	8.7	.224	17.144	18.0	341.8	-18.0	91.2D	3.617
4-5020	4-5270	.216	158.6	-10.3	-3.6	1.085	78.7	.252	1.160	62.1	212.7	.883D	1.477	80.2	.761	3.7	-9.8	268.7	.182
4-5270	4-5383.5	.256	261.9	-26.2	-1.9	.655	102.2	.444	1.003	196.3	284.6	.558A	1.447D	66.9	1.329	-.6	-1.6	70.4	.475
4-5383.5	4-5500	.475	80.2	-1.1	-.5	1.255	112.6	.406	.842	265.9	499.3	.500	1.164A	110.9	.885	-3.1	-20.2	231.0	.352
		13.98	10.67	4.93	3.41	6.82	5.64	15.25	1/1/2	122.2	28.2	9.8	.266	11.694	5.5	345.2	-5.0	93.0D	2.845
4-5030	4-5270	.245	165.4	-6.7	-2.8	1.077	76.5	.274	1.164	71.6	212.1	.845D	1.483	79.3	.754	2.7	-12.2	267.2	.172
4-5270	4-5386.4	.248	280.2	-26.4	-1.8	.666	102.3	.427	1.017	197.6	290.5	.583A	1.451D	70.8	1.335	-.6	-1.8	71.6	.439
4-5386.4	4-5510	.439	84.7	-2.8	-1.1	1.244	111.0	.376	.822	266.2	504.5	.513	1.130A	107.4	.867	-2.7	-27.4	238.6	.304
		14.44	10.81	5.39	3.83	7.03	5.42	14.31	1/1/2	124.5	32.4	13.1	.312	8.783	5.2	348.3	4.7	94.4D	2.416
MARS ARRIVAL DATE = 2445280 (6 NOV 1982)																			
4-5020	4-5280	.215	157.9	-16.3	-4.6	1.087	79.4	.247	1.188	58.8	215.6	.894D	1.481	79.8	.769	4.6	-3.3	270.3	.172
4-5280	4-5384.7	.279	277.1	-26.1	-1.8	.672	106.0	.450	1.019	201.8	285.8	.560A	1.477D	68.9	1.335	-.6	-2.1	71.5	.478
4-5384.7	4-5500	.478	81.6	-1.1	-.5	1.259	112.7	.408	.848	266.6	498.1	.501	1.195A	111.4	.890	-3.1	-26.2	232.0	.359
		14.76	11.12	4.89	3.64	7.04	6.23	15.40	1/1/2	125.5	27.2	10.2	.263	11.293	5.9	346.4	-8.7	93.6D	2.705

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 520 DAYS; MARS ARRIVAL DATE = 2445160 = 9 JUL 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / APHEL / PERIH KAPPA	APHEL / PSI 2 / PSI 4 / PSI 6 -A	PSI 2 / V 2 / V 4 / V 6 E	V 2 / I 2 / I 4 / I 6 INC	I 2 / DECL2 / DECL4 / DECL6 RAP	DECL2 / RA2 / RA4 / RA6 DECLP	RA2 / SPEED2 / SPEED4 / SPEED6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2445160 (9 JUL 1982)																				
4-4960	4-5160	.105	168.6	-1.6	-.6	1.120	69.3	.233	1.282	3.4	152.4	.9830	1.581A	97.7	.726	2.3	-11.4	304.3	.195	
4-5160	4-5362.8	.291	284.0	-27.7	-2.1	.603	76.5	.479	1.056	166.9	284.7	.551A	1.564	67.6	1.345	1.5	3.7	37.1	.514	
4-5362.8	4-5460	.514	51.1	1.8	.8	1.231	114.6	.429	.807	257.5	504.7	.461	1.153A	110.9	.858	-3.6	-19.5	205.8	.354	
		14.27	10.13	3.60	4.15	7.54	6.53	15.29	1/1/2	27.2	33.3	14.2	.228	8.102	8.1	313.7	7.6	91.4D	1.618	
4-4970	4-5160	.114	162.5	2.7	-.4	1.120	67.4	.236	1.280	13.4	152.3	.9760	1.582A	97.9	.727	2.2	-12.0	304.5	.197	
4-5160	4-5365.9	.280	284.3	-28.2	-2.3	.611	79.3	.462	1.068	167.0	289.7	.574A	1.562	69.4	1.349	1.6	4.2	39.1	.479	
4-5365.9	4-5490	.479	56.0	.5	.2	1.221	113.3	.402	.791	257.5	509.4	.473	1.109A	107.4	.842	-3.5	-21.9	210.3	.309	
		14.12	9.93	3.66	4.19	7.59	6.25	14.40	1/1/2	27.0	38.1	17.3	.262	6.668	12.7	317.0	12.5	92.9D	1.485	
4-4980	4-5160	.132	157.8	5.9	-.4	1.118	85.3	.241	1.274	24.3	152.9	.9660	1.581A	98.0	.724	2.1	-12.6	303.9	.198	
4-5160	4-5368.8	.272	284.5	-26.7	-2.4	.617	79.9	.449	1.076	167.1	294.1	.593A	1.559	70.9	1.352	1.7	4.8	40.6	.450	
4-5368.8	4-5500	.450	60.2	-.9	-.4	1.213	112.0	.380	.779	257.6	514.8	.463	1.075A	103.6	.828	-3.3	-23.9	213.3	.269	
		14.10	9.86	3.65	4.22	7.62	6.03	13.66	1/1/2	27.5	44.3	20.3	.297	5.684	16.6	319.9	16.4	94.2D	1.390	
4-4990	4-5160	.158	155.2	7.8	-.3	1.114	83.0	.250	1.262	36.1	154.5	.9460	1.578A	97.9	.719	2.0	-13.3	302.6	.199	
4-5160	4-5370.7	.265	284.7	-29.2	-2.5	.621	80.3	.439	1.082	167.2	297.6	.607A	1.558	72.1	1.354	1.8	5.3	42.0	.428	
4-5370.7	4-5510	.428	63.7	-2.4	-.9	1.208	110.9	.361	.770	257.5	520.9	.492	1.048A	100.2	.816	-3.2	-25.3	214.1	.234	
		14.26	10.01	4.14	4.25	7.64	5.87	13.08	1/1/2	28.9	52.6	23.1	.329	5.000	19.8	322.3	19.8	95.1D	1.315	
4-5000	4-5160	.193	154.8	8.6	-.3	1.108	80.4	.264	1.244	48.6	156.9	.9150	1.572A	97.8	.711	1.9	-14.1	300.3	.201	
4-5160	4-5372.2	.261	284.8	-29.5	-2.6	.624	80.6	.433	1.087	167.3	300.1	.616A	1.557	72.9	1.356	1.8	5.8	42.7	.413	
4-5372.2	4-5520	.413	66.3	-4.0	-1.5	1.203	110.2	.349	.763	257.3	527.8	.497	1.029A	96.4	.811	-3.1	-25.7	211.6	.206	
		14.63	10.35	4.59	4.28	7.67	5.77	12.66	1/1/2	31.0	64.0	25.4	.353	4.541	22.7	324.2	22.6	95.5D	1.251	
MARS ARRIVAL DATE = 2445170 (19 JUL 1982)																				
4-4950	4-5170	.103	166.3	-14.4	-.7	1.114	90.7	.220	1.262	356.1	520.5	.984	1.540A	95.3	.727	3.4	-5.9	302.2	.174	
4-5170	4-5360.7	.301	286.6	-26.9	-1.9	.593	78.8	.499	1.032	168.3	277.5	.517A	1.547	65.1	1.336	1.3	2.8	37.6	.560	
4-5360.7	4-5470	.560	47.5	3.0	1.5	1.248	116.7	.465	.837	257.9	499.0	.448	1.226A	115.2	.886	-3.9	-17.1	201.5	.414	
		14.04	10.37	3.58	3.67	7.07	6.78	16.57	1/1/2	34.7	28.4	9.9	.192	11.627	3.1	312.6	-1.1	89.1L	2.040	
4-4960	4-5170	.102	162.5	-5.0	-1.0	1.115	89.0	.221	1.262	5.5	159.8	.9630	1.542A	95.5	.727	2.7	-8.6	303.5	.174	
4-5170	4-5364.2	.287	287.0	-27.4	-2.1	.603	79.7	.478	1.044	168.3	283.2	.545A	1.544	67.2	1.341	1.3	3.2	40.2	.518	
4-5364.2	4-5480	.518	53.0	1.8	.8	1.236	114.9	.433	.814	258.1	503.2	.462	1.167A	111.6	.865	-3.7	-19.9	207.2	.364	
		13.66	10.00	3.58	3.68	7.08	6.43	15.49	1/1/2	33.2	32.0	12.9	.224	8.910	6.6	316.3	6.1	91.0D	1.774	
4-4970	4-5170	.112	157.4	1.1	-.8	1.114	87.1	.225	1.259	15.8	159.8	.9770	1.542A	95.6	.726	2.4	-10.0	303.6	.175	
4-5170	4-5367.5	.276	287.3	-27.9	-2.2	.611	80.5	.460	1.055	168.5	288.3	.569A	1.541	69.1	1.345	1.4	3.6	42.3	.482	
4-5367.5	4-5490	.482	58.0	.5	.2	1.225	113.4	.405	.797	258.3	507.9	.475	1.120A	108.1	.847	-3.5	-22.5	212.0	.318	
		13.49	9.79	3.66	3.69	7.09	6.13	14.57	1/1/2	32.9	36.4	16.0	.259	7.201	11.6	319.7	11.4	92.6D	1.606	
4-4980	4-5170	.130	153.8	5.1	-.6	1.112	85.1	.230	1.252	26.7	160.6	.9640	1.541A	95.6	.723	2.2	-11.1	302.9	.176	
4-5170	4-5370.1	.267	287.5	-28.4	-2.3	.617	81.1	.446	1.064	168.6	292.9	.589A	1.539	70.7	1.348	1.5	4.1	44.0	.452	
4-5370.1	4-5500	.452	62.3	-1.0	-.4	1.217	112.0	.381	.784	258.4	513.2	.486	1.083A	104.6	.834	-3.3	-24.3	215.6	.276	
		13.45	9.74	3.64	3.71	7.11	5.90	13.80	1/1/2	33.6	42.2	19.0	.295	6.058	15.6	322.7	15.6	93.9D	1.492	
4-4990	4-5170	.157	152.3	7.3	-.5	1.108	82.8	.240	1.240	38.5	162.2	.9430	1.538A	95.4	.717	2.1	-12.1	301.3	.176	
4-5170	4-5372.4	.260	287.7	-28.6	-2.5	.622	81.6	.436	1.071	168.8	296.7	.604A	1.537	72.0	1.351	1.5	4.6	45.3	.427	
4-5372.4	4-5510	.427	66.0	-2.5	-.9	1.211	110.9	.362	.774	258.4	519.1	.494	1.054A	101.0	.823	-3.1	-25.8	217.1	.240	
		13.58	9.86	4.13	3.72	7.12	5.73	13.18	1/1/2	35.2	49.8	21.9	.329	5.272	19.0	325.3	19.0	94.9D	1.406	
4-5000	4-5170	.191	152.7	8.2	-.5	1.102	80.3	.255	1.223	50.9	164.4	.9110	1.534A	95.2	.709	2.0	-13.2	298.6	.177	
4-5170	4-5374.1	.255	287.7	-29.2	-2.6	.625	81.9	.428	1.076	168.9	299.4	.615A	1.536	72.9	1.352	1.6	5.0	46.2	.410	
4-5374.1	4-5520	.410	68.8	-4.0	-1.5	1.206	110.1	.347	.767	258.3	525.8	.500	1.033A	97.3	.815	-3.0	-26.5	215.6	.210	
		13.92	10.17	4.56	3.75	7.15	5.61	12.72	1/1/2	37.8	60.3	24.4	.357	4.740	21.9	327.3	21.9	95.4D	1.335	
4-5010	4-5170	.231	154.6	8.2	-.5	1.093	77.6	.276	1.199	63.6	167.0	.8680	1.530A	94.9	.698	1.9	-14.5	294.9	.180	
4-5170	4-5374.9	.253	287.8	-29.4	-2.6	.627	82.0	.425	1.078	168.9	300.8	.620A	1.536	73.3	1.353	1.6	5.2	46.6	.402	
4-5374.9	4-5530	.402	70.4	-5.5	-1.9	1.202	109.7	.340	.761	257.7	533.4	.502	1.020A	93.4	.809	-3.0	-25.9	209.9	.189	
		14.53	10.72	5.17	3.81	7.21	5.56	12.43	1/1/2	41.4	74.7	26.1	.371	4.421	24.4	328.5	24.4	95.3D	1.270	
MARS ARRIVAL DATE = 2445180 (29 JUL 1982)																				
4-4950	4-5180	.114	155.4	-29.1	-3.5	1.110	90.4	.211	1.248	357.6	527.3	.984	1.512A	93.3	.729	5.2	2.6	299.1	.165	
4-5180	4-5362.0	.297	289.5	-26.6	-1.9	.591	80.0	.500	1.018	169.7	275.8	.509A	1.526	64.7	1.331	1.1	2.4	40.7	.565	
4-5362.0	4-5470	.565	49.3	3.0	1.5	1.254	116.9	.470	.847	258.7	497.6	.449	1.245A	115.9	.894	-3.9	-17.5	202.6	.425	
		13.84	10.37	3.68	3.47	6.87	6.69	16.82	1/1/2	44.1	27.4	8.6	.188	13.312	5.1	315.2	-4.3	88.7L	2.317	
4-4960	4-5180	.103	156.1	-11.0	-1.8	1.110	88.7	.213	1.247	7.3	166.8	.9820	1.513A	93.5	.728	3.4	-4.5	301.5	.158	
4-5180	4-5365.6	.283	289.8	-27.1	-2.0	.602	81.0	.477	1.031	169.9	281.6	.539A	1.523	66.9	1.336	1.1	2.7	43.3	.522	
4-5365.6	4-5480	.522	54.8	1.8	.9	1.240	115.1	.437	.822	258.9	501.8	.463	1.161A	112.4	.871	-3.7	-20.2	208.3	.374	
		13.23	9.90	3.58	3.33	6.75	6.32	15.70	1/1/2	40.4	30.7	11.6	.221	9.891	4.8	318.9	4.2	90.7D	1.961	
4-4970	4-5180	.111	152.8	-1.8	-1.2	1.110	86.9	.216	1.244	17.6	167.0	.9750	1.513A	93.5	.727	2.8	-7.4	301.9	.157	
4-5180	4-5368.8	.271	290.0	-27.6	-2.2	.611	81.8	.459	1.043	170.0	286.9	.564A	1.521	68.8	1.341	1.2	3.1	45.4	.485	
4-5368.8	4-5490	.485	59.9	.5	.2	1.230	113.4	.408	.804	259.1	506.4	.476	1.131A	108.9	.853	-3.5	-22.7	213.7	.326	
		12.97	9.67	3.66	3.31	6.71	6.01	14.74	1/1/2	39.8	34.9	14.7	.256	7.826	10.3	322.4	10.1	92.3D	1.747	
4-4980	4-5180	.130	150.4	3.5	-.9	1.108	84.9	.222	1.237	28.6	167.8	.9620	1.512A	93.4	.724	2.5	-9.2	301.1	.157	
4-5180	4-5371.7	.261	290.2	-28.0	-2.3	.618	82.4	.444	1.052	170.2	291.6	.585A	1.519	70.5	1.344	1.2	3.5	47.2	.453	
4-5371.7	4-5500	.453	64.4	-1.0	-.4	1.221	112.0	.383	.790	259.3	511.5	.488	1.092A	105.4	.839	-3.3	-24.7	217.7	.284	
		12.90	9.60	3.63	3.30	6.71	5.77	13.93	1/1/2	40.5	40.2	17.7	.293	6.487	14.6	325.5	14.6	93.6D	1.606	
4-4990	4-5180	.156	149.9	6.3	-.8	1.103	82.7	.233	1.225	40.3	169.3	.9400	1.510A	93.2	.718	2.2	-10.7	299.2	.157	
4-5180	4-5374.1	.254	290.3	-28.5	-2.4	.623	82.9	.432	1.060	170.4	295.7	.601A	1.518	71.8	1.347	1.3	3.9	46.6	.428	
4-5374.1	4-5510	.428	68.2	-2.5	-.9	1.214	110.9	.362	.779	259.3	517.3	.497	1.061A	101.8	.826	-3.1	-26.2	219.9	.246	
		13.01	9.70	4.12	3.31	6.71	5.56	13.26	1/1/2	42.4	47.3	20.7	.329	5.579	18.2	328.2	18.1	94.7D	1.505	
4-5000	4-5180	.189	151.1	7.5	-.7	1.097	80.3	.248	1.208	52.4	171.2	.9090	1.508A	92.9	.710	2.1	-12.2	296.2	.159	
4-5180	4-5375.9	.249	290.3	-28.9	-2.5	.627	83.2	.424	1.065	170.6	298.7	.613A	1.517	72.8	1.349	1.4	4.3	49.5	.409	
4-5375.9	4-5520	.409	71.2	-4.1	-1.5	1.209	110.0	.346	.771	259.2	523.9	.504	1.036A	98.2	.819	-2.9	-27.1	219.3	.214	
		13.33	9.99	4.54	3.34	6.74	5.45	12.78	1/1/2	45.4	56.9	23.2	.360	4.966	21.1	330.3	21.1	95.3D	1.426	
4-5010	4-5180	.228	153.5	7.7	-.7	1.089	77.7	.269	1.186	64.8	173.4	.8670	1.506A	92.4	.699	2.0	-13.8	292.0	.162	
4-5180	4-5376.9	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.068	170.7	300.5	.620A	1.516	73.4	1.351	1.4	4.5	50.0	.398	
4-5376.9	4-5530	.398	73.2	-5.5	-1.9	1.205	109.5	.337	.765	258.8	531.3	.507	1.022A	94.4	.815	-2.9	-26.9	214.8	.191	
		13.90	10.50	5.12	3.40	6.81	5.38	12.45	1/1/2	49.4	70.2	25.2	.379	4.580	23.6	331.8	23.6	95.3D	1.357	
4-5020	4-5180	.273	156.9	7.1	-.6	1.077	74.7	.299	1.158	77.1	175.7	.8120	1.504A	91.6	.685	1.8	-15.5	286.9	.166	
4-5180	4-5376.8	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.067	170.7	300.2	.619A	1.516	73.3	1.350	1.4	4.5	49.9	.400	
4-5376.8	4-5540	.400	73.5	-6.9	-2.4	1.201	109.6	.337	.760	257.7	539.9	.503	1.016A	90.0	.808	-2.9	-24.6	205.4	.163	
		14.81	11.27	5.67	3.54	6.94	5.39	12.34	1/1/2	54.4	88.2	26.2	.376	4.420	25.9	332.3	25.9	94.6D	1.286	
MARS ARRIVAL DATE = 2445190 (8 AUG 1982)																				
4-4960	4-5190	.110	148.6	-21.3	-3.0	1.107	88.5	.206	1.237	8.6	173.5	.9820	1.491A	91.7	.732	4.6	2.1	298.1	.149	
4-5190	4-5366.9	.278	292.2	-26.8	-2.0	.601	82.4	.477	1.018	171.5	280.0	.532A	1.504	66.5	1.332	1.0	2.2	46.3	.527	
4-5366.9	4-5480	.527	56.6	1.9	.9	1.245	115.2	.441	.830	259.7	500.4	.464	1.197A	113.1	.878	-3.7	-20.6	209.8	.383	
		12.98	9.85	3.65	3.13	6.54	6.20	15.91	1/1/2	49.6	29.5	10.3	.217	11.094	2.8	321.4	2.0	90.3D	2.188	
4-4970	4-5190	.113	148.5	-6.6	-1.8	1.106	86.7	.210	1.233	19.0	173.7	.9740	1.491A	91.7	.730	3.3	-3.7	299.0	.143	
4-5190	4-5370.2	.266	292.4	-27.2	-2.1	.611	83.2	.458	1.030	171.8	285.5	.559A	1.502	68.5	1.337	1.0	2.5	48.5	.488	
4-5370.2	4-5490	.488	61.8	.5	.2	1.234	113.5	.411	.810	259.9	504.9	.478	1.143A	109.6	.859	-3.5	-25.0	215.2	.335	
		12.58	9.55	3.67	3.03	6.44	5.88	14.91	1/1/2	47.9	33.4	13.4	.252	8.564	8.8	324.9	8.7	92.0D	1.910	
4-4980	4-5190	.130	147.7	.9	-1.3	1.104	84.8	.217	1.225	30.0	174.5	.9600	1.491A	91.5	.727	2.8	-6.8	298.3	.142	
4-5190	4-5373.2	.256	292.4	-27.7	-2.2	.619	83.6	.442	1.041	172.0	290.4	.581A	1.500	70.3	1.341	1.0	2.9	50.4	.455	
4-5373.2	4-5500	.455	66.4	-1.0	-.4	1.225	112.1	.385	.795	260.1	510.0	.489	1.101A	106.1	.844	-3.2	-25.0	219.6	.292	
		12.46	9.46	3.64	3.00	6.41	5.63	14.08	1/1/2	48.5	38.4	16.5	.290	6.975	13.5	326.2	13.5	93.4D	1.734	
4-4990	4-5190	.156	146.1	4.8	-1.1	1.100	82.7	.227	1.214	41.5	175.9	.9380	1.490A	91.2	.721	2.4	-9.1	296.2	.142	
4-5190	4-5375.7	.248	292.4	-28.2	-2.3	.625	84.3	.429	1.049	172.3	294.6	.598A	1.499	71.7	1.344	1.1	3.2	51.8	.426	
4-5375.7	4-5510	.426	70.4	-2.5	-1.0	1.216	110.9	.363	.784	260.2	515.6	.499	1.068A	102.6	.832	-3.0	-26.6	222.4	.252	
		12.54	9.54	4.11	3.00	6.41	5.43	13.39	1/1/2	50.5	45.0	19.4	.328	5.923	17.2	331.0	17.2	94.4D	1.614	

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445190
6 AUG 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5000	4-5190	.167	149.9	6.5	-.9	1.094	80.4	.243	1.199	53.3	177.5	.908D	1.489A	90.8	.714	2.2	-11.1	292.9	.144
4-5190	4-5377.6	.242	292.4	-26.5	-2.4	.629	84.6	.420	1.055	172.5	298.0	.611A	1.498	72.8	1.346	1.1	3.5	52.8	.406
4-5377.6	4-5520	.406	75.6	-4.1	-1.3	1.212	109.9	.346	.775	260.2	522.0	.307	1.043A	99.0	.823	-2.9	-27.6	222.7	.219
		12.64	9.80	4.51	3.03	6.44	5.29	12.86	1/1/2	53.6	53.9	22.1	.362	5.216	20.2	333.3	20.2	95.1D	1.524
4-5010	4-5190	.225	152.9	6.9	-.9	1.086	77.8	.264	1.178	65.3	179.3	.867D	1.489A	90.2	.704	2.0	-13.1	288.5	.148
4-5190	4-5378.9	.239	292.4	-26.8	-2.4	.632	84.8	.415	1.058	172.6	300.1	.619A	1.498	73.5	1.348	1.1	3.7	53.4	.395
4-5378.9	4-5530	.395	75.8	-5.6	-1.9	1.208	109.3	.335	.768	259.9	529.2	.511	1.026A	95.3	.817	-2.8	-27.7	219.4	.193
		13.38	10.27	5.06	3.11	6.52	5.20	12.48	1/1/2	58.1	66.1	24.2	.385	4.761	22.8	335.0	22.8	95.3D	1.449
4-5020	4-5190	.267	156.6	6.4	-.8	1.075	75.0	.293	1.152	77.1	181.1	.815D	1.489	89.6	.690	1.9	-15.0	283.3	.155
4-5190	4-5379.1	.238	292.4	-26.8	-2.4	.632	84.9	.414	1.059	172.7	300.5	.620A	1.497	73.6	1.348	1.1	3.8	53.5	.393
4-5379.1	4-5540	.393	76.6	-7.0	-2.4	1.204	109.2	.332	.763	259.0	537.5	.310	1.016A	91.2	.812	-2.8	-26.1	211.2	.180
		14.23	10.97	5.78	3.26	6.67	5.19	12.31	1/1/2	63.5	82.8	25.5	.390	4.533	25.2	335.8	25.1	94.8D	1.377
MARS ARRIVAL DATE = 2445200 (18 AUG 1982)																			
4-4940	4-5200	.129	199.0	45.2	5.0	1.103	91.6	.200	1.230	350.1	541.0	.984	1.476	89.8	.737	-3.3	-40.2	304.3	.128
4-5200	4-5360.7	.308	293.7	-25.6	-1.8	.572	82.0	.531	.973	172.8	265.8	.456A	1.489	61.2	1.314	.7	1.3	43.6	.629
4-5360.7	4-5460	.629	46.5	4.1	2.3	1.265	119.4	.520	.907	260.0	491.4	.455	1.379A	120.7	.939	-4.3	-15.0	197.9	.506
		13.54	10.81	3.83	2.72	6.14	6.99	16.69	2/1/2	56.5	22.9	4.0	.152	26.428	43.5	317.7	-43.4	85.7L	4.170
4-4960	4-5200	.140	137.2	-37.6	-5.6	1.105	88.4	.201	1.229	9.5	179.9	.981D	1.476A	90.0	.736	7.2	14.1	292.4	.156
4-5200	4-5368.3	.274	294.2	-26.5	-2.0	.601	83.9	.477	1.006	173.3	278.4	.526A	1.485	66.2	1.327	.8	1.7	49.3	.531
4-5368.3	4-5480	.531	58.4	1.9	.9	1.251	115.4	.445	.839	260.4	499.0	.465	1.212A	113.8	.885	-3.8	-20.9	210.9	.393
		13.32	10.03	3.94	3.29	6.70	6.08	16.12	1/1/2	61.8	28.4	9.1	.213	12.576	2.0	323.9	-.9	90.0L	2.466
4-4970	4-5200	.119	144.0	-14.1	-2.8	1.104	86.7	.205	1.225	19.8	180.1	.973D	1.476	90.0	.734	4.2	1.8	295.0	.136
4-5200	4-5371.6	.261	294.2	-27.0	-2.1	.611	84.7	.457	1.019	173.6	284.1	.554A	1.484	68.3	1.333	.8	2.0	51.6	.491
4-5371.6	4-5490	.491	63.6	.5	.2	1.238	113.8	.414	.817	260.7	503.5	.479	1.155A	110.3	.865	-3.5	-23.2	216.7	.344
		12.35	9.47	3.72	2.88	6.29	5.75	15.09	1/1/2	57.3	32.1	12.2	.249	9.428	7.0	327.4	6.9	91.7D	2.099
4-4980	4-5200	.131	145.2	-2.9	-1.9	1.102	84.8	.212	1.218	30.7	180.8	.959D	1.476	89.8	.731	3.2	-3.6	294.5	.132
4-5200	4-5374.8	.250	294.1	-27.5	-2.1	.620	85.3	.440	1.030	174.0	289.2	.577A	1.483	70.0	1.337	.8	2.2	53.4	.457
4-5374.8	4-5500	.457	68.3	-1.0	-.4	1.229	112.1	.387	.801	260.9	508.4	.491	1.110A	106.8	.849	-3.2	-25.2	221.5	.299
		12.13	9.33	3.85	2.80	6.21	5.49	14.22	1/1/2	57.5	36.8	13.3	.288	7.528	12.3	330.7	12.2	93.2D	1.878
4-4990	4-5200	.155	146.6	2.5	-1.5	1.098	82.7	.223	1.207	42.0	181.9	.938D	1.476	89.4	.726	2.7	-7.0	292.4	.131
4-5200	4-5377.2	.242	294.1	-27.9	-2.2	.626	85.8	.427	1.036	174.3	293.6	.595A	1.482	71.5	1.341	.8	2.5	54.9	.429
4-5377.2	4-5510	.429	72.4	-2.6	-1.0	1.221	110.9	.364	.788	261.0	514.0	.502	1.075A	103.3	.837	-3.0	-26.8	224.6	.259
		12.17	9.36	4.10	2.79	6.20	5.28	13.50	1/1/2	59.5	42.9	18.3	.327	6.304	16.2	333.7	16.2	94.2D	1.733
4-5000	4-5200	.185	149.1	5.0	-1.2	1.092	80.5	.238	1.192	53.6	183.3	.908D	1.477	89.0	.719	2.4	-9.8	289.0	.133
4-5200	4-5379.3	.236	293.9	-28.3	-2.5	.631	86.1	.417	1.045	174.6	297.2	.609A	1.481	72.7	1.343	.9	2.8	55.9	.407
4-5379.3	4-5520	.407	75.8	-4.2	-1.5	1.215	109.8	.346	.779	261.1	520.3	.510	1.048A	99.8	.827	-2.8	-27.9	225.8	.224
		12.44	9.61	4.49	2.83	6.24	5.13	12.94	1/1/2	62.9	51.1	21.0	.363	5.469	19.3	336.1	19.3	95.0D	1.629
4-5010	4-5200	.221	152.5	5.8	-1.1	1.085	78.0	.260	1.173	65.1	184.7	.869D	1.478	88.3	.709	2.1	-12.2	284.6	.136
4-5200	4-5380.7	.232	293.9	-28.5	-2.3	.634	86.4	.411	1.049	174.8	299.7	.618A	1.480	73.5	1.345	.9	2.9	56.8	.392
4-5380.7	4-5530	.392	76.3	-5.7	-1.9	1.211	109.1	.333	.772	260.9	527.3	.515	1.029A	96.2	.820	-2.7	-28.3	223.5	.196
		12.95	10.03	5.01	2.92	6.35	5.03	12.55	1/1/2	67.3	62.3	23.3	.390	4.961	21.9	336.0	21.9	95.3D	1.547
4-5020	4-5200	.262	156.5	5.8	-1.0	1.074	75.3	.287	1.149	76.6	186.1	.819D	1.479	87.6	.697	1.9	-14.5	279.4	.140
4-5200	4-5381.3	.230	293.8	-28.8	-2.3	.635	86.5	.409	1.051	174.9	300.6	.622A	1.480	73.8	1.346	.9	3.0	56.8	.387
4-5381.3	4-5540	.387	79.5	-7.0	-2.4	1.207	108.9	.328	.766	260.2	535.3	.515	1.017A	92.3	.815	-2.6	-27.3	216.6	.179
		13.75	10.67	5.68	3.08	6.49	4.99	12.30	1/1/2	72.4	77.8	24.7	.401	4.668	24.3	339.1	24.2	95.0D	1.472
MARS ARRIVAL DATE = 2445210 (28 AUG 1982)																			
4-4940	4-5210	.114	193.0	39.2	3.9	1.102	91.6	.197	1.225	350.4	546.8	.984	1.466	88.3	.742	-2.2	-36.0	298.8	.114
4-5210	4-5361.9	.305	295.4	-25.4	-1.9	.570	83.8	.534	.959	174.5	263.9	.447A	1.471	60.6	1.308	.6	1.0	46.5	.637
4-5361.9	4-5460	.637	48.2	4.2	2.4	1.292	119.6	.527	.922	260.6	490.2	.436	1.408A	121.4	.948	-4.4	-15.4	198.6	.518
		13.07	10.59	3.68	2.48	5.90	6.91	16.99	2/1/2	64.2	22.1	3.6	.148	31.820	62.9	322.4	-62.7	86.1L	4.572
4-4950	4-5210	.202	220.6	63.7	9.9	1.103	90.1	.196	1.225	359.7	546.0	.985	1.466	88.5	.742	-8.3	-63.0	310.2	.160
4-5210	4-5365.9	.286	295.6	-25.8	-1.9	.587	84.8	.503	.978	174.8	270.6	.486A	1.470	63.4	1.316	.6	1.1	49.6	.583
4-5365.9	4-5470	.583	54.4	3.2	1.6	1.272	117.5	.467	.879	261.0	493.7	.451	1.307A	117.9	.916	-4.1	-18.4	205.5	.458
		14.49	11.12	4.73	3.37	6.77	6.39	17.58	2/1/2	70.9	24.5	5.2	.177	21.923	23.0	322.9	-22.9	87.4L	3.697
4-4970	4-5210	.134	137.8	-25.7	-4.5	1.102	86.6	.202	1.219	20.2	186.0	.973D	1.466	88.8	.740	5.8	10.4	289.8	.139
4-5210	4-5373.0	.256	295.4	-26.8	-2.0	.612	86.4	.456	1.008	175.7	282.7	.548A	1.467	68.0	1.329	.8	1.9	54.5	.495
4-5373.0	4-5490	.495	65.4	.5	.2	1.243	113.8	.417	.824	261.4	502.1	.480	1.168A	110.9	.871	-3.5	-23.5	216.0	.353
		12.43	9.50	3.87	2.93	6.34	5.62	15.27	1/1/2	66.1	30.8	11.0	.246	10.444	5.0	329.9	4.9	91.9D	2.319
4-4980	4-5210	.134	142.6	-8.6	-2.6	1.100	84.8	.209	1.213	30.9	186.6	.959D	1.466	88.3	.737	3.9	.9	290.1	.127
4-5210	4-5376.0	.245	295.2	-27.3	-2.1	.621	87.0	.436	1.019	176.1	286.0	.572A	1.466	69.8	1.334	.8	1.8	56.4	.459
4-5376.0	4-5500	.459	70.2	-1.0	-.4	1.233	112.2	.389	.806	261.7	507.0	.493	1.120A	107.5	.854	-3.2	-25.4	223.1	.307
		11.93	9.22	3.86	2.70	6.12	5.35	14.37	1/1/2	67.2	35.2	14.1	.265	8.155	10.8	333.2	10.8	92.9D	2.037
4-4990	4-5210	.155	145.4	-.6	-1.9	1.097	82.8	.220	1.203	42.0	187.5	.938D	1.467	87.9	.732	5.1	-4.4	288.1	.125
4-5210	4-5376.7	.236	295.0	-27.7	-2.1	.628	87.4	.425	1.029	176.5	292.8	.592A	1.466	71.4	1.338	.8	1.8	57.9	.430
4-5376.7	4-5510	.430	74.4	-2.8	-1.0	1.225	110.9	.365	.793	261.9	512.5	.504	1.083A	104.0	.841	-2.9	-27.0	228.9	.266
		11.90	9.23	4.10	2.67	6.08	5.13	13.82	1/1/2	69.1	41.0	17.1	.325	6.721	15.1	336.2	15.1	94.1D	1.860
4-5000	4-5210	.183	148.5	3.0	-1.5	1.091	80.6	.235	1.189	53.3	186.6	.910D	1.469	87.4	.725	2.6	-9.2	284.8	.127
4-5210	4-5380.9	.230	294.8	-28.1	-2.2	.634	87.8	.414	1.036	176.9	296.5	.607A	1.465	72.6	1.341	.6	2.0	59.0	.407
4-5380.9	4-5520	.407	77.9	-4.2	-1.5	1.219	109.8	.346	.783	261.9	518.6	.512	1.034A	100.5	.831	-2.7	-28.1	226.7	.230
		12.13	9.43	4.45	2.70	6.12	4.97	13.02	1/1/2	72.3	48.6	19.9	.363	5.786	18.3	338.8	18.3	94.9D	1.739
4-5010	4-5210	.217	152.3	4.4	-1.3	1.084	78.3	.255	1.172	64.3	189.7	.872D	1.471	86.7	.717	2.3	-11.2	280.5	.132
4-5210	4-5382.8	.225	294.6	-28.4	-2.2	.638	88.1	.407	1.041	177.2	299.3	.617A	1.465	73.5	1.343	.7	2.2	59.7	.390
4-5382.8	4-5530	.390	80.6	-5.7	-2.0	1.214	109.0	.331	.776	261.8	525.5	.518	1.033A	97.0	.824	-2.6	-28.7	227.3	.200
		12.61	9.80	4.94	2.80	6.21	4.86	12.58	1/1/2	76.8	59.0	22.3	.395	5.178	21.0	340.8	20.9	95.3D	1.648
4-5020	4-5210	.256	156.7	4.5	-1.2	1.074	75.7	.282	1.150	75.6	190.7	.825D	1.474	85.9	.709	2.0	-13.6	275.7	.141
4-5210	4-5383.2	.223	294.5	-28.5	-2.2	.639	88.2	.404	1.043	177.3	300.8	.622A	1.465	73.9	1.344	.7	2.3	60.0	.383
4-5383.2	4-5540	.383	82.1	-7.1	-2.4	1.210	108.8	.324	.770	261.5	533.3	.520	1.019A	93.2	.819	-2.5	-28.1	221.6	.179
		13.57	10.39	5.57	2.96	6.39	4.81	12.30	1/1/2	81.5	73.4	24.0	.411	4.817	23.3	342.1	23.2	95.1D	1.568
4-5030	4-5210	.299	161.3	3.8	-1.1	1.063	72.8	.315	1.123	86.3	191.5	.769D	1.477	84.9	.690	1.8	-16.0	270.8	.155
4-5210	4-5382.7	.224	294.6	-28.4	-2.2	.638	88.1	.406	1.042	177.2	299.7	.619A	1.465	73.6	1.343	.7	2.2	59.8	.388
4-5382.7	4-5550	.388	82.0	-8.3	-2.8	1.206	108.9	.327	.765	260.0	542.3	.515	1.015	88.9	.815	-2.6	-29.5	211.0	.176
		14.47	11.21	6.36	3.26	6.66	4.85	12.26	1/1/2	86.3	92.6	24.5	.400	4.709	25.7	342.4	25.5	94.1D	1.484
MARS ARRIVAL DATE = 2445220 (7 SEP 1982)																			
4-4940	4-5220	.107	190.4	35.2	3.3	1.101	91.6	.195	1.222	350.2	552.3	.984	1.460	87.1	.746	-1.7	-34.0	293.1	.107
4-5220	4-5363.1	.305	296.5	-25.3	-1.9	.567	85.9	.537	.946	176.5	262.1	.436A	1.455	60.1	1.303	.4	.7	49.4	.645
4-5363.1	4-5460	.645	49.8	4.5	2.5	1.299	119.9	.535	.938	261.5	489.0	.436	1.439A	122.1	.958	-4.5	-15.7	199.4	.531
		12.81	10.46	3.82	2.55	5.77	6.84	19.50	2/1/2	73.7	21.4	3.7	.145	31.263	63.8	341.4	-63.4	87.1L	4.382
4-4950	4-5220	.139	199.0	54.0	5.9	1.102	90.1	.194	1.222	359.6	551.6	.985	1.459	87.2	.748	-4.4	-50.2	298.7	.122
4-5220	4-5367.2	.288	296.5	-25.8	-1.9	.586	86.8	.505	.966	176.9	266.9	.478A	1.454	63.0	1.312	.4	.7	52.4	.590
4-5367.2	4-5470	.590	56.0	3.2	1.7	1.278	117.7	.493	.891	261.7	492.5	.452	1.330A	116.6	.926	-4.2	-16.7	206.4	.470
		12.84	10.23	3.93	2.61	6.02	6.31	17.84	2/1/2	74.5	23.7	4.4	.175	26.079	54.8	329.6	-54.5	87.1L	4.336
4-4970	4-5220	.186	125.7	-42.6	-8.4	1.101	86.7	.200	1.216	20.1	191.6	.973D	1.459	87.2	.746	9.7	23.7	283.6	.171
4-5220	4-5374.8	.251	295.9	-26.6	-2.0	.613	86.5	.456	.998	177.9	281.4	.543A	1.452	67.7	1.325	.4	.9	57.3	.498
4-5374.8	4-5490	.499	67.2	.5	.2	1.247	113.9	.421	.831	262.2	500.7	.481	1.181A	111.6	.877	-3.5	-23.7	219.3	.362
		13.62	10.01	4.80	3.81	7.01	5.81	18.45	1/1/2	78.4	29.7	9.9	.242	11.627	2.8	332.2	2.4	91.8D	2.871
4-4980	4-5220	.142	139.2	-17.1	-3.8	1.099	84.9	.207	1.210	30.8	192.0	.960D	1.460	88.9	.743	5.0	7.2	285.2	.129
4-5220	4-5377.4	.240	295.5	-27.2	-2.0	.625	86.8	.437	1.010	178.5	286.9	.568A	1.452	69.6	1.331	.4	1.1	58.2	.482
4-5377.4	4-5500	.482	72.0	-1.0	-.4	1.237	112.5	.392	.812	262.4	505.6	.494	1.130A	108.1	.860	-3.2	-25.6	224.7	.315
		11.94	9.16	3.96	2.75	6.17	5.22	14.51	1/1/2	77.5	33.8	13.0	.282	8.947	9.2	335.6	9.2	92.7D	2.211

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445220
7 SEP 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / SUN A	THET2 / THET4 / SUN R	PERIH / PERIH / KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERTC	
4-4990	4-5220	.155	144.1	-5.0	-2.6	1.096	82.9	.217	1.201	41.5	192.7	.940D	1.461	86.5	.739	3.6	-1.0	283.7	.123	
4-5220	4-5380.1	.231	295.1	-27.7	-2.1	.631	89.3	.423	1.020	179.0	291.7	.589A	1.452	71.2	1.355	.4	1.2	60.7	.431	
4-5380.1	4-5510	.431	76.3	-2.6	-1.0	1.226	110.9	.366	.798	262.6	511.0	.506	1,090A	104.7	.846	-2.9	-27.2	226.9	.273	*
		11.74	9.11	4.10	2.63	6.05	5.00	13.73	1/1/2	78.8	39.2	16.0	.325	7.169	13.8	338.7	13.8	93.9D	1.994	
4-5000	4-5220	.160	148.1	.4	-2.0	1.091	80.6	.232	1.186	52.5	193.5	.913D	1.464	86.0	.733	2.9	-6.2	280.7	.124	
4-5220	4-5382.4	.224	294.7	-28.0	-2.1	.637	89.6	.412	1.026	179.5	295.6	.605A	1.452	72.5	1.338	.4	1.3	61.9	.407	
4-5382.4	4-5520	.407	60.0	-4.3	-1.5	1.222	109.7	.346	.787	262.8	517.0	.515	1.060A	101.2	.655	-2.7	-26.3	231.3	.235	
		11.91	9.26	4.42	2.65	6.07	4.83	13.11	1/1/2	82.0	46.5	16.9	.363	6.095	17.2	341.4	17.2	94.8D	1.852	
4-5010	4-5220	.212	152.3	2.6	-1.6	1.084	78.6	.252	1.172	63.4	194.3	.877D	1.467	85.3	.725	2.4	-10.1	276.8	.130	
4-5220	4-5384.1	.219	294.4	-28.3	-2.1	.641	89.9	.404	1.034	179.8	298.8	.616A	1.452	73.5	1.340	.4	1.4	62.6	.389	
4-5384.1	4-5530	.389	82.8	-5.8	-2.0	1.216	108.9	.331	.779	262.7	523.7	.522	1.037A	97.7	.828	-2.5	-26.9	230.7	.204	
		12.35	9.59	4.87	2.76	6.17	4.72	12.63	1/1/2	86.0	56.0	21.4	.398	5.396	20.0	343.5	19.8	95.3D	1.748	
4-5020	4-5220	.249	157.0	3.2	-1.4	1.075	76.1	.277	1.152	74.1	194.9	.833D	1.470	84.4	.714	2.1	-13.1	272.4	.139	
4-5220	4-5385.1	.217	294.2	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.6	.623A	1.452	74.0	1.342	.4	1.5	63.0	.379	
4-5385.1	4-5540	.379	84.6	-7.2	-2.4	1.213	108.4	.321	.773	262.3	531.3	.525	1.021A	94.1	.822	-2.4	-28.7	226.1	.181	
		13.07	10.12	5.46	2.94	6.35	4.66	12.32	1/1/2	90.3	69.4	23.2	.419	4.972	22.3	345.0	22.1	95.3D	1.664	
4-5030	4-5220	.291	161.9	2.7	-1.5	1.064	73.4	.308	1.127	84.5	195.3	.780D	1.474	83.4	.701	1.8	-15.8	268.2	.153	
4-5220	4-5385.0	.217	294.3	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.4	.622A	1.452	74.0	1.342	.4	1.5	63.0	.360	
4-5385.0	4-5550	.580	85.0	-8.4	-2.8	1.209	108.5	.321	.768	261.3	540.0	.521	1.015	90.0	.818	-2.4	-26.7	216.6	.172	
		14.10	10.87	6.20	3.23	6.64	4.67	12.21	1/1/2	94.4	67.4	24.1	.416	4.799	24.6	345.5	24.3	94.5D	1.581	
MARS ARRIVAL DATE = 2445230 (17 SEP 1982)																				
4-4930	4-5230	.105	189.5	21.9	2.2	1.098	93.2	.197	1.219	340.6	556.6	.978	1.459	85.6	.754	-.5	-27.0	283.8	.102	
4-5230	4-5360.1	.326	296.9	-24.8	-1.9	.541	87.5	.580	.912	178.2	253.2	.383A	1.441	56.3	1.287	.2	.3	48.9	.716	
4-5360.1	4-5450	.716	44.7	5.3	3.3	1.334	122.5	.591	1.026	262.1	484.7	.420	1.633A	126.2	1.007	-5.0	-12.7	192.6	.612	
		13.35	11.08	3.60	2.28	5.70	7.47	21.34	2/1/2	86.2	18.9	6.5	.117	17.628	129.8	323.6	50.1	91.7D	1.949	
4-4940	4-5230	.103	189.6	32.0	2.9	1.100	91.7	.194	1.220	349.6	557.5	.983	1.456	85.9	.755	-1.3	-32.8	287.3	.103	
4-5230	4-5364.4	.301	296.9	-25.3	-1.9	.565	88.3	.541	.935	178.6	260.4	.429A	1.441	59.6	1.298	.2	.3	52.2	.653	
4-5364.4	4-5460	.653	51.4	4.4	2.5	1.306	120.1	.542	.954	262.2	487.6	.437	1.472A	122.7	.966	-4.6	-16.0	200.1	.544	
		12.66	10.38	3.59	2.29	5.71	6.80	19.61	2/1/2	83.9	20.7	4.2	.141	27.549	101.1	331.3	78.8	88.5L	3.747	
4-4950	4-5230	.119	191.9	46.7	4.5	1.101	90.2	.193	1.220	359.0	556.8	.985	1.455	86.1	.755	-3.0	-43.8	290.8	.110	
4-5230	4-5368.4	.280	296.6	-25.8	-1.9	.585	89.1	.508	.955	179.1	267.4	.470A	1.440	62.6	1.307	.2	.3	55.2	.596	
4-5368.4	4-5470	.596	57.6	3.3	1.7	1.264	117.9	.499	.903	262.5	491.2	.453	1.354A	119.2	.954	-4.3	-19.0	207.2	.481	
		12.57	9.96	3.72	2.41	5.83	6.24	18.10	2/1/2	83.1	22.8	3.9	.169	29.727	90.0	328.6	-49.9	87.1L	4.659	
4-4960	4-5230	.209	216.3	66.9	10.3	1.102	88.6	.194	1.218	8.8	196.5	.982D	1.454	86.1	.754	-8.9	-68.5	300.8	.161	
4-5230	4-5372.1	.262	296.1	-26.5	-1.9	.602	89.8	.479	.974	179.8	274.0	.507A	1.440	65.2	1.316	.2	.4	57.8	.546	
4-5372.1	4-5480	.546	63.5	2.0	1.0	1.266	115.8	.459	.866	262.7	495.1	.466	1.264A	115.7	.906	-3.9	-21.8	214.1	.423	
		14.01	10.62	4.83	3.40	6.80	5.79	16.78	2/1/2	85.0	25.4	5.9	.202	19.358	15.8	331.0	-15.8	89.1L	3.697	
4-4960	4-5230	.165	133.2	-29.8	-6.1	1.099	85.1	.205	1.209	29.9	197.0	.961D	1.456	85.7	.750	7.2	16.4	280.5	.147	
4-5230	4-5378.7	.236	294.9	-27.3	-2.0	.626	90.9	.437	1.003	181.1	285.8	.565A	1.440D	69.4	1.328	.2	.5	61.8	.464	
4-5378.7	4-5500	.464	73.8	-1.0	-.4	1.240	112.5	.394	.818	263.2	504.2	.496	1.141A	108.7	.865	-3.2	-25.8	226.2	.323	
		12.45	9.36	4.23	3.09	6.50	5.13	14.66	1/1/2	86.4	32.5	12.0	.279	9.593	7.4	337.9	7.4	92.6D	2.395	
4-4990	4-5230	.156	142.3	-11.4	-3.5	1.096	83.2	.215	1.200	40.5	197.5	.942D	1.458	85.4	.746	4.5	3.5	279.6	.127	
4-5230	4-5381.8	.227	294.3	-27.7	-2.0	.634	91.3	.422	1.013	181.8	290.9	.586A	1.441D	71.1	1.333	.2	.5	63.4	.433	
4-5381.8	4-5510	.433	76.1	-2.7	-1.0	1.231	110.9	.368	.803	263.4	509.5	.507	1.098A	105.3	.850	-2.9	-27.3	230.7	.279	o
		11.75	9.04	4.14	2.70	6.12	4.90	13.85	1/1/2	88.0	37.6	15.1	.321	7.631	12.5	341.0	12.4	93.8D	2.130	
4-5000	4-5230	.178	147.6	-3.1	-2.5	1.091	81.1	.229	1.189	51.2	198.1	.916D	1.461	84.8	.740	3.3	-3.8	277.0	.125	
4-5230	4-5383.8	.220	293.7	-26.1	-2.0	.641	91.6	.410	1.022	182.3	295.2	.603A	1.441D	72.5	1.336	.2	.6	64.6	.407	
4-5383.8	4-5520	.407	61.9	-4.3	-1.5	1.224	109.7	.347	.791	263.6	515.5	.517	1.065A	101.9	.839	-2.6	-26.4	233.6	.241	
		11.80	9.13	4.39	2.68	6.09	4.73	13.19	1/1/2	91.0	44.3	18.0	.363	6.403	16.1	343.8	16.0	94.7D	1.962	
4-5010	4-5230	.208	152.4	.4	-2.0	1.085	78.9	.248	1.174	61.9	198.6	.883D	1.465	84.1	.733	2.7	-8.7	273.6	.130	
4-5230	4-5385.7	.215	293.2	-28.4	-2.0	.646	91.9	.401	1.028	182.8	298.5	.616A	1.441D	73.5	1.339	.2	.6	65.4	.388	
4-5385.7	4-5530	.388	84.9	-5.9	-2.0	1.219	108.8	.330	.783	263.6	522.1	.524	1.041A	98.4	.831	-2.4	-29.1	233.8	.208	
		12.19	9.42	4.80	2.77	6.16	4.61	12.69	1/1/2	94.6	53.3	20.5	.400	5.614	18.9	346.0	18.7	95.3D	1.646	
4-5020	4-5230	.242	157.4	1.6	-1.7	1.077	76.5	.272	1.155	72.4	198.9	.841D	1.469	83.2	.724	2.3	-12.3	269.9	.140	
4-5230	4-5386.8	.212	292.9	-28.6	-2.0	.648	92.0	.396	1.032	183.0	300.6	.623A	1.441D	74.1	1.340	.2	.7	65.8	.376	
4-5386.8	4-5540	.376	86.9	-7.3	-2.4	1.215	108.2	.319	.776	263.3	529.5	.528	1.024A	94.8	.825	-2.3	-29.1	230.2	.182	
		12.85	9.89	5.35	2.96	6.37	4.54	12.34	1/1/2	98.4	65.8	22.5	.426	5.126	21.2	347.6	20.9	95.4D	1.756	
4-5030	4-5230	.282	162.5	1.4	-1.5	1.066	74.0	.301	1.133	82.5	199.0	.792D	1.474	82.2	.712	1.9	-15.1	266.3	.154	
4-5230	4-5387.0	.211	292.8	-28.6	-2.0	.649	92.0	.396	1.033	183.1	300.9	.624A	1.442D	74.2	1.341	.2	.7	65.9	.374	
4-5387.0	4-5550	.374	87.7	-8.5	-2.8	1.212	108.1	.317	.771	262.4	538.0	.527	1.015A	90.9	.821	-2.3	-27.6	221.7	.170	
		13.62	10.57	6.04	3.25	6.65	4.53	12.18	1/1/2	101.9	82.8	23.6	.430	4.892	23.4	348.4	23.0	94.9D	1.672	
MARS ARRIVAL DATE = 2445240 (27 SEP 1982)																				
4-4930	4-5240	.106	190.7	20.3	2.1	1.096	93.3	.197	1.218	339.5	563.4	.977	1.458	84.5	.761	-.4	-27.0	278.8	.104	
4-5240	4-5361.8	.328	298.8	-24.9	-1.9	.538	90.5	.586	.901	180.4	251.4	.373A	1.429D	55.6	1.282	-.0	-.0	51.7	.727	
4-5361.8	4-5450	.727	46.3	5.4	3.5	1.345	122.8	.601	1.052	262.8	483.5	.420	1.664A	126.9	1.019	-5.2	-13.0	193.4	.627	
		13.42	11.11	3.61	2.30	5.72	7.50	21.72	2/1/2	86.7	18.3	7.7	.114	14.979	134.6	327.2	49.3	92.4D	1.991	
4-4940	4-5240	.101	190.0	29.0	2.7	1.100	91.9	.194	1.219	348.5	562.4	.983	1.455	84.9	.761	-1.1	-31.8	281.8	.104	
4-5240	4-5365.8	.301	296.5	-25.4	-1.9	.564	91.1	.546	.925	181.0	258.8	.420A	1.430D	59.1	1.294	-.0	-.0	54.9	.661	
4-5365.8	4-5460	.661	52.9	4.5	2.6	1.314	120.4	.550	.972	263.0	486.6	.437	1.507A	123.3	.978	-4.8	-16.3	200.8	.557	
		12.67	10.37	3.57	2.30	5.72	6.80	19.93	2/1/2	94.3	20.0	4.9	.138	23.238	113.1	351.2	66.8	89.7L	3.059	
4-4950	4-5240	.109	189.5	41.1	3.7	1.101	90.3	.192	1.219	358.0	561.7	.984	1.453	85.1	.761	-2.3	-39.9	284.4	.107	
4-5240	4-5369.8	.279	295.9	-26.0	-1.9	.586	91.8	.511	.947	181.7	265.9	.463A	1.430D	62.1	1.304	-.0	-.0	57.8	.603	
4-5369.8	4-5470	.603	59.2	3.4	1.8	1.291	118.1	.505	.916	263.2	490.0	.453	1.379A	119.8	.942	-4.4	-19.3	208.0	.492	
		12.21	9.86	3.64	2.39	5.77	6.22	18.37	2/1/2	92.8	22.1	3.7	.165	30.987	87.4	332.5	-67.3	87.5L	4.980	
4-4960	4-5240	.147	196.0	57.0	6.4	1.102	88.7	.193	1.217	7.8	201.3	.982D	1.453	85.1	.761	-5.1	-55.7	286.1	.125	
4-5240	4-5373.4	.261	295.1	-26.5	-1.9	.604	92.3	.481	.966	182.5	272.7	.501A	1.431D	64.8	1.313	-.0	-.0	60.4	.551	
4-5373.4	4-5480	.551	65.1	2.0	1.0	1.272	116.0	.465	.876	263.4	493.9	.469	1.283A	116.3	.913	-3.9	-21.9	215.0	.433	
		12.44	9.77	4.01	2.67	6.09	5.75	17.00	2/1/2	92.1	24.5	5.2	.198	22.207	23.9	333.2	-23.9	88.9L	4.195	
4-4990	4-5240	.168	139.1	-20.8	-5.0	1.096	83.4	.213	1.201	39.1	201.9	.945D	1.457	84.3	.753	5.9	10.0	276.3	.139	
4-5240	4-5382.8	.225	292.3	-27.9	-1.9	.639	93.6	.421	1.009	184.9	290.2	.584A	1.433D	71.0	1.331	-.0	-.1	65.9	.434	
4-5382.8	4-5510	.434	79.9	-2.7	-1.0	1.235	110.9	.370	.807	264.1	508.2	.509	1.106A	105.9	.854	-2.8	-27.3	232.4	.266	
		12.06	9.12	4.26	2.94	6.35	4.86	13.97	1/1/2	95.8	36.1	14.2	.319	8.079	10.9	343.2	10.8	93.8D	2.258	
4-5000	4-5240	.176	146.8	-8.0	-3.2	1.092	81.4	.227	1.191	49.6	202.3	.921D	1.461	83.8	.748	4.0	-.6	274.2	.130	
4-5240	4-5385.2	.218	291.5	-28.3	-1.9	.646	93.8	.409	1.018	185.6	294.7	.602A	1.434D	72.4	1.335	-.0	-.1	67.0	.407	
4-5385.2	4-5520	.407	63.7	-4.4	-1.5	1.227	109.7	.347	.795	264.3	514.1	.519	1.071A	102.5	.843	-2.5	-28.4	235.7	.246	
		11.84	9.07	4.58	2.77	6.19	4.69	13.28	1/1/2	99.0	42.4	17.2	.362	6.692	14.8	345.9	14.6	94.7D	2.063	
4-5010	4-5240	.203	152.5	-2.5	-2.4	1.086	79.3	.244	1.177	60.0	202.6	.890D	1.465	83.1	.742	3.0	-7.0	271.4	.134	
4-5240	4-5367.1	.213	290.8	-28.5	-1.9	.651	94.1	.400	1.025	186.2	296.3	.615A	1.435D	73.5	1.338	-.0	-.1	67.8	.387	
4-5367.1	4-5530	.387	86.8	-6.0	-2.0	1.222	108.7	.330	.786	264.4	520.6	.527	1.045A	99.0	.834	-2.5	-29.1	236.5	.212	
		12.14	9.30	4.74	2.84	6.25	4.56	12.75	1/1/2	102.4	60.9	19.8	.402	5.810	17.6	348.2	17.4	95.4D	1.933	
4-5020	4-5240	.238	167.8	-.4	-2.0	1.078	77.0	.267	1.160	70.2	202.7	.851D	1.470	82.2	.734	2.5	-11.4	268.3	.143	
4-5240	4-5368.4	.210	290.5	-28.7	-1.9	.654	94.2	.394	1.029	186.5	300.7	.624A	1.435D	74.2	1.340	-.0	-.1	66.3	.373	
4-5368.4	4-5540	.373	89.0	-7.4	-2.4	1.217	108.1	.318	.779	264.2	527.9	.532	1.026A	95.5	.828	-2.2	-29.3	233.6	.185	
		12.74	9.72	5.24	3.02	6.43	4.49	12.37	1/1/2	105.7	62.7	21.9	.431	5.288	20.0	350.0	19.6	95.6D	1.836	
4-5030	4-5240	.273	183.2	-.1	-1.8	1.069	74.6	.294	1.140	80.1	202.6	.804D	1.475	81.2	.725	2.0	-14.6	265.4	.157	
4-5240	4-5368.8	.209	290.2	-28.8	-1.9	.655	94.2	.393	1.031	186.8	301.5	.626A	1.436D	74.5	1.340	-.0	-.1	68.4	.369	
4-5368.8	4-5550	.369	90.1	-8.6	-2.7	1.214	107.9	.313	.774	263.5	536.1	.532	1.016A	91.8	.824	-2.1	-28.3	226.4	.199	
		13.64	10.34	5.87	3.31	6.71	4.46	12.17	1/1/2	108.7	78.8	23.2	.441	4.972	22.2	350.0	21.7	95.3D	1.752	

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 920 DAYS
MARS ARRIVAL DATE = 2445250
7 OCT 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445250 (7 OCT 1982)																			
4-4930	4-5250	.108	192.4	18.3	2.1	1.098	93.6	.199	1.218	338.0	567.9	.976	1.460	83.6	.767	-.4	-26.7	274.4	.109
4-5250	4-5362.5	.331	295.7	-25.2	-2.0	.538	94.2	.593	.893	182.9	249.9	.363A	1.422D	55.0	1.276	-.2	-.3	54.4	.738
4-5362.5	4-5450	.738	47.9	5.6	3.6	1.352	123.1	.611	1.081	263.6	482.3	.420	1.742A	127.5	1.032	-5.4	-13.4	194.0	.643
		13.61	11.24	3.65	2.36	5.80	7.61	22.11	2/1/2	106.4	17.7	8.8	.110	13.043	137.6	330.7	42.2	93.0D	1.331
4-4940	4-5250	.101	191.5	26.0	2.5	1.100	92.1	.195	1.219	347.1	566.9	.982	1.456	83.9	.768	-1.0	-30.8	277.2	.107
4-5250	4-5366.8	.304	295.1	-25.7	-2.0	.565	94.5	.551	.918	183.7	257.5	.412A	1.423D	58.6	1.291	-.2	-.4	57.5	.670
4-5366.8	4-5460	.670	54.5	4.6	2.7	1.322	120.6	.559	.892	263.7	485.4	.438	1.546A	124.0	.988	-4.9	-16.6	201.5	.570
		12.79	10.44	3.57	2.35	5.77	6.87	20.26	2/1/2	104.0	19.4	5.8	.134	19.694	120.6	333.8	59.2	90.9D	2.505
4-4950	4-5250	.104	189.6	36.3	3.2	1.101	90.6	.193	1.219	356.5	566.2	.984	1.454	84.1	.768	-1.9	-36.9	279.4	.108
4-5250	4-5370.8	.281	294.1	-26.3	-2.0	.589	94.8	.514	.941	184.6	264.8	.457A	1.424D	61.8	1.302	-.2	-.4	60.3	.610
4-5370.8	4-5470	.610	60.8	3.5	1.8	1.297	118.3	.512	.930	263.9	488.8	.454	1.408A	120.4	.951	-4.4	-19.5	208.8	.504
		12.24	9.87	3.59	2.38	5.80	6.28	18.64	2/1/2	102.4	21.4	3.9	.162	29.304	82.9	342.4	-82.7	88.2L	4.578
4-4960	4-5250	.124	190.0	49.0	4.8	1.102	89.0	.193	1.218	6.3	205.8	.983D	1.453	84.2	.767	-3.6	-47.6	281.3	.117
4-5250	4-5374.6	.263	293.0	-26.8	-1.9	.607	95.2	.484	.961	185.6	271.8	.496A	1.426D	64.5	1.311	-.2	-.5	62.8	.557
4-5374.6	4-5480	.557	66.7	2.1	1.0	1.277	116.1	.470	.886	264.1	492.7	.470	1.302A	116.9	.920	-4.0	-22.1	215.9	.443
		12.10	9.58	3.78	2.52	5.94	5.80	17.22	2/1/2	101.0	23.7	4.6	.194	24.683	83.5	335.3	-33.5	88.8L	4.597
4-4970	4-5250	.206	207.2	66.2	9.8	1.101	87.4	.196	1.215	16.2	205.6	.977D	1.455	84.1	.766	-6.8	-68.5	287.2	.164
4-5250	4-5378.1	.248	291.7	-27.3	-1.9	.623	95.5	.458	.979	186.6	278.4	.530A	1.427D	67.0	1.319	-.2	-.5	64.9	.510
4-5378.1	4-5490	.510	72.1	.6	.2	1.261	114.2	.432	.854	264.3	496.9	.485	1.223A	113.4	.895	-3.5	-24.2	222.6	.388
		13.64	10.20	4.77	3.45	6.85	5.42	16.00	2/1/2	98.1	26.6	7.3	.231	15.800	8.7	338.5	-8.7	90.9D	3.421
4-4990	4-5250	.203	131.7	-34.7	-8.2	1.097	83.7	.212	1.203	37.3	206.0	.949D	1.458	83.5	.761	9.0	19.7	274.4	.171
4-5250	4-5384.0	.227	289.2	-26.2	-1.9	.645	96.1	.421	1.007	188.5	289.9	.583A	1.431D	70.9	1.331	-.2	-.7	66.1	.436
4-5384.0	4-5510	.436	81.5	-2.8	-1.0	1.238	111.0	.372	.812	264.8	506.9	.510	1.114A	106.4	.859	-2.8	-27.4	233.9	.292
		13.24	9.63	4.73	3.61	7.01	4.90	14.08	1/1/2	100.6	34.8	13.6	.317	8.469	9.1	345.1	9.0	93.8D	2.365
4-5000	4-5250	.180	145.2	-15.0	-4.4	1.093	81.8	.224	1.194	47.6	206.2	.926D	1.462	82.9	.756	5.0	3.9	272.4	.141
4-5250	4-5386.5	.220	288.1	-28.5	-1.9	.653	96.4	.409	1.017	189.4	294.6	.601A	1.432D	72.4	1.335	-.2	-.7	69.2	.408
4-5386.5	4-5520	.408	85.4	-4.5	-1.6	1.230	109.7	.348	.799	265.0	512.7	.521	1.077A	103.0	.846	-2.5	-28.4	237.6	.251
		12.12	9.15	4.42	2.97	6.38	4.73	13.37	1/1/2	105.5	40.8	16.6	.361	6.929	13.3	347.9	13.0	94.9D	2.142
4-5010	4-5250	.199	152.3	-6.4	-3.1	1.087	79.8	.241	1.182	57.8	206.3	.897D	1.466	82.5	.751	3.5	-4.8	270.1	.140
4-5250	4-5388.5	.215	287.2	-28.7	-1.9	.658	96.5	.399	1.024	190.0	298.4	.615A	1.434D	73.5	1.338	-.2	-.8	70.0	.386
4-5388.5	4-5530	.386	88.6	-6.1	-2.0	1.224	108.7	.329	.789	265.1	519.2	.529	1.049A	99.6	.837	-2.2	-29.1	239.0	.216
		12.24	9.29	4.68	2.96	6.37	4.61	12.81	1/1/2	109.1	46.8	19.3	.403	5.959	16.3	350.3	15.9	95.6D	1.998
4-5020	4-5250	.226	158.3	-2.9	-2.4	1.080	77.6	.262	1.166	67.8	206.2	.861D	1.471	81.4	.743	2.7	-10.2	267.6	.148
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.6	.393	1.030	190.4	301.1	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.371
4-5389.9	4-5540	.371	91.0	-7.5	-2.4	1.220	108.0	.316	.782	265.0	526.4	.535	1.029A	96.1	.831	-2.1	-29.4	237.1	.187
		12.77	9.65	5.12	3.12	6.52	4.53	12.41	1/1/2	112.1	59.8	21.5	.436	5.353	18.7	352.0	18.1	95.9D	1.696
4-5030	4-5250	.263	163.9	-1.8	-2.0	1.071	75.2	.287	1.147	77.5	205.9	.817D	1.477	80.4	.734	2.2	-14.0	265.2	.161
4-5250	4-5390.5	.210	286.3	-28.9	-1.8	.664	96.7	.391	1.032	190.6	302.2	.628A	1.435D	74.7	1.341	-.2	-.9	70.8	.365
4-5390.5	4-5550	.365	92.3	-8.7	-2.7	1.216	107.6	.310	.776	264.5	534.4	.536	1.017A	92.5	.827	-2.0	-28.7	230.6	.169
		13.59	10.20	5.71	3.39	6.79	4.50	12.17	1/1/2	114.7	74.9	23.0	.451	5.021	20.7	353.2	20.1	95.7D	1.813
MARS ARRIVAL DATE = 2445260 (17 OCT 1982)																			
4-4930	4-5260	.111	194.6	16.0	2.0	1.098	94.0	.201	1.219	336.0	572.0	.973	1.464	82.7	.774	-.4	-26.4	271.4	.116
4-5260	4-5363.7	.340	293.8	-25.5	-2.1	.540	98.4	.601	.868	185.7	248.6	.355A	1.421D	54.4	1.276	-.5	-.7	57.0	.749
4-5363.7	4-5450	.749	49.5	5.7	3.8	1.362	123.4	.622	1.113	264.3	481.2	.420	1.806A	128.1	1.044	-5.6	-13.7	194.6	.659
		13.99	11.48	3.65	2.50	5.92	7.63	22.52	2/1/2	115.1	17.1	9.9	.107	11.643	139.3	334.0	40.4	93.3D	1.141
4-4940	4-5260	.102	193.7	22.8	2.3	1.100	92.4	.196	1.220	345.2	571.0	.981	1.460	83.1	.774	-.9	-29.8	273.9	.113
4-5260	4-5368.0	.311	292.8	-26.1	-2.0	.570	98.3	.556	.914	186.7	256.4	.406A	1.423D	58.1	1.289	-.5	-.7	59.9	.679
4-5368.0	4-5460	.679	56.1	4.8	2.8	1.330	120.9	.568	1.013	264.5	484.2	.438	1.586A	124.6	.998	-5.0	-16.9	202.1	.583
		13.09	10.64	3.58	2.46	5.87	7.06	20.60	2/1/2	112.9	18.8	6.7	.130	17.118	124.9	336.8	54.9	91.0D	2.103
4-4950	4-5260	.101	191.2	31.8	2.9	1.102	90.9	.194	1.220	354.6	570.3	.984	1.457	83.3	.774	-1.6	-34.7	275.8	.113
4-5260	4-5372	.286	291.4	-26.6	-2.0	.594	98.5	.518	.938	187.9	264.0	.452A	1.425D	61.4	1.301	-.4	-.8	62.6	.617
4-5372	4-5470	.617	62.4	3.5	1.9	1.304	118.5	.519	.945	264.6	487.7	.458	1.435A	121.0	.960	-4.5	-19.8	209.5	.518
		12.47	10.02	3.57	2.46	5.87	6.45	18.92	2/1/2	111.2	20.7	4.4	.158	26.257	83.7	11.9	85.3	88.8L	3.992
4-4960	4-5260	.113	189.0	42.5	3.9	1.102	89.3	.194	1.219	4.3	209.9	.983D	1.455	83.4	.774	-2.6	-42.2	277.2	.117
4-5260	4-5375.8	.269	289.8	-27.2	-2.0	.614	98.5	.487	.960	189.2	271.2	.493A	1.427D	64.3	1.311	-.4	-.9	65.0	.582
4-5375.8	4-5480	.582	68.2	2.1	1.0	1.282	116.3	.473	.897	264.8	491.5	.471	1.323A	117.4	.927	-4.0	-22.3	216.7	.453
		12.17	9.63	3.67	2.53	5.95	5.96	17.45	2/1/2	109.7	22.9	4.4	.190	25.918	83.4	337.2	-83.4	89.0L	4.745
4-4970	4-5260	.151	192.6	55.7	6.4	1.102	87.7	.196	1.217	14.3	209.7	.978D	1.455	83.3	.773	-5.4	-55.7	279.0	.136
4-5260	4-5379.2	.254	288.2	-27.6	-1.9	.630	98.7	.461	.979	190.4	276.0	.528A	1.430D	66.8	1.319	-.4	-1.0	67.0	.514
4-5379.2	4-5490	.514	73.7	.6	.3	1.265	114.3	.437	.862	265.0	495.7	.486	1.238A	113.9	.901	-3.5	-24.4	223.6	.396
		12.52	9.64	4.06	2.87	6.28	5.59	16.18	2/1/2	107.3	25.7	6.8	.228	16.840	13.4	340.3	-13.4	91.0D	3.605
4-5000	4-5260	.194	141.3	-25.3	-6.4	1.094	82.3	.222	1.198	45.2	209.8	.932D	1.464	82.2	.764	6.9	10.7	271.9	.160
4-5260	4-5387.7	.227	283.7	-28.6	-1.8	.662	99.2	.410	1.020	193.7	294.8	.601A	1.438D	72.4	1.336	-.4	-1.4	71.1	.409
4-5387.7	4-5520	.409	87.0	-4.5	-1.6	1.233	109.7	.349	.803	265.7	511.5	.522	1.083A	103.5	.850	-2.4	-28.4	239.3	.257
		12.89	9.52	4.61	3.37	6.78	4.90	13.46	1/1/2	109.7	39.2	16.3	.360	7.064	11.6	349.6	11.3	93.1D	2.164
4-5010	4-5260	.197	151.7	-11.8	-3.9	1.089	80.3	.237	1.187	55.2	209.8	.905D	1.468	81.6	.759	4.3	-1.7	269.8	.149
4-5260	4-5389.7	.222	282.7	-28.8	-1.8	.668	99.3	.401	1.028	194.4	298.8	.616A	1.440D	73.6	1.339	-.4	-1.5	71.7	.386
4-5389.7	4-5530	.386	90.3	-6.1	-2.0	1.226	108.6	.330	.792	265.9	517.9	.531	1.053A	100.1	.840	-2.2	-29.1	241.2	.220
		12.57	9.43	4.65	3.14	6.54	4.78	12.87	1/1/2	114.6	46.9	19.1	.404	6.029	14.8	352.0	14.2	93.9D	2.030
4-5020	4-5260	.222	158.6	-6.1	-2.9	1.082	78.1	.257	1.173	65.1	209.6	.872D	1.474	80.7	.752	3.1	-8.7	267.7	.154
4-5260	4-5391.2	.219	281.9	-28.9	-1.8	.672	99.4	.394	1.034	195.0	301.7	.626A	1.442D	74.5	1.342	-.4	-1.6	72.2	.370
4-5391.2	4-5540	.370	92.8	-7.6	-2.4	1.222	107.8	.315	.785	265.8	525.0	.537	1.032A	96.7	.834	-2.0	-29.4	240.0	.190
		12.97	9.72	5.02	3.25	6.65	4.70	12.44	1/1/2	117.7	57.3	21.4	.439	5.380	17.2	353.6	16.5	96.4D	1.924
4-5030	4-5260	.254	164.7	-4.0	-2.4	1.074	75.9	.281	1.156	74.7	209.1	.831D	1.480	79.7	.744	2.4	-13.2	265.8	.166
4-5260	4-5392.0	.217	281.5	-28.9	-1.8	.674	99.4	.391	1.037	195.3	303.2	.631A	1.442D	74.9	1.343	-.4	-1.6	72.4	.362
4-5392.0	4-5550	.362	94.3	-8.8	-2.7	1.218	107.5	.306	.779	265.3	532.9	.539	1.018A	93.2	.829	-1.9	-28.9	234.4	.166
		13.71	10.21	5.54	3.50	6.90	4.67	12.17	1/1/2	120.0	71.6	23.0	.459	5.013	19.2	355.0	18.4	96.3D	1.842
MARS ARRIVAL DATE = 2445270 (27 OCT 1982)																			
4-4930	4-5270	.116	197.2	13.5	2.0	1.099	94.4	.205	1.220	333.7	575.7	.970	1.471	81.6	.779	-.3	-26.1	269.8	.125
4-5270	4-5365.0	.354	291.0	-25.9	-2.2	.548	103.4	.609	.868	189.0	247.8	.346A	1.429D	53.6	1.276	-.7	-1.0	59.4	.761
4-5365.0	4-5450	.761	51.1	6.0	4.0	1.373	123.7	.634	1.150	265.1	480.0	.421	1.879A	128.8	1.058	-5.8	-14.1	195.1	.676
		14.60	11.92	3.70	2.68	6.09	8.23	22.96	2/1/2	122.7	16.6	10.8	.104	10.625	139.8	337.3	39.8	93.4D	.999
4-4940	4-5270	.104	196.5	19.3	2.2	1.101	92.8	.199	1.222	342.8	574.8	.979	1.465	82.3	.780	-.8	-29.0	272.1	.122
4-5270	4-5369.2	.325	289.5	-26.5	-2.1	.579	102.7	.563	.916	190.3	255.8	.401A	1.432D	57.7	1.290	-.7	-1.1	62.2	.688
4-5369.2	4-5460	.689	57.7	4.9	3.0	1.339	121.1	.577	1.036	265.2	483.0	.458	1.634A	125.2	1.010	-5.2	-17.3	202.7	.598
		13.63	11.02	3.60	2.61	6.02	7.43	20.36	2/1/2	120.6	18.2	7.5	.127	15.264	126.8	339.9	52.9	91.2D	1.812
4-4950	4-5270	.100	193.9	27.3	2.6	1.102	91.3	.196	1.222	352.3	574.1	.983	1.461	82.5	.780	-1.4	-32.9	273.8	.120
4-5270	4-5373.2	.301	287.7	-27.0	-2.0	.604	102.4	.524	.942	191.8	263.6	.449A	1.435D	61.1	1.303	-.7	-1.2	64.7	.624
4-5373.2	4-5470	.624	63.9	3.8	2.0	1.310	118.7	.526	.960	265.4	486.5	.455	1.466A	121.6	.969	-4.6	-20.1	210.2	.527
		12.94	10.36	3.56	2.98	6.00	6.79	19.20	2/1/2	118.9	20.0	4.9	.154	23.329	99.4	356.0	79.9	89.2L	3.447
4-4960	4-5270	.106	190.5	36.7	5.3	1.103	89.7	.195	1.221	2.0	213.6	.984D	1.459	82.7	.780	-2.3	-38.4	275.0	.122
4-5270	4-5376.9	.262	285.8	-27.5	-2.0	.625	102.3	.491	.965	193.5	271.1	.491A	1.439D	64.0	1.313	-.6	-1.5	66.9	.567
4-5376.9	4-5480	.567	69.7	2.2	1.1	1.288	116.5	.481	.908	265.5	490.5	.471	1.344A	118.0	.935	-4.1	-22.5	217.6	.463
		12.54	9.92	3.61	2.82	6.04	6.31	17.66	2/1/2	117.5	22.2	4.5	.187	25.414	91.3	339.9	-91.3	89.2L	4.360
4-4970	4-5270	.128	199.4	47.4	4.8	1.102	88.1	.196	1.219	11.9	213.4	.980D	1.459	82.6	.779	-3.9	-47.4	275.9	.131
4-5270	4-5380.4	.268	283.8	-27.9	-1.9	.642	102.2	.465	.985	194.9	278.1	.527A	1.443D	66.6	1.322	-.6	-1.5	68.8	.518
4-5380.4	4-5490	.518	75.2	.6	.3	1.270	114.4	.441	.870	265.7	494.6	.486	1.253A	114.4	.907	-3.6	-24.5	224.5	.408
		12.53	9.74	3.61	2.79	6.20	5.93	16.37	2/1/2	119.7	24.8	6.7	.224	17.144	18.0	341.8	-18.0	91.2D	3.017

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445270
27 OCT 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-4980	4-5270	.196	199.7	61.9	8.9	1.101	86.4	.201	1.216	21.8	213.2	.972D	1.460	82.5	.777	-8.2	-64.4	279.3	.169
4-5270	4-5383.5	.256	281.9	-28.2	-1.9	.655	102.2	.444	1.003	196.3	284.6	.558A	1.447D	68.9	1.329	-.6	-1.6	70.4	.475
4-5383.5	4-5500	.475	80.2	-1.1	-.5	1.255	112.6	.406	.842	265.9	499.3	.500	1.184A	110.9	.885	-3.1	-26.2	231.0	.352
		13.83	10.27	4.63	3.56	6.96	5.64	15.25	2/1/2	110.4	28.2	9.8	.266	11.694	3.3	345.2	-3.0	93.0D	2.845
4-5010	4-5270	.201	149.8	-19.6	-5.3	1.091	80.8	.234	1.193	52.4	213.0	.914D	1.472	81.0	.767	5.6	3.0	270.4	.163
4-5270	4-5390.9	.237	277.7	-28.7	-1.7	.681	102.4	.404	1.038	199.6	299.8	.619A	1.458D	73.7	1.343	-.6	-2.1	73.0	.386
4-5390.9	4-5530	.386	91.9	-6.2	-2.1	1.229	108.6	.330	.795	266.5	516.6	.533	1.058A	100.6	.843	-2.1	-29.0	243.2	.224
		13.27	9.85	4.70	3.43	6.83	5.14	12.94	1/1/2	118.3	45.1	19.3	.404	5.977	13.1	353.4	12.4	96.5D	2.011
4-5020	4-5270	.216	158.6	-10.3	-3.6	1.085	78.7	.252	1.160	62.1	212.7	.883D	1.477	80.2	.761	3.7	-6.6	268.7	.162
4-5270	4-5392.5	.234	276.8	-28.7	-1.7	.685	102.4	.398	1.045	200.3	303.0	.629A	1.460D	74.7	1.346	-.6	-2.3	73.4	.369
4-5392.5	4-5540	.369	94.5	-7.7	-2.4	1.224	107.8	.315	.787	266.5	523.6	.540	1.035A	97.2	.836	-1.9	-29.3	242.6	.193
		13.41	10.00	4.93	3.41	6.82	5.07	12.48	1/1/2	122.2	55.0	21.7	.442	5.308	15.5	355.2	14.6	97.1D	1.906
4-5030	4-5270	.245	165.4	-6.7	-2.8	1.077	76.5	.274	1.164	71.6	212.1	.845D	1.483	79.3	.754	2.7	-12.2	267.2	.172
4-5270	4-5393.4	.232	276.3	-28.7	-1.7	.687	102.4	.394	1.048	200.7	304.6	.635A	1.461D	75.2	1.347	-.6	-2.3	73.6	.359
4-5393.4	4-5550	.359	96.2	-9.0	-2.8	1.220	107.3	.306	.781	266.2	531.4	.542	1.020A	93.7	.832	-1.8	-29.0	237.8	.170
		14.04	10.41	5.39	3.63	7.03	5.03	12.19	1/1/2	124.5	68.6	23.5	.466	4.920	17.5	356.5	16.4	97.1D	1.827

MARS ARRIVAL DATE = 2445280 (6 NOV 1982)

4-4940	4-5280	.108	199.7	15.7	2.1	1.101	93.3	.203	1.224	340.1	578.2	.976	1.472	81.5	.785	-.7	-28.3	271.6	.132
4-5280	4-5370.5	.347	285.6	-26.8	-2.2	.595	107.8	.570	.927	194.6	255.9	.398A	1.455D	57.3	1.295	-.9	-1.5	64.2	.699
4-5370.5	4-5460	.699	59.3	5.1	3.1	1.348	121.4	.587	1.063	266.0	481.8	.439	1.686A	125.8	1.021	-5.4	-17.6	203.4	.612
		14.47	11.67	3.63	2.80	6.21	6.04	21.33	2/1/2	127.2	17.6	8.1	.125	14.087	126.4	342.9	53.2	91.1D	1.612
4-4950	4-5280	.101	197.4	22.8	2.4	1.103	91.7	.198	1.224	349.5	577.5	.982	1.467	81.8	.786	-1.2	-31.4	273.2	.129
4-5280	4-5374.4	.323	283.4	-27.3	-2.1	.621	107.0	.531	.954	196.4	264.0	.448A	1.460D	60.8	1.308	-.9	-1.6	66.5	.632
4-5374.4	4-5470	.652	65.5	3.6	2.1	1.318	118.9	.534	.978	266.1	485.3	.456	1.500A	122.2	.978	-4.7	-20.3	210.9	.539
		13.71	10.96	3.57	2.75	6.16	7.39	19.50	2/1/2	125.7	19.3	5.5	.151	21.026	100.4	359.1	78.7	89.4L	3.016
4-4960	4-5280	.102	193.5	31.3	2.9	1.104	90.1	.196	1.224	359.2	577.1	.984	1.465	82.0	.785	-1.9	-35.6	274.3	.130
4-5280	4-5378.1	.305	281.2	-27.6	-2.0	.642	106.5	.498	.978	198.3	271.8	.491A	1.466D	63.9	1.319	-.9	-1.8	66.5	.573
4-5378.1	4-5460	.573	71.3	2.2	1.1	1.293	116.6	.487	.919	266.2	489.1	.472	1.367A	118.6	.942	-4.1	-22.7	216.4	.473
		13.23	10.47	3.56	2.76	6.17	6.69	17.92	2/1/2	124.3	21.4	4.9	.183	23.425	55.1	340.2	-55.1	69.6L	4.104
4-4970	4-5280	.116	190.2	40.4	3.9	1.103	88.5	.197	1.222	9.1	216.7	.981D	1.464	82.0	.785	-3.1	-41.9	275.1	.134
4-5280	4-5381.5	.290	279.1	-27.9	-1.9	.659	106.2	.471	1.000	200.1	279.0	.529A	1.472D	66.8	1.328	-.8	-2.0	70.2	.522
4-5381.5	4-5490	.522	76.7	.6	.3	1.274	114.6	.445	.878	266.4	493.4	.487	1.269A	115.0	.913	-3.6	-24.6	225.4	.413
		13.06	10.21	3.69	2.85	6.26	6.52	16.56	2/1/2	122.6	24.0	7.0	.220	16.399	21.4	343.2	-21.4	91.7D	3.395
4-4980	4-5280	.151	191.8	51.2	6.0	1.102	86.9	.201	1.219	19.0	216.5	.974D	1.464	81.9	.783	-5.4	-52.6	276.3	.151
4-5280	4-5384.7	.279	277.1	-28.1	-1.8	.672	106.0	.450	1.019	201.8	285.8	.560A	1.477D	68.9	1.335	-.8	-2.1	71.5	.478
4-5384.7	4-5500	.478	81.8	-1.1	-.5	1.259	112.7	.409	.848	266.6	498.1	.501	1.195A	111.4	.890	-3.1	-26.2	232.0	.359
		13.45	10.28	4.05	3.17	6.58	6.23	15.40	2/1/2	119.7	27.2	10.2	.263	11.293	5.9	346.4	-5.7	93.6D	2.705
4-5010	4-5280	.222	144.4	-31.3	-7.9	1.093	81.4	.231	1.199	49.2	216.0	.923D	1.476	80.5	.774	8.1	11.0	272.1	.189
4-5280	4-5392.1	.261	272.7	-28.3	-1.7	.698	105.8	.411	1.057	205.7	301.5	.623A	1.492D	73.9	1.350	-.8	-2.8	73.7	.386
4-5392.1	4-5530	.386	93.5	-6.3	-2.1	1.231	108.5	.330	.798	267.2	515.4	.535	1.062A	101.1	.846	-2.0	-28.9	245.1	.228
		14.77	10.77	5.02	4.00	7.40	5.75	13.00	1/1/2	119.0	43.5	20.0	.404	5.763	11.3	354.4	10.3	97.4D	1.925
4-5020	4-5280	.213	157.9	-16.3	-4.6	1.087	79.4	.247	1.188	58.8	215.6	.894D	1.481	79.8	.769	4.6	-3.3	270.3	.172
4-5280	4-5393.7	.258	271.8	-28.3	-1.6	.703	105.8	.404	1.064	206.4	304.9	.634A	1.495D	74.9	1.353	-.8	-2.9	74.0	.368
4-5393.7	4-5540	.368	96.1	-7.8	-2.5	1.226	107.7	.314	.790	267.2	522.4	.542	1.038A	97.7	.839	-1.8	-29.2	245.0	.196
		14.20	10.56	4.89	3.64	7.04	5.67	12.52	1/1/2	125.5	52.9	22.6	.445	5.106	13.7	356.2	12.5	98.1D	1.827
4-5030	4-5280	.236	165.9	-10.1	-3.3	1.081	77.3	.268	1.173	66.2	214.9	.859D	1.488	78.9	.763	5.1	-10.7	269.1	.179
4-5280	4-5394.7	.256	271.3	-28.3	-1.6	.706	105.8	.401	1.069	206.9	307.0	.640A	1.497D	75.5	1.354	-.8	-3.1	74.1	.357
4-5394.7	4-5550	.357	98.0	-9.1	-2.8	1.222	107.1	.304	.783	266.9	530.0	.545	1.021A	94.3	.834	-1.7	-29.0	241.0	.172
		14.65	10.88	5.24	3.78	7.17	5.63	12.20	1/1/2	128.4	65.9	24.5	.472	4.714	15.6	357.5	14.2	98.3D	1.754

MARS ARRIVAL DATE = 2445290 (16 NOV 1982)

4-4960	4-5290	.101	197.6	25.8	2.6	1.104	90.7	.199	1.227	356.0	580.1	.983	1.471	81.4	.790	-1.7	-33.6	274.9	.139
4-5290	4-5379.3	.339	276.6	-27.8	-2.0	.668	111.3	.507	1.007	204.3	273.5	.496A	1.517D	63.8	1.330	-1.1	-2.2	69.6	.579
4-5379.3	4-5480	.579	72.9	2.3	1.2	1.300	116.8	.483	.933	267.0	487.9	.473	1.393A	119.2	.951	-4.2	-22.9	219.2	.484
		14.32	11.39	3.57	2.93	6.34	7.02	18.17	2/1/2	130.2	20.7	5.6	.179	20.402	83.8	341.3	-83.6	90.1D	3.474
4-4970	4-5290	.108	193.2	34.0	3.3	1.105	89.0	.199	1.226	5.8	219.8	.982D	1.470	81.5	.790	-2.5	-38.1	275.7	.141
4-5290	4-5382.7	.325	274.4	-27.7	-1.9	.684	110.7	.481	1.030	206.8	281.1	.534A	1.526D	66.6	1.339	-1.0	-2.4	71.0	.527
4-5382.7	4-5490	.527	78.2	.8	.3	1.279	114.7	.450	.888	267.1	492.2	.488	1.287A	118.5	.920	-3.6	-24.8	226.4	.422
		14.06	11.07	3.63	2.98	6.39	7.44	18.76	2/1/2	128.9	23.2	7.9	.217	14.593	22.9	344.2	-22.9	92.4D	2.945
4-4980	4-5290	.129	191.2	42.8	4.6	1.104	87.4	.201	1.224	15.7	219.5	.977D	1.470	81.4	.789	-4.0	-45.2	276.5	.150
4-5290	4-5385.8	.314	272.5	-27.8	-1.8	.698	110.3	.461	1.060	208.5	288.0	.566A	1.534D	69.0	1.346	-1.0	-2.7	72.1	.481
4-5385.8	4-5500	.482	83.2	-1.2	-.5	1.263	112.8	.412	.855	267.3	496.9	.503	1.208A	111.9	.895	-3.1	-26.3	233.1	.367
		14.13	10.98	3.62	3.18	6.56	7.16	18.58	2/1/2	126.9	26.3	11.2	.259	10.282	8.0	347.4	-7.8	94.4D	2.407

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445150
29 JUN 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2445150 (29 JUN 1982)																			
4-4920	4-5150	.144	190.0	9.4	1.8	1.113	96.0	.247	1.276	329.2	513.6	.962	1.594A	98.0	.718	.2	-20.2	300.4	.195
4-5150	4-5361.5	.294	280.8	-27.9	-2.1	.804	77.4	.480	1.071	165.6	286.2	.557A	1.586	67.9	1.349	1.7	4.2	33.9	.510
4-5361.5	4-5480	.510	49.2	1.8	.8	1.226	114.7	.426	.800	256.5	506.1	.459	1.140A	110.1	.852	-3.8	-19.1	204.3	.344
		14.74	10.59	3.98	4.15	7.54	6.62	13.09	2/1/2	26.4	34.8	15.5	.231	7.428	9.4	311.1	8.9	91.7D	1.486
4-4930	4-5150	.130	181.6	-12.4	-1.3	1.118	94.6	.246	1.288	336.3	510.6	.971	1.606A	98.7	.723	3.1	-10.1	300.0	.206
4-5150	4-5364.5	.284	281.0	-28.5	-2.3	.611	78.2	.464	1.081	165.6	291.1	.579A	1.583	69.6	1.353	1.8	4.8	35.9	.477
4-5364.5	4-5490	.477	54.0	.5	.2	1.217	113.2	.400	.785	256.6	511.0	.471	1.099A	106.6	.836	-3.4	-21.5	208.4	.300
		14.60	10.19	3.84	4.41	7.80	6.35	14.24	1/1/2	26.8	39.9	18.5	.265	6.208	13.7	314.3	13.5	93.2D	1.379
4-4940	4-5150	.116	163.1	-6.1	-.5	1.122	93.1	.246	1.297	344.0	508.1	.978	1.617A	99.3	.727	2.3	-12.6	302.3	.211
4-5150	4-5366.9	.276	281.2	-29.0	-2.5	.616	78.7	.452	1.088	165.7	295.2	.597A	1.580	71.1	1.355	1.9	5.4	37.5	.449
4-5366.9	4-5500	.449	58.1	-.9	-.4	1.210	112.0	.378	.774	256.7	516.5	.481	1.067A	103.0	.825	-3.5	-23.4	210.9	.261
		14.38	9.87	3.72	4.51	7.90	6.15	13.54	1/1/2	24.3	46.6	21.5	.298	5.357	17.4	317.1	17.3	94.4D	1.299
4-4950	4-5150	.111	160.2	-3.2	-.3	1.125	91.5	.247	1.304	352.2	506.2	.983	1.626A	99.8	.729	2.1	-13.1	303.6	.215
4-5150	4-5366.9	.271	281.4	-29.5	-2.6	.620	79.2	.443	1.094	165.7	298.5	.610A	1.579	72.2	1.357	2.0	6.0	38.6	.428
4-5366.9	4-5510	.428	61.4	-2.4	-.9	1.204	111.0	.362	.765	256.6	522.8	.489	1.042A	99.3	.814	-3.2	-24.6	210.9	.226
		14.29	9.66	3.66	4.63	8.02	6.00	12.99	1/1/2	23.0	55.6	24.3	.326	4.759	20.6	319.5	20.5	95.2D	1.233
4-4960	4-5150	.110	174.7	-.0	-.2	1.127	89.8	.248	1.309	1.1	144.9	.984D	1.633A	100.2	.731	2.0	-13.4	304.3	.219
4-5150	4-5370.2	.267	281.5	-29.8	-2.7	.622	79.4	.437	1.098	165.8	300.6	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.415
4-5370.2	4-5520	.415	63.7	-3.9	-1.5	1.200	110.4	.351	.759	256.2	529.9	.493	1.025A	95.4	.806	-3.2	-24.7	207.2	.202
		14.29	9.56	3.65	4.72	8.11	5.91	12.61	1/1/2	22.2	66.0	26.5	.348	4.367	23.3	320.9	23.3	95.5D	1.173
4-4970	4-5150	.118	168.2	3.3	-.2	1.126	87.6	.251	1.309	10.8	144.4	.980D	1.637A	100.4	.731	2.0	-13.6	304.6	.223
4-5150	4-5370.3	.267	281.5	-29.9	-2.7	.623	79.4	.437	1.098	165.8	300.8	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.414
4-5370.3	4-5530	.414	64.4	-5.4	-2.0	1.196	110.4	.350	.753	255.3	536.2	.490	1.017A	91.0	.801	-3.2	-22.8	198.9	.191
		14.42	9.62	3.71	4.80	8.19	5.91	12.46	1/1/2	22.0	65.2	27.7	.350	4.179	25.6	321.6	25.6	95.0D	1.115
4-4980	4-5150	.134	162.6	6.1	-.1	1.126	85.7	.256	1.304	21.4	144.9	.970D	1.638A	100.6	.729	1.9	-13.9	304.2	.225
4-5150	4-5367.8	.274	281.3	-29.2	-2.5	.618	78.9	.448	1.091	165.7	298.7	.603A	1.580	71.8	1.356	1.9	5.7	38.0	.439
4-5367.8	4-5540	.439	61.8	-6.7	-2.7	1.191	111.6	.369	.748	252.9	549.0	.472	1.023	84.8	.795	-3.6	-17.2	185.4	.212
		14.81	9.95	3.87	4.86	8.24	6.08	12.75	1/1/2	22.3	108.3	26.8	.311	4.315	27.7	320.2	27.7	92.7D	1.032
MARS ARRIVAL DATE = 2445160 (9 JUL 1982)																			
4-4920	4-5160	.135	189.3	11.7	1.7	1.109	95.5	.234	1.261	330.4	519.9	.965	1.556A	95.9	.719	.1	-20.4	301.0	.174
4-5160	4-5362.8	.291	284.0	-27.7	-2.1	.603	78.5	.479	1.058	166.9	284.7	.551A	1.564	67.6	1.345	1.5	3.7	37.1	.514
4-5362.8	4-5480	.514	51.1	1.6	.8	1.231	114.8	.429	.807	257.3	504.7	.461	1.153A	110.9	.858	-3.6	-19.5	205.8	.354
		14.06	10.41	3.88	3.68	7.08	6.53	13.29	2/1/2	31.1	33.3	14.2	.226	8.102	9.1	313.7	7.8	91.4D	1.618
4-4940	4-5160	.113	175.6	-15.1	-1.8	1.116	92.7	.232	1.276	345.7	515.0	.980	1.571A	97.0	.725	3.4	-7.7	301.6	.191
4-5160	4-5366.5	.272	284.5	-28.7	-2.4	.617	79.9	.449	1.076	167.1	294.1	.593A	1.559	70.9	1.352	1.7	4.8	40.8	.450
4-5366.5	4-5500	.450	60.2	-.9	-.4	1.213	112.0	.380	.779	257.6	514.8	.483	1.075A	103.8	.828	-3.3	-23.9	213.3	.269
		13.74	9.70	3.67	4.04	7.44	6.03	13.66	1/1/2	30.4	44.3	20.3	.297	5.684	16.6	319.9	16.4	94.2D	1.390
4-4950	4-5160	.105	173.9	-6.9	-.8	1.119	91.1	.232	1.280	354.2	513.4	.984	1.577A	97.5	.727	2.6	-10.4	303.5	.192
4-5160	4-5370.7	.265	284.7	-29.2	-2.5	.621	80.3	.439	1.082	167.2	297.6	.607A	1.558	72.1	1.354	1.8	5.3	42.0	.428
4-5370.7	4-5510	.428	63.7	-2.4	-.9	1.208	110.9	.361	.770	257.5	520.9	.492	1.048A	100.2	.818	-3.2	-25.5	214.1	.234
		13.56	9.47	3.60	4.09	7.48	5.87	13.08	1/1/2	28.1	52.6	25.1	.329	5.000	19.8	322.3	19.6	95.1D	1.315
4-4960	4-5160	.105	166.6	-1.6	-.6	1.120	89.3	.233	1.282	3.4	152.4	.983D	1.581A	97.7	.728	2.3	-11.4	304.3	.195
4-5160	4-5372.2	.261	284.8	-29.5	-2.6	.624	80.8	.433	1.087	167.3	300.1	.616A	1.557	72.9	1.356	1.8	5.8	42.7	.413
4-5372.2	4-5520	.413	66.3	-4.0	-1.5	1.203	110.2	.349	.763	257.3	527.8	.497	1.029A	96.4	.811	-3.1	-25.7	211.6	.208
		13.51	9.37	3.60	4.15	7.54	5.77	12.66	1/1/2	27.2	64.0	25.4	.353	4.541	22.7	324.2	22.6	95.5D	1.291
4-4970	4-5160	.114	162.5	2.7	-.4	1.120	87.4	.236	1.280	13.4	152.3	.978D	1.582A	97.9	.727	2.2	-12.0	304.5	.197
4-5160	4-5372.7	.260	284.8	-29.7	-2.7	.625	80.7	.431	1.088	167.3	300.9	.619A	1.556	73.2	1.356	1.9	5.9	43.0	.408
4-5372.7	4-5530	.408	67.5	-5.4	-2.0	1.199	110.0	.344	.757	256.5	535.7	.497	1.018A	92.2	.805	-3.1	-24.5	204.6	.189
		13.60	9.41	3.68	4.19	7.59	5.73	12.43	1/1/2	27.0	79.7	27.0	.362	4.286	25.1	325.1	25.1	95.2D	1.189
4-4980	4-5160	.132	157.8	5.9	-.4	1.118	85.5	.241	1.274	24.5	152.9	.966D	1.581A	98.0	.724	2.1	-12.6	303.9	.198
4-5160	4-5371.5	.264	284.7	-29.3	-2.6	.622	80.5	.437	1.084	167.2	298.6	.611A	1.557	72.4	1.355	1.8	5.5	42.3	.421
4-5371.5	4-5540	.422	66.3	-6.8	-2.5	1.195	110.7	.354	.752	254.6	545.5	.485	1.018	87.0	.800	-3.3	-20.3	192.6	.197
		13.90	9.66	3.85	4.22	7.62	5.83	12.53	1/1/2	27.5	100.8	26.9	.338	4.294	27.3	324.6	27.2	95.6D	1.115
MARS ARRIVAL DATE = 2445170 (19 JUL 1982)																			
4-4910	4-5170	.139	183.8	7.7	1.1	1.100	96.4	.228	1.240	324.2	529.0	.958	1.523A	93.2	.717	.8	-17.7	297.0	.151
4-5170	4-5360.7	.301	286.6	-26.9	-1.9	.593	76.8	.499	1.032	168.5	277.5	.517A	1.547	65.1	1.336	1.3	2.8	37.6	.560
4-5360.7	4-5470	.560	47.5	3.0	1.5	1.248	116.7	.465	.837	257.9	499.0	.448	1.226A	115.2	.886	-3.9	-17.1	201.5	.414
		13.66	10.71	3.92	3.17	6.58	6.78	16.57	2/1/2	39.6	28.4	9.9	.192	11.627	3.1	312.6	-1.1	89.1L	2.040
4-4920	4-5170	.128	186.5	13.3	1.8	1.105	95.1	.224	1.248	331.4	526.2	.968	1.528A	93.9	.721	.1	-20.8	300.8	.156
4-5170	4-5364.2	.287	287.0	-27.4	-2.1	.603	79.7	.478	1.044	168.3	283.2	.545A	1.544	67.2	1.341	1.3	3.2	40.2	.518
4-5364.2	4-5480	.518	53.0	1.8	.8	1.236	114.9	.433	.814	258.1	503.2	.462	1.167A	111.6	.865	-3.7	-19.9	207.2	.364
		13.52	10.24	3.81	3.28	6.66	6.43	15.49	2/1/2	36.5	32.0	12.9	.224	8.910	6.8	316.3	6.1	91.0D	1.774
4-4930	4-5170	.152	204.5	39.2	5.6	1.109	93.8	.222	1.254	339.1	523.8	.976	1.532A	94.5	.723	-3.7	-36.3	307.1	.168
4-5170	4-5367.3	.276	287.3	-27.9	-2.2	.611	80.5	.460	1.053	168.5	286.5	.569A	1.541	69.1	1.345	1.4	3.6	42.3	.482
4-5367.3	4-5490	.482	58.0	.5	.2	1.225	113.4	.405	.797	256.3	507.9	.475	1.120A	108.1	.847	-3.5	-22.3	212.0	.318
		13.74	10.20	4.06	3.55	6.95	6.13	14.57	2/1/2	37.9	36.4	16.0	.259	7.201	11.6	319.7	11.4	92.6D	1.606
4-4940	4-5170	.135	159.3	-38.8	-4.8	1.112	92.3	.220	1.259	347.3	521.9	.982	1.536A	95.0	.726	6.6	5.3	297.8	.187
4-5170	4-5370.1	.267	287.5	-28.4	-2.3	.617	81.1	.446	1.064	168.6	292.9	.589A	1.539	70.7	1.348	1.5	4.1	44.0	.452
4-5370.1	4-5500	.452	62.3	-1.0	-.4	1.217	112.0	.381	.784	258.4	513.2	.486	1.083A	104.6	.834	-3.3	-24.3	215.6	.276
		13.74	9.79	3.88	3.95	7.35	5.90	13.80	1/1/2	42.0	42.2	19.0	.295	6.058	15.6	322.7	15.6	93.9D	1.492
4-4950	4-5170	.103	166.3	-14.4	-1.7	1.114	90.7	.220	1.262	356.1	520.5	.984	1.540A	95.3	.727	3.4	-5.9	302.2	.174
4-5170	4-5372.4	.260	287.7	-28.8	-2.5	.622	81.6	.436	1.071	168.8	296.7	.604A	1.537	72.0	1.351	1.5	4.6	45.3	.427
4-5372.4	4-5510	.427	66.0	-2.5	-.9	1.211	110.9	.362	.774	256.4	519.1	.494	1.054A	101.0	.823	-3.1	-25.8	217.1	.240
		12.99	9.31	3.58	3.67	7.07	5.73	13.18	1/1/2	34.7	49.8	21.9	.329	5.272	19.0	325.3	19.0	94.9D	1.406
4-4960	4-5170	.102	162.5	-5.0	-1.0	1.115	89.0	.221	1.262	5.5	159.8	.983D	1.542A	95.5	.727	2.7	-8.6	303.5	.174
4-5170	4-5374.1	.255	287.7	-29.2	-2.6	.625	81.9	.426	1.076	168.9	299.4	.613A	1.536	72.9	1.352	1.6	5.0	46.2	.410
4-5374.1	4-5520	.410	68.8	-4.0	-1.5	1.206	110.1	.347	.767	258.3	525.6	.500	1.033A	97.3	.815	-3.0	-26.5	215.6	.210
		12.87	9.19	3.58	3.68	7.08	5.61	12.72	1/1/2	33.2	60.3	24.4	.357	4.740	21.9	327.3	21.9	95.4D	1.335
4-4970	4-5170	.112	157.4	1.1	-.8	1.114	87.1	.225	1.259	15.8	159.8	.977D	1.542A	93.6	.726	2.4	-10.0	303.6	.175
4-5170	4-5374.9	.253	287.8	-29.4	-2.6	.627	82.0	.425	1.078	168.9	300.8	.620A	1.536	73.3	1.353	1.6	5.2	46.6	.402
4-5374.9	4-5530	.402	70.4	-5.5	-1.9	1.202	109.7	.340	.761	257.7	535.4	.502	1.020A	93.4	.809	-3.0	-25.9	209.9	.189
		12.91	9.22	3.66	3.69	7.09	5.56	12.43	1/1/2	32.9	74.7	26.1	.371	4.421	24.4	328.5	24.4	95.3D	1.270
4-4980	4-5170	.130	153.8	5.1	-.6	1.112	85.1	.230	1.252	26.7	160.6	.964D	1.541A	95.6	.723	2.2	-11.1	302.9	.176
4-5170	4-5374.2	.255	287.7	-29.2	-2.6	.626	81.9	.428	1.076	168.9	299.7	.616A	1.536	72.9	1.353	1.6	5.1	46.2	.409
4-5374.2	4-5540	.409	70.1	-6.8	-2.5	1.198	110.0	.345	.756	256.2	542.6	.495	1.016	86.6	.804	-3.1	-22.7	199.2	.188
		13.15	9.44	3.64	3.71	7.11	5.60	12.41	1/1/2	33.6	94.2	26.7	.339	4.337	26.7	328.6	26.6	94.2D	1.199
4-4990	4-5170	.157	152.3	7.3	-.5	1.108	82.8	.240	1.240	38.5	162.2	.943D	1.538A	95.4	.717	2.1	-12.1	301.3	.176
4-5170	4-5369.0	.270	287.5	-28.2	-2.3	.615	80.8	.452	1.060	168.5	291.0	.561A	1.540	70.0	1.347	1.4	3.9	43.3	.464
4-5369.0	4-5550	.464	64.3	-7.9	-3.3	1.192	112.7	.387	.749	251.4	555.6	.459	1.038	80.8	.797	-3.9	-15.2	183.0	.241
		13.05	10.12	4.13	3.72	7.12	6.00	13.21	1/1/2	35.2	120.5	24.0	.279	4.609	29.7	324.9	29.6	90.0D	1.064
MARS ARRIVAL DATE = 2445180 (29 JUL 1982)																			
4-4910	4-5180	.134	183.8	9.4	1.2	1.098	96.1	.221	1.232	324.9	535.0	.960	1.504A	91.4	.721	.7	-16.2	295.6	.136
4-5180	4-5362.0	.297	289.5	-26.6	-1.9	.591	80.0	.500	1.018	169.7	275.8	.509A	1.526	64.7	1.331	1.1	2.4	40.7	.565
4-5362.0	4-5470	.565	49.3	3.0	1.5	1.254	116.9	.470	.847	258.7	497.6	.449	1.245A	115.9	.894	-3.9	-17.5	202.6	.425
		13.44	10.56	3.87	2.67	6.26	6.69	16.82	2/1/2	46.3	27.4	8.6	.188	13.312	5.1	315.2	-4.3	88.7L	2.317
4-4920	4-5180	.122	187.8	14.5	1.8	1.102	94.8	.217	1.238	332.3	532.4	.970	1.506A	92.1	.724	.1	-20.9	299.7	.140
4-5180	4-5365.6	.283	289.8	-27.1	-2.0	.602	81.0	.477	1.031	169.9	281.6	.538A	1.523	66.9	1.336	1.1	2.7	43.3	.522
4-5365.6	4-5480	.522	54.6	1.8	.8	1.240	115.1	.437	.822	258.9	501.8	.463	1.161A	112.4	.871	-3.7	-20.2	208.5	.374
		13.03	10.07	3.76	2.93	6.36	6.32	15.70	2/1/2	42.9	30.7	11.6	.221	9.891	4.8	318.9	4.2	90.7D	1.961

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2445180 29 JUL 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	$PEED1 / $PEED3 / $PEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 CTA	$PEED2 / $PEED4 / $PEED6 PERIC
4-4930	4-5180	.125	195.4	30.0	3.6	1.105	93.5	.213	1.243	340.2	330.2	.977	1.508A	92.6	.726	-1.8	-29.2	304.4	.146
4-5180	4-5368.8	.271	290.0	-27.6	-2.2	.611	81.8	.459	1.043	170.0	286.9	.564A	1.521	68.8	1.341	1.2	3.1	45.4	.485
4-5368.8	4-5490	.485	59.9	.5	.2	1.230	113.4	.408	.804	259.1	506.4	.476	1.131A	108.9	.853	-3.5	-22.7	213.7	.326
		12.86	9.79	3.78	3.07	6.48	6.01	14.74	2/1/2	41.3	34.9	14.7	.256	7.826	10.3	322.4	10.1	92.3D	1.747
4-4950	4-5180	.114	155.4	-29.1	-3.5	1.110	90.4	.211	1.248	357.6	327.5	.984	1.512A	93.3	.729	5.2	2.6	299.1	.165
4-5180	4-5374.1	.254	290.3	-28.5	-2.4	.623	82.9	.432	1.060	170.4	295.7	.601A	1.518	71.8	1.347	1.3	3.9	48.6	.428
4-5374.1	4-5510	.428	68.2	-2.5	-.9	1.214	110.9	.362	.779	259.3	517.3	.497	1.061A	101.8	.828	-3.1	-26.2	219.9	.246
		12.73	9.26	3.68	3.47	6.87	5.58	13.28	1/1/2	44.1	47.3	20.7	.329	5.579	18.2	328.2	18.1	94.7D	1.505
4-4960	4-5180	.103	156.1	-11.0	-1.8	1.110	88.7	.213	1.247	7.3	166.8	.982D	1.513A	93.5	.728	3.4	-4.5	301.5	.156
4-5180	4-5375.9	.249	290.3	-28.9	-2.5	.627	83.2	.424	1.065	170.6	298.7	.613A	1.517	72.8	1.349	1.4	4.3	49.5	.409
4-5375.9	4-5520	.409	71.2	-4.1	-1.5	1.209	110.0	.346	.771	259.2	523.9	.504	1.038A	98.2	.819	-2.9	-27.1	219.3	.214
		12.36	9.03	3.56	3.33	6.73	5.45	12.78	1/1/2	40.4	56.9	23.2	.360	4.966	21.1	330.3	21.1	95.3D	1.426
4-4970	4-5180	.111	152.8	-1.8	-1.2	1.110	86.9	.216	1.244	17.6	167.0	.975D	1.513A	93.5	.727	2.8	-7.4	301.9	.157
4-5180	4-5376.9	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.068	170.7	300.5	.620A	1.516	73.4	1.351	1.4	4.5	50.0	.396
4-5376.9	4-5530	.398	73.2	-5.5	-1.9	1.205	109.5	.337	.765	258.8	531.3	.507	1.022A	94.4	.813	-2.9	-26.9	214.8	.191
		12.34	9.04	3.66	3.31	6.71	5.38	12.45	1/1/2	39.8	70.2	25.2	.379	4.580	23.6	331.8	23.6	95.3D	1.357
4-4980	4-5180	.130	150.4	3.5	-.9	1.108	84.9	.222	1.237	28.6	167.8	.962D	1.512A	93.4	.724	2.5	-9.2	301.1	.157
4-5180	4-5376.8	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.067	170.7	300.2	.619A	1.516	73.3	1.350	1.4	4.5	49.9	.400
4-5376.8	4-5540	.400	73.5	-6.9	-2.4	1.201	109.6	.337	.760	257.7	539.9	.503	1.016A	90.0	.808	-2.9	-24.6	205.4	.183
		12.33	9.22	3.83	3.30	6.71	5.39	12.34	1/1/2	40.5	88.2	26.2	.376	4.420	25.9	332.3	25.9	94.6D	1.286
4-4990	4-5180	.156	149.9	6.3	-.8	1.103	82.7	.233	1.225	40.3	169.3	.940D	1.510A	93.2	.718	2.2	-10.7	299.2	.157
4-5180	4-5373.9	.255	290.3	-28.5	-2.4	.623	82.8	.433	1.059	170.4	295.4	.600A	1.518	71.7	1.347	1.3	3.9	48.5	.429
4-5373.9	4-5550	.429	70.5	-8.0	-3.1	1.197	111.0	.360	.754	254.6	551.0	.483	1.025	85.9	.805	-3.4	-19.0	191.5	.209
		13.02	9.71	4.12	3.31	6.71	5.59	12.71	1/1/2	42.4	111.6	25.0	.326	4.623	28.6	330.6	28.5	91.9D	1.181
MARS ARRIVAL DATE = 2445190 (8 AUG 1982)																			
4-4910	4-5190	.130	183.8	10.7	1.3	1.096	96.0	.216	1.225	325.2	340.8	.961	1.489	89.8	.726	.6	-18.8	293.2	.123
4-5190	4-5363.3	.293	292.0	-26.3	-1.9	.589	81.5	.501	1.004	171.3	274.0	.501A	1.506	64.3	1.326	.9	1.9	43.7	.571
4-5363.3	4-5470	.571	51.0	3.1	1.6	1.260	117.1	.475	.857	259.5	496.3	.450	1.264A	116.8	.902	-4.0	-17.8	203.6	.436
		13.07	10.43	3.84	2.64	6.06	6.60	17.07	2/1/2	54.1	26.4	7.4	.184	15.489	9.0	317.7	-8.6	88.3L	2.671
4-4920	4-5190	.118	167.2	15.5	1.8	1.100	94.6	.211	1.230	332.9	336.4	.971	1.489A	90.4	.729	.0	-21.3	297.6	.126
4-5190	4-5366.9	.278	292.2	-26.8	-2.0	.601	82.4	.477	1.018	171.5	280.0	.532A	1.504	66.5	1.332	1.0	2.2	46.3	.527
4-5366.9	4-5480	.527	56.6	1.9	.9	1.245	115.2	.441	.830	259.7	500.4	.464	1.197A	113.1	.878	-3.7	-20.6	209.8	.383
		12.62	9.92	3.72	2.70	6.11	6.20	15.91	2/1/2	50.4	29.5	10.3	.217	11.094	2.8	321.4	2.0	90.3D	2.186
4-4930	4-5190	.115	191.9	27.0	2.9	1.103	93.2	.207	1.234	340.9	336.4	.978	1.490A	90.9	.730	-1.2	-27.3	301.9	.130
4-5190	4-5370.2	.266	292.4	-27.2	-2.1	.611	83.2	.458	1.030	171.6	285.5	.559A	1.502	68.5	1.337	1.0	2.5	48.5	.488
4-5370.2	4-5490	.488	61.6	.5	.2	1.234	113.5	.411	.810	259.9	504.9	.478	1.143A	109.6	.859	-3.5	-23.0	215.2	.335
		12.34	9.57	3.69	2.77	6.18	5.88	14.91	2/1/2	48.0	33.4	13.4	.252	8.564	6.8	324.9	6.7	92.0D	1.910
4-4940	4-5190	.181	216.3	55.9	8.4	1.105	91.8	.205	1.237	349.5	334.8	.983	1.490A	91.3	.732	-6.7	-52.0	311.4	.180
4-5190	4-5373.2	.256	292.4	-27.7	-2.2	.619	83.8	.442	1.041	172.0	290.4	.581A	1.500	70.3	1.341	1.0	2.9	50.4	.455
4-5373.2	4-5500	.455	66.4	-1.0	-.4	1.225	112.1	.385	.795	260.1	510.0	.489	1.101A	106.1	.844	-3.2	-25.0	219.6	.292
		13.43	10.06	4.43	3.37	6.77	5.63	14.08	2/1/2	54.9	38.4	16.5	.290	6.975	13.5	328.2	13.5	93.4D	1.734
4-4950	4-5190	.192	131.0	-53.6	-9.1	1.107	90.2	.205	1.238	358.9	333.9	.985	1.491A	91.8	.732	10.8	21.8	291.0	.198
4-5190	4-5375.7	.248	292.4	-28.2	-2.3	.625	84.3	.429	1.049	172.3	294.6	.598A	1.499	71.7	1.344	1.1	3.2	51.8	.428
4-5375.7	4-5510	.428	70.4	-2.5	-1.0	1.218	110.9	.363	.784	260.2	515.6	.499	1.068A	102.6	.832	-3.0	-26.6	222.4	.252
		14.22	10.00	4.57	4.21	7.61	5.43	13.39	1/1/2	61.3	45.0	19.4	.328	5.925	17.2	331.0	17.2	94.4D	1.614
4-4960	4-5190	.110	148.6	-21.3	-3.0	1.107	88.5	.206	1.237	6.6	173.5	.982D	1.491A	91.7	.732	4.6	2.1	298.1	.149
4-5190	4-5377.6	.242	292.4	-28.5	-2.4	.629	84.6	.420	1.055	172.5	298.0	.611A	1.498	72.8	1.346	1.1	3.5	52.8	.408
4-5377.6	4-5520	.408	73.6	-4.1	-1.5	1.212	109.9	.346	.775	260.2	522.0	.507	1.043A	99.0	.823	-2.9	-27.6	222.7	.219
		12.07	8.94	3.65	3.13	6.54	5.29	12.86	1/1/2	49.6	53.9	22.1	.362	5.218	20.2	333.5	20.2	95.1D	1.524
4-4970	4-5190	.113	148.5	-8.6	-1.8	1.106	86.7	.210	1.233	19.0	173.7	.974D	1.491A	91.7	.730	3.3	-3.7	299.0	.143
4-5190	4-5376.9	.239	292.4	-28.8	-2.4	.632	84.8	.415	1.058	172.6	300.1	.619A	1.498	73.5	1.348	1.1	3.7	53.4	.395
4-5376.9	4-5530	.395	73.8	-5.6	-1.9	1.208	109.3	.335	.768	259.9	529.2	.511	1.026A	95.3	.817	-2.8	-27.7	219.4	.193
		11.90	8.88	3.67	3.03	6.44	5.20	12.48	1/1/2	47.9	66.1	24.2	.365	4.761	22.8	335.0	22.8	95.3D	1.449
4-4980	4-5190	.130	147.7	.9	-1.3	1.104	84.8	.217	1.225	30.0	174.5	.960D	1.491A	91.5	.727	2.8	-6.8	298.3	.142
4-5190	4-5379.1	.236	292.4	-28.8	-2.4	.632	84.9	.414	1.059	172.7	300.5	.620A	1.497	73.6	1.348	1.1	3.6	53.5	.393
4-5379.1	4-5540	.393	76.6	-7.0	-2.4	1.204	109.2	.332	.763	259.0	537.5	.510	1.016A	91.2	.812	-2.8	-26.1	211.2	.180
		12.02	9.02	3.84	3.00	6.41	5.19	12.31	1/1/2	48.5	82.8	25.5	.390	4.533	25.2	335.8	25.1	94.8D	1.377
4-4990	4-5190	.156	146.1	4.8	-1.1	1.100	82.7	.227	1.214	41.5	175.9	.936D	1.490A	91.2	.721	2.4	-9.1	296.2	.142
4-5190	4-5377.4	.243	292.4	-28.5	-2.4	.628	84.6	.422	1.054	172.5	297.5	.610A	1.498	72.6	1.346	1.1	3.5	52.6	.410
4-5377.4	4-5550	.410	75.0	-8.1	-2.9	1.200	110.0	.345	.758	256.8	547.6	.497	1.019	86.0	.808	-3.0	-21.7	198.5	.192
		12.42	9.42	4.11	3.00	6.41	5.31	12.47	1/1/2	50.5	104.5	25.1	.357	4.598	27.7	335.0	27.5	92.9D	1.284
MARS ARRIVAL DATE = 2445200 (18 AUG 1982)																			
4-4900	4-5200	.144	180.4	9.7	1.2	1.090	97.2	.219	1.215	317.9	349.0	.949	1.481	87.5	.730	.8	-17.9	284.0	.113
4-5200	4-5360.7	.308	293.7	-25.6	-1.8	.572	82.0	.531	.973	172.8	265.8	.456A	1.469	61.2	1.314	.7	1.3	43.6	.629
4-5360.7	4-5460	.629	46.5	4.1	2.3	1.285	119.4	.520	.907	260.0	491.4	.435	1.379A	120.7	.939	-4.3	-15.0	197.9	.506
		13.42	10.97	3.98	2.45	5.87	6.99	18.69	2/1/2	68.2	22.9	4.0	.152	26.426	43.5	317.7	-43.4	85.7L	4.170
4-4910	4-5200	.128	184.1	11.5	1.4	1.094	95.9	.212	1.220	325.4	346.4	.962	1.479	88.3	.732	.5	-19.4	289.8	.114
4-5200	4-5364.6	.289	294.0	-26.0	-1.9	.588	83.0	.502	.990	173.0	272.3	.494A	1.467	63.8	1.321	.7	1.5	46.6	.577
4-5364.6	4-5470	.577	52.7	3.1	1.6	1.266	117.3	.481	.868	260.2	495.0	.451	1.285A	117.2	.910	-4.1	-18.1	204.6	.447
		12.78	10.31	3.82	2.47	5.89	6.49	17.32	2/1/2	63.0	25.4	6.3	.181	18.324	14.7	320.3	-14.6	87.9L	3.127
4-4920	4-5200	.116	187.0	16.0	1.8	1.098	94.5	.206	1.224	333.2	344.2	.972	1.477	88.9	.734	.0	-21.9	294.3	.116
4-5200	4-5368.3	.274	294.2	-26.5	-2.0	.601	83.9	.477	1.006	173.3	276.4	.526A	1.485	66.2	1.327	.8	1.7	49.3	.531
4-5368.3	4-5480	.531	58.4	1.9	.9	1.251	115.4	.445	.839	260.4	499.0	.465	1.212A	113.8	.885	-3.8	-20.9	210.9	.393
		12.28	9.78	3.70	2.50	5.92	6.08	16.12	2/1/2	58.9	28.4	9.1	.213	12.576	2.0	323.9	-.9	90.0L	2.466
4-4930	4-5200	.110	190.0	25.5	2.6	1.101	93.1	.203	1.228	341.4	342.4	.979	1.476	89.4	.736	-.9	-26.8	298.6	.116
4-5200	4-5371.6	.261	294.2	-27.0	-2.1	.611	84.7	.457	1.019	173.6	284.1	.554A	1.484	68.3	1.333	.8	2.0	51.8	.491
4-5371.6	4-5490	.491	65.6	.5	.2	1.238	113.6	.414	.817	260.7	503.5	.479	1.155A	110.3	.865	-3.5	-23.2	216.7	.344
		11.94	9.40	3.64	2.55	5.96	5.75	15.09	2/1/2	56.1	32.1	12.2	.249	9.426	7.0	327.4	6.9	91.7D	2.099
4-4940	4-5200	.129	199.0	45.2	5.0	1.103	91.6	.200	1.230	350.1	341.0	.984	1.476	89.8	.737	-3.3	-40.2	304.3	.126
4-5200	4-5374.6	.250	294.1	-27.5	-2.1	.620	85.3	.440	1.030	174.0	289.2	.577A	1.483	70.0	1.337	.8	2.2	53.4	.457
4-5374.6	4-5500	.457	68.3	-1.0	-.4	1.229	112.1	.387	.801	260.9	508.4	.491	1.110A	106.8	.849	-3.2	-25.2	221.5	.299
		12.03	9.31	3.83	2.72	6.14	5.49	14.22	2/1/2	56.5	36.8	15.3	.288	7.528	12.3	330.7	12.2	93.2D	1.878
4-4960	4-5200	.140	137.2	-37.6	-5.6	1.105	88.4	.201	1.229	9.5	179.9	.981D	1.476A	90.0	.736	7.2	14.1	292.4	.156
4-5200	4-5379.3	.236	293.9	-28.3	-2.3	.631	86.1	.417	1.045	174.6	297.2	.609A	1.481	72.7	1.343	.9	2.6	55.9	.407
4-5379.3	4-5520	.407	75.8	-4.2	-1.5	1.215	109.8	.346	.779	261.1	520.3	.510	1.048A	99.8	.827	-2.8	-27.9	225.8	.224
		12.36	9.07	3.94	3.29	6.70	5.15	12.94	1/1/2	61.8	51.1	21.0	.363	5.489	19.3	336.1	19.3	95.0D	1.629
4-4970	4-5200	.119	144.0	-14.1	-2.8	1.104	86.7	.205	1.225	19.8	180.1	.973D	1.476	90.0	.734	4.2	1.8	295.0	.136
4-5200	4-5360.7	.232	293.9	-28.5	-2.3	.634	86.4	.411	1.049	174.8	299.7	.618A	1.480	73.5	1.345	.9	2.9	56.6	.392
4-5360.7	4-5530	.392	78.3	-5.7	-1.9	1.211	109.1	.333	.772	260.9	527.3	.515	1.029A	96.2	.820	-2.7	-26.3	223.5	.196
		11.63	8.75	3.72	2.88	6.29	5.03	12.53	1/1/2	57.3	62.3	23.3	.390	4.961	21.9	338.0	21.9	95.3D	1.547
4-4980	4-5200	.131	145.2	-2.9	-1.9	1.102	84.8	.212	1.218	30.7	180.8	.959D	1.476	89.8	.731	3.2	-3.6	294.5	.132
4-5200	4-5361.3	.230	293.8	-28.6	-2.3	.635	86.5	.409	1.051	174.9	300.6	.622A	1.480	73.8	1.346	.9	3.0	56.8	.387
4-5361.3	4-5540	.387	79.5	-7.0	-2.4	1.207	108.9	.328	.766	260.2	535.3	.515	1.017A	92.3	.815	-2.6	-27.3	216.6	.179
		11.64	8.84	3.85	2.80	6.21	4.99	12.30	1/1/2	57.5	77.8	24.7	.401	4.668	24.3	339.1	24.2	95.0D	1.472
4-4990	4-5200	.155	146.6	2.5	-1.5	1.098	82.7	.223	1.207	42.0	181.9	.936D	1.476	89.4	.726	2.7	-7.0	292.4	.131
4-5200	4-5360.2	.233	293.9	-28.4	-2.3	.633	86.3	.413	1.048	174.7	298.9	.615A	1.481	73.2	1.344	.9	2.8	56.4	.397
4-5360.2	4-5550	.397	78.8	-8.2	-2.9	1.204	109.4	.335	.762	258.5	544.8	.507	1.016	87.8	.812	-2.8	-23.8	205.0	.182
		11.96	9.17	4.10	2.79	6.20	5.06	12.34	1/1/2	59.5	98.2	24.9	.381	4.836	26.7	338.9	26.5	93.6D	1.364

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445200
18-AUG 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5000	4-5200	.185	149.1	5.0	-1.2	1.092	80.5	.238	1.192	53.6	183.3	.908D	1.477	89.0	.719	2.4	-9.8	289.0	.133
4-5200	4-5364.9	.288	294.0	-26.1	-1.9	.589	83.1	.500	.992	173.0	272.8	.496A	1.467	64.0	1.522	.7	1.5	46.9	.573
4-5364.9	4-5560	.575	81.2	-8.7	-4.7	1.190	118.0	.470	.747	244.9	565.1	.395	1.098	70.9	.797	-5.2	-11.5	178.5	.352
		13.77	10.94	4.49	2.83	6.24	6.46	15.26	1/1/2	62.9	135.5	17.6	.183	6.527	35.9	326.6	35.7	83.4L	1.011
4-5000	4-5200	.185	149.1	5.0	-1.2	1.092	80.5	.238	1.192	53.6	183.3	.908D	1.477	89.0	.719	2.4	-9.8	289.0	.133
4-5200	4-5373.9	.253	294.2	-27.4	-2.1	.616	85.2	.444	1.027	173.9	288.0	.571A	1.483	69.6	1.336	.6	2.2	53.0	.465
4-5373.9	4-5560	.465	71.7	-8.9	-3.6	1.197	112.6	.387	.754	252.6	558.4	.463	1.046	79.1	.806	-3.7	-16.5	188.2	.249
		12.86	10.03	4.49	2.83	6.24	5.54	13.34	1/1/2	62.9	124.9	21.7	.278	5.308	31.1	334.4	30.9	86.7L	1.198
MARS ARRIVAL DATE = 2445210 (28 AUG 1982)																			
4-4900	4-5210	.144	181.1	10.2	1.3	1.089	97.2	.218	1.212	317.6	554.2	.948	1.473	86.1	.736	.6	-18.4	279.1	.108
4-5210	4-5361.9	.305	295.4	-25.4	-1.9	.570	83.8	.534	.959	174.5	265.9	.447A	1.471	60.6	1.308	.6	1.0	46.5	.637
4-5361.9	4-5460	.637	48.2	4.2	2.4	1.292	119.6	.527	.922	260.8	490.2	.436	1.408A	121.4	.948	-4.4	-15.4	198.6	.518
		13.27	10.89	3.98	2.37	5.79	6.91	18.99	2/1/2	76.4	22.1	5.6	.148	31.820	62.9	322.4	-62.7	86.1L	4.572
4-4910	4-5210	.128	184.6	12.1	1.5	1.093	95.8	.210	1.217	325.1	551.8	.961	1.472	86.9	.738	.5	-20.0	285.0	.108
4-5210	4-5365.9	.286	295.6	-25.8	-1.9	.587	84.8	.503	.978	174.8	270.6	.486A	1.470	63.4	1.316	.6	1.1	49.6	.583
4-5365.9	4-5470	.583	54.4	3.2	1.6	1.272	117.5	.487	.879	261.0	493.7	.451	1.307A	117.9	.918	-4.1	-18.4	205.5	.458
		12.57	10.20	3.81	2.37	5.79	6.39	17.58	2/1/2	72.9	24.5	5.2	.177	21.923	23.0	322.9	-22.9	87.4L	3.697
4-4920	4-5210	.114	187.2	16.3	1.8	1.097	94.5	.204	1.220	333.1	549.7	.972	1.469	87.5	.740	.0	-22.5	290.0	.108
4-5210	4-5369.6	.269	295.6	-26.3	-2.0	.601	85.7	.477	.994	175.2	276.8	.519A	1.468	65.8	1.323	.6	1.3	52.2	.536
4-5369.6	4-5480	.536	60.1	1.9	.9	1.256	115.5	.450	.848	261.2	497.7	.466	1.229A	114.4	.892	-3.8	-21.1	212.0	.403
		12.03	9.65	3.68	2.37	5.79	5.97	16.34	2/1/2	68.6	27.3	8.0	.209	14.421	4.9	326.3	-4.6	89.7L	2.808
4-4930	4-5210	.107	189.1	24.4	2.4	1.099	93.0	.199	1.223	341.5	548.1	.979	1.467	88.0	.741	-.7	-26.8	294.4	.110
4-5210	4-5373.0	.256	295.4	-26.8	-2.0	.612	86.4	.456	1.008	175.7	282.7	.546A	1.467	68.0	1.329	.6	1.5	54.5	.495
4-5373.0	4-5490	.495	65.4	.5	.2	1.243	113.8	.417	.624	261.4	502.1	.480	1.168A	110.9	.871	-3.5	-23.5	218.0	.353
		11.64	9.24	3.62	2.40	5.82	5.62	15.27	2/1/2	65.4	30.8	11.0	.246	10.444	5.0	329.9	4.9	91.5D	2.319
4-4940	4-5210	.1173557.3		39.2	3.9	1.102	91.6	3.35514.332		350.4	546.8	.987	1.469	170.3	.742	-2.2	-61.3	298.8	8.389
4-5210	4-5376.0	.245	295.2	-27.3	-2.1	.621	87.0	.436	1.019	176.1	288.0	.572A	1.466	69.8	1.334	.6	1.6	56.4	.459
4-5376.0	4-5500	.459	70.2	-1.0	-.4	1.233	112.2	.389	.806	261.7	507.0	.493	1.120A	107.5	.854	-3.2	-25.4	223.1	.307
		11.51	9.03	3.68	2.48	5.90	5.35	14.37	2/1/2	64.2	35.2	14.1	.265	8.155	10.8	333.2	10.8	92.9D	2.037
4-4950	4-5210	.202	220.6	63.7	9.9	1.103	90.1	.196	1.225	359.7	546.0	.985	1.466	88.5	.742	-8.3	-63.0	310.2	.160
4-5210	4-5378.7	.236	295.0	-27.7	-2.1	.628	87.4	.425	1.029	176.5	292.6	.592A	1.466	71.4	1.338	.6	1.8	57.9	.430
4-5378.7	4-5510	.430	74.4	-2.6	-1.0	1.225	110.9	.365	.793	261.9	512.5	.504	1.083A	104.0	.841	-2.9	-27.0	226.9	.266
		13.23	9.86	4.75	3.37	6.77	5.13	13.62	2/1/2	70.9	41.0	17.1	.325	6.721	15.1	336.2	15.1	94.1D	1.860
4-4970	4-5210	.134	137.8	-25.7	-4.5	1.102	86.6	.202	1.219	20.2	186.0	.973D	1.466	88.5	.740	5.8	10.4	269.8	.139
4-5210	4-5382.5	.223	294.6	-28.4	-2.2	.638	88.1	.407	1.041	177.2	299.3	.617A	1.465	73.5	1.343	.7	2.2	59.7	.390
4-5382.5	4-5530	.390	80.6	-5.7	-2.0	1.214	109.0	.331	.776	261.8	525.3	.518	1.033A	97.0	.824	-2.6	-26.7	227.3	.200
		11.67	8.74	3.87	2.93	6.34	4.86	12.58	1/1/2	68.1	59.0	22.3	.395	5.176	21.0	340.6	20.9	95.3D	1.648
4-4980	4-5210	.134	142.6	-8.6	-2.6	1.100	84.8	.209	1.213	30.9	186.6	.959D	1.466	88.3	.737	3.9	.9	290.1	.127
4-5210	4-5383.2	.223	294.5	-28.5	-2.2	.639	88.2	.404	1.043	177.3	300.6	.622A	1.465	73.9	1.344	.7	2.3	60.0	.383
4-5383.2	4-5540	.383	82.1	-7.1	-2.4	1.210	108.6	.324	.770	261.3	533.3	.520	1.019A	93.2	.819	-2.5	-26.1	221.6	.179
		11.40	8.69	3.88	2.70	6.12	4.81	12.30	1/1/2	67.2	73.4	24.0	.411	4.817	23.3	342.1	23.2	95.1D	1.568
4-4990	4-5210	.155	145.4	-.6	-1.9	1.097	82.8	.220	1.203	42.0	187.5	.938D	1.467	87.9	.732	3.1	-4.4	288.1	.125
4-5210	4-5382.7	.224	294.6	-28.4	-2.2	.638	88.1	.406	1.042	177.2	299.7	.619A	1.465	73.6	1.343	.7	2.2	59.8	.388
4-5382.7	4-5550	.388	82.0	-8.3	-2.6	1.206	108.9	.327	.765	260.0	542.3	.515	1.015	88.9	.815	-2.6	-25.5	211.0	.176
		11.61	8.93	4.10	2.67	6.08	4.85	12.26	1/1/2	69.1	92.6	24.5	.400	4.709	25.7	342.4	25.5	94.1D	1.484
4-5000	4-5210	.183	146.5	3.0	-1.5	1.091	80.6	.235	1.189	55.5	188.6	.910D	1.469	87.4	.725	2.6	-8.2	284.8	.127
4-5210	4-5379.2	.234	294.9	-27.8	-2.1	.630	87.5	.422	1.031	176.6	293.5	.596A	1.466	71.7	1.338	.6	1.9	58.2	.424
4-5379.2	4-5560	.424	78.3	-9.1	-3.4	1.202	110.6	.355	.760	256.3	553.8	.490	1.029	82.7	.811	-5.1	-19.9	198.6	.211
		12.25	9.55	4.45	2.70	6.12	5.09	12.74	1/1/2	72.5	116.3	22.9	.334	5.038	29.0	340.2	28.8	91.0D	1.548
MARS ARRIVAL DATE = 2445220 (7 SEP 1982)																			
4-4900	4-5220	.146	182.0	10.5	1.4	1.089	97.3	.218	1.210	316.9	559.2	.947	1.474	84.9	.743	.7	-18.9	275.9	.107
4-5220	4-5363.1	.303	296.5	-25.3	-1.9	.567	85.9	.537	.946	176.5	262.1	.438A	1.455	60.1	1.305	.4	.7	49.4	.645
4-5363.1	4-5460	.645	49.8	4.3	2.5	1.299	119.9	.535	.938	261.5	489.0	.436	1.439A	122.1	.958	-4.5	-15.7	199.4	.531
		13.20	10.84	4.00	2.36	5.78	6.84	19.30	2/1/2	89.0	21.4	3.7	.145	31.285	83.8	341.4	-83.4	87.1L	4.362
4-4910	4-5220	.128	185.4	12.2	1.6	1.092	95.9	.209	1.214	324.6	557.0	.961	1.468	85.8	.745	.4	-20.6	279.9	.105
4-5220	4-5367.2	.282	296.5	-25.6	-1.9	.586	86.0	.505	.966	176.9	268.9	.478A	1.454	63.0	1.312	.4	.7	52.4	.590
4-5367.2	4-5470	.590	56.0	3.2	1.7	1.276	117.7	.493	.891	261.7	492.3	.452	1.330A	118.6	.926	-4.2	-18.7	206.4	.470
		12.44	10.12	3.81	2.32	5.74	6.31	17.84	2/1/2	83.5	23.7	4.4	.173	26.079	34.6	325.6	-34.5	87.1L	4.336
4-4920	4-5220	.114	187.7	16.1	1.8	1.096	94.5	.202	1.218	332.7	555.0	.971	1.464	86.3	.747	.0	-23.1	284.9	.104
4-5220	4-5370.9	.265	296.3	-26.3	-2.0	.601	87.6	.478	.983	177.4	275.4	.513A	1.453	65.5	1.319	.4	.8	55.1	.541
4-5370.9	4-5480	.541	61.8	2.0	.9	1.261	115.7	.455	.857	262.0	496.4	.467	1.246A	115.1	.899	-3.9	-21.4	213.1	.413
		11.85	9.55	3.68	2.31	5.73	5.87	16.56	2/1/2	79.0	26.4	6.9	.205	16.676	9.6	326.7	-9.5	89.4L	3.220
4-4930	4-5220	.105	189.0	23.3	2.3	1.099	93.1	.198	1.220	341.2	555.5	.979	1.461	86.7	.748	-.6	-26.9	289.2	.104
4-5220	4-5374.3	.251	295.9	-26.8	-2.0	.613	88.3	.456	.998	177.9	281.4	.543A	1.452	67.7	1.325	.4	.9	57.3	.498
4-5374.3	4-5490	.499	67.2	.5	.2	1.247	113.9	.421	.831	262.2	500.7	.481	1.181A	111.6	.877	-3.5	-23.7	219.3	.362
		11.42	9.11	3.61	2.31	5.73	5.31	15.45	2/1/2	75.6	29.7	9.9	.242	11.627	2.5	332.2	2.4	91.2D	2.571
4-4940	4-5220	.107	190.4	35.2	3.3	1.101	91.6	.195	1.222	350.2	552.3	.984	1.460	87.1	.748	-1.7	-34.0	293.1	.107
4-5220	4-5377.4	.240	295.5	-27.2	-2.0	.623	88.6	.437	1.010	178.5	286.9	.568A	1.452	69.6	1.331	.4	1.1	59.2	.462
4-5377.4	4-5500	.462	72.0	-1.0	-.4	1.237	112.3	.392	.812	262.4	505.6	.494	1.130A	108.1	.860	-3.2	-25.6	224.7	.315
		11.19	8.84	3.62	2.35	5.77	5.22	14.51	2/1/2	73.7	33.8	13.0	.282	8.847	9.2	335.6	9.2	92.7D	2.211
4-4950	4-5220	.139	199.0	54.0	5.9	1.102	90.1	.194	1.222	359.6	551.6	.985	1.459	87.2	.748	-4.4	-50.2	298.7	.122
4-5220	4-5380.1	.231	295.1	-27.7	-2.1	.631	89.5	.423	1.020	179.0	291.7	.589A	1.452	71.2	1.335	.4	1.2	60.7	.431
4-5380.1	4-5510	.431	76.3	-2.6	-1.0	1.228	110.9	.366	.798	262.6	511.0	.506	1.090A	104.7	.846	-2.9	-27.2	228.9	.273
		11.54	8.93	3.93	2.61	6.02	5.00	13.73	2/1/2	74.5	39.2	16.0	.325	7.169	13.8	336.7	13.8	93.9D	1.994
4-4970	4-5220	.186	125.7	-42.6	-8.4	1.101	86.7	.200	1.216	20.1	191.6	.973D	1.459	87.2	.746	9.7	23.7	283.6	.171
4-5220	4-5384.1	.219	294.4	-28.3	-2.1	.641	89.9	.404	1.034	179.8	296.8	.616A	1.452	73.5	1.340	.4	1.4	62.6	.389
4-5384.1	4-5530	.389	82.8	-5.8	-2.0	1.216	108.9	.331	.779	262.7	523.7	.522	1.037A	97.7	.828	-2.5	-28.9	230.7	.204
		12.63	9.22	4.50	3.61	7.01	4.72	12.63	1/1/2	79.4	56.0	21.4	.398	5.396	20.0	343.5	19.8	95.3D	1.748
4-4960	4-5220	.142	139.2	-17.1	-3.9	1.099	84.9	.207	1.210	30.6	192.0	.960D	1.460	86.9	.743	5.0	7.2	285.2	.129
4-5220	4-5385.1	.217	294.2	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.6	.623A	1.452	74.0	1.342	.4	1.5	63.0	.379
4-5385.1	4-5540	.379	84.6	-7.2	-2.4	1.213	108.4	.321	.773	262.3	531.5	.525	1.021A	94.1	.822	-2.4	-28.7	226.1	.181
		11.37	8.62	3.96	2.75	6.17	4.66	12.32	1/1/2	77.3	69.4	23.2	.419	4.972	22.3	345.0	22.1	95.3D	1.664
4-4990	4-5220	.155	144.1	-5.0	-2.6	1.096	82.9	.217	1.201	41.9	192.7	.940D	1.461	86.5	.739	3.6	-1.0	283.7	.123
4-5220	4-5385.0	.217	294.3	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.4	.622A	1.452	74.0	1.342	.4	1.5	63.0	.380
4-5385.0	4-5550	.380	85.0	-8.4	-2.8	1.209	108.5	.321	.766	261.3	540.0	.521	1.015	90.0	.818	-2.4	-28.7	216.6	.172
		11.40	8.77	4.10	2.83	6.05	4.67	12.21	1/1/2	78.8	87.4	24.1	.416	4.799	24.6	345.5	24.3	94.5D	1.581
4-5000	4-5220	.180	148.1	.4	-2.0	1.001	80.8	.232	1.188	52.5	193.5	.913D	1.464	86.0	.733	2.9	-6.2	280.7	.124
4-5220	4-5382.7	.223	294.7	-28.1	-2.1	.638	89.7	.410	1.029	179.5	296.3	.607A	1.452	72.7	1.338	.4	1.3	62.0	.404
4-5382.7	4-5560	.404	82.7	-9.2	-3.3	1.205	109.6	.339	.763	258.6	550.5	.505	1.022	84.7	.815	-2.7	-22.2	203.1	.192
		11.69	9.24	4.42	2.83	6.07	4.82	12.47	1/1/2	82.0	109.8	23.2	.369	4.973	27.5	344.4	27.2	92.2D	1.465
MARS ARRIVAL DATE = 2445230 (17 SEP 1982)																			
4-4990	4-5230	.170	178.9	10.1	1.4	1.085	99.1	.232	1.206	308.2	566.2	.926	1.485	82.6	.748	1.0	-17.7	262.7	.117
4-5230	4-5380.1	.326	298.9	-24.8	-1.9	.541	87.8	.580	.912	178.2	253.2	.383A	1.441	56.3	1.287	.2	.3	48.9	.718
4-5380.1	4-5480	.716	44.7	5.5	3.3	1.334	122.5	.591	1.026	262.1	484.7	.420	1.633A	126.2	1.007	-5.0	-12.7	192.8	.612
		14.29	11.77	4.29	2.82	5.94	7.47	21.34	2/1/2	105.5	18.9	6.5	.117	17.628	129.6	325.6	50.1	91.7D	1.949
4-4900	4-5230	.149	185.1	10.4	1.5	1.088	97.5	.219	1.210	315.8	563.9	.944	1.473	83.7	.750	.7	-19.2	269.0	.110
4-5230	4-5364.4	.301	298.9	-25.3	-1.9	.565	86.3	.541	.935	178.6	260.4	.429A	1.441	59.6	1.298	.2	.3	52.2	.655
4-5364.4	4-5460	.655	51.4	4.4	2.5	1.306	120.1	.542	.954	262.2	497.8	.437	1.472A	122.7	.968	-4.6	-16.0	200.1	.544
		13.24	10.83	4.03	2.41	5.83	6.80	19.61	2/1/2	99.4	20.7	4.2	.141	27.549	101.1	331.3	78.8	88.5L	3.747

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2445230 17 SEP 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLF	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-4910	4-5230	.130	186.4	12.0	1.6	1.092	96.1	.210	1.213	323.7	561.8	.959	1.468	84.5	.752	.4	-21.1	274.7	.106
4-5230	4-5368.4	.280	296.6	-25.8	-1.9	.585	89.1	.508	.955	179.1	267.4	.470A	1.440	62.6	1.307	.2	.5	55.2	.596
4-5368.4	4-5470	.596	57.6	3.3	1.7	1.284	117.9	.499	.903	262.5	491.2	.453	1.354A	119.2	.934	-4.3	-19.0	207.2	.481
		12.41	10.08	3.83	2.34	5.76	6.24	18.10	2/1/2	94.1	22.6	3.9	.169	29.727	50.0	328.6	-49.9	87.1L	4.859
4-4920	4-5230	.115	188.6	15.5	1.8	1.095	94.6	.202	1.216	331.9	560.1	.970	1.462	85.1	.753	.0	-23.5	279.6	.103
4-5230	4-5372.1	.262	296.1	-26.5	-1.9	.602	89.8	.479	.974	179.8	274.0	.507A	1.440	65.2	1.316	.2	.4	57.8	.546
4-5372.1	4-5480	.546	65.5	2.0	1.0	1.266	115.8	.459	.866	262.7	495.1	.468	1.264A	115.7	.906	-3.9	-21.6	214.1	.423
		11.77	9.46	3.69	2.29	5.71	5.79	16.78	2/1/2	89.7	25.4	5.9	.202	19.338	15.8	331.0	-15.8	89.1L	3.697
4-4930	4-5230	.105	189.5	21.9	2.2	1.098	93.2	.197	1.219	340.6	558.6	.978	1.459	85.6	.754	-.5	-27.0	283.8	.102
4-5230	4-5375.6	.248	295.5	-26.8	-2.0	.615	90.4	.456	.989	180.5	280.2	.538A	1.440D	67.4	1.322	.2	.4	60.1	.502
4-5375.6	4-5490	.502	68.9	.5	.2	1.252	114.0	.425	.839	262.9	499.4	.483	1.195A	112.2	.883	-3.5	-23.9	220.5	.371
		11.30	9.02	3.80	2.26	5.70	5.42	15.64	2/1/2	86.2	28.6	6.8	.238	12.971	.8	334.5	-.7	91.1D	2.853
4-4940	4-5230	.103	189.6	32.0	2.9	1.100	91.7	.194	1.220	349.6	557.5	.983	1.456	85.9	.755	-1.3	-32.8	287.3	.103
4-5230	4-5378.7	.236	294.9	-27.3	-2.0	.626	90.9	.437	1.005	181.1	285.8	.565A	1.440D	69.4	1.328	.2	.5	61.9	.464
4-5378.7	4-5500	.464	73.8	-1.0	-.4	1.240	112.3	.394	.818	263.2	504.2	.496	1.141A	108.7	.865	-3.2	-25.8	226.2	.323
		11.01	8.72	3.59	2.29	5.71	5.13	14.66	2/1/2	83.9	32.5	12.0	.279	9.593	7.4	337.9	7.4	92.6D	2.395
4-4950	4-5230	.119	191.9	46.7	4.5	1.101	90.2	.193	1.220	359.0	556.8	.985	1.455	86.1	.755	-3.0	-43.8	290.8	.110
4-5230	4-5381.5	.227	294.3	-27.7	-2.0	.634	91.5	.422	1.013	181.8	290.9	.586A	1.441D	71.1	1.333	.2	.5	63.4	.433
4-5381.5	4-5510	.433	78.1	-2.7	-1.0	1.231	110.9	.366	.803	263.4	509.5	.507	1.098A	105.3	.850	-2.9	-27.3	230.7	.279
		11.03	8.63	3.72	2.41	5.83	4.90	13.85	2/1/2	83.1	37.6	15.1	.321	7.631	12.5	341.0	12.4	93.6D	2.130
4-4960	4-5230	.209	216.3	66.9	10.3	1.102	88.6	.194	1.218	8.8	196.5	.982D	1.454	86.1	.754	-8.9	-68.5	300.8	.161
4-5230	4-5383.8	.220	293.7	-28.1	-2.0	.641	91.6	.410	1.022	182.3	295.2	.603A	1.441D	72.5	1.336	.2	.6	64.6	.407
4-5383.8	4-5520	.407	81.9	-4.3	-1.5	1.224	109.7	.347	.791	263.6	515.5	.517	1.065A	101.9	.839	-2.6	-28.4	233.6	.241
		10.96	9.56	4.83	3.40	6.80	4.73	13.19	2/1/2	85.0	44.3	18.0	.363	6.403	16.1	343.8	16.0	94.7D	1.962
4-4980	4-5230	.165	133.2	-29.8	-6.1	1.099	85.1	.205	1.209	29.9	197.0	.961D	1.456	85.7	.750	7.2	16.4	280.5	.147
4-5230	4-5386.8	.212	292.9	-28.6	-2.0	.646	92.0	.396	1.032	183.0	300.6	.623A	1.441D	74.1	1.340	.2	.7	65.8	.376
4-5386.8	4-5540	.376	86.9	-7.3	-2.4	1.215	108.2	.319	.776	263.3	529.5	.528	1.024A	94.8	.825	-2.3	-29.1	230.2	.182
		11.86	8.77	4.25	3.09	6.50	4.54	12.34	1/1/2	86.4	65.8	22.5	.426	5.126	21.2	347.6	20.9	95.4D	1.756
4-4990	4-5230	.158	142.3	-11.4	-3.5	1.096	83.2	.215	1.200	40.5	197.5	.942D	1.458	85.4	.746	4.5	3.5	279.6	.127
4-5230	4-5387.0	.211	292.8	-28.6	-2.0	.649	92.0	.396	1.033	183.1	300.9	.624A	1.442D	74.2	1.341	.2	.7	65.9	.374
4-5387.0	4-5550	.374	87.7	-8.5	-2.8	1.212	108.1	.317	.771	262.4	536.0	.527	1.015A	90.9	.821	-2.5	-27.6	221.7	.170
		11.37	8.67	4.14	2.70	6.12	4.53	12.18	1/1/2	88.0	82.8	25.6	.430	4.892	25.4	348.4	25.0	94.9D	1.672
4-5000	4-5230	.178	147.6	-3.1	-2.5	1.091	81.1	.229	1.189	51.2	198.1	.916D	1.461	84.8	.740	3.5	-3.8	277.0	.125
4-5230	4-5385.8	.215	293.2	-28.4	-2.0	.645	91.8	.402	1.028	182.7	298.1	.614A	1.441D	73.4	1.338	.2	.6	65.3	.390
4-5385.8	4-5560	.390	86.3	-9.4	-3.2	1.208	108.9	.328	.766	260.3	547.8	.515	1.018	86.2	.819	-2.5	-23.9	209.1	.180
		11.70	9.02	4.39	2.68	6.09	4.62	12.31	1/1/2	91.0	104.1	23.2	.396	4.966	26.1	347.9	25.6	93.0D	1.569
MARS ARRIVAL DATE = 2445240 (27 SEP 1982)																			
4-4890	4-5240	.177	180.2	9.6	1.5	1.085	99.4	.236	1.206	306.6	570.5	.921	1.491	81.4	.755	.9	-18.0	259.5	.126
4-5240	4-5361.5	.328	296.8	-24.9	-1.9	.538	90.5	.586	.901	180.4	251.4	.373A	1.429D	55.6	1.282	-.0	-.0	51.7	.727
4-5361.5	4-5450	.727	46.3	5.4	3.5	1.343	122.8	.601	1.052	262.8	483.5	.420	1.684A	126.9	1.019	-5.2	-13.0	193.4	.627
		14.56	11.88	4.37	2.68	6.09	7.50	21.72	2/1/2	114.5	18.3	7.7	.114	14.979	134.6	327.2	45.3	92.4D	1.591
4-4900	4-5240	.154	184.4	10.0	1.5	1.088	97.8	.222	1.210	314.4	568.4	.941	1.478	82.5	.757	.7	-19.5	264.9	.117
4-5240	4-5365.6	.301	296.5	-25.4	-1.9	.564	91.1	.546	.925	181.0	256.8	.420A	1.430D	59.1	1.294	-.0	-.0	54.9	.661
4-5365.6	4-5460	.661	52.9	4.5	2.6	1.314	120.4	.550	.972	263.0	486.6	.437	1.507A	123.3	.978	-4.8	-16.3	200.8	.557
		13.40	10.89	4.09	2.52	5.93	6.80	19.93	2/1/2	109.1	20.0	4.9	.138	23.256	113.1	331.2	66.8	89.7L	3.059
4-4910	4-5240	.134	187.8	11.4	1.7	1.092	96.3	.212	1.213	322.4	566.4	.956	1.469	83.4	.759	.4	-21.4	270.2	.110
4-5240	4-5369.6	.279	295.9	-26.0	-1.9	.586	91.8	.511	.947	181.7	265.9	.463A	1.430D	62.1	1.304	-.0	-.0	57.8	.603
4-5369.6	4-5470	.603	59.2	3.4	1.8	1.291	118.1	.505	.916	263.2	490.0	.453	1.379A	119.8	.942	-4.4	-19.3	208.0	.492
		12.50	10.09	3.87	2.41	5.83	6.22	18.37	2/1/2	104.2	22.1	3.7	.165	30.987	67.4	332.5	-67.3	87.5L	4.960
4-4920	4-5240	.117	190.0	14.6	1.8	1.095	94.8	.203	1.216	330.8	564.8	.969	1.463	84.0	.760	.0	-23.6	274.8	.106
4-5240	4-5373.4	.261	295.1	-26.5	-1.9	.604	92.3	.481	.966	182.5	272.7	.501A	1.431D	64.8	1.313	-.0	-.0	60.4	.551
4-5373.4	4-5480	.551	65.1	2.0	1.0	1.272	116.0	.465	.876	263.4	493.9	.469	1.263A	116.3	.913	-3.9	-21.9	215.0	.433
		11.81	9.47	3.71	2.34	5.76	5.75	17.00	2/1/2	100.0	24.5	5.2	.198	22.207	23.9	333.2	-23.9	88.9L	4.195
4-4930	4-5240	.106	190.7	20.5	2.1	1.098	93.3	.197	1.218	339.5	563.4	.977	1.458	84.5	.761	-.4	-27.0	278.8	.104
4-5240	4-5376.8	.246	294.2	-27.0	-1.9	.618	92.8	.457	.983	183.3	279.1	.534A	1.431D	67.2	1.320	-.0	-.1	62.6	.506
4-5376.8	4-5490	.506	70.5	.5	.2	1.256	114.1	.429	.846	263.6	498.1	.484	1.209A	112.8	.869	-3.5	-24.1	221.6	.379
		11.29	8.99	3.81	2.30	5.72	5.38	15.82	2/1/2	96.7	27.5	8.0	.235	14.412	4.4	336.8	-4.4	90.9D	3.140
4-4940	4-5240	.101	190.0	29.0	2.7	1.100	91.9	.194	1.219	348.5	562.4	.983	1.455	84.9	.761	-1.1	-31.8	281.8	.104
4-5240	4-5380.0	.234	293.2	-27.5	-1.9	.630	93.2	.437	.997	184.2	285.0	.561A	1.432D	69.2	1.326	-.0	-.1	64.4	.467
4-5380.0	4-5500	.467	73.5	-1.1	-.4	1.244	112.4	.397	.824	263.9	502.9	.497	1.151A	109.3	.870	-3.2	-25.9	227.5	.330
		10.96	8.66	3.57	2.30	5.72	5.09	14.81	2/1/2	94.3	31.3	11.1	.276	10.359	5.2	340.0	5.2	92.5D	2.579
4-4950	4-5240	.109	189.5	41.1	3.7	1.101	90.5	.192	1.219	358.0	561.7	.984	1.453	85.1	.761	-2.3	-39.9	284.4	.107
4-5240	4-5382.8	.225	292.3	-27.9	-1.9	.639	93.6	.421	1.009	184.9	290.2	.584A	1.433D	71.0	1.331	-.0	-.1	65.9	.434
4-5382.8	4-5510	.434	79.9	-2.7	-1.0	1.235	110.9	.370	.807	264.1	508.2	.509	1.106A	105.9	.854	-2.8	-27.3	232.4	.286
		10.85	8.50	3.64	2.35	5.77	4.86	13.97	2/1/2	92.8	36.1	14.2	.319	8.079	10.9	343.2	10.8	93.8D	2.256
4-4960	4-5240	.147	196.0	57.0	6.4	1.102	88.7	.193	1.217	7.8	201.3	.982D	1.453	85..	.761	-5.1	-55.7	288.1	.125
4-5240	4-5385.2	.218	291.5	-28.3	-1.9	.646	93.8	.409	1.018	185.6	294.7	.602A	1.434D	72.4	1.335	-.0	-.1	67.0	.407
4-5385.2	4-5520	.407	83.7	-4.4	-1.5	1.227	109.7	.347	.795	264.3	514.1	.519	1.071A	102.5	.843	-2.5	-28.4	235.7	.246
		11.37	8.70	4.01	2.67	6.09	4.69	13.28	2/1/2	92.1	42.4	17.2	.362	6.692	14.8	345.9	14.6	94.7D	2.063
4-4960	4-5240	.253	117.8	-47.2	-12.1	1.099	85.3	.204	1.209	28.7	201.6	.963D	1.455	84.7	.757	13.2	29.8	276.9	.213
4-5240	4-5388.4	.210	290.3	-28.7	-1.9	.654	94.2	.394	1.029	186.5	300.7	.624A	1.435D	74.2	1.340	-.0	-.1	66.3	.373
4-5388.4	4-5540	.373	89.0	-7.4	-2.4	1.217	108.1	.318	.779	264.2	527.9	.532	1.026A	95.5	.828	-2.2	-29.3	233.8	.185
		14.59	10.01	5.52	4.58	7.97	4.49	12.37	1/1/2	92.5	62.7	21.9	.431	5.258	20.0	350.0	19.6	95.6D	1.636
4-4990	4-5240	.168	139.1	-20.8	-5.0	1.096	83.4	.213	1.201	39.1	201.9	.945D	1.457	84.3	.753	5.9	10.0	276.3	.139
4-5240	4-5388.8	.209	290.2	-28.8	-1.9	.655	94.2	.393	1.031	186.6	301.5	.626A	1.436D	74.5	1.340	-.0	-.1	66.4	.369
4-5388.8	4-5550	.369	90.1	-8.6	-2.7	1.214	107.9	.313	.774	263.5	536.1	.532	1.016A	91.8	.824	-2.1	-28.3	226.4	.169
		11.67	8.73	4.26	2.94	6.35	4.46	12.17	1/1/2	95.8	78.6	23.2	.441	4.972	22.2	350.9	21.7	95.3D	1.752
4-5000	4-5240	.178	146.8	-8.0	-3.2	1.092	81.4	.227	1.191	49.6	202.3	.921D	1.461	83.8	.748	4.0	-.6	274.2	.130
4-5240	4-5387.8	.211	290.5	-28.6	-1.9	.653	94.1	.397	1.027	186.3	299.6	.620A	1.435D	73.9	1.339	-.0	-.1	66.1	.380
4-5387.8	4-5560	.380	89.4	-9.5	-3.1	1.211	108.4	.320	.769	261.8	545.6	.523	1.015	87.4	.822	-2.3	-25.3	214.5	.173
		11.68	8.90	4.38	2.77	6.19	4.52	12.22	1/1/2	99.0	99.0	23.2	.417	4.971	24.6	350.8	24.0	93.8D	1.658
4-5010	4-5240	.203	152.5	-2.5	-2.4	1.086	79.3	.244	1.177	60.0	202.6	.890D	1.465	83.1	.742	3.0	-7.0	271.4	.134
4-5240	4-5387.3	.292	296.2	-25.6	-1.9	.574	91.4	.531	.934	181.3	261.8	.438A	1.430D	60.4	1.298	-.0	-.0	56.1	.637
4-5387.3	4-5570	.637	66.4	-9.4	-5.8	1.194	121.0	.516	.752	242.2	568.2	.364	1.139	65.9	.805	-5.8	-12.9	183.8	.416
		14.12	11.28	4.74	2.84	6.25	6.55	16.61	1/1/2	102.4	139.7	13.9	.148	8.273	42.6	339.6	42.2	80.2L	1.079
4-5010	4-5240	.203	152.5	-2.5	-2.4	1.086	79.3	.244	1.177	60.0	202.6	.890D	1.465	83.1	.742	3.0	-7.0	271.4	.134
4-5240	4-5383.1	.224	292.2	-26.0	-1.9	.640	93.6	.419	1.010	185.0	290.8	.586A	1.433D	71.2	1.332	-.0	-.1	66.1	.431
4-5383.1	4-5570	.431	84.5	-9.9	-5.8	1.206	110.9	.359	.764	256.9	557.8	.489	1.038	80.5	.818	-2.9	-19.8	199.8	.224
		12.41	9.87	4.74	2.84	6.25	4.84	12.94	1/1/2	102.4	123.0	20.7	.324	5.572	29.1	347.9	28.5	89.6L	1.481
MARS ARRIVAL DATE = 2445250 (7 OCT 1982)																			
4-4900	4-5250	.160	185.9	9.4	1.6	1.089	98.2	.227	1.210	312.5	572.5	.935	1.465	81.4	.764	.7	-19.6	262.1	.126
4-5250	4-5366.6	.304	295.1	-25.7	-2.0	.565	94.5	.551	.918	183.7	257.5	.412A	1.423D	58.6	1.291	-.2	-.4	57.5	.670
4-5366.6	4-5460	.670	54.5	4.6	2.7	1.322	120.6	.559	.992	263.7	485.4	.438	1.346A	124.0	.988	-4.9	-16.6	201.6	.570
		13.73	11.04	4.17	2.69	6.10	6.87	20.26	2/1/2	117.6	19.4	5.8	.134	19.694	120.6	333.6	99.2	90.5D	2.808
4-4910	4-5250	.139	189.4	10.5	1.7	1.092	96.7	.215	1.213	320.7	570.7	.983	1.474	82.5	.768	.4	-21.6	266.7	.118
4-5250	4-5370.8	.291	294.1	-26.3	-2.0	.589	94.8	.514	.941	184.8	264.8	.487A	1.424D	61.8	1.302	-.2	-.4	60.3	.610
4-5370.8	4-5470	.610	60.8	3.8	1.8	1.297	116.3	.512	.930	265.9	488.8	.484	1.406A	120.4	.981	-4.4	-19.8	208.8	.804
		12.74	10.20	3.92	2.54	5.96	6.28	18.64	2/1/2	113.4	21.4	3.9	.162	29.304	82.9	342.4	-82.7	88.2L	4.578

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 360 DAYS | MARS ARRIVAL DATE = 2443250 | 7 OCT 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-4920	4-5250	.121	191.7	13.3	1.8	1.095	95.1	.206	1.216	329.2	569.1	.966	1.466	83.0	.766	.0	-23.8	270.9	.112
4-5250	4-5374.6	.263	293.0	-26.8	-1.9	.607	95.2	.484	.961	185.6	271.8	.496A	1.426D	64.5	1.311	-.2	-.5	62.6	.557
4-5374.6	4-5480	.557	66.7	2.1	1.0	1.277	116.1	.470	.886	264.1	492.7	.470	1.302A	116.9	.920	-4.0	-22.1	215.9	.443
		11.98	9.54	3.74	2.44	5.86	5.80	17.22	2/1/2	109.6	23.7	4.6	.194	24.683	33.5	335.3	-33.5	88.8L	4.597
4-4930	4-5250	.108	192.4	18.5	2.1	1.098	93.6	.199	1.218	338.0	567.9	.976	1.460	83.6	.767	-.4	-26.7	274.4	.109
4-5250	4-5378.1	.248	291.7	-27.3	-1.9	.623	95.5	.458	.979	186.6	276.4	.530A	1.427D	67.0	1.319	-.2	-.5	64.9	.510
4-5378.1	4-5490	.510	72.1	.6	.2	1.261	114.2	.432	.854	264.3	496.9	.485	1.223A	113.4	.695	-3.5	-24.2	222.6	.366
		11.43	9.05	3.63	2.38	5.80	5.42	16.00	2/1/2	106.4	26.6	7.3	.231	15.800	8.7	338.5	-8.7	90.9D	3.421
4-4940	4-5250	.101	191.5	26.0	2.5	1.100	92.1	.195	1.219	347.1	566.9	.982	1.456	83.9	.768	-1.0	-30.6	277.2	.107
4-5250	4-5381.2	.236	290.4	-27.6	-1.9	.635	95.9	.438	.994	187.8	284.4	.559A	1.429D	69.1	1.325	-.2	-.6	66.7	.470
4-5381.2	4-5500	.470	77.1	-1.1	-.4	1.248	112.5	.400	.830	264.6	501.6	.498	1.162A	109.9	.675	-3.1	-26.0	228.7	.337
		11.05	8.70	3.57	2.35	5.77	5.13	14.96	2/1/2	104.0	30.2	10.4	.272	11.057	2.8	342.0	2.7	92.5D	2.739
4-4950	4-5250	.104	189.6	36.3	3.2	1.101	90.6	.193	1.219	356.5	566.2	.984	1.454	84.1	.768	-1.9	-36.9	279.4	.106
4-5250	4-5384.0	.227	289.2	-28.2	-1.9	.645	96.1	.421	1.007	188.5	289.9	.583A	1.431D	70.9	1.331	-.2	-.7	68.1	.436
4-5384.0	4-5510	.456	81.5	-2.6	-1.0	1.236	111.0	.372	.812	264.8	506.9	.510	1.114A	106.4	.859	-2.8	-27.4	233.9	.292
		10.87	8.49	3.59	2.38	5.80	4.90	14.08	2/1/2	102.4	34.8	13.6	.317	8.469	9.1	345.1	9.0	93.8D	2.365
4-4960	4-5250	.124	190.0	49.0	4.8	1.102	89.0	.193	1.218	6.3	205.8	.983D	1.453	84.2	.767	-3.8	-47.8	281.3	.117
4-5250	4-5386.5	.220	288.1	-28.5	-1.9	.653	96.4	.409	1.017	189.4	294.6	.601A	1.432D	72.4	1.335	-.2	-.7	69.2	.408
4-5386.5	4-5520	.408	85.4	-4.5	-1.6	1.230	109.7	.348	.799	265.0	512.7	.521	1.077A	103.0	.846	-2.5	-26.4	237.6	.251
		11.03	8.51	3.78	2.52	5.94	4.75	13.57	2/1/2	101.0	40.8	16.6	.361	6.929	13.3	347.9	13.0	94.9D	2.142
4-4970	4-5250	.206	207.2	66.2	9.8	1.101	87.4	.196	1.215	16.2	205.6	.977D	1.453	84.1	.766	-6.8	-68.5	287.2	.164
4-5250	4-5388.8	.215	287.2	-28.7	-1.9	.658	96.5	.399	1.024	190.0	298.4	.615A	1.434D	73.5	1.338	-.2	-.8	70.0	.386
4-5388.8	4-5530	.386	88.6	-6.1	-2.0	1.224	108.7	.329	.789	265.1	519.2	.529	1.049A	99.6	.837	-2.2	-29.1	239.0	.216
		12.83	9.38	4.77	3.45	6.85	4.61	12.81	2/1/2	98.1	48.8	19.3	.403	5.959	16.3	350.3	15.9	95.6D	1.998
4-4990	4-5250	.203	131.7	-34.7	-8.2	1.097	83.7	.212	1.203	37.3	206.0	.949D	1.458	83.5	.761	9.0	19.7	274.4	.171
4-5250	4-5390.5	.210	286.3	-28.9	-1.8	.664	96.7	.391	1.032	190.6	302.2	.628A	1.435D	74.7	1.341	-.2	-.9	70.6	.365
4-5390.5	4-5550	.365	92.3	-8.7	-2.7	1.216	107.6	.310	.776	264.5	534.4	.536	1.017A	92.5	.827	-2.0	-28.7	250.6	.169
		12.84	9.23	4.73	3.61	7.01	4.50	12.17	1/1/2	100.6	74.9	23.0	.451	5.021	20.7	353.2	20.1	95.7D	1.813
4-5000	4-5250	.180	145.2	-15.0	-4.4	1.093	81.8	.224	1.194	47.6	206.2	.926D	1.462	82.9	.756	5.0	3.9	272.4	.141
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.6	.393	1.030	190.4	301.0	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.372
4-5389.9	4-5560	.372	92.1	-9.6	-3.1	1.213	107.9	.314	.772	263.0	543.5	.530	1.014	88.4	.824	-2.1	-26.2	219.5	.167
		11.92	8.95	4.42	2.97	6.38	4.53	12.15	1/1/2	105.5	94.5	25.3	.456	4.961	23.0	353.4	22.3	94.6D	1.725
4-5010	4-5250	.199	152.3	-6.4	-3.1	1.087	79.8	.241	1.182	57.8	206.3	.897D	1.466	82.5	.751	3.5	-4.8	270.1	.140
4-5250	4-5386.7	.219	288.0	-28.5	-1.9	.653	96.4	.408	1.017	189.4	294.9	.602A	1.433D	72.5	1.335	-.2	-.7	69.3	.408
4-5386.7	4-5570	.406	88.8	-10.1	-3.6	1.209	109.6	.340	.767	259.4	554.6	.507	1.028	82.7	.822	-2.5	-21.7	205.8	.201
		12.36	9.40	4.68	2.96	6.37	4.72	12.59	1/1/2	109.1	117.3	21.5	.365	5.353	26.5	351.6	25.8	91.4D	1.587

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4-4900	4-5260	.169	187.7	8.5	1.7	1.089	98.8	.233	1.211	310.5	576.3	.929	1.494	80.3	.770	.7	-20.1	260.6	.136
4-5260	4-5368.0	.311	292.6	-26.1	-2.0	.570	98.3	.556	.914	186.7	256.4	.406A	1.423D	58.1	1.289	-.5	-.7	59.9	.679
4-5368.0	4-5460	.679	56.1	4.8	2.8	1.330	120.9	.568	1.013	264.5	484.2	.458	1.568A	124.6	.998	-5.0	-16.9	202.1	.583
		14.26	11.33	4.27	2.93	6.34	7.06	20.60	2/1/2	125.2	18.8	6.7	.130	17.118	124.9	336.8	54.9	91.0D	2.103
4-4910	4-5260	.146	191.2	9.4	1.7	1.092	97.1	.220	1.214	318.6	574.7	.948	1.481	81.3	.772	.3	-21.8	264.6	.128
4-5260	4-5372	.286	291.4	-26.6	-2.0	.594	98.3	.518	.938	187.9	264.0	.452A	1.425D	61.4	1.301	-.4	-.6	62.6	.617
4-5372	4-5470	.617	62.4	3.5	1.9	1.304	118.5	.519	.945	264.6	487.7	.455	1.435A	121.0	.960	-4.5	-19.8	209.5	.515
		13.17	10.44	4.00	2.73	6.14	6.45	18.92	2/1/2	121.4	20.7	4.4	.158	26.257	93.7	11.9	85.3	88.8L	3.992
4-4920	4-5260	.126	193.7	11.7	1.8	1.096	95.5	.209	1.217	327.2	573.2	.963	1.471	82.1	.773	.0	-23.9	268.3	.121
4-5260	4-5375.8	.269	289.8	-27.2	-2.0	.614	98.5	.487	.960	189.2	271.2	.493A	1.427D	64.3	1.311	-.4	-.9	65.0	.562
4-5375.8	4-5480	.562	68.2	2.1	1.0	1.282	116.3	.475	.897	264.6	491.5	.471	1.323A	117.4	.927	-4.0	-22.3	216.7	.453
		12.55	9.76	3.79	2.59	6.01	5.96	17.45	2/1/2	118.0	22.9	4.4	.190	25.918	83.4	337.2	-43.4	89.0L	4.745
4-4930	4-5260	.111	194.6	16.0	2.0	1.098	94.0	.201	1.219	336.0	572.0	.973	1.464	82.7	.774	-.4	-26.4	271.4	.116
4-5260	4-5379.2	.254	288.2	-27.6	-1.9	.630	98.7	.461	.979	190.4	276.0	.526A	1.430D	66.8	1.319	-.4	-1.0	67.0	.514
4-5379.2	4-5490	.514	73.7	.6	.3	1.265	114.3	.437	.862	265.0	495.7	.486	1.238A	113.9	.901	-3.5	-24.4	223.6	.396
		11.74	9.24	3.65	2.50	5.92	5.59	16.18	2/1/2	115.1	25.7	6.8	.228	16.840	13.4	340.3	-13.4	91.0D	3.605
4-4940	4-5260	.102	193.7	22.8	2.3	1.100	92.4	.196	1.220	345.2	571.0	.981	1.460	83.1	.774	-.9	-29.8	273.9	.113
4-5260	4-5382.4	.243	286.5	-28.0	-1.9	.643	98.8	.440	.995	191.6	284.2	.558A	1.433D	69.0	1.326	-.4	-1.1	68.7	.473
4-5382.4	4-5500	.473	78.6	-1.1	-.4	1.252	112.5	.403	.836	265.3	500.4	.499	1.173A	110.4	.880	-3.1	-26.1	229.9	.345
		11.33	8.87	3.58	2.46	5.87	5.29	15.10	2/1/2	112.9	29.1	9.9	.269	11.561	1.1	343.7	-.1	92.7D	2.843
4-4950	4-5260	.101	191.2	31.8	2.9	1.102	90.9	.194	1.220	354.6	570.3	.984	1.457	83.3	.774	-1.6	-34.7	275.8	.113
4-5260	4-5385.2	.234	285.0	-28.4	-1.8	.654	99.0	.423	1.009	192.7	289.9	.582A	1.436D	70.8	1.332	-.4	-1.2	70.1	.437
4-5385.2	4-5510	.437	83.1	-2.8	-1.1	1.241	111.0	.374	.817	265.5	505.7	.512	1.122A	106.9	.863	-2.7	-27.4	235.3	.298
		11.10	8.64	3.57	2.46	5.87	5.07	14.20	2/1/2	111.2	33.5	13.2	.314	8.726	7.2	346.8	6.9	94.0D	2.427
4-4960	4-5260	.115	189.0	42.5	3.9	1.102	89.3	.194	1.219	4.3	209.9	.983D	1.455	83.4	.774	-2.8	-42.2	277.2	.117
4-5260	4-5387.7	.227	283.7	-28.6	-1.8	.662	99.2	.410	1.020	193.7	294.8	.601A	1.438D	72.4	1.336	-.4	-1.4	71.1	.409
4-5387.7	4-5520	.409	87.0	-4.5	-1.6	1.233	109.7	.349	.803	265.7	511.5	.522	1.083A	103.5	.850	-2.4	-26.4	239.3	.257
		11.11	8.57	3.67	2.53	5.95	4.90	13.46	2/1/2	109.7	39.2	16.3	.360	7.064	11.6	349.6	11.3	95.1D	2.164
4-4970	4-5260	.151	192.8	55.7	6.4	1.102	87.7	.196	1.217	14.3	209.7	.978D	1.455	83.3	.773	-5.4	-55.7	279.0	.136
4-5260	4-5389.7	.222	282.7	-28.8	-1.8	.668	99.3	.401	1.028	194.4	298.8	.616A	1.440D	73.6	1.339	-.4	-1.5	71.7	.386
4-5389.7	4-5530	.386	90.3	-6.1	-2.0	1.226	108.6	.330	.792	265.9	517.9	.531	1.053A	100.1	.840	-2.2	-29.1	241.2	.220
		11.71	8.84	4.06	2.87	6.28	4.78	12.87	2/1/2	107.3	46.9	19.1	.404	6.029	14.8	352.0	14.2	95.9D	2.030
4-5000	4-5260	.194	141.3	-25.5	-6.4	1.094	82.3	.222	1.198	45.2	209.6	.932D	1.464	82.2	.764	6.9	10.7	271.9	.160
4-5260	4-5391.7	.218	281.7	-28.9	-1.8	.673	99.4	.392	1.036	195.2	302.6	.629A	1.442D	74.7	1.342	-.4	-1.6	72.3	.365
4-5391.7	4-5560	.365	94.5	-9.8	-3.1	1.215	107.6	.309	.774	264.2	541.7	.535	1.013	89.2	.827	-1.9	-27.0	224.1	.164
		12.67	9.30	4.61	3.37	6.78	4.66	12.11	1/1/2	109.7	90.3	23.5	.451	4.907	21.2	355.4	20.4	93.4D	1.762
4-5010	4-5260	.197	151.7	-11.8	-3.9	1.089	80.3	.237	1.187	55.2	209.8	.905D	1.466	81.6	.759	4.3	-1.7	269.8	.149
4-5260	4-5389.3	.223	282.9	-28.8	-1.8	.667	99.3	.402	1.027	194.3	298.0	.613A	1.440D	73.4	1.339	-.4	-1.4	71.6	.390
4-5389.3	4-5570	.390	92.2	-10.3	-3.5	1.211	108.8	.327	.770	261.3	552.2	.518	1.022	84.2	.825	-2.2	-23.0	210.9	.187
		12.59	9.46	4.65	3.14	6.54	4.81	12.40	1/1/2	114.6	112.4	22.3	.395	5.178	24.2	354.4	23.4	92.8D	1.650

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4-4910	4-5270	.154	193.3	7.9	1.8	1.093	97.7	.226	1.216	316.1	578.3	.941	1.490	80.3	.777	.3	-22.0	263.8	.141
4-5270	4-5373.2	.301	287.7	-27.0	-2.0	.604	102.4	.524	.942	191.8	263.6	.449A	1.435D	61.1	1.303	-.7	-1.2	64.7	.624
4-5373.2	4-5470	.624	63.9	3.6	2.0	1.310	118.7	.526	.960	265.4	486.5	.455	1.466A	121.6	.969	-4.6	-20.1	210.2	.527
		13.86	10.69	4.09	2.98	6.38	6.79	19.20	2/1/2	128.3	20.0	4.9	.154	23.329	99.4	356.0	79.9	89.2L	3.447
4-4920	4-5270	.133	195.9	9.8	1.8	1.096	96.0	.214	1.218	324.8	576.9	.958	1.479	81.2	.779	.0	-25.8	267.0	.132
4-5270	4-5376.9	.282	285.8	-27.5	-2.0	.625	102.3	.491	.965	193.3	271.1	.491A	1.439D	64.0	1.313	-.6	-1.3	66.9	.567
4-5376.9	4-5480	.567	69.7	2.2	1.1	1.288	116.5	.481	.908	265.5	490.3	.471	1.344A	118.0	.935	-4.1	-22.5	217.6	.463
		12.96	10.16	3.86	2.80	6.21	6.31	17.68	2/1/2	125.3	22.2	4.5	.187	25.414	91.3	358.9	-51.3	89.2L	4.560
4-4930	4-5270	.116	197.2	13.5	2.0	1.099	94.4	.205	1.220	333.7	575.7	.970	1.471	81.8	.779	-.3	-26.1	269.8	.125
4-5270	4-5380.4	.268	283.8	-27.9	-1.9	.642	102.2	.465	.985	194.9	278.1	.527A	1.443D	66.6	1.322	-.6	-1.5	68.8	.518
4-5380.4	4-5490	.518	75.2	.6	.3	1.270	114.4	.441	.870	265.7	494.6	.486	1.253A	114.4	.907	-3.6	-24.5	224.5	.405
		12.30	9.62	3.70	2.68	6.09	5.93	16.37	2/1/2	122.7	24.8	6.7	.224	17.144	18.0	341.8	-18.0	91.2D	3.617
4-4940	4-5270	.104	196.5	19.3	2.2	1.101	92.8	.199	1.222	342.8	574.8	.979	1.465	82.5	.780	-.8	-29.0	272.1	.122
4-5270	4-5383.5	.256	281.9	-28.2	-1.9	.655	102.2	.444	1.003	196.3	284.6	.558A	1.447D	68.9	1.329	-.6	-1.6	70.4	.475
4-5383.5	4-5500	.475	80.2	-1.1	-.5	1.255	112.6	.406	.842	265.9	499.3	.500	1.184A	110.9	.885	-3.1	-26.2	231.0	.352
		11.84	9.24	3.60	2.61	6.02	5.64	15.25	2/1/2	120.6	28.2	9.8	.266	11.694	5.3	345.2	-3.0	93.0D	2.845
4-4950	4-5270	.100	193.9	27.3	2.6	1.102	91.3	.196	1.222	352.3	574.1	.983	1.461	82.5	.780	-1.4	-32.9	273.8	.120
4-5270	4-5386.4	.248	280.2	-28.4	-1.8	.666	102.3	.427	1.017	197.6	290.5	.583A	1.451D	70.8	1.335	-.6	-1.8	71.6	.439
4-5386.4	4-5510	.439	84.7	-2.9	-1.1	1.244	111.0	.376	.822	266.2	504.5	.513	1.130A	107.4	.867	-2.7	-27.4	236.6	.304
		11.57	8.99	3.56	2.58	6.00	5.42	14.31	2/1/2	118.9	32.4	12.1	.312	8.753	5.2	348.3	4.7	94.4D	2.416

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445270
27 OCT 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-4960	4-5270	.106	190.5	36.7	3.3	1.103	89.7	.195	1.221	2.0	213.6	.984D	1.459	82.7	.780	-2.3	-38.4	275.0	.122
4-5270	4-5388.9	.241	278.8	-28.6	-1.8	.674	102.3	.414	1.029	198.7	295.6	.603A	1.455D	72.4	1.340	-.6	-2.0	72.4	.409
4-5388.9	4-5520	.409	88.6	-4.6	-1.6	1.235	109.7	.350	.806	266.4	510.2	.524	1.089A	104.0	.853	-2.4	-28.4	240.9	.262
		11.49	8.87	3.61	2.62	6.04	5.26	13.54	2/1/2	117.5	37.9	16.3	.359	7.040	9.9	351.1	9.3	95.6D	2.167
4-4970	4-5270	.128	189.4	47.4	4.8	1.102	88.1	.196	1.219	11.9	213.4	.980D	1.459	82.6	.779	-3.9	-47.4	275.9	.131
4-5270	4-5390.9	.237	277.7	-26.7	-1.7	.681	102.4	.404	1.038	199.6	299.8	.619A	1.458D	73.7	1.343	-.6	-2.1	73.0	.386
4-5390.9	4-5530	.386	91.9	-6.2	-2.1	1.229	106.6	.330	.795	266.5	516.6	.533	1.058A	100.6	.843	-2.1	-29.0	243.2	.224
		11.74	8.96	3.81	2.79	6.20	5.14	12.94	2/1/2	115.7	45.1	19.3	.404	5.977	13.1	353.4	12.4	96.5D	2.011
4-4980	4-5270	.196	199.7	61.9	8.9	1.101	86.4	.201	1.216	21.8	213.2	.972D	1.460	82.5	.777	-8.2	-64.4	279.3	.169
4-5270	4-5392.5	.234	276.8	-26.7	-1.7	.685	102.4	.398	1.045	200.3	303.0	.629A	1.460D	74.7	1.346	-.6	-2.3	73.4	.369
4-5392.5	4-5540	.369	94.5	-7.7	-2.4	1.224	107.8	.315	.787	266.5	523.6	.54C	1.035A	97.2	.836	-1.9	-29.3	242.6	.193
		13.26	9.70	4.65	3.56	6.96	5.07	12.48	2/1/2	110.4	55.0	21.7	.442	5.308	15.5	355.2	14.6	97.1D	1.906
4-5010	4-5270	.201	149.8	-19.6	-5.3	1.091	80.8	.234	1.193	32.4	213.0	.914D	1.472	81.0	.767	5.6	3.0	270.4	.163
4-5270	4-5391.6	.235	277.3	-26.7	-1.7	.683	102.4	.401	1.041	199.9	301.1	.623A	1.459D	74.1	1.344	-.6	-2.2	73.2	.379
4-5391.6	4-5570	.379	95.1	-10.4	-3.4	1.214	108.2	.318	.773	262.8	550.1	.526	1.019	85.4	.827	-2.0	-24.1	215.6	.177
		13.24	9.82	4.70	3.43	6.83	5.11	12.27	1/1/2	116.3	108.1	23.2	.419	4.967	21.8	356.5	20.8	94.3D	1.664
4-5020	4-5270	.216	158.6	-10.3	-3.6	1.085	78.7	.252	1.180	62.1	212.7	.883D	1.477	80.2	.761	3.7	-6.6	268.7	.162
4-5270	4-5375.6	.289	286.5	-27.3	-2.0	.618	102.3	.502	.957	192.6	268.4	.476A	1.438D	63.0	1.309	-.6	-1.3	66.2	.587
4-5375.6	4-5580	.587	77.7	-10.0	-5.5	1.201	116.5	.478	.760	246.4	568.8	.397	1.124	68.3	.817	-4.8	-16.2	193.1	.377
		14.61	11.40	4.93	3.41	6.82	6.47	15.77	1/1/2	122.2	139.7	14.4	.174	7.987	37.7	346.2	37.1	81.5L	1.218
4-5020	4-5270	.216	158.6	-10.3	-3.6	1.085	78.7	.252	1.180	62.1	212.7	.883D	1.477	80.2	.761	3.7	-6.6	268.7	.162
4-5270	4-5383.9	.255	281.7	-26.2	-1.8	.657	102.2	.441	1.004	196.5	285.3	.561A	1.448D	69.1	1.330	-.6	-1.7	70.5	.471
4-5383.9	4-5580	.471	86.8	-10.3	-4.4	1.207	112.7	.390	.766	254.7	564.0	.467	1.064	76.2	.825	-3.2	-18.6	200.3	.270
		13.96	10.54	4.93	3.41	6.82	5.61	13.68	1/1/2	122.2	132.6	16.3	.271	6.278	29.0	351.6	28.2	87.3L	1.451

MARS ARRIVAL DATE = 2445280 (6 NOV 1982)

4-4920	4-5260	.141	198.4	7.7	1.8	1.097	96.6	.220	1.220	321.9	580.3	.952	1.489	80.3	.784	.0	-23.9	267.0	.145
4-5260	4-5376.1	.305	281.2	-27.6	-2.0	.642	106.5	.498	.978	198.3	271.8	.491A	1.466D	63.9	1.319	-.9	-1.8	66.5	.573
4-5376.1	4-5480	.573	71.3	2.2	1.1	1.293	116.6	.487	.919	266.2	469.1	.472	1.367A	118.6	.942	-4.1	-22.7	218.4	.473
		13.90	10.84	3.95	3.06	6.46	6.69	17.92	2/1/2	131.5	21.4	4.9	.183	23.423	55.1	340.2	-55.1	89.6L	4.104
4-4930	4-5260	.122	200.0	10.7	1.9	1.099	94.9	.210	1.222	330.9	579.2	.966	1.479	81.0	.785	-.3	-25.9	269.5	.137
4-5260	4-5381.5	.290	279.1	-27.9	-1.9	.659	106.2	.471	1.000	200.1	279.0	.529A	1.472D	66.6	1.328	-.8	-2.0	70.2	.522
4-5381.5	4-5490	.522	76.7	.6	.3	1.274	114.6	.445	.878	266.4	493.4	.487	1.269A	115.0	.913	-3.6	-24.6	225.4	.413
		13.17	10.26	3.75	2.90	6.31	6.52	16.56	2/1/2	129.2	24.0	7.0	.220	16.399	21.4	343.2	-21.4	91.7D	3.395
4-4940	4-5260	.108	199.7	15.7	2.1	1.101	93.3	.203	1.224	340.1	578.2	.976	1.472	81.5	.785	-.7	-28.3	271.6	.132
4-5260	4-5384.7	.279	277.1	-26.1	-1.8	.672	106.0	.450	1.019	201.8	285.6	.560A	1.477D	68.9	1.335	-.8	-2.1	71.5	.476
4-5384.7	4-5500	.476	81.6	-1.1	-.5	1.259	112.7	.409	.848	266.6	498.1	.501	1.195A	111.4	.890	-3.1	-26.2	232.0	.359
		12.66	9.86	3.63	2.80	6.21	6.23	15.40	2/1/2	127.2	27.2	10.2	.263	11.293	5.9	346.4	-5.7	93.6D	2.705
4-4950	4-5260	.101	197.4	22.8	2.4	1.103	91.7	.198	1.224	349.5	577.5	.982	1.467	81.8	.786	-1.2	-31.4	273.2	.129
4-5260	4-5367.5	.271	275.3	-26.2	-1.8	.684	105.9	.433	1.035	203.4	291.8	.586A	1.483D	70.9	1.341	-.8	-2.4	72.6	.441
4-5367.5	4-5510	.441	86.1	-2.9	-1.1	1.247	111.1	.378	.826	266.8	503.3	.514	1.139A	107.9	.871	-2.7	-27.4	237.8	.310
		12.54	9.59	3.57	2.75	6.16	6.03	14.43	2/1/2	125.7	31.3	13.6	.309	8.459	3.6	349.5	2.4	95.1D	2.305
4-4960	4-5260	.102	193.5	31.3	2.9	1.104	90.1	.196	1.224	359.2	577.1	.984	1.465	82.0	.785	-1.9	-35.6	274.3	.130
4-5260	4-5390.0	.265	273.8	-26.5	-1.7	.692	105.9	.421	1.047	204.6	297.1	.607A	1.468D	72.6	1.346	-.8	-2.6	73.3	.410
4-5390.0	4-5520	.410	90.1	-4.7	-1.6	1.236	109.7	.351	.810	267.0	509.1	.526	1.095A	104.5	.857	-2.3	-26.3	242.4	.267
		12.20	9.45	3.58	2.76	6.17	5.87	13.83	2/1/2	124.3	36.6	16.9	.357	6.798	8.0	352.1	7.1	96.3D	2.071
4-4970	4-5260	.116	190.2	40.4	3.9	1.103	88.5	.197	1.222	9.1	216.7	.981D	1.464	82.0	.785	-3.1	-41.9	275.1	.134
4-5260	4-5392.1	.261	272.7	-26.3	-1.7	.698	105.8	.411	1.057	205.7	301.5	.623A	1.492D	73.9	1.350	-.8	-2.8	73.7	.386
4-5392.1	4-5530	.386	93.5	-6.3	-2.1	1.231	108.5	.330	.798	267.2	515.4	.535	1.062A	101.1	.848	-2.0	-28.9	245.1	.228
		12.30	9.45	3.69	2.85	6.26	5.75	13.00	2/1/2	122.8	43.5	20.0	.404	5.763	11.3	354.4	10.3	97.4D	1.925
4-4980	4-5260	.151	191.8	51.2	6.0	1.102	86.9	.201	1.219	19.0	216.5	.974D	1.464	81.9	.783	-5.4	-52.6	276.3	.151
4-5260	4-5393.7	.256	271.8	-26.3	-1.6	.703	105.8	.404	1.064	206.4	304.9	.634A	1.495D	74.9	1.353	-.8	-2.9	74.0	.366
4-5393.7	4-5540	.366	96.1	-7.8	-2.5	1.226	107.7	.314	.790	267.2	522.4	.542	1.038A	97.7	.839	-1.8	-29.2	245.0	.196
		12.90	9.73	4.05	3.17	6.58	5.67	12.52	2/1/2	119.7	52.9	22.6	.445	5.106	13.7	356.2	12.5	98.1D	1.827
4-5010	4-5260	.222	144.4	-31.3	-7.9	1.093	81.4	.231	1.199	49.2	216.0	.923D	1.476	80.5	.774	8.1	11.0	272.1	.169
4-5260	4-5393.6	.258	271.9	-26.3	-1.6	.702	105.8	.405	1.064	206.4	304.6	.633A	1.495D	74.8	1.352	-.8	-2.9	74.0	.369
4-5393.6	4-5570	.369	97.6	-10.6	-3.4	1.216	107.7	.311	.775	264.0	548.2	.533	1.016	86.3	.829	-1.8	-24.9	220.0	.169
		14.70	10.70	5.02	4.00	7.40	5.68	12.17	1/1/2	119.0	104.0	24.7	.441	4.679	19.4	357.9	18.0	96.0D	1.621
4-5020	4-5260	.213	157.9	-16.5	-4.6	1.087	79.4	.247	1.188	58.8	215.6	.894D	1.481	79.8	.769	4.6	-3.3	270.3	.172
4-5260	4-5388.7	.268	274.6	-26.2	-1.8	.688	105.9	.427	1.041	204.0	294.5	.597A	1.486D	71.7	1.344	-.8	-2.5	72.9	.426
4-5388.7	4-5580	.426	92.6	-10.6	-4.0	1.211	110.5	.355	.770	258.7	560.2	.497	1.043	79.6	.827	-2.5	-20.6	206.5	.227
		14.47	10.83	4.89	3.64	7.04	5.94	12.98	1/1/2	125.5	126.6	21.1	.332	5.457	23.6	355.4	22.6	91.0D	1.479

MARS ARRIVAL DATE = 2445290 (16 NOV 1982)

4-4930	4-5290	.130	203.1	7.8	1.9	1.100	95.6	.216	1.225	327.7	582.2	.961	1.469	80.2	.789	-.3	-25.8	270.3	.150
4-5290	4-5382.7	.325	274.4	-27.7	-1.9	.684	110.7	.481	1.030	206.5	281.1	.534A	1.526D	66.6	1.339	-1.0	-2.4	71.0	.527
4-5382.7	4-5490	.527	78.2	.6	.3	1.279	114.7	.450	.888	267.1	492.2	.488	1.267A	115.5	.920	-3.6	-24.8	226.4	.422
		14.44	11.26	3.84	3.17	6.57	7.44	16.76	2/1/2	134.7	23.2	7.9	.217	14.393	22.9	344.2	-22.9	92.4D	2.945
4-4940	4-5290	.114	203.3	12.0	2.0	1.102	93.9	.207	1.227	336.9	581.3	.972	1.481	80.8	.790	-.7	-27.7	272.2	.144
4-5290	4-5385.8	.314	272.5	-27.8	-1.8	.698	110.3	.461	1.050	208.5	288.0	.566A	1.534D	69.0	1.346	-1.0	-2.7	72.1	.461
4-5385.8	4-5500	.462	83.2	-1.2	-.5	1.263	112.8	.412	.855	267.3	496.9	.503	1.208A	111.9	.895	-3.1	-26.3	233.1	.367
		13.66	10.63	3.66	3.05	6.44	7.15	15.55	2/1/2	132.9	26.3	11.2	.259	10.262	8.0	347.4	-7.8	94.4D	2.407
4-4950	4-5290	.103	201.5	18.1	2.3	1.104	92.3	.202	1.227	346.4	580.6	.980	1.475	81.2	.790	-1.1	-30.3	273.7	.140
4-5290	4-5388.6	.306	270.9	-27.8	-1.8	.708	109.9	.445	1.066	210.1	294.3	.592A	1.541D	71.1	1.352	-1.0	-2.9	72.9	.443
4-5388.6	4-5510	.443	87.6	-3.0	-1.1	1.250	111.1	.380	.831	267.5	502.2	.515	1.147A	108.4	.875	-2.6	-27.4	239.0	.317
		13.47	10.52	3.59	2.96	6.36	6.93	14.55	2/1/2	131.4	30.2	14.7	.306	7.804	3.0	350.3	.2	96.1D	2.084
4-4960	4-5290	.101	197.6	25.8	2.6	1.104	90.7	.199	1.227	356.0	580.1	.983	1.471	81.4	.790	-1.7	-33.8	274.9	.139
4-5290	4-5391.2	.301	269.4	-27.8	-1.7	.717	109.8	.432	1.081	211.7	299.8	.613A	1.548D	72.8	1.357	-1.0	-3.2	73.4	.411
4-5391.2	4-5520	.411	91.6	-4.8	-1.7	1.241	109.7	.353	.814	267.7	507.9	.527	1.102A	105.0	.860	-2.2	-26.2	243.8	.272
		13.29	10.35	3.57	2.93	6.34	6.78	13.73	2/1/2	130.2	35.3	18.3	.355	6.302	6.4	352.9	5.0	97.5D	1.885
4-4970	4-5290	.108	193.2	34.0	3.3	1.105	89.0	.199	1.226	5.8	219.6	.982D	1.470	81.5	.790	-2.5	-38.1	275.7	.141
4-5290	4-5393.5	.296	268.4	-27.7	-1.6	.723	109.6	.423	1.091	212.8	304.3	.629A	1.553D	74.2	1.361	-1.0	-3.4	73.7	.386
4-5393.5	4-5530	.386	95.1	-6.4	-2.1	1.233	108.5	.331	.802	267.8	514.2	.537	1.067A	101.6	.849	-1.9	-28.8	246.9	.233
		13.28	10.30	3.63	2.98	6.39	6.67	13.07	2/1/2	128.9	41.9	21.5	.404	5.357	9.5	355.0	8.1	98.7D	1.760
4-4980	4-5290	.129	191.2	42.8	4.6	1.104	87.4	.201	1.224	15.7	219.5	.977D	1.470	81.4	.789	-4.0	-45.2	276.5	.150
4-5290	4-5395.0	.293	267.5	-27.7	-1.6	.728	109.5	.417	1.099	213.7	307.9	.641A	1.557D	75.3	1.364	-1.0	-3.6	73.7	.367
4-5395.0	4-5540	.367	97.8	-7.9	-2.5	1.228	107.6	.314	.792	267.9	521.1	.544	1.041A	98.2	.841	-1.7	-29.1	247.4	.199
		13.57	10.42	3.82	3.15	6.56	6.59	12.57	2/1/2	126.9	50.9	24.3	.447	4.745	11.8	356.8	10.2	99.6D	1.675
4-4990	4-5290	.164	196.8	54.9	7.8	1.102	85.7	.207	1.220	25.6	219.2	.967D	1.472	81.1	.787	-7.4	-58.3	279.0	.178
4-5290	4-5396.1	.291	267.1	-27.6	-1.6	.730	109.4	.413	1.104	214.3	310.3	.648A	1.560D	76.0	1.365	-1.0	-3.8	73.7	.355
4-5396.1	4-5550	.355	99.8	-9.2	-2.8	1.224	107.0	.302	.786	267.7	528.7	.548	1.023A	94.8	.836	-1.6	-29.0	244.1	.173
		14.76	11.01	4.46	3.75	7.15	6.54	12.23	2/1/2	121.4	63.2	26.4	.478	4.375	13.7	358.1	11.9	100.0D	1.614

MARS ARRIVAL DATE = 2445300 (26 NOV 1982)

4-4960	4-5300	.101	202.5	20.2	2.4	1.106	91.3	.202	1.231	352.5	582.9	.982	1.480	80.8	.795	-1.5	-32.0	276.4	.149
4-5300	4-5392.4	.349	265.9	-27.2	-1.7	.752	114.0	.453	1.139	220.0	303.9	.623A	1.654D	73.3	1.375	-1.2	-3.8	72.6	.413
4-5392.4	4-5520	.413	93.3	-4.9	-1.7	1.244	109.7	.355	.819	268.4	506.6	.529	1.109A	105.5	.864	-2.2	-28.1	245.4	.278
		14.81	11.66	3.57	3.15	6.55	8.09	13.83	2/1/2	135.2	33.9	20.7	.353	5.567	5.3	353.2	2.9	99.2D	1.613
4-4970	4-5300	.103	197.7	27.9	2.9	1.106	89.6	.201	1.230	2.3	222.5	.983D	1.477	81.0	.794	-2.2	-35.4	277.3	.150
4-5300	4-5394.6	.345	265.0	-27.1	-1.6	.758	113.7	.444	1.150	221.3	308.6	.639A	1.661D	74.8	1.378	-1.2	-4.1	72.8	.386
4-5394.6	4-5530	.386	96.8	-6.6	-2.2	1.236	108.5	.331	.805	268.6	512.8	.539	1.072A	102.1	.852	-1.8	-28.6	248.8	.238
		14.72	11.56	3.59	3.16	6.56	7.97	13.15	2/1/2	134.1	40.2	24.3	.404	4.761	8.0	356.2	5.9	100.6D	1.517

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445300
26 NOV 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-4960	4-5300	.117	193.7	35.8	3.7	1.105	88.0	.202	1.228	12.1	222.2	.980D	1.477	80.9	.794	-3.2	-40.3	278.0	.155
4-5300	4-5396.4	.342	264.3	-27.0	-1.5	.762	113.6	.438	1.156	222.2	312.4	.851A	1.666D	76.0	1.361	-1.2	-4.3	72.4	.366
4-5396.4	4-5540	.366	99.7	-8.1	-2.5	1.230	107.5	.315	.796	266.7	319.6	.546	1.045A	98.8	.844	-1.6	-26.8	249.9	.203
		14.84	11.59	3.70	3.25	6.66	7.68	12.65	2/1/2	152.6	48.7	27.3	.449	4.230	10.2	356.9	7.9	101.7D	1.452

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445150 (29 JUN 1982)																			
4-4880	4-5150	.198	169.1	5.7	.2	1.090	100.6	.261	1.231	304.3	528.5	.910	1.552A	94.0	.697	1.7	-15.8	285.4	.162
4-5150	4-5361.3	.294	280.6	-27.9	-2.1	.604	77.4	.480	1.071	165.6	286.2	.557A	1.586	67.9	1.349	1.7	4.2	33.9	.510
4-5361.3	4-5480	.510	49.2	1.8	.8	1.226	114.7	.426	.800	256.5	506.1	.459	1.140A	110.1	.852	-3.6	-19.1	204.3	.344
		14.68	11.28	4.66	3.40	6.80	6.62	15.09	2/1/2	40.5	34.8	15.5	.231	7.428	9.4	311.1	8.9	91.7D	1.486
4-4890	4-5150	.182	174.4	3.8	.2	1.096	99.5	.255	1.243	310.1	524.4	.926	1.560A	95.2	.703	1.7	-15.8	289.9	.171
4-5150	4-5364.3	.284	281.0	-26.5	-2.3	.611	78.2	.464	1.081	165.6	291.1	.579A	1.583	69.6	1.353	1.8	4.8	35.9	.477
4-5364.3	4-5490	.477	54.0	.5	.2	1.217	113.2	.400	.785	256.6	511.0	.471	1.099A	106.6	.836	-3.4	-21.5	208.4	.300
		14.40	10.80	4.45	3.60	7.00	6.35	14.24	2/1/2	36.0	39.9	18.5	.265	6.208	13.7	314.3	13.5	93.2D	1.379
4-4900	4-5150	.166	179.3	2.4	.3	1.102	98.4	.252	1.255	316.1	520.5	.939	1.571A	96.3	.708	1.6	-15.9	293.7	.180
4-5150	4-5366.9	.276	281.2	-29.0	-2.5	.616	78.7	.452	1.088	165.7	295.2	.597A	1.580	71.1	1.355	1.9	5.4	37.5	.449
4-5366.9	4-5500	.449	58.1	-.9	-.4	1.210	112.0	.378	.774	256.7	516.5	.481	1.067A	103.0	.823	-3.3	-23.4	210.9	.261
		14.21	10.41	4.26	3.80	7.20	6.15	13.54	2/1/2	32.4	46.6	21.5	.298	5.357	17.4	317.1	17.3	94.4D	1.299
4-4910	4-5150	.154	183.7	2.3	.5	1.108	97.2	.249	1.267	322.5	516.9	.951	1.582A	97.2	.714	1.4	-16.4	297.0	.188
4-5150	4-5366.9	.271	281.4	-29.5	-2.6	.620	79.2	.443	1.094	165.7	298.5	.610A	1.579	72.2	1.357	2.0	6.0	38.6	.428
4-5366.9	4-5510	.428	61.4	-2.4	-.9	1.204	111.0	.362	.765	256.6	522.8	.489	1.042A	99.3	.814	-3.2	-24.6	210.9	.228
		14.08	10.10	4.09	3.98	7.38	6.00	12.99	2/1/2	29.3	55.6	24.3	.328	4.759	20.6	319.3	20.5	95.2D	1.233
4-4920	4-5150	.144	190.0	9.4	1.6	1.113	96.0	.247	1.278	329.2	513.6	.962	1.594A	98.0	.718	.2	-20.2	300.4	.195
4-5150	4-5370.2	.267	281.5	-29.8	-2.7	.622	79.4	.437	1.098	165.8	300.6	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.415
4-5370.2	4-5520	.415	63.7	-3.9	-1.5	1.200	110.4	.351	.759	256.2	529.9	.493	1.025A	95.4	.806	-3.2	-24.7	207.2	.202
		14.04	9.89	3.98	4.15	7.54	5.91	12.61	2/1/2	26.4	68.0	26.5	.348	4.367	25.3	320.9	25.3	95.5D	1.173
4-4930	4-5150	.130	181.6	-12.4	-1.3	1.118	94.6	.246	1.288	336.3	510.6	.971	1.606A	98.7	.723	3.1	-10.1	300.0	.206
4-5150	4-5370.3	.267	281.5	-29.9	-2.7	.623	79.4	.437	1.098	165.8	300.8	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.414
4-5370.3	4-5530	.414	64.4	-5.4	-2.0	1.196	110.4	.350	.753	255.3	530.2	.490	1.017A	91.0	.801	-3.2	-22.8	198.9	.191
		14.15	9.74	3.84	4.41	7.80	5.91	12.46	1/1/2	26.8	85.2	27.7	.350	4.179	25.6	321.6	25.6	95.0D	1.113
4-4940	4-5150	.118	183.1	-6.1	-.5	1.122	93.1	.246	1.297	344.0	508.1	.978	1.617A	99.3	.727	2.3	-12.6	302.3	.211
4-5150	4-5367.8	.274	281.3	-29.2	-2.5	.616	78.9	.448	1.091	165.7	296.7	.603A	1.580	71.6	1.356	1.9	5.7	38.0	.439
4-5367.8	4-5540	.439	61.8	-6.7	-2.7	1.191	111.6	.369	.748	252.5	549.0	.472	1.023	84.8	.795	-3.6	-17.2	185.4	.212
		14.31	9.80	3.72	4.51	7.90	6.08	12.75	1/1/2	24.3	108.3	26.6	.311	4.315	27.7	320.2	27.7	92.7D	1.032
MARS ARRIVAL DATE = 2445160 (9 JUL 1982)																			
4-4880	4-5160	.191	169.3	6.9	.4	1.087	100.3	.253	1.222	304.6	533.9	.913	1.531A	92.0	.701	1.6	-15.7	284.2	.146
4-5160	4-5362.8	.291	284.0	-27.7	-2.1	.603	78.5	.479	1.058	166.9	284.7	.551A	1.564	67.6	1.345	1.5	3.7	37.1	.514
4-5362.8	4-5480	.514	51.1	1.8	.8	1.231	114.8	.429	.807	257.3	504.7	.461	1.153A	110.9	.858	-3.6	-19.5	205.8	.354
		14.18	11.09	4.57	3.08	6.49	6.53	15.29	2/1/2	46.6	33.3	14.2	.228	8.102	8.1	313.7	7.8	91.4D	1.618
4-4890	4-5160	.175	174.6	5.4	.5	1.093	99.2	.246	1.232	310.6	530.1	.929	1.535A	93.2	.706	1.5	-15.9	289.4	.154
4-5160	4-5365.9	.280	284.3	-28.2	-2.3	.611	79.3	.462	1.068	167.0	289.7	.574A	1.562	69.4	1.349	1.6	4.2	39.1	.479
4-5365.9	4-5490	.479	56.0	.5	.2	1.221	113.3	.402	.791	257.5	509.4	.473	1.109A	107.4	.842	-3.5	-21.9	210.3	.309
		13.83	10.60	4.35	3.24	6.64	6.25	14.40	2/1/2	41.6	38.1	17.3	.262	6.668	12.7	317.0	12.5	92.9D	1.485
4-4900	4-5160	.160	179.4	4.6	.6	1.098	98.0	.241	1.242	316.9	526.4	.943	1.542A	94.2	.710	1.3	-16.3	293.7	.161
4-5160	4-5368.5	.272	284.5	-28.7	-2.4	.617	79.9	.449	1.076	167.1	294.1	.593A	1.559	70.9	1.352	1.7	4.8	40.8	.450
4-5368.5	4-5500	.450	60.2	-.9	-.4	1.213	112.0	.380	.779	257.6	514.8	.483	1.075A	103.8	.826	-3.3	-23.9	213.3	.269
		13.58	10.19	4.16	3.39	6.80	6.03	13.66	2/1/2	37.5	44.3	20.3	.297	5.684	16.6	319.9	16.4	94.2D	1.390
4-4910	4-5160	.146	183.9	5.4	.9	1.104	96.8	.237	1.252	323.4	523.0	.955	1.549A	95.1	.715	1.0	-17.2	297.4	.168
4-5160	4-5370.7	.265	284.7	-29.2	-2.5	.621	80.3	.439	1.082	167.2	297.6	.607A	1.558	72.1	1.354	1.8	5.3	42.0	.428
4-5370.7	4-5510	.428	63.7	-2.4	-.9	1.208	110.9	.361	.770	257.5	520.9	.492	1.048A	100.2	.818	-3.2	-25.3	214.1	.234
		13.41	9.87	4.00	3.54	6.94	5.87	13.08	2/1/2	34.0	52.6	23.1	.329	5.000	19.8	322.3	19.8	95.1D	1.315
4-4920	4-5160	.135	189.3	11.7	1.7	1.109	95.5	.234	1.261	330.4	519.9	.965	1.556A	95.9	.719	.1	-20.4	301.0	.174
4-5160	4-5372.2	.261	284.8	-29.5	-2.6	.624	80.6	.433	1.087	167.3	300.1	.616A	1.557	72.9	1.356	1.8	5.8	42.7	.413
4-5372.2	4-5520	.413	66.3	-4.0	-1.5	1.203	110.2	.349	.763	257.3	527.8	.497	1.029A	96.4	.811	-3.1	-25.7	211.8	.206
		13.33	9.65	3.88	3.68	7.08	5.77	12.66	2/1/2	31.1	64.0	25.4	.353	4.541	22.7	324.2	22.6	95.3D	1.251
4-4940	4-5160	.113	175.6	-15.1	-1.6	1.116	92.7	.232	1.276	345.7	515.0	.980	1.571A	97.0	.725	3.4	-7.7	301.6	.191
4-5160	4-5371.3	.264	284.7	-29.3	-2.6	.622	80.5	.437	1.084	167.2	298.6	.611A	1.557	72.4	1.355	1.8	5.5	42.3	.421
4-5371.3	4-5540	.422	66.3	-6.8	-2.5	1.195	110.7	.354	.752	254.6	545.5	.485	1.018	87.0	.800	-3.3	-20.5	192.6	.197
		13.54	9.50	3.67	4.04	7.44	5.63	12.53	1/1/2	30.4	100.8	26.9	.338	4.294	27.3	324.6	27.2	93.6D	1.115
MARS ARRIVAL DATE = 2445170 (19 JUL 1982)																			
4-4870	4-5170	.205	164.0	9.6	.5	1.080	101.3	.256	1.207	298.8	543.2	.898	1.516	88.9	.701	1.6	-15.3	274.7	.129
4-5170	4-5360.7	.301	286.6	-26.9	-1.9	.593	78.8	.499	1.032	166.3	277.5	.517A	1.547	65.1	1.336	1.3	2.8	37.6	.560
4-5360.7	4-5470	.560	47.5	3.0	1.5	1.248	116.7	.465	.837	257.9	499.0	.446	1.226A	115.2	.886	-3.9	-17.1	201.5	.414
		14.29	11.55	4.76	2.74	6.15	6.78	16.57	2/1/2	60.9	28.4	9.9	.192	11.627	3.1	312.6	-1.1	89.1L	2.040
4-4880	4-5170	.186	169.8	8.0	.6	1.085	100.1	.247	1.215	304.8	539.3	.916	1.515A	90.2	.706	1.5	-15.7	282.0	.133
4-5170	4-5364.2	.287	287.0	-27.4	-2.1	.603	79.7	.476	1.044	168.3	283.2	.545A	1.544	67.2	1.341	1.3	3.2	40.2	.516
4-5364.2	4-5480	.516	53.0	1.8	.8	1.236	114.9	.433	.814	258.1	503.2	.462	1.167A	111.6	.865	-3.7	-19.9	207.2	.364
		13.76	10.93	4.50	2.85	6.24	6.43	15.49	2/1/2	53.9	32.0	12.9	.224	8.910	6.6	316.3	6.1	91.0D	1.774
4-4890	4-5170	.169	174.8	6.7	.6	1.090	98.9	.239	1.224	311.0	535.7	.932	1.516A	91.4	.710	1.3	-16.1	288.0	.139
4-5170	4-5367.3	.276	287.3	-27.9	-2.2	.611	80.5	.460	1.055	168.5	288.3	.569A	1.541	69.1	1.345	1.4	3.8	42.3	.462
4-5367.3	4-5490	.462	58.0	.5	.2	1.225	113.4	.405	.797	258.3	507.9	.475	1.120A	108.1	.847	-3.5	-22.5	212.0	.318
		13.35	10.41	4.28	2.94	6.35	6.13	14.57	2/1/2	48.2	36.4	16.0	.259	7.201	11.6	319.7	11.4	92.6D	1.606
4-4900	4-5170	.153	179.5	6.4	.8	1.095	97.7	.233	1.232	317.4	532.2	.946	1.519A	92.3	.714	1.1	-16.8	292.9	.145
4-5170	4-5370.1	.267	287.5	-26.4	-2.3	.617	81.1	.446	1.064	168.6	292.9	.589A	1.539	70.7	1.348	1.5	4.1	44.0	.452
4-5370.1	4-5500	.452	62.3	-1.0	-.4	1.217	112.0	.381	.784	258.4	513.2	.486	1.083A	104.6	.834	-3.3	-24.3	215.6	.276
		13.05	9.99	4.08	3.06	6.47	5.90	13.80	2/1/2	43.5	42.2	19.0	.295	6.058	15.6	322.7	15.6	93.9D	1.492
4-4910	4-5170	.139	183.8	7.7	1.1	1.100	96.4	.228	1.240	324.2	529.0	.958	1.523A	93.2	.717	.8	-17.7	297.0	.151
4-5170	4-5372.4	.260	287.7	-26.8	-2.5	.622	81.6	.436	1.071	168.8	296.7	.604A	1.537	72.0	1.351	1.5	4.6	45.3	.427
4-5372.4	4-5510	.427	66.0	-2.5	-.9	1.211	110.9	.362	.774	258.4	519.1	.494	1.054A	101.0	.823	-3.1	-25.8	217.1	.240
		12.83	9.65	3.92	3.17	6.58	5.73	13.18	2/1/2	39.6	49.8	21.9	.329	5.272	19.0	325.3	19.0	94.9D	1.406
4-4920	4-5170	.128	188.5	13.3	1.8	1.105	95.1	.224	1.248	331.4	526.2	.968	1.528A	93.9	.721	.1	-20.6	300.8	.156
4-5170	4-5374.1	.255	287.7	-29.2	-2.6	.625	81.9	.428	1.076	168.9	299.4	.615A	1.536	72.9	1.352	1.6	5.0	46.2	.410
4-5374.1	4-5520	.410	66.8	-4.0	-1.5	1.206	110.1	.347	.767	258.3	525.8	.500	1.033A	97.3	.815	-3.0	-26.5	215.6	.210
		12.70	9.42	3.81	3.28	6.68	5.61	12.72	2/1/2	36.5	60.3	24.4	.357	4.740	21.9	327.3	21.9	95.4D	1.335
4-4930	4-5170	.152	204.5	39.2	5.6	1.109	93.8	.222	1.254	339.1	523.8	.976	1.532A	94.5	.723	-3.7	-36.3	307.1	.166
4-5170	4-5374.9	.253	287.8	-29.4	-2.6	.627	82.0	.425	1.078	168.9	300.8	.620A	1.536	73.3	1.353	1.6	5.2	46.6	.402
4-5374.9	4-5530	.402	70.4	-5.5	-1.9	1.202	109.7	.340	.761	257.7	533.4	.502	1.020A	93.4	.809	-3.0	-25.9	209.9	.189
		13.17	9.62	4.06	3.55	6.95	5.56	12.43	2/1/2	37.9	74.7	26.1	.371	4.421	24.4	328.5	24.4	95.3D	1.270
4-4940	4-5170	.135	159.3	-36.8	-4.8	1.112	92.3	.220	1.259	347.3	521.9	.982	1.536A	95.0	.726	6.6	5.3	297.8	.187
4-5170	4-5374.2	.255	287.7	-29.2	-2.6	.626	81.9	.426	1.076	168.9	299.7	.616A	1.536	72.9	1.353	1.6	5.1	46.2	.409
4-5374.2	4-5540	.409	70.1	-6.6	-2.5	1.198	110.0	.345	.756	256.2	542.6	.495	1.016	86.6	.804	-3.1	-22.7	199.2	.188
		13.44	9.49	3.88	3.95	7.35	5.60	12.41	1/1/2	42.0	94.2	26.7	.359	4.337	26.7	328.6	26.6	94.2D	1.199
4-4950	4-5170	.103	166.3	-14.4	-1.7	1.114	90.7	.220	1.262	356.1	520.5	.984	1.540A	95.3	.727	3.4	-5.9	302.2	.174
4-5170	4-5369.0	.270	287.5	-28.2	-2.3	.615	80.6	.452	1.060	168.5	291.0	.581A	1.540	70.0	1.347	1.4	3.9	43.3	.464
4-5369.0	4-5550	.464	64.3	-7.9	-3.3	1.192	112.7	.387	.749	251.4	555.6	.459	1.038	80.6	.797	-3.9	-15.2	183.0	.241
		13.25	9.58	3.86	3.67	7.07	6.00	13.21	1/1/2	34.7	120.5	24.0	.279	4.809	29.7	324.9	29.6	90.0D	1.084
MARS ARRIVAL DATE = 2445180 (29 JUL 1982)																			
4-4870	4-5180	.203	164.4	10.4	.7	1.078	101.2	.253	1.203	298.6	548.3	.898	1.507	87.2	.708	1.5	-15.1	270.7	.121
4-5180	4-5362.0	.297	289.5	-26.6	-1.9	.591	80.0	.500	1.018	169.7	275.8	.509A	1.526	64.7	1.331	1.1	2.4	40.7	.565
4-5362.0	4-5470	.565	49.3	3.0	1.5	1.254	116.9	.470	.847	258.7	497.6	.449	1.245A	115.9	.894	-3.9	-17.5	202.6	.425
		14.03	11.43	4.74	2.60	6.01	6.89	16.82	2/1/2	70.0	27.4	8.6	.188	13.312	5.1	315.2	-4.3	88.7L	2.317
4-4880	4-5180	.183	170.0	8.9	.7	1.083	99.9	.242	1.210	304.8	544.7	.917	1.503	88.5	.711	1.4	-15.7	278.8	.125
4-5180	4-5365.6	.283	289.8	-27.1	-2.0	.602	81.0	.477	1.031	169.9	281.6	.539A	1.525	66.9	1.336	1.1	2.7	43.3	.522
4-5365.6	4-5480	.522	54.8	1.8	.9	1.240	115.1	.437	.822	258.9	501.8	.463	1.181A	112.4	.871	-3.7	-20.2	208.5	.374
		13.42	10.78	4.48	2.64	6.06	6.52	15.70	2/1/2	62.3	30.7	11.6	.221	9.891	4.6	318.9	4.2	90.7D	1.961

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445180
29 JUL 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-4890	4-5180	.165	175.1	7.9	.8	1.088	98.7	.234	1.218	311.2	541.2	.933	1.502	89.6	.715	1.2	-16.3	285.5	.127
4-5180	4-5368.8	.271	290.0	-27.6	-2.2	.611	81.8	.459	1.043	170.0	286.9	.564A	1.521	68.8	1.341	1.2	3.1	45.4	.465
4-5368.8	4-5490	.485	59.9	.5	.2	1.250	113.4	.408	.804	259.1	506.4	.476	1.131A	108.9	.853	-3.5	-22.7	213.7	.326
		12.95	10.24	4.23	2.71	6.12	6.01	14.74	2/1/2	55.8	34.9	14.7	.256	7.826	10.3	322.4	10.1	92.3D	1.747
4-4900	4-5180	.149	179.7	7.8	1.0	1.093	97.4	.226	1.225	317.8	537.9	.947	1.502A	90.6	.718	1.0	-17.0	291.0	.131
4-5180	4-5371.7	.261	290.2	-28.0	-2.3	.618	82.4	.444	1.052	170.2	291.6	.585A	1.519	70.5	1.344	1.2	3.5	47.2	.453
4-5371.7	4-5500	.453	64.4	-1.0	-.4	1.221	112.0	.383	.790	259.3	511.5	.488	1.092A	105.4	.839	-3.5	-24.7	217.7	.284
		12.59	9.80	4.03	2.79	6.20	5.77	13.93	2/1/2	50.6	40.2	17.7	.293	6.487	14.6	329.5	14.6	93.6D	1.606
4-4910	4-5180	.134	183.6	9.4	1.2	1.098	96.1	.221	1.232	324.9	535.0	.960	1.504A	91.4	.721	.7	-18.2	295.6	.136
4-5180	4-5374.1	.254	290.3	-28.5	-2.4	.623	82.9	.432	1.060	170.4	295.7	.601A	1.518	71.8	1.347	1.3	3.9	48.6	.426
4-5374.1	4-5510	.428	68.2	-2.5	-.9	1.214	110.9	.362	.779	259.3	517.3	.497	1.061A	101.8	.828	-3.1	-26.2	219.9	.246
		12.33	9.45	3.87	2.87	6.28	5.56	13.28	2/1/2	46.3	47.3	20.7	.329	5.579	18.2	328.2	18.1	94.7D	1.505
4-4920	4-5180	.122	187.8	14.5	1.8	1.102	94.8	.217	1.238	332.3	532.4	.970	1.506A	92.1	.724	.1	-20.9	299.7	.140
4-5180	4-5375.9	.249	290.3	-28.9	-2.5	.627	83.2	.424	1.065	170.6	298.7	.613A	1.517	72.6	1.349	1.4	4.3	49.5	.409
4-5375.9	4-5520	.409	71.2	-4.1	-1.5	1.209	110.0	.346	.771	259.2	523.9	.504	1.038A	98.2	.819	-2.9	-27.1	219.3	.214
		12.16	9.21	3.76	2.95	6.36	5.45	12.78	2/1/2	42.9	56.9	23.2	.360	4.966	21.1	330.3	21.1	95.3D	1.426
4-4930	4-5180	.125	195.4	30.0	3.6	1.105	93.5	.213	1.243	340.2	530.2	.977	1.508A	92.6	.726	-1.8	-29.2	304.4	.146
4-5180	4-5376.9	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.068	170.7	300.5	.620A	1.516	73.4	1.351	1.4	4.5	50.0	.398
4-5376.9	4-5550	.398	73.2	-5.5	-1.9	1.205	109.5	.337	.765	258.8	531.3	.507	1.022A	94.4	.813	-2.9	-26.9	214.6	.191
		12.23	9.16	3.78	3.07	6.48	5.38	12.45	2/1/2	41.3	70.2	25.2	.379	4.560	23.6	331.8	23.6	95.3D	1.357
4-4950	4-5180	.114	155.4	-29.1	-3.5	1.110	90.4	.211	1.248	357.6	527.3	.984	1.512A	93.3	.729	5.2	2.6	299.1	.165
4-5180	4-5373.9	.255	290.3	-28.5	-2.4	.623	82.8	.433	1.059	170.4	295.4	.600A	1.516	71.7	1.347	1.3	3.9	48.5	.429
4-5373.9	4-5550	.429	70.5	-8.0	-3.1	1.197	111.0	.360	.754	254.6	551.0	.483	1.025	83.9	.803	-3.4	-19.0	191.5	.209
		12.74	9.27	3.68	3.47	6.87	5.59	12.71	1/1/2	44.1	111.6	25.0	.326	4.623	28.6	330.6	28.5	91.9D	1.181

MARS ARRIVAL DATE = 2445190 (8 AUG 1982)

4-4870	4-5190	.203	165.0	11.0	.6	1.077	101.2	.252	1.200	298.2	553.3	.897	1.502	85.6	.714	1.5	-15.0	265.9	.117
4-5190	4-5363.3	.293	292.0	-26.3	-1.9	.589	81.5	.501	1.004	171.3	274.0	.501A	1.506	64.3	1.326	.9	1.9	43.7	.371
4-5363.3	4-5470	.571	51.0	3.1	1.6	1.260	117.1	.475	.857	259.5	496.3	.450	1.264A	116.6	.902	-4.0	-17.8	203.6	.436
		13.86	11.34	4.74	2.53	5.94	6.60	17.07	2/1/2	80.0	26.4	7.4	.184	15.489	9.0	317.7	-8.6	88.3L	2.671
4-4880	4-5190	.182	170.5	9.6	.9	1.082	99.9	.240	1.206	304.5	549.8	.917	1.496	86.9	.718	1.3	-15.8	274.5	.117
4-5190	4-5366.9	.278	292.2	-26.8	-2.0	.601	82.4	.477	1.016	171.5	280.0	.532A	1.504	66.5	1.332	1.0	2.2	46.3	.527
4-5366.9	4-5480	.527	56.6	1.9	.9	1.245	115.2	.441	.830	259.7	500.4	.464	1.197A	113.1	.878	-3.7	-20.6	209.8	.383
		13.17	10.65	4.44	2.52	5.94	6.20	15.91	2/1/2	71.7	29.5	10.5	.217	11.094	2.6	321.4	2.0	90.3D	2.188
4-4890	4-5190	.163	175.5	8.8	.9	1.087	98.6	.230	1.213	311.1	546.6	.934	1.492	88.0	.721	1.1	-16.5	281.9	.118
4-5190	4-5370.2	.266	292.4	-27.2	-2.1	.611	83.2	.458	1.030	171.6	285.5	.559A	1.502	68.5	1.337	1.0	2.5	46.5	.488
4-5370.2	4-5490	.488	61.6	.5	.2	1.234	113.5	.411	.810	259.9	504.9	.478	1.143A	109.6	.859	-3.5	-23.0	215.2	.335
		12.63	10.08	4.20	2.54	5.96	6.08	14.91	2/1/2	64.7	33.4	13.4	.252	8.564	6.8	324.9	6.7	92.0D	1.910
4-4900	4-5190	.146	180.0	8.9	1.1	1.091	97.3	.222	1.219	318.0	543.5	.949	1.490	89.0	.724	.9	-17.4	288.0	.121
4-5190	4-5373.2	.256	292.4	-27.7	-2.2	.619	83.8	.442	1.041	172.0	290.4	.581A	1.500	70.3	1.341	1.0	2.9	50.4	.455
4-5373.2	4-5500	.455	66.4	-1.0	-.4	1.225	112.1	.385	.795	260.1	510.0	.489	1.101A	106.1	.844	-3.2	-25.0	219.6	.292
		12.21	9.62	4.00	2.59	6.00	5.65	14.08	2/1/2	58.8	38.4	16.5	.290	6.975	13.5	328.2	13.5	93.4D	1.734
4-4910	4-5190	.130	183.6	10.7	1.3	1.096	96.0	.216	1.225	325.2	540.8	.961	1.489	89.8	.726	.8	-18.8	293.2	.123
4-5190	4-5375.7	.248	292.4	-28.2	-2.3	.625	84.3	.429	1.049	172.3	294.6	.598A	1.499	71.7	1.344	1.1	3.2	51.8	.428
4-5375.7	4-5510	.428	70.4	-2.5	-1.0	1.216	110.9	.363	.784	260.2	515.8	.499	1.068A	102.6	.832	-3.0	-26.6	222.4	.252
		11.91	9.27	3.84	2.64	6.06	5.43	13.39	2/1/2	54.1	45.0	19.4	.328	8.923	17.2	331.0	17.2	94.4D	1.614
4-4920	4-5190	.118	187.2	15.5	1.8	1.100	94.6	.211	1.230	332.9	538.4	.971	1.489A	90.4	.729	.0	-21.3	297.6	.126
4-5190	4-5377.6	.242	292.4	-28.5	-2.4	.629	84.6	.420	1.055	172.5	298.0	.611A	1.498	72.8	1.346	1.1	3.5	52.8	.408
4-5377.6	4-5520	.408	73.6	-4.1	-1.5	1.212	109.9	.346	.775	260.2	522.0	.507	1.043A	99.0	.823	-2.9	-27.6	222.7	.219
		11.70	9.01	3.72	2.70	6.11	5.29	12.86	2/1/2	50.4	53.9	22.1	.362	5.216	20.2	333.3	20.2	95.1D	1.524
4-4930	4-5190	.115	191.9	27.0	2.9	1.103	93.2	.207	1.254	340.9	536.4	.978	1.490A	90.9	.730	-1.2	-27.3	301.9	.130
4-5190	4-5376.9	.239	292.4	-28.8	-2.4	.632	84.8	.415	1.058	172.6	300.1	.619A	1.498	73.5	1.348	1.1	3.7	53.4	.395
4-5376.9	4-5530	.395	75.8	-5.6	-1.9	1.208	109.3	.335	.768	259.9	529.2	.511	1.026A	95.3	.817	-2.8	-27.7	219.4	.193
		11.66	8.89	3.69	2.77	6.16	5.20	12.48	2/1/2	48.0	66.1	24.2	.365	4.761	22.8	335.0	22.8	95.3D	1.449
4-4940	4-5190	.181	216.3	55.9	8.4	1.105	91.8	.205	1.237	349.5	534.8	.983	1.490A	91.3	.732	-6.7	-52.0	311.4	.160
4-5190	4-5379.1	.238	292.4	-28.8	-2.4	.632	84.9	.414	1.059	172.7	300.5	.620A	1.497	73.6	1.348	1.1	3.8	53.5	.393
4-5379.1	4-5540	.393	76.6	-7.0	-2.4	1.204	109.2	.332	.763	259.0	537.5	.510	1.016A	91.2	.812	-2.8	-26.1	211.2	.180
		12.99	9.62	4.43	3.57	6.77	5.19	12.51	2/1/2	54.9	82.8	25.5	.390	4.533	25.2	335.8	25.1	94.8D	1.377
4-4950	4-5190	.192	131.0	-53.6	-9.1	1.107	90.2	.205	1.238	358.9	533.9	.985	1.491A	91.6	.732	10.8	21.8	291.0	.198
4-5190	4-5377.4	.243	292.4	-28.5	-2.4	.628	84.6	.422	1.054	172.5	297.5	.610A	1.496	72.6	1.346	1.1	3.5	52.6	.410
4-5377.4	4-5550	.410	75.0	-8.1	-2.9	1.200	110.0	.345	.758	258.8	547.6	.497	1.019	66.0	.808	-3.0	-21.7	198.5	.192
		14.10	9.86	4.57	4.21	7.61	5.31	12.47	1/1/2	61.3	104.5	25.1	.357	4.598	27.7	335.0	27.5	92.9D	1.264

MARS ARRIVAL DATE = 2445200 (18 AUG 1982)

4-4860	4-5200	.231	160.0	13.0	.9	1.072	103.0	.271	1.192	291.1	561.5	.869	1.514	82.5	.719	1.6	-13.6	251.4	.124
4-5200	4-5360.7	.308	293.7	-25.6	-1.8	.572	82.0	.331	.973	172.8	265.8	.456A	1.469	61.2	1.314	.7	1.3	43.6	.629
4-5360.7	4-5460	.629	46.5	4.1	2.3	1.285	119.4	.320	.907	260.0	491.4	.435	1.379A	120.7	.959	-4.5	-15.0	197.9	.508
		14.82	12.16	5.17	2.66	6.07	6.99	18.69	2/1/2	99.6	22.9	4.0	.152	28.428	43.5	317.7	-43.4	85.7L	4.170
4-4870	4-5200	.205	165.7	11.4	1.0	1.077	101.4	.253	1.198	297.5	556.1	.894	1.501	84.1	.722	1.4	-14.8	260.8	.117
4-5200	4-5364.6	.289	294.0	-26.0	-1.9	.588	83.0	.502	.990	173.0	272.3	.494A	1.487	63.8	1.321	.7	1.3	46.6	.377
4-5364.6	4-5470	.577	52.7	3.1	1.6	1.266	117.3	.481	.868	260.2	495.0	.451	1.285A	117.2	.910	-4.1	-18.1	204.6	.447
		13.79	11.26	4.77	2.53	5.94	6.49	17.32	2/1/2	90.4	25.4	6.3	.181	18.324	14.7	320.5	-14.6	87.9L	3.127
4-4880	4-5200	.183	171.1	10.1	1.0	1.081	99.9	.239	1.204	304.1	554.9	.916	1.492	85.4	.724	1.3	-15.9	269.6	.113
4-5200	4-5368.3	.274	294.2	-26.5	-2.0	.601	83.9	.477	1.006	173.3	278.4	.526A	1.485	66.2	1.327	.8	1.7	49.3	.331
4-5368.3	4-5480	.531	58.4	1.9	.9	1.251	115.4	.445	.839	260.4	499.0	.465	1.212A	113.8	.885	-3.8	-20.9	210.9	.393
		13.00	10.53	4.45	2.46	5.86	6.08	16.12	2/1/2	81.9	28.4	9.1	.213	12.576	2.0	323.9	-.9	90.0L	2.466
4-4890	4-5200	.162	176.1	9.5	1.1	1.086	98.5	.228	1.210	310.9	551.8	.934	1.485	86.6	.727	1.1	-16.8	277.3	.112
4-5200	4-5371.6	.261	294.2	-27.0	-2.1	.611	84.7	.457	1.019	173.6	284.1	.554A	1.484	68.3	1.333	.8	2.0	51.6	.491
4-5371.6	4-5490	.491	63.6	.5	.2	1.238	113.6	.414	.817	260.7	503.5	.479	1.155A	110.3	.865	-3.5	-23.2	216.7	.344
		12.38	9.94	4.19	2.44	5.86	5.75	15.09	2/1/2	74.5	32.1	12.2	.249	9.428	7.0	327.4	6.9	91.7D	2.099
4-4900	4-5200	.144	180.4	9.7	1.2	1.090	97.2	.219	1.215	317.9	549.0	.949	1.481	87.5	.730	.8	-17.9	284.0	.113
4-5200	4-5374.6	.250	294.1	-27.5	-2.1	.620	85.3	.440	1.030	174.0	289.2	.577A	1.483	70.0	1.337	.8	2.2	53.4	.457
4-5374.6	4-5500	.457	68.5	-1.0	-.4	1.229	112.1	.387	.801	260.9	508.4	.491	1.11DA	106.8	.849	-3.2	-25.2	221.5	.299
		11.92	9.47	3.98	2.45	5.87	5.49	14.22	2/1/2	68.2	36.8	15.3	.266	7.528	12.3	330.7	12.2	93.2D	1.878
4-4910	4-5200	.128	184.1	11.5	1.4	1.094	95.9	.212	1.220	325.4	546.4	.962	1.479	88.5	.732	.5	-19.4	289.6	.114
4-5200	4-5377.2	.242	294.1	-27.9	-2.2	.626	85.8	.427	1.036	174.3	293.6	.595A	1.482	71.5	1.341	.8	2.5	54.9	.429
4-5377.2	4-5510	.429	72.4	-2.6	-1.0	1.221	110.9	.364	.788	261.0	514.0	.502	1.075A	103.3	.857	-3.0	-26.8	224.8	.259
		11.57	9.09	3.82	2.47	5.89	5.28	13.50	2/1/2	63.0	42.9	18.3	.327	6.304	16.2	333.7	16.2	94.2D	1.733
4-4920	4-5200	.116	187.0	16.0	1.8	1.098	94.5	.206	1.224	333.2	544.2	.972	1.477	88.9	.734	.0	-21.9	294.3	.116
4-5200	4-5379.5	.236	293.9	-28.3	-2.3	.631	86.1	.417	1.045	174.6	297.2	.609A	1.481	72.7	1.343	.9	2.8	55.9	.407
4-5379.5	4-5520	.407	75.8	-4.2	-1.5	1.215	109.8	.346	.779	261.1	520.5	.510	1.048A	99.8	.827	-2.8	-27.9	225.8	.224
		11.33	8.82	3.70	2.50	5.92	5.15	12.94	2/1/2	58.9	51.1	21.0	.363	5.489	19.3	336.1	19.3	95.0D	1.629
4-4930	4-5200	.110	190.0	25.5	2.6	1.101	93.1	.203	1.228	341.4	542.4	.979	1.476	89.4	.736	-.9	-26.6	298.6	.116
4-5200	4-5380.7	.232	293.9	-28.5	-2.3	.634	86.4	.411	1.049	174.8	299.7	.618A	1.480	73.5	1.345	.9	2.9	56.8	.392
4-5380.7	4-5530	.392	78.3	-5.7	-1.9	1.211	109.1	.333	.772	260.9	527.3	.515	1.029A	96.2	.820	-2.7	-28.3	225.5	.196
		11.22	8.67	3.64	2.55	5.98	5.03	12.53	2/1/2	56.1	62.3	23.3	.390	4.961	21.9	338.0	21.9	95.3D	1.547
4-4940	4-5200	.129	199.0	48.2	5.0	1.103	91.6	.200	1.230	350.1	541.0	.984	1.476	89.8	.737	-3.3	-40.2	304.3	.126
4-5200	4-5381.3	.230	293.8	-28.6	-2.3	.635	86.5	.409	1.051	174.9	300.6	.622A	1.480	73.8	1.348	.9	3.0	56.8	.387
4-5381.3	4-5540	.387	79.5	-7.0	-2.4	1.207	108.9	.328	.766	260.2	535.3	.515	1.017A	92.3	.815	-2.6	-27.3	216.6	.179
		11.54	8.82	3.83	2.72	6.14	4.99	12.30	2/1/2	56.5	77.8	24.7	.401	4.668	24.3	339.1	24.2	95.0D	1.478

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 600 DAYS; MARS ARRIVAL DATE = 2445200 (18 AUG 1982)

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAR	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-4960	4-5200	.140	137.2	-37.6	-5.6	1.105	88.4	.201	1.229	9.5	179.9	.981D	1.476A	90.0	.736	7.2	14.1	292.4	.156
4-5200	4-5364.9	.268	294.0	-26.1	-1.9	.589	85.1	.500	.992	173.0	272.8	.496A	1.487	64.0	1.322	.7	1.5	46.9	.573
4-5364.9	4-5560	.573	61.2	-8.7	-4.7	1.190	118.0	.470	.747	244.9	565.1	.395	1.098	70.9	.797	-5.2	-11.5	178.5	.352
		13.69	10.40	3.94	3.29	6.70	6.46	15.26	1/1/2	61.8	135.5	17.6	.183	6.527	35.9	326.6	35.7	83.4L	1.011
4-4960	4-5200	.140	137.2	-37.6	-5.6	1.105	88.4	.201	1.229	9.5	179.9	.981D	1.476A	90.0	.736	7.2	14.1	292.4	.156
4-5200	4-5373.9	.255	294.2	-27.4	-2.1	.618	85.2	.444	1.027	173.9	288.0	.571A	1.483	69.6	1.336	.6	2.2	53.0	.465
4-5373.9	4-5560	.465	71.7	-8.9	-5.6	1.197	112.6	.367	.754	252.6	556.4	.463	1.046	79.1	.806	-3.7	-16.5	188.2	.249
		12.78	9.48	3.94	3.29	6.70	5.54	13.34	1/1/2	61.8	124.9	21.7	.278	5.308	31.1	334.4	30.9	88.7L	1.198

MARS ARRIVAL DATE = 2445210 (28 AUG 1982)

4-4870	4-5210	.209	166.6	11.7	1.1	1.076	101.6	.256	1.197	296.5	562.8	.890	1.503	82.6	.729	1.4	-14.8	256.0	.121
4-5210	4-5365.9	.286	295.6	-25.8	-1.9	.587	84.8	.503	.978	174.8	270.6	.486A	1.470	63.4	1.316	.6	1.1	49.6	.563
4-5365.9	4-5470	.583	54.4	3.2	1.6	1.272	117.5	.487	.879	261.0	493.7	.451	1.307A	117.9	.918	-4.1	-18.4	205.5	.458
		13.82	11.22	4.83	2.60	6.01	6.39	17.58	2/1/2	100.6	24.5	5.2	.177	21.923	23.0	322.9	-22.9	67.4L	3.697
4-4880	4-5210	.185	171.9	10.5	1.1	1.081	100.1	.240	1.202	303.3	559.7	.913	1.491	84.0	.732	1.2	-16.0	264.4	.114
4-5210	4-5369.6	.269	295.8	-26.3	-2.0	.601	85.7	.477	.994	175.2	276.8	.519A	1.468	65.8	1.323	.6	1.3	52.2	.536
4-5369.6	4-5480	.536	60.1	1.9	.9	1.256	115.5	.450	.848	261.2	497.7	.466	1.229A	114.4	.892	-3.8	-21.1	212.0	.403
		12.92	10.45	4.48	2.47	5.89	5.97	16.34	2/1/2	92.4	27.3	8.0	.209	14.421	4.9	326.3	-4.6	89.7L	2.808
4-4890	4-5210	.163	176.8	9.9	1.2	1.085	98.6	.228	1.207	310.3	556.8	.932	1.482	85.2	.734	1.0	-17.2	272.2	.110
4-5210	4-5373.0	.256	295.4	-26.6	-2.0	.612	86.4	.456	1.008	175.7	282.7	.548A	1.467	66.0	1.329	.6	1.8	54.8	.495
4-5373.0	4-5490	.495	65.4	.5	.2	1.243	113.8	.417	.824	261.4	502.1	.480	1.168A	110.9	.871	-3.5	-23.5	218.0	.393
		12.23	9.83	4.20	2.40	5.82	5.62	15.27	2/1/2	84.9	30.8	11.0	.246	10.444	5.0	329.9	4.9	91.9D	2.319
4-4900	4-5210	.144	181.1	10.2	1.3	1.089	97.2	.218	1.212	317.6	554.2	.948	1.478	86.1	.736	.8	-18.4	279.1	.108
4-5210	4-5376.0	.245	295.2	-27.3	-2.1	.621	87.0	.438	1.019	176.1	288.0	.572A	1.466	69.8	1.334	.6	1.6	56.4	.459
4-5376.0	4-5500	.459	70.2	-1.0	-.4	1.233	112.2	.389	.806	261.7	507.0	.493	1.120A	107.5	.854	-3.2	-25.4	223.1	.307
		11.70	9.33	3.98	2.37	5.79	5.35	14.37	2/1/2	78.4	35.2	14.1	.285	8.155	10.8	333.2	10.8	92.9D	2.037
4-4910	4-5210	.128	184.6	12.1	1.5	1.093	95.8	.210	1.217	325.1	551.8	.961	1.472	86.9	.738	.5	-20.0	285.0	.108
4-5210	4-5378.7	.236	295.0	-27.7	-2.1	.628	87.4	.425	1.029	176.5	292.6	.592A	1.466	71.4	1.338	.6	1.8	57.9	.430
4-5378.7	4-5510	.430	74.4	-2.6	-1.0	1.225	110.9	.365	.793	261.9	512.5	.504	1.083A	104.0	.841	-2.9	-27.0	226.9	.286
		11.31	8.94	3.81	2.37	5.79	5.13	13.62	2/1/2	72.9	41.0	17.1	.325	6.721	15.1	336.2	15.1	94.1D	1.860
4-4920	4-5210	.114	187.2	16.3	1.8	1.097	94.5	.204	1.220	333.1	549.7	.972	1.469	87.5	.740	.0	-22.5	290.0	.108
4-5210	4-5380.9	.230	294.8	-28.1	-2.2	.634	87.8	.414	1.036	176.9	296.5	.607A	1.465	72.6	1.341	.6	2.0	59.0	.407
4-5380.9	4-5520	.407	77.9	-4.2	-1.5	1.219	109.8	.346	.783	261.9	518.6	.512	1.054A	100.5	.831	-2.7	-28.1	226.7	.230
		11.03	8.65	3.68	2.37	5.79	4.97	13.02	2/1/2	66.6	48.6	19.9	.363	5.786	18.3	338.8	18.3	94.9D	1.739
4-4930	4-5210	.107	189.1	24.4	2.4	1.099	93.0	.199	1.223	341.5	546.1	.979	1.467	88.0	.741	-.7	-26.8	294.4	.110
4-5210	4-5382.8	.225	294.6	-28.4	-2.2	.638	88.1	.407	1.041	177.2	299.3	.617A	1.465	73.8	1.343	.7	2.2	59.7	.390
4-5382.8	4-5530	.390	80.6	-5.7	-2.0	1.214	109.0	.331	.776	261.8	525.5	.518	1.033A	97.0	.824	-2.6	-28.7	227.3	.200
		10.88	8.48	3.62	2.40	5.82	4.86	12.58	2/1/2	65.4	59.0	22.3	.395	5.176	21.0	340.8	20.9	99.3D	1.648
4-4940	4-5210	.114	193.0	39.2	3.9	1.102	91.6	.197	1.225	350.4	546.8	.984	1.466	88.3	.742	-2.2	-36.0	298.8	.114
4-5210	4-5383.2	.223	294.5	-28.5	-2.2	.639	88.2	.404	1.043	177.3	300.6	.622A	1.465	73.9	1.344	.7	2.3	60.0	.383
4-5383.2	4-5540	.383	82.1	-7.1	-2.4	1.210	108.6	.324	.770	261.3	533.3	.520	1.019A	93.2	.819	-2.5	-28.1	221.6	.179
		10.97	8.49	3.66	2.48	5.90	4.81	12.30	2/1/2	64.2	73.4	24.0	.411	4.817	23.3	342.1	23.2	95.1D	1.568
4-4950	4-5210	.202	220.6	63.7	9.9	1.103	90.1	.196	1.225	359.7	546.0	.985	1.466	88.5	.742	-8.3	-63.0	310.2	.160
4-5210	4-5382.7	.224	294.6	-28.4	-2.2	.638	88.1	.406	1.042	177.2	299.7	.619A	1.465	73.8	1.343	.7	2.2	59.8	.388
4-5382.7	4-5550	.388	82.0	-8.3	-2.8	1.206	108.9	.327	.765	260.0	542.3	.515	1.015	88.9	.815	-2.6	-25.5	211.0	.176
		12.94	9.57	4.73	3.37	6.77	4.85	12.26	2/1/2	70.9	92.6	24.5	.400	4.709	25.7	342.4	25.5	94.1D	1.464

MARS ARRIVAL DATE = 2445220 (7 SEP 1982)

4-4870	4-5220	.216	167.7	11.6	1.2	1.076	102.0	.261	1.196	295.2	567.2	.885	1.508	81.2	.737	1.4	-14.8	252.0	.129
4-5220	4-5367.2	.282	296.5	-25.8	-1.9	.586	86.8	.505	.966	176.9	268.9	.478A	1.454	63.0	1.312	.4	.7	52.4	.590
4-5367.2	4-5470	.590	56.0	3.2	1.7	1.278	117.7	.493	.891	261.7	492.5	.452	1.330A	116.6	.926	-4.2	-18.7	206.4	.470
		13.97	11.23	4.92	2.74	6.15	6.31	17.84	2/1/2	110.1	23.7	4.4	.173	26.079	34.6	325.6	-34.5	87.1L	4.336
4-4880	4-5220	.189	172.9	10.7	1.2	1.081	100.3	.243	1.201	302.2	564.3	.909	1.493	82.7	.739	1.2	-16.1	259.7	.116
4-5220	4-5370.9	.265	296.3	-26.3	-2.0	.601	87.6	.478	.983	177.4	275.4	.513A	1.453	65.5	1.319	.4	.8	55.1	.541
4-5370.9	4-5480	.541	61.8	2.0	.9	1.261	115.7	.455	.857	262.0	496.4	.467	1.246A	115.1	.899	-3.9	-21.4	213.1	.413
		12.95	10.40	4.54	2.55	5.96	5.87	16.56	2/1/2	102.6	26.4	6.9	.205	16.676	9.6	328.7	-9.5	89.4L	3.220
4-4890	4-5220	.166	177.7	10.1	1.3	1.085	98.8	.229	1.206	309.4	561.7	.930	1.482	83.9	.741	1.0	-17.4	267.1	.112
4-5220	4-5374.3	.251	295.9	-26.6	-2.0	.613	86.3	.456	.998	177.9	281.4	.543A	1.452	67.7	1.325	.4	.9	57.3	.496
4-5374.3	4-5490	.499	67.2	.5	.2	1.247	113.9	.421	.831	262.2	500.7	.481	1.181A	111.6	.877	-3.5	-23.7	219.3	.362
		12.17	9.74	4.24	2.43	5.85	5.51	15.45	2/1/2	95.5	29.7	9.9	.242	11.627	2.5	332.2	2.4	91.2D	2.571
4-4900	4-5220	.146	182.0	10.5	1.4	1.089	97.3	.218	1.210	316.9	559.2	.947	1.474	84.9	.743	.7	-18.9	273.9	.107
4-5220	4-5377.4	.240	295.5	-27.2	-2.0	.623	86.8	.437	1.010	176.5	286.9	.568A	1.452	69.6	1.331	.4	1.1	59.2	.462
4-5377.4	4-5500	.462	72.0	-1.0	-.4	1.237	112.3	.392	.812	262.4	505.6	.494	1.130A	108.1	.860	-3.2	-25.6	224.7	.315
		11.56	9.22	4.00	2.36	5.78	5.22	14.51	2/1/2	89.0	33.8	13.0	.282	8.847	9.2	335.6	9.2	92.7D	2.211
4-4910	4-5220	.128	185.4	12.2	1.6	1.092	95.9	.209	1.214	324.6	557.0	.961	1.466	85.6	.745	.4	-20.6	279.9	.105
4-5220	4-5380.1	.231	295.1	-27.7	-2.1	.631	89.3	.423	1.020	179.0	291.7	.589A	1.452	71.2	1.335	.4	1.2	60.7	.431
4-5380.1	4-5510	.431	76.3	-2.6	-1.0	1.228	110.9	.366	.798	262.6	511.0	.506	1.090A	104.7	.846	-2.9	-27.2	228.9	.273
		11.14	8.82	3.81	2.32	5.74	5.00	13.73	2/1/2	83.5	39.2	16.0	.323	7.169	13.8	338.7	13.8	93.9D	1.994
4-4920	4-5220	.114	187.7	16.1	1.8	1.096	94.5	.202	1.218	332.7	555.0	.971	1.464	86.3	.747	.0	-23.1	284.9	.104
4-5220	4-5382.4	.224	294.7	-28.0	-2.1	.637	89.6	.412	1.026	179.5	295.6	.605A	1.452	72.5	1.338	.4	1.3	61.9	.407
4-5382.4	4-5520	.407	80.0	-4.3	-1.5	1.222	109.7	.346	.787	262.8	517.0	.515	1.060A	101.2	.835	-2.7	-28.3	231.3	.235
		10.82	8.52	3.66	2.31	5.73	4.83	13.11	2/1/2	79.0	46.3	18.9	.363	6.095	17.2	341.4	17.2	94.8D	1.852
4-4930	4-5220	.105	189.0	25.3	2.3	1.099	93.1	.196	1.220	341.2	553.5	.979	1.461	86.7	.748	-.6	-26.9	289.2	.104
4-5220	4-5384.1	.219	294.4	-28.3	-2.1	.641	89.9	.404	1.034	179.8	298.8	.616A	1.452	73.5	1.340	.4	1.4	62.6	.389
4-5384.1	4-5530	.389	82.8	-5.8	-2.0	1.216	108.9	.331	.779	262.7	523.7	.522	1.037A	97.7	.828	-2.5	-28.9	230.7	.204
		10.63	8.32	3.61	2.31	5.73	4.72	12.63	2/1/2	75.6	56.0	21.4	.398	5.396	20.0	343.5	19.8	95.3D	1.748
4-4940	4-5220	.107	190.4	35.2	3.3	1.101	91.6	.195	1.222	350.2	552.3	.984	1.460	87.1	.748	-1.7	-34.0	293.1	.107
4-5220	4-5385.1	.217	294.2	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.6	.623A	1.452	74.0	1.342	.4	1.5	63.0	.379
4-5385.1	4-5540	.379	84.6	-7.2	-2.4	1.213	108.4	.321	.773	262.3	531.3	.525	1.021A	94.1	.822	-2.4	-28.7	226.1	.181
		10.62	8.27	3.62	2.35	5.77	4.66	12.32	2/1/2	73.7	69.4	23.2	.419	4.972	22.3	345.0	22.1	95.3D	1.664
4-4950	4-5220	.139	199.0	54.0	5.9	1.102	90.1	.194	1.222	359.6	551.6	.985	1.459	87.2	.748	-4.4	-50.2	298.7	.122
4-5220	4-5385.0	.217	294.3	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.4	.622A	1.452	74.0	1.342	.4	1.5	63.0	.380
4-5385.0	4-5550	.380	85.0	-8.4	-2.8	1.209	108.5	.321	.768	261.3	540.0	.521	1.015	90.0	.818	-2.4	-26.7	216.8	.172
		11.20	8.59	3.95	2.61	6.02	4.67	12.21	2/1/2	74.5	67.4	24.1	.416	4.799	24.6	345.5	24.3	94.9D	1.561

MARS ARRIVAL DATE = 2445230 (17 SEP 1982)

4-4870	4-5230	.224	168.9	11.8	1.4	1.076	102.5	.268	1.197	293.6	571.3	.876	1.517	79.8	.744	1.4	-15.0	249.1	.140
4-5230	4-5368.4	.280	296.6	-25.8	-1.9	.585	89.1	.508	.955	179.1	267.4	.470A	1.440	62.6	1.307	.2	.3	55.2	.596
4-5368.4	4-5470	.596	57.6	3.3	1.7	1.264	117.9	.499	.903	262.5	491.2	.453	1.354A	119.2	.934	-4.3	-19.0	207.2	.481
		14.26	11.50	5.06	2.96	6.37	6.24	18.10	2/1/2	118.6	22.8	3.9	.169	29.727	50.0	326.6	-49.9	87.1L	4.859
4-4860	4-5230	.195	174.1	10.7	1.4	1.081	100.7	.247	1.201	300.8	568.7	.904	1.498	81.4	.746	1.2	-16.3	255.9	.126
4-5230	4-5372.1	.262	296.1	-26.3	-1.9	.602	89.6	.479	.974	179.6	274.0	.507A	1.440	65.2	1.316	.2	.4	57.8	.546
4-5372.1	4-5480	.546	63.5	2.0	1.0	1.266	115.6	.459	.866	262.7	495.1	.468	1.264A	115.7	.906	-3.9	-21.6	214.1	.423
		13.11	10.41	4.63	2.70	6.11	5.79	16.78	2/1/2	111.9	25.4	5.9	.202	19.336	15.8	331.0	-15.8	89.1L	3.697
4-4890	4-5230	.170	178.9	10.1	1.4	1.085	99.1	.232	1.206	308.2	566.2	.926	1.485	82.6	.748	1.0	-17.7	262.7	.117
4-5230	4-5373.6	.248	295.5	-26.6	-2.0	.615	90.4	.456	.989	180.5	280.2	.558A	1.440D	67.4	1.322	.2	.4	60.1	.502
4-5373.6	4-5490	.502	66.9	.5	.2	1.252	114.0	.425	.839	262.9	499.4	.483	1.195A	118.2	.863	-3.5	-23.9	220.5	.371
		12.23	9.71	4.29	2.52	5.94	5.42	15.64	2/1/2	105.5	28.6	8.8	.238	12.971	.8	334.5	-.7	91.1D	2.853
4-4900	4-5230	.149	183.1	10.4	1.5	1.088	97.5	.218	1.210	315.8	563.9	.944	1.475	83.7	.750	.7	-19.2	269.0	.110
4-5230	4-5378.7	.236	294.9	-27.3	-2.0	.626	90.9	.437	1.003	181.1	285.8	.565A	1.440D	69.4	1.328	.2	.5	61.9	.464
4-5378.7	4-5500	.464	73.8	-1.0	-.4	1.240	112.3	.394	.818	263.2	504.2	.496	1.141A	108.7	.865	-3.2	-25.8	226.2	.323
		11.57	9.16	4.03	2.41	5.83	5.13	14.66	2/1/2	99.4	32.5	12.0	.279	9.593	7.4	337.9	7.4	92.6D	2.395

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 600 DAYS; MARS ARRIVAL DATE = 2445230 17 SEP 1982

LAUNCH DEPART	ARRIVE SWNGBY	SPEED1 SPEED3	RA1 RA3	DECL1 DECL3	I 1 I 3	V 1 V 3	PSI 1 PSI 3	ECCEN ECCEN	SMA SMA	THET1 THET3	THET2 THET4	PERIH PERIH	APHEL APHEL	PSI 2 PSI 4	V 2 V 4	I 2 I 4	DECL2 DECL4	RA2 RA4	SPEED2 SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERTC
4-4910	4-5230	.130	186.4	12.0	1.6	1.092	96.1	.210	1.213	323.7	561.6	.959	1.468	64.5	.752	.4	-21.1	274.7	.106
4-5230	4-5381.5	.227	294.3	-27.7	-2.0	.634	91.5	.422	1.013	181.6	290.9	.586A	1.441D	71.1	1.333	.2	.5	83.4	.433
4-5381.5	4-5510	.435	78.1	-2.7	-1.0	1.231	110.9	.368	.803	263.4	509.5	.507	1.098A	105.5	.850	-2.9	-27.3	230.7	.279
		11.07	8.74	3.83	2.54	5.76	4.90	13.85	2/1/2	94.1	37.6	15.1	.321	7.631	12.5	341.0	12.4	93.8D	2.130
4-4920	4-5230	.115	188.6	15.5	1.8	1.095	94.6	.202	1.216	331.9	560.1	.970	1.462	65.1	.753	.0	-23.5	279.6	.103
4-5230	4-5383.8	.220	293.7	-28.1	-2.0	.641	91.6	.410	1.022	182.3	295.2	.603A	1.441D	72.5	1.336	.2	.6	64.6	.407
4-5383.8	4-5520	.407	81.9	-4.3	-1.5	1.224	109.7	.347	.791	263.6	515.5	.517	1.065A	101.9	.839	-2.6	-28.4	233.6	.241
		10.72	8.42	3.69	2.29	5.71	4.73	13.19	2/1/2	89.7	44.3	18.0	.363	6.403	16.1	343.8	16.0	94.7D	1.962
4-4930	4-5230	.105	189.5	21.9	2.2	1.098	93.2	.197	1.219	340.6	558.6	.978	1.459	65.6	.754	-.5	-27.0	283.8	.102
4-5230	4-5385.7	.215	293.2	-28.4	-2.0	.646	91.9	.401	1.028	182.8	298.5	.616A	1.441D	73.5	1.339	.2	.6	65.4	.388
4-5385.7	4-5530	.388	84.9	-5.9	-2.0	1.219	108.8	.330	.783	263.6	522.1	.524	1.041A	98.4	.831	-2.4	-29.1	233.8	.208
		10.49	8.21	3.60	2.28	5.70	4.61	12.69	2/1/2	86.2	53.3	20.5	.400	5.614	18.9	346.0	18.7	95.3D	1.846
4-4940	4-5230	.103	189.6	32.0	2.9	1.100	91.7	.194	1.220	349.6	557.5	.983	1.456	65.9	.755	-1.3	-32.8	287.3	.103
4-5230	4-5386.8	.212	292.9	-28.6	-2.0	.648	92.0	.396	1.032	183.0	300.6	.623A	1.441D	74.1	1.340	.2	.7	65.8	.376
4-5386.8	4-5540	.376	86.9	-7.3	-2.4	1.215	108.2	.319	.776	263.3	529.5	.528	1.024A	94.8	.825	-2.3	-29.1	230.2	.182
		10.42	8.13	3.59	2.29	5.71	4.54	12.34	2/1/2	83.9	65.8	22.5	.426	5.126	21.2	347.6	20.9	95.4D	1.756
4-4950	4-5230	.119	191.9	46.7	4.5	1.101	90.2	.193	1.220	359.0	556.8	.985	1.455	66.1	.755	-3.0	-43.8	290.8	.110
4-5230	4-5387.0	.211	292.8	-28.6	-2.0	.649	92.0	.396	1.033	183.1	300.9	.624A	1.442D	74.2	1.341	.2	.7	65.9	.374
4-5387.0	4-5550	.374	87.7	-8.5	-2.8	1.212	108.1	.317	.771	262.4	538.0	.527	1.015A	90.9	.821	-2.3	-27.6	221.7	.170
		10.66	8.25	3.72	2.41	5.83	4.53	12.18	2/1/2	83.1	82.8	23.6	.430	4.892	23.4	348.4	23.0	94.9D	1.672
4-4960	4-5230	.209	216.3	66.9	10.3	1.102	88.6	.194	1.218	8.8	196.5	.982D	1.454	86.1	.754	-8.9	-68.5	300.8	.161
4-5230	4-5385.5	.215	293.2	-28.4	-2.0	.645	91.8	.402	1.028	182.7	298.1	.614A	1.441D	73.4	1.338	.2	.6	65.3	.390
4-5385.5	4-5560	.390	86.3	-9.4	-3.2	1.208	108.9	.328	.766	260.3	547.8	.515	1.018	86.2	.819	-2.5	-29.9	209.1	.180
		12.85	9.45	4.83	3.40	6.80	4.62	12.31	2/1/2	85.0	104.1	23.2	.396	4.966	26.1	347.9	25.6	93.0D	1.569

MARS ARRIVAL DATE = 2445240 (27 SEP 1982)

4-4870	4-5240	.236	170.3	11.6	1.5	1.077	103.2	.277	1.197	291.5	575.1	.866	1.529	78.4	.752	1.5	-15.3	247.5	.156
4-5240	4-5369.6	.279	295.9	-26.0	-1.9	.586	91.8	.511	.947	181.7	265.9	.463A	1.430D	62.1	1.304	-.0	-.0	57.8	.603
4-5369.6	4-5470	.603	59.2	3.4	1.8	1.291	118.1	.505	.916	263.2	490.0	.453	1.379A	119.8	.942	-4.4	-19.5	208.0	.492
		14.74	11.47	5.25	3.27	6.68	6.22	18.37	2/1/2	125.9	22.1	3.7	.165	30.987	67.4	332.5	-67.3	87.9L	4.960
4-4880	4-5240	.204	175.4	10.4	1.5	1.081	101.2	.254	1.202	299.0	572.8	.896	1.507	80.1	.753	1.2	-16.6	253.4	.138
4-5240	4-5373.4	.261	295.1	-26.5	-1.9	.604	92.3	.481	.966	182.5	272.7	.501A	1.431D	64.8	1.313	-.0	-.0	60.4	.551
4-5373.4	4-5460	.551	65.1	2.0	1.0	1.272	116.0	.465	.876	263.4	493.9	.469	1.283A	116.3	.913	-3.9	-21.9	215.0	.433
		13.43	10.51	4.75	2.92	6.33	5.75	17.00	2/1/2	120.2	24.5	5.2	.198	22.207	23.9	333.2	-23.9	88.9L	4.195
4-4890	4-5240	.177	180.2	9.8	1.5	1.085	99.4	.236	1.206	306.6	570.5	.921	1.491	81.4	.755	.9	-18.0	259.3	.126
4-5240	4-5376.6	.246	294.2	-27.0	-1.9	.616	92.6	.457	.983	183.3	279.1	.534A	1.431D	67.2	1.320	-.0	-.1	62.6	.506
4-5376.6	4-5490	.506	70.5	.5	.2	1.256	114.1	.429	.846	263.6	498.1	.484	1.209A	112.8	.889	-3.5	-24.1	221.6	.379
		12.44	9.76	4.37	2.66	6.09	5.38	15.82	2/1/2	114.5	27.5	8.0	.235	14.412	4.4	336.6	-4.4	90.9D	3.148
4-4900	4-5240	.154	184.4	10.0	1.5	1.088	97.8	.222	1.210	314.4	568.4	.941	1.478	82.5	.757	.7	-19.5	264.9	.117
4-5240	4-5380.0	.234	293.2	-27.5	-1.9	.630	93.2	.437	.997	184.2	285.0	.561A	1.432D	69.2	1.326	-.0	-.1	64.4	.467
4-5380.0	4-5500	.467	75.5	-1.1	-.4	1.244	112.4	.397	.824	263.9	502.9	.497	1.151A	109.3	.870	-3.2	-25.9	227.5	.330
		11.69	9.17	4.09	2.52	5.93	5.09	14.81	2/1/2	109.1	31.5	11.1	.276	10.359	5.2	340.0	5.2	92.5D	2.579
4-4910	4-5240	.134	187.8	11.4	1.7	1.092	96.3	.212	1.213	322.4	566.4	.956	1.469	83.4	.759	.4	-21.4	270.2	.110
4-5240	4-5382.8	.225	292.3	-27.9	-1.9	.639	93.6	.421	1.009	184.9	290.2	.584A	1.433D	71.0	1.331	-.0	-.1	65.9	.434
4-5382.8	4-5510	.434	79.9	-2.7	-1.0	1.235	110.9	.370	.807	264.1	508.2	.509	1.106A	105.9	.854	-2.8	-27.3	232.4	.286
		11.14	8.75	3.87	2.41	5.83	4.86	13.97	2/1/2	104.2	36.1	14.2	.319	8.079	10.9	343.2	10.8	93.8D	2.256
4-4920	4-5240	.117	190.0	14.6	1.8	1.095	94.8	.203	1.216	330.8	564.6	.969	1.463	84.0	.760	.0	-23.6	274.8	.106
4-5240	4-5385.2	.218	291.5	-28.3	-1.9	.646	93.8	.409	1.018	185.6	294.7	.602A	1.434D	72.4	1.335	-.0	-.1	67.0	.407
4-5385.2	4-5520	.407	83.7	-4.4	-1.5	1.227	109.7	.347	.795	264.3	514.1	.519	1.071A	102.5	.843	-2.5	-28.4	235.7	.246
		10.74	8.40	3.71	2.34	5.76	4.69	13.28	2/1/2	100.0	42.4	17.2	.362	6.692	14.8	345.9	14.6	94.7D	2.063
4-4930	4-5240	.106	190.7	20.3	2.1	1.098	93.3	.197	1.216	339.5	565.4	.977	1.458	84.5	.761	-.4	-27.0	278.6	.104
4-5240	4-5387.1	.213	290.8	-28.5	-1.9	.651	94.1	.400	1.025	186.2	298.3	.615A	1.435D	73.5	1.338	-.0	-.1	67.8	.387
4-5387.1	4-5550	.387	86.8	-6.0	-2.0	1.222	108.7	.330	.786	264.4	520.6	.527	1.045A	99.0	.834	-2.5	-29.1	236.5	.212
		10.47	8.17	3.61	2.30	5.72	4.56	12.75	2/1/2	96.7	50.9	19.8	.402	5.810	17.6	348.2	17.4	95.4D	1.933
4-4940	4-5240	.101	190.0	29.0	2.7	1.100	91.9	.194	1.219	348.5	562.4	.983	1.455	84.9	.761	-1.1	-31.8	281.8	.104
4-5240	4-5388.4	.210	290.3	-28.7	-1.9	.654	94.2	.394	1.029	186.5	300.7	.624A	1.435D	74.2	1.340	-.0	-.1	68.3	.373
4-5388.4	4-5540	.373	89.0	-7.4	-2.4	1.217	108.1	.318	.779	264.2	527.9	.532	1.026A	95.5	.828	-2.2	-29.3	233.8	.185
		10.36	8.06	3.57	2.30	5.72	4.49	12.37	2/1/2	94.3	62.7	21.9	.431	5.258	20.0	350.0	19.6	95.6D	1.836
4-4950	4-5240	.109	189.5	41.1	3.7	1.101	90.3	.192	1.219	358.0	561.7	.984	1.453	85.1	.761	-2.3	-39.9	284.4	.107
4-5240	4-5388.8	.209	290.2	-28.8	-1.9	.655	94.2	.393	1.031	186.8	301.5	.626A	1.436D	74.5	1.340	-.0	-.1	68.4	.369
4-5388.8	4-5550	.369	90.1	-8.6	-2.7	1.214	107.9	.313	.774	263.5	536.1	.532	1.016A	91.8	.824	-2.1	-28.3	226.4	.169
		10.45	8.10	3.64	2.35	5.77	4.46	12.17	2/1/2	92.8	76.6	25.2	.441	4.972	22.2	350.9	21.7	95.3D	1.752
4-4960	4-5240	.147	196.0	57.0	6.4	1.102	88.7	.193	1.217	7.8	201.3	.982D	1.453	85.1	.761	-5.1	-55.7	288.1	.125
4-5240	4-5387.8	.211	290.5	-28.6	-1.9	.653	94.1	.397	1.027	186.3	299.6	.620A	1.435D	73.9	1.339	-.0	-.1	66.1	.380
4-5387.8	4-5560	.380	89.4	-9.5	-3.1	1.211	108.4	.320	.769	261.8	545.6	.523	1.015	87.4	.822	-2.3	-25.3	214.5	.173
		11.21	8.54	4.01	2.67	6.09	4.52	12.22	2/1/2	92.1	99.0	23.2	.417	4.971	24.6	350.8	24.0	95.6D	1.658

MARS ARRIVAL DATE = 2445250 (7 OCT 1982)

4-4860	4-5250	.215	177.0	10.0	1.6	1.081	101.9	.283	1.203	296.8	576.6	.886	1.519	78.8	.760	1.2	-17.0	252.1	.153
4-5250	4-5374.6	.263	293.0	-26.8	-1.9	.607	95.2	.484	.961	185.6	271.8	.496A	1.426D	64.5	1.311	-.2	-.5	62.8	.557
4-5374.6	4-5460	.557	66.7	2.1	1.0	1.277	116.1	.470	.886	264.1	492.7	.470	1.302A	116.9	.920	-4.0	-22.1	215.9	.443
		13.93	10.72	4.92	3.22	6.63	5.80	17.22	2/1/2	127.4	23.7	4.6	.194	24.683	33.5	335.3	-33.5	88.8L	4.597
4-4890	4-5250	.186	181.7	9.3	1.6	1.085	100.0	.243	1.206	304.6	574.5	.914	1.499	80.2	.762	.9	-18.3	257.1	.137
4-5250	4-5378.1	.248	291.7	-27.3	-1.9	.623	95.5	.458	.979	186.6	278.4	.530A	1.427D	67.0	1.319	-.2	-.5	64.9	.510
4-5378.1	4-5490	.510	72.1	.6	.2	1.261	114.2	.432	.854	264.3	496.9	.485	1.223A	113.4	.895	-3.5	-24.2	222.6	.366
		12.62	9.91	4.49	2.91	6.32	5.42	16.00	2/1/2	122.5	26.6	7.3	.231	15.800	8.7	338.5	-8.7	90.9D	3.421
4-4900	4-5250	.180	185.9	9.4	1.6	1.089	98.2	.227	1.210	312.5	572.5	.935	1.485	81.4	.764	.7	-19.6	262.1	.126
4-5250	4-5381.2	.236	290.4	-27.8	-1.9	.635	95.9	.438	.994	187.6	284.4	.559A	1.429D	69.1	1.325	-.2	-.6	66.7	.470
4-5381.2	4-5500	.470	77.1	-1.1	-.4	1.248	112.5	.400	.830	264.6	501.6	.498	1.162A	109.9	.875	-3.1	-26.0	228.7	.337
		11.98	9.29	4.17	2.69	6.10	5.15	14.96	2/1/2	117.8	30.2	10.4	.272	11.057	2.8	342.0	2.7	92.5D	2.739
4-4910	4-5250	.139	189.4	10.5	1.7	1.092	96.7	.215	1.213	320.7	570.7	.953	1.474	82.3	.765	.4	-21.6	266.7	.116
4-5250	4-5384.0	.227	289.2	-28.2	-1.9	.645	96.1	.421	1.007	188.5	289.9	.583A	1.431D	70.9	1.331	-.2	-.7	68.1	.436
4-5384.0	4-5510	.436	81.5	-2.8	-1.0	1.238	111.0	.372	.812	264.8	506.9	.510	1.114A	106.4	.859	-2.8	-27.4	233.9	.292
		11.36	8.82	3.92	2.54	5.96	4.90	14.08	2/1/2	113.4	34.8	13.6	.317	8.469	9.1	345.1	9.0	93.8D	2.365
4-4920	4-5250	.121	191.7	13.3	1.8	1.095	95.1	.206	1.216	329.2	569.1	.966	1.466	83.0	.766	.0	-23.8	270.9	.112
4-5250	4-5386.5	.220	288.1	-28.5	-1.9	.653	96.4	.409	1.017	189.4	294.6	.601A	1.432D	72.4	1.335	-.2	-.7	69.2	.408
4-5386.5	4-5520	.408	85.4	-4.5	-1.6	1.230	109.7	.348	.799	265.0	512.7	.521	1.077A	103.0	.846	-2.5	-26.4	237.6	.251
		10.91	8.47	3.74	2.44	5.86	4.73	13.37	2/1/2	109.6	40.8	16.6	.361	6.929	13.3	347.9	13.0	94.9D	2.142
4-4930	4-5250	.108	192.4	18.3	2.1	1.098	93.6	.199	1.218	336.0	567.9	.976	1.460	83.6	.767	-.4	-26.7	274.4	.109
4-5250	4-5386.5	.215	287.2	-28.7	-1.9	.656	96.5	.399	1.024	190.0	298.4	.615A	1.434D	73.5	1.338	-.2	-.8	70.0	.388
4-5386.5	4-5530	.388	88.6	-6.1	-2.0	1.224	108.7	.329	.789	265.1	519.2	.529	1.049A	99.6	.837	-2.2	-29.1	239.0	.216
		10.61	8.23	3.63	2.38	5.80	4.61	12.61	2/1/2	106.4	46.6	19.3	.403	5.959	16.3	350.5	15.9	95.6D	1.998
4-4940	4-5250	.101	191.5	26.0	2.5	1.100	92.1	.193	1.219	347.1	566.9	.982	1.456	83.9	.768	-1.0	-30.8	277.2	.107
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.8	.393	1.030	190.4	301.1	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.371
4-5389.9	4-5540	.371	91.0	-7.5	-2.4	1.220	108.0	.316	.762	265.0	526.4	.535	1.029A	90.1	.831	-2.1	-29.4	237.1	.187
		10.45	8.10	3.57	2.35	5.77	4.53	12.41	2/1/2	104.0	59.8	21.5	.436	5.353	18.7	352.0	18.1	95.9D	1.896
4-4950	4-5250	.104	189.6	36.3	3.2	1.101	90.6	.193	1.219	356.5	566.2	.984	1.454	84.1	.768	-1.9	-36.9	279.4	.108
4-5250	4-5390.9	.210	286.3	-28.9	-1.8	.664	96.7	.391	1.032	190.8	302.2	.628A	1.435D	74.7	1.341	-.2	-.9	70.6	.365
4-5390.9	4-5550	.365	92.3	-8.7	-2.7	1.216	107.8	.310	.776	264.5	534.4	.536	1.017A	92.8	.827	-2.0	-28.7	230.6	.169
		10.46	8.09	3.59	2.39	5.80	4.50	12.17	2/1/2	102.4	74.9	23.0	.451	5.021	20.7	353.2	20.1	95.7D	1.613

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 600 DAYS; MARS ARRIVAL DATE = 2445250 = 7 OCT 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / APHEL / KAPPA	APHEL / PSI 2 / PSI 4 / PSI 6 / -A	PSI 2 / V 2 / V 4 / V 6 / E	V 2 / I 2 / I 4 / I 6 / INC	I 2 / DECL2 / DECL4 / DECL6 / RAP	DECL2 / RA2 / RA4 / RA6 / DECLP	RA2 / SPEED2 / SPEED4 / SPEED6 / ETA	SPEED2 / PERIC
4-4960	4-5250	.124	190.0	49.0	4.8	1.102	89.0	.193	1.218	6.3	205.8	.983D	1.453	84.2	.767	-3.6	-47.6	261.3	.117	
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.6	.393	1.030	190.4	301.0	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.372	
4-5389.9	4-5560	.372	92.1	-9.6	-3.1	1.213	107.9	.314	.772	263.0	543.5	.530	1.014	88.4	.824	-2.1	-26.2	219.5	.167	
		10.85	8.30	3.78	2.52	5.94	4.53	12.15	2/1/2	101.0	94.5	23.3	.436	4.961	23.0	353.4	22.3	94.6D	1.725	
4-4970	4-5250	.206	207.2	66.2	9.8	1.101	87.4	.196	1.215	16.2	205.6	.977D	1.453	84.1	.766	-8.8	-68.5	287.2	.164	
4-5250	4-5366.7	.219	288.0	-28.5	-1.9	.653	96.4	.408	1.017	189.4	294.9	.602A	1.433D	72.5	1.335	-.2	-.7	69.3	.406	
4-5366.7	4-5570	.406	88.8	-10.1	-3.6	1.209	109.6	.340	.767	259.4	554.6	.507	1.028	82.7	.822	-2.5	-21.7	205.8	.201	
		12.94	9.49	4.77	3.45	6.85	4.72	12.59	2/1/2	98.1	117.3	21.5	.365	5.353	26.5	351.6	25.8	91.4D	1.587	
MARS ARRIVAL DATE = 2445260 (17 OCT 1982)																				
4-4660	4-5260	.230	176.6	9.4	1.7	1.082	102.7	.275	1.204	294.1	580.0	.873	1.535	77.4	.767	1.2	-17.5	252.0	.172	
4-5260	4-5375.8	.269	289.8	-27.2	-2.0	.614	98.5	.487	.960	189.2	271.2	.493A	1.427D	64.3	1.311	-.4	-1.9	65.0	.562	
4-5375.8	4-5460	.562	68.2	2.1	1.0	1.282	116.3	.475	.897	264.8	491.5	.471	1.323A	117.4	.927	-4.0	-22.3	216.7	.453	
		14.73	11.11	5.15	3.62	7.02	5.96	17.45	2/1/2	133.4	22.9	4.4	.190	25.918	43.4	337.2	-43.4	89.0L	4.745	
4-4690	4-5260	.197	163.4	8.6	1.7	1.085	100.6	.251	1.208	302.2	578.1	.904	1.511	79.0	.769	.9	-18.7	256.3	.153	
4-5260	4-5379.2	.254	288.2	-27.6	-1.9	.630	98.7	.461	.979	190.4	276.0	.528A	1.430D	66.8	1.319	-.4	-1.0	67.0	.514	
4-5379.2	4-5490	.514	73.7	.6	.3	1.265	114.3	.437	.862	265.0	495.7	.486	1.238A	113.9	.901	-3.5	-24.4	223.6	.396	
		13.44	10.23	4.68	3.21	6.62	5.59	16.16	2/1/2	129.3	25.7	6.8	.228	16.840	13.4	340.3	-13.4	91.0D	3.605	
4-4900	4-5260	.169	187.7	8.5	1.7	1.089	98.8	.233	1.211	310.3	576.3	.929	1.494	80.3	.770	.7	-20.1	260.6	.138	
4-5260	4-5382.4	.243	286.5	-28.0	-1.9	.643	98.8	.440	.995	191.6	284.2	.558A	1.433D	69.0	1.326	-.4	-1.1	68.7	.473	
4-5382.4	4-5500	.473	78.6	-1.1	-.4	1.252	112.5	.403	.836	265.3	500.4	.499	1.173A	110.4	.860	-3.1	-26.1	229.9	.345	
		12.49	9.57	4.27	2.93	6.34	5.29	15.10	2/1/2	125.2	29.1	9.9	.269	11.561	1.1	343.7	-.1	92.7D	2.843	
4-4910	4-5260	.146	191.2	9.4	1.7	1.092	97.1	.220	1.214	318.6	574.7	.948	1.481	81.3	.772	.5	-21.8	264.6	.128	
4-5260	4-5385.2	.234	285.0	-28.4	-1.8	.654	99.0	.423	1.009	192.7	289.9	.562A	1.436D	70.8	1.332	-.4	-1.2	70.1	.437	
4-5385.2	4-5510	.437	83.1	-2.8	-1.1	1.241	111.0	.374	.817	265.5	505.7	.512	1.122A	106.9	.863	-2.7	-27.4	235.3	.298	
		11.79	9.07	4.00	2.73	6.14	5.07	14.20	2/1/2	121.4	33.5	13.2	.314	8.726	7.2	346.8	6.9	94.0D	2.427	
4-4920	4-5260	.126	193.7	11.7	1.8	1.096	95.5	.209	1.217	327.2	573.2	.963	1.471	82.1	.773	.0	-23.9	268.3	.121	
4-5260	4-5387.7	.227	283.7	-28.6	-1.8	.662	99.2	.410	1.020	193.7	294.8	.601A	1.438D	72.4	1.336	-.4	-1.4	71.1	.409	
4-5387.7	4-5520	.409	87.0	-4.5	-1.6	1.233	109.7	.349	.803	265.7	511.5	.522	1.089A	103.5	.850	-2.4	-28.4	239.5	.257	
		11.29	8.70	3.79	2.59	6.01	4.90	13.46	2/1/2	118.0	39.2	16.3	.360	7.064	11.6	349.6	11.3	95.1D	2.184	
4-4930	4-5260	.111	194.6	16.0	2.0	1.098	94.0	.201	1.219	336.0	572.0	.973	1.464	82.7	.774	-.4	-26.4	271.4	.116	
4-5260	4-5389.7	.222	282.7	-28.8	-1.8	.668	99.3	.401	1.028	194.4	298.8	.616A	1.440D	73.6	1.339	-.4	-1.5	71.7	.388	
4-5389.7	4-5530	.386	90.3	-6.1	-2.0	1.226	108.6	.330	.792	265.9	517.9	.531	1.053A	100.1	.840	-2.2	-29.1	241.2	.220	
		10.94	8.44	3.65	2.50	5.92	4.78	12.87	2/1/2	115.1	46.9	19.1	.404	6.029	14.8	352.0	14.2	95.9D	2.030	
4-4940	4-5260	.102	195.7	22.8	2.3	1.100	92.4	.196	1.220	345.2	571.0	.981	1.460	83.1	.774	-.9	-29.8	273.9	.113	
4-5260	4-5391.2	.219	281.9	-28.9	-1.8	.672	99.4	.394	1.034	195.0	301.7	.626A	1.442D	74.5	1.342	-.4	-1.6	72.2	.370	
4-5391.2	4-5540	.370	92.8	-7.6	-2.4	1.222	107.8	.315	.785	265.8	525.0	.537	1.032A	96.7	.834	-2.0	-29.4	240.0	.190	
		10.74	8.26	3.58	2.46	5.87	4.70	12.44	2/1/2	112.9	57.3	21.4	.439	5.380	17.2	353.8	16.5	96.4D	1.924	
4-4950	4-5260	.101	191.2	31.8	2.9	1.102	90.9	.194	1.220	354.6	570.3	.984	1.457	83.3	.774	-1.6	-34.7	275.8	.113	
4-5260	4-5392.0	.217	281.5	-28.9	-1.8	.674	99.4	.391	1.037	195.3	303.2	.631A	1.442D	74.9	1.343	-.4	-1.6	72.4	.362	
4-5392.0	4-5550	.362	94.3	-8.8	-2.7	1.218	107.5	.308	.779	265.3	532.9	.539	1.018A	93.2	.829	-1.9	-28.9	234.4	.169	
		10.69	8.24	3.57	2.46	5.87	4.67	12.17	2/1/2	111.2	71.6	23.0	.459	5.013	19.2	355.0	18.4	96.3D	1.842	
4-4960	4-5260	.115	189.0	42.5	3.9	1.102	89.3	.194	1.219	4.3	209.9	.983D	1.455	83.4	.774	-2.6	-42.2	277.2	.117	
4-5260	4-5391.7	.218	281.7	-28.9	-1.8	.673	99.4	.392	1.036	195.2	302.6	.629A	1.442D	74.7	1.342	-.4	-1.6	72.3	.365	
4-5391.7	4-5560	.365	94.5	-9.8	-3.1	1.215	107.6	.309	.774	264.2	541.7	.535	1.013	89.2	.827	-1.9	-27.0	224.1	.164	
		10.86	8.35	3.67	2.53	5.95	4.68	12.11	2/1/2	109.7	90.3	23.5	.451	4.907	21.2	355.4	20.4	95.4D	1.762	
4-4970	4-5260	.151	192.8	55.7	6.4	1.102	87.7	.196	1.217	14.3	209.7	.978D	1.455	83.5	.773	-5.4	-55.7	279.0	.136	
4-5260	4-5389.8	.223	282.9	-28.8	-1.8	.667	99.3	.402	1.027	194.3	298.0	.613A	1.440D	73.4	1.339	-.4	-1.4	71.6	.390	
4-5389.8	4-5570	.390	92.2	-10.3	-3.5	1.211	108.8	.327	.770	261.3	552.2	.518	1.022	84.2	.825	-2.2	-23.0	210.9	.187	
		11.73	8.86	4.06	2.67	6.28	4.81	12.40	2/1/2	107.3	112.4	22.3	.395	5.178	24.2	354.4	23.4	92.8D	1.650	
MARS ARRIVAL DATE = 2445270 (27 OCT 1982)																				
4-4690	4-5270	.211	165.3	7.6	1.8	1.086	101.5	.265	1.210	299.3	581.4	.892	1.527	77.8	.775	1.0	-19.1	256.6	.171	
4-5270	4-5380.4	.268	283.8	-27.9	-1.9	.642	102.2	.465	.985	194.9	276.1	.527A	1.443D	66.6	1.322	-.6	-1.5	68.8	.518	
4-5380.4	4-5490	.518	75.2	.6	.3	1.270	114.4	.441	.870	265.7	494.6	.486	1.253A	114.4	.907	-3.6	-24.5	224.5	.405	
		14.38	10.78	4.85	3.60	7.00	5.93	16.37	2/1/2	135.1	24.8	6.7	.224	17.144	18.0	341.8	-18.0	91.2D	3.817	
4-4900	4-5270	.180	169.6	7.3	1.8	1.090	99.5	.242	1.213	307.6	579.8	.920	1.506	79.2	.776	.6	-20.4	260.3	.153	
4-5270	4-5383.5	.256	281.9	-28.2	-1.9	.655	102.2	.444	1.003	196.3	284.6	.558A	1.447D	68.9	1.329	-.6	-1.6	70.4	.475	
4-5383.5	4-5500	.475	80.2	-1.1	-.5	1.255	112.6	.406	.842	265.9	499.3	.500	1.184A	110.9	.885	-3.1	-26.2	231.0	.352	
		13.29	10.06	4.42	3.23	6.64	5.64	15.25	2/1/2	131.6	28.2	9.8	.266	11.694	3.3	345.2	-3.0	93.0D	2.845	
4-4910	4-5270	.154	193.3	7.9	1.8	1.093	97.7	.226	1.216	316.1	578.3	.941	1.490	80.3	.777	.3	-22.0	263.8	.141	
4-5270	4-5386.4	.248	280.2	-28.4	-1.8	.666	102.5	.427	1.017	197.6	290.5	.583A	1.451D	70.8	1.335	-.6	-1.8	71.6	.439	
4-5386.4	4-5510	.439	84.7	-2.9	-1.1	1.244	111.0	.376	.822	266.2	504.5	.515	1.130A	107.4	.867	-2.7	-27.4	236.6	.304	
		12.49	9.52	4.09	2.98	6.38	5.42	14.31	2/1/2	128.3	32.4	13.1	.312	8.753	5.2	348.3	4.7	94.4D	2.416	
4-4920	4-5270	.133	195.9	9.8	1.8	1.096	96.0	.214	1.218	324.8	576.9	.958	1.479	81.2	.779	.0	-23.8	267.0	.132	
4-5270	4-5388.9	.241	278.8	-28.6	-1.8	.674	102.3	.414	1.029	198.7	295.6	.603A	1.455D	72.4	1.340	-.6	-2.0	72.4	.409	
4-5388.9	4-5520	.409	88.6	-4.6	-1.6	1.235	109.7	.350	.806	266.4	510.2	.524	1.089A	104.0	.853	-2.4	-28.4	240.9	.282	
		11.92	9.12	3.86	2.80	6.21	5.26	13.54	2/1/2	125.5	37.9	16.3	.359	7.040	9.9	351.1	9.3	95.6D	2.167	
4-4930	4-5270	.116	197.2	13.5	2.0	1.099	94.4	.205	1.220	333.7	575.7	.970	1.471	81.8	.779	-.3	-26.1	269.6	.125	
4-5270	4-5390.9	.237	277.7	-28.7	-1.7	.681	102.4	.404	1.038	199.6	299.8	.619A	1.458D	73.7	1.343	-.6	-2.1	73.0	.386	
4-5390.9	4-5530	.386	91.9	-6.2	-2.1	1.229	108.6	.330	.795	266.5	516.6	.533	1.058A	100.6	.843	-2.1	-29.0	243.2	.224	
		11.52	8.84	3.70	2.68	6.09	5.14	12.94	2/1/2	122.7	45.1	19.3	.404	5.977	13.1	353.4	12.4	96.3D	2.011	
4-4940	4-5270	.104	196.5	19.3	2.2	1.101	92.8	.199	1.222	342.8	574.8	.979	1.465	82.3	.780	-.8	-29.0	272.1	.122	
4-5270	4-5392.8	.234	276.8	-28.7	-1.7	.685	102.4	.396	1.045	200.3	303.0	.629A	1.460D	74.7	1.346	-.6	-2.3	73.4	.369	
4-5392.8	4-5540	.369	94.5	-7.7	-2.4	1.224	107.8	.315	.787	266.5	523.6	.540	1.035A	97.2	.836	-1.9	-29.3	242.6	.193	
		11.27	8.66	3.60	2.61	6.02	5.07	12.48	2/1/2	120.6	53.0	21.7	.442	5.308	15.5	355.2	14.6	97.1D	1.906	
4-4950	4-5270	.100	193.9	27.3	2.6	1.102	91.3	.196	1.222	352.3	574.1	.983	1.461	82.5	.780	-1.4	-32.9	273.8	.120	
4-5270	4-5393.4	.232	276.3	-28.7	-1.7	.687	102.4	.394	1.048	200.7	304.6	.635A	1.461D	75.2	1.347	-.6	-2.3	73.6	.359	
4-5393.4	4-5550	.359	96.2	-9.0	-2.8	1.220	107.5	.306	.781	266.2	531.4	.542	1.020A	95.7	.832	-1.8	-29.0	237.8	.170	
		11.17	8.59	3.56	2.58	6.00	5.03	12.19	2/1/2	118.9	68.6	23.5	.466	4.920	17.5	356.5	16.4	97.1D	1.827	
4-4960	4-5270	.106	190.5	36.7	3.3	1.103	89.7	.195	1.221	2.0	213.6	.984D	1.459	82.7	.780	-2.3	-36.4	275.0	.122	
4-5270	4-5393.8	.232	276.4	-28.7	-1.7	.687	102.4	.394	1.048	200.6	304.6	.635A	1.461D	75.1	1.347	-.6	-2.3	73.5	.360	
4-5393.8	4-5560	.360	96.6	-9.9	-3.0	1.217	107.5	.305	.776	265.1	540.1	.540	1.013	90.0	.829	-1.8	-27.5	226.3	.161	
		11.26	8.64	3.61	2.62	6.04	5.03	12.08	2/1/2	117.5	66.6	24.1	.464	4.782	19.4	357.1	18.2	96.4D	1.755	
4-4970	4-5270	.126	189.4	47.4	4.8	1.102	88.1	.196	1.219	11.9	213.4	.980D	1.459	82.6	.779	-3.9	-47.4	275.9	.131	
4-5270	4-5391.6	.235	277.3	-28.7	-1.7	.683	102.4	.401	1.041	199.9	301.1	.623A	1.459D	74.1	1.344	-.6	-2.2	73.2	.379	
4-5391.6	4-5570	.379	95.1	-10.4	-3.4	1.214	108.2	.316	.773	262.8	550.1	.526	1.019	85.4	.827	-2.0	-24.1	215.6	.177	
		11.71	8.93	3.81	2.79	6.20	5.11	12.27	2/1/2	115.7	108.1	23.2	.419	4.967	21.8	356.5	20.8	94.3D	1.664	
4-4980	4-5270	.196	199.7	61.9	8.9	1.101	86.4	.201	1.216	21.8	213.2	.972D	1.460	82.5	.777	-8.2	-64.4	279.3	.169	
4-5270	4-5375.6	.289	286.5	-27.3	-2.0	.616	102.3	.502	.957	192.8	266.4	.476A	1.438D	63.0	1.309	-.6	-1.3	66.2	.567	
4-5375.6	4-5560	.567	77.7	-10.0	-5.5	1.201	118.5	.478	.760	246.4	568.6	.397	1.124	66.3	.817	-4.8	-16.2	193.1	.377	
		14.66	11.10	4.63	3.56	6.96	6.47	15.77	2/1/2	110.4	139.7	14.4	.174	7.987	37.7	346.2	37.1	91.5L	1.218	
4-4980	4-5270	.196	199.7	61.9	8.9	1.101	86.4	.201	1.216	21.8	213.2	.972D	1.460	82.5	.777	-8.2	-64.4	279.3	.169	
4-5270	4-5383.9	.255	281.7	-28.2	-1.8	.657	102.2	.441	1.004	196.5	285.3	.561A	1.448D	69.1	1.330	-.6	-1.7	70.5	.471	
4-5383.9	4-5580	.471	86.8	-10.3	-4.4	1.207	112.7	.390	.766	254.7	564.0	.467	1.064	76.2	.823	-3.2	-18.8	200.3	.270	
		13.80	10.25	4.63	3.56	6.96	5.61	13.68	2/1/2	110.4	152.6	18.3	.271	6.278	29.0	351.8	28.2	87.5L	1.431	
MARS ARRIVAL DATE = 2445280 (8 NOV 1982)																				
4-4900	4-5280	.194	191.7	6.0	1.8	1.090	100.3	.252	1.215	304.5	582.9	.906	1.522	78.1	.781	.7	-20.8	261.1	.171	
4-5280	4-5384.7	.279	277.1	-28.1	-1.8	.672	106.0	.450	1.019	201.8	285.8	.560A	1.477D	68.9	1.335	-.8	-2.1	71.8	.478	
4-5384.7	4-5500	.478	81.8	-1.1	-.5	1.259	112.7	.409	.848	266.6	498.1	.501	1.195A	111.4	.890	-3.1	-26.2	232.0	.359	
		14.45	10.84	4.61	3.61	7.01	6.23	15.40	2/1/2	137.0	27.2	10.2	.263	11.293	5.9	348.4	-5.7	93.6D	2.705	

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445280
6 NOV 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-4910	4-5280	.165	195.5	6.3	1.8	1.094	98.4	.234	1.218	313.2	581.5	.935	1.503	79.4	.785	.3	-22.2	264.2	.156
4-5280	4-5387.5	.271	275.3	-28.2	-1.8	.684	105.9	.433	1.035	203.4	291.8	.586A	1.483D	70.9	1.341	-.8	-2.4	72.6	.441
4-5387.5	4-5510	.441	86.1	-2.9	-1.1	1.247	111.1	.370	.826	266.8	503.3	.514	1.139A	107.9	.671	-2.7	-27.4	237.8	.310
		13.54	10.25	4.23	3.28	6.69	6.03	14.43	2/1/2	134.1	31.3	13.6	.309	6.459	5.6	349.5	2.4	95.1D	2.305
4-4920	4-5280	.141	198.4	7.7	1.8	1.097	96.6	.220	1.220	321.9	580.3	.952	1.489	80.3	.784	.0	-23.9	267.0	.145
4-5280	4-5390.0	.265	273.8	-28.3	-1.7	.692	105.9	.421	1.047	204.6	297.1	.607A	1.488D	72.6	1.346	-.8	-2.6	73.3	.410
4-5390.0	4-5520	.410	90.1	-4.7	-1.6	1.238	109.7	.351	.810	267.0	509.1	.526	1.095A	104.5	.857	-2.3	-28.3	242.4	.267
		12.87	9.82	3.95	3.06	6.46	5.87	13.63	2/1/2	131.5	36.6	16.9	.357	6.798	8.0	352.1	7.1	96.3D	2.071
4-4930	4-5280	.122	200.0	10.7	1.9	1.099	94.9	.210	1.222	330.9	579.2	.966	1.479	81.0	.785	-.3	-25.9	269.5	.137
4-5280	4-5392.1	.261	272.7	-28.3	-1.7	.698	105.8	.411	1.057	205.7	301.5	.623A	1.492D	73.9	1.350	-.8	-2.8	73.7	.386
4-5392.1	4-5530	.386	93.5	-6.3	-2.1	1.231	108.5	.330	.798	267.2	515.4	.535	1.062A	101.1	.846	-2.0	-28.9	245.1	.228
		12.41	9.51	3.75	2.90	6.31	5.75	13.00	2/1/2	129.2	43.5	20.0	.404	5.765	11.3	354.4	10.3	97.4D	1.925
4-4940	4-5280	.108	199.7	15.7	2.1	1.101	93.3	.203	1.224	340.1	578.2	.976	1.472	81.5	.785	-.7	-28.3	271.6	.132
4-5280	4-5393.7	.258	271.8	-28.3	-1.6	.703	105.8	.404	1.064	206.4	304.9	.634A	1.495D	74.9	1.353	-.8	-2.9	74.0	.368
4-5393.7	4-5540	.368	96.1	-7.8	-2.5	1.226	107.7	.314	.790	267.2	522.4	.542	1.038A	97.7	.839	-1.8	-29.2	245.0	.196
		12.10	9.30	3.63	2.80	6.21	5.67	12.52	2/1/2	127.2	52.9	22.6	.445	5.106	13.7	356.2	12.5	98.1D	1.627
4-4950	4-5280	.101	197.4	22.8	2.4	1.103	91.7	.198	1.224	349.5	577.5	.982	1.467	81.8	.786	-1.2	-31.4	273.2	.129
4-5280	4-5394.7	.256	271.3	-28.3	-1.6	.706	105.8	.401	1.069	206.9	307.0	.640A	1.497D	75.5	1.354	-.8	-3.1	74.1	.357
4-5394.7	4-5550	.357	98.0	-9.1	-2.8	1.222	107.1	.304	.783	266.9	530.0	.545	1.021A	94.3	.854	-1.7	-29.0	241.0	.172
		11.95	9.20	3.57	2.75	6.16	5.63	12.20	2/1/2	125.7	65.9	24.5	.472	4.714	15.6	357.5	14.2	98.3D	1.754
4-4960	4-5280	.102	193.5	31.3	2.9	1.104	90.1	.196	1.224	359.2	577.1	.984	1.465	82.0	.785	-1.9	-35.6	274.3	.130
4-5280	4-5394.8	.256	271.3	-28.3	-1.6	.706	105.7	.400	1.069	206.9	307.2	.641A	1.497D	75.6	1.354	-.8	-3.1	74.1	.355
4-5394.8	4-5560	.355	98.6	-10.0	-3.0	1.218	107.1	.301	.779	266.1	536.6	.544	1.013A	90.6	.831	-1.6	-27.6	232.5	.160
		11.96	9.20	3.58	2.76	6.17	5.62	12.06	2/1/2	124.3	83.1	25.3	.476	4.558	17.3	358.2	15.9	97.8D	1.693
4-4970	4-5280	.116	190.2	40.4	3.9	1.103	88.5	.197	1.222	9.1	216.7	.981D	1.464	82.0	.785	-3.1	-41.9	275.1	.134
4-5280	4-5393.6	.258	271.9	-28.3	-1.6	.702	105.8	.405	1.064	206.4	304.6	.633A	1.495D	74.8	1.352	-.8	-2.9	74.0	.369
4-5393.6	4-5570	.569	97.6	-10.6	-3.4	1.216	107.7	.311	.775	264.0	548.2	.533	1.016	86.3	.829	-1.8	-24.9	220.0	.169
		12.23	9.38	3.69	2.85	6.26	5.68	12.17	2/1/2	122.8	104.0	24.7	.441	4.679	19.4	357.9	18.0	96.0D	1.621
4-4980	4-5280	.151	191.6	51.2	6.0	1.102	86.9	.201	1.219	19.0	216.5	.974D	1.464	81.9	.783	-5.4	-52.6	276.3	.151
4-5280	4-5388.7	.268	274.6	-28.2	-1.8	.688	105.9	.427	1.041	204.0	294.5	.597A	1.486D	71.7	1.344	-.8	-2.5	72.9	.426
4-5388.7	4-5580	.426	92.6	-10.6	-4.0	1.211	110.5	.355	.770	258.7	560.2	.497	1.043	79.6	.827	-2.5	-20.6	206.5	.227
		13.17	10.00	4.05	3.17	6.58	5.94	12.98	2/1/2	119.7	126.6	21.1	.332	5.457	23.6	355.4	22.6	91.0D	1.479

MARS ARRIVAL DATE = 2445290 (16 NOV 1982)

4-4920	4-5290	.152	201.1	5.5	1.6	1.097	97.3	.226	1.223	318.7	583.2	.944	1.502	79.4	.789	.0	-23.9	268.1	.160
4-5290	4-5391.2	.301	269.4	-27.8	-1.7	.717	109.8	.432	1.081	211.7	299.6	.613A	1.548D	72.8	1.357	-1.0	-3.2	73.4	.411
4-5391.2	4-5520	.411	91.6	-4.8	-1.7	1.241	109.7	.353	.814	267.7	507.9	.527	1.102A	105.0	.860	-2.2	-28.2	243.8	.272
		14.23	10.86	4.07	3.37	6.77	6.79	13.73	2/1/2	136.8	35.3	18.3	.355	6.302	6.4	352.9	5.0	97.5D	1.885
4-4930	4-5290	.130	203.1	7.8	1.9	1.100	95.6	.216	1.225	327.7	582.2	.961	1.489	80.2	.789	-.3	-25.6	270.3	.150
4-5290	4-5393.3	.296	268.4	-27.7	-1.6	.723	109.6	.423	1.091	212.8	304.3	.629A	1.553D	74.2	1.361	-1.0	-3.4	73.7	.386
4-5393.3	4-5530	.386	95.1	-6.4	-2.1	1.233	108.5	.331	.802	267.6	514.2	.537	1.067A	101.6	.849	-1.9	-28.8	246.9	.233
		13.67	10.51	3.84	3.17	6.57	6.67	13.07	2/1/2	134.7	41.9	21.5	.404	5.357	9.5	355.0	8.1	98.7D	1.760
4-4940	4-5290	.114	203.3	12.0	2.0	1.102	93.9	.207	1.227	336.9	581.3	.972	1.481	80.8	.790	-.7	-27.7	272.2	.144
4-5290	4-5395.0	.293	267.5	-27.7	-1.6	.728	109.5	.417	1.099	213.7	307.9	.641A	1.557D	75.3	1.364	-1.0	-3.6	73.7	.367
4-5395.0	4-5540	.367	97.8	-7.9	-2.5	1.228	107.6	.314	.792	267.9	521.1	.544	1.041A	98.2	.841	-1.7	-29.1	247.4	.199
		13.30	10.27	3.68	3.03	6.44	6.59	12.57	2/1/2	132.9	50.9	24.3	.447	4.745	11.8	356.8	10.2	99.6D	1.675
4-4950	4-5290	.103	201.5	18.1	2.3	1.104	92.3	.202	1.227	346.4	580.6	.980	1.475	81.2	.790	-1.1	-30.3	273.7	.140
4-5290	4-5396.1	.291	267.1	-27.6	-1.6	.730	109.4	.413	1.104	214.3	310.3	.648A	1.560D	76.0	1.365	-1.0	-3.8	73.7	.355
4-5396.1	4-5550	.355	99.8	-9.2	-2.8	1.224	107.0	.302	.786	267.7	528.7	.548	1.023A	94.8	.836	-1.6	-29.0	244.1	.173
		13.09	10.13	3.59	2.96	6.36	6.54	12.23	2/1/2	131.4	63.2	26.4	.478	4.375	13.7	358.1	11.9	100.0D	1.614
4-4960	4-5290	.101	197.6	25.8	2.6	1.104	90.7	.199	1.227	356.0	580.1	.983	1.471	81.4	.790	-1.7	-33.6	274.8	.139
4-5290	4-5396.4	.291	266.9	-27.6	-1.5	.731	109.3	.412	1.105	214.5	310.9	.650A	1.561D	76.2	1.366	-1.0	-3.8	73.7	.351
4-5396.4	4-5560	.351	100.7	-10.2	-3.0	1.220	106.8	.298	.781	267.0	537.0	.548	1.014A	91.3	.833	-1.5	-28.0	236.3	.159
		13.04	10.10	3.57	2.93	6.34	6.54	12.05	2/1/2	130.2	79.6	27.5	.487	4.206	15.2	358.8	13.3	99.7D	1.562
4-4970	4-5290	.108	193.2	34.0	3.3	1.105	89.0	.199	1.226	5.8	219.8	.982D	1.470	81.5	.790	-2.5	-38.1	275.7	.141
4-5290	4-5395.8	.292	267.3	-27.7	-1.6	.729	109.5	.415	1.101	213.9	308.9	.644A	1.558D	75.8	1.364	-1.0	-3.7	73.7	.361
4-5395.8	4-5570	.361	100.1	-10.7	-3.3	1.217	107.3	.305	.777	265.3	546.4	.540	1.014	87.2	.852	-1.8	-25.3	224.4	.183
		13.18	10.20	3.63	2.98	6.39	6.57	12.10	2/1/2	128.9	100.0	27.0	.460	4.281	16.8	358.8	15.0	98.2D	1.510
4-4980	4-5290	.129	191.2	42.8	4.6	1.104	87.4	.201	1.224	15.7	219.5	.977D	1.470	81.4	.789	-4.0	-45.2	276.5	.150
4-5290	4-5391.9	.299	269.0	-27.8	-1.7	.719	109.7	.429	1.084	212.1	301.4	.619A	1.550D	73.3	1.359	-1.0	-3.5	73.5	.402
4-5391.9	4-5580	.402	96.5	-10.8	-3.8	1.214	109.3	.336	.773	261.1	557.5	.513	1.033	81.5	.830	-2.1	-21.7	211.4	.205
		13.72	10.57	3.82	3.15	6.56	6.74	12.65	2/1/2	126.9	122.0	24.0	.372	4.611	19.7	357.5	18.2	94.1D	1.418

MARS ARRIVAL DATE = 2445300 (26 NOV 1982)

4-4950	4-5300	.106	205.9	13.3	2.1	1.105	92.9	.206	1.231	342.9	583.4	.977	1.484	80.5	.795	-1.1	-29.4	275.3	.152
4-5300	4-5397.6	.340	263.9	-27.0	-1.5	.765	113.4	.434	1.164	222.6	315.0	.658A	1.670D	76.8	1.383	-1.2	-4.5	72.2	.352
4-5397.6	4-5550	.352	101.8	-9.4	-2.8	1.226	106.9	.301	.788	268.6	527.1	.551	1.026A	93.4	.839	-1.4	-28.8	247.5	.176
		14.65	11.45	3.62	3.20	6.60	7.03	12.26	2/1/2	136.4	60.2	29.7	.484	3.896	11.9	356.1	9.4	102.4D	1.402
4-4960	4-5300	.101	202.5	20.2	2.4	1.106	91.3	.202	1.231	352.5	582.9	.982	1.480	80.8	.795	-1.5	-32.0	276.4	.149
4-5300	4-5398.1	.339	263.7	-26.9	-1.5	.766	113.4	.433	1.166	223.1	316.0	.661A	1.671D	77.1	1.383	-1.2	-4.6	72.1	.347
4-5398.1	4-5560	.347	103.0	-10.3	-3.0	1.222	106.6	.295	.783	268.0	535.3	.552	1.015A	92.0	.836	-1.4	-28.1	240.6	.159
		14.52	11.37	3.57	3.15	6.55	7.01	12.05	2/1/2	135.2	73.8	31.1	.499	3.731	13.2	356.9	10.6	102.4D	1.364
4-4970	4-5300	.103	197.7	27.9	2.9	1.108	89.6	.201	1.230	2.3	222.5	.983D	1.477	81.0	.794	-2.2	-35.4	277.3	.150
4-5300	4-5397.5	.340	263.9	-27.0	-1.5	.765	113.5	.435	1.164	222.6	314.6	.659A	1.670D	76.7	1.383	-1.2	-4.5	72.2	.353
4-5397.5	4-5570	.354	102.7	-10.9	-3.3	1.220	106.9	.299	.779	266.6	544.4	.546	1.013	88.1	.834	-1.4	-26.1	229.4	.158
		14.59	11.43	3.59	3.16	6.56	7.04	12.04	2/1/2	134.1	95.5	30.9	.481	3.755	14.4	359.1	11.9	101.3D	1.326

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2445150
29 JUN 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445150 (29 JUN 1982)																			
4-4850	4-5150	.251	151.0	12.5	.1	1.072	104.1	.287	1.197	288.1	541.6	.854	1.541	89.4	.681	1.8	-14.9	264.2	.137
4-5150	4-5364.3	.284	281.0	-28.5	-2.3	.611	78.2	.464	1.081	165.6	291.1	.579A	1.583	69.6	1.353	1.8	4.6	35.9	.477
4-5364.3	4-5490	.477	54.0	.5	.2	1.217	113.2	.400	.785	256.6	511.0	.471	1.099A	106.6	.836	-3.4	-21.5	208.4	.300
		14.75	11.85	5.49	2.90	6.31	6.35	14.24	2/1/2	60.8	39.9	18.5	.265	6.208	15.7	314.3	13.5	93.2D	1.379
4-4860	4-5150	.232	157.3	10.2	.1	1.078	102.9	.276	1.206	293.3	537.1	.875	1.542A	91.1	.686	1.8	-15.4	272.8	.144
4-5150	4-5366.9	.276	281.2	-29.0	-2.5	.616	78.7	.452	1.088	165.7	295.2	.597A	1.580	71.1	1.355	1.9	5.4	37.5	.449
4-5366.9	4-5500	.449	58.1	-.9	-.4	1.210	112.0	.378	.774	256.7	516.5	.481	1.067A	103.0	.823	-3.3	-23.4	210.9	.261
		14.36	11.32	5.17	3.04	6.45	6.15	13.54	2/1/2	52.6	46.6	21.5	.298	5.357	17.4	317.1	17.3	94.4D	1.299
4-4870	4-5150	.214	163.4	7.9	.2	1.084	101.7	.267	1.219	298.7	532.7	.894	1.545A	92.6	.692	1.8	-15.7	279.7	.152
4-5150	4-5368.9	.271	281.4	-29.5	-2.6	.620	79.2	.443	1.094	165.7	298.5	.610A	1.579	72.2	1.357	2.0	6.0	38.6	.428
4-5368.9	4-5510	.428	61.4	-2.4	-.9	1.204	111.0	.362	.765	256.6	522.8	.489	1.042A	99.3	.614	-3.2	-24.6	210.9	.228
		14.11	10.90	4.90	3.21	6.62	6.00	12.99	2/1/2	45.9	55.6	24.3	.328	4.759	20.6	319.3	20.5	95.2D	1.233
4-4880	4-5150	.198	169.1	5.7	.2	1.090	100.6	.261	1.231	304.3	528.5	.910	1.552A	94.0	.697	1.7	-15.8	285.4	.162
4-5150	4-5370.2	.267	281.5	-29.8	-2.7	.622	79.4	.437	1.098	165.8	300.6	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.415
4-5370.2	4-5520	.415	63.7	-3.9	-1.5	1.200	110.1	.351	.759	256.2	529.9	.493	1.025A	95.4	.806	-3.2	-24.7	207.2	.202
		13.98	10.57	4.66	3.40	6.80	5.91	12.61	2/1/2	40.5	68.0	26.5	.348	4.367	23.3	320.9	23.5	95.5D	1.173
4-4890	4-5150	.182	174.4	3.6	.2	1.096	99.5	.255	1.243	310.1	524.4	.926	1.560A	95.2	.703	1.7	-15.8	289.9	.171
4-5150	4-5370.3	.267	281.5	-29.9	-2.7	.623	79.4	.437	1.098	165.8	300.8	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.414
4-5370.3	4-5530	.414	64.4	-5.4	-2.0	1.196	110.4	.350	.753	255.3	538.2	.490	1.017A	91.0	.801	-3.2	-22.8	198.9	.191
		13.98	10.36	4.45	3.60	7.00	5.91	12.46	2/1/2	36.0	85.2	27.7	.350	4.179	25.6	321.6	25.6	95.0D	1.113
4-4900	4-5150	.168	179.3	2.4	.3	1.102	98.4	.252	1.255	316.1	520.5	.939	1.571A	96.3	.708	1.6	-15.9	293.7	.180
4-5150	4-5367.8	.274	281.3	-29.2	-2.5	.618	78.9	.448	1.091	165.7	296.7	.603A	1.580	71.6	1.356	1.9	5.7	38.0	.439
4-5367.8	4-5540	.439	61.8	-6.7	-2.7	1.191	111.6	.369	.748	252.5	549.0	.472	1.025	84.8	.795	-3.6	-17.2	185.4	.212
		14.14	10.34	4.26	3.80	7.20	6.08	12.75	2/1/2	32.4	108.3	26.8	.311	4.315	27.7	320.2	27.7	92.7D	1.032
MARS ARRIVAL DATE = 2445160 (9 JUL 1982)																			
4-4850	4-5160	.249	151.3	13.1	.3	1.070	104.0	.264	1.193	287.8	546.4	.854	1.532	87.5	.686	1.8	-14.2	260.4	.129
4-5160	4-5365.9	.280	284.3	-28.2	-2.3	.611	79.3	.462	1.068	167.0	289.7	.574A	1.562	69.4	1.349	1.6	4.2	39.1	.479
4-5365.9	4-5490	.479	56.0	.5	.2	1.221	113.3	.402	.791	257.5	509.4	.473	1.109A	107.4	.842	-3.5	-21.9	210.3	.309
		14.46	11.71	5.46	2.75	6.16	6.25	14.40	2/1/2	69.7	38.1	17.3	.262	6.668	12.7	317.0	12.5	92.9D	1.485
4-4860	4-5160	.228	157.6	10.9	.3	1.076	102.7	.271	1.202	293.3	542.2	.876	1.528	89.2	.691	1.7	-15.0	269.9	.133
4-5160	4-5366.5	.272	284.5	-28.7	-2.4	.617	79.9	.449	1.076	167.1	294.1	.593A	1.559	70.9	1.352	1.7	4.8	40.8	.450
4-5366.5	4-5500	.450	60.2	-.9	-.4	1.213	112.0	.380	.779	257.6	514.8	.483	1.075A	105.8	.828	-3.3	-23.9	213.3	.269
		13.96	11.14	5.11	2.82	6.23	6.03	13.66	2/1/2	60.4	44.3	20.3	.297	5.684	16.6	319.9	16.4	94.2D	1.390
4-4870	4-5160	.209	163.6	8.8	.3	1.081	101.5	.261	1.212	298.8	538.0	.896	1.528A	90.7	.696	1.7	-15.5	277.6	.139
4-5160	4-5370.7	.265	284.7	-29.2	-2.5	.621	80.3	.439	1.082	167.2	297.6	.607A	1.558	72.1	1.354	1.8	5.3	42.0	.426
4-5370.7	4-5510	.428	63.7	-2.4	-.9	1.208	110.9	.361	.770	257.5	520.9	.492	1.048A	100.2	.818	-3.2	-25.3	214.1	.234
		13.63	10.69	4.82	2.94	6.35	5.87	13.08	2/1/2	52.8	52.6	23.1	.329	5.000	19.8	322.5	19.8	95.1D	1.315
4-4880	4-5160	.191	169.3	6.9	.4	1.087	100.3	.253	1.222	304.6	533.9	.913	1.531A	92.0	.701	1.6	-15.7	284.2	.146
4-5160	4-5372.2	.261	284.8	-29.5	-2.6	.624	80.6	.433	1.087	167.3	300.1	.616A	1.557	72.9	1.356	1.8	5.8	42.7	.413
4-5372.2	4-5520	.413	66.3	-4.0	-1.5	1.203	110.2	.349	.763	257.3	527.8	.497	1.029A	96.4	.811	-3.1	-25.7	211.6	.206
		13.42	10.33	4.57	3.08	6.49	5.77	12.66	2/1/2	46.6	64.0	25.4	.353	4.741	22.7	324.2	22.6	95.5D	1.251
4-4890	4-5160	.175	174.6	5.4	.5	1.093	99.2	.246	1.232	310.6	530.1	.929	1.535A	93.2	.706	1.5	-15.9	289.4	.154
4-5160	4-5372.7	.260	284.8	-29.7	-2.7	.625	80.7	.431	1.088	167.3	300.9	.619A	1.556	73.2	1.356	1.9	5.9	43.0	.408
4-5372.7	4-5530	.408	67.5	-5.4	-2.0	1.199	110.0	.344	.757	256.5	535.7	.497	1.018A	92.2	.805	-3.1	-24.5	204.6	.189
		13.32	10.08	4.35	3.24	6.64	5.73	12.43	2/1/2	41.6	79.7	27.0	.362	4.266	25.1	325.1	25.1	95.2D	1.189
4-4900	4-5160	.160	179.4	4.6	.6	1.098	98.0	.241	1.242	316.9	526.4	.943	1.542A	94.2	.710	1.3	-16.3	293.7	.161
4-5160	4-5371.3	.264	284.7	-29.3	-2.6	.622	80.5	.437	1.084	167.2	298.6	.611A	1.557	72.4	1.355	1.8	5.5	42.3	.421
4-5371.3	4-5540	.422	66.3	-6.8	-2.5	1.195	110.7	.354	.752	254.6	545.5	.485	1.018	87.0	.800	-3.3	-20.3	192.6	.197
		13.38	9.99	4.16	3.39	6.80	5.83	12.53	2/1/2	37.5	100.8	26.9	.338	4.294	27.3	324.6	27.2	93.6D	1.115
MARS ARRIVAL DATE = 2445170 (19 JUL 1982)																			
4-4850	4-5170	.249	151.8	13.6	.5	1.069	104.0	.263	1.190	287.4	551.3	.853	1.526	85.6	.693	1.7	-13.6	255.8	.125
4-5170	4-5367.3	.276	287.3	-27.9	-2.2	.611	80.5	.460	1.055	168.5	288.3	.569A	1.541	69.1	1.345	1.4	3.6	42.3	.482
4-5367.3	4-5490	.482	58.0	.5	.2	1.225	113.4	.405	.797	258.3	507.9	.475	1.120A	108.1	.847	-3.5	-22.3	212.0	.318
		14.26	11.59	5.45	2.67	6.09	6.13	14.57	2/1/2	79.3	36.4	16.0	.259	7.201	11.6	319.7	11.4	92.6D	1.606
4-4860	4-5170	.226	158.0	11.6	.5	1.074	102.6	.268	1.198	293.1	547.2	.877	1.519	87.4	.697	1.7	-14.6	266.0	.125
4-5170	4-5370.1	.267	287.5	-28.4	-2.3	.617	81.1	.446	1.084	168.6	292.9	.589A	1.539	70.7	1.348	1.5	4.1	44.0	.452
4-5370.1	4-5500	.452	62.3	-1.0	-.4	1.217	112.0	.381	.784	258.4	513.2	.486	1.083A	104.6	.834	-3.3	-24.3	215.6	.276
		13.66	10.98	5.08	2.68	6.09	5.90	13.80	2/1/2	69.4	42.2	19.0	.295	6.056	15.6	322.7	15.6	93.9D	1.492
4-4870	4-5170	.205	164.0	9.6	.5	1.080	101.3	.256	1.207	298.8	543.2	.898	1.516	88.9	.701	1.6	-15.3	274.7	.129
4-5170	4-5372.4	.260	287.7	-28.8	-2.5	.622	81.6	.436	1.071	168.8	296.7	.604A	1.537	72.0	1.351	1.5	4.6	45.3	.427
4-5372.4	4-5510	.427	66.0	-2.5	-.9	1.211	110.9	.362	.774	258.4	519.1	.494	1.054A	101.0	.823	-3.1	-25.8	217.1	.240
		13.23	10.49	4.76	2.74	6.15	5.73	13.16	2/1/2	60.9	49.8	21.9	.329	5.272	19.0	325.3	19.0	94.9D	1.406
4-4880	4-5170	.186	169.6	8.0	.6	1.085	100.1	.247	1.215	304.8	539.3	.916	1.515A	90.2	.706	1.5	-15.7	282.0	.133
4-5170	4-5374.1	.255	287.7	-29.2	-2.6	.625	81.9	.428	1.076	168.9	299.4	.615A	1.536	72.9	1.352	1.6	5.0	46.2	.410
4-5374.1	4-5520	.410	66.6	-4.0	-1.5	1.206	110.1	.347	.767	258.3	525.6	.500	1.033A	97.3	.815	-3.0	-26.5	215.6	.210
		12.94	10.11	4.50	2.83	6.24	5.61	12.72	2/1/2	53.9	60.3	24.4	.357	4.740	21.9	327.3	21.9	95.4D	1.335
4-4890	4-5170	.169	174.8	6.7	.6	1.090	98.9	.239	1.224	311.0	535.7	.932	1.516A	91.4	.710	1.3	-16.1	286.0	.139
4-5170	4-5374.9	.253	287.8	-29.4	-2.6	.627	82.0	.425	1.078	168.9	300.8	.620A	1.536	73.3	1.353	1.6	5.2	46.6	.402
4-5374.9	4-5530	.402	70.4	-5.5	-1.9	1.202	109.7	.340	.761	257.7	533.4	.502	1.020A	93.4	.809	-3.0	-25.9	209.9	.189
		12.78	9.83	4.28	2.94	6.35	5.56	12.43	2/1/2	48.2	74.7	26.1	.371	4.421	24.4	328.5	24.4	95.3D	1.270
4-4900	4-5170	.153	179.5	6.4	.8	1.095	97.7	.233	1.232	317.4	532.2	.946	1.519A	92.3	.714	1.1	-16.6	292.9	.145
4-5170	4-5374.2	.255	287.7	-29.2	-2.6	.626	81.9	.428	1.076	168.9	299.7	.616A	1.536	72.9	1.353	1.6	5.1	46.2	.409
4-5374.2	4-5540	.409	70.1	-6.8	-2.5	1.198	110.0	.345	.756	256.2	542.6	.495	1.016	88.6	.804	-3.1	-22.7	199.2	.188
		12.75	9.69	4.08	3.08	6.47	5.60	12.41	2/1/2	43.5	94.2	24.7	.359	4.337	26.7	328.6	26.6	94.2D	1.199
4-4910	4-5170	.139	183.8	7.7	1.1	1.100	96.4	.228	1.240	324.2	529.0	.958	1.523A	93.2	.717	.8	-17.7	297.0	.151
4-5170	4-5369.0	.270	287.5	-28.2	-2.3	.615	80.8	.452	1.060	168.5	291.0	.581A	1.540	70.0	1.347	1.4	3.9	43.3	.464
4-5369.0	4-5550	.464	64.3	-7.9	-3.3	1.192	112.7	.387	.749	251.4	555.6	.459	1.038	80.6	.797	-3.9	-15.2	183.0	.241
		13.09	9.92	3.92	3.17	6.56	6.00	13.21	2/1/2	39.6	120.5	24.0	.279	4.809	29.7	324.9	29.6	90.0D	1.064
MARS ARRIVAL DATE = 2445180 (29 JUL 1982)																			
4-4850	4-5180	.251	152.4	14.1	.6	1.069	104.1	.264	1.187	286.8	555.9	.850	1.525	83.9	.700	1.7	-13.0	250.8	.125
4-5180	4-5368.8	.271	290.0	-27.6	-2.2	.611	81.8	.459	1.043	170.0	286.9	.564A	1.521	66.8	1.341	1.2	3.1	45.4	.485
4-5368.8	4-5490	.485	59.9	.5	.2	1.230	113.4	.408	.804	259.1	506.4	.476	1.131A	106.9	.853	-3.5	-22.7	213.7	.326
		14.17	11.50	5.49	2.67	6.08	6.01	14.74	2/1/2	89.5	34.9	14.7	.256	7.826	10.3	322.4	10.1	92.3D	1.747
4-4860	4-5180	.225	158.6	12.2	.6	1.073	102.6	.267	1.195	292.6	552.1	.876	1.514	85.7	.704	1.6	-14.2	261.3	.121
4-5180	4-5371.7	.261	290.2	-28.0	-2.3	.616	82.4	.444	1.052	170.2	291.6	.585A	1.519	70.5	1.344	1.2	3.5	47.2	.453
4-5371.7	4-5500	.453	64.4	-1.0	-.4	1.221	112.0	.383	.790	259.3	511.5	.488	1.092A	105.4	.839	-3.3	-24.7	217.7	.284
		13.44	10.84	5.07	2.60	6.01	5.77	13.93	2/1/2	79.2	40.2	17.7	.293	6.487	14.6	325.5	14.6	93.6D	1.606
4-4870	4-5180	.203	164.4	10.4	.7	1.078	101.2	.253	1.203	298.6	546.3	.898	1.507	87.2	.708	1.5	-15.1	270.7	.121
4-5180	4-5374.1	.254	290.3	-28.5	-2.4	.623	82.9	.432	1.060	170.4	295.7	.601A	1.518	71.8	1.347	1.3	3.9	46.6	.428
4-5374.1	4-5510	.426	66.2	-2.5	-.9	1.214	110.9	.362	.779	259.3	517.3	.497	1.061A	101.6	.826	-3.1	-26.2	219.9	.246
		12.92	10.32	4.74	2.60	6.01	5.58	13.28	2/1/2	70.0	47.3	20.7	.329	5.579	18.2	328.2	18.1	94.7D	1.505
4-4880	4-5180	.183	170.0	8.9	.7	1.083	99.9	.242	1.210	304.8	544.7	.917	1.503	88.5	.711	1.4	-15.7	278.8	.123
4-5180	4-5375.9	.249	290.3	-28.9	-2.5	.627	83.2	.424	1.065	170.6	298.7	.613A	1.517	72.8	1.349	1.4	4.3	49.5	.409
4-5375.9	4-5520	.409	71.2	-4.1	-1.5	1.209	110.0	.346	.771	259.2	523.9	.504	1.038A	98.2	.819	-2.9	-27.1	219.3	.214
		12.55	9.91	4.46	2.64	6.06	5.45	12.78	2/1/2	82.3	56.9	23.2	.360	4.966	21.1	330.5	21.1	95.3D	1.426
4-4890	4-5180	.165	175.1	7.9	.8	1.088	98.7	.234	1.218	311.2	541.2	.933	1.502	89.6	.718	1.2	-16.3	286.8	.127
4-5180	4-5376.9	.248	290.3	-29.1	-2.5	.629	83.4	.420	1.068	170.7	300.5	.620A	1.518	73.4	1.351	1.4	4.5	50.0	.398
4-5376.9	4-5530	.398	73.2	-5.5	-1.9	1.205	109.5	.357	.765	258.8	531.3	.507	1.022A	94.4	.813	-2.9	-26.9	214.8	.191
		12.32	9.61	4.25	2.71	6.12	5.38	12.45	2/1/2	95.8	70.2	25.2	.379	4.580	23.6	331.8	23.6	95.3D	1.357

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2445180
29 JUL 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-4900	4-5180	.149	179.7	7.8	1.0	1.093	97.4	.226	1.225	317.8	537.9	.947	1.502A	90.6	.718	1.0	-17.0	291.0		.131
4-5180	4-5376.8	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.067	170.7	300.2	.619A	1.516	73.3	1.350	1.4	4.5	49.9		.400
4-5376.8	4-5540	.400	73.5	-6.9	-2.4	1.201	109.6	.337	.760	257.7	539.9	.503	1.016A	90.0	.808	-2.9	-24.6	205.4		.183
		12.21	9.42	4.03	2.79	6.20	5.39	12.34	2/1/2	50.6	68.2	26.2	.376	4.420	25.9	332.3	25.9	94.6D	1.266	
4-4910	4-5160	.134	183.8	9.4	1.2	1.098	96.1	.221	1.232	324.9	535.0	.960	1.504A	91.4	.721	.7	-18.2	295.6		.136
4-5160	4-5373.9	.255	290.3	-28.5	-2.4	.623	82.8	.453	1.059	170.4	295.4	.600A	1.518	71.7	1.347	1.3	3.9	48.5		.429
4-5373.9	4-5550	.429	70.5	-8.0	-3.1	1.197	111.0	.360	.754	254.6	551.0	.483	1.025	83.9	.803	-3.4	-19.0	191.5		.209
		12.34	9.47	3.87	2.87	6.28	5.59	12.71	2/1/2	46.3	111.6	25.0	.326	4.623	28.6	330.6	28.5	91.9D	1.181	
MARS ARRIVAL DATE = 2445190 (8 AUG 1982)																				
4-4850	4-5190	.255	153.2	14.5	.8	1.068	104.4	.287	1.186	285.9	560.5	.845	1.527	82.2	.708	1.7	-12.5	246.0		.129
4-5190	4-5370.2	.266	292.4	-27.2	-2.1	.611	83.2	.458	1.030	171.8	285.5	.559A	1.502	68.5	1.337	1.0	2.5	46.5		.466
4-5370.2	4-5490	.486	61.8	.5	.2	1.234	113.5	.411	.810	259.9	504.9	.478	1.143A	109.6	.859	-3.5	-23.0	215.2		.335
		14.18	11.44	5.56	2.74	6.15	5.88	14.91	2/1/2	99.5	33.4	13.4	.252	8.564	8.6	324.9	8.7	92.0D	1.910	
4-4860	4-5190	.227	159.2	12.6	.8	1.075	102.7	.268	1.193	292.0	556.9	.873	1.512	84.0	.711	1.6	-13.9	256.3		.121
4-5190	4-5373.2	.256	292.4	-27.7	-2.2	.619	83.6	.442	1.041	172.0	290.4	.581A	1.500	70.5	1.341	1.0	2.9	50.4		.455
4-5373.2	4-5500	.455	66.4	-1.0	-.4	1.225	112.1	.385	.795	260.1	510.0	.489	1.101A	106.1	.844	-3.2	-25.0	219.6		.292
		13.32	10.73	5.10	2.59	6.01	5.63	14.08	2/1/2	69.4	38.4	16.5	.290	6.975	13.5	328.2	13.5	93.4D	1.734	
4-4870	4-5190	.203	165.0	11.0	.8	1.077	101.2	.252	1.200	298.2	553.3	.897	1.502	85.6	.714	1.5	-15.0	265.9		.117
4-5190	4-5375.7	.248	292.4	-26.2	-2.3	.625	84.3	.429	1.049	172.3	294.6	.598A	1.499	71.7	1.344	1.1	3.2	51.8		.428
4-5375.7	4-5510	.428	70.4	-2.5	-1.0	1.218	110.9	.363	.784	260.2	515.6	.499	1.068A	102.6	.832	-3.0	-26.6	222.4		.252
		12.70	10.17	4.74	2.53	5.94	5.43	13.39	2/1/2	60.0	45.0	19.4	.328	5.923	17.2	331.0	17.2	94.4D	1.614	
4-4880	4-5190	.182	170.5	9.6	.9	1.082	99.9	.240	1.206	304.5	549.8	.917	1.496	86.9	.718	1.3	-15.8	274.5		.117
4-5190	4-5377.6	.242	292.4	-26.5	-2.4	.629	84.6	.420	1.055	172.5	298.0	.611A	1.498	72.8	1.346	1.1	3.5	52.8		.408
4-5377.6	4-5520	.406	73.6	-4.1	-1.5	1.212	109.9	.346	.775	260.2	522.0	.507	1.043A	99.0	.825	-2.9	-27.6	222.7		.219
		12.25	9.73	4.44	2.52	5.94	5.29	12.86	2/1/2	71.7	53.9	22.1	.362	5.216	20.2	333.3	20.2	95.1D	1.524	
4-4890	4-5190	.163	175.5	8.8	.9	1.087	98.6	.230	1.213	311.1	546.6	.934	1.492	88.0	.721	1.1	-16.5	281.9		.116
4-5190	4-5378.9	.239	292.4	-26.8	-2.4	.632	84.8	.415	1.058	172.6	300.1	.619A	1.498	73.5	1.348	1.1	3.7	53.4		.395
4-5378.9	4-5530	.395	75.8	-5.6	-1.9	1.208	109.3	.335	.768	259.9	529.2	.511	1.026A	95.3	.817	-2.8	-27.7	219.4		.193
		11.95	9.40	4.20	2.54	5.96	5.20	12.48	2/1/2	64.7	66.1	24.2	.385	4.761	22.8	335.0	22.8	95.3D	1.449	
4-4900	4-5190	.146	180.0	8.9	1.1	1.091	97.3	.222	1.219	318.0	543.5	.949	1.490	89.0	.724	.9	-17.4	288.0		.121
4-5190	4-5379.1	.238	292.4	-26.8	-2.4	.632	84.9	.414	1.059	172.7	300.5	.620A	1.497	73.6	1.348	1.1	3.8	53.5		.393
4-5379.1	4-5540	.393	76.6	-7.0	-2.4	1.204	109.2	.332	.763	259.0	537.5	.510	1.016A	91.2	.812	-2.8	-26.1	211.2		.180
		11.77	9.19	4.00	2.59	6.00	5.19	12.31	2/1/2	58.8	82.8	25.5	.390	4.533	25.2	335.8	25.1	94.8D	1.377	
4-4910	4-5190	.130	185.8	10.7	1.3	1.096	96.0	.216	1.225	325.2	540.8	.961	1.489	89.8	.726	.6	-18.8	293.2		.123
4-5190	4-5377.4	.243	292.4	-26.5	-2.4	.628	84.6	.422	1.054	172.5	297.5	.610A	1.498	72.6	1.346	1.1	3.5	52.6		.410
4-5377.4	4-5550	.410	75.0	-8.1	-2.9	1.200	110.0	.345	.758	256.8	547.6	.497	1.019	86.0	.808	-3.0	-21.7	198.5		.192
		11.78	9.14	3.84	2.64	6.06	5.31	12.47	2/1/2	54.1	104.5	25.1	.357	4.598	27.7	335.0	27.5	92.9D	1.284	
MARS ARRIVAL DATE = 2445200 (18 AUG 1982)																				
4-4850	4-5200	.262	154.1	14.8	1.0	1.068	104.8	.293	1.185	284.7	564.8	.838	1.533	80.5	.716	1.8	-12.1	241.9		.137
4-5200	4-5371.6	.261	294.2	-27.0	-2.1	.611	84.7	.457	1.019	173.6	284.1	.554A	1.484	68.3	1.333	.8	2.0	51.6		.491
4-5371.6	4-5490	.491	63.6	.5	.2	1.238	113.6	.414	.817	260.7	503.5	.479	1.155A	110.3	.865	-3.5	-23.2	216.7		.344
		14.33	11.43	5.68	2.90	6.31	5.75	15.09	2/1/2	108.9	32.1	12.2	.249	9.428	7.0	327.4	6.9	91.7D	2.099	
4-4860	4-5200	.231	160.0	13.0	.9	1.072	103.0	.271	1.192	291.1	561.5	.869	1.514	82.5	.719	1.6	-13.6	251.4		.124
4-5200	4-5374.6	.250	294.1	-27.5	-2.1	.620	85.3	.440	1.030	174.0	289.2	.577A	1.483	70.0	1.337	.8	2.2	53.4		.457
4-5374.6	4-5500	.457	66.3	-1.0	-.4	1.229	112.1	.387	.801	260.9	508.4	.491	1.110A	106.8	.849	-3.2	-25.2	221.5		.299
		13.31	10.65	5.17	2.66	6.07	5.49	14.22	2/1/2	99.6	36.8	15.3	.288	7.528	12.3	330.7	12.2	93.2D	1.878	
4-4870	4-5200	.205	165.7	11.4	1.0	1.077	101.4	.253	1.198	297.5	558.1	.894	1.501	84.1	.722	1.4	-14.8	260.8		.117
4-5200	4-5377.2	.242	294.1	-27.9	-2.2	.626	85.8	.427	1.038	174.3	295.6	.595A	1.482	71.5	1.341	.8	2.5	54.9		.429
4-5377.2	4-5510	.429	72.4	-2.6	-1.0	1.221	110.9	.364	.788	261.0	514.0	.502	1.075A	103.3	.837	-3.0	-26.8	224.6		.259
		12.57	10.05	4.77	2.53	5.94	5.28	13.50	2/1/2	90.4	42.9	18.3	.327	6.304	16.2	333.7	16.2	94.2D	1.735	
4-4880	4-5200	.183	171.1	10.1	1.0	1.081	99.9	.239	1.204	304.1	554.9	.916	1.492	85.4	.724	1.3	-15.9	269.6		.115
4-5200	4-5379.3	.236	293.9	-26.3	-2.3	.631	86.1	.417	1.045	174.6	297.2	.609A	1.481	72.7	1.343	.9	2.8	55.9		.407
4-5379.3	4-5520	.407	75.8	-4.2	-1.5	1.215	109.8	.346	.779	261.1	520.3	.510	1.048A	99.8	.827	-2.8	-27.9	225.8		.224
		12.04	9.58	4.45	2.46	5.88	5.13	12.94	2/1/2	81.9	51.1	21.0	.363	5.489	19.3	336.1	19.3	95.0D	1.629	
4-4890	4-5200	.162	176.1	9.5	1.1	1.086	98.5	.228	1.210	310.9	551.8	.934	1.485	86.6	.727	1.1	-16.8	277.3		.112
4-5200	4-5380.7	.232	293.9	-26.5	-2.3	.634	86.4	.411	1.049	174.8	299.7	.618A	1.480	73.5	1.345	.9	2.9	56.6		.392
4-5380.7	4-5530	.392	78.3	-5.7	-1.9	1.211	109.1	.333	.772	260.9	527.3	.515	1.029A	96.2	.820	-2.7	-28.3	223.5		.196
		11.66	9.22	4.19	2.44	5.86	5.03	12.53	2/1/2	74.5	62.3	23.3	.390	4.961	21.9	336.0	21.9	95.3D	1.547	
4-4900	4-5200	.144	180.4	9.7	1.2	1.090	97.2	.219	1.215	317.9	549.0	.949	1.481	87.5	.730	.8	-17.9	284.0		.113
4-5200	4-5381.3	.230	293.8	-26.6	-2.3	.635	86.5	.409	1.051	174.9	300.6	.622A	1.480	73.8	1.346	.9	3.0	56.8		.387
4-5381.3	4-5540	.387	79.5	-7.0	-2.4	1.207	108.9	.328	.766	260.2	535.3	.515	1.017A	92.3	.815	-2.6	-27.3	216.6		.179
		11.43	8.97	3.98	2.45	5.87	4.99	12.30	2/1/2	68.2	77.8	24.7	.401	4.668	24.3	339.1	24.2	95.0D	1.472	
4-4910	4-5200	.128	184.1	11.5	1.4	1.094	95.9	.212	1.220	325.4	546.4	.962	1.479	88.3	.732	.5	-19.4	289.6		.114
4-5200	4-5380.2	.233	293.9	-28.4	-2.3	.633	86.3	.413	1.048	174.7	298.9	.615A	1.481	73.2	1.344	.9	2.9	56.4		.397
4-5380.2	4-5550	.397	78.8	-8.2	-2.9	1.204	109.4	.335	.762	256.5	544.8	.507	1.016	87.8	.812	-2.8	-23.9	205.0		.182
		11.35	8.88	3.82	2.47	5.89	5.06	12.34	2/1/2	63.0	98.2	24.9	.381	4.636	26.7	338.9	26.5	93.6D	1.384	
4-4920	4-5200	.116	187.0	16.0	1.8	1.098	94.5	.206	1.224	333.2	544.2	.972	1.477	88.9	.734	.0	-21.9	294.3		.116
4-5200	4-5364.9	.288	294.0	-26.1	-1.9	.589	83.1	.500	.992	173.0	272.8	.496A	1.487	64.0	1.322	.7	1.5	46.9		.573
4-5364.9	4-5560	.575	61.2	-8.7	-4.7	1.190	118.0	.470	.747	244.9	565.1	.395	1.098	70.9	.797	-5.2	-11.5	178.5		.352
		12.66	10.15	3.70	2.50	5.92	6.46	15.26	2/1/2	58.9	135.5	17.6	.183	6.527	35.9	326.6	35.7	83.4L	1.011	
4-4920	4-5200	.116	187.0	16.0	1.8	1.098	94.5	.206	1.224	333.2	544.2	.972	1.477	88.9	.734	.0	-21.9	294.3		.116
4-5200	4-5373.9	.253	294.2	-27.4	-2.1	.618	85.2	.444	1.027	175.9	288.0	.571A	1.483	69.8	1.338	.8	2.2	53.0		.465
4-5373.9	4-5560	.465	71.7	-8.9	-3.8	1.197	112.6	.387	.754	252.8	558.4	.463	1.046	79.1	.806	-3.7	-16.5	188.2		.249
		11.74	9.24	3.70	2.50	5.92	5.54	13.34	2/1/2	58.9	124.9	21.7	.278	5.308	31.1	334.4	30.9	88.7L	1.198	
MARS ARRIVAL DATE = 2445210 (28 AUG 1982)																				
4-4850	4-5210	.272	155.2	14.9	1.1	1.068	105.3	.301	1.186	283.2	568.9	.829	1.542	78.8	.724	1.6	-12.1	238.9		.149
4-5210	4-5373.0	.256	295.4	-26.8	-2.0	.612	86.4	.456	1.008	175.7	282.7	.548A	1.467	68.0	1.329	.6	1.5	54.5		.495
4-5373.0	4-5490	.495	65.4	.5	.2	1.243	113.8	.417	.824	261.4	502.1	.480	1.168A	110.9	.871	-3.5	-23.5	218.0		.353
		14.62	11.47	5.85	3.14	6.55	5.62	15.27	2/1/2	117.4	30.8	11.0	.246	10.444	5.0	329.9	4.9	91.3D	2.319	
4-4860	4-5210	.238	161.0	13.2	1.1	1.072	103.3	.276	1.191	289.9	565.9	.863	1.519	80.9	.726	1.6	-13.4	247.3		.132
4-5210	4-5376.0	.245	295.2	-27.3	-2.1	.621	87.0	.438	1.019	176.1	286.0	.572A	1.466	69.6	1.334	.6	1.6	56.4		.459
4-5376.0	4-5500	.459	70.2	-1.0	-.4	1.233	112.2	.389	.806	261.7	507.0	.493	1.120A	107.5	.854	-3.2	-25.4	223.1		.307
		13.43	10.62	5.27	2.81	6.22	5.35	14.37	2/1/2	109.1	35.2	14.1	.285	8.155	10.8	333.2	10.8	92.9D	2.037	
4-4870	4-5210	.209	166.6	11.7	1.1	1.076	101.6	.256	1.197	296.5	562.8	.890	1.503	82.6	.729	1.4	-14.8	256.0		.121
4-5210	4-5378.7	.236	295.0	-27.7	-2.1	.628	87.4	.425	1.029	176.5	292.6	.592A	1.466	71.4	1.338	.6	1.8	57.9		.430
4-5378.7	4-5510	.430	74.4	-2.6	-1.0	1.225	110.9	.365	.793	261.9	512.5	.504	1.083A	104.0	.841	-2.9	-27.0	226.9		.266
		12.56	9.96	4.83	2.60	6.01	5.13	13.62	2/1/2	100.6	41.0	17.1	.325	6.721	15.1	336.2	15.1	94.1D	1.660	
4-4880	4-5210	.185	171.9	10.5	1.1	1.081	100.1	.240	1.202	303.3	559.7	.913	1.491	84.0	.732	1.2	-16.0	264.4		.114
4-5210	4-5380.9	.230	294.8	-28.1	-2.2	.634	87.8	.414	1.036	176.9	296.5	.607A	1.465	72.6	1.341	.6	2.0	59.0		.407
4-5380.9	4-5520	.407	77.9	-4.2	-1.5	1.219	109.8	.346	.783	261.9	518.6	.512	1.054A	100.5	.831	-2.7	-26.1	228.7		.230
		11.92	9.45	4.48	2.47	5.89	4.97	13.02	2/1/2	92.4	48.6	19.9	.363	5.786	18.3	336.8	18.3	94.9D	1.739	
4-4890	4-5210	.163	176.8	9.9	1.2	1.085	98.6	.226	1.207	310.3	556.8	.932	1.482	85.2	.734	1.0	-17.2	272.2		.110
4-5210	4-5382.8	.225	294.6	-28.4	-2.2	.638	88.1	.407	1.041	177.2	299.3	.617A	1.465	73.5	1.343	.7	2.2	59.7		.390
4-5382.8	4-5530	.390	80.6	-5.7	-2.0	1.214	109.0	.331	.776	261.8	525.5	.518	1.033A	97.0	.824	-2.6	-28.7	227.3		.200
		11.47	9.07	4.20	2.40	5.82	4.86	12.58	2/1/2	84.9	59.0	22.3	.395	5.178	21.0	340.8	20.9	95.3D	1.648	
4-4900	4-5210	.144	181.1	10.2	1.5	1.089	97.2	.218	1.212	317.6	554.2	.948	1.476	88.1	.736	.8	-18.4	279.1		.108
4-5210	4-5383.2	.223	294.5	-28.8	-2.2	.639	88.2	.404	1.043	177.3	300.8	.622A	1.465	73.9	1.344	.7	2.3	60.0		.383
4-5383.2	4-5540	.383	82.1	-7.1	-2.4	1.210	108.6	.324	.770	261.3	533.5	.520	1.019A	93.2	.819	-2.5	-28.1	231.6		.179
		11.17	9.00	3.98	2.37	5.79	4.81	12.30	2/1/2	78.4	73.4	24.0	.411	4.817	23.3	342.1	23.2	95.1D	1.868	

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2445210 | 26 AUG 1982

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A.	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-4910	4-5210	.126	184.6	12.1	1.5	1.093	95.6	.210	1.217	325.1	551.8	.961	1.472	86.9	.738	.5	-20.0	285.0	.108
4-5210	4-5382.7	.224	294.6	-26.4	-2.2	.638	88.1	.406	1.042	177.2	299.7	.619A	1.465	73.6	1.343	.7	2.2	59.8	.368
4-5382.7	4-5550	.388	82.0	-8.3	-2.8	1.206	108.9	.327	.765	260.0	542.3	.515	1.015	88.9	.815	-2.8	-25.5	211.0	.176
		11.02	8.66	3.81	2.37	5.79	4.85	12.26	2/1/2	72.9	92.6	24.5	.400	4.709	25.7	342.4	25.5	94.1D	1.484
4-4920	4-5210	.114	187.2	16.5	1.8	1.097	94.5	.204	1.220	333.1	549.7	.972	1.469	87.5	.740	.0	-22.5	290.0	.108
4-5210	4-5379.2	.234	294.9	-27.6	-2.1	.630	87.5	.422	1.031	176.6	293.5	.596A	1.466	71.7	1.338	.6	1.9	58.2	.424
4-5379.2	4-5560	.424	78.3	-9.1	-3.4	1.202	110.6	.355	.760	256.3	553.8	.490	1.029	82.7	.811	-3.1	-19.9	196.6	.211
		11.15	8.78	3.68	2.37	5.79	5.09	12.74	2/1/2	68.6	116.3	22.9	.334	5.038	29.0	340.2	28.8	91.0D	1.348
MARS ARRIVAL DATE = 2445220 (7 SEP 1982)																			
4-4860	4-5220	.247	162.1	13.3	1.3	1.072	103.9	.283	1.191	288.3	570.0	.854	1.528	79.4	.734	1.6	-13.5	244.3	.144
4-5220	4-5377.4	.240	295.5	-27.2	-2.0	.623	88.8	.437	1.010	178.5	286.9	.568A	1.452	69.6	1.331	.4	1.1	59.2	.462
4-5377.4	4-5500	.462	72.0	-1.0	-.4	1.237	112.3	.392	.812	262.4	505.6	.494	1.130A	108.1	.860	-3.2	-25.6	224.7	.315
		13.69	10.65	5.45	3.04	6.45	5.22	14.51	2/1/2	117.6	33.8	13.0	.282	8.847	9.2	335.6	9.2	92.7D	2.211
4-4870	4-5220	.216	167.7	11.8	1.2	1.076	102.0	.261	1.196	295.2	567.2	.885	1.508	81.2	.737	1.4	-14.8	252.0	.129
4-5220	4-5380.1	.231	295.1	-27.7	-2.1	.631	89.3	.423	1.020	179.0	291.7	.569A	1.452	71.2	1.335	.4	1.2	60.7	.431
4-5380.1	4-5510	.431	76.3	-2.6	-1.0	1.228	110.9	.366	.798	262.6	511.0	.506	1.090A	104.7	.846	-2.9	-27.2	226.9	.273
		12.67	9.93	4.92	2.74	6.15	5.00	13.73	2/1/2	110.1	39.2	16.0	.323	7.169	13.8	338.7	13.8	93.9D	1.994
4-4880	4-5220	.189	172.9	10.7	1.2	1.081	100.3	.243	1.201	302.2	564.3	.909	1.493	82.7	.739	1.2	-16.1	259.7	.118
4-5220	4-5382.4	.224	294.7	-28.0	-2.1	.637	89.6	.412	1.028	179.5	295.8	.605A	1.452	72.5	1.336	.4	1.3	61.9	.407
4-5382.4	4-5520	.407	80.0	-4.3	-1.5	1.222	109.7	.346	.767	262.8	517.0	.515	1.060A	101.2	.835	-2.7	-28.3	231.5	.235
		11.92	9.37	4.54	2.55	5.96	4.83	13.11	2/1/2	102.6	46.3	18.9	.363	6.095	17.2	341.4	17.2	94.6D	1.652
4-4890	4-5220	.166	177.7	10.1	1.3	1.085	98.8	.229	1.206	309.4	561.7	.930	1.482	83.9	.741	1.0	-17.4	267.1	.112
4-5220	4-5384.1	.219	294.4	-28.3	-2.1	.641	89.9	.404	1.034	179.8	298.8	.616A	1.452	73.5	1.340	.4	1.4	62.6	.389
4-5384.1	4-5530	.389	82.8	-5.8	-2.0	1.216	108.9	.331	.779	262.7	523.7	.522	1.037A	97.7	.828	-2.5	-26.9	230.7	.204
		11.39	8.95	4.24	2.43	5.85	4.72	12.63	2/1/2	95.5	56.0	21.4	.398	5.396	20.0	343.5	19.8	95.3D	1.748
4-4900	4-5220	.146	182.0	10.5	1.4	1.089	97.3	.218	1.210	316.9	559.2	.947	1.474	84.9	.743	.7	-18.9	273.9	.107
4-5220	4-5385.1	.217	294.2	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.6	.623A	1.452	74.0	1.342	.4	1.5	63.0	.379
4-5385.1	4-5540	.379	84.6	-7.2	-2.4	1.213	108.4	.321	.773	262.3	531.3	.525	1.021A	94.1	.822	-2.4	-28.7	226.1	.181
		11.02	8.66	4.00	2.36	5.78	4.66	12.32	2/1/2	89.0	69.4	23.2	.419	4.972	22.3	345.0	22.1	95.3D	1.664
4-4910	4-5220	.126	185.4	12.2	1.6	1.092	95.9	.209	1.214	324.6	557.0	.961	1.468	85.6	.745	.4	-20.6	279.9	.105
4-5220	4-5385.0	.217	294.5	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.4	.622A	1.452	74.0	1.342	.4	1.5	63.0	.380
4-5385.0	4-5550	.380	85.0	-8.4	-2.8	1.209	108.5	.321	.766	261.3	540.0	.521	1.015	90.0	.816	-2.4	-26.7	216.6	.172
		10.80	8.46	3.81	2.32	5.74	4.67	12.21	2/1/2	83.5	87.4	24.1	.416	4.799	24.6	345.5	24.3	94.5D	1.581
4-4920	4-5220	.114	187.7	16.1	1.8	1.096	94.5	.202	1.218	332.7	555.0	.971	1.464	86.3	.747	.0	-23.1	284.9	.104
4-5220	4-5382.7	.223	294.7	-28.1	-2.1	.638	89.7	.410	1.029	179.5	296.5	.607A	1.452	72.7	1.338	.4	1.3	62.0	.404
4-5382.7	4-5560	.404	82.7	-9.2	-3.3	1.205	109.6	.339	.763	258.6	550.5	.505	1.022	84.7	.815	-2.7	-22.2	203.1	.192
		10.80	8.50	3.68	2.31	5.73	4.62	12.47	2/1/2	79.0	109.8	23.2	.369	4.975	27.5	344.4	27.2	92.2D	1.465
MARS ARRIVAL DATE = 2445230 (17 SEP 1982)																			
4-4860	4-5230	.259	163.4	13.3	1.4	1.072	104.6	.293	1.192	286.4	573.6	.842	1.541	77.8	.742	1.7	-13.8	242.5	.160
4-5230	4-5376.7	.236	294.9	-27.3	-2.0	.626	90.9	.437	1.003	181.1	285.8	.565A	1.440D	69.4	1.328	.2	.5	61.9	.464
4-5376.7	4-5500	.464	73.8	-1.0	-.4	1.240	112.3	.394	.818	263.2	504.2	.496	1.141A	108.7	.865	-3.2	-25.8	226.2	.323
		14.13	10.77	5.64	3.36	6.77	5.13	14.66	2/1/2	125.1	32.5	12.0	.279	9.593	7.4	337.9	7.4	92.6D	2.395
4-4870	4-5230	.224	168.9	11.8	1.4	1.076	102.5	.268	1.197	293.6	571.3	.876	1.517	79.8	.744	1.4	-15.0	249.1	.140
4-5230	4-5381.8	.227	294.3	-27.7	-2.0	.634	91.3	.422	1.013	181.8	290.9	.566A	1.441D	71.1	1.333	.2	.5	63.4	.433
4-5381.8	4-5510	.433	78.1	-2.7	-1.0	1.231	110.9	.368	.803	263.4	509.5	.507	1.098A	105.3	.850	-2.9	-27.3	230.7	.279
		12.93	9.96	5.06	2.96	6.37	4.90	13.85	2/1/2	118.6	37.6	15.1	.321	7.631	12.5	341.0	12.4	93.8D	2.130
4-4880	4-5230	.195	174.1	10.7	1.4	1.081	100.7	.247	1.201	300.8	568.7	.904	1.498	81.4	.746	1.2	-16.3	255.9	.126
4-5230	4-5383.8	.220	293.7	-28.1	-2.0	.641	91.6	.410	1.022	182.3	295.2	.603A	1.441D	72.5	1.336	.2	.6	64.8	.407
4-5383.8	4-5520	.407	81.9	-4.5	-1.5	1.224	109.7	.347	.791	263.6	515.5	.517	1.065A	101.9	.839	-2.6	-28.4	233.6	.241
		12.06	9.36	4.63	2.70	6.11	4.73	13.19	2/1/2	111.9	44.3	18.0	.363	6.403	16.1	343.8	16.0	94.7D	1.962
4-4890	4-5230	.170	178.9	10.1	1.4	1.085	99.1	.232	1.206	308.2	566.2	.926	1.485	82.6	.748	1.0	-17.7	262.7	.117
4-5230	4-5385.7	.215	293.2	-28.4	-2.0	.646	91.9	.401	1.026	182.8	298.5	.616A	1.441D	73.5	1.339	.2	.6	65.4	.388
4-5385.7	4-5530	.388	84.9	-5.9	-2.0	1.219	108.8	.330	.783	263.6	522.1	.524	1.041A	96.4	.831	-2.4	-29.1	233.9	.208
		11.43	8.90	4.29	2.52	5.94	4.61	12.69	2/1/2	105.5	53.3	20.5	.400	5.614	18.9	346.0	18.7	95.3D	1.848
4-4900	4-5230	.149	183.1	10.4	1.5	1.088	97.5	.219	1.210	315.8	563.9	.944	1.475	83.7	.750	.7	-19.2	269.0	.110
4-5230	4-5386.8	.212	292.9	-28.6	-2.0	.648	92.0	.396	1.032	183.0	300.6	.623A	1.441D	74.1	1.340	.2	.7	65.8	.378
4-5386.8	4-5540	.376	86.9	-7.5	-2.4	1.215	108.2	.319	.776	263.5	529.5	.528	1.024A	94.8	.825	-2.3	-29.1	230.2	.182
		10.98	8.57	4.03	2.41	5.85	4.54	12.34	2/1/2	89.4	65.8	22.5	.426	5.126	21.2	347.6	20.9	95.4D	1.756
4-4910	4-5230	.130	186.4	12.0	1.6	1.092	96.1	.210	1.213	323.7	561.8	.959	1.488	84.5	.752	.4	-21.1	274.7	.106
4-5230	4-5387.0	.211	292.8	-28.6	-2.0	.649	92.0	.396	1.033	183.1	300.9	.624A	1.442D	74.2	1.341	.2	.7	65.9	.374
4-5387.0	4-5550	.374	87.7	-8.5	-2.8	1.212	108.1	.317	.771	262.4	536.0	.527	1.015A	90.9	.821	-2.3	-27.6	221.7	.170
		10.70	8.37	3.85	2.34	5.76	4.53	12.18	2/1/2	94.1	82.8	23.8	.430	4.892	23.4	348.4	23.0	94.9D	1.672
4-4920	4-5230	.115	188.6	15.5	1.8	1.095	94.6	.202	1.216	331.9	560.1	.970	1.482	85.1	.753	.0	-23.5	279.6	.103
4-5230	4-5389.5	.215	293.2	-28.4	-2.0	.645	91.8	.402	1.026	182.7	298.1	.614A	1.441D	73.4	1.338	.2	.6	65.3	.390
4-5389.5	4-5560	.390	86.3	-9.4	-3.2	1.208	108.9	.328	.766	260.3	547.8	.515	1.018	86.2	.819	-2.5	-25.9	209.1	.180
		10.61	8.32	3.69	2.29	5.71	4.62	12.31	2/1/2	89.7	104.1	23.2	.396	4.966	26.1	347.9	25.8	93.0D	1.569
MARS ARRIVAL DATE = 2445240 (27 SEP 1982)																			
4-4860	4-5240	.275	164.9	13.0	1.6	1.073	105.5	.307	1.193	284.0	577.3	.827	1.559	76.2	.750	1.7	-14.2	241.9	.180
4-5240	4-5380.0	.234	293.2	-27.5	-1.9	.630	93.2	.437	.997	184.2	285.0	.561A	1.432D	69.2	1.326	-.0	-.1	64.4	.467
4-5380.0	4-5500	.467	75.5	-1.1	-.4	1.244	112.4	.397	.824	263.9	502.9	.497	1.151A	109.3	.870	-3.2	-25.9	227.5	.330
		14.80	11.01	5.92	3.79	7.19	5.09	14.81	2/1/2	131.4	31.3	11.1	.276	10.359	5.2	340.0	5.2	92.5D	2.579
4-4870	4-5240	.236	170.3	11.6	1.5	1.077	103.2	.277	1.197	291.5	575.1	.866	1.529	78.4	.752	1.5	-15.3	247.5	.156
4-5240	4-5382.8	.225	292.3	-27.9	-1.9	.639	93.6	.421	1.009	184.9	290.2	.584A	1.433D	71.0	1.331	-.0	-.1	65.9	.434
4-5382.8	4-5510	.434	79.9	-2.7	-1.0	1.235	110.9	.370	.807	264.1	508.2	.509	1.106A	105.9	.854	-2.6	-27.3	232.4	.286
		13.38	10.11	5.25	3.27	6.68	4.86	13.97	2/1/2	125.9	36.1	14.2	.319	8.079	10.9	343.2	10.8	93.8D	2.256
4-4880	4-5240	.204	175.4	10.4	1.5	1.081	101.2	.254	1.202	299.0	572.8	.896	1.507	80.1	.753	1.2	-16.6	253.4	.138
4-5240	4-5385.2	.216	291.5	-28.3	-1.9	.646	93.8	.409	1.016	185.6	294.7	.602A	1.434D	72.4	1.335	-.0	-.1	67.0	.407
4-5385.2	4-5520	.407	83.7	-4.4	-1.5	1.227	109.7	.347	.795	264.3	514.1	.519	1.071A	102.5	.843	-2.5	-26.4	235.7	.246
		12.36	9.44	4.75	2.92	6.33	4.69	13.26	2/1/2	120.2	42.4	17.2	.362	6.692	14.8	345.9	14.6	94.7D	2.063
4-4890	4-5240	.177	180.2	9.8	1.5	1.085	99.4	.236	1.206	306.6	570.5	.921	1.491	81.4	.755	.9	-18.0	259.3	.126
4-5240	4-5387.1	.213	290.8	-28.5	-1.9	.651	94.1	.400	1.025	186.2	298.3	.615A	1.435D	73.5	1.336	-.0	-.1	67.8	.387
4-5387.1	4-5530	.387	86.8	-6.0	-2.0	1.222	108.7	.330	.786	264.4	520.6	.527	1.045A	99.0	.834	-2.3	-29.1	236.5	.212
		11.62	8.94	4.37	2.68	6.09	4.56	12.75	2/1/2	114.5	50.9	19.8	.402	5.810	17.6	348.2	17.4	95.4D	1.933
4-4900	4-5240	.154	184.4	10.0	1.5	1.088	97.8	.222	1.210	314.4	568.4	.941	1.478	82.5	.757	.7	-19.5	264.9	.117
4-5240	4-5386.4	.210	290.3	-28.7	-1.9	.654	94.2	.394	1.029	186.5	300.7	.624A	1.439D	74.2	1.340	-.0	-.1	68.3	.373
4-5386.4	4-5540	.373	89.0	-7.4	-2.4	1.217	108.1	.318	.778	264.2	527.9	.532	1.026A	95.5	.828	-2.2	-29.3	233.8	.185
		11.09	8.67	4.09	2.52	5.93	4.49	12.37	2/1/2	109.1	62.7	21.9	.431	5.258	20.0	350.0	19.8	95.6D	1.636
4-4910	4-5240	.134	187.8	11.4	1.7	1.092	96.3	.212	1.213	322.4	566.4	.956	1.469	83.4	.759	.4	-21.4	270.2	.110
4-5240	4-5388.8	.209	290.2	-28.8	-1.9	.655	94.2	.393	1.031	186.6	301.5	.626A	1.436D	74.5	1.340	-.0	-.1	68.4	.369
4-5388.8	4-5550	.369	90.1	-8.6	-2.7	1.214	107.9	.313	.774	263.5	536.1	.532	1.016A	91.8	.824	-2.1	-28.5	226.4	.169
		10.74	8.33	3.87	2.41	5.83	4.46	12.17	2/1/2	104.2	78.6	23.2	.441	4.972	22.2	350.9	21.7	95.3D	1.752
4-4920	4-5240	.117	190.0	14.6	1.8	1.095	94.6	.203	1.216	330.6	564.8	.969	1.483	84.0	.760	.0	-23.6	274.8	.106
4-5240	4-5387.8	.211	290.5	-28.6	-1.9	.653	94.1	.397	1.027	186.3	299.6	.620A	1.435D	73.9	1.339	-.0	-.1	68.1	.380
4-5387.8	4-5560	.380	89.4	-9.5	-3.1	1.211	108.4	.320	.769	261.8	545.6	.523	1.015	87.4	.822	-2.5	-25.5	214.5	.173
		10.57	8.23	3.71	2.34	5.76	4.52	12.22	2/1/2	100.0	99.0	23.2	.417	4.971	24.6	350.8	24.0	93.8D	1.658
4-4930	4-5240	.106	190.7	20.3	2.1	1.098	93.3	.197	1.218	339.5	563.4	.977	1.488	84.8	.761	-.4	-27.0	278.6	.104
4-5240	4-5387.3	.292	296.2	-25.6	-1.9	.574	91.4	.531	.934	181.3	261.8	.438A	1.430D	60.4	1.298	-.0	-.0	56.1	.637
4-5387.3	4-5570	.637	66.4	-9.4	-5.8	1.194	121.0	.516	.752	242.2	568.2	.364	1.139	65.9	.805	-5.8	-12.9	183.8	.416
		12.46	10.16	3.61	2.30	5.72	6.85	16.61	2/1/2	96.7	139.7	13.9	.148	8.273	42.6	336.6	42.2	80.2L	1.079

STOPOVER TIME = 0 DAYS — 1982 INBOUND SWINGBY — MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2445240
27 SEP 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-4930	4-5240	.106	190.7	20.3	2.1	1.098	93.3	.197	1.218	339.5	563.4	.977	1.458	84.5	.761	-.4	-27.0	276.6	.104
4-5240	4-5383.1	.224	292.2	-28.0	-1.9	.640	93.6	.419	1.010	185.0	290.8	.566A	1.433D	71.2	1.332	-.0	-.1	66.1	.431
4-5383.1	4-5570	.431	84.3	-9.9	-3.8	1.206	110.9	.359	.764	256.9	557.8	.489	1.038	80.5	.616	-2.9	-19.8	199.8	.224
		10.75	8.45	3.61	2.30	5.72	4.84	12.94	2/1/2	96.7	125.0	20.7	.324	5.572	29.1	347.9	28.5	89.6L	1.481
MARS ARRIVAL DATE = 2445250 (7 OCT 1982)																			
4-4870	4-5250	.251	171.9	11.2	1.7	1.077	104.0	.290	1.199	289.0	578.6	.852	1.546	76.9	.759	1.5	-15.8	247.1	.175
4-5250	4-5384.0	.227	289.2	-28.2	-1.9	.645	96.1	.421	1.007	188.5	289.9	.583A	1.431D	70.9	1.331	-.2	-.7	68.1	.436
4-5384.0	4-5510	.456	81.5	-2.8	-1.0	1.238	111.0	.372	.812	264.8	506.9	.510	1.114A	106.4	.859	-2.8	-27.4	233.9	.292
		14.08	10.40	5.50	3.68	7.08	4.90	14.08	2/1/2	132.2	34.8	13.6	.317	8.469	9.1	345.1	9.0	93.8D	2.365
4-4880	4-5250	.215	177.0	10.0	1.6	1.081	101.9	.263	1.203	296.8	576.6	.886	1.519	78.8	.760	1.2	-17.0	252.1	.153
4-5250	4-5386.5	.220	288.1	-28.5	-1.9	.653	96.4	.409	1.017	189.4	294.6	.601A	1.432D	72.4	1.335	-.2	-.7	69.2	.406
4-5386.5	4-5520	.408	85.4	-4.5	-1.6	1.230	109.7	.348	.799	265.0	512.7	.521	1.077A	103.0	.846	-2.5	-28.4	237.6	.251
		12.88	9.65	4.92	3.22	6.63	4.73	13.37	2/1/2	127.4	40.8	16.6	.361	6.929	13.3	347.9	13.0	94.9D	2.142
4-4890	4-5250	.186	181.7	9.3	1.6	1.085	100.0	.243	1.206	304.6	574.5	.914	1.499	80.2	.762	.9	-18.3	257.1	.137
4-5250	4-5388.5	.215	287.2	-28.7	-1.9	.658	96.5	.399	1.024	190.0	298.4	.615A	1.434D	73.5	1.338	-.2	-.8	70.0	.366
4-5388.5	4-5530	.386	88.6	-6.1	-2.0	1.224	108.7	.329	.769	265.1	519.2	.529	1.049A	99.6	.837	-2.2	-29.1	239.0	.216
		12.01	9.10	4.49	2.91	6.32	4.61	12.81	2/1/2	122.5	46.8	19.3	.403	5.959	16.3	350.3	15.9	95.6D	1.998
4-4900	4-5250	.160	185.9	9.4	1.6	1.089	98.2	.227	1.210	312.5	572.5	.935	1.485	81.4	.764	.7	-19.8	262.1	.126
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.6	.393	1.030	190.4	301.1	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.371
4-5389.9	4-5540	.371	91.0	-7.5	-2.4	1.220	108.0	.316	.782	265.0	526.4	.535	1.029A	96.1	.831	-2.1	-29.4	237.1	.167
		11.36	8.69	4.17	2.69	6.10	4.53	12.41	2/1/2	117.8	59.8	21.5	.436	5.353	16.7	352.0	16.1	95.9D	1.896
4-4910	4-5250	.139	189.4	10.5	1.7	1.092	96.7	.215	1.213	320.7	570.7	.953	1.474	82.3	.765	.4	-21.6	266.7	.116
4-5250	4-5390.8	.210	286.3	-28.9	-1.8	.664	98.7	.391	1.032	190.8	302.2	.628A	1.435D	74.7	1.341	-.2	-.9	70.8	.365
4-5390.8	4-5550	.365	92.3	-8.7	-2.7	1.216	107.6	.310	.776	264.5	534.4	.536	1.017A	92.5	.827	-2.0	-28.7	230.6	.169
		10.96	8.42	3.92	2.54	5.96	4.50	12.17	2/1/2	113.4	74.9	23.0	.451	5.021	20.7	353.2	20.1	95.7D	1.813
4-4920	4-5250	.121	191.7	13.3	1.8	1.095	95.1	.206	1.216	329.2	569.1	.966	1.466	83.0	.766	.0	-23.8	270.9	.112
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.6	.393	1.030	190.4	301.0	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.372
4-5389.9	4-5560	.372	92.1	-9.6	-3.1	1.213	107.9	.314	.772	263.0	543.5	.530	1.014	88.4	.824	-2.1	-26.2	219.5	.167
		10.71	8.27	3.74	2.44	5.86	4.53	12.15	2/1/2	109.6	94.5	23.3	.436	4.961	23.0	353.4	22.3	94.6D	1.725
4-4930	4-5250	.108	192.4	18.3	2.1	1.098	93.6	.199	1.218	338.0	567.9	.976	1.460	83.6	.767	-.4	-26.7	274.4	.109
4-5250	4-5364.1	.321	295.6	-25.3	-2.0	.548	94.2	.377	.902	183.1	252.6	.381A	1.422D	56.3	1.283	-.2	-.4	55.5	.713
4-5364.1	4-5570	.713	63.6	-9.3	-6.7	1.192	124.8	.571	.750	237.7	568.8	.321	1.178	61.1	.803	-6.9	-12.1	182.6	.483
		13.33	10.95	3.63	2.38	5.80	7.33	18.15	2/1/2	106.4	141.1	12.0	.118	9.547	48.0	334.9	47.6	78.2L	1.012
4-4930	4-5250	.106	192.4	18.3	2.1	1.098	93.6	.199	1.218	338.0	567.9	.976	1.460	83.6	.767	-.4	-26.7	274.4	.109
4-5250	4-5386.7	.219	288.0	-28.5	-1.9	.653	96.4	.408	1.017	189.4	294.9	.602A	1.433D	72.5	1.335	-.2	-.7	69.3	.406
4-5386.7	4-5570	.406	88.8	-10.1	-3.6	1.209	109.6	.340	.767	259.4	554.8	.507	1.028	82.7	.822	-2.5	-21.7	205.8	.201
		10.72	8.35	3.63	2.38	5.80	4.72	12.59	2/1/2	106.4	117.3	21.5	.365	5.393	26.5	351.6	25.8	91.4D	1.587
MARS ARRIVAL DATE = 2445260 (17 OCT 1982)																			
4-4860	4-5260	.230	178.6	9.4	1.7	1.082	102.7	.275	1.204	294.1	580.0	.873	1.535	77.4	.767	1.2	-17.5	252.0	.172
4-5260	4-5387.7	.227	283.7	-28.6	-1.8	.662	99.2	.410	1.020	193.7	294.8	.601A	1.436D	72.4	1.336	-.4	-1.4	71.1	.409
4-5387.7	4-5520	.409	87.0	-4.5	-1.6	1.233	109.7	.349	.803	265.7	511.5	.522	1.083A	103.5	.850	-2.4	-28.4	239.3	.257
		13.67	10.05	5.15	3.62	7.02	4.90	13.46	2/1/2	133.4	39.2	16.3	.360	7.064	11.8	349.6	11.3	95.1D	2.184
4-4890	4-5260	.197	183.4	8.6	1.7	1.085	100.6	.251	1.208	302.2	578.1	.904	1.511	79.0	.769	.9	-18.7	256.3	.153
4-5260	4-5389.7	.222	282.7	-28.6	-1.8	.668	99.3	.401	1.028	194.4	296.8	.616A	1.440D	73.6	1.339	-.4	-1.5	71.7	.386
4-5389.7	4-5530	.386	90.3	-6.1	-2.0	1.226	108.6	.330	.792	265.9	517.9	.531	1.053A	100.1	.840	-2.2	-29.1	241.2	.220
		12.64	9.43	4.65	3.21	6.62	4.78	12.87	2/1/2	129.3	46.9	19.1	.404	6.029	14.8	352.0	14.2	95.9D	2.030
4-4900	4-5260	.169	187.7	8.5	1.7	1.089	98.8	.233	1.211	310.3	576.3	.929	1.494	80.3	.770	.7	-20.1	260.6	.138
4-5260	4-5391.2	.219	281.9	-28.9	-1.8	.672	99.4	.394	1.034	195.0	301.7	.626A	1.442D	74.5	1.342	-.4	-1.6	72.2	.370
4-5391.2	4-5540	.370	92.6	-7.6	-2.4	1.222	107.8	.315	.785	265.8	525.0	.537	1.032A	96.7	.834	-2.0	-29.4	240.0	.190
		11.90	8.98	4.27	2.93	6.34	4.70	12.44	2/1/2	125.2	57.3	21.4	.439	5.380	17.2	353.6	16.5	96.4D	1.924
4-4910	4-5260	.146	191.2	9.4	1.7	1.092	97.1	.220	1.214	318.6	574.7	.948	1.481	81.3	.772	.3	-21.8	264.6	.128
4-5260	4-5392.0	.217	281.5	-28.9	-1.8	.674	99.4	.391	1.037	195.3	303.2	.631A	1.442D	74.9	1.343	-.4	-1.6	72.4	.362
4-5392.0	4-5550	.362	94.3	-8.8	-2.7	1.218	107.5	.308	.779	265.5	532.9	.539	1.018A	93.2	.829	-1.9	-28.9	234.4	.169
		11.39	8.66	4.00	2.73	6.14	4.67	12.17	2/1/2	121.4	71.6	23.0	.459	5.013	19.2	355.0	18.4	96.3D	1.842
4-4920	4-5260	.126	193.7	11.7	1.8	1.096	95.5	.209	1.217	327.2	573.2	.963	1.471	82.1	.773	.0	-23.9	268.3	.121
4-5260	4-5391.7	.218	281.7	-28.9	-1.8	.673	99.4	.392	1.036	195.2	302.6	.629A	1.442D	74.7	1.342	-.4	-1.6	72.3	.365
4-5391.7	4-5560	.365	94.5	-9.8	-3.1	1.215	107.6	.309	.774	264.2	541.7	.535	1.013	89.2	.827	-1.9	-27.0	224.1	.184
		11.07	8.47	3.79	2.59	6.01	4.68	12.11	2/1/2	118.0	90.3	23.5	.451	4.907	21.2	355.4	20.4	95.4D	1.762
4-4930	4-5260	.111	194.6	16.0	2.0	1.098	94.0	.201	1.219	336.0	572.0	.973	1.464	82.7	.774	-.4	-26.4	271.4	.116
4-5260	4-5389.5	.223	282.9	-28.8	-1.8	.667	99.3	.402	1.027	194.3	298.0	.613A	1.440D	73.4	1.339	-.4	-1.4	71.6	.390
4-53[illegible].3	4-5570	.390	92.2	-10.3	-3.5	1.211	108.8	.327	.770	261.3	552.2	.518	1.022	84.2	.825	-2.2	-23.0	210.9	.187
		10.96	8.46	3.65	2.50	5.92	4.81	12.40	2/1/2	115.1	112.4	22.3	.395	5.178	24.2	354.4	23.4	92.8D	1.650
MARS ARRIVAL DATE = 2445270 (27 OCT 1982)																			
4-4860	4-5270	.249	180.5	8.5	1.9	1.082	103.8	.290	1.206	291.0	582.9	.856	1.556	75.9	.773	1.5	-18.0	253.0	.194
4-5270	4-5388.9	.241	278.8	-28.6	-1.8	.674	102.3	.414	1.029	198.7	295.6	.603A	1.455D	72.4	1.340	-.6	-2.0	72.4	.409
4-5388.9	4-5520	.409	86.6	-4.6	-1.6	1.235	109.7	.350	.806	266.4	510.2	.524	1.089A	104.0	.853	-2.4	-28.4	240.9	.262
		14.83	10.72	5.46	4.11	7.51	5.26	13.54	2/1/2	138.5	37.9	16.3	.359	7.040	9.9	351.1	9.3	95.6D	2.167
4-4890	4-5270	.211	185.5	7.6	1.8	1.086	101.5	.263	1.210	299.3	581.4	.892	1.527	77.8	.775	1.0	-19.1	256.6	.171
4-5270	4-5390.9	.237	277.7	-28.7	-1.7	.681	102.4	.404	1.036	199.6	299.8	.619A	1.458D	73.7	1.343	-.6	-2.1	73.0	.386
4-5390.9	4-5530	.386	91.9	-6.2	-2.1	1.229	106.6	.330	.795	266.5	516.6	.533	1.058A	100.6	.843	-2.1	-29.0	243.2	.224
		13.59	10.00	4.85	3.60	7.00	5.14	12.94	2/1/2	135.1	45.1	19.3	.404	5.977	13.1	353.4	12.4	96.5D	2.011
4-4900	4-5270	.160	189.6	7.3	1.8	1.090	99.5	.242	1.213	307.6	579.8	.920	1.506	79.2	.776	.6	-20.4	260.3	.153
4-5270	4-5392.5	.234	276.8	-28.7	-1.7	.685	102.4	.398	1.045	200.3	303.0	.629A	1.460D	74.7	1.346	-.6	-2.3	73.4	.369
4-5392.5	4-5540	.369	94.5	-7.7	-2.4	1.224	107.8	.315	.787	266.5	523.6	.540	1.035A	97.2	.836	-1.9	-29.3	242.6	.193
		12.72	9.49	4.42	3.23	6.64	5.07	12.48	2/1/2	131.6	55.0	21.7	.442	5.308	15.5	355.2	14.6	97.1D	1.906
4-4910	4-5270	.154	193.3	7.9	1.8	1.093	97.7	.226	1.216	316.1	578.3	.941	1.490	80.5	.777	.3	-22.0	263.8	.141
4-5270	4-5393.4	.232	276.3	-28.7	-1.7	.687	102.4	.394	1.048	200.7	304.8	.635A	1.461D	75.2	1.347	-.6	-2.3	73.6	.359
4-5393.4	4-5550	.359	96.2	-9.0	-2.8	1.220	107.3	.306	.781	266.2	531.4	.542	1.020A	93.7	.832	-1.8	-29.0	237.8	.170
		12.10	9.12	4.09	2.98	6.58	5.03	12.19	2/1/2	128.3	68.6	23.5	.466	4.920	17.5	356.5	16.4	97.1D	1.827
4-4920	4-5270	.133	195.9	9.8	1.8	1.096	96.0	.214	1.218	324.8	576.9	.958	1.479	81.2	.779	.0	-23.8	267.0	.132
4-5270	4-5393.3	.232	276.4	-28.7	-1.7	.687	102.4	.394	1.048	200.6	304.6	.635A	1.461D	75.1	1.347	-.6	-2.3	73.5	.360
4-5393.3	4-5560	.360	96.6	-9.9	-3.0	1.217	107.3	.305	.776	265.1	540.1	.540	1.013	90.0	.829	-1.8	-27.5	228.3	.161
		11.69	8.89	3.86	2.80	6.21	5.03	12.08	2/1/2	125.3	86.6	24.1	.464	4.782	19.4	357.1	18.2	96.4D	1.755
4-4930	4-5270	.116	197.2	13.5	2.0	1.099	94.4	.205	1.220	333.7	575.7	.970	1.471	81.8	.779	-.3	-26.1	269.8	.125
4-5270	4-5391.6	.235	277.3	-28.7	-1.7	.683	102.4	.401	1.041	199.9	301.1	.623A	1.459D	74.1	1.344	-.6	-2.2	73.2	.379
4-5391.6	4-5570	.379	95.1	-10.4	-3.4	1.214	108.2	.318	.773	262.8	550.1	.526	1.019	85.4	.827	-2.0	-24.1	215.6	.177
		11.49	8.81	3.70	2.68	6.09	5.11	12.27	2/1/2	122.7	108.1	23.2	.419	4.967	21.8	356.5	20.8	94.3D	1.664
4-4940	4-5270	.104	196.5	19.3	2.2	1.101	92.8	.199	1.222	342.8	574.8	.979	1.465	82.3	.780	-.8	-29.0	272.1	.122
4-5270	4-5375.6	.269	286.5	-27.3	-2.0	.616	102.5	.502	.957	192.8	268.4	.476A	1.438D	63.0	1.309	-.6	-1.3	66.2	.567
4-5375.6	4-5580	.587	77.7	-10.0	-5.5	1.201	118.5	.478	.760	246.4	568.6	.397	1.124	68.3	.817	-4.8	-16.2	193.1	.377
		12.67	10.07	3.60	2.61	6.02	6.47	15.77	2/1/2	120.6	139.7	14.4	.174	7.987	37.7	346.2	37.1	81.5L	1.218
4-4940	4-5270	.104	196.5	19.3	2.2	1.101	92.8	.199	1.222	342.8	574.8	.979	1.465	82.3	.780	-.8	-29.0	272.1	.122
4-5270	4-5383.9	.255	281.7	-28.2	-1.8	.657	102.2	.441	1.004	196.5	285.3	.561A	1.448D	69.1	1.330	-.6	-1.7	70.5	.471
4-5383.9	4-5560	.471	86.8	-10.3	-4.4	1.207	112.7	.390	.766	254.7	564.0	.467	1.064	76.2	.823	-3.2	-18.8	200.3	.270
		11.82	9.21	3.60	2.61	6.02	5.61	13.68	2/1/2	120.6	132.6	18.3	.271	6.278	29.0	351.8	28.2	87.3L	1.431
MARS ARRIVAL DATE = 2445280 (6 NOV 1982)																			
4-4900	4-5280	.194	191.7	6.0	1.8	1.090	100.3	.252	1.215	304.5	582.9	.908	1.522	78.1	.781	.7	-20.8	261.1	.171
4-5280	4-5393.7	.258	271.8	-28.3	-1.8	.703	105.8	.404	1.064	206.4	304.9	.634A	1.493D	74.9	1.353	-.8	-2.9	74.0	.368
4-5393.7	4-5540	.368	96.1	-7.8	-2.5	1.226	107.7	.314	.790	267.2	522.4	.542	1.038A	97.7	.839	-1.8	-29.2	245.0	.196
		13.89	10.28	4.61	3.61	7.01	5.67	12.52	2/1/2	137.0	52.9	22.6	.445	5.106	13.7	356.2	12.5	98.1D	1.827

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2445280
6 NOV 1982

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-4910	4-5280	.165	195.5	6.3	1.8	1.094	98.4	.234	1.218	313.2	561.5	.933	1.503	79.4	.783	.3	-22.2	264.2	.156
4-5280	4-5394.7	.256	271.3	-26.3	-1.6	.706	105.8	.401	1.069	206.9	307.0	.640A	1.497D	75.5	1.354	-.8	-3.1	74.1	.357
4-5394.7	4-5550	.357	98.0	-9.1	-2.8	1.222	107.1	.304	.783	266.9	530.0	.545	1.021A	94.3	.834	-1.7	-29.0	241.0	.172
		13.15	9.86	4.23	3.28	6.69	5.63	12.20	2/1/2	134.1	65.9	24.5	.472	4.714	15.6	357.5	14.2	98.3D	1.75
4-4920	4-5280	.141	198.4	7.7	1.8	1.097	96.6	.220	1.220	321.9	560.3	.952	1.489	80.3	.784	.0	-23.9	267.0	.145
4-5280	4-5394.8	.256	271.3	-26.3	-1.6	.706	105.7	.400	1.069	206.9	307.2	.641A	1.497D	75.6	1.354	-.8	-3.1	74.1	.355
4-5394.8	4-5560	.355	98.6	-10.0	-3.0	1.218	107.1	.301	.779	266.1	536.6	.544	1.013A	90.6	.831	-1.6	-27.8	232.3	.160
		12.83	9.57	3.95	3.06	6.46	5.62	12.06	2/1/2	131.5	63.1	25.3	.476	4.558	17.3	358.2	15.9	97.8D	1.693
4-4930	4-5280	.122	200.0	10.7	1.9	1.099	94.9	.210	1.222	330.9	579.2	.966	1.479	81.0	.785	-.3	-25.9	269.5	.137
4-5280	4-5393.6	.256	271.9	-26.3	-1.6	.702	105.8	.405	1.064	206.4	304.6	.633A	1.495D	74.8	1.352	-.8	-2.9	74.0	.369
4-5393.6	4-5570	.369	97.6	-10.6	-3.4	1.216	107.7	.311	.775	264.0	548.2	.533	1.016	86.3	.829	-1.6	-24.9	220.0	.169
		12.34	9.44	3.75	2.90	6.31	5.66	12.17	2/1/2	129.2	104.0	24.7	.441	4.679	19.4	357.9	16.0	96.0D	1.621
4-4940	4-5280	.108	199.7	15.7	2.1	1.101	93.3	.203	1.224	340.1	576.2	.976	1.472	81.5	.785	-.7	-26.3	271.6	.132
4-5280	4-5370.6	.347	285.5	-26.8	-2.2	.696	107.6	.370	.927	194.6	256.1	.399A	1.456D	57.4	1.296	-.9	-1.5	64.2	.697
4-5370.6	4-5580	.697	73.1	-9.8	-6.8	1.199	123.9	.559	.757	239.6	570.1	.334	1.181	61.5	.814	-6.4	-15.2	190.9	.474
		14.46	11.66	3.63	2.80	6.21	8.03	17.94	2/1/2	127.2	142.1	12.1	.124	9.472	43.6	343.9	43.1	78.1L	1.048
4-4940	4-5280	.108	199.7	15.7	2.1	1.101	93.3	.203	1.224	340.1	576.2	.976	1.472	81.5	.785	-.7	-26.3	271.6	.132
4-5280	4-5368.7	.266	274.6	-26.2	-1.8	.688	105.9	.427	1.041	204.0	294.5	.597A	1.486D	71.7	1.344	-.8	-2.5	72.9	.426
4-5368.7	4-5560	.426	92.6	-10.6	-4.0	1.211	110.5	.355	.770	258.7	560.2	.497	1.043	79.6	.827	-2.5	-20.6	206.5	.227
		12.37	9.57	3.63	2.80	6.21	5.94	12.98	2/1/2	127.2	126.6	21.1	.332	5.457	23.6	355.4	22.6	91.0D	1.479
MARS ARRIVAL DATE = 2445290 (16 NOV 1982)																			
4-4910	4-5290	.179	197.9	4.5	1.8	1.094	99.2	.244	1.220	309.8	564.4	.922	1.518	78.3	.787	.3	-22.4	265.6	.174
4-5290	4-5396.1	.291	267.1	-27.6	-1.6	.730	109.4	.413	1.104	214.3	310.3	.648A	1.560D	76.0	1.365	-1.0	-3.6	73.7	.355
4-5396.1	4-5550	.355	99.6	-9.2	-2.8	1.224	107.0	.302	.786	267.7	528.7	.548	1.025A	94.8	.836	-1.6	-29.0	244.1	.173
		14.61	10.95	4.40	3.66	7.06	6.54	12.23	2/1/2	139.1	63.2	26.4	.478	4.375	13.7	358.1	11.9	100.0D	1.614
4-4920	4-5290	.152	201.1	5.5	1.8	1.097	97.3	.226	1.223	318.7	563.2	.944	1.502	79.4	.789	.0	-23.9	268.1	.160
4-5290	4-5396.4	.291	266.9	-27.6	-1.5	.731	109.5	.412	1.105	214.5	310.9	.650A	1.561D	76.2	1.366	-1.0	-3.6	73.7	.351
4-5396.4	4-5560	.351	100.7	-10.2	-3.0	1.220	106.6	.298	.781	267.0	537.0	.548	1.014A	91.3	.833	-1.5	-28.0	236.3	.159
		13.98	10.61	4.07	3.37	6.77	6.54	12.05	2/1/2	136.8	79.6	27.5	.487	4.206	15.2	358.8	13.3	99.7D	1.562
4-4930	4-5290	.130	203.1	7.8	1.9	1.100	95.6	.216	1.225	327.7	562.2	.961	1.489	80.2	.769	-.3	-25.6	270.3	.150
4-5290	4-5395.8	.292	267.3	-27.7	-1.6	.729	109.5	.415	1.101	213.9	308.9	.644A	1.558D	75.6	1.364	-1.0	-3.7	73.7	.361
4-5395.8	4-5570	.361	100.1	-10.7	-3.3	1.217	107.3	.305	.777	265.3	546.4	.540	1.014	87.2	.832	-1.6	-25.8	224.4	.163
		13.57	10.41	3.84	3.17	6.57	6.57	12.10	2/1/2	134.7	100.0	27.0	.460	4.281	16.8	358.8	15.0	98.2D	1.510
4-4940	4-5290	.114	203.3	12.0	2.0	1.102	93.9	.207	1.227	336.9	581.3	.972	1.481	80.8	.790	-.7	-27.7	272.2	.144
4-5290	4-5391.9	.299	269.0	-27.8	-1.7	.719	109.7	.429	1.084	212.1	301.4	.619A	1.550D	73.3	1.359	-1.0	-3.3	73.5	.402
4-5391.9	4-5560	.402	96.5	-10.8	-3.6	1.214	109.3	.336	.775	261.1	557.5	.513	1.035	81.5	.830	-2.1	-21.7	211.4	.205
		13.45	10.42	3.66	3.03	6.44	6.74	12.66	2/1/2	132.9	122.0	24.0	.372	4.811	18.7	357.3	16.2	94.1D	1.418

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2445150
29 JUN 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2445150 (29 JUN 1982)																			
4-4840	4-5150	.273	144.4	14.7	.1	1.066	105.4	.301	1.187	282.9	546.1	.829	1.545	87.4	.675	1.8	-13.8	253.9	.133
4-5150	4-5370.2	.267	281.5	-29.8	-2.7	.622	79.4	.437	1.098	165.8	300.6	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.415
4-5370.2	4-5520	.415	63.7	-3.9	-1.5	1.200	110.4	.351	.759	256.2	529.9	.493	1.025A	95.4	.806	-3.2	-24.7	207.2	.202
		14.62	11.79	5.88	2.82	6.23	5.91	12.61	2/1/2	70.8	68.0	26.5	.348	4.367	23.3	320.9	23.3	95.5D	1.173
4-4850	4-5150	.251	151.0	12.5	.1	1.072	104.1	.287	1.197	288.1	541.6	.654	1.541	89.4	.681	1.8	-14.9	264.2	.137
4-5150	4-5370.3	.267	281.5	-29.9	-2.7	.623	79.4	.437	1.098	165.8	300.8	.618A	1.578	72.9	1.359	2.1	6.5	39.3	.414
4-5370.3	4-5530	.414	64.4	-5.4	-2.0	1.196	110.4	.350	.753	255.3	538.2	.490	1.017A	91.0	.801	-3.2	-22.8	196.9	.191
		14.30	11.40	5.49	2.90	6.31	5.91	12.46	2/1/2	60.8	85.2	27.7	.350	4.179	25.6	321.6	25.6	95.0D	1.113
4-4860	4-5150	.232	157.3	10.2	.1	1.078	102.9	.276	1.208	293.3	537.1	.875	1.542A	91.1	.686	1.8	-15.4	272.8	.144
4-5150	4-5367.8	.274	281.3	-29.2	-2.5	.618	78.9	.448	1.091	165.7	296.7	.630A	1.580	71.6	1.356	1.9	5.7	36.0	.439
4-5367.8	4-5540	.439	61.8	-6.7	-2.7	1.191	111.6	.369	.748	252.5	549.0	.472	1.023	84.8	.795	-3.6	-17.2	185.4	.212
		14.29	11.25	5.17	3.04	6.45	6.08	12.75	2/1/2	52.6	108.3	26.8	.311	4.315	27.7	320.2	27.7	92.7D	1.052
MARS ARRIVAL DATE = 2445160 (9 JUL 1982)																			
4-4840	4-5160	.273	144.8	15.2	.3	1.065	105.4	.301	1.184	282.5	550.8	.828	1.540	85.4	.682	1.8	-12.9	249.3	.129
4-5160	4-5372.2	.261	284.8	-29.5	-2.6	.624	80.6	.433	1.087	167.3	300.1	.616A	1.557	72.9	1.356	1.8	5.8	42.7	.413
4-5372.2	4-5520	.413	66.3	-4.0	-1.5	1.203	110.2	.349	.763	257.3	527.8	.497	1.029A	96.4	.811	-3.1	-25.7	211.6	.206
		14.40	11.65	5.88	2.75	6.16	5.77	12.66	2/1/2	80.5	64.0	25.4	.353	4.541	22.7	324.2	22.6	95.5D	1.251
4-4850	4-5160	.249	151.3	13.1	.3	1.070	104.0	.284	1.193	287.8	546.4	.854	1.532	87.5	.686	1.8	-14.2	260.4	.129
4-5160	4-5372.7	.260	284.8	-29.7	-2.7	.625	80.7	.431	1.088	167.3	300.9	.619A	1.556	73.2	1.356	1.9	5.9	43.0	.408
4-5372.7	4-5530	.408	67.5	-5.4	-2.0	1.199	110.0	.344	.757	256.5	535.7	.497	1.018A	92.2	.805	-3.1	-24.5	204.6	.189
		13.94	11.19	5.46	2.75	6.16	5.73	12.43	2/1/2	69.7	79.7	27.0	.362	4.286	25.1	325.1	25.1	95.2D	1.169
4-4860	4-5160	.228	157.6	10.9	.3	1.076	102.7	.271	1.202	293.3	542.2	.876	1.526	89.2	.691	1.7	-15.0	269.9	.133
4-5160	4-5371.3	.264	284.7	-29.3	-2.6	.622	80.5	.437	1.084	167.2	298.6	.611A	1.557	72.4	1.355	1.8	5.5	42.3	.421
4-5371.3	4-5540	.422	66.3	-6.8	-2.5	1.195	110.7	.354	.752	254.6	545.5	.485	1.018	87.0	.800	-3.5	-20.3	192.6	.197
		13.76	10.94	5.11	2.82	6.23	5.83	12.53	2/1/2	60.4	100.8	26.9	.338	4.294	27.3	324.6	27.2	93.6D	1.115
MARS ARRIVAL DATE = 2445170 (19 JUL 1982)																			
4-4840	4-5170	.276	145.4	15.6	.5	1.064	105.6	.302	1.181	281.8	555.3	.825	1.538	83.6	.689	1.8	-12.0	244.4	.130
4-5170	4-5374.1	.255	287.7	-29.2	-2.6	.625	81.9	.428	1.076	168.9	299.4	.615A	1.536	72.9	1.352	1.8	5.0	46.2	.410
4-5374.1	4-5520	.410	68.8	-4.0	-1.5	1.206	110.1	.347	.767	258.3	525.8	.500	1.033A	97.3	.815	-3.0	-26.5	215.6	.210
		14.29	11.53	5.92	2.75	6.17	5.61	12.72	2/1/2	90.5	60.3	24.4	.357	4.740	21.9	327.3	21.9	95.4D	1.335
4-4850	4-5170	.249	151.8	13.6	.5	1.069	104.0	.283	1.190	287.4	551.3	.853	1.526	85.6	.693	1.7	-13.6	255.8	.125
4-5170	4-5374.9	.253	287.8	-29.4	-2.6	.627	82.0	.425	1.078	168.9	300.8	.620A	1.536	73.3	1.353	1.8	5.2	46.6	.402
4-5374.9	4-5530	.402	70.4	-5.5	-1.9	1.202	109.7	.340	.761	257.7	533.4	.502	1.020A	93.4	.809	-3.0	-25.9	209.9	.189
		13.69	11.01	5.45	2.67	6.09	5.56	12.43	2/1/2	79.3	74.7	26.1	.371	4.421	24.4	328.5	24.4	95.3D	1.270
4-4860	4-5170	.226	158.0	11.6	.5	1.074	102.6	.268	1.196	295.1	547.2	.877	1.519	87.4	.697	1.7	-14.6	266.0	.125
4-5170	4-5374.2	.255	287.7	-29.2	-2.6	.626	81.9	.428	1.076	168.9	299.7	.616A	1.536	72.9	1.353	1.8	5.1	46.2	.409
4-5374.2	4-5540	.409	70.1	-6.8	-2.5	1.198	110.0	.345	.756	256.2	542.6	.495	1.016	88.6	.804	-3.1	-22.7	199.2	.188
		13.56	10.68	5.08	2.68	6.09	5.60	12.41	2/1/2	69.4	94.2	26.7	.359	4.337	26.7	328.6	26.6	94.2D	1.199
4-4870	4-5170	.205	164.0	9.6	.5	1.080	101.3	.256	1.207	298.8	543.2	.898	1.516	88.9	.701	1.6	-15.5	274.7	.129
4-5170	4-5369.0	.270	287.5	-28.2	-2.3	.615	80.8	.452	1.060	168.5	291.0	.581A	1.540	70.0	1.347	1.4	3.9	43.3	.464
4-5369.0	4-5550	.464	64.3	-7.9	-3.3	1.192	112.7	.387	.749	251.4	555.6	.459	1.038	80.6	.797	-3.9	-15.2	183.0	.241
		13.50	10.76	4.76	2.74	6.15	6.00	15.21	2/1/2	60.9	120.5	24.0	.279	4.809	29.7	324.9	29.6	90.0D	1.064
MARS ARRIVAL DATE = 2445180 (29 JUL 1982)																			
4-4840	4-5180	.280	146.1	16.0	.8	1.064	105.8	.306	1.180	281.0	559.8	.819	1.541	81.7	.696	1.8	-11.3	239.8	.134
4-5180	4-5375.9	.249	290.3	-28.9	-2.5	.627	83.2	.424	1.065	170.6	298.7	.613A	1.517	72.6	1.349	1.4	4.5	49.5	.409
4-5375.9	4-5520	.409	71.2	-4.1	-1.5	1.209	110.0	.346	.771	259.2	523.9	.504	1.038A	98.2	.819	-2.9	-27.1	219.3	.214
		14.30	11.46	6.01	2.84	6.25	5.45	12.78	2/1/2	100.4	56.9	23.2	.360	4.966	21.1	330.5	21.1	95.3D	1.426
4-4850	4-5180	.251	152.4	14.1	.6	1.069	104.1	.284	1.187	286.8	555.9	.850	1.525	83.9	.700	1.7	-13.0	250.6	.125
4-5180	4-5376.9	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.068	170.7	300.5	.620A	1.516	73.4	1.351	1.4	4.5	50.0	.396
4-5376.9	4-5530	.398	73.2	-5.5	-1.9	1.205	109.5	.337	.765	256.8	531.3	.507	1.022A	94.4	.815	-2.9	-26.9	214.8	.191
		13.54	10.87	5.49	2.67	6.08	5.38	12.45	2/1/2	89.5	70.2	25.2	.379	4.580	23.6	331.8	23.6	95.3D	1.357
4-4860	4-5180	.225	158.6	12.2	.6	1.073	102.6	.267	1.195	292.6	552.1	.876	1.514	85.7	.704	1.6	-14.2	261.3	.121
4-5180	4-5376.8	.246	290.3	-29.1	-2.5	.629	83.4	.420	1.067	170.7	300.2	.619A	1.516	73.3	1.350	1.4	4.5	49.9	.400
4-5376.8	4-5540	.400	73.5	-6.9	-2.4	1.201	109.6	.337	.760	257.7	539.9	.503	1.016A	90.0	.808	-2.9	-24.6	205.4	.183
		13.07	10.47	5.07	2.60	6.01	5.39	12.34	2/1/2	79.2	86.2	26.2	.376	4.420	25.9	332.5	25.9	94.6D	1.286
4-4870	4-5180	.203	164.4	10.4	.7	1.078	101.2	.253	1.203	296.6	548.3	.898	1.507	87.2	.708	1.5	-15.1	270.7	.121
4-5180	4-5373.9	.255	290.3	-28.5	-2.4	.623	82.8	.433	1.059	170.4	295.4	.600A	1.518	71.7	1.347	1.3	3.9	48.5	.429
4-5373.9	4-5550	.429	70.5	-8.0	-3.1	1.197	111.0	.360	.754	254.6	551.0	.483	1.025	83.9	.803	-3.4	-19.0	191.5	.209
		12.93	10.33	4.74	2.60	6.01	5.59	12.71	2/1/2	70.0	111.6	25.0	.328	4.623	28.6	330.6	28.5	91.9D	1.181
MARS ARRIVAL DATE = 2445190 (8 AUG 1982)																			
4-4840	4-5190	.286	147.0	16.3	.8	1.064	106.3	.312	1.179	279.8	564.0	.812	1.547	79.9	.704	1.9	-10.8	235.8	.143
4-5190	4-5377.6	.242	292.4	-28.5	-2.4	.629	84.6	.420	1.055	172.5	298.0	.611A	1.498	72.8	1.346	1.1	3.5	52.6	.408
4-5377.6	4-5520	.408	73.6	-4.1	-1.5	1.212	109.9	.346	.775	260.2	522.0	.507	1.043A	99.0	.823	-2.9	-27.6	222.7	.219
		14.45	11.44	6.15	3.02	6.43	5.29	12.86	2/1/2	109.6	53.9	22.1	.362	5.216	20.2	333.5	20.2	95.1D	1.524
4-4850	4-5190	.255	153.2	14.5	.6	1.068	104.4	.287	1.186	285.9	560.5	.845	1.527	82.2	.708	1.7	-12.5	246.0	.129
4-5190	4-5378.9	.239	292.4	-28.8	-2.4	.632	84.8	.415	1.058	172.6	300.1	.619A	1.498	73.5	1.348	1.1	3.7	53.4	.395
4-5378.9	4-5530	.395	75.8	-5.6	-1.9	1.208	109.3	.335	.768	259.9	529.2	.511	1.026A	95.3	.817	-2.8	-27.7	219.4	.193
		13.51	10.76	5.56	2.74	6.15	5.20	12.48	2/1/2	99.5	66.1	24.2	.385	4.761	22.8	335.0	22.8	95.3D	1.449
4-4860	4-5190	.227	159.2	12.6	.8	1.073	102.7	.268	1.193	292.0	556.9	.873	1.512	84.0	.711	1.6	-13.9	256.3	.121
4-5190	4-5379.1	.238	292.4	-28.8	-2.4	.632	84.9	.414	1.059	172.7	300.5	.620A	1.497	73.6	1.348	1.1	3.8	53.5	.393
4-5379.1	4-5540	.395	76.6	-7.0	-2.4	1.204	109.2	.332	.763	259.0	537.5	.510	1.016A	91.2	.812	-2.8	-26.1	211.2	.180
		12.89	10.29	5.10	2.59	6.01	5.19	12.31	2/1/2	89.4	82.8	25.5	.390	4.533	25.2	335.8	25.1	94.8D	1.377
4-4870	4-5190	.203	165.0	11.0	.8	1.077	101.2	.252	1.200	298.2	553.3	.897	1.502	85.6	.714	1.5	-15.0	265.9	.117
4-5190	4-5377.4	.243	292.4	-28.5	-2.4	.628	84.6	.422	1.054	172.5	297.5	.610A	1.498	72.6	1.346	1.1	3.5	52.6	.410
4-5377.4	4-5550	.410	75.0	-8.1	-2.9	1.200	110.0	.345	.758	256.8	547.6	.497	1.019	86.0	.808	-3.0	-21.7	198.5	.192
		12.58	10.05	4.74	2.55	5.94	5.31	12.47	2/1/2	80.0	104.5	25.1	.357	4.598	27.7	335.0	27.5	92.9D	1.264
MARS ARRIVAL DATE = 2445200 (18 AUG 1982)																			
4-4840	4-5200	.298	148.0	16.6	1.0	1.064	106.9	.321	1.180	276.3	568.1	.801	1.558	78.1	.713	1.9	-10.6	232.9	.156
4-5200	4-5379.3	.236	293.9	-28.3	-2.3	.631	86.1	.417	1.045	174.6	297.2	.609A	1.481	72.7	1.343	.9	2.8	55.9	.407
4-5379.3	4-5520	.407	75.6	-4.2	-1.5	1.215	109.8	.346	.779	261.1	520.3	.510	1.048A	99.8	.827	-2.8	-27.9	225.6	.224
		14.77	11.47	6.35	3.29	6.70	5.13	12.94	2/1/2	117.9	51.1	21.0	.363	5.489	19.3	336.1	19.3	95.0D	1.629
4-4850	4-5200	.262	154.1	14.8	1.0	1.068	104.8	.293	1.185	284.7	564.8	.838	1.533	80.5	.716	1.8	-12.1	241.9	.137
4-5200	4-5380.7	.232	293.9	-28.5	-2.3	.634	86.4	.411	1.049	174.8	299.7	.618A	1.480	73.5	1.345	.9	2.9	56.8	.392
4-5380.7	4-5530	.392	76.3	-5.7	-1.9	1.211	109.1	.333	.772	260.9	527.3	.515	1.029A	96.2	.820	-2.7	-28.3	223.5	.196
		13.60	10.71	5.68	2.90	6.31	5.03	12.53	2/1/2	108.9	62.3	23.3	.390	4.961	21.9	336.0	21.9	95.3D	1.547
4-4860	4-5200	.231	160.0	13.0	.9	1.072	103.0	.271	1.192	291.1	561.5	.869	1.514	82.5	.719	1.8	-13.6	251.4	.124
4-5200	4-5381.3	.230	293.8	-28.6	-2.3	.635	86.5	.409	1.051	174.9	300.6	.622A	1.480	73.8	1.346	.9	3.0	58.8	.387
4-5381.3	4-5540	.387	79.5	-7.0	-2.4	1.207	108.9	.328	.766	260.2	535.3	.515	1.017A	92.3	.815	-2.6	-27.3	216.6	.179
		12.62	10.16	5.17	2.66	6.07	4.99	12.30	2/1/2	99.6	77.8	24.7	.401	4.668	24.3	339.1	24.2	95.0D	1.472
4-4870	4-5200	.205	165.7	11.4	1.0	1.077	101.4	.253	1.198	297.5	558.1	.894	1.501	84.1	.722	1.4	-14.6	260.6	.117
4-5200	4-5380.2	.235	293.9	-28.4	-2.3	.633	86.3	.413	1.048	174.7	298.9	.615A	1.481	73.2	1.344	.9	2.9	58.4	.397
4-5380.2	4-5550	.397	78.8	-8.2	-2.9	1.204	109.4	.335	.762	258.5	544.8	.507	1.016	87.6	.812	-2.8	-23.9	205.0	.182
		12.36	9.83	4.77	2.53	5.94	5.06	12.54	2/1/2	90.4	98.2	24.9	.381	4.636	26.7	336.9	26.5	93.6D	1.384
4-4880	4-5200	.183	171.1	10.1	1.0	1.081	99.9	.239	1.204	304.1	554.9	.916	1.492	85.4	.724	1.3	-15.9	269.6	.113
4-5200	4-5364.9	.288	294.0	-26.1	-1.9	.589	85.1	.500	.992	175.0	272.8	.498A	1.487	84.0	1.322	.7	1.9	46.9	.373
4-5364.9	4-5560	.573	61.2	-8.7	-4.7	1.190	118.0	.470	.747	244.9	565.1	.395	1.088	70.9	.797	-3.2	-11.5	178.5	.352
		13.37	10.91	4.45	2.46	5.88	6.46	15.26	2/1/2	81.9	135.5	17.6	.183	6.527	35.9	326.6	35.7	93.4L	1.011

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2443200
18 AUG 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 5 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-4880	4-5200	.183	171.1	10.1	1.0	1.081	99.9	.239	1.204	304.1	554.9	.916	1.492	85.4	.724	1.3	-15.9	269.6	.113
4-5200	4-5373.9	.253	294.2	-27.4	-2.1	.618	85.2	.444	1.027	173.9	268.0	.571A	1.483	69.6	1.336	.6	2.2	53.0	.465
4-5373.9	4-5560	.465	71.7	-8.9	-3.8	1.197	112.6	.387	.754	252.6	558.4	.463	1.046	79.1	.806	-3.7	-16.5	188.2	.249
		12.46	9.99	4.45	2.46	5.88	5.54	13.34	2/1/2	81.9	124.9	21.7	.278	5.308	31.1	334.4	30.9	88.7L	1.198
MARS ARRIVAL DATE = 2445210 (28 AUG 1982)																			
4-4850	4-5210	.272	155.2	14.9	1.1	1.068	105.3	.301	1.186	283.2	568.9	.829	1.542	78.8	.724	1.8	-12.1	238.9	.149
4-5210	4-5382.5	.225	294.6	-28.4	-2.2	.638	88.1	.407	1.041	177.2	299.3	.617A	1.465	73.5	1.343	.7	2.2	59.7	.390
4-5382.5	4-5530	.390	80.6	-5.7	-2.0	1.214	109.0	.331	.776	261.8	525.5	.518	1.033A	97.0	.824	-2.6	-28.7	227.3	.200
		13.86	10.71	5.85	3.14	6.55	4.86	12.58	2/1/2	117.4	59.0	22.3	.395	5.176	21.0	340.8	20.9	95.3D	1.648
4-4860	4-5210	.238	161.0	13.2	1.1	1.072	103.3	.276	1.191	289.9	565.9	.863	1.519	80.9	.726	1.6	-13.4	247.3	.132
4-5210	4-5383.2	.225	294.5	-28.5	-2.2	.639	88.2	.404	1.043	177.3	300.6	.622A	1.465	73.9	1.344	.7	2.3	60.0	.383
4-5383.2	4-5540	.383	82.1	-7.1	-2.4	1.210	108.6	.324	.770	261.3	533.3	.520	1.019A	95.2	.819	-2.5	-28.1	221.6	.179
		12.69	10.09	5.27	2.81	6.22	4.81	12.30	2/1/2	109.1	73.4	24.0	.411	4.817	23.3	342.1	23.2	95.1D	1.568
4-4870	4-5210	.209	166.6	11.7	1.1	1.076	101.6	.256	1.197	296.5	562.8	.890	1.503	82.6	.729	1.4	-14.8	256.0	.121
4-5210	4-5382.7	.224	294.6	-28.4	-2.2	.638	88.1	.406	1.042	177.2	299.7	.619A	1.465	73.6	1.343	.7	2.2	59.8	.388
4-5382.7	4-5550	.388	82.0	-8.3	-2.8	1.206	108.9	.327	.765	260.0	542.3	.515	1.015	88.9	.815	-2.6	-25.5	211.0	.176
		12.27	9.68	4.83	2.60	6.01	4.85	12.26	2/1/2	100.6	92.6	24.5	.400	4.709	25.7	342.4	25.5	94.1D	1.464
4-4880	4-5210	.185	171.9	10.5	1.1	1.081	100.1	.240	1.202	303.3	559.7	.913	1.491	84.0	.732	1.2	-16.0	264.4	.114
4-5210	4-5379.2	.234	294.9	-27.6	-2.1	.630	87.5	.422	1.031	176.6	293.5	.596A	1.466	71.7	1.338	.6	1.9	58.2	.424
4-5379.2	4-5560	.424	78.3	-9.1	-3.4	1.202	110.6	.355	.760	256.3	553.8	.490	1.029	82.7	.811	-3.1	-19.9	196.6	.211
		12.04	9.57	4.48	2.47	5.89	5.09	12.74	2/1/2	92.4	116.3	22.9	.334	5.038	29.0	340.2	28.8	91.0D	1.348
MARS ARRIVAL DATE = 2445220 (7 SEP 1982)																			
4-4850	4-5220	.285	156.4	15.0	1.3	1.068	106.1	.312	1.186	281.4	572.7	.816	1.556	77.1	.732	1.9	-12.2	237.1	.166
4-5220	4-5384.1	.219	294.4	-28.3	-2.1	.641	89.9	.404	1.034	179.8	298.8	.616A	1.452	73.5	1.340	.4	1.4	62.6	.389
4-5384.1	4-5550	.389	82.8	-5.6	-2.0	1.216	108.9	.331	.779	262.7	525.7	.522	1.037A	97.7	.828	-2.5	-28.9	230.7	.204
		14.30	10.81	6.09	3.49	6.90	4.72	12.63	2/1/2	124.8	56.0	21.4	.398	5.396	20.0	343.5	19.8	95.3D	1.748
4-4860	4-5220	.247	162.1	13.3	1.3	1.072	103.9	.283	1.191	288.3	570.0	.854	1.528	79.4	.734	1.6	-13.5	244.3	.144
4-5220	4-5385.1	.217	294.2	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.6	.623A	1.452	74.0	1.342	.4	1.5	63.0	.379
4-5385.1	4-5540	.379	84.6	-7.2	-2.4	1.213	108.4	.321	.773	262.3	531.3	.525	1.021A	94.1	.822	-2.4	-28.7	226.1	.181
		13.12	10.08	5.43	3.04	6.45	4.66	12.32	2/1/2	117.6	69.4	23.2	.419	4.972	22.3	345.0	22.1	95.3D	1.664
4-4870	4-5220	.216	167.7	11.8	1.2	1.076	102.0	.261	1.196	295.2	567.2	.885	1.508	81.2	.737	1.4	-14.8	252.0	.129
4-5220	4-5385.0	.217	294.3	-28.5	-2.1	.643	90.0	.400	1.037	180.0	300.4	.622A	1.452	74.0	1.342	.4	1.5	63.0	.380
4-5385.0	4-5550	.380	85.0	-8.4	-2.8	1.209	108.5	.321	.766	261.3	540.0	.521	1.015	90.0	.818	-2.4	-26.7	216.6	.172
		12.33	9.59	4.92	2.74	6.15	4.67	12.21	2/1/2	110.1	87.4	24.1	.416	4.799	24.6	345.5	24.3	94.5D	1.561
4-4860	4-5220	.189	172.9	10.7	1.2	1.081	100.3	.243	1.201	302.2	564.3	.909	1.493	82.7	.739	1.2	-16.1	259.7	.116
4-5220	4-5382.7	.223	294.7	-28.1	-2.1	.638	89.7	.410	1.029	179.5	296.3	.607A	1.452	72.7	1.338	.4	1.3	62.0	.404
4-5382.7	4-5560	.404	82.7	-9.2	-3.3	1.205	109.6	.339	.763	258.6	550.5	.505	1.022	84.7	.815	-2.7	-22.2	203.1	.192
		11.90	9.35	4.54	2.55	5.96	4.82	12.47	2/1/2	102.6	109.8	23.2	.369	4.973	27.5	344.4	27.2	92.2D	1.465
MARS ARRIVAL DATE = 2445230 (17 SEP 1982)																			
4-4860	4-5230	.259	163.4	13.3	1.4	1.072	104.6	.293	1.192	286.4	573.8	.842	1.541	77.8	.742	1.7	-13.8	242.5	.160
4-5230	4-5386.8	.212	292.9	-28.6	-2.0	.648	92.0	.398	1.032	183.0	300.6	.623A	1.441D	74.1	1.340	.2	.7	65.8	.376
4-5386.8	4-5540	.376	86.9	-7.3	-2.4	1.215	108.2	.319	.776	263.3	529.5	.528	1.024A	94.8	.825	-2.3	-29.1	230.2	.182
		13.54	10.18	5.64	3.36	6.77	4.54	12.34	2/1/2	125.1	65.8	22.5	.426	5.126	21.2	347.6	20.9	95.4D	1.756
4-4870	4-5230	.224	168.9	11.8	1.4	1.076	102.5	.268	1.197	293.6	571.3	.876	1.517	79.8	.744	1.4	-15.0	249.1	.140
4-5230	4-5387.0	.211	292.8	-28.6	-2.0	.649	92.0	.396	1.033	183.1	300.9	.624A	1.442D	74.2	1.341	.2	.7	65.9	.374
4-5387.0	4-5550	.374	87.7	-8.3	-2.8	1.212	108.1	.317	.771	262.4	538.0	.527	1.015A	90.9	.821	-2.3	-27.6	221.7	.170
		12.55	9.59	5.06	2.96	6.37	4.53	12.18	2/1/2	118.6	82.8	23.6	.430	4.892	23.4	346.4	23.0	94.9D	1.672
4-4860	4-5230	.195	174.1	10.7	1.4	1.081	100.7	.247	1.201	300.8	568.7	.904	1.498	81.4	.746	1.2	-16.3	255.9	.126
4-5230	4-5385.5	.215	293.2	-28.4	-2.0	.645	91.8	.402	1.028	182.7	298.1	.614A	1.441D	73.4	1.338	.2	.6	65.3	.390
4-5385.5	4-5560	.390	86.3	-9.4	-3.2	1.208	108.9	.328	.766	260.3	547.8	.515	1.018	86.2	.819	-2.5	-23.9	209.1	.160
		11.95	9.25	4.63	2.70	6.11	4.62	12.31	2/1/2	111.9	104.1	23.2	.396	4.966	26.1	347.9	25.6	93.0D	1.569
MARS ARRIVAL DATE = 2445240 (27 SEP 1982)																			
4-4860	4-5240	.275	164.9	13.0	1.6	1.073	105.5	.307	1.193	284.0	577.3	.827	1.559	76.2	.750	1.7	-14.2	241.9	.160
4-5240	4-5388.4	.210	290.3	-28.7	-1.9	.654	94.2	.394	1.029	186.5	300.7	.624A	1.435D	74.2	1.340	-.0	-.1	68.3	.373
4-5388.4	4-5540	.373	89.0	-7.4	-2.4	1.217	108.1	.318	.779	264.2	527.9	.532	1.026A	95.5	.828	-2.2	-29.3	233.8	.185
		14.20	10.41	5.92	3.79	7.19	4.49	12.37	2/1/2	131.4	62.7	21.9	.431	5.258	20.0	350.0	19.6	95.6D	1.636
4-4870	4-5240	.236	170.3	11.6	1.5	1.077	103.2	.27.	1.197	291.5	575.1	.866	1.529	78.4	.752	1.5	-15.3	247.5	.156
4-5240	4-5388.8	.209	290.2	-28.8	-1.9	.655	94.2	.393	1.031	186.6	301.5	.626A	1.436D	74.5	1.340	-.0	-.1	68.4	.369
4-5388.8	4-5550	.369	90.1	-8.6	-2.7	1.214	107.9	.313	.774	263.5	536.1	.532	1.016A	91.8	.824	-2.1	-28.3	226.4	.169
		12.99	9.71	5.25	3.27	6.68	4.46	12.17	2/1/2	125.9	78.6	23.2	.441	4.972	22.2	350.9	21.7	95.3D	1.752
4-4860	4-5240	.204	175.4	10.4	1.5	1.081	101.2	.254	1.202	299.0	572.8	.896	1.507	80.1	.753	1.2	-16.6	253.4	.136
4-5240	4-5387.8	.211	290.5	-28.6	-1.9	.653	94.1	.397	1.027	186.3	299.6	.620A	1.435D	73.9	1.339	-.0	-.1	66.1	.380
4-5387.8	4-5560	.380	89.4	-9.5	-3.1	1.211	108.4	.320	.769	261.8	545.6	.523	1.015	87.4	.822	-2.3	-25.3	214.5	.173
		12.19	9.27	4.75	2.92	6.33	4.52	12.22	2/1/2	120.2	99.0	23.2	.417	4.971	24.6	350.6	24.0	93.8D	1.658
4-4890	4-5240	.177	180.2	9.8	1.5	1.085	99.4	.236	1.206	306.6	570.5	.921	1.491	81.4	.755	.9	-16.0	259.3	.126
4-5240	4-5387.3	.292	296.2	-25.6	-1.9	.574	91.4	.331	.934	181.3	261.8	.438A	1.430D	60.4	1.298	-.0	-.0	56.1	.637
4-5387.3	4-5570	.637	66.4	-9.4	-5.8	1.194	121.0	.316	.752	242.2	568.2	.364	1.139	65.9	.805	-5.8	-12.9	183.8	.416
		13.60	10.92	4.37	2.68	6.09	6.55	16.61	2/1/2	114.5	139.7	13.9	.146	6.273	42.6	339.6	42.2	80.2L	1.079
4-4890	4-5240	.177	180.2	9.8	1.5	1.085	99.4	.236	1.206	306.6	570.5	.921	1.491	81.4	.755	.9	-16.0	259.3	.126
4-5240	4-5383.1	.224	292.2	-28.0	-1.9	.640	93.6	.419	1.010	185.0	290.8	.586A	1.433D	71.2	1.332	-.0	-.1	66.1	.431 *
4-5383.1	4-5570	.431	84.3	-9.9	-3.8	1.206	110.9	.359	.764	256.9	557.8	.489	1.038	80.5	.818	-2.9	-19.8	199.8	.224
		11.89	9.21	4.37	2.68	6.09	4.84	12.94	2/1/2	114.5	123.0	20.7	.324	5.572	29.1	347.9	28.5	89.6L	1.461
MARS ARRIVAL DATE = 2445250 (7 OCT 1982)																			
4-4870	4-5250	.251	171.9	11.2	1.7	1.077	104.0	.290	1.199	289.0	576.6	.852	1.546	78.9	.759	1.5	-15.8	247.1	.175
4-5250	4-5390.5	.210	286.3	-28.9	-1.8	.664	96.7	.391	1.032	190.6	302.2	.626A	1.435D	74.7	1.341	-.2	-.9	70.6	.365
4-5390.5	4-5550	.365	92.3	-8.7	-2.7	1.216	107.6	.310	.776	264.5	534.4	.536	1.017A	92.5	.827	-2.0	-28.7	230.6	.169
		13.66	10.00	5.50	3.66	7.08	4.50	12.17	2/1/2	132.2	74.9	23.0	.451	5.021	20.7	353.2	20.1	95.7D	1.613
4-4880	4-5250	.215	177.0	10.0	1.6	1.081	101.9	.263	1.203	296.8	576.6	.886	1.519	78.8	.760	1.2	-17.0	252.1	.153
4-5250	4-5389.9	.211	286.6	-28.9	-1.8	.662	96.6	.393	1.030	190.4	301.0	.625A	1.435D	74.3	1.340	-.2	-.8	70.4	.372
4-5389.9	4-5560	.372	92.1	-9.6	-3.1	1.213	107.9	.314	.772	263.0	543.5	.530	1.014	88.4	.824	-2.1	-26.2	219.5	.167
		12.67	9.45	4.92	3.22	6.63	4.53	12.15	2/1/2	127.4	94.5	23.3	.436	4.961	23.0	353.4	22.3	94.6D	1.725
4-4890	4-5250	.186	181.7	9.3	1.6	1.085	100.0	.243	1.206	304.6	574.5	.914	1.499	80.2	.762	.9	-18.3	257.1	.137
4-5250	4-5364.1	.321	295.6	-25.3	-2.0	.548	94.2	.577	.902	185.1	252.6	.381A	1.422D	56.3	1.283	-.2	-.4	55.5	.713
4-5364.1	4-5570	.713	63.6	-9.3	-6.7	1.192	124.8	.571	.750	237.7	568.8	.321	1.178	61.1	.803	-6.9	-12.1	182.6	.483
		14.73	11.82	4.49	2.91	6.32	7.33	18.15	2/1/2	122.5	141.1	12.0	.118	9.547	46.0	334.9	47.6	78.2L	1.012
4-4890	4-5250	.186	181.7	9.3	1.6	1.085	100.0	.243	1.206	304.6	574.5	.914	1.499	80.2	.762	.9	-18.3	257.1	.137
4-5250	4-5386.7	.219	288.0	-28.5	-1.9	.653	96.4	.408	1.017	189.4	294.9	.602A	1.433D	72.5	1.335	-.2	-.7	69.3	.408
4-5386.7	4-5570	.406	88.8	-10.1	-3.6	1.209	109.6	.340	.767	259.4	554.6	.507	1.028	82.7	.822	-2.5	-21.7	205.8	.201 ○
		12.12	9.21	4.49	2.91	6.32	4.72	12.59	2/1/2	122.5	117.3	21.5	.365	5.353	26.5	351.6	25.8	91.4D	1.587
MARS ARRIVAL DATE = 2445260 (17 OCT 1982)																			
4-4870	4-5260	.271	173.6	10.6	1.9	1.078	105.2	.306	1.200	286.0	581.7	.834	1.567	75.2	.765	1.6	-16.4	247.8	.198
4-5260	4-5392.0	.217	281.5	-28.9	-1.8	.674	99.4	.391	1.037	195.3	303.2	.631A	1.442D	74.9	1.343	-.4	-1.6	72.4	.362
4-5392.0	4-5550	.362	94.3	-8.8	-2.7	1.218	107.5	.308	.779	265.3	532.9	.539	1.018A	93.2	.829	-1.9	-28.9	234.4	.169
		14.71	10.51	5.84	4.20	7.60	4.67	12.17	2/1/2	137.4	71.6	23.0	.459	5.013	19.2	355.0	18.4	96.3D	1.642
4-4880	4-5260	.250	178.6	9.4	1.7	1.082	102.7	.275	1.204	294.1	580.0	.875	1.535	77.4	.767	1.2	-17.5	252.0	.172
4-5260	4-5391.7	.218	281.7	-28.9	-1.8	.673	99.4	.392	1.036	195.2	302.6	.629A	1.442D	74.7	1.342	-.4	-1.6	72.3	.365
4-5391.7	4-5560	.365	94.5	-9.8	-3.1	1.215	107.6	.309	.774	264.2	541.7	.535	1.013	89.2	.827	-1.9	-27.0	224.1	.164
		13.45	9.83	5.15	3.62	7.02	4.68	12.11	2/1/2	133.4	90.3	23.5	.451	4.907	21.2	358.4	20.4	95.4D	1.782

STOPOVER TIME = 0 DAYS | 1982 INBOUND SWINGBY | MISSION DURATION = 660. DAYS
MARS ARRIVAL DATE = 2445260
17 OCT 1982

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-4690	4-5260	.197	183.4	8.6	1.7	1.085	100.6	.231	1.208	302.2	578.1	.904	1.511	79.0	.769	.9	-18.7	256.3	.153
4-5260	4-5389.3	.223	282.9	-28.8	-1.8	.667	99.3	.402	1.027	194.3	298.0	.613A	1.440D	73.4	1.339	-.4	-1.4	71.6	.390
4-5389.3	4-5570	.390	92.2	-10.3	-3.5	1.211	108.8	.327	.770	261.5	552.2	.518	1.022	84.2	.825	-2.2	-23.0	210.9	.187
		12.66	9.45	4.65	3.21	6.62	4.81	12.40	2/1/2	129.3	112.4	22.3	.395	5.178	24.2	354.4	23.4	92.8D	1.650
MARS ARRIVAL DATE = 2445270 (27 OCT 1982)																			
4-4660	4-5270	.249	180.5	8.5	1.9	1.082	103.8	.290	1.206	291.0	582.9	.856	1.556	75.9	.773	1.3	-18.0	253.0	.194
4-5270	4-5393.3	.232	276.4	-28.7	-1.7	.687	102.4	.394	1.048	200.6	304.6	.635A	1.461D	75.1	1.347	-.6	-2.3	73.5	.360
4-5393.3	4-5560	.360	96.6	-9.9	-3.0	1.217	107.3	.305	.776	265.1	540.1	.540	1.013	90.0	.829	-1.8	-27.5	228.3	.161
		14.60	10.49	5.46	4.11	7.51	5.03	12.08	2/1/2	138.5	86.6	24.1	.464	4.782	19.4	357.1	16.2	96.4D	1.755
4-4690	4-5270	.211	185.3	7.6	1.8	1.086	101.5	.263	1.210	299.3	581.4	.692	1.527	77.8	.775	1.0	-19.1	256.6	.171
4-5270	4-5391.6	.235	277.3	-28.7	-1.7	.683	102.4	.401	1.041	199.9	301.1	.623A	1.459D	74.1	1.344	-.6	-2.2	73.2	.379
4-5391.6	4-5570	.379	95.1	-10.4	-3.4	1.214	108.2	.318	.773	262.8	550.1	.526	1.019	85.4	.827	-2.0	-24.1	215.6	.177
		13.56	9.97	4.85	3.60	7.00	5.11	12.27	2/1/2	135.1	108.1	23.2	.419	4.967	21.8	356.5	20.8	94.3D	1.664
4-4900	4-5270	.180	189.6	7.3	1.8	1.090	99.5	.242	1.213	307.6	579.8	.920	1.506	79.2	.778	.6	-20.4	260.3	.153
4-5270	4-5375.6	.289	286.5	-27.3	-2.0	.618	102.3	.502	.957	192.8	268.4	.476A	1.438D	63.0	1.309	-.6	-1.3	66.2	.587
4-5375.6	4-5560	.567	77.7	-10.0	-5.5	1.201	116.5	.476	.760	246.4	568.6	.397	1.124	88.3	.817	-4.8	-16.2	193.1	.377
		14.12	10.89	4.42	3.23	6.64	6.47	15.77	2/1/2	131.6	139.7	14.4	.174	7.987	37.7	348.2	37.1	91.5L	1.218
4-4900	4-5270	.180	189.6	7.3	1.8	1.090	99.5	.242	1.213	307.6	579.8	.920	1.506	79.2	.778	.6	-20.4	260.3	.153
4-5270	4-5383.9	.255	281.7	-28.2	-1.8	.657	102.2	.441	1.004	196.5	285.3	.561A	1.448D	69.1	1.330	-.6	-1.7	70.5	.471
4-5383.9	4-5560	.471	86.6	-10.3	-4.4	1.207	112.7	.390	.766	254.7	564.0	.467	1.064	76.2	.823	-3.2	-18.8	200.3	.270
		13.28	10.03	4.42	3.23	6.64	5.61	13.68	2/1/2	131.6	132.6	18.3	.271	6.278	29.0	351.8	28.2	87.3L	1.431
MARS ARRIVAL DATE = 2445280 (6 NOV 1982)																			
4-4900	4-5280	.194	191.7	8.0	1.8	1.090	100.3	.252	1.215	304.5	582.9	.908	1.522	78.1	.781	.7	-20.8	261.1	.171
4-5280	4-5388.7	.268	274.6	-28.2	-1.8	.688	105.9	.427	1.041	204.0	294.5	.597A	1.466D	71.7	1.344	-.8	-2.5	72.9	.426
4-5388.7	4-5560	.426	92.6	-10.6	-4.0	1.211	110.5	.355	.770	258.7	560.2	.497	1.043	79.6	.827	-2.5	-20.6	206.5	.227
		14.16	10.58	4.61	3.61	7.01	5.94	12.98	2/1/2	137.0	126.6	21.1	.352	5.497	23.8	358.4	22.6	91.0D	1.479

1984

OUTBOUND SWINGBY

4.6

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2445780
20 MAR 1984

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445780 (20 MAR 1984)																				
4-5520	4-5576.2	.241	154.5	-3.7	-4.0	.802	99.4	.379	.755	196.1	252.8	.469A	1.041D	67.8	1.194	-1.7	-4.2	35.6	.453	
4-5576.2	4-5780	.453	11.4	7.4	2.6	1.366	108.6	.464	1.130	298.0	525.0	.605	1.655A	102.3	.600	-2.2	-27.6	250.8	.260	
4-5780	4-6000	.148	147.8	-6.2	-3.9	.707	104.2	.311	1.341	217.7	405.4	.924	1.759D	100.3	1.126	5.6	43.2	46.9	.261	
		14.18	8.46	5.33	5.72	9.10	3.13	13.54	1/2/2	44.2	33.8	26.8	.293	4.315	154.0	322.2	23.7	65.8L	.970	
4-5530	4-5580.4	.272	147.9	-.6	-4.2	.845	104.3	.363	.798	208.6	262.4	.508A	1.067D	69.3	1.224	-2.4	-6.4	37.4	.432	
4-5580.4	4-5780	.432	15.2	8.9	2.9	1.371	107.3	.458	1.145	302.1	522.5	.620	1.670A	103.6	.610	-2.7	-29.1	254.5	.269	
4-5780	4-6010	.129	159.6	5.0	-.7	.696	102.7	.310	1.314	212.6	410.3	.907	1.721D	101.3	1.122	2.5	31.5	59.6	.254	
		14.57	8.61	5.86	5.96	9.34	2.75	13.42	1/2/2	40.9	29.5	26.9	.323	4.306	145.2	327.4	31.3	83.1L	1.066	
4-5540	4-5585.0	.327	142.6	2.7	-4.3	.911	109.2	.361	.877	226.4	277.9	.561A	1.194D	71.2	1.270	-3.0	-8.9	36.9	.410	
4-5585.0	4-5780	.410	19.3	11.2	3.4	1.376	106.0	.453	1.162	306.6	519.8	.636	1.688A	105.2	.620	-3.3	-30.7	256.1	.280	
4-5780	4-6020	.120	169.9	6.0	.3	.685	101.2	.310	1.286	207.5	415.2	.889	1.688D	102.2	1.117	1.6	28.7	68.0	.263	
		15.70	9.46	6.89	6.23	9.61	2.57	13.57	1/2/2	37.8	18.9	26.7	.358	4.339	130.7	334.8	43.3	80.7L	1.194	
MARS ARRIVAL DATE = 2445790 (30 MAR 1984)																				
4-5480	4-5632.2	.140	186.9	55.3	7.0	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.3	-72.1	20.3	.239	
4-5632.2	4-5790	.239	13.7	-18.0	-3.0	1.404	88.2	.421	1.244	6.0	148.4	.720D	1.769A	109.0	.671	1.8	-20.2	276.1	.312	
4-5790	4-5960	.218	140.1	24.9	2.6	.772	110.6	.355	1.520	241.8	385.2	.980	2.060D	96.5	1.155	-1.0	9.3	38.7	.212	
		15.72	8.62	5.94	7.10	10.47	4.68	12.76	2/1/1	26.2	46.1	54.2	1.051	2.195	92.4	13.5	-9.3	78.8L	1.257	
4-5490	4-5636.1	.147	183.6	57.6	7.3	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.7	-72.5	16.1	.249	
4-5636.1	4-5790	.249	9.1	-15.1	-2.7	1.405	86.3	.424	1.243	12.4	148.4	.716D	1.771A	109.2	.670	1.5	-21.2	276.1	.315	
4-5790	4-5970	.204	144.3	25.6	3.0	.758	109.6	.344	1.475	237.3	390.5	.967	1.982D	97.7	1.148	-1.4	9.0	42.3	.222	
		15.52	8.37	4.01	7.16	10.53	4.36	12.90	2/1/1	26.1	39.9	57.6	.972	2.077	92.4	9.0	-11.5	71.6L	1.047	
4-5510	4-5573.2	.223	160.5	-6.1	-3.8	.782	94.6	.387	.737	187.4	248.9	.451A	1.022D	67.2	1.180	-1.0	-2.5	32.7	.461	
4-5573.2	4-5790	.461	8.4	6.2	2.2	1.358	109.3	.460	1.103	295.0	531.5	.595	1.611A	97.1	.589	-1.8	-26.6	244.8	.231	
4-5790	4-5990	.191	160.6	35.6	6.7	.752	107.3	.328	1.394	227.7	400.8	.937	1.851D	99.7	1.136	-8.0	-3.5	54.6	.255	
		14.09	9.09	5.04	4.99	8.38	4.05	13.44	1/2/1	54.2	35.5	25.7	.283	4.469	160.2	317.1	18.6	87.9L	.986	
4-5520	4-5577.8	.233	153.5	-5.7	-5.9	.811	99.2	.365	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.436	
4-5577.8	4-5790	.436	12.4	7.2	2.4	1.362	107.8	.451	1.116	299.4	529.1	.612	1.620A	98.7	.598	-2.2	-28.1	249.6	.237	
4-5790	4-6000	.202	142.8	-24.0	-10.1	.719	106.0	.322	1.359	222.6	405.6	.921	1.797D	100.6	1.131	11.6	39.6	30.1	.330	
		14.67	9.52	5.20	5.16	8.54	4.32	14.80	1/2/2	49.9	47.1	26.4	.317	4.576	153.8	322.6	24.0	84.9L	1.070	
4-5530	4-5581.8	.264	146.7	-.4	-4.1	.854	103.9	.349	.807	209.7	265.7	.525A	1.086D	70.3	1.230	-2.3	-6.8	38.0	.412	
4-5581.8	4-5790	.412	16.2	8.6	2.7	1.366	106.5	.444	1.129	303.8	526.7	.628	1.631A	100.2	.606	-2.6	-29.5	253.8	.244	
4-5790	4-6010	.144	158.4	4.6	-.9	.707	104.5	.318	1.327	217.4	410.3	.905	1.750D	101.5	1.125	2.7	32.3	59.4	.261	
		14.09	8.75	5.71	5.54	8.72	3.04	13.54	1/2/2	46.1	25.9	26.5	.354	4.366	144.6	328.0	31.7	82.1L	1.192	
4-5540	4-5586.5	.317	141.5	3.0	-4.2	.918	108.6	.348	.887	226.0	282.0	.578A	1.196D	72.4	1.275	-2.9	-9.2	37.1	.386	
4-5586.5	4-5790	.388	20.2	10.9	3.2	1.371	105.0	.437	1.144	308.7	524.1	.644	1.644A	101.6	.616	-3.2	-31.1	257.9	.253	
4-5790	4-6020	.132	166.2	6.9	.3	.695	102.9	.317	1.298	212.1	415.1	.887	1.710D	102.4	1.120	1.6	28.4	68.2	.268	
		15.08	9.51	6.71	5.56	8.94	2.80	13.65	1/2/2	42.7	18.9	26.3	.400	4.398	129.7	335.7	44.1	79.9L	1.357	
MARS ARRIVAL DATE = 2445800 (9 APR 1984)																				
4-5470	4-5626.2	.140	186.5	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.3	23.1	.233	
4-5626.2	4-5800	.233	15.0	-24.7	-4.0	1.394	89.5	.400	1.202	1.7	155.2	.722D	1.683A	104.7	.656	2.8	-17.3	275.2	.274	
4-5800	4-5950	.261	136.4	22.9	2.2	.810	113.5	.400	1.650	251.6	360.6	.989	2.310D	95.8	1.175	-.6	10.7	35.1	.222	
		15.79	9.70	3.93	6.09	9.47	5.76	12.90	2/1/1	32.1	52.7	46.7	1.107	2.521	93.3	13.7	-4.9	82.8L	1.683	
4-5480	4-5632.2	.137	185.9	54.6	6.7	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-10.0	-71.4	20.3	.234	
4-5632.2	4-5800	.234	10.1	-20.0	-3.3	1.394	87.7	.402	1.202	6.0	155.0	.719D	1.685A	104.9	.656	2.0	-19.2	275.9	.275	
4-5800	4-5960	.245	141.5	22.8	2.3	.794	112.5	.383	1.584	247.3	386.0	.977	2.191D	97.1	1.166	-.7	11.0	37.5	.228	
		15.37	9.25	3.90	6.12	9.50	5.34	13.00	2/1/1	31.6	45.3	51.8	1.098	2.291	93.9	9.2	-7.7	74.5L	1.418	
4-5490	4-5636.2	.144	182.6	57.0	7.1	.905	90.7	.170	.868	183.7	364.7	.720	1.015D	90.7	1.275	-10.5	-72.0	18.2	.244	
4-5636.2	4-5800	.244	5.8	-16.3	-2.8	1.394	85.9	.405	1.200	14.4	155.1	.714D	1.686A	105.1	.655	1.4	-20.6	275.4	.276	
4-5800	4-5970	.226	145.1	22.9	2.5	.779	111.5	.368	1.525	242.7	391.2	.963	2.087D	96.5	1.158	-.9	11.4	41.1	.236	
		15.07	8.91	3.98	6.15	9.55	4.94	13.12	2/1/1	31.5	39.2	56.0	1.006	2.130	93.7	9.5	-10.3	68.1L	1.139	
4-5500	4-5568.8	.228	165.9	-6.8	-3.6	.764	90.4	.409	.721	180.6	244.7	.426A	1.016D	65.9	1.167	-.4	-.9	27.9	.486	
4-5568.8	4-5800	.486	4.4	5.0	1.9	1.351	110.7	.467	1.081	290.2	538.4	.578	1.586A	91.4	.580	-1.5	-24.2	235.2	.212	
4-5800	4-5980	.212	149.5	23.4	3.0	.763	110.4	.355	1.472	237.9	396.2	.949	1.995D	99.5	1.150	-1.2	11.2	45.9	.244	
		14.21	9.67	5.12	4.54	7.93	4.55	13.24	1/2/1	67.9	34.1	24.2	.255	4.762	165.6	310.8	15.8	90.0D	.958	
4-5510	4-5573.9	.218	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.8	1.183	-1.0	-2.5	33.2	.451	
4-5573.9	4-5800	.451	9.2	5.8	2.1	1.355	106.9	.453	1.094	295.6	535.7	.599	1.589A	93.5	.590	-1.8	-26.4	242.0	.214	
4-5800	4-5990	.199	155.8	25.9	4.0	.748	109.1	.344	1.425	232.8	401.0	.954	1.915D	100.2	1.143	-2.3	8.5	52.0	.253	
		13.80	9.21	4.97	4.59	7.98	4.24	13.40	1/2/1	61.6	30.4	23.3	.295	4.559	160.5	317.4	16.3	87.1L	1.050	
4-5520	4-5578.8	.227	152.7	-5.7	-3.9	.817	99.0	.355	.769	197.2	257.5	.496A	1.042D	69.4	1.204	-1.7	-4.5	36.8	.425	
4-5578.8	4-5800	.425	13.3	8.9	2.2	1.359	107.5	.442	1.106	300.4	533.5	.617	1.594A	95.3	.596	-2.1	-28.2	247.4	.218	
4-5800	4-6000	.267	185.2	48.4	15.7	.734	107.8	.336	1.383	227.6	405.7	.919	1.847D	101.0	1.136	-13.9	-28.0	61.3	.363	
		15.71	11.02	5.10	4.69	8.08	5.92	15.48	1/2/1	56.5	50.1	26.0	.336	4.446	153.9	323.1	23.9	84.2L	1.159	
4-5550	4-5582.9	.258	145.8	-.2	-4.0	.860	103.7	.338	.814	210.6	268.4	.538A	1.089D	71.1	1.234	-2.3	-6.8	38.4	.397	
4-5582.9	4-5800	.397	17.1	8.3	2.3	1.363	105.6	.433	1.117	305.1	531.0	.634	1.601A	96.8	.606	-2.5	-29.7	252.2	.223	
4-5800	4-6010	.162	157.6	3.0	-1.4	.720	106.5	.329	1.345	222.3	410.4	.902	1.768D	101.8	1.130	3.3	34.1	58.9	.271	
		13.84	9.02	5.61	4.82	8.21	3.41	13.71	1/2/2	52.3	24.7	26.0	.382	4.440	144.5	328.3	31.8	81.3L	1.314	
4-5540	4-5587.6	.310	140.7	3.3	-4.0	.923	108.2	.338	.894	229.3	285.4	.592A	1.197D	73.3	1.279	-2.9	-9.5	37.3	.370	
4-5587.6	4-5800	.370	20.9	10.4	2.9	1.367	104.2	.424	1.130	310.3	528.5	.650	1.609A	98.2	.614	-3.0	-31.5	256.8	.230	
4-5800	4-6020	.147	167.2	7.6	.4	.707	104.6	.325	1.312	216.8	415.0	.885	1.738D	102.7	1.123	1.5	28.0	68.4	.273	
		14.66	9.67	6.37	4.99	8.38	3.10	13.75	1/2/2	48.3	18.9	25.8	.439	4.479	129.2	336.2	44.5	79.3L	1.328	
MARS ARRIVAL DATE = 2445810 (19 APR 1984)																				
4-5480	4-5632.3	.135	185.5	54.3	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.1	20.3	.232	
4-5632.3	4-5810	.232	7.4	-22.3	-3.6	1.387	87.4	.387	1.172	9.5	161.3	.718D	1.627A	101.1	.647	2.3	-17.9	274.1	.244	
4-5810	4-5960	.276	143.1	21.0	2.1	.821	114.5	.418	1.674	252.9	386.7	.973	2.374D	97.8	1.181	-.4	12.3	36.5	.248	
		15.35	10.02	3.89	5.33	8.71	6.13	13.32	2/1/1	37.6	44.7	49.3	1.119	2.396	95.0	5.9	-6.4	71.1L	1.563	
4-5490	4-5636.2	.142	182.1	56.7	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.6	16.4	.241	
4-5636.2	4-5810	.241	5.3	-17.7	-3.0	1.387	85.6	.391	1.170	15.9	161.4	.713D	1.627A	101.2	.645	1.8	-19.8	274.0	.245	
4-5810	4-5970	.256	146.4	20.7	2.2	.802	113.4	.398	1.594	248.2	391.8	.960	2.228D	98.9	1.170	-.5	13.1	40.2	.253	
		14.94	9.60	3.95	5.34	8.73	5.64	13.40	2/1/1	37.7	38.7	54.5	1.032	2.185	94.8	8.6	-9.4	65.3L	1.222	
4-5500	4-5568.8	.229	165.9	-6.9	-3.6	.762	90.4	.411	.720	180.5	244.5	.424A	1.016D	65.8	1.166	-.4	-.9	27.8	.488	
4-5568.8	4-5810	.488	4.6	4.6	1.8	1.349	110.9	.466	1.074	289.4	542.7	.573	1.576	87.6	.583	-1.4	-23.1	230.3	.204	
4-5810	4-5980	.236	150.2	20.5	2.4	.785	112.3	.380	1.525	243.2	396.6	.945	2.104D	99.9	1.161	-.7	13.8	44.9	.259	
		14.66	10.31	5.14	4.36	7.75	5.17	13.49	1/2/1	77.5	33.6	23.8	.252	4.840	166.4	310.2	13.1	90.4D	.968	
4-5510	4-5574.2	.217	159.8	-6.3	-3.7	.789	94.6	.376	.743	187.7	250.8	.463A	1.022D	67.9	1.185	-1.0	-2.5	33.3	.448	
4-5574.2	4-5810	.448	9.7	5.5	1.9	1.353	108.8	.449	1.087	295.4	540.0	.599	1.574A	90.0	.592	-1.7	-25.8	237.9	.202	
4-5810	4-5990	.220	154.8	20.8	2.9	.767	111.0	.365	1.465	236.0	401.4	.930	2.000D	100.7	1.192	-1.1	13.0	50.7	.264	
		13.98	9.67	4.94	4.31	7.70	4.73	13.59	1/2/1	70.1	29.2	24.9	.300	4.636	161.1	317.5	17.7	87.1L	1.091	
4-5520	4-5579.1	.224	152.2	-5.7	-3.9	.820	98.9	.349	.772	197.5	258.7	.502A	1.042D	69.8	1.207	-1.7	-4.5	37.1	.415	
4-5579.1	4-5810	.415	14.0	8.4	2.1	1.357	107.0	.435	1.097	300.7	537.6	.620	1.575A	91.9	.600	-2.0	-27.9	244.0	.205	
4-5810	4-6000	.207	162.0	24.5	4.4	.791	109.6	.353	1.414	232.7	406.0	.915	1.912D	101.5	1.143	-2.6	9.0	57.9	.275	*
		13.61	9.47	5.05	4.34	7.73	4.42	13.75	1/2/1	64.4	26.9	25.5	.349	4.529	154.4	323.0	23.4	83.9L	1.230	
4-5530	4-5583.7	.253	145.2	-.1	-3.9	.864	103.5	.331	.818	211.3	270.3	.547A	1.090D	71.7	1.237	-2.5	-6.9	38.7	.386	
4-5583.7	4-5810	.386	17.7	7.7	2.3	1.360	105.4	.425	1.108	305.9	535.4	.637	1.578A	93.4	.607	-2.4	-29.6	249.4	.206	
4-5810	4-6010	.167	155.5	-4.0	-3.5	.735	108.2	.345	1.369	227.2	410.5	.899	1.838D	102.3	1.135	3.4	41.2	56.1	.292	
		13.90	9.48	6.84	4.41	7.80	3.95	14.08	1/2/2	59.5	28.8	25.5	.403	4.535	144.9	328.2	31.8	80.9L	1.485	
4-5540	4-5588.9	.305	140.1	3.6	-3.9	.927	107.9	.331	.900	230.4	288.1	.602A	1.199D	74.1	1.282	-2.8	-9.8	37.6	.356	
4-5588.9	4-5810	.356	21.8	9.7	2.6	1.364	103.7	.414	1.119	311.8	533.0	.655	1.583A	94.9	.614	-2.9	-31.6	254.6	.211	
4-5810	4-6020	.165	167.0	8.1	.8	.720	106.6	.336	1.329	221.7	415.0	.883	1.776D	103.0	1.128	1.5	27.3	68.6	.281	
		14.47	9.98	6.48	4.82	7.81	3.47	13.89	1/2/2	54.9	18.8	25.1	.475	4.598	129.0	336.2	44.7	78.9L	1.701	

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2445810
19 APR 1984

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5550	4-5595.7	.375	137.4	6.7	-3.7	1.012	111.7	.372	1.054	253.6	312.6	.662A	1.446D	77.7	1.345	-3.2	-13.2	31.7	.322
4-5595.7	4-5810	.322	25.6	14.2	3.4	1.369	101.4	.404	1.133	319.4	530.0	.676	1.590A	96.6	.623	-3.8	-34.5	260.4	.220
4-5810	4-6030	.151	175.1	7.7	1.1	.706	104.9	.331	1.295	216.1	419.5	.866	1.723D	103.7	1.121	.8	25.9	76.9	.267
		15.79	11.06	7.89	4.73	8.12	3.18	13.99	1/2/2	50.2	15.4	28.1	.580	4.122	102.3	6.5	60.0	83.5L	1.612
MARS ARRIVAL DATE = 2445820 (29 APR 1984)																			
4-5460	4-5632.3	.136	185.6	54.4	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.2	20.3	.232
4-5632.3	4-5820	.232	5.6	-25.4	-4.2	1.381	87.2	.377	1.152	10.4	167.2	.718D	1.586A	97.5	.642	2.8	-15.9	272.0	.219
4-5820	4-5960	.312	145.0	19.4	2.0	.852	116.5	.462	1.803	258.5	387.4	.970	2.636D	98.6	1.199	-.2	13.3	35.7	.272
		15.67	10.97	3.89	4.71	8.10	7.08	13.72	2/1/1	44.9	44.4	46.5	1.113	2.534	95.9	3.3	-5.3	66.5L	1.708
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5820	.240	1.7	-19.4	-3.3	1.381	85.4	.380	1.149	16.9	167.4	.712D	1.585A	97.5	.641	1.8	-16.6	271.8	.216
4-5820	4-5970	.289	146.1	18.8	2.0	.830	115.4	.435	1.690	253.6	392.3	.955	2.424D	99.6	1.185	-.2	14.4	39.5	.275
		15.13	10.43	3.94	4.70	8.09	6.48	13.77	2/1/1	44.8	38.4	52.8	1.043	2.250	95.5	.5	-8.6	63.2L	1.305
4-5500	4-5640.3	.156	178.6	58.3	7.7	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.1	-71.9	11.3	.258
4-5640.3	4-5820	.258	358.5	-14.9	-2.8	1.380	83.4	.385	1.144	23.8	167.7	.703D	1.584A	97.5	.638	1.2	-20.5	271.1	.219
4-5820	4-5980	.267	151.5	18.2	2.1	.809	114.2	.411	1.597	248.5	397.1	.941	2.253D	100.6	1.173	-.3	15.6	44.3	.277
		14.75	10.04	4.12	4.72	8.11	5.92	13.82	1/1/1	45.3	33.3	57.6	.902	2.077	94.5	358.2	-11.2	59.5L	.972
4-5510	4-5573.9	.219	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.7	1.183	-1.0	-2.5	33.1	.452
4-5573.9	4-5820	.452	9.9	4.9	1.7	1.351	109.0	.449	1.081	294.4	544.4	.595	1.566	86.5	.596	-1.6	-24.6	232.6	.196
4-5820	4-5990	.246	155.3	17.6	2.2	.789	113.0	.391	1.520	243.3	401.7	.926	2.113D	101.4	1.162	-.4	18.8	49.9	.281
		14.53	10.35	4.97	4.18	7.57	5.38	13.88	1/2/1	79.9	28.9	24.4	.294	4.729	162.1	316.7	16.7	67.6L	1.098
4-5520	4-5579.2	.223	152.1	-3.7	-3.9	.821	98.9	.348	.773	197.5	259.0	.504A	1.042D	69.9	1.207	-1.7	-4.5	37.1	.414
4-5579.2	4-5820	.414	14.4	5.8	1.9	1.355	107.0	.433	1.091	300.4	542.0	.619	1.563	88.5	.603	-1.9	-27.1	239.4	.194
4-5820	4-6000	.226	160.0	17.5	2.6	.770	111.6	.374	1.455	237.8	406.2	.911	1.998D	102.1	1.152	-.8	16.8	56.3	.264
		14.04	9.93	5.04	4.11	7.51	4.89	13.94	1/2/1	73.4	25.1	25.0	.351	4.628	155.3	322.6	22.5	64.1L	1.273
4-5530	4-5584.1	.251	144.8	.0	-3.9	.866	103.4	.328	.821	211.6	271.3	.552A	1.090D	72.0	1.239	-2.2	-7.0	38.8	.381
4-5584.1	4-5820	.381	18.3	7.0	2.0	1.356	105.2	.420	1.100	306.0	539.8	.638	1.562A	90.2	.610	-2.2	-29.2	245.4	.194
4-5820	4-6010	.224	172.4	26.7	7.1	.753	110.1	.360	1.399	232.3	410.6	.895	1.904D	102.8	1.142	-5.3	1.4	65.1	.303
		14.45	10.33	5.90	4.11	7.51	4.83	14.29	1/2/1	67.9	26.2	24.8	.414	4.655	145.6	327.8	30.9	60.7L	1.514
4-5540	4-5589.8	.302	139.7	3.7	-3.9	.929	107.7	.327	.903	231.0	289.8	.608A	1.198D	74.5	1.284	-2.8	-9.9	37.6	.348
4-5589.8	4-5820	.348	22.0	8.8	2.3	1.362	103.3	.408	1.110	312.2	537.5	.658	1.563A	91.7	.617	-2.7	-31.3	251.3	.196
4-5820	4-6020	.186	167.6	8.8	.8	.736	108.5	.350	1.352	226.6	415.0	.860	1.825D	103.4	1.133	1.0	26.0	69.0	.291
		14.50	10.34	6.41	4.16	7.56	3.93	14.07	1/2/2	62.7	16.6	24.3	.497	4.753	129.4	335.7	44.5	78.7L	1.865
4-5550	4-5596.9	.369	137.0	7.0	-3.5	1.013	111.4	.366	1.057	254.5	315.5	.670A	1.444D	78.5	1.346	-3.1	-13.6	31.3	.308
4-5596.9	4-5820	.308	26.0	13.1	3.0	1.367	100.7	.395	1.123	321.1	534.5	.680	1.567A	93.6	.625	-3.5	-34.5	258.0	.202
4-5820	4-6030	.169	174.8	8.5	1.4	.720	106.8	.342	1.312	220.9	419.4	.863	1.760D	104.1	1.125	.5	24.7	77.1	.295
		15.62	11.33	7.76	4.30	7.69	3.57	14.13	1/2/2	57.0	15.4	27.2	.635	4.259	101.1	8.3	60.6	84.5L	2.071
MARS ARRIVAL DATE = 2445830 (9 MAY 1984)																			
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5830	.240	.7	-21.7	-3.7	1.377	85.3	.373	1.134	17.4	172.9	.712D	1.557A	94.2	.640	2.2	-16.9	268.8	.198
4-5830	4-5970	.327	150.1	17.1	1.8	.863	117.4	.481	1.830	259.0	392.7	.951	2.710D	100.5	1.205	.0	15.4	39.1	.300
		15.65	11.43	3.95	4.22	7.61	7.48	14.24	2/1/1	52.8	38.4	50.6	1.041	2.339	95.9	359.1	-7.7	61.6L	1.394
4-5500	4-5640.2	.155	176.2	58.1	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.4	.256
4-5640.2	4-5830	.256	357.8	-16.1	-3.0	1.376	83.4	.378	1.130	24.3	173.2	.703D	1.556A	94.1	.637	1.4	-19.6	268.0	.198
4-5830	4-5980	.301	153.2	16.3	1.8	.836	116.2	.449	1.699	253.9	397.4	.936	2.462D	101.4	1.189	.0	16.8	43.9	.300
		15.14	10.91	4.11	4.23	7.62	6.81	14.24	1/1/1	53.3	33.3	56.2	.915	2.122	94.9	357.3	-10.5	58.5L	1.026
4-5510	4-5572.8	.225	160.7	-6.0	-3.8	.779	94.6	.391	.735	187.3	248.2	.447A	1.022D	67.0	1.178	-1.1	-2.5	32.5	.466
4-5572.8	4-5830	.466	9.5	4.3	1.6	1.349	109.8	.455	1.076	292.2	548.8	.586	1.565	82.8	.601	-1.5	-22.8	226.8	.198
4-5830	4-5990	.277	156.6	15.3	1.8	.815	114.9	.422	1.594	248.5	401.9	.921	2.268D	102.1	1.175	.0	18.3	49.4	.301
		15.46	11.25	5.08	4.22	7.61	6.17	14.24	1/2/1	90.7	28.9	23.9	.277	4.831	163.4	315.6	15.5	66.8L	1.062
4-5520	4-5578.7	.226	152.5	-3.7	-3.9	.818	99.0	.353	.770	197.3	258.0	.498A	1.042D	69.6	1.205	-1.7	-4.5	36.9	.420
4-5578.7	4-5830	.420	14.5	5.1	1.7	1.353	107.4	.434	1.006	299.0	546.4	.614	1.557	85.1	.608	-1.8	-25.8	235.9	.190
4-5830	4-6000	.254	160.4	14.1	1.8	.793	113.5	.400	1.510	243.0	406.4	.906	2.114D	102.8	1.163	.0	19.8	55.6	.301
		14.69	10.66	5.08	4.03	7.43	5.57	14.25	1/2/1	83.5	25.0	24.3	.341	4.746	156.6	321.8	21.4	64.6L	1.276
4-5530	4-5584.1	.252	144.9	-.0	-3.9	.866	103.4	.329	.820	211.5	271.1	.551A	1.090D	71.9	1.238	-2.2	-6.9	38.8	.382
4-5584.1	4-5830	.382	18.6	6.2	1.8	1.356	105.4	.418	1.095	305.3	544.2	.637	1.553	87.0	.614	-2.1	-28.3	240.4	.186
4-5830	4-6010	.231	164.6	12.7	1.8	.773	112.0	.382	1.441	237.4	410.7	.891	1.990D	103.4	1.151	.1	21.3	62.4	.302
		14.47	10.52	5.51	3.95	7.34	5.01	14.27	1/2/1	77.4	21.5	24.0	.412	4.803	146.8	327.0	29.8	61.0L	1.566
4-5540	4-5589.8	.301	139.5	3.8	-3.8	.930	107.7	.325	.905	231.3	290.5	.611A	1.199D	74.7	1.284	-2.8	-10.0	37.6	.345
4-5589.8	4-5830	.345	22.5	7.8	2.0	1.360	103.3	.404	1.104	312.2	541.9	.656	1.550	88.7	.621	-2.5	-30.7	246.8	.188
4-5830	4-6020	.211	169.9	11.9	2.0	.754	110.4	.367	1.583	231.6	415.0	.876	1.890D	104.0	1.141	-.2	21.5	69.8	.303
		14.82	10.90	6.39	3.92	7.32	4.51	14.29	1/2/2	71.5	16.3	25.5	.506	4.961	130.1	334.6	44.0	78.8L	2.006
4-5550	4-5597.8	.364	136.8	7.2	-3.4	1.014	111.1	.363	1.058	255.0	317.4	.675A	1.442D	79.0	1.347	-3.1	-13.9	31.0	.298
4-5597.8	4-5830	.298	26.4	11.6	2.6	1.365	100.4	.388	1.116	322.0	539.0	.663	1.550A	90.6	.629	-3.2	-34.1	254.5	.188
4-5830	4-6030	.191	175.4	9.6	1.9	.736	108.7	.355	1.334	225.8	419.3	.860	1.809D	104.5	1.131	-.0	22.8	77.5	.305
		15.70	11.73	7.67	3.98	7.37	4.05	14.32	1/2/2	64.8	15.4	25.8	.676	4.472	100.0	9.6	61.3	85.5L	2.348
MARS ARRIVAL DATE = 2445840 (19 MAY 1984)																			
4-5520	4-5577.5	.233	153.5	-3.7	-3.9	.811	99.2	.365	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.436
4-5577.5	4-5840	.436	14.2	4.4	1.5	1.351	108.3	.441	1.081	296.5	550.8	.604	1.559	81.7	.614	-1.7	-23.9	226.0	.194
4-5840	4-6000	.286	161.8	11.8	1.4	.820	115.6	.432	1.586	248.2	406.4	.901	2.272D	103.6	1.176	.5	21.4	55.4	.322
		15.73	11.60	5.20	4.13	7.52	6.40	14.66	1/2/1	94.2	25.2	25.7	.317	4.880	158.2	320.5	19.9	66.2L	1.229
4-5530	4-5583.4	.255	145.4	-.1	-4.0	.863	103.6	.334	.817	211.0	269.6	.544A	1.090D	71.5	1.236	-2.3	-6.8	38.8	.390
4-5583.4	4-5840	.390	18.8	5.3	1.6	1.355	105.9	.421	1.090	303.7	548.6	.631	1.550	83.8	.620	-2.0	-26.8	234.8	.185
4-5840	4-6010	.260	165.2	9.5	1.0	.796	114.0	.408	1.496	242.5	410.8	.886	2.107D	104.1	1.162	.9	24.0	62.0	.321
		15.23	11.31	5.56	3.92	7.32	5.74	14.62	1/2/1	87.6	21.8	23.2	.395	4.980	148.3	325.8	28.5	61.9L	1.571
4-5540	4-5589.6	.302	139.6	3.7	-3.9	.929	107.7	.327	.904	231.0	289.9	.609A	1.199D	74.6	1.284	-2.8	-9.9	37.6	.347
4-5589.6	4-5840	.347	22.9	8.6	1.7	1.358	103.5	.404	1.099	311.2	546.4	.655	1.544	85.7	.626	-2.3	-29.5	241.5	.180
4-5840	4-6020	.242	163.8	-6.2	-4.1	.774	112.4	.388	1.424	236.7	415.0	.871	1.977D	104.6	1.150	6.0	41.8	65.0	.337
		15.50	11.69	6.41	3.81	7.21	5.29	14.95	1/2/1	81.2	26.3	22.1	.498	5.222	131.3	333.1	43.2	79.3L	2.104

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 320 DAYS
MARS ARRIVAL DATE = 2445760
20 MAR 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445760 (20 MAR 1984)																			
4-5480	4-5632.1	.147	186.5	58.5	7.4	.907	89.2	.169	.867	176.0	360.1	.721	1.013	90.0	1.274	-10.8	-73.2	20.4	.240
4-5632.1	4-5780	.248	18.0	-18.3	-2.8	1.418	88.9	.448	1.306	3.6	141.5	.721D	1.891A	113.3	.692	1.6	-20.9	276.0	.356
4-5780	4-6000	.148	147.8	-6.2	-3.9	.707	104.2	.311	1.541	217.7	405.4	.924	1.759D	100.3	1.126	5.6	43.2	46.9	.261
		15.42	7.14	4.01	6.28	11.65	3.13	13.54	2/1/2	21.5	33.8	57.0	.976	2.097	90.8	17.9	-11.7	83.4L	1.071
4-5520	4-5576.2	.241	154.5	-3.7	-4.0	.602	99.4	.379	.755	196.1	252.8	.469A	1.041D	67.8	1.194	-1.7	-4.2	35.6	.453
4-5576.2	4-5780	.453	11.4	7.4	2.6	1.366	108.6	.464	1.130	298.0	525.0	.605	1.655A	102.3	.600	-2.2	-27.6	250.6	.260
4-5780	4-6040	.112	192.9	.9	1.0	.664	97.6	.318	1.244	197.0	424.9	.848	1.640D	104.2	1.108	1.0	27.1	84.3	.267
		13.48	7.76	5.33	5.72	9.10	2.43	14.00	1/2/2	44.2	12.3	26.8	.293	4.315	154.0	322.2	23.7	85.8L	.970
4-5530	4-5580.4	.272	147.9	-.6	-4.2	.845	104.3	.363	.798	208.6	262.4	.508A	1.087D	69.3	1.224	-2.4	-6.4	37.4	.432
4-5580.4	4-5780	.432	15.2	8.9	2.9	1.371	107.3	.458	1.145	302.1	522.5	.620	1.670A	103.6	.610	-2.7	-29.1	254.5	.269
4-5780	4-6050	.115	205.1	-3.2	1.2	.655	95.5	.326	1.224	191.7	429.8	.826	1.623D	105.4	1.103	.9	26.6	92.6	.302
		14.31	8.35	5.86	5.96	9.34	2.49	14.27	1/2/2	40.9	9.5	26.9	.323	4.306	145.2	327.4	31.3	83.1L	1.066
4-5540	4-5585.0	.327	142.6	2.7	-4.3	.911	109.2	.361	.877	226.4	277.9	.561A	1.194D	71.2	1.270	-3.0	-8.9	36.9	.410
4-5585.0	4-5780	.410	19.3	11.2	3.4	1.376	106.0	.453	1.162	306.6	519.8	.636	1.668A	105.2	.620	-3.3	-30.7	256.1	.280
4-5780	4-6060	.124	216.9	-7.3	1.4	.645	93.3	.336	1.207	186.5	434.8	.801	1.612D	106.6	1.098	.8	25.7	101.0	.319
		15.78	9.55	6.89	6.23	9.61	2.65	14.59	1/2/2	37.8	6.9	26.7	.358	4.339	130.7	334.8	43.3	80.7L	1.194
MARS ARRIVAL DATE = 2445790 (30 MAR 1984)																			
4-5470	4-5628.1	.143	189.1	53.6	7.0	.910	87.8	.169	.868	169.0	356.3	.721A	1.015	89.5	1.273	-10.2	-71.9	23.4	.238
4-5628.1	4-5790	.238	18.5	-21.6	-3.6	1.403	90.1	.419	1.243	359.8	508.7	.722	1.764A	108.7	.670	2.5	-18.8	275.7	.310
4-5790	4-5990	.191	160.6	35.8	6.7	.732	107.3	.328	1.394	227.7	400.6	.937	1.651D	99.7	1.136	-5.0	-3.5	54.6	.255
		15.07	8.03	3.97	7.04	10.41	4.05	13.44	2/1/1	26.7	35.5	50.4	1.061	2.340	91.8	18.0	-7.2	87.1L	1.430
4-5480	4-5632.2	.140	186.9	55.3	7.0	.907	89.2	.169	.867	176.0	360.5	.721	1.013	90.0	1.274	-10.3	-72.1	20.3	.239
4-5632.2	4-5790	.239	13.7	-18.0	-3.0	1.404	88.2	.421	1.244	6.0	148.4	.720D	1.769A	109.0	.671	1.8	-20.2	276.1	.312
4-5790	4-6000	.202	142.8	-24.0	-10.1	.719	106.0	.322	1.359	222.6	405.6	.921	1.797D	100.6	1.131	11.8	59.6	30.1	.350
		13.36	8.26	5.84	7.10	10.47	4.32	14.80	2/1/2	26.2	47.1	54.2	1.051	2.195	92.4	13.3	-9.3	78.6L	1.257
4-5490	4-5636.1	.147	183.6	57.6	7.3	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.7	-72.5	16.1	.249
4-5636.1	4-5790	.249	9.1	-15.1	-2.7	1.405	86.3	.424	1.243	12.4	148.4	.716D	1.771A	109.2	.670	1.3	-21.2	276.1	.315
4-5790	4-6010	.144	158.4	4.6	-.9	.707	104.5	.318	1.327	217.4	410.3	.905	1.750D	101.5	1.125	2.7	32.3	89.4	.261
		14.20	7.05	4.01	7.16	10.53	3.04	13.54	2/1/2	26.1	25.9	57.6	.972	2.077	92.4	9.0	-11.5	71.6L	1.047
4-5510	4-5573.2	.223	160.5	-6.1	-3.8	.782	94.6	.367	.737	187.4	248.9	.451A	1.022D	67.2	1.180	-1.0	-2.5	32.7	.461
4-5573.2	4-5790	.461	8.4	6.2	2.2	1.358	109.3	.460	1.105	295.0	531.5	.595	1.611A	97.1	.589	-1.8	-26.6	244.8	.231
4-5790	4-6030	.123	178.3	5.6	.8	.684	101.2	.317	1.272	206.7	419.8	.869	1.676D	103.3	1.114	1.1	27.3	76.4	.277
		12.67	7.68	5.04	4.99	8.58	2.63	13.81	1/2/2	54.2	15.4	25.7	.283	4.489	160.2	317.1	18.6	87.5L	.986
4-5520	4-5577.8	.235	153.5	-3.7	-3.9	.611	99.2	.385	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.436
4-5577.8	4-5790	.436	12.4	7.2	2.4	1.362	107.8	.451	1.116	299.4	529.1	.612	1.620A	98.7	.588	-2.2	-28.1	249.6	.237
4-5790	4-6040	.116	189.4	2.6	1.1	.673	99.4	.320	1.249	201.3	424.5	.849	1.648D	104.2	1.109	.9	26.7	84.6	.266
		12.89	7.73	5.20	5.16	8.54	2.54	14.01	1/2/2	49.9	12.4	26.4	.317	4.376	153.8	322.8	24.0	84.9L	1.070
4-5530	4-5581.8	.264	146.7	-.4	-4.1	.854	103.9	.349	.807	209.7	265.7	.525A	1.088D	70.3	1.230	-2.3	-6.6	38.0	.412
4-5581.8	4-5790	.412	16.2	8.6	2.7	1.366	106.5	.444	1.129	303.8	526.7	.628	1.631A	100.2	.606	-2.6	-29.5	253.8	.244
4-5790	4-6050	.117	201.4	-1.4	1.3	.662	97.4	.325	1.227	195.9	429.5	.828	1.626D	105.3	1.104	.8	26.1	93.0	.300
		13.58	8.24	5.71	5.54	8.72	2.53	14.24	1/2/2	46.1	9.7	26.5	.354	4.366	144.8	328.0	31.7	82.1L	1.192
4-5540	4-5586.8	.317	141.5	3.0	-4.2	.918	108.6	.346	.867	228.0	282.0	.578A	1.196D	72.4	1.275	-2.9	-9.2	37.1	.388
4-5586.8	4-5790	.388	20.2	10.9	3.2	1.371	105.0	.437	1.144	308.7	524.1	.644	1.644A	101.6	.616	-3.2	-31.1	257.9	.253
4-5790	4-6060	.122	213.5	-5.6	1.4	.652	95.2	.333	1.208	190.5	434.1	.805	1.610D	106.4	1.099	.7	25.5	101.4	.315
		14.90	9.33	6.71	5.56	8.94	2.62	14.51	1/2/2	42.7	7.1	26.3	.400	4.396	129.7	335.7	44.1	79.9L	1.357
MARS ARRIVAL DATE = 2445800 (9 APR 1984)																			
4-5470	4-5628.2	.140	188.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.5	23.1	.233
4-5628.2	4-5800	.233	15.0	-24.7	-4.0	1.394	89.5	.400	1.202	1.7	155.2	.722D	1.683A	104.7	.656	2.8	-17.3	275.2	.274
4-5800	4-5990	.199	155.6	25.9	4.0	.748	109.1	.344	1.425	232.8	401.0	.954	1.915D	100.2	1.143	-2.3	8.5	52.0	.253
		14.27	8.17	3.93	6.09	9.47	4.24	13.40	2/1/1	32.1	30.4	46.7	1.107	2.521	93.3	15.7	-4.9	82.8L	1.663
4-5490	4-5636.2	.144	182.9	57.0	7.1	.905	90.7	.170	.868	183.7	364.7	.720	1.015D	90.7	1.275	-10.5	-72.0	16.2	.244
4-5636.2	4-5800	.244	5.8	-16.3	-2.8	1.394	85.9	.405	1.200	14.4	155.1	.714D	1.686A	105.1	.655	1.4	-20.6	275.4	.276
4-5800	4-6010	.162	157.6	3.0	-1.4	.720	106.5	.329	1.345	222.3	410.4	.902	1.788D	101.8	1.130	3.3	34.1	88.9	.271
		13.54	7.58	3.98	6.15	9.53	3.41	13.71	2/1/2	31.5	24.7	56.0	1.008	2.130	93.7	5.5	-10.5	68.1L	1.139
4-5500	4-5568.8	.228	165.9	-6.9	-5.6	.764	90.4	.409	.721	180.6	244.7	.426A	1.016D	65.9	1.167	-.4	-.9	27.9	.486
4-5568.8	4-5800	.486	4.4	5.0	1.9	1.351	110.7	.467	1.081	290.2	538.4	.576	1.586A	91.4	.580	-1.5	-24.2	235.2	.212
4-5800	4-6020	.147	187.2	7.6	.4	.707	104.8	.325	1.312	216.8	415.0	.885	1.736D	102.7	1.123	1.5	28.0	88.4	.275
		12.75	8.22	5.12	4.54	7.93	3.10	13.75	1/2/2	67.9	18.9	24.2	.255	4.782	165.6	310.6	13.8	90.0D	.958
4-5510	4-5573.9	.218	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.8	1.183	-1.0	-2.5	33.2	.451
4-5573.9	4-5800	.451	9.2	5.9	2.1	1.355	108.9	.453	1.094	295.6	535.7	.599	1.569A	93.5	.590	-1.8	-26.4	242.0	.214
4-5800	4-6030	.136	176.3	6.7	.9	.694	103.1	.323	1.282	211.3	419.6	.868	1.696D	103.5	1.117	1.0	26.7	76.6	.281
		12.45	7.84	4.97	4.59	7.98	2.87	13.88	1/2/2	61.6	15.4	25.3	.295	4.559	160.5	317.4	18.3	87.1L	1.050
4-5520	4-5576.5	.227	152.7	-3.7	-3.9	.817	99.0	.355	.769	197.2	257.5	.496A	1.042D	69.4	1.204	-1.7	-4.5	36.8	.423
4-5576.5	4-5800	.423	13.5	6.9	2.2	1.359	107.3	.442	1.106	300.4	533.3	.617	1.594A	95.3	.598	-2.1	-28.2	247.4	.218
4-5800	4-6040	.127	186.4	4.1	1.2	.682	101.2	.323	1.255	205.8	424.2	.849	1.661D	104.3	1.111	.7	26.1	84.9	.290
		12.50	7.81	5.10	4.69	8.08	2.71	14.05	1/2/2	58.5	12.5	26.0	.336	4.446	153.9	323.1	23.9	84.2L	1.159
4-5530	4-5582.9	.256	145.8	-.2	-4.0	.860	103.7	.338	.814	210.6	266.4	.538A	1.089D	71.1	1.234	-2.3	-6.8	38.4	.397
4-5582.9	4-5800	.397	17.1	8.3	2.5	1.363	105.6	.433	1.117	305.1	531.0	.634	1.601A	96.8	.606	-2.5	-29.7	252.2	.223
4-5800	4-6050	.123	197.7	.4	1.4	.671	99.2	.326	1.231	200.3	428.8	.829	1.633D	105.2	1.105	.6	25.6	93.2	.300
		13.05	8.23	5.61	4.82	8.21	2.82	14.24	1/2/2	52.3	9.6	26.0	.382	4.440	144.5	328.3	31.8	81.3L	1.314
4-5540	4-5587.8	.310	140.7	3.3	-4.0	.923	108.2	.338	.894	223.3	285.4	.592A	1.197D	73.3	1.279	-2.9	-9.5	37.3	.370
4-5587.8	4-5800	.370	20.9	10.4	2.9	1.367	104.2	.424	1.130	310.3	526.5	.650	1.609A	98.2	.614	-3.0	-31.5	256.8	.230
4-5800	4-6060	.123	209.7	-5.8	1.5	.660	97.1	.332	1.210	194.7	433.5	.808	1.612D	106.2	1.099	.5	24.8	101.7	.312
		14.20	9.21	6.57	4.99	8.38	2.64	14.46	1/2/2	48.3	7.3	25.8	.439	4.479	129.2	336.2	44.5	79.3L	1.528
MARS ARRIVAL DATE = 2445810 (19 APR 1984)																			
4-5470	4-5628.2	.140	188.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.3	23.1	.233
4-5628.2	4-5810	.233	12.3	-26.9	-4.7	1.386	89.2	.385	1.173	3.1	161.4	.721D	1.625A	100.9	.647	3.4	-14.9	273.9	.244
4-5810	4-5990	.220	154.8	20.8	2.9	.767	111.0	.365	1.465	236.0	401.4	.930	2.000D	100.7	1.152	-1.1	13.8	50.7	.264
		14.00	8.67	3.93	5.33	8.72	4.73	13.59	2/1/1	38.4	29.2	42.8	1.105	2.743	94.4	10.1	-3.2	79.2L	1.926
4-5480	4-5632.3	.135	185.5	54.3	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.1	20.3	.232
4-5632.3	4-5810	.232	7.4	-22.3	-3.6	1.387	87.4	.387	1.172	9.5	161.3	.718D	1.627A	101.1	.647	2.3	-17.9	274.1	.244
4-5810	4-6000	.207	162.0	24.5	4.4	.751	109.6	.353	1.414	232.7	406.0	.915	1.912D	101.5	1.143	-2.6	9.0	57.8	.273
		13.63	8.30	3.69	5.33	8.71	4.42	13.75	2/1/1	37.8	26.9	49.3	1.119	2.396	95.0	5.9	-6.4	71.1L	1.563
4-5490	4-5636.2	.142	182.1	56.7	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.6	16.4	.241
4-5636.2	4-5810	.241	3.3	-17.7	-3.0	1.387	85.6	.391	1.170	15.9	161.4	.713D	1.627A	101.2	.645	1.6	-19.8	274.0	.245
4-5810	4-6010	.187	155.5	-4.0	-3.5	.735	108.2	.343	1.369	227.2	410.5	.899	1.838D	102.3	1.135	5.4	41.2	56.1	.292
		13.25	7.91	3.95	5.34	8.73	3.95	14.08	2/1/2	57.7	26.8	54.5	1.032	2.165	94.8	2.6	-9.4	65.3L	1.222
4-5500	4-5568.6	.229	165.9	-6.9	-5.6	.762	90.4	.411	.720	180.5	244.5	.424A	1.016D	65.8	1.166	-.4	-.9	27.8	.486
4-5568.6	4-5810	.486	4.6	4.6	1.8	1.349	110.9	.466	1.074	289.4	542.7	.573	1.576	87.6	.583	-1.4	-23.1	230.3	.204
4-5810	4-6020	.165	187.0	8.1	.5	.720	106.6	.336	1.329	221.7	415.0	.883	1.776D	103.0	1.128	1.3	27.3	68.6	.281
		12.97	8.61	5.14	4.36	7.75	3.47	13.89	1/2/2	77.5	16.8	23.8	.252	4.840	166.4	310.2	13.1	90.4D	.968
4-5510	4-5574.2	.217	159.8	-6.3	-3.7	.789	94.6	.376	.743	187.7	250.8	.463A	1.022D	67.9	1.185	-1.0	-2.5	33.3	.448
4-5574.2	4-5810	.448	9.7	5.5	1.9	1.353	108.8	.449	1.087	295.4	540.0	.599	1.574A	90.0	.592	-1.7	-25.8	237.9	.202
4-5810	4-6030	.151	175.1	7.7	1.1	.706	104.9	.331	1.295	216.1	419.5	.866	1.723D	103.7	1.121	.8	25.9	76.9	.287
		12.43	8.12	4.94	4.31	7.70	3.18	13.99	1/2/2	70.1	15.4	24.9	.300	4.638	161.1	317.5	17.7	87.1L	1.091
4-5520	4-5579.1	.224	152.2	-3.7	-3.9	.820	98.9	.349	.772	197.5	258.7	.502A	1.042D	69.8	1.207	-1.7	-4.5	37.1	.415
4-5579.1	4-5810	.415	14.0	6.4	2.1	1.357	107.0	.435	1.097	300.7	537.6	.620	1.575A	91.9	.600	-2.0	-27.9	244.0	.203
4-5810	4-6040	.139	184.2	5.4	1.4	.693	103.1	.329	1.264	210.4	424.0	.848	1.680D	104.5	1.114	.6	25.4	88.1	.294
		12.94	8.00	5.05	4.54	7.75	2.94	14.12	1/2/2	64.4	12.5	25.8	.349	4.529	154.4	323.0	23.4	83.9L	1.230

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445810
19 APR 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5530	4-5563.7	.253	145.2	-.1	-3.9	.864	103.5	.351	.818	211.3	270.3	.547A	1.090D	71.7	1.237	-2.3	-6.9	38.7	.386
4-5563.7	4-5810	.386	17.7	7.7	2.3	1.360	105.4	.425	1.108	305.9	535.4	.637	1.578A	93.4	.607	-2.4	-29.6	249.4	.206
4-5810	4-6050	.131	194.4	2.0	1.5	.680	101.1	.329	1.237	204.7	428.5	.830	1.645D	105.3	1.107	.4	25.0	93.5	.302
		12.73	8.32	5.54	4.41	7.80	2.79	14.27	1/2/2	59.5	9.9	25.5	.403	4.535	144.9	328.2	31.5	80.8L	1.425
4-5540	4-5588.9	.305	140.1	3.6	-3.9	.927	107.9	.351	.900	230.4	288.1	.602A	1.199D	74.1	1.282	-2.8	-9.8	37.5	.356
4-5588.9	4-5810	.356	21.5	9.7	2.6	1.364	103.7	.414	1.119	311.6	533.0	.655	1.583A	94.9	.614	-2.9	-31.6	254.6	.211
4-5810	4-6060	.128	205.9	-2.1	1.6	.669	99.0	.333	1.213	199.1	433.0	.810	1.617D	106.2	1.101	.4	24.3	101.9	.312
		13.72	9.20	6.48	4.52	7.91	2.72	14.45	1/2/2	54.9	7.4	25.1	.473	4.595	129.0	336.2	44.7	78.9L	1.701
4-5550	4-5595.7	.375	137.4	6.7	-3.7	1.012	111.7	.372	1.054	253.6	312.6	.662A	1.446D	77.7	1.345	-3.2	-13.2	31.7	.322
4-5595.7	4-5810	.322	25.6	14.2	3.4	1.369	101.4	.404	1.133	319.4	530.0	.676	1.590A	96.6	.623	-3.8	-34.5	260.4	.220
4-5810	4-6070	.130	216.0	-6.4	1.7	.657	96.7	.339	1.192	193.4	437.6	.788	1.596D	107.1	1.094	.3	23.2	110.4	.323
		15.38	10.65	7.89	4.73	8.12	2.77	14.68	1/2/2	50.2	5.1	28.1	.580	4.122	102.3	6.5	60.0	83.5L	1.612

MARS ARRIVAL DATE = 2445820 (29 APR 1984)

4-5470	4-5628.0	.145	189.7	54.0	7.2	.910	87.8	.169	.868	169.0	356.2	.721A	1.015	89.5	1.273	-10.4	-72.3	23.5	.241
4-5628.0	4-5820	.241	10.6	-35.3	-5.8	1.381	89.0	.375	1.153	3.7	167.3	.721D	1.585A	97.4	.643	4.5	-10.9	271.7	.222
4-5820	4-5990	.246	155.3	17.6	2.2	.789	113.0	.391	1.520	243.3	401.7	.926	2.113D	101.4	1.162	-.4	16.6	49.9	.281
		14.15	9.38	3.99	4.78	8.17	5.38	13.88	2/1/1	46.1	28.9	37.6	1.033	3.104	95.2	7.1	-1.9	76.4L	2.173
4-5480	4-5632.3	.136	185.6	54.4	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.2	20.3	.232
4-5632.3	4-5820	.232	5.6	-25.4	-4.2	1.381	87.2	.377	1.152	10.4	167.2	.718D	1.586A	97.5	.642	2.8	-15.9	272.0	.219
4-5820	4-6000	.226	160.0	17.5	2.6	.770	111.6	.374	1.455	237.8	406.2	.911	1.998D	102.1	1.152	-.8	16.8	56.3	.284
		13.49	8.78	3.89	4.71	8.10	4.89	13.94	2/1/1	44.9	25.1	46.5	1.113	2.534	95.9	3.3	-5.3	68.5L	1.708
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5820	.240	1.7	-19.4	-3.3	1.381	85.4	.380	1.149	16.9	167.4	.712D	1.585A	97.5	.641	1.8	-18.6	271.8	.218
4-5820	4-6010	.224	172.4	28.7	7.1	.753	110.1	.360	1.399	232.3	410.6	.895	1.904D	102.8	1.142	-5.3	1.4	65.1	.303
		13.48	8.78	3.94	4.70	8.09	4.83	14.29	2/1/1	44.8	26.2	52.8	1.043	2.250	95.5	.5	-8.6	65.2L	1.305
4-5500	4-5640.3	.156	178.6	58.3	7.7	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.1	-71.9	11.3	.258
4-5640.3	4-5820	.258	356.5	-14.9	-2.8	1.380	83.4	.385	1.144	23.8	167.7	.703D	1.584A	97.5	.638	1.2	-20.5	271.1	.219
4-5820	4-6020	.186	167.6	8.8	.8	.736	108.5	.350	1.352	226.6	415.0	.880	1.825D	103.4	1.133	1.0	26.0	69.0	.291
		12.77	8.05	4.12	4.72	8.11	3.93	14.07	1/1/2	45.3	18.6	57.6	.902	2.077	94.5	356.2	-11.2	59.5L	.972
4-5510	4-5573.9	.219	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.7	1.183	-1.0	-2.5	33.1	.452
4-5573.9	4-5820	.452	9.9	4.9	1.7	1.351	109.0	.449	1.081	294.4	544.4	.595	1.566	86.5	.596	-1.6	-24.6	232.6	.196
4-5820	4-6030	.169	174.8	8.5	1.4	.720	106.6	.342	1.312	220.9	419.4	.863	1.760D	104.1	1.125	.5	24.7	77.1	.295
		12.71	8.54	4.97	4.18	7.57	3.57	14.13	1/2/2	79.9	15.4	24.4	.294	4.729	162.1	316.7	16.7	87.8L	1.098
4-5520	4-5579.2	.223	152.1	-3.7	-3.9	.821	98.9	.348	.773	197.5	259.0	.504A	1.042D	69.9	1.207	-1.7	-4.5	37.1	.414
4-5579.2	4-5820	.414	14.4	5.8	1.9	1.355	107.0	.433	1.091	300.4	542.0	.619	1.563	88.5	.603	-1.9	-27.1	239.4	.194
4-5820	4-6040	.155	182.7	6.4	1.6	.705	105.0	.337	1.277	215.1	423.8	.847	1.707D	104.7	1.117	.3	24.5	85.3	.299
		12.41	8.50	5.04	4.11	7.51	3.26	14.22	1/2/2	73.4	12.6	25.0	.351	4.628	155.3	322.6	22.5	84.1L	1.273
4-5530	4-5584.1	.251	144.8	.0	-3.9	.866	103.4	.328	.821	211.6	271.3	.552A	1.090D	72.0	1.239	-2.2	-7.0	36.8	.381
4-5584.1	4-5820	.381	18.3	7.0	2.0	1.358	105.2	.420	1.100	306.0	539.8	.636	1.562A	90.2	.610	-2.2	-29.2	245.4	.194
4-5820	4-6050	.143	191.8	3.3	1.7	.692	103.0	.335	1.246	209.3	426.2	.829	1.663D	105.4	1.110	.2	24.3	93.7	.305
		12.64	8.52	5.50	4.11	7.51	3.02	14.33	1/2/2	67.9	10.0	24.8	.414	4.655	145.6	327.8	30.9	80.7L	1.514
4-5540	4-5589.5	.302	139.7	3.7	-3.9	.929	107.7	.327	.903	231.0	289.8	.608A	1.198D	74.5	1.284	-2.8	-9.9	37.6	.348
4-5589.5	4-5820	.348	22.0	8.8	2.3	1.362	103.3	.406	1.110	312.2	537.5	.656	1.563A	91.7	.617	-2.7	-31.3	251.3	.196
4-5820	4-6060	.136	202.3	-.5	1.7	.679	100.9	.335	1.219	203.6	432.6	.811	1.628D	106.2	1.102	.2	23.7	102.1	.313
		13.44	9.26	6.41	4.16	7.56	2.87	14.47	1/2/2	62.7	7.6	24.3	.497	4.753	129.4	335.7	44.5	78.7L	1.865
4-5550	4-5596.9	.369	137.0	7.0	-3.5	1.013	111.4	.366	1.057	254.5	315.5	.670A	1.444D	78.5	1.346	-3.1	-13.6	31.3	.308
4-5596.9	4-5820	.308	26.0	13.1	3.0	1.367	100.7	.395	1.123	321.1	534.5	.680	1.567A	93.6	.625	-3.5	-34.5	256.0	.202
4-5820	4-6070	.133	214.0	-4.7	1.8	.667	98.7	.339	1.195	197.8	437.0	.791	1.600D	107.0	1.095	.2	22.7	110.6	.322
		14.89	10.59	7.76	4.30	7.69	2.83	14.65	1/2/2	57.0	5.3	27.2	.635	4.259	101.1	8.3	60.6	84.5L	2.071

MARS ARRIVAL DATE = 2445830 (9 MAY 1984)

4-5470	4-5627.4	.170	194.7	57.9	8.9	.910	87.8	.169	.868	169.1	355.3	.721A	1.015	89.3	1.273	-12.1	-76.1	25.5	.276
4-5627.4	4-5830	.276	10.0	-46.0	-8.6	1.377	89.1	.367	1.139	3.2	172.8	.721D	1.557A	94.1	.643	7.2	-1.7	266.5	.213
4-5830	4-5990	.277	156.6	15.3	1.8	.815	114.9	.422	1.594	248.5	401.9	.921	2.268D	102.1	1.175	.0	18.3	49.4	.301
		15.03	10.45	4.26	4.58	7.97	6.17	14.24	2/1/1	56.0	28.9	28.8	.792	4.017	95.1	4.5	-1.5	74.8L	2.386
4-5480	4-5632.2	.139	186.5	55.0	6.8	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.2	-71.8	20.3	.237
4-5632.2	4-5830	.237	4.5	-30.0	-5.0	1.377	87.1	.369	1.137	10.8	172.7	.718D	1.557A	94.2	.642	3.5	-12.6	269.1	.200
4-5830	4-6000	.254	160.4	14.1	1.8	.793	113.5	.400	1.510	243.0	406.4	.906	2.114D	102.8	1.163	.0	19.8	55.6	.301
		13.76	9.50	3.93	4.26	7.65	5.57	14.25	2/1/1	53.0	25.0	42.6	1.070	2.751	96.2	1.4	-4.2	66.4L	1.674
4-5490	4-5636.2	.141	181.8	58.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5830	.240	.7	-21.7	-3.7	1.377	85.3	.373	1.134	17.4	172.9	.712D	1.557A	94.2	.640	2.2	-16.9	268.8	.198
4-5830	4-6010	.231	164.6	12.7	1.8	.773	112.0	.382	1.441	237.4	410.7	.891	1.990D	103.4	1.151	.1	21.3	62.4	.302
		13.18	8.96	3.95	4.22	7.61	5.01	14.27	2/1/1	52.8	21.5	30.6	1.041	2.339	95.9	359.1	-7.7	61.6L	1.394
4-5500	4-5640.2	.155	178.2	56.1	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.4	.256
4-5640.2	4-5830	.256	357.8	-16.1	-3.0	1.376	83.4	.378	1.130	24.3	173.2	.703D	1.556A	94.1	.637	1.4	-19.6	268.0	.198
4-5830	4-6020	.211	169.9	11.9	2.0	.754	110.4	.367	1.363	231.6	415.0	.876	1.890D	104.0	1.141	-.2	21.5	69.8	.303
		12.85	8.62	4.11	4.23	7.62	4.51	14.29	1/1/2	53.3	18.3	56.2	.915	2.122	94.9	357.3	-10.5	58.5L	1.026
4-5510	4-5572.8	.225	160.7	-6.0	-3.8	.779	94.6	.391	.735	187.3	248.2	.447A	1.022D	67.0	1.178	-1.1	-2.5	32.5	.466
4-5572.8	4-5830	.466	9.5	4.3	1.6	1.349	109.8	.455	1.076	292.2	548.8	.586	1.565	82.8	.601	-1.5	-22.8	226.6	.198
4-5830	4-6030	.191	175.4	9.6	1.9	.736	108.7	.355	1.334	225.8	419.3	.860	1.809D	104.5	1.131	-.0	22.8	77.5	.305
		13.35	9.13	5.08	4.22	7.61	4.05	14.32	1/2/2	90.7	15.4	23.9	.277	4.831	163.4	315.6	15.5	88.8L	1.062
4-5520	4-5578.7	.226	152.5	-3.7	-3.9	.818	99.0	.353	.770	197.3	256.0	.498A	1.042D	69.6	1.205	-1.7	-4.5	36.9	.420
4-5578.7	4-5830	.420	14.5	5.1	1.7	1.353	107.4	.434	1.086	299.0	546.4	.614	1.557	85.1	.608	-1.8	-25.8	233.9	.190
4-5830	4-6040	.174	182.1	7.2	1.9	.720	106.9	.347	1.293	220.0	423.6	.844	1.742D	105.1	1.122	-.0	23.3	85.6	.307
		12.78	8.74	5.08	4.03	7.43	3.66	14.37	1/2/2	83.5	12.7	24.3	.341	4.746	156.6	321.8	21.4	84.8L	1.278
4-5530	4-5584.1	.252	144.9	-.0	-3.9	.866	103.4	.329	.820	211.5	271.1	.551A	1.090D	71.9	1.238	-2.2	-6.9	36.8	.382
4-5584.1	4-5830	.382	18.6	6.2	1.8	1.356	105.4	.416	1.095	305.3	544.2	.637	1.553	87.0	.614	-2.1	-28.3	240.4	.186
4-5830	4-6050	.159	190.0	4.3	1.9	.704	105.0	.342	1.258	214.1	427.9	.828	1.686D	105.7	1.113	-.0	23.3	93.9	.311
		12.79	8.85	5.51	3.95	7.34	3.34	14.44	1/2/2	77.4	10.2	24.0	.412	4.603	146.8	327.0	29.8	81.0L	1.566
4-5540	4-5589.8	.301	139.5	3.6	-3.8	.930	107.7	.325	.905	231.3	290.5	.611A	1.199D	74.7	1.284	-2.8	-10.0	37.6	.345
4-5589.8	4-5830	.345	22.5	7.8	2.0	1.360	103.3	.404	1.104	312.2	541.9	.658	1.550	86.7	.621	-2.5	-30.7	246.8	.185
4-5830	4-6060	.147	199.4	.8	1.9	.690	102.9	.340	1.227	208.2	432.2	.810	1.644D	106.3	1.105	-.0	22.9	102.3	.316
		13.41	9.49	6.39	3.92	7.32	3.10	14.54	1/2/2	71.5	7.6	23.3	.506	4.961	130.1	334.6	44.0	78.8L	2.006
4-5550	4-5597.8	.364	136.6	7.2	-3.4	1.014	111.1	.363	1.058	255.0	317.4	.675A	1.442D	79.0	1.347	-3.1	-13.9	31.0	.298
4-5597.8	4-5830	.298	26.4	11.6	2.6	1.365	100.4	.388	1.116	322.0	539.0	.683	1.550A	90.6	.629	-3.2	-34.1	254.5	.188
4-5830	4-6070	.141	210.1	-3.2	1.9	.677	100.7	.341	1.201	202.3	436.5	.792	1.610D	107.1	1.097	-.0	22.0	110.8	.323
		14.61	10.64	7.67	3.98	7.37	2.97	14.66	1/2/2	64.8	5.5	25.8	.676	4.472	100.0	9.6	61.3	85.5L	2.348

MARS ARRIVAL DATE = 2445840 (19 MAY 1984)

4-5480	4-5632.0	.149	189.2	56.9	7.6	.907	89.2	.169	.867	176.1	360.1	.721	1.013	90.0	1.274	-10.9	-73.7	20.4	.252
4-5632.0	4-5840	.252	4.1	-38.0	-6.5	1.374	87.2	.363	1.128	10.7	177.9	.716D	1.538A	91.2	.644	5.0	-6.7	265.6	.190
4-5840	4-6000	.286	161.8	11.9	1.4	.820	115.6	.432	1.586	248.2	406.4	.901	2.272D	103.6	1.176	.5	21.4	55.4	.322
		14.47	10.44	4.04	4.03	7.42	6.40	14.66	2/1/1	62.3	25.2	36.6	.948	3.188	96.0	359.7	-3.0	64.6L	2.073
4-5490	4-5636.2	.142	182.3	56.8	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.7	16.3	.242
4-5636.2	4-5840	.242	.4	-25.1	-4.3	1.374	85.5	.367	1.125	17.4	178.0	.712D	1.538A	91.1	.642	2.7	-14.3	265.2	.184
4-5840	4-6010	.260	165.2	9.5	1.0	.796	114.0	.408	1.496	242.5	410.8	.886	2.107D	104.1	1.162	.9	24.0	62.0	.321
		13.99	9.70	3.96	3.89	7.29	5.74	14.62	2/1/1	61.5	21.8	47.5	1.024	2.482	96.1	356.3	-6.5	60.4L	1.518
4-5500	4-5640.2	.154	177.9	56.0	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.6	11.5	.255
4-5640.2	4-5840	.255	357.7	-17.7	-3.5	1.374	83.5	.375	1.120	24.3	178.3	.703D	1.537A	91.0	.640	1.6	-18.2	264.2	.183
4-5840	4-6020	.242	163.8	-6.2	-4.1	.774	112.4	.388	1.424	236.7	415.0	.871	1.977D	104.6	1.150	6.0	41.6	65.0	.337
		13.26	9.38	4.10	3.88	7.28	5.29	14.95	1/1/1	62.0	26.3	34.5	.925	2.165	95.1	357.0	-9.5	57.8L	1.096

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445640
19 MAY 1984

LAUNCH SWNGBY DEPART	SWNGBY ARRIVE RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN P	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-5510	4-5570.8	.240	161.9	-5.6	-3.8	.784	94.8	.414	.722	186.9	244.6	.423A	1.022D	65.5	1.166	-1.1	-2.4	31.2	.493
4-5570.8	4-5840	.493	8.6	3.7	1.4	1.348	111.2	.469	1.071	288.4	353.3	.569	1.575	78.8	.807	-1.4	-20.4	220.5	.210
4-5840	4-6030	.218	177.4	11.9	3.0	.754	110.7	.575	1.365	230.8	419.2	.856	1.873D	105.1	1.138	-1.2	18.9	78.0	.319
		14.49	9.98	5.31	4.50	7.90	4.68	14.59	1/2/2	101.9	16.0	23.4	.247	4.935	165.0	313.6	14.0	90.9D	.973
4-5520	4-5577.5	.233	153.5	-3.7	-3.9	.811	99.2	.365	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.436
4-5577.5	4-5840	.436	14.2	4.4	1.5	1.351	108.5	.441	1.081	296.5	550.8	.604	1.559	81.7	.614	-1.7	-23.9	228.0	.194
4-5840	4-6040	.196	182.4	8.1	2.4	.736	108.9	.361	1.315	224.9	423.4	.841	1.790D	105.5	1.127	-.5	21.5	85.8	.318
		13.49	9.36	5.20	4.13	7.52	4.17	14.58	1/2/2	94.2	13.0	23.7	.317	4.880	158.2	320.5	19.9	86.2L	1.229
4-5530	4-5583.4	.255	145.4	-.1	-4.0	.863	103.6	.334	.817	211.0	269.6	.544A	1.090D	71.5	1.236	-2.3	-6.8	38.8	.390
4-5583.4	4-5840	.390	18.8	5.3	1.6	1.355	105.9	.421	1.090	303.7	548.6	.631	1.550	83.8	.620	-2.0	-26.8	234.6	.185
4-5840	4-6050	.176	189.1	5.1	2.2	.719	106.9	.352	1.274	218.9	427.6	.825	1.722D	106.0	1.117	-.4	22.2	94.0	.319
		13.24	9.32	5.56	5.92	7.52	5.75	14.60	1/2/2	87.6	10.4	23.2	.395	4.980	148.3	325.8	26.5	81.9L	1.571
4-5540	4-5589.6	.302	139.6	3.7	-5.9	.929	107.7	.327	.904	231.0	289.9	.609A	1.199D	74.6	1.284	-2.6	-9.9	37.6	.347
4-5589.6	4-5840	.347	22.9	6.6	1.7	1.356	103.5	.404	1.099	311.2	546.4	.655	1.544	85.7	.626	-2.3	-29.5	241.5	.180
4-5840	4-6060	.163	197.3	1.9	2.1	.703	104.9	.347	1.239	212.9	431.8	.809	1.668D	106.6	1.108	-.3	22.0	102.5	.321
		13.64	9.83	6.41	5.81	7.21	5.42	14.64	1/2/2	81.2	8.1	22.1	.498	5.222	131.3	333.1	43.2	79.3L	2.104
4-5550	4-5598.2	.363	136.7	7.3	-5.4	1.014	111.0	.361	1.059	255.2	318.2	.677A	1.441D	79.3	1.347	-3.1	-14.0	30.9	.294
4-5598.2	4-5840	.294	26.9	9.9	2.2	1.363	100.3	.385	1.111	322.1	545.5	.683	1.539	87.8	.634	-2.9	-33.3	249.9	.176
4-5840	4-6070	.152	206.9	-1.9	2.0	.689	102.7	.345	1.208	207.0	436.1	.792	1.625D	107.2	1.099	-.2	21.3	111.0	.325
		14.59	10.83	7.64	5.76	7.16	5.19	14.72	1/2/2	73.6	5.8	24.2	.694	4.777	99.2	10.6	62.3	86.7L	2.625
4-5570	4-5643.9	.397	153.0	12.9	-.7	1.065	112.6	.407	1.185	266.8	363.6	.702	1.667D	96.8	1.392	-3.6	-18.6	4.5	.275
4-5643.9	4-5840	.275	356.2	-13.5	-2.7	1.373	81.7	.379	1.115	30.5	178.7	.692D	1.537A	90.8	.636	1.0	-20.4	262.9	.164
4-5840	4-6090	.146	229.9	-9.9	1.9	.663	97.8	.350	1.159	195.1	444.6	.753	1.566D	108.6	1.082	-.2	18.5	127.6	.340
		15.37	11.46	8.38	3.91	7.30	3.09	15.00	1/1/2	63.0	1.6	9.5	.795	12.100	143.7	290.7	28.1	45.7L	9.820

MARS ARRIVAL DATE = 2445850 (29 MAY 1984)

4-5490	4-5636.1	.147	183.7	57.6	7.4	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.8	-72.6	16.1	.249
4-5636.1	4-5850	.249	.7	-50.5	-5.3	1.373	85.5	.363	1.119	17.0	182.8	.712D	1.525	88.4	.647	3.7	-10.0	261.3	.176
4-5850	4-6010	.294	166.7	7.7	.7	.823	116.1	.441	1.574	247.6	410.7	.880	2.268D	104.9	1.176	1.2	24.9	62.0	.343
		14.36	10.64	4.01	3.72	7.12	6.63	15.06	2/1/1	71.0	22.1	42.9	.968	2.737	95.8	357.8	-5.0	59.3L	1.681
4-5500	4-5640.2	.154	177.8	57.9	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.5	11.6	.254
4-5640.2	4-5850	.254	356.2	-20.1	-3.7	1.372	83.6	.369	1.114	23.8	183.0	.704D	1.525	88.2	.645	2.0	-16.2	260.1	.174
4-5850	4-6020	.268	166.8	1.9	-1.0	.798	114.5	.415	1.480	241.8	414.9	.866	2.094D	105.3	1.161	2.8	31.4	68.4	.342
		13.68	10.02	4.09	3.66	7.06	5.93	15.04	1/1/1	71.3	20.6	52.0	.930	2.260	95.0	357.0	-8.1	57.4L	1.191
4-5520	4-5575.5	.246	155.1	-5.7	-4.1	.797	99.5	.388	.750	195.7	251.3	.459A	1.041D	67.3	1.190	-1.8	-4.2	35.1	.464
4-5575.5	4-5850	.464	13.5	3.6	1.3	1.350	109.7	.455	1.076	292.5	555.2	.587	1.569	76.0	.621	-1.6	-21.6	222.4	.208
4-5850	4-6040	.225	183.8	9.6	3.2	.755	110.9	.378	1.345	229.9	423.3	.837	1.853D	106.1	1.135	-1.5	18.6	86.0	.332
		14.67	10.22	5.41	4.45	7.84	4.81	14.85	1/2/2	105.0	13.9	23.0	.280	5.019	160.1	318.7	18.1	88.4L	1.124
4-5530	4-5582.1	.262	146.5	-.3	-4.1	.855	103.8	.346	.806	209.9	266.4	.529A	1.088D	70.6	1.231	-2.3	-6.6	38.1	.408
4-5582.1	4-5850	.408	18.7	4.3	1.4	1.354	106.8	.429	1.087	300.8	553.0	.621	1.554	80.6	.627	-1.9	-24.8	229.1	.192
4-5850	4-6050	.200	189.1	5.6	2.6	.755	109.0	.365	1.295	223.8	427.4	.822	1.768D	106.5	1.123	-.8	20.6	94.2	.330
		14.03	9.96	5.66	4.07	7.47	4.27	14.81	1/2/2	98.1	10.9	22.3	.361	5.175	150.3	324.1	26.8	83.4L	1.509
4-5540	4-5586.8	.305	140.1	3.5	-5.9	.927	107.9	.332	.900	230.3	287.9	.601A	1.198D	74.0	1.282	-2.8	-9.7	37.5	.357
4-5586.8	4-5850	.357	23.2	5.5	1.5	1.357	104.1	.408	1.096	309.2	550.8	.649	1.543	82.7	.653	-2.1	-27.9	236.0	.181
4-5850	4-6060	.162	196.0	2.6	2.3	.718	106.9	.356	1.254	217.6	431.5	.807	1.701D	106.9	1.113	-.6	21.0	102.6	.329
		14.16	10.33	6.48	5.83	7.23	5.84	14.80	1/2/2	91.4	8.5	20.8	.471	5.535	132.9	331.2	42.1	80.1L	2.135
4-5550	4-5598.0	.364	136.7	7.2	-5.4	1.014	111.1	.362	1.056	255.0	317.6	.675A	1.442D	79.1	1.347	-3.1	-13.9	31.0	.297
4-5598.0	4-5850	.297	27.6	8.1	1.8	1.362	100.6	.385	1.107	321.0	548.0	.681	1.553	85.0	.640	-2.6	-31.8	244.7	.174
4-5850	4-6070	.167	204.4	-.9	2.2	.702	104.7	.351	1.219	211.7	435.7	.791	1.647D	107.4	1.102	-.5	20.5	111.1	.331
		14.64	11.17	7.66	5.67	7.07	3.91	14.82	1/2/2	83.3	6.2	22.2	.682	5.193	98.7	11.0	65.5	87.6L	2.661
4-5560	4-5618.1	.397	139.7	11.0	-1.8	1.076	112.2	.409	1.223	270.7	355.9	.722A	1.723D	88.8	1.397	-3.0	-18.8	9.8	.231
4-5618.1	4-5850	.231	22.7	31.8	5.1	1.370	93.0	.359	1.123	348.7	543.6	.719	1.526	86.0	.650	-6.5	-46.3	256.0	.185
4-5850	4-6080	.156	214.3	-4.6	2.1	.667	102.4	.349	1.169	205.7	439.8	.774	1.605D	107.9	1.093	-.4	19.3	119.6	.334
		15.57	11.66	8.57	5.91	7.30	3.29	14.89	1/2/2	75.4	4.1	52.0	1.129	2.282	76.5	310.9	-75.0	101.9D	1.448

MARS ARRIVAL DATE = 2445860 (8 JUN 1984)

4-5490	4-5636.1	.164	188.4	60.0	8.6	.905	90.7	.170	.868	183.6	364.6	.720	1.015D	90.7	1.275	-12.0	-75.3	14.9	.274
4-5636.1	4-5860	.274	1.0	-41.2	-7.6	1.372	85.7	.361	1.116	16.2	187.3	.713D	1.518	88.9	.654	5.9	-1.5	267.8	.181
4-5860	4-6010	.334	168.8	6.3	.5	.855	116.2	.481	1.685	252.7	410.5	.874	2.496D	105.9	1.194	1.3	25.2	62.3	.369
		15.71	11.69	4.22	3.82	7.22	7.67	15.61	2/1/1	80.6	22.5	54.7	.802	3.352	94.6	357.3	-3.4	57.7L	1.667
4-5500	4-5640.2	.155	176.1	56.0	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.5	.256
4-5640.2	4-5860	.256	359.1	-23.6	-4.3	1.371	83.9	.366	1.112	23.0	187.5	.705D	1.518	88.7	.652	2.6	-15.2	256.1	.170
4-5860	4-6020	.303	171.5	2.3	-.6	.826	116.6	.448	1.557	246.6	414.7	.860	2.255D	106.2	1.176	2.4	29.6	69.1	.363
		14.53	10.95	4.10	3.58	6.98	6.85	15.48	1/1/1	80.6	20.2	48.3	.920	2.442	94.7	357.5	-6.4	57.0L	1.327
4-5530	4-5580.1	.274	148.1	-.6	-4.2	.843	104.4	.366	.795	208.3	261.6	.504A	1.087D	69.1	1.222	-2.4	-6.3	37.3	.436
4-5580.1	4-5860	.436	18.2	3.5	1.2	1.353	108.3	.443	1.085	296.6	557.3	.604	1.565	77.1	.634	-1.7	-22.7	224.2	.207
4-5860	4-6050	.228	190.0	6.6	3.3	.754	111.0	.382	1.324	228.6	427.1	.818	1.830D	107.0	1.131	-1.6	18.3	94.3	.344
		15.26	10.85	5.90	4.43	7.82	4.93	15.09	1/2/2	108.3	11.9	21.4	.316	5.380	152.6	322.2	24.8	85.6L	1.383
4-5540	4-5587.4	.312	141.0	3.2	-4.1	.921	108.4	.341	.892	226.9	284.2	.587A	1.196D	73.0	1.278	-2.9	-9.4	37.3	.378
4-5587.4	4-5860	.378	23.3	4.3	1.2	1.356	105.1	.416	1.094	306.0	555.1	.639	1.548	79.7	.640	-2.0	-25.9	230.6	.190
4-5860	4-6060	.205	195.7	3.2	2.7	.735	109.0	.370	1.275	222.7	431.2	.804	1.746D	107.4	1.118	-1.1	19.6	102.7	.340
		15.02	10.89	6.62	4.02	7.42	4.38	15.02	1/2/2	101.6	9.1	19.6	.425	5.686	155.1	326.9	40.5	81.4L	2.078
4-5550	4-5596.9	.368	137.0	7.0	-3.5	1.013	111.4	.366	1.056	254.4	315.4	.670A	1.443D	78.5	1.346	-3.1	-13.6	31.3	.306
4-5596.9	4-5860	.306	26.2	6.5	1.4	1.361	101.3	.389	1.104	316.5	552.4	.675	1.534	82.3	.647	-2.4	-29.9	239.2	.176
4-5860	4-6070	.186	202.8	-.2	2.4	.717	106.8	.361	1.234	216.6	435.3	.789	1.679D	107.7	1.107	-.8	19.5	111.2	.339
		15.40	11.09	7.75	5.71	7.11	3.94	14.96	1/2/2	93.5	6.7	20.1	.635	5.738	98.7	10.2	64.8	88.7L	3.010
4-5560	4-5622.1	.385	140.6	11.5	-1.4	1.066	111.6	.394	1.191	269.1	360.7	.722	1.660D	90.2	1.390	-3.0	-19.3	7.0	.223
4-5622.1	4-5860	.223	19.5	31.9	4.9	1.370	91.6	.356	1.120	354.0	547.7	.721	1.519	85.8	.657	-6.3	-46.7	251.7	.180
4-5860	4-6080	.171	211.5	-3.6	2.2	.701	104.6	.355	1.200	210.5	439.3	.774	1.626D	108.1	1.096	-.7	18.5	119.7	.339
		15.49	11.68	8.07	5.81	7.21	3.61	14.99	1/2/2	81.2	4.6	52.6	1.212	2.256	77.4	306.9	-75.6	102.4D	1.524

MARS ARRIVAL DATE = 2445870 (18 JUN 1984)

4-5500	4-5640.3	.161	180.0	59.0	8.0	.905	92.4	.173	.869	191.6	369.8	.719	1.020D	91.4	1.276	-11.4	-72.7	10.8	.265
4-5640.3	4-5870	.265	.2	-30.7	-5.7	1.371	84.2	.364	1.111	21.9	191.6	.706D	1.518	88.5	.660	3.9	-7.8	253.0	.173
4-5870	4-6020	.344	173.7	1.8	-.4	.859	116.7	.489	1.669	251.6	414.4	.853	2.486D	107.2	1.194	2.2	28.7	69.8	.390
		15.78	12.11	4.17	3.64	7.05	7.94	16.05	1/1/1	89.6	20.3	42.3	.859	2.772	94.0	358.1	-4.3	56.1L	1.822
4-5510	4-5644.9	.171	173.8	57.5	8.1	.907	94.2	.180	.878	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.4	7.4	.266
4-5644.9	4-5870	.269	359.0	-17.8	-3.5	1.370	82.3	.371	1.106	28.8	191.6	.696D	1.517	83.2	.657	1.7	-16.3	250.8	.170
4-5870	4-6030	.315	174.7	-6.3	-3.4	.828	117.0	.484	1.538	245.9	418.6	.839	2.236D	107.4	1.174	5.2	38.1	76.2	.389
		16.03	11.46	4.29	3.56	6.98	7.15	16.03	1/1/1	90.6	21.7	52.9	.832	2.245	93.4	356.3	-7.1	56.6L	1.036
4-5560	4-5626.2	.370	141.8	12.0	-1.1	1.055	111.1	.378	1.160	267.1	365.3	.721	1.599D	91.9	1.382	-3.1	-19.8	8.0	.218
4-5626.2	4-5870	.218	16.2	31.0	4.7	1.371	90.2	.355	1.118	359.2	551.7	.722	1.515	83.7	.665	-6.3	-46.3	247.4	.179
4-5870	4-6080	.190	209.6	-3.0	2.4	.716	106.7	.364	1.214	215.5	438.9	.772	1.636D	108.5	1.100	-1.0	17.6	119.8	.347
		15.61	11.62	7.78	5.79	7.19	4.04	15.14	1/2/2	88.0	5.5	52.0	1.259	2.282	76.5	309.1	-77.2	102.1D	1.615

STOPOVER TIME = 0 DAYS — 1984 OUTBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2445780 (20 MAR 1984)

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLF	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445780 (20 MAR 1984)																				
4-5470	4-5627.9	.150	190.8	54.9	7.5	.910	87.8	.169	.868	169.0	356.0	.721A	1.015	89.4	1.273	-10.8	-73.2	23.9	.248
4-5627.9	4-5780	.248	22.7	-18.9	-3.3	1.416	90.8	.446	1.301	357.4	502.0	.721	1.881A	112.9	.690	2.2	-19.9	275.6	.353
4-5780	4-6030	.113	181.0	4.2	.7	.674	99.5	.313	1.265	202.2	420.0	.869	1.661D	105.2	1.113	1.2	27.7	76.2	.274
		14.70	6.51	4.05	8.19	11.55	2.46	13.77	2/1/2	22.0	15.4	54.2	.976	2.193	90.4	22.6	-10.3	91.8D	1.165
4-5480	4-5632.1	.147	188.5	56.5	7.4	.907	89.2	.169	.867	176.0	360.1	.721	1.013	90.0	1.274	-10.8	-73.2	20.4	.248
4-5632.1	4-5780	.248	18.0	-16.3	-2.8	1.418	88.9	.448	1.306	3.6	141.5	.721D	1.891A	113.3	.692	1.6	-20.9	276.0	.356
4-5780	4-6040	.112	192.9	.9	1.0	.664	97.6	.318	1.244	197.0	424.9	.848	1.640D	104.2	1.108	1.0	27.1	84.3	.287
		14.72	6.44	4.01	8.28	11.65	2.43	14.00	2/1/2	21.5	12.3	57.0	.976	2.097	90.8	17.9	-11.7	83.4L	1.071
4-5520	4-5576.2	.241	154.5	-3.7	-4.0	.802	99.4	.379	.755	196.1	252.8	.469A	1.041D	67.8	1.194	-1.7	-4.2	35.6	.453
4-5576.2	4-5780	.453	11.4	7.4	2.6	1.366	108.6	.464	1.130	298.0	525.0	.605	1.655A	102.3	.600	-2.2	-27.8	250.8	.260
4-5780	4-6080	.161	236.6	-13.7	1.7	.628	87.9	.369	1.175	176.4	445.0	.741	1.609	109.6	1.088	.8	23.2	117.5	.362
		14.45	8.73	5.33	5.72	9.10	3.40	15.46	1/2/2	44.2	2.5	26.8	.293	4.315	154.0	322.2	23.7	85.6L	.970
MARS ARRIVAL DATE = 2445790 (30 MAR 1984)																				
4-5470	4-5628.1	.143	189.1	53.6	7.0	.910	87.8	.169	.868	169.0	356.3	.721A	1.015	89.5	1.273	-10.2	-71.9	23.4	.238
4-5628.1	4-5790	.238	18.5	-21.6	-3.6	1.403	90.1	.419	1.243	359.8	508.7	.722	1.764A	108.7	.670	2.5	-18.8	275.7	.310
4-5790	4-6030	.123	178.3	5.6	.8	.684	101.2	.317	1.272	206.7	419.8	.869	1.676D	103.3	1.114	1.1	27.3	76.4	.277
		13.65	6.61	3.97	7.04	10.41	2.63	13.81	2/1/2	26.7	15.4	50.4	1.061	2.348	91.8	18.0	-7.2	87.1L	1.430
4-5480	4-5632.2	.140	186.9	55.3	7.0	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.3	-72.1	20.3	.239
4-5632.2	4-5790	.239	13.7	-18.0	-3.0	1.404	88.2	.421	1.244	6.0	148.4	.720D	1.769A	109.0	.671	1.8	-20.2	276.1	.312
4-5790	4-6040	.118	189.4	2.6	1.1	.673	99.4	.320	1.249	201.3	424.5	.849	1.648D	104.2	1.109	.9	26.7	84.6	.288
		13.58	6.48	3.94	7.10	10.47	2.54	14.01	2/1/2	26.2	12.4	54.2	1.051	2.195	92.4	13.3	-9.5	78.6L	1.257
4-5490	4-5636.1	.147	183.6	57.6	7.3	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.7	-72.5	16.1	.249
4-5636.1	4-5790	.249	9.1	-15.1	-2.7	1.405	86.3	.424	1.243	12.4	148.4	.716D	1.771A	109.2	.670	1.3	-21.2	276.1	.315
4-5790	4-6050	.117	201.4	-1.4	1.3	.662	97.4	.325	1.227	195.9	429.3	.828	1.626D	105.3	1.104	.8	26.1	93.0	.300
		13.69	6.54	4.01	7.16	10.53	2.53	14.24	2/1/2	26.1	9.7	57.6	.972	2.077	92.4	9.0	-11.5	71.6L	1.047
4-5510	4-5573.2	.223	160.5	-6.1	-3.8	.782	94.6	.387	.737	187.4	248.9	.451A	1.022D	67.2	1.180	-1.0	-2.5	32.7	.461
4-5573.2	4-5790	.461	8.4	6.2	2.2	1.358	109.3	.460	1.103	295.0	531.5	.595	1.611A	97.1	.589	-1.8	-26.6	244.6	.231
4-5790	4-6070	.134	225.0	-9.6	1.6	.642	92.7	.345	1.190	185.2	439.0	.779	1.600D	107.6	1.093	.6	24.2	109.7	.332
		12.87	7.88	5.04	4.99	8.38	2.84	14.84	1/2/2	54.2	4.7	25.7	.283	4.489	160.2	317.1	18.6	87.5L	.986
4-5520	4-5577.5	.233	153.5	-3.7	-3.9	.811	99.2	.365	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.436
4-5577.5	4-5790	.436	12.4	7.2	2.4	1.362	107.8	.451	1.116	299.4	529.1	.612	1.620A	98.7	.598	-2.2	-28.1	249.6	.237
4-5790	4-6080	.152	235.3	-12.8	1.7	.633	90.0	.361	1.174	180.0	443.9	.750	1.597D	109.1	1.088	.6	22.8	118.0	.352
		13.54	6.59	5.20	5.16	8.54	3.19	15.25	1/2/2	49.9	2.5	26.4	.317	4.376	153.8	322.8	24.0	84.9L	1.070
4-5530	4-5581.8	.264	146.7	-.4	-4.1	.854	103.9	.349	.807	209.7	265.7	.525A	1.088D	70.3	1.230	-2.3	-6.6	38.0	.412
4-5581.8	4-5790	.412	16.2	8.6	2.7	1.366	106.5	.444	1.129	303.8	526.7	.628	1.631A	100.2	.606	-2.8	-29.5	253.8	.244
4-5790	4-6090	.176	243.9	-15.3	1.8	.625	86.9	.381	1.159	175.0	449.1	.717	1.600	110.7	1.082	.6	21.0	126.1	.377
		14.77	9.44	5.71	5.34	8.72	3.72	15.77	1/2/2	46.1	1.8	26.5	.354	4.366	144.6	328.0	31.7	82.1L	1.192
MARS ARRIVAL DATE = 2445800 (9 APR 1984)																				
4-5470	4-5628.2	.140	188.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.5	23.1	.233
4-5628.2	4-5800	.233	15.0	-24.7	-4.0	1.394	89.5	.400	1.202	1.7	155.2	.722D	1.683A	104.7	.656	2.8	-17.3	275.2	.274
4-5800	4-6030	.136	176.3	6.7	.9	.694	103.1	.323	1.282	211.3	419.6	.868	1.696D	103.5	1.117	1.0	26.7	76.6	.281
		12.90	6.80	3.93	6.09	9.47	2.87	13.88	2/1/2	32.1	15.4	46.7	1.107	2.521	93.3	13.7	-4.9	82.8L	1.683
4-5480	4-5632.2	.137	185.9	54.6	6.7	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-10.0	-71.4	20.3	.234
4-5632.2	4-5800	.234	10.1	-20.0	-3.3	1.394	87.7	.402	1.202	8.0	155.0	.719D	1.685A	104.9	.656	2.0	-19.2	275.5	.275
4-5800	4-6040	.127	186.4	4.1	1.2	.682	101.2	.323	1.255	205.8	424.2	.849	1.661D	104.3	1.111	.7	26.1	84.9	.290
		12.73	6.61	3.90	6.12	9.50	2.71	14.05	2/1/2	31.6	12.5	51.8	1.098	2.291	93.9	9.2	-7.7	74.5L	1.418
4-5490	4-5636.2	.144	182.6	57.0	7.1	.905	90.7	.170	.868	183.7	364.7	.720	1.015D	90.7	1.275	-10.5	-72.0	16.2	.244
4-5636.2	4-5800	.244	5.8	-16.3	-2.8	1.394	85.9	.405	1.200	14.4	155.1	.714D	1.686A	105.1	.655	1.4	-20.6	275.4	.276
4-5800	4-6050	.123	197.7	.4	1.4	.671	99.2	.326	1.231	200.3	428.8	.829	1.633D	105.2	1.105	.6	25.6	93.2	.300
		12.75	6.60	3.98	6.15	9.53	2.62	14.24	2/1/2	31.5	9.8	56.0	1.008	2.130	93.7	5.3	-10.3	68.1L	1.139
4-5500	4-5568.6	.228	165.9	-6.9	-3.6	.764	90.4	.409	.721	180.6	244.7	.426A	1.016D	65.9	1.167	-.4	-.9	27.9	.486
4 5568.6	4-5800	.486	4.4	5.0	1.9	1.351	110.7	.467	1.081	290.2	538.4	.576	1.586A	91.4	.580	-1.5	-24.2	235.2	.212
4-5800	4-6060	.123	209.7	-3.8	1.5	.660	97.1	.332	1.210	194.7	433.5	.808	1.612D	106.2	1.099	.5	24.6	101.7	.312
		12.29	7.76	5.12	4.54	7.93	2.64	14.46	1/2/2	67.9	7.3	24.2	.255	4.762	165.6	310.6	13.8	90.0D	.958
4-5510	4-5573.9	.218	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.8	1.183	-1.0	-2.5	33.2	.451
4-5573.9	4-5800	.451	9.2	5.9	2.1	1.355	108.9	.453	1.094	295.6	535.7	.599	1.589A	93.5	.590	-1.8	-26.4	242.0	.214
4-5800	4-6070	.130	221.8	-8.1	1.6	.649	94.7	.341	1.190	189.2	436.2	.784	1.596D	107.3	1.093	.5	25.8	110.1	.327
		12.33	7.74	4.97	4.59	7.98	2.77	14.74	1/2/2	61.6	4.9	25.3	.295	4.559	160.5	317.4	18.3	87.1L	1.050
4-5520	4-5578.5	.227	152.7	-3.7	-3.9	.817	99.0	.355	.769	197.2	257.5	.496A	1.042D	69.4	1.204	-1.7	-4.5	36.8	.423
4-5578.5	4-5800	.423	13.3	6.9	2.2	1.359	107.3	.442	1.106	300.4	533.3	.617	1.594A	95.3	.598	-2.1	-28.2	247.4	.218
4-5800	4-6080	.144	233.0	-11.8	1.7	.640	92.1	.354	1.173	183.9	443.0	.758	1.588D	108.6	1.087	.5	22.5	116.4	.344
		12.84	8.14	5.10	4.69	8.08	3.04	15.09	1/2/2	56.5	2.6	26.0	.336	4.446	153.9	323.1	25.9	84.2L	1.159
4-5530	4-5582.9	.258	145.8	-.2	-4.0	.860	103.7	.338	.814	210.6	268.4	.538A	1.089D	71.1	1.234	-2.3	-6.6	38.4	.397
4-5582.9	4-5800	.397	17.1	8.3	2.5	1.363	105.8	.433	1.117	305.1	531.0	.634	1.601A	96.8	.606	-2.5	-29.7	252.2	.223
4-5800	4-6090	.165	242.9	-14.6	1.8	.630	89.2	.371	1.157	178.6	447.9	.728	1.586	110.1	1.081	.5	20.5	126.6	.365
		13.90	9.08	5.61	4.82	8.21	3.47	15.52	1/2/2	52.3	1.3	26.0	.382	4.440	144.5	328.3	31.8	81.3L	1.314
4-5540	4-5587.8	.310	140.7	3.3	-4.0	.923	108.2	.338	.894	229.3	285.4	.592A	1.197D	73.3	1.279	-2.9	-9.5	37.3	.370
4-5587.8	4-5800	.370	20.9	10.4	2.9	1.367	104.2	.424	1.130	310.3	528.5	.650	1.609A	98.2	.614	-3.0	-31.5	256.8	.230
4-5800	4-6100	.192	251.1	-16.7	1.9	.622	85.8	.394	1.142	173.5	453.0	.693	1.592	111.9	1.075	.5	18.4	134.5	.392
		15.64	10.65	6.57	4.99	8.38	4.08	16.09	1/2/2	48.3	2.8	25.8	.439	4.479	129.2	336.2	44.5	79.3L	1.528
MARS ARRIVAL DATE = 2445810 (19 APR 1984)																				
4-5470	4-5628.2	.140	188.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.5	23.1	.233
4-5628.2	4-5810	.233	12.3	-28.9	-4.7	1.386	89.2	.385	1.173	3.1	161.4	.721D	1.625A	100.9	.647	3.4	-14.9	273.9	.244
4-5810	4-6030	.151	175.1	7.7	1.1	.706	104.9	.331	1.295	216.1	419.5	.866	1.723D	103.7	1.121	.8	25.9	76.9	.287
		12.45	7.11	3.93	5.33	8.72	3.18	13.99	2/1/2	38.4	15.4	42.8	1.105	2.743	94.4	10.1	-3.2	79.2L	1.926
4-5480	4-5632.3	.135	185.5	54.3	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.1	20.3	.232
4-5632.3	4-5810	.232	7.4	-22.3	-3.6	1.387	87.4	.387	1.172	9.5	161.3	.716D	1.627A	101.1	.647	2.3	-17.9	274.1	.244
4-5810	4-6040	.139	184.2	5.4	1.4	.693	103.1	.329	1.264	210.4	424.0	.848	1.680D	104.5	1.114	.6	25.4	85.1	.294
		12.16	6.83	3.89	5.33	8.71	2.94	14.12	2/1/2	37.8	12.5	49.3	1.119	2.396	95.0	5.9	-6.4	71.1L	1.563
4-5490	4-5636.2	.142	182.1	58.7	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.6	16.4	.241
4-5636.2	4-5810	.241	3.3	-17.7	-3.0	1.387	85.6	.391	1.170	15.9	161.4	.713D	1.627A	101.2	.645	1.8	-19.8	274.0	.245
4-5810	4-6050	.131	194.4	2.0	1.5	.660	101.1	.329	1.237	204.7	428.5	.830	1.645D	105.3	1.107	.4	25.0	93.5	.302
		12.08	6.74	3.95	5.34	8.73	2.79	14.27	2/1/2	37.7	9.9	54.5	1.032	2.185	94.8	2.6	-9.4	85.3L	1.222
4-5500	4-5568.6	.229	165.9	-6.9	-3.6	.762	90.4	.411	.720	180.5	244.3	.424A	1.016D	65.8	1.166	-.4	-.9	27.8	.488
4-5568.6	4-5810	.488	4.6	4.6	1.8	1.349	110.9	.466	1.074	289.4	542.7	.573	1.576	87.6	.583	-1.4	-23.1	230.3	.204
4-5810	4-6060	.128	205.9	-2.1	1.6	.669	99.0	.333	1.213	199.1	433.0	.810	1.617D	106.2	1.101	.4	24.3	101.9	.312
		12.22	7.86	5.14	4.36	7.75	2.72	14.45	1/2/2	77.5	7.4	23.8	.252	4.840	166.4	310.2	13.1	90.4D	.968
4-5510	4-5574.2	.217	159.8	-6.3	-3.7	.789	94.6	.376	.743	187.7	250.8	.463A	1.022D	67.9	1.185	-1.0	-2.5	33.3	.448
4-5574.2	4-5810	.448	9.7	5.5	1.9	1.353	108.8	.449	1.087	295.4	540.0	.599	1.574A	90.0	.592	-1.7	-25.8	237.9	.202
4-5810	4-6070	.130	218.0	-8.4	1.7	.657	96.7	.339	1.192	193.4	437.6	.788	1.596D	107.1	1.094	.3	23.2	110.4	.323
		12.02	7.71	4.94	4.31	7.70	2.77	14.66	1/2/2	70.1	5.1	24.9	.300	4.638	161.1	317.3	17.7	87.1L	1.091
4-5520	4-5579.1	.224	152.2	-3.7	-3.9	.820	98.9	.349	.772	197.5	258.7	.502A	1.042D	69.8	1.207	-1.7	-4.5	37.1	.415
4-5579.1	4-5810	.415	14.0	6.4	2.1	1.357	107.0	.435	1.097	300.7	537.6	.620	1.575A	91.9	.600	-2.0	-27.9	244.0	.203
4-5810	4-6080	.139	229.9	-10.4	1.7	.647	94.2	.349	1.173	187.9	442.2	.764	1.582D	108.3	1.087	.3	21.8	118.8	.336
		12.34	8.00	5.05	4.34	7.73	2.94	14.96	1/2/2	64.4	2.8	25.5	.349	4.529	154.4	323.0	23.4	83.9L	1.230
4-5530	4-5583.7	.253	145.2	-.1	-3.9	.864	103.5	.331	.818	211.3	270.3	.547A	1.090D	71.7	1.237	-2.3	-6.9	38.7	.386
4-5583.7	4-5810	.386	17.7	7.7	2.3	1.360	105.4	.425	1.108	305.9	535.4	.637	1.578A	93.4	.607	-2.4	-29.8	249.4	.206
4-5810	4-6090	.155	240.9	-13.7	1.8	.637	91.4	.363	1.156	182.4	446.9	.737	1.575D	109.6	1.081	.3	20.0	127.0	.355
		13.22	8.81	5.54	4.41	7.80	3.27	15.32	1/2/2	59.5	.9	25.5	.403	4.535	144.9	328.2	31.5	80.8L	1.425

STOPOVER TIME = 0 DAYS — 1984 OUTBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2445810 (19 APR 1984)

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-5540	4-5588.9	.305	140.1	3.6	-3.9	.927	107.9	.331	.900	230.4	288.1	.602A	1.199D	74.1	1.282	-2.8	-9.8	37.5	.356
4-5588.9	4-5810	.356	21.5	9.7	2.6	1.364	103.7	.414	1.119	311.6	533.0	.655	1.583A	94.9	.614	-2.9	-31.6	254.6	.211
4-5810	4-6100	.179	250.4	-16.2	1.8	.628	88.2	.382	1.140	177.1	451.7	.705	1.575	111.1	1.074	.3	17.9	135.0	.376
		14.77	10.25	6.48	4.52	7.91	3.77	15.79	1/2/2	54.9	2.1	25.1	.475	4.595	129.0	336.2	44.7	78.9L	1.701
MARS ARRIVAL DATE = 2445820 (29 APR 1984)																			
4-5470	4-5628.0	.145	189.7	54.0	7.2	.910	87.8	.169	.868	169.0	356.2	.721A	1.015	89.5	1.273	-10.4	-72.3	23.5	.241
4-5628.0	4-5820	.241	10.6	-35.3	-5.8	1.381	89.0	.375	1.153	3.7	167.3	.721D	1.585A	97.4	.643	4.5	-10.9	271.7	.222
4-5820	4-6050	.169	174.8	8.5	1.4	.720	106.8	.342	1.312	220.9	419.4	.863	1.760D	104.1	1.125	.5	24.7	77.1	.295
		12.34	7.56	3.99	4.78	8.17	3.57	14.13	2/1/2	46.1	15.4	37.6	1.033	3.104	95.2	7.1	-1.9	76.4L	2.173
4-5480	4-5632.3	.136	185.6	54.4	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.2	20.3	.232
4-5632.3	4-5820	.232	5.6	-25.4	-4.2	1.381	87.2	.377	1.152	10.4	167.2	.718D	1.586A	97.5	.642	2.8	-15.9	272.0	.219
4-5820	4-6040	.155	182.7	6.4	1.6	.705	105.0	.337	1.277	215.1	423.8	.847	1.707D	104.7	1.117	.3	24.5	85.3	.299
		11.66	7.15	3.69	4.71	8.10	3.26	14.22	2/1/2	44.9	12.6	46.5	1.113	2.534	95.9	3.3	-5.3	68.9L	1.708
4-5490	4-5636.2	.141	181.6	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5820	.240	1.7	-19.4	-3.5	1.381	85.4	.380	1.149	16.9	167.4	.712D	1.585A	97.5	.641	1.8	-18.6	271.8	.216
4-5820	4-6050	.143	191.8	3.3	1.7	.692	105.0	.335	1.246	209.3	426.2	.829	1.663D	105.4	1.110	.2	24.5	93.7	.305
		11.67	6.97	3.94	4.70	8.09	3.02	14.33	2/1/2	44.8	10.0	52.8	1.043	2.250	95.5	.5	-8.6	63.2L	1.705
4-5500	4-5640.3	.156	176.6	58.3	7.7	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.1	-71.9	11.3	.258
4-5640.3	4-5820	.258	358.5	-14.9	-2.8	1.380	83.4	.385	1.144	23.8	167.7	.703D	1.584A	97.5	.638	1.2	-20.5	271.1	.219
4-5820	4-6060	.136	202.3	-.5	1.7	.679	100.9	.335	1.219	203.6	432.6	.811	1.628D	106.2	1.102	.2	23.7	102.1	.313
		11.71	6.99	4.12	4.72	8.11	2.87	14.47	1/1/2	45.3	7.6	57.6	.902	2.077	94.5	356.2	-11.2	59.5L	.972
4-5510	4-5573.9	.219	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.7	1.183	-1.0	-2.5	33.1	.452
4-5573.9	4-5820	.452	9.9	4.9	1.7	1.351	109.0	.449	1.081	294.4	544.4	.595	1.566	86.5	.596	-1.6	-24.6	232.6	.196
4-5820	4-6070	.133	214.0	-4.7	1.8	.667	98.7	.339	1.195	197.8	437.0	.791	1.600D	107.0	1.095	.2	22.7	110.6	.322
		11.98	7.80	4.97	4.18	7.57	2.83	14.65	1/2/2	79.9	5.3	24.4	.294	4.729	162.1	316.7	16.7	87.6L	1.098
4-5520	4-5579.2	.223	152.1	-3.7	-3.9	.821	96.9	.348	.773	197.5	259.0	.504A	1.042D	69.9	1.207	-1.7	-4.5	37.1	.414
4-5579.2	4-5820	.414	14.4	5.8	1.9	1.355	107.0	.433	1.091	300.4	542.0	.619	1.563	88.5	.603	-1.9	-27.1	239.4	.194
4-5820	4-6080	.138	226.1	-8.9	1.8	.655	96.2	.346	1.174	192.1	441.5	.768	1.580D	108.0	1.088	.2	21.5	119.1	.333
		12.07	7.95	5.04	4.11	7.51	2.91	14.88	1/2/2	73.4	3.0	25.0	.351	4.628	155.3	322.6	22.5	84.1L	1.273
4-5530	4-5584.1	.251	144.8	.0	-3.9	.866	103.4	.328	.821	211.6	271.3	.552A	1.090D	72.0	1.239	-2.2	-7.0	38.8	.381
4-5584.1	4-5820	.381	18.3	7.0	2.0	1.356	105.2	.420	1.100	306.0	539.8	.636	1.562A	90.2	.610	-2.2	-29.2	245.4	.194
4-5820	4-6090	.149	237.9	-12.6	1.8	.645	95.5	.356	1.156	186.4	446.0	.744	1.566D	109.1	1.081	.2	19.5	127.3	.348
		12.75	8.64	5.50	4.11	7.51	3.14	15.17	1/2/2	67.9	.9	24.6	.414	4.655	145.8	327.8	30.9	80.7L	1.514
4-5540	4-5589.5	.302	139.7	3.7	-3.9	.929	107.7	.327	.903	231.0	289.8	.608A	1.198D	74.5	1.284	-2.6	-9.9	37.6	.348
4-5589.5	4-5820	.348	22.0	8.8	2.3	1.362	103.3	.408	1.110	312.2	537.5	.656	1.563A	91.7	.617	-2.7	-31.3	251.3	.196
4-5820	4-6100	.167	248.6	-15.4	1.8	.635	90.6	.372	1.139	180.9	450.6	.716	1.562D	110.5	1.073	.2	17.4	135.4	.367
		14.10	9.93	6.41	4.16	7.56	3.53	15.55	1/2/2	62.7	1.5	24.3	.497	4.753	129.4	335.7	44.5	78.7L	1.665
MARS ARRIVAL DATE = 2445830 (9 MAY 1984)																			
4-5470	4-5627.4	.170	194.7	57.9	8.9	.910	87.8	.169	.868	169.1	355.3	.721A	1.015	89.5	1.275	-12.1	-78.1	25.5	.276
4-5627.4	4-5830	.276	10.0	-48.0	-8.6	1.377	89.1	.367	1.139	3.2	172.8	.721D	1.557A	94.1	.643	7.2	-1.7	266.5	.213
4-5830	4-6030	.191	175.4	9.6	1.9	.736	106.7	.355	1.334	225.8	419.3	.860	1.809D	104.5	1.131	-.0	22.8	77.5	.303
		12.92	8.34	4.26	4.56	7.97	4.05	14.32	2/1/2	56.0	15.4	28.8	.792	4.017	95.1	4.5	-1.5	74.8L	2.388
4-5480	4-5632.2	.139	186.5	55.0	6.6	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.2	-71.8	20.3	.237
4-5632.2	4-5830	.237	4.5	-30.0	-5.0	1.377	87.1	.369	1.137	10.8	172.7	.718D	1.557A	94.2	.642	3.5	-12.6	269.1	.200
4-5830	4-6040	.174	182.1	7.2	1.9	.720	106.9	.347	1.293	220.0	423.6	.844	1.742D	105.1	1.122	-.0	23.5	85.6	.307
		11.85	7.59	3.93	4.26	7.65	3.66	14.37	2/1/2	55.0	12.7	42.6	1.070	2.751	96.2	1.4	-4.2	66.4L	1.874
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5830	.240	.7	-21.7	-3.7	1.377	85.3	.373	1.134	17.4	172.9	.712D	1.557A	94.2	.640	2.2	-16.9	268.8	.198
4-5830	4-6050	.159	190.0	4.3	1.9	.704	105.0	.342	1.258	214.1	427.9	.828	1.686D	105.7	1.113	-.0	23.5	95.9	.311
		11.51	7.29	3.95	4.22	7.61	3.34	14.44	2/1/2	52.8	10.2	50.6	1.041	2.339	95.9	359.1	-7.7	61.6L	1.594
4-5500	4-5640.2	.155	178.2	58.1	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.4	.256
4-5640.2	4-5830	.256	357.6	-16.1	-3.0	1.376	83.4	.378	1.130	24.3	173.2	.703D	1.556A	94.1	.637	1.4	-19.6	268.0	.198
4-5830	4-6060	.147	199.4	.8	1.9	.690	102.9	.340	1.227	208.2	432.2	.810	1.644D	106.3	1.105	-.0	22.9	102.5	.316
		11.44	7.21	4.11	4.25	7.62	3.10	14.54	1/1/2	53.3	7.8	56.2	.915	2.122	94.9	357.3	-10.5	56.5L	1.026
4-5510	4-5572.8	.225	160.7	-6.0	-3.8	.779	94.6	.391	.735	187.3	248.2	.447A	1.022D	67.0	1.178	-1.1	-2.5	32.5	.466
4-5572.8	4-5830	.466	9.5	4.3	1.8	1.349	109.8	.455	1.076	292.2	546.8	.586	1.565	82.8	.601	-1.5	-22.8	226.6	.198
4-5830	4-6070	.141	210.1	-3.2	1.9	.677	100.7	.341	1.201	202.3	436.5	.792	1.610D	107.1	1.097	-.0	22.0	110.8	.323
		12.26	8.04	5.06	4.22	7.61	2.97	14.66	1/2/2	90.7	5.5	23.9	.277	4.631	163.4	315.6	15.5	88.8L	1.062
4-5520	4-5578.7	.226	152.5	-3.7	-3.9	.818	99.0	.353	.770	197.3	258.0	.498A	1.042D	69.6	1.205	-1.7	-4.5	36.9	.420
4-5578.7	4-5830	.420	14.5	5.1	1.7	1.353	107.4	.434	1.086	299.0	546.4	.614	1.557	85.1	.608	-1.8	-25.8	233.9	.190
4-5830	4-6080	.140	222.0	-7.4	1.9	.665	98.3	.345	1.177	196.5	440.8	.772	1.583D	107.9	1.089	-.0	20.7	119.3	.331
		12.07	8.04	5.06	4.03	7.43	2.95	14.84	1/2/2	83.5	3.3	24.3	.341	4.746	156.6	321.8	21.4	84.8L	1.276
4-5530	4-5584.1	.252	144.9	-.0	-3.9	.866	103.4	.329	.820	211.5	271.1	.551A	1.090D	71.9	1.238	-2.2	-6.9	38.8	.382
4-5584.1	4-5830	.382	18.8	6.2	1.8	1.356	105.4	.418	1.095	305.3	544.2	.637	1.553	87.0	.614	-2.1	-28.3	240.4	.196
4-5830	4-6090	.146	234.2	-11.3	1.9	.653	95.7	.352	1.157	190.7	445.2	.749	1.564D	108.8	1.081	-.0	18.9	127.8	.343
		12.53	8.56	5.51	3.95	7.34	3.07	15.06	1/2/2	77.4	1.1	24.0	.412	4.803	146.8	327.0	29.8	81.0L	1.566
4-5540	4-5589.8	.301	139.5	3.8	-3.8	.930	107.7	.325	.905	231.3	290.5	.611A	1.199D	74.7	1.284	-2.8	-10.0	37.6	.345
4-5589.8	4-5830	.345	22.5	7.8	2.0	1.360	103.3	.404	1.104	312.2	541.9	.656	1.550	88.7	.621	-2.5	-30.7	246.8	.185
4-5830	4-6100	.159	245.8	-14.5	1.9	.642	92.8	.364	1.139	185.0	449.7	.724	1.553D	110.0	1.073	-.0	16.8	135.7	.358
		13.66	9.75	6.39	3.92	7.32	3.35	15.37	1/2/2	71.5	1.0	23.3	.506	4.961	130.1	334.6	44.0	78.8L	2.006
4-5550	4-5597.8	.364	136.8	7.2	-3.4	1.014	111.1	.363	1.058	255.0	317.4	.675A	1.442D	79.0	1.347	-3.1	-13.9	31.0	.298
4-5597.8	4-5830	.298	26.4	11.6	2.6	1.365	100.4	.388	1.116	322.0	539.0	.683	1.550A	90.6	.629	-3.2	-34.1	254.5	.188
4-5830	4-6110	.180	256.3	-16.8	1.8	.633	89.6	.381	1.122	179.4	454.3	.695	1.550	111.3	1.066	-.0	14.4	143.8	.377
		15.45	11.48	7.87	3.98	7.37	3.80	15.78	1/2/2	64.8	3.1	25.8	.676	4.472	100.0	9.6	61.3	85.5L	2.348
MARS ARRIVAL DATE = 2445840 (19 MAY 1984)																			
4-5480	4-5632.0	.149	189.2	56.9	7.6	.907	89.2	.169	.867	176.1	360.1	.721	1.013	90.0	1.274	-10.9	-73.7	20.4	.252
4-5632.0	4-5840	.252	4.1	-38.0	-6.5	1.374	87.2	.363	1.128	10.7	177.9	.718D	1.538A	91.2	.644	5.0	-6.7	265.6	.190
4-5840	4-6040	.196	182.4	8.1	2.4	.736	108.9	.361	1.315	224.9	423.4	.841	1.790D	105.5	1.127	-.5	21.5	85.8	.316
		12.23	8.21	4.04	4.03	7.42	4.17	14.56	2/1/2	62.3	13.0	36.6	.948	3.188	96.0	359.7	-3.0	64.6L	2.073
4-5490	4-5636.2	.142	182.3	56.8	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.7	16.3	.242
4-5636.2	4-5840	.242	.4	-25.1	-4.3	1.374	85.3	.367	1.125	17.4	178.0	.712D	1.538A	91.1	.642	2.7	-14.3	265.2	.184
4-5840	4-6090	.178	189.1	5.1	2.2	.719	106.9	.352	1.274	218.9	427.6	.825	1.722D	106.0	1.117	-.4	22.2	94.0	.319
		11.60	7.71	3.96	3.89	7.29	3.75	14.60	2/1/2	61.5	10.4	47.5	1.024	2.482	96.1	358.3	-6.5	60.4L	1.518
4-5500	4-5640.2	.154	177.9	58.0	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.6	11.5	.255
4-5640.2	4-5840	.255	357.7	-17.7	-3.3	1.374	83.5	.373	1.120	24.3	178.3	.703D	1.537A	91.0	.640	1.6	-18.2	264.2	.183
4-5840	4-6060	.163	197.3	1.9	2.1	.703	104.9	.347	1.239	212.9	431.8	.809	1.666D	106.6	1.108	-.3	22.0	102.5	.321
		11.40	7.52	4.10	3.86	7.28	3.42	14.64	1/1/2	62.0	6.1	54.5	.925	2.185	95.1	357.0	-9.5	57.6L	1.096
4-5510	4-5570.8	.240	161.9	-5.6	-3.8	.764	94.8	.414	.722	186.9	244.6	.423A	1.022D	65.5	1.168	-1.1	-2.4	31.2	.493
4-5570.8	4-5840	.493	8.6	3.7	1.4	1.346	111.2	.469	1.071	288.4	553.3	.569	1.573	78.8	.607	-1.4	-20.4	220.5	.210
4-5840	4-6070	.152	206.9	-1.9	2.0	.689	102.7	.345	1.208	207.0	436.1	.792	1.625D	107.2	1.099	-.2	21.3	111.0	.325
		13.00	8.50	5.31	4.50	7.90	3.19	14.72	1/2/2	101.9	5.8	23.4	.247	4.935	165.0	313.8	14.0	90.9D	.973
4-5520	4-5577.8	.233	153.5	-3.7	-3.9	.811	99.2	.365	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.436
4-5577.8	4-5840	.436	14.2	4.4	1.5	1.351	106.3	.441	1.081	296.5	550.8	.604	1.559	81.7	.614	-1.7	-23.9	228.0	.194
4-5840	4-6080	.146	217.9	-5.9	1.9	.675	100.4	.346	1.182	201.0	440.3	.774	1.591D	107.8	1.090	-.2	20.0	119.5	.331
		12.40	8.27	5.20	4.13	7.52	3.07	14.84	1/2/2	94.2	5.6	23.7	.317	4.880	158.2	320.5	19.9	86.2L	1.229
4-5530	4-5583.4	.255	145.4	-.1	-4.0	.863	103.6	.334	.817	211.0	269.6	.544A	1.090D	71.5	1.236	-2.3	-8.8	38.6	.390
4-5583.4	4-5840	.390	18.8	6.3	1.6	1.355	105.9	.421	1.090	303.7	548.6	.631	1.550	83.8	.620	-2.0	-26.8	234.8	.185
4-5840	4-6090	.146	229.9	-9.9	1.9	.663	97.8	.350	1.159	195.1	444.6	.755	1.566D	108.6	1.082	-.2	18.3	127.8	.340
		12.57	8.65	5.36	3.92	7.32	3.08	15.00	1/2/2	67.6	1.6	23.2	.395	4.980	148.3	325.8	28.5	81.9L	1.571

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2445840
19 MAY 1984

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5540	4-5589.6	.302	139.6	3.7	-3.9	.929	107.7	.327	.904	231.0	289.9	.609A	1.199D	74.6	1.284	-2.6	-9.9	37.6	.347
4-5589.6	4-5840	.347	22.9	6.6	1.7	1.358	103.5	.404	1.099	311.2	346.4	.655	1.544	85.7	.626	-2.3	-29.5	241.6	.160
4-5840	4-6100	.154	242.1	-13.4	1.9	.651	95.1	.359	1.139	189.2	448.9	.751	1.548D	109.6	1.074	-.2	16.2	136.0	.351
		13.46	9.65	6.41	3.81	7.21	3.25	15.24	1/2/2	81.2	.8	22.1	.498	5.222	131.3	333.1	43.2	79.3L	2.104
4-5550	4-5598.2	.365	136.7	7.3	-3.4	1.014	111.0	.361	1.059	255.2	318.2	.677A	1.441D	79.3	1.347	-3.1	-14.0	30.9	.294
4-5598.2	4-5840	.294	26.9	0.9	2.2	1.363	100.3	.385	1.111	322.1	343.5	.683	1.539	87.8	.634	-2.9	-33.3	249.9	.176
4-5840	4-6110	.170	253.7	-16.1	1.8	.641	92.1	.372	1.122	183.5	453.2	.705	1.539D	110.8	1.066	-.2	13.6	144.0	.367
		14.97	11.21	7.64	3.76	7.16	3.58	15.56	1/2/2	73.6	2.7	24.2	.694	4.777	99.2	10.6	62.3	86.7L	2.623
MARS ARRIVAL DATE = 2445850 (29 MAY 1984)																			
4-5470	4-5618.9	.229	129.1	-47.2	-12.9	.908	87.6	.172	.866	169.2	341.6	.717A	1.015	87.3	1.271	9.8	67.6	40.3	.234
4-5618.9	4-5850	.235	22.0	54.4	5.6	1.371	92.7	.359	1.123	349.9	543.5	.720	1.526	88.0	.650	-6.8	-47.6	256.0	.167
4-5850	4-6030	.263	184.8	21.5	7.7	.775	112.7	.394	1.405	235.8	419.1	.851	1.959D	105.7	1.147	-5.9	4.0	78.5	.351
		14.91	10.94	5.13	3.97	7.37	5.81	15.24	1/2/2	73.5	23.9	34.9	1.093	5.338	100.0	14.6	-2.7	91.7D	2.556
4-5480	4-5631.4	.201	199.3	62.2	11.2	.907	89.2	.168	.867	176.2	359.2	.721A	1.013	89.9	1.274	-14.5	-60.5	20.4	.323
4-5631.4	4-5850	.323	3.3	-56.7	-11.4	1.373	87.5	.359	1.122	9.4	182.8	.719D	1.525	88.5	.649	9.8	8.3	262.0	.209
4-5850	4-6040	.223	183.8	9.6	3.2	.755	110.9	.378	1.345	229.9	423.3	.837	1.853D	106.1	1.135	-1.5	18.6	86.0	.332
		13.99	9.51	4.71	4.48	7.87	4.81	14.85	2/1/2	73.9	15.9	24.4	.576	4.735	93.7	357.9	-3.4	63.0L	2.152
4-5490	4-5636.1	.147	183.7	57.6	7.4	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.8	-72.6	16.1	.249
4-5636.1	4-5850	.249	.7	-30.5	-5.3	1.373	85.5	.363	1.119	17.0	182.8	.712D	1.525	88.4	.647	3.7	-10.0	261.3	.176
4-5850	4-6050	.200	189.1	5.8	2.6	.735	109.0	.365	1.295	223.8	427.4	.822	1.768D	106.5	1.123	-.8	20.6	94.2	.330
		12.01	8.29	4.01	3.72	7.12	4.27	14.81	2/1/2	71.0	10.9	42.9	.968	2.737	95.8	357.8	-5.0	99.3L	1.681
4-5500	4-5640.2	.154	177.8	57.9	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.5	11.6	.254
4-5640.2	4-5850	.254	358.2	-20.1	-3.7	1.372	83.6	.369	1.114	23.6	183.0	.704D	1.525	88.2	.645	2.0	-16.2	260.1	.174
4-5850	4-6060	.182	196.0	2.6	2.3	.718	106.9	.356	1.254	217.8	431.5	.807	1.701D	106.9	1.113	-.6	21.0	102.6	.329
		11.60	7.93	4.09	3.66	7.06	3.84	14.80	1/1/2	71.3	8.5	52.0	.930	2.280	95.0	357.0	-8.1	57.4L	1.191
4-5520	4-5575.5	.246	155.1	-3.7	-4.1	.797	99.5	.388	.750	195.7	251.3	.459A	1.041D	67.3	1.190	-1.8	-4.2	35.1	.484
4-5575.5	4-5850	.464	15.5	3.6	1.3	1.350	109.7	.455	1.078	292.5	555.2	.587	1.569	78.0	.621	-1.6	-21.6	222.4	.208
4-5850	4-6080	.156	214.3	-4.6	2.1	.687	102.4	.349	1.189	205.7	439.8	.774	1.605D	107.9	1.093	-.4	19.3	119.6	.334
		13.15	8.70	5.41	4.45	7.84	3.29	14.89	1/2/2	105.0	4.1	23.0	.280	5.019	160.1	318.7	18.1	88.4L	1.124
4-5530	4-5582.1	.262	146.5	-.3	-4.1	.855	103.8	.346	.808	209.9	266.4	.529A	1.088D	70.6	1.231	-2.3	-6.6	36.1	.408
4-5582.1	4-5850	.408	18.7	4.3	1.4	1.354	106.8	.429	1.087	300.8	553.0	.621	1.554	80.6	.627	-1.9	-24.8	229.1	.192
4-5850	4-6090	.151	225.6	-8.5	2.0	.674	100.0	.351	1.164	199.6	444.0	.756	1.572D	108.6	1.083	-.4	17.7	128.0	.339
		12.94	8.87	5.68	4.07	7.47	3.19	14.99	1/2/2	98.1	2.1	22.3	.361	5.175	150.3	324.1	26.8	83.4L	1.509
4-5540	4-5588.8	.305	140.1	3.5	-3.9	.927	107.9	.332	.900	230.3	287.9	.601A	1.198D	74.0	1.282	-2.8	-9.7	37.5	.357
4-5588.8	4-5850	.357	23.2	5.5	1.5	1.357	104.1	.408	1.096	309.2	550.8	.649	1.543	82.7	.633	-2.1	-27.9	236.0	.181
4-5850	4-6100	.153	257.8	-12.2	1.9	.661	97.3	.356	1.142	193.7	448.1	.735	1.548D	109.4	1.074	-.4	15.6	136.2	.348
		13.54	9.71	6.48	3.83	7.23	3.23	15.16	1/2/2	91.4	1.0	20.8	.471	5.535	132.9	331.2	42.1	80.1L	2.135
4-5550	4-5598.0	.364	136.7	7.2	-3.4	1.014	111.1	.362	1.058	255.0	317.6	.675A	1.442D	79.1	1.347	-3.1	-13.9	31.0	.297
4-5598.0	4-5850	.297	27.6	6.1	1.8	1.362	100.6	.385	1.107	321.0	548.0	.681	1.533	85.0	.640	-2.6	-31.8	244.7	.174
4-5850	4-6110	.163	250.0	-15.3	1.9	.649	94.4	.365	1.122	187.8	452.4	.712	1.532D	110.3	1.066	-.3	13.2	144.2	.359
		14.76	11.09	7.66	3.67	7.07	3.43	15.40	1/2/2	83.3	2.4	22.2	.682	5.193	98.7	11.0	63.5	87.8L	2.861
MARS ARRIVAL DATE = 2445860 (8 JUN 1984)																			
4-5490	4-5636.1	.164	186.4	60.0	8.6	.905	90.7	.170	.868	183.6	364.6	.720	1.015D	90.7	1.275	-12.0	-75.3	14.9	.274
4-5636.1	4-5860	.274	1.0	-41.2	-7.6	1.372	85.7	.361	1.116	16.2	187.3	.713D	1.518	85.9	.654	5.9	-1.5	257.8	.181
4-5860	4-6050	.228	190.0	6.8	3.3	.754	111.0	.382	1.324	228.8	427.1	.818	1.830D	107.0	1.131	-1.6	18.3	94.3	.344
		12.96	9.14	4.22	3.82	7.22	4.93	15.09	2/1/2	80.6	11.9	34.7	.802	3.352	94.6	357.3	-3.4	57.7L	1.887
4-5500	4-5640.2	.155	178.1	58.0	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.5	.256
4-5640.2	4-5860	.256	359.1	-23.8	-4.3	1.371	83.9	.366	1.112	23.0	187.5	.705D	1.518	85.7	.652	2.6	-13.2	256.1	.170
4-5860	4-6060	.205	195.7	3.2	2.7	.735	109.0	.370	1.275	222.7	431.2	.804	1.746D	107.4	1.118	-1.1	19.6	102.7	.340
		12.06	8.48	4.10	3.58	6.98	4.38	15.02	1/1/2	80.6	9.1	48.3	.920	2.442	94.7	357.5	-6.4	57.0L	1.327
4-5520	4-5572.4	.270	157.3	-3.5	-4.3	.773	100.2	.426	.730	194.4	245.1	.419A	1.040D	64.8	1.174	-1.9	-3.9	33.5	.309
4-5572.4	4-5860	.309	12.1	2.9	1.2	1.349	112.0	.479	1.075	286.7	559.5	.560	1.591	73.7	.628	-1.5	-19.3	217.7	.234
4-5860	4-6080	.171	211.5	-3.6	2.2	.701	104.6	.355	1.200	210.5	439.3	.774	1.626D	108.1	1.096	-.7	18.5	119.7	.339
		14.51	9.43	5.62	5.09	8.47	3.61	14.99	1/2/2	115.2	4.6	22.4	.232	5.149	162.3	316.3	16.1	91.6D	.961
4-5530	4-5580.1	.274	148.1	-.6	-4.2	.843	104.4	.366	.795	208.3	261.6	.504A	1.087D	69.1	1.222	-2.4	-6.3	37.3	.436
4-5580.1	4-5860	.436	18.2	3.5	1.2	1.353	108.3	.443	1.085	296.6	557.3	.604	1.565	77.1	.634	-1.7	-22.7	224.2	.207
4-5860	4-6090	.161	221.7	-7.4	2.1	.686	102.1	.353	1.171	204.4	443.4	.757	1.585D	108.8	1.086	-.6	17.0	128.1	.341
		13.73	9.29	5.90	4.43	7.82	3.39	15.03	1/2/2	108.3	2.7	21.4	.316	5.380	152.6	322.2	24.8	85.6L	1.383
4-5540	4-5587.4	.312	141.0	3.2	-4.1	.921	108.4	.341	.892	228.9	284.2	.587A	1.196D	73.0	1.278	-2.9	-9.4	37.3	.376
4-5587.4	4-5860	.376	23.3	4.3	1.2	1.356	105.1	.416	1.094	306.0	555.1	.639	1.548	79.7	.640	-2.0	-25.9	230.8	.190
4-5860	4-6100	.157	233.3	-11.0	2.0	.672	99.5	.355	1.146	198.3	447.5	.739	1.553D	109.3	1.076	-.5	15.0	136.4	.346
		13.95	9.93	6.62	4.02	7.42	3.51	15.14	1/2/2	101.6	1.6	19.6	.425	5.886	155.1	328.9	40.5	81.4L	2.078
4-5550	4-5596.9	.366	137.0	7.0	-3.5	1.013	111.4	.366	1.056	254.4	315.4	.670A	1.443D	78.5	1.346	-3.1	-13.6	31.3	.308
4-5596.9	4-5860	.308	28.2	6.5	1.4	1.361	101.3	.389	1.104	318.5	552.4	.675	1.534	82.3	.647	-2.4	-29.9	239.2	.176
4-5860	4-6110	.161	245.6	-14.3	1.9	.659	96.8	.361	1.124	192.3	451.6	.718	1.530D	110.0	1.066	-.5	12.6	144.4	.354
		14.85	11.14	7.75	3.71	7.11	3.39	15.30	1/2/2	93.5	2.3	20.1	.635	5.738	98.7	10.2	64.8	88.7L	3.010
4-5560	4-5622.1	.383	140.6	11.5	-1.4	1.066	111.6	.394	1.191	269.1	360.7	.722	1.660D	90.2	1.390	-3.0	-19.3	7.0	.223
4-5622.1	4-5860	.223	19.5	31.9	4.9	1.370	91.6	.356	1.120	354.0	547.7	.721	1.519	85.8	.657	-6.3	-46.7	251.7	.180
4-5860	4-6120	.172	257.8	-16.8	1.8	.648	93.7	.372	1.106	186.3	455.7	.695	1.516D	111.0	1.057	-.5	9.9	152.3	.367
		15.52	11.70	8.07	3.81	7.21	3.63	15.55	1/2/2	81.2	4.0	52.6	1.212	2.258	77.4	306.9	-75.8	102.4D	1.524
MARS ARRIVAL DATE = 2445870 (18 JUN 1984)																			
4-5470	4-5618.1	.208	130.7	-45.9	-11.5	.908	87.6	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	63.0	39.5	.210
4-5618.1	4-5870	.210	25.4	15.6	2.4	1.369	93.4	.358	1.118	347.0	552.4	.718	1.517	83.3	.664	-3.8	-37.5	247.1	.169
4-5870	4-6030	.315	174.7	-6.5	-3.4	.628	117.0	.454	1.538	245.9	418.6	.839	2.236D	107.4	1.174	5.2	38.1	76.2	.389
		15.52	11.97	4.82	3.55	6.95	7.15	16.03	1/2/1	90.7	21.7	48.4	1.365	2.438	98.2	22.9	-1.6	96.2D	1.963
4-5500	4-5640.3	.161	180.0	59.0	8.0	.905	92.4	.173	.869	191.6	369.8	.719	1.020D	91.4	1.276	-11.4	-72.7	10.8	.265
4-5640.3	4-5870	.265	.2	-30.7	-5.7	1.371	84.2	.364	1.111	21.9	191.6	.706D	1.515	83.5	.660	3.9	-7.8	253.0	.173
4-5870	4-6060	.233	196.2	3.8	3.3	.754	111.1	.386	1.303	227.7	430.8	.799	1.806D	107.9	1.126	-1.7	17.8	102.8	.355
		12.66	9.22	4.17	3.64	7.05	5.04	15.31	1/1/2	89.6	10.1	42.3	.859	2.772	94.0	358.1	-4.3	56.1L	1.522
4-5510	4-5644.5	.171	173.8	57.5	8.1	.907	94.2	.180	.873	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.4	7.4	.269
4-5644.5	4-5870	.269	359.0	-17.8	-3.5	4.370	82.3	.371	1.106	28.8	191.8	.696D	1.517	83.2	.657	1.7	-16.3	250.8	.170
4-5870	4-6070	.209	202.2	.3	2.7	.734	109.0	.373	1.254	221.5	434.8	.786	1.722D	108.2	1.113	-1.2	16.3	111.3	.350
		12.36	8.78	4.29	3.58	6.96	4.49	15.20	1/1/2	90.6	7.5	52.9	.832	2.245	93.4	356.5	-7.1	56.6L	1.036
4-5530	4-5577.2	.295	150.4	-.9	-4.5	.825	105.5	.399	.776	206.2	255.0	.467A	1.086D	66.7	1.209	-2.6	-6.0	36.1	.480
4-5577.2	4-5870	.480	17.3	2.7	1.0	1.352	110.5	.466	1.083	290.6	561.5	.578	1.587	73.3	.642	-1.6	-20.6	220.4	.234
4-5870	4-6090	.176	218.5	-6.4	2.2	.699	104.3	.359	1.181	209.2	442.9	.757	1.604D	108.8	1.089	-.8	16.3	128.2	.346
		15.06	9.99	6.28	5.07	8.45	3.71	15.13	1/2/2	117.6	3.4	20.7	.261	5.575	155.1	319.9	22.5	86.7L	1.194
4-5540	4-5585.3	.324	142.3	2.8	-4.3	.913	109.0	.358	.880	226.8	278.9	.565A	1.194D	71.5	1.271	-3.0	-9.0	36.9	.405
4-5585.3	4-5870	.405	23.3	3.5	1.0	1.356	106.7	.430	1.092	301.5	559.3	.623	1.561	76.6	.648	-1.9	-23.9	226.5	.206
4-5870	4-6100	.166	229.0	-10.0	2.1	.684	101.8	.358	1.152	203.0	446.9	.740	1.564D	109.3	1.078	-.7	14.4	136.5	.348
		14.76	10.35	6.85	4.41	7.80	3.51	15.17	1/2/2	111.2	2.2	18.4	.367	6.259	137.7	326.3	38.4	83.3L	1.931
4-5550	4-5595.2	.377	137.5	6.6	-3.7	1.011	111.8	.374	1.053	253.3	311.5	.659A	1.446D	77.4	1.344	-3.2	-13.1	31.8	.327
4-5595.2	4-5870	.327	26.9	4.7	1.1	1.360	102.4	.397	1.102	314.7	556.8	.665	1.540	79.5	.655	-2.2	-27.7	234.2	.185
4-5870	4-6110	.164	240.9	-13.3	1.9	.670	99.1	.360	1.126	196.9	450.9	.722	1.534D	109.9	1.068	-.7	12.0	144.6	.353
		15.26	11.36	7.93	3.91	7.30	3.45	15.26	1/2/2	103.5	2.5	18.0	.562	6.401	99.4	7.9	66.0	89.4L	3.037
4-5560	4-5626.2	.370	141.8	12.0	-1.1	1.055	111.1	.378	1.160	267.1	365.3	.721	1.599D	91.5	1.382	-3.1	-19.8	5.0	.218
4-5626.2	4-5870	.218	16.2	31.0	4.7	1.371	90.2	.355	1.118	359.2	551.7	.722	1.515	83.7	.665	-6.3	-46.3	247.4	.179
4-5870	4-6120	.169	253.4	-16.1	1.8	.658	96.1	.367	1.107	190.8	454.9	.701	1.513D	110.7	1.058	-.7	9.4	152.5	.361
		15.12	11.33	7.78	3.79	7.19	3.55	15.43	1/2/2	89.0	3.8	52.0	1.259	2.282	78.5	306.1	-77.2	102.1D	1.615

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445880
28 JUN 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445880 (28 JUN 1984)																			
4-5500	4-5640.5	.193	188.9	62.3	10.3	.905	92.4	.173	.869	191.5	370.0	.719	1.0200	91.5	1.276	-13.7	-77.1	0.0	.311
4-5640.5	4-5880	.311	.3	-46.5	-9.5	1.371	84.5	.363	1.112	20.7	195.5	.708D	1.516	81.5	.669	7.7	4.4	251.9	.195
4-5880	4-6060	.265	197.8	4.7	4.3	.776	113.5	.408	1.341	232.7	430.4	.794	1.887D	108.7	1.136	-2.7	15.0	102.8	.374
		14.62	10.47	4.60	4.15	7.55	5.87	15.71	1/1/2	97.1	11.9	30.7	.625	3.782	91.7	358.5	-2.5	53.4L	1.734
4-5510	4-5644.5	.170	173.7	57.4	8.1	.907	94.2	.180	.873	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.3	7.4	.268
4-5644.5	4-5880	.268	.7	-22.0	-4.2	1.371	82.8	.370	1.108	27.2	195.6	.698D	1.517	81.2	.667	2.4	-13.1	248.3	.174
4-5880	4-6070	.237	202.4	.7	3.2	.755	111.1	.390	1.281	226.5	434.4	.782	1.781D	108.8	1.120	-1.8	16.8	111.4	.364
		15.13	9.48	4.29	3.67	7.07	5.17	15.50	1/1/2	98.9	8.5	46.5	.635	2.436	92.8	359.8	-4.8	56.6L	1.199
4-5560	4-5630.4	.357	143.2	12.5	-.7	1.044	110.5	.364	1.130	264.9	389.7	.719	1.541D	92.6	1.375	-3.1	-20.3	3.7	.217
4-5630.4	4-5880	.217	13.4	26.9	4.4	1.371	86.9	.355	1.118	4.3	195.5	.721D	1.515	81.8	.673	-6.0	-44.9	243.8	.161
4-5880	4-6120	.170	248.5	-15.5	1.8	.669	98.6	.365	1.111	195.5	454.2	.706	1.516D	110.5	1.059	-.6	8.8	152.7	.356
		14.93	11.09	7.51	3.83	7.23	3.59	15.38	1/2/2	96.8	3.8	50.0	1.274	2.366	79.7	300.7	-78.8	101.1D	1.740
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																			
4-5510	4-5644.8	.178	176.5	58.7	8.8	.907	94.2	.180	.873	199.8	375.4	.716	1.030D	92.3	1.279	-12.1	-71.7	8.1	.281
4-5644.8	4-5890	.281	2.4	-31.5	-6.2	1.371	83.2	.369	1.110	25.5	199.2	.701D	1.520	79.5	.677	4.3	-6.4	247.4	.186
4-5890	4-6070	.271	203.6	1.2	4.0	.775	113.4	.411	1.318	231.5	433.9	.776	1.861D	109.5	1.130	-2.8	14.7	111.3	.363
		14.34	10.40	4.40	3.93	7.33	6.01	15.90	1/1/2	105.8	10.1	40.2	.760	2.907	91.6	1.5	-1.9	55.3L	1.450
4-5560	4-5634.8	.344	144.7	13.1	-.3	1.035	110.0	.331	1.102	262.4	373.9	.715	1.486D	93.8	1.367	-3.3	-20.9	3.3	.216
4-5634.8	4-5890	.216	11.6	25.1	3.9	1.372	87.6	.357	1.116	9.0	199.1	.716D	1.518	80.0	.682	-5.6	-42.5	241.4	.166
4-5890	4-6120	.178	243.7	-14.6	1.9	.661	101.0	.366	1.117	200.4	453.5	.709	1.525D	110.5	1.062	-1.0	8.2	152.9	.359
		14.93	11.00	7.25	3.93	7.33	3.75	15.39	1/2/2	104.3	3.9	46.7	1.262	2.526	80.4	289.7	-80.2	99.7D	1.925
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																			
4-5520	4-5648.8	.186	169.9	54.7	8.4	.911	96.1	.190	.878	208.2	380.9	.712	1.045D	93.3	1.282	-11.5	-67.5	5.7	.277
4-5648.8	4-5900	.277	4.6	-19.4	-3.9	1.372	82.0	.376	1.110	29.8	202.5	.693D	1.527	77.6	.685	2.0	-14.7	244.2	.191
4-5900	4-6080	.276	209.5	-2.1	3.7	.774	113.5	.415	1.296	230.5	437.3	.759	1.834D	110.5	1.124	-2.5	13.7	119.9	.391
		14.71	10.85	4.50	4.06	7.45	6.15	16.08	1/1/2	113.7	9.6	48.1	.783	2.452	90.5	4.5	-1.6	58.4L	1.137
4-5560	4-5638.5	.332	146.4	13.6	-.1	1.025	109.5	.338	1.078	259.8	377.8	.712	1.440D	94.5	1.360	-3.4	-21.6	3.7	.221
4-5638.5	4-5900	.221	11.0	19.8	3.1	1.373	86.5	.361	1.119	13.3	202.6	.715D	1.523	78.3	.691	-5.0	-38.3	240.5	.192
4-5900	4-6120	.191	239.6	-14.0	1.8	.694	103.4	.370	1.126	205.3	452.8	.709	1.543D	110.6	1.065	-1.2	7.5	153.0	.363
		15.13	11.06	7.00	4.07	7.46	4.06	15.48	1/2/2	111.3	4.1	42.0	1.232	2.790	80.4	271.9	-80.4	97.9D	2.205
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																			
4-5560	4-5642.5	.320	148.1	14.6	-.5	1.012	109.0	.327	1.052	287.1	381.2	.708	1.395D	95.2	1.353	-3.7	-22.6	4.6	.224
4-5642.5	4-5910	.224	11.7	12.4	2.0	1.374	85.5	.365	1.121	16.8	205.7	.712D	1.531	76.7	.700	-5.9	-35.0	240.7	.198
4-5910	4-6120	.211	256.6	-13.6	2.0	.710	105.6	.376	1.139	210.4	492.1	.708	1.569D	111.0	1.070	-1.4	6.9	153.1	.370
		15.55	11.28	8.77	4.24	7.64	4.52	15.65	1/2/2	118.0	4.4	39.8	1.199	3.257	79.0	283.8	-77.8	96.2D	2.706

STOPOVER TIME = 0 DAYS | 1964 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445780
20 MAR 1964

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445780 (20 MAR 1964)																			
4-5470	4-5627.9	.150	190.8	54.9	7.5	.910	87.6	.169	.868	169.0	356.0	.721A	1.015	89.4	1.273	-10.8	-73.2	23.9	.248
4-5627.9	4-5780	.248	22.7	-18.9	-3.3	1.416	90.6	.446	1.301	357.4	502.0	.721	1.881A	112.9	.690	2.2	-19.9	275.6	.353
4-5780	4-6070	.140	227.5	-10.9	1.5	.636	90.7	.350	1.190	181.4	439.8	.773	1.607D	108.0	1.093	.8	24.6	109.3	.338
		15.19	7.00	4.05	8.19	11.55	2.95	14.98	2/1/2	22.0	4.4	54.2	.976	2.193	90.4	22.6	-10.3	91.8D	1.165
4-5480	4-5632.1	.147	186.5	56.5	7.4	.907	89.2	.169	.867	176.0	360.1	.721	1.013	90.0	1.274	-10.8	-73.2	20.4	.248
4-5632.1	4-5780	.248	18.0	-16.3	-2.8	1.418	88.9	.448	1.306	3.6	141.5	.721D	1.891A	113.3	.692	1.6	-20.9	276.0	.356
4-5780	4-6080	.161	236.6	-13.7	1.7	.628	87.9	.369	1.175	176.4	445.0	.741	1.609	109.6	1.088	.8	23.2	117.5	.362
		15.69	7.41	4.01	8.28	11.65	3.40	15.46	2/1/2	21.5	2.5	57.0	.976	2.097	90.8	17.9	-11.7	83.4L	1.071
MARS ARRIVAL DATE = 2445790 (30 MAR 1964)																			
4-5470	4-5628.1	.143	189.1	53.6	7.0	.910	87.8	.169	.868	169.0	356.3	.721A	1.015	89.5	1.273	-10.2	-71.9	23.4	.238
4-5628.1	4-5790	.238	18.5	-21.6	-3.6	1.403	90.1	.419	1.243	359.8	508.7	.722	1.764A	108.7	.670	2.5	-18.8	275.7	.310
4-5790	4-6070	.134	225.0	-9.6	1.6	.642	92.7	.345	1.190	185.2	439.0	.779	1.600D	107.6	1.093	.6	24.2	109.7	.332
		13.85	6.81	3.97	7.04	10.41	2.84	14.84	2/1/2	26.7	4.7	50.4	1.061	2.348	91.8	18.0	-7.2	87.1L	1.430
4-5480	4-5632.2	.140	186.9	55.3	7.0	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.3	-72.1	20.3	.239
4-5632.2	4-5790	.239	13.7	-18.0	-3.0	1.404	88.2	.421	1.244	6.0	148.4	.720D	1.769A	109.0	.671	1.8	-20.2	276.1	.312
4-5790	4-6080	.152	235.3	-12.8	1.7	.633	90.0	.361	1.174	180.0	443.9	.750	1.597D	109.1	1.088	.6	22.8	118.0	.352
		14.24	7.13	3.94	7.10	10.47	3.19	15.25	2/1/2	26.2	2.5	54.2	1.051	2.195	92.4	15.3	-9.3	78.6L	1.257
4-5490	4-5636.1	.147	183.6	57.6	7.3	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.7	-72.5	16.1	.249
4-5636.1	4-5790	.249	9.1	-15.1	-2.7	1.405	86.3	.424	1.243	12.4	148.4	.716D	1.771A	109.2	.670	1.3	-21.2	276.1	.315
4-5790	4-6090	.176	243.9	-15.3	1.8	.625	86.9	.381	1.159	175.0	449.1	.717	1.600	110.7	1.082	.6	21.0	126.1	.377
		14.89	7.73	4.01	7.16	10.53	3.72	15.77	2/1/2	26.1	1.8	57.6	.972	2.077	92.4	9.0	-11.5	71.6L	1.047
4-5510	4-5573.8	.223	160.5	-6.1	-3.6	.782	94.6	.387	.737	187.4	248.9	.451A	1.022D	67.2	1.180	-1.0	-2.5	32.7	.461
4-5573.8	4-5790	.461	6.4	6.2	2.2	1.358	109.3	.460	1.103	295.0	531.5	.595	1.611A	97.1	.589	-1.8	-26.6	244.8	.231
4-5790	4-6110	.248	256.7	-18.5	2.0	.609	79.2	.443	1.135	165.7	460.1	.631	1.636	115.3	1.070	.7	18.7	141.4	.449
		15.46	10.47	5.04	4.99	8.36	5.42	17.36	1/2/2	54.2	6.1	25.7	.283	4.489	160.2	317.1	18.8	87.5L	.986
MARS ARRIVAL DATE = 2445800 (9 APR 1964)																			
4-5470	4-5628.2	.140	188.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.5	23.1	.233
4-5628.2	4-5800	.233	15.0	-24.7	-4.0	1.394	89.5	.400	1.202	1.7	155.2	.722D	1.683A	104.7	.656	2.8	-17.3	275.2	.274
4-5800	4-6070	.130	221.8	-8.1	1.6	.649	94.7	.341	1.190	189.2	438.2	.784	1.596D	107.3	1.093	.5	23.8	110.1	.327
		12.80	6.71	3.93	6.09	9.47	2.77	14.74	2/1/2	32.1	4.9	46.7	1.107	2.521	93.3	13.7	-4.9	82.8L	1.683
4-5480	4-5632.2	.137	185.9	54.6	6.7	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-10.0	-71.4	20.3	.234
4-5632.2	4-5800	.234	10.1	-20.0	-3.3	1.394	87.7	.402	1.202	8.0	155.0	.719D	1.685A	104.9	.656	2.0	-19.2	275.5	.275
4-5800	4-6080	.144	233.0	-11.8	1.7	.640	92.1	.354	1.173	183.9	443.0	.758	1.586D	108.6	1.087	.5	22.3	118.4	.344
		13.07	6.94	3.90	6.12	9.50	3.04	15.09	2/1/2	31.6	2.6	51.8	1.098	2.291	93.9	9.2	-7.7	74.5L	1.418
4-5490	4-5636.2	.144	182.6	57.0	7.1	.905	90.7	.170	.868	183.7	364.7	.720	1.015D	90.7	1.275	-10.5	-72.0	16.2	.244
4-5636.2	4-5800	.244	5.8	-16.3	-2.8	1.394	85.9	.405	1.200	14.4	155.1	.714D	1.686A	105.1	.655	1.4	-20.6	275.4	.278
4-5800	4-6090	.165	242.9	-14.6	1.8	.630	89.2	.371	1.157	178.6	447.9	.728	1.586	110.1	1.081	.5	20.5	126.6	.365
		13.60	7.44	3.98	6.15	9.53	3.47	15.52	2/1/2	31.5	1.3	56.0	1.008	2.130	93.7	5.3	-10.3	68.1L	1.139
4-5500	4-5568.8	.228	165.9	-6.9	-3.6	.764	90.4	.409	.721	180.6	244.7	.426A	1.016D	65.9	1.167	-.4	-.9	27.9	.486
4-5568.8	4-5800	.486	4.4	5.0	1.9	1.351	110.7	.467	1.081	290.2	536.4	.576	1.586A	91.4	.580	-1.5	-24.2	235.2	.212
4-5800	4-6100	.192	251.1	-16.7	1.9	.622	85.8	.394	1.142	173.5	453.0	.693	1.592	111.9	1.075	.5	18.4	134.5	.392
		13.74	9.20	5.12	4.54	7.93	4.08	16.09	1/2/2	67.9	2.8	24.2	.255	4.762	165.6	310.8	13.8	90.0D	.958
4-5510	4-5573.9	.218	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.8	1.183	-1.0	-2.5	33.2	.451
4-5573.9	4-5800	.451	9.2	5.9	2.1	1.355	108.9	.453	1.094	295.6	535.7	.599	1.589A	93.5	.590	-1.8	-26.4	242.0	.214
4-5800	4-6110	.227	257.9	-18.3	2.0	.614	81.9	.424	1.130	168.7	458.3	.651	1.608	114.1	1.066	.5	16.1	142.1	.426
		14.48	9.89	4.97	4.59	7.98	4.92	16.85	1/2/2	61.6	5.2	25.3	.295	4.559	160.5	317.4	18.3	87.1L	1.050
MARS ARRIVAL DATE = 2445810 (19 APR 1964)																			
4-5470	4-5628.2	.140	188.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.3	23.1	.233
4-5628.2	4-5810	.233	12.3	-26.9	-4.7	1.386	89.2	.385	1.173	3.1	161.4	.721D	1.625A	100.9	.647	3.4	-14.9	273.9	.244
4-5810	4-6070	.130	218.0	-6.4	1.7	.657	96.7	.339	1.192	193.4	437.6	.786	1.596D	107.1	1.094	.5	23.2	110.4	.323
		12.04	6.70	3.93	5.33	8.72	2.77	14.68	2/1/2	38.4	5.1	42.8	1.105	2.745	94.4	10.1	-3.2	79.2L	1.926
4-5480	4-5632.3	.135	185.5	54.3	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.1	20.3	.232
4-5632.3	4-5810	.232	7.4	-22.3	-3.8	1.387	87.4	.387	1.172	9.5	161.3	.718D	1.627A	101.1	.647	2.3	-17.9	274.1	.244
4-5810	4-6080	.139	229.9	-10.4	1.7	.647	94.2	.349	1.173	187.9	442.2	.764	1.582D	108.3	1.087	.3	21.8	118.8	.338
		12.16	6.83	3.89	5.33	8.71	2.94	14.96	2/1/2	37.8	2.8	49.3	1.119	2.396	95.0	5.9	-6.4	71.1L	1.563
4-5490	4-5636.2	.142	182.1	56.7	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.8	16.4	.241
4-5636.2	4-5810	.241	3.3	-17.7	-3.0	1.387	85.6	.391	1.170	15.9	161.4	.713D	1.627A	101.2	.645	1.8	-19.8	274.0	.245
4-5810	4-6090	.155	240.9	-13.7	1.8	.637	91.4	.363	1.156	182.4	446.9	.737	1.575D	109.6	1.081	.3	20.0	127.0	.355
		12.57	7.23	3.95	5.34	8.73	3.27	15.32	2/1/2	37.7	.9	54.5	1.032	2.185	94.8	2.8	-9.4	65.3L	1.222
4-5500	4-5568.8	.229	165.9	-6.9	-3.6	.782	90.4	.411	.720	180.5	244.3	.424A	1.016D	65.8	1.166	-.4	-.9	27.8	.488
4-5568.8	4-5810	.488	4.6	4.8	1.8	1.349	110.9	.466	1.074	289.4	542.7	.573	1.576	87.8	.583	-1.4	-23.1	230.5	.204
4-5810	4-6100	.179	250.4	-16.2	1.8	.628	88.2	.382	1.140	177.1	451.7	.705	1.575	111.1	1.074	.3	17.9	135.0	.378
		13.27	8.91	5.14	4.36	7.75	3.77	15.79	1/2/2	77.5	2.1	23.8	.252	4.840	166.4	310.2	13.1	90.4D	.968
4-5510	4-5574.2	.217	159.8	-6.3	-3.7	.789	94.6	.376	.743	187.7	250.8	.463A	1.022D	67.9	1.185	-1.0	-2.5	33.3	.448
4-5574.2	4-5810	.448	9.7	5.5	1.9	1.353	108.8	.449	1.087	295.4	540.0	.599	1.574A	90.0	.592	-1.7	-25.8	237.9	.202
4-5810	4-6110	.209	256.3	-17.9	1.9	.619	84.6	.407	1.126	172.0	456.8	.668	1.565	113.0	1.067	.3	15.5	142.7	.407
		13.73	9.42	4.94	4.31	7.70	4.48	16.42	1/2/2	70.1	4.4	24.9	.300	4.658	161.1	317.3	17.7	87.1L	1.091
4-5520	4-5579.1	.224	152.2	-3.7	-3.9	.820	98.9	.349	.772	197.5	258.7	.502A	1.042D	69.8	1.207	-1.7	-4.5	37.1	.415
4-5579.1	4-5810	.415	14.0	6.4	2.1	1.357	107.0	.435	1.097	300.7	537.6	.620	1.575A	91.9	.600	-2.0	-27.9	244.0	.203
4-5810	4-6120	.248	264.6	-19.1	2.0	.611	80.4	.440	1.114	167.3	462.1	.623	1.604	115.4	1.061	.3	13.0	150.1	.445
		14.83	10.48	5.05	4.34	7.73	5.44	17.26	1/2/2	64.4	6.9	25.5	.349	4.529	154.4	323.0	23.4	83.9L	1.230
MARS ARRIVAL DATE = 2445820 (29 APR 1964)																			
4-5470	4-5628.0	.145	189.7	54.0	7.2	.910	87.8	.169	.868	169.0	356.2	.721A	1.015	89.5	1.273	-10.4	-72.3	23.5	.241
4-5628.0	4-5820	.241	10.6	-35.3	-5.8	1.381	89.0	.375	1.153	3.7	167.3	.721D	1.585A	97.4	.643	4.5	-10.9	271.7	.222
4-5820	4-6070	.133	214.0	-4.7	1.8	.667	98.7	.339	1.195	197.8	437.0	.791	1.600D	107.0	1.095	.2	22.7	110.6	.322
		11.60	6.83	3.99	4.78	8.17	2.83	14.65	2/1/2	46.1	5.3	37.6	1.033	3.104	95.2	7.1	-1.9	76.4L	2.173
4-5480	4-5632.3	.136	185.6	54.4	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.2	20.3	.232
4-5632.3	4-5820	.232	5.6	-25.4	-4.2	1.381	87.2	.377	1.152	10.4	167.2	.718D	1.586A	97.5	.642	2.8	-15.9	272.0	.219
4-5820	4-6080	.136	226.1	-8.9	1.8	.655	96.2	.346	1.174	192.1	441.5	.766	1.580D	108.0	1.088	.2	21.3	119.1	.333
		11.51	6.80	3.89	4.71	8.10	2.91	14.88	2/1/2	44.9	3.0	46.5	1.113	2.534	95.9	3.3	-5.3	68.5L	1.708
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5820	.240	1.7	-19.4	-3.3	1.381	85.4	.380	1.149	16.9	167.4	.712D	1.585A	97.5	.641	1.8	-18.6	271.8	.218
4-5820	4-6090	.149	237.9	-12.6	1.8	.645	93.5	.356	1.156	186.4	446.0	.744	1.568D	109.1	1.081	.2	19.5	127.3	.348
		11.78	7.08	3.94	4.70	8.09	3.14	15.17	2/1/2	44.8	.9	52.8	1.043	2.250	95.5	.5	-8.6	63.2L	1.305
4-5500	4-5640.3	.156	178.6	58.3	7.7	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.1	-71.9	11.3	.258
4-5640.3	4-5820	.258	358.5	-14.9	-2.8	1.360	83.4	.385	1.144	23.8	167.7	.703D	1.584A	97.5	.638	1.2	-20.5	271.1	.219
4-5820	4-6100	.167	248.6	-15.4	1.8	.635	90.6	.372	1.139	180.9	450.6	.716	1.562D	110.5	1.073	.2	17.4	135.4	.367
		12.36	7.65	4.12	4.72	8.11	3.53	15.55	1/1/2	45.3	1.5	57.6	.902	2.077	94.5	358.2	-11.2	59.5L	.972
4-5510	4-5573.9	.219	160.0	-6.2	-3.7	.787	94.6	.379	.741	187.6	250.2	.460A	1.022D	67.7	1.183	-1.0	-2.5	33.1	.452
4-5573.9	4-5820	.452	9.9	4.9	1.7	1.351	109.0	.449	1.081	294.4	544.4	.595	1.566	86.8	.596	-1.6	-24.8	232.6	.196
4-5820	4-6110	.193	257.8	-17.4	1.9	.625	87.2	.393	1.124	175.6	455.4	.683	1.565	112.1	1.066	.2	15.0	143.2	.391
		13.25	9.06	4.97	4.18	7.57	4.11	16.06	1/2/2	79.9	3.7	24.4	.294	4.729	162.1	316.7	16.7	87.6L	1.098
4-5520	4-5579.2	.223	152.1	-3.7	-3.9	.821	98.9	.348	.773	197.5	259.0	.504A	1.042D	69.9	1.207	-1.7	-4.8	37.1	.414
4-5579.2	4-5820	.414	14.4	5.8	1.9	1.355	107.0	.433	1.091	300.4	542.0	.619	1.563	88.5	.603	-1.9	-27.1	239.4	.194
4-5820	4-6120	.227	265.3	-18.8	1.9	.617	83.3	.421	1.111	170.9	460.4	.643	1.576	114.1	1.069	.2	12.4	150.7	.422
		14.07	9.96	5.04	4.11	7.51	4.92	16.78	1/2/2	73.4	6.0	25.0	.351	4.628	155.3	322.6	22.8	84.1L	1.273

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445820
29 APR 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	P$I 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	P$I 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	P$I 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	P$I 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	P$I 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	P$I 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5530	4-5584.1	.251	144.8	.0	-3.9	.666	103.4	.328	.821	211.6	271.3	.552A	1.090D	72.0	1.239	-2.2	-7.0	36.8	.361
4-5584.1	4-5820	.361	18.5	7.0	2.0	1.356	105.2	.420	1.100	306.0	539.8	.638	1.562A	90.2	.610	-2.2	-29.2	245.4	.194
4-5820	4-6130	.271	271.4	-19.7	1.9	.609	78.6	.458	1.099	165.9	465.8	.595	1.602	116.7	1.052	.2	9.8	157.9	.464
		19.65	11.51	5.50	4.11	7.51	6.01	17.70	1/2/2	67.9	6.5	24.8	.414	4.655	145.6	327.6	30.9	80.7L	1.314
								MARS ARRIVAL DATE = 2445830 (9 MAY 1984)										
4-5470	4-5627.4	.170	194.7	57.9	8.9	.910	87.6	.169	.868	169.1	355.3	.721A	1.015	89.3	1.273	-12.1	-76.1	25.5	.276
4-5627.4	4-5830	.276	10.0	-48.0	-8.6	1.377	89.1	.367	1.139	3.2	172.6	.721D	1.557A	94.1	.643	7.2	-1.7	266.5	.215
4-5830	4-6070	.141	210.1	-3.2	1.9	.677	100.7	.341	1.201	202.3	436.5	.792	1.610D	107.1	1.097	-.0	22.0	110.8	.523
		11.83	7.25	4.28	4.58	7.97	2.97	14.66	2/1/2	56.0	5.5	26.8	.792	4.017	95.1	4.5	-1.5	74.8L	2.388
4-5480	4-5632.2	.139	186.5	55.0	6.8	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.2	-71.6	20.3	.237
4-5632.2	4-5830	.237	4.5	-30.0	-5.0	1.377	87.1	.369	1.137	10.8	172.7	.716D	1.557A	94.2	.642	5.5	-12.6	269.1	.200
4-5830	4-6080	.140	222.0	-7.4	1.9	.665	98.3	.345	1.177	196.5	440.8	.772	1.583D	107.9	1.089	-.0	20.7	119.5	.331
		11.14	6.88	3.93	4.26	7.65	2.95	14.84	2/1/2	53.0	3.3	42.6	1.070	2.751	96.2	1.4	-4.2	66.4L	1.874
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5830	.240	.7	-21.7	-3.7	1.377	85.5	.373	1.134	17.4	172.9	.712D	1.557A	94.2	.640	8.2	-16.9	268.8	.198
4-5830	4-6090	.148	234.2	-11.3	1.8	.655	95.7	.352	1.157	190.7	445.2	.749	1.564D	108.8	1.081	-.0	18.9	127.6	.343
		11.24	7.02	3.95	4.22	7.61	3.07	15.06	2/1/2	52.8	1.1	50.6	1.041	2.359	95.9	359.1	-7.7	61.6L	1.394
4-5500	4-5640.2	.155	176.2	58.1	7.8	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.4	.256
4-5640.2	4-5830	.256	357.6	-16.1	-3.0	1.376	83.4	.378	1.130	24.3	173.2	.703D	1.556A	94.1	.637	1.4	-19.6	268.0	.198
4-5830	4-6100	.159	245.8	-14.5	1.9	.642	92.8	.364	1.139	183.0	449.7	.724	1.553D	110.0	1.073	-.0	16.8	135.7	.358
		11.68	7.45	4.11	4.23	7.62	3.35	15.37	1/1/2	53.3	1.0	56.2	.915	2.122	94.9	357.3	-10.3	58.5L	1.026
4-5510	4-5572.8	.225	160.7	-6.0	-3.8	.779	94.6	.391	.735	187.3	248.2	.447A	1.022D	67.0	1.178	-1.1	-2.5	32.5	.466
4-5572.8	4-5830	.466	9.5	4.3	1.6	1.349	109.8	.455	1.076	292.2	546.8	.586	1.565	82.8	.601	-1.5	-22.8	226.6	.196
4-5830	4-6110	.180	256.3	-16.8	1.8	.635	89.6	.381	1.122	179.4	454.3	.695	1.550	111.3	1.066	-.0	14.4	143.6	.377
		13.10	8.88	5.08	4.22	7.61	3.80	15.76	1/2/2	90.7	3.1	23.9	.277	4.831	163.4	319.8	15.5	88.8L	1.062
4-5520	4-5578.7	.226	152.5	-3.7	-3.9	.818	99.0	.353	.770	197.3	258.0	.496A	1.042D	69.6	1.205	-1.7	-4.5	36.9	.420
4-5578.7	4-5830	.420	14.5	5.1	1.7	1.353	107.4	.434	1.086	299.0	546.4	.614	1.557	85.1	.606	-1.8	-25.6	233.9	.190
4-5830	4-6120	.209	265.1	-18.4	1.8	.623	86.0	.404	1.108	174.1	459.0	.660	1.555	113.1	1.056	-.0	11.7	151.3	.403
		13.59	9.56	5.08	4.03	7.43	4.47	16.33	1/2/2	83.5	5.3	24.3	.341	4.746	156.6	321.8	21.4	84.8L	1.276
4-5530	4-5584.1	.252	144.9	-.0	-3.9	.666	103.4	.329	.820	211.5	271.1	.551A	1.090D	71.9	1.238	-2.2	-6.9	36.8	.362
4-5584.1	4-5830	.362	18.6	6.2	1.8	1.356	105.4	.418	1.095	305.3	544.2	.637	1.553	87.0	.614	-2.1	-28.3	240.4	.166
4-5830	4-6130	.247	272.4	-19.4	1.8	.615	81.6	.435	1.095	169.0	464.0	.619	1.572	115.3	1.051	-.0	9.0	158.6	.438
		14.85	10.90	5.51	3.95	7.34	5.39	17.10	1/2/2	77.4	7.6	24.0	.412	4.803	166.8	327.0	29.8	81.0L	1.566
								MARS ARRIVAL DATE = 2445840 (19 MAY 1984)										
4-5480	4-5632.0	.149	189.2	56.9	7.6	.907	89.2	.169	.867	176.1	360.1	.721	1.013	90.0	1.274	-10.9	-73.7	20.4	.252
4-5632.0	4-5840	.252	4.1	-38.0	-6.5	1.374	87.2	.365	1.128	10.7	177.9	.718D	1.558A	91.2	.644	5.0	-6.7	265.6	.190
4-5840	4-6080	.146	217.9	-5.9	1.9	.675	100.4	.346	1.162	201.0	440.3	.774	1.591D	107.8	1.090	-.2	20.0	119.5	.331
		11.14	7.11	4.04	4.03	7.42	3.07	14.84	2/1/2	62.3	3.6	30.6	.948	3.188	98.0	359.7	-3.0	64.6L	2.073
4-5490	4-5636.2	.142	182.3	56.8	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.4	-71.7	16.3	.242
4-5636.2	4-5840	.242	.4	-25.1	-4.3	1.374	85.3	.367	1.125	17.4	178.0	.712D	1.558A	91.1	.642	2.7	-14.3	265.2	.184
4-5840	4-6090	.146	229.9	-9.9	1.9	.663	97.8	.350	1.159	195.1	444.6	.753	1.566D	108.6	1.082	-.2	18.3	127.8	.340
		10.94	7.05	3.96	3.89	7.29	3.09	15.00	2/1/2	61.5	1.6	47.5	1.024	2.482	96.1	358.3	-6.8	60.4L	1.518
4-5500	4-5640.2	.154	177.9	58.0	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.8	11.5	.255
4-5640.2	4-5840	.255	357.7	-17.7	-3.3	1.374	83.5	.373	1.120	24.3	178.3	.703D	1.557A	91.0	.640	1.6	-18.2	264.2	.183
4-5840	4-6100	.154	242.1	-13.4	1.9	.651	95.1	.359	1.139	189.2	448.9	.731	1.548D	109.6	1.074	-.2	16.2	136.0	.351
		11.22	7.34	4.10	3.88	7.28	3.25	15.24	1/1/2	62.0	.8	84.5	.925	2.185	95.1	357.0	-9.5	57.8L	1.096
4-5510	4-5570.8	.240	161.9	-5.6	-3.8	.764	94.8	.414	.722	186.9	244.6	.423A	1.022D	65.5	1.166	-1.1	-2.4	31.2	.493
4-5570.8	4-5840	.493	8.8	3.7	1.4	1.348	111.2	.469	1.071	286.4	553.3	.569	1.573	78.8	.607	-1.4	-20.4	220.5	.210
4-5840	4-6110	.170	253.7	-16.1	1.8	.641	92.1	.372	1.122	183.5	453.2	.705	1.539D	110.6	1.066	-.2	15.8	144.0	.367
		13.38	8.86	5.51	4.50	7.90	3.58	15.56	1/2/2	101.9	2.7	23.4	.247	4.935	165.0	313.8	14.0	90.9D	.973
4-5520	4-5577.8	.233	153.5	-3.7	-3.9	.811	99.2	.365	.763	196.7	255.5	.484A	1.041D	68.7	1.200	-1.7	-4.4	36.2	.438
4-5577.8	4-5840	.436	14.2	4.4	1.5	1.351	108.3	.441	1.081	296.5	550.8	.604	1.559	81.7	.614	-1.7	-23.9	228.0	.194
4-5840	4-6120	.193	263.8	-17.9	1.8	.631	88.7	.390	1.106	177.9	457.7	.674	1.538	112.2	1.058	-.2	11.1	151.7	.389
		13.43	9.30	5.20	4.15	7.52	4.10	16.00	1/2/2	94.2	4.7	23.7	.317	4.880	158.2	320.5	19.9	86.2L	1.229
4-5530	4-5583.4	.258	145.4	-.1	-4.0	.663	103.6	.334	.817	211.0	269.6	.544A	1.090D	71.5	1.236	-2.3	-6.8	38.8	.390
4-5583.4	4-5840	.390	18.6	5.3	1.8	1.355	105.9	.421	1.090	303.7	548.6	.631	1.550	85.8	.620	-2.0	-26.8	234.8	.185
4-5840	4-6130	.225	272.4	-19.1	1.8	.621	84.7	.416	1.092	172.5	462.4	.638	1.546	114.0	1.050	-.2	6.5	159.2	.416
		14.35	10.43	5.56	3.92	7.52	4.66	16.61	1/2/2	87.6	6.9	23.2	.395	4.980	168.3	325.8	28.5	81.9L	1.571
								MARS ARRIVAL DATE = 2445850 (29 MAY 1984)										
4-5470	4-5618.9	.229	129.1	-47.2	-12.9	.908	87.8	.172	.866	169.2	341.6	.717A	1.015	87.3	1.271	9.8	67.6	40.3	.234
4-5618.9	4-5850	.235	22.0	34.4	5.6	1.371	92.7	.359	1.123	349.8	543.5	.720	1.526	89.0	.650	-8.8	-47.8	256.0	.187
4-5850	4-6070	.187	204.4	-.9	2.2	.702	104.7	.351	1.219	211.7	435.7	.791	1.647D	107.4	1.102	-.5	20.5	111.1	.351
		12.62	8.65	5.13	3.97	7.37	3.51	14.82	1/2/2	73.5	6.2	34.9	1.093	3.336	100.0	14.9	-2.7	91.7D	2.336
4-5480	4-5631.4	.201	199.3	62.2	11.2	.907	89.2	.168	.867	176.2	359.2	.721A	1.013	89.9	1.274	-14.5	-80.5	20.4	.325
4-5631.4	4-5850	.323	3.3	-56.7	-11.4	1.373	87.5	.359	1.122	9.4	182.8	.719D	1.525	88.5	.649	9.8	8.3	262.0	.209
4-5850	4-6090	.156	214.3	-4.8	2.1	.667	102.4	.349	1.189	205.7	439.8	.774	1.603D	107.9	1.093	-.4	19.3	119.6	.334
		12.47	8.00	4.71	4.48	7.87	3.29	14.89	2/1/2	73.9	4.1	24.4	.576	4.735	93.7	357.9	-3.4	93.0L	2.192
4-5490	4-5636.1	.147	183.7	57.6	7.4	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.8	-72.6	16.1	.249
4-5636.1	4-5850	.249	.7	-30.5	-5.3	1.373	85.5	.363	1.119	17.0	182.8	.712D	1.525	88.4	.647	3.7	-10.0	261.3	.176
4-5850	4-6090	.151	225.6	-8.5	2.0	.674	100.0	.351	1.164	199.6	444.0	.756	1.572D	108.6	1.083	-.4	17.7	128.0	.339
		10.92	7.20	4.01	3.72	7.12	3.19	14.99	2/1/2	71.0	2.1	42.9	.968	2.757	95.8	357.8	-5.0	59.3L	1.681
4-5500	4-5640.2	.154	177.8	57.9	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.5	11.6	.254
4-5640.2	4-5850	.254	358.2	-20.1	-3.7	1.372	83.6	.369	1.114	23.6	183.0	.704D	1.525	88.2	.645	2.0	-16.2	260.1	.174
4-5850	4-6100	.153	237.8	-12.2	1.9	.661	97.3	.356	1.142	193.7	448.1	.735	1.548D	109.4	1.074	-.4	15.6	136.2	.348
		10.99	7.32	4.09	3.66	7.06	3.25	15.16	1/1/2	71.3	1.0	52.0	.930	2.280	95.0	357.0	-9.1	57.4L	1.191
4-5520	4-5578.8	.246	155.1	-3.7	-4.1	.797	99.5	.368	.750	195.7	251.3	.459A	1.041D	67.3	1.190	-1.8	-4.2	35.1	.464
4-5578.8	4-5850	.464	13.5	3.6	1.3	1.350	109.7	.455	1.076	292.5	555.2	.587	1.569	78.0	.621	-1.8	-21.6	222.4	.208
4-5850	4-6120	.181	261.4	-17.4	1.8	.639	91.2	.379	1.105	182.0	456.6	.686	1.525D	111.5	1.057	-.3	10.5	152.0	.376
		13.66	9.23	5.41	4.45	7.84	3.82	15.74	1/2/2	105.0	4.3	23.0	.260	5.019	160.1	318.7	18.1	88.4L	1.124
4-5530	4-5582.1	.262	146.5	-.3	-4.1	.655	103.8	.346	.808	209.9	266.4	.529A	1.088D	70.6	1.231	-2.3	-6.6	38.1	.408
4-5582.1	4-5850	.408	16.7	4.3	1.4	1.354	106.8	.429	1.087	300.8	555.0	.621	1.554	80.8	.627	-1.9	-24.8	229.1	.192
4-5850	4-6130	.207	271.3	-18.7	1.7	.629	87.6	.400	1.090	176.4	461.1	.654	1.526	113.0	1.049	-.4	7.7	159.6	.396
		14.18	10.11	5.68	4.07	7.47	4.42	16.22	1/2/2	98.1	6.3	22.3	.361	5.175	150.3	324.1	26.8	83.4L	1.509
4-5540	4-5588.8	.305	140.1	3.5	-3.9	.927	107.9	.332	.900	230.3	287.8	.601A	1.198D	74.0	1.282	-2.8	-9.7	37.5	.357
4-5588.8	4-5850	.357	23.2	5.5	1.5	1.357	104.1	.408	1.096	309.2	550.6	.649	1.543	82.7	.633	-2.1	-27.9	236.0	.181
4-5850	4-6140	.242	279.6	-19.4	1.7	.620	83.4	.428	1.077	171.0	463.7	.616	1.538	115.0	1.041	-.4	4.7	166.9	.429
		15.60	11.76	6.48	3.83	7.23	5.28	16.90	1/2/2	91.4	8.4	20.8	.471	5.535	138.9	331.2	42.1	80.1L	2.139
								MARS ARRIVAL DATE = 2445860 (8 JUN 1984)										
4-5470	4-5618.3	.213	130.4	-46.2	-11.8	.908	87.8	.172	.866	169.2	340.6	.717A	1.015	87.2	1.270	8.8	64.1	39.6	.215
4-5618.3	4-5860	.215	23.5	22.5	5.4	1.369	93.1	.356	1.119	348.3	540.1	.719	1.519	85.5	.656	-4.8	-41.5	251.5	.173
4-5860	4-6070	.186	202.8	-.2	2.4	.717	106.6	.361	1.234	216.8	433.3	.789	1.679D	107.7	1.107	-.8	19.5	111.2	.339
		12.46	8.82	4.86	5.64	7.04	3.94	14.98	1/2/2	81.7	6.7	43.0	1.299	2.728	99.5	19.1	-2.7	94.0D	2.244
4-5490	4-5636.1	.164	186.4	60.0	8.6	.905	90.7	.170	.868	183.6	364.6	.720	1.015D	90.7	1.275	-12.0	-73.3	14.9	.274
4-5636.1	4-5860	.274	1.0	-41.2	-7.6	1.372	85.7	.361	1.116	16.2	187.3	.713D	1.516	85.9	.654	5.9	-1.5	257.8	.181
4-5860	4-6090	.161	221.7	-7.4	2.1	.686	102.1	.355	1.171	204.4	443.4	.737	1.585D	108.6	1.086	-.6	17.0	128.1	.341
		11.43	7.61	4.22	3.82	7.22	3.39	15.03	2/1/2	80.6	2.7	34.7	.802	3.352	94.6	357.3	-3.4	87.7L	1.887
4-5500	4-5640.2	.165	176.1	58.0	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.5	.256
4-5640.2	4-5860	.256	359.1	-23.8	-4.3	1.371	83.9	.366	1.112	25.0	187.5	.703D	1.516	85.7	.652	2.6	-13.2	256.1	.170
4-5860	4-6100	.157	235.5	-11.0	2.0	.672	99.5	.355	1.146	196.5	447.5	.739	1.553D	109.3	1.076	-.5	15.0	136.4	.346
		10.99	7.41	4.10	3.58	6.98	3.31	15.14	1/1/2	80.6	1.6	46.3	.920	2.442	94.7	357.5	-6.4	87.0L	1.927

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS | MARS ARRIVAL DATE = 2445860 | 8 JUN 1984

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5520	4-5572.4	.270	157.3	-3.5	-4.3	.773	100.2	.426	.730	194.4	245.1	.419A	1.040D	64.8	1.174	-1.9	-3.9	33.5	.509
4-5572.4	4-5860	.509	12.1	2.9	1.2	1.349	112.0	.479	1.075	286.7	559.5	.560	1.591	73.7	.628	-1.5	-19.3	217.7	.234
4-5860	4-6120	.172	257.8	-16.8	1.8	.648	93.7	.372	1.106	186.3	455.7	.695	1.516D	111.0	1.057	-.5	9.9	152.3	.367
		14.54	9.45	5.82	5.09	8.47	3.63	15.55	1/2/2	115.2	4.0	22.4	.232	5.149	162.3	316.3	16.1	91.6D	.961
4-5530	4-5580.1	.274	148.1	-.6	-4.2	.843	104.4	.366	.795	208.3	261.6	.504A	1.087D	69.1	1.222	-2.4	-6.5	37.3	.436
4-5580.1	4-5860	.436	18.2	3.5	1.2	1.353	108.3	.443	1.085	296.6	557.3	.604	1.565	77.1	.634	-1.7	-22.7	224.2	.207
4-5860	4-6130	.192	269.1	-18.4	1.7	.637	90.3	.387	1.089	180.5	459.9	.667	1.511D	112.2	1.049	-.5	7.1	160.0	.364
		14.42	9.98	5.90	4.43	7.82	4.08	15.92	1/2/2	108.3	5.8	21.4	.316	5.360	152.6	322.2	24.8	85.6L	1.383
4-5540	4-5587.4	.312	141.0	3.2	-4.1	.921	108.4	.341	.892	228.9	284.2	.587A	1.196D	73.0	1.278	-2.9	-9.4	37.3	.376
4-5587.4	4-5860	.376	23.3	4.3	1.2	1.356	105.1	.416	1.094	306.0	555.1	.639	1.548	79.7	.640	-2.0	-25.9	230.8	.190
4-5860	4-6140	.221	278.7	-19.2	1.6	.627	86.4	.410	1.075	174.8	464.3	.634	1.515	113.8	1.040	-.5	4.1	167.4	.408
		15.40	11.38	6.62	4.02	7.42	4.76	16.45	1/2/2	101.6	7.8	19.6	.425	5.886	135.1	328.9	40.5	61.4L	2.078

MARS ARRIVAL DATE = 2445870 (18 JUN 1984)

4-5470	4-5618.1	.208	130.7	-45.9	-11.5	.908	87.8	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	63.0	39.5	.210
4-5618.1	4-5870	.210	25.4	15.6	2.4	1.369	93.4	.358	1.118	347.0	552.4	.718	1.517	85.5	.664	-3.8	-37.5	247.1	.169
4-5870	4-6070	.209	202.2	.3	2.7	.734	109.0	.373	1.254	221.5	434.8	.766	1.722D	108.2	1.113	-1.2	16.3	111.3	.350
		12.85	9.30	4.82	3.55	6.95	4.49	15.20	1/2/2	90.7	7.5	48.4	1.365	2.438	98.2	22.9	-1.6	96.2D	1.963
4-5480	4-5626.7	.224	127.4	-47.2	-12.7	.907	89.3	.169	.867	176.5	351.9	.721A	1.013	88.8	1.273	9.4	69.3	31.4	.222
4-5626.7	4-5870	.222	15.5	32.6	5.0	1.371	90.0	.355	1.118	.0	191.7	.722D	1.515	83.7	.664	-6.6	-47.3	247.2	.181
4-5870	4-6080	.190	209.6	-3.0	2.4	.716	106.7	.364	1.214	215.3	438.9	.772	1.656D	108.5	1.100	-1.0	17.6	119.8	.347
		12.93	9.09	5.05	3.85	7.23	4.04	15.14	1/2/2	89.0	5.3	37.6	1.220	3.103	97.7	10.5	-.5	79.5L	2.565
4-5500	4-5640.3	.161	180.0	59.0	8.0	.905	92.4	.173	.869	191.6	369.8	.719	1.020D	91.4	1.276	-11.4	-72.7	10.8	.265
4-5640.3	4-5870	.265	.2	-30.7	-5.7	1.371	84.2	.364	1.111	21.9	191.6	.706D	1.515	83.5	.660	3.9	-7.8	253.0	.173
4-5870	4-6100	.166	229.0	-10.0	2.1	.684	101.8	.358	1.152	203.0	446.9	.740	1.564D	109.3	1.078	-.7	14.4	136.5	.348
		11.32	7.68	4.17	3.64	7.05	3.51	15.17	1/1/2	89.6	2.2	42.3	.859	2.772	94.0	358.1	-4.3	56.1L	1.522
4-5510	4-5644.5	.171	173.8	57.5	8.1	.907	94.2	.180	.873	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.4	7.4	.269
4-5644.5	4-5870	.269	359.0	-17.8	-3.5	1.370	82.3	.371	1.106	28.8	191.8	.696D	1.517	83.2	.657	1.7	-16.3	250.8	.170
4-5870	4-6110	.164	240.9	-13.3	1.9	.670	99.1	.360	1.128	196.9	450.9	.722	1.534D	109.9	1.068	-.7	12.0	144.6	.353
		11.32	7.74	4.29	3.58	6.98	3.45	15.26	1/1/2	90.6	2.5	52.9	.832	2.245	93.4	358.3	-7.1	56.6L	1.036
4-5530	4-5577.2	.295	150.4	-.9	-4.5	.825	105.3	.399	.776	206.2	255.0	.467A	1.086D	66.7	1.209	-2.6	-6.0	36.1	.480
4-5577.2	4-5870	.480	17.3	2.7	1.0	1.352	110.5	.466	1.083	290.8	561.3	.578	1.587	73.3	.642	-1.6	-20.6	220.4	.234
4-5870	4-6130	.182	265.6	-18.0	1.7	.646	92.9	.378	1.089	184.8	458.9	.678	1.501D	111.6	1.049	-.7	6.5	160.2	.374
		15.19	10.13	6.28	5.07	8.45	3.85	15.70	1/2/2	117.6	5.5	20.7	.261	5.573	155.1	319.9	22.5	88.7L	1.194
4-5540	4-5585.3	.324	142.3	2.8	-4.3	.913	109.0	.358	.880	226.8	278.9	.565A	1.194D	71.5	1.271	-3.0	-9.0	36.9	.405
4-5585.3	4-5870	.405	23.3	3.3	1.0	1.356	106.7	.430	1.092	301.5	559.3	.623	1.561	76.6	.648	-1.9	-23.9	226.5	.206
4-5870	4-6140	.204	276.6	-19.0	1.6	.636	89.3	.395	1.074	179.0	463.1	.649	1.498	112.9	1.040	-.7	3.4	167.8	.392
		15.61	11.20	6.85	4.41	7.80	4.36	16.10	1/2/2	111.2	7.3	18.4	.367	6.259	137.7	326.3	38.4	83.3L	1.931

MARS ARRIVAL DATE = 2445880 (28 JUN 1984)

4-5470	4-5618.1	.208	130.8	-45.9	-11.5	.908	87.8	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	62.9	39.5	.210
4-5618.1	4-5880	.210	27.8	10.9	1.7	1.369	93.8	.359	1.118	345.5	556.4	.717	1.519	81.2	.673	-3.2	-34.4	243.5	.170
4-5880	4-6070	.237	202.4	.7	3.2	.753	111.1	.390	1.261	226.5	434.4	.762	1.761D	108.6	1.120	-1.6	16.8	111.4	.364
		13.57	9.98	4.81	3.59	6.99	5.17	15.50	1/2/2	99.4	8.5	52.7	1.369	2.254	96.5	26.5	.0	98.6D	1.717
4-5480	4-5626.4	.208	128.3	-46.1	-11.6	.907	89.3	.169	.867	176.5	351.3	.721A	1.015	88.7	1.273	8.3	65.9	31.4	.202
4-5626.4	4-5880	.202	18.7	19.5	2.8	1.371	90.5	.355	1.119	358.0	555.7	.722	1.516	81.7	.673	-4.4	-39.4	244.7	.173
4-5880	4-6080	.214	206.6	-2.6	2.7	.733	108.9	.377	1.233	220.3	438.4	.769	1.698D	108.9	1.106	-1.3	16.6	119.9	.358
		13.05	9.40	4.81	3.65	7.05	4.60	15.37	1/2/2	97.5	6.1	47.2	1.477	2.499	96.7	16.4	.4	84.5L	2.215
4-5500	4-5640.5	.193	186.9	62.5	10.3	.905	92.4	.173	.869	191.5	370.0	.719	1.020D	91.5	1.276	-13.7	-77.1	6.0	.311
4-5640.5	4-5880	.311	.3	-46.5	-9.5	1.371	84.5	.363	1.112	20.7	195.5	.708D	1.516	81.5	.669	7.7	4.4	251.9	.195
4-5880	4-6100	.181	225.5	-9.1	2.2	.698	104.0	.363	1.162	207.9	446.3	.740	1.583D	109.5	1.081	-1.0	13.7	136.6	.352
		12.57	8.41	4.60	4.15	7.55	3.82	15.26	1/1/2	97.1	2.9	30.7	.623	3.782	91.7	358.5	-2.5	53.4L	1.734
4-5510	4-5644.5	.170	173.7	57.4	8.1	.907	94.2	.180	.873	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.5	7.4	.268
4-5644.5	4-5880	.268	.7	-22.0	-4.2	1.371	82.6	.370	1.108	27.2	195.6	.698D	1.517	81.2	.667	2.4	-13.1	246.5	.174
4-5880	4-6110	.172	236.4	-12.4	2.0	.683	101.4	.362	1.134	201.7	450.2	.724	1.545D	109.9	1.070	-.9	11.4	144.7	.354
		11.59	7.91	4.29	3.67	7.07	3.63	15.29	1/1/2	98.9	2.8	48.5	.835	2.436	92.8	359.8	-4.8	56.6L	1.199

MARS ARRIVAL DATE = 2445890 (8 JUL 1984)

4-5470	4-5618.2	.210	130.6	-46.1	-11.6	.908	87.8	.172	.866	169.2	340.5	.717A	1.015	87.2	1.270	8.6	63.5	39.5	.212
4-5618.2	4-5890	.212	30.6	7.5	1.2	1.369	94.3	.361	1.119	343.9	560.1	.715	1.523	79.4	.682	-2.7	-32.0	241.1	.177
4-5890	4-6070	.271	203.6	1.2	4.0	.775	113.4	.411	1.318	231.5	433.9	.776	1.861D	109.3	1.130	-2.8	14.7	111.3	.383
		14.58	10.85	4.84	3.73	7.13	6.01	15.90	1/2/2	107.4	10.1	56.4	1.337	2.117	94.7	30.2	2.1	101.2D	1.492
4-5480	4-5626.2	.203	128.6	-45.8	-11.3	.907	89.3	.169	.867	176.5	351.1	.721A	1.013	88.7	1.272	8.0	64.9	31.5	.197
4-5626.2	4-5890	.197	22.1	12.1	1.7	1.371	91.0	.356	1.120	356.1	559.5	.721	1.519	79.9	.683	-3.4	-34.9	242.5	.175
4-5890	4-6080	.243	208.6	-2.4	3.1	.752	111.1	.393	1.260	225.3	437.9	.764	1.756D	109.6	1.114	-1.8	15.3	119.9	.372
		13.74	10.04	4.74	3.70	7.10	5.50	15.67	1/2/2	105.6	7.2	53.2	1.556	2.232	94.8	21.3	2.0	88.8L	1.917
4-5490	4-5634.8	.225	126.5	-46.3	-12.7	.906	90.8	.170	.868	183.9	362.6	.721	1.015D	90.4	1.275	9.3	69.1	19.5	.221
4-5634.8	4-5890	.221	11.2	26.1	4.1	1.372	87.5	.358	1.118	9.5	199.1	.718D	1.518	80.0	.682	-5.8	-43.1	241.2	.187
4-5890	4-6090	.219	215.1	-5.5	2.6	.731	108.8	.380	1.213	219.1	441.8	.752	1.674D	109.6	1.099	-1.5	14.5	128.4	.365
		13.74	9.78	5.07	3.95	7.35	4.72	15.52	1/2/2	104.2	5.1	43.3	1.235	2.709	93.9	9.4	1.1	71.7L	2.112
4-5510	4-5644.6	.179	176.5	58.7	8.8	.907	94.2	.180	.873	199.8	375.4	.716	1.030D	92.3	1.279	-12.1	-71.7	6.1	.281
4-5644.6	4-5890	.281	2.4	-31.5	-6.2	1.371	83.2	.369	1.110	25.5	199.2	.703D	1.520	79.5	.677	4.3	-6.4	247.4	.186
4-5890	4-6110	.186	232.6	-11.7	2.1	.696	103.7	.366	1.143	206.6	449.6	.724	1.563D	110.1	1.073	-1.1	10.7	144.8	.358
		12.27	8.33	4.40	3.93	7.33	3.93	15.37	1/1/2	105.8	3.2	40.2	.760	2.907	91.6	1.5	-1.9	55.3L	1.450

MARS ARRIVAL DATE = 2445900 (18 JUL 1984)

4-5470	4-5629.4	.115	181.1	44.9	4.7	.910	87.7	.169	.868	168.8	358.2	.721A	1.015	89.7	1.274	-8.0	-65.2	20.9	.195
4-5629.4	4-5900	.195	22.0	8.7	1.2	1.372	90.3	.357	1.122	356.9	562.8	.721	1.524	78.3	.693	-3.0	-32.8	241.5	.183
4-5900	4-6070	.310	205.7	2.2	5.2	.801	115.7	.438	1.370	236.5	433.3	.770	1.970D	110.4	1.143	-3.9	11.6	111.1	.408
		14.60	10.73	5.69	3.86	7.26	7.05	16.45	2/2/2	112.4	12.6	73.9	1.585	1.664	89.5	202.8	-61.8	90.3D	1.052
4-5480	4-5626.2	.203	128.6	-45.8	-11.3	.907	89.3	.169	.867	176.5	351.1	.721A	1.013	88.7	1.272	8.0	64.9	31.5	.196
4-5626.2	4-5900	.196	26.0	7.2	1.0	1.372	91.6	.358	1.123	354.0	563.0	.721	1.525	78.2	.693	-2.8	-31.9	241.3	.183
4-5900	4-6080	.276	209.5	-2.1	3.7	.774	113.5	.415	1.296	230.3	437.3	.759	1.834D	110.3	1.124	-2.5	13.7	119.9	.391
		14.75	10.89	4.74	3.86	7.26	6.15	16.08	1/2/2	112.8	8.6	57.7	1.560	2.071	92.7	25.9	3.9	92.9D	1.671
4-5490	4-5634.7	.211	127.0	-45.3	-11.8	.906	90.8	.170	.868	183.9	362.5	.721	1.015D	90.4	1.275	8.4	66.3	20.0	.205
4-5634.7	4-5900	.205	15.3	12.8	1.9	1.373	88.1	.358	1.121	7.2	202.6	.719D	1.523	78.4	.692	-3.7	-35.2	241.3	.185
4-5900	4-6090	.248	214.9	-5.4	3.0	.751	111.1	.397	1.239	224.1	441.2	.748	1.730D	110.3	1.107	-1.9	13.4	128.5	.380
		14.21	10.29	4.85	3.92	7.32	5.43	15.83	1/2/2	111.9	6.1	53.5	1.460	2.221	92.3	14.9	3.1	78.2L	1.763
4-5510	4-5645.5	.255	194.9	63.6	14.2	.907	94.1	.180	.872	199.4	376.3	.715	1.029D	92.5	1.279	-17.5	-79.6	348.9	.389
4-5645.5	4-5900	.390	359.2	-56.4	-13.8	1.372	83.4	.370	1.114	24.6	202.5	.702D	1.525	77.9	.687	11.9	12.4	250.8	.242
4-5900	4-6110	.205	229.6	-11.2	2.2	.711	106.1	.375	1.156	211.6	449.0	.723	1.590D	110.4	1.078	-1.3	10.0	145.0	.365
		15.24	9.95	5.57	5.29	8.67	4.38	15.53	1/1/2	107.8	3.8	23.4	.396	4.925	87.4	184.1	-21.8	49.8L	1.556
4-5520	4-5648.8	.186	169.9	54.7	8.4	.911	96.1	.190	.878	206.2	380.9	.712	1.045D	93.3	1.282	-11.5	-67.5	5.7	.277
4-5648.8	4-5900	.277	4.6	-19.4	-3.9	1.372	82.0	.376	1.110	29.9	202.5	.693D	1.527	77.6	.685	2.0	-14.7	244.2	.191
4-5900	4-6120	.191	239.6	-14.0	1.9	.694	103.4	.370	1.126	205.3	452.8	.709	1.543D	110.6	1.065	-1.2	7.5	153.0	.363
		12.62	8.56	4.50	4.06	7.45	4.06	15.48	1/1/2	113.7	4.1	48.1	.783	2.452	90.5	4.5	-1.8	58.4L	1.137
4-5560	4-5638.5	.332	146.4	15.8	-.1	1.023	109.5	.338	1.076	259.8	377.8	.712	1.440D	94.5	1.360	-3.4	-21.6	3.7	.221
4-5638.5	4-5900	.221	11.0	19.8	3.1	1.373	86.5	.361	1.119	13.5	202.6	.715D	1.523	78.3	.691	-5.0	-39.3	240.3	.192
4-5900	4-6160	.211	288.3	-19.5	1.1	.642	90.3	.398	1.044	180.5	467.8	.628	1.460D	113.5	1.021	-1.2	-4.6	183.6	.394
		15.60	11.53	7.00	4.07	7.46	4.53	16.13	1/2/2	111.3	9.6	42.0	1.232	2.790	80.4	271.9	-80.4	97.9D	2.203

MARS ARRIVAL DATE = 2445910 (28 JUL 1984)

4-5480	4-5632.9	.112	177.8	46.9	4.7	.907	89.2	.169	.867	175.9	361.3	.721	1.013	90.2	1.274	-8.0	-65.2	19.8	.193
4-5632.9	4-5910	.195	22.0	5.4	.8	1.374	89.5	.359	1.126	2.0	206.0	.721D	1.530	76.9	.702	-2.6	-30.9	241.8	.192
4-5910	4-6080	.316	211.2	-1.7	4.6	.800	115.9	.441	1.347	235.5	436.5	.752	1.941D	111.5	1.137	-3.5	11.4	119.8	.416
		14.93	10.86	3.66	4.08	7.47	7.20	16.62	2/2/2	118.5	10.6	70.8	1.576	1.731	89.0	203.6	-60.1	87.9L	1.151

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445910
28 JUL 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5490	4-5634.7	.207	127.2	-45.0	-11.5	.906	90.8	.170	.868	183.9	362.5	.721	1.015D	90.4	1.275	8.1	65.3	20.2	.198
4-5634.7	4-5910	.198	19.8	6.0	.9	1.374	88.8	.360	1.125	4.7	205.9	.720D	1.530	76.9	.702	-2.7	-31.3	241.6	.192
4-5910	4-6090	.263	215.5	-5.3	3.4	.773	113.5	.418	1.275	229.1	440.5	.742	1.607D	111.1	1.117	-2.4	12.1	128.5	.399
		15.19	11.10	4.79	4.09	7.48	6.31	16.24	1/2/2	118.4	7.4	59.3	1.541	2.022	90.2	19.8	4.9	65.6L	1.574
4-5490	4-5636.4	.115	172.9	49.3	4.9	.905	90.7	.170	.868	183.6	364.9	.720	1.015D	90.7	1.275	-8.2	-65.4	17.7	.201
4-5636.4	4-5910	.201	17.8	6.7	1.0	1.374	88.0	.361	1.124	7.4	205.9	.719D	1.530	76.9	.702	-2.8	-31.7	241.5	.193
4-5910	4-6090	.263	215.5	-5.3	3.4	.773	113.5	.418	1.275	229.1	440.5	.742	1.607D	111.1	1.117	-2.4	12.1	128.5	.399
		14.11	10.01	3.69	4.10	7.50	6.31	16.24	2/2/2	118.3	7.4	72.2	1.468	1.698	90.0	197.8	-60.7	82.5L	1.038
4-5500	4-5642.8	.229	126.9	-44.9	-12.8	.905	92.3	.174	.868	190.9	373.1	.717	1.020D	91.9	1.276	9.4	66.5	11.1	.227
4-5642.8	4-5910	.227	11.3	13.5	2.2	1.374	85.3	.366	1.121	17.6	205.7	.711D	1.531	76.7	.700	-4.1	-35.6	240.5	.200
4-5910	4-6100	.254	221.2	-8.3	2.8	.749	111.0	.400	1.219	222.9	444.4	.752	1.706D	111.0	1.100	-1.9	11.2	136.9	.386
		14.98	10.71	5.13	4.27	7.66	5.58	15.97	2/2/2	117.9	5.4	53.0	1.167	2.242	89.9	191.5	50.0	69.9L	1.448
4-5520	4-5649.3	.203	175.3	57.3	9.8	.911	96.1	.190	.878	207.9	381.4	.711	1.044D	93.4	1.282	-12.9	-70.3	3.0	.304
4-5649.3	4-5910	.304	6.3	-34.7	-7.3	1.373	82.4	.376	1.115	28.1	205.6	.696D	1.534	76.2	.696	5.4	-4.5	246.3	.211
4-5910	4-6120	.211	236.6	-13.6	2.0	.710	105.8	.378	1.139	210.4	452.1	.706	1.569D	111.0	1.070	-1.4	6.9	155.1	.370
		13.79	9.26	4.74	4.53	7.92	4.52	15.63	1/1/2	117.8	4.4	55.6	.651	3.275	88.5	188.5	-37.5	55.4L	1.481
4-5560	4-5642.3	.320	148.1	14.6	-.5	1.012	109.0	.327	1.052	257.1	381.2	.708	1.395D	95.2	1.353	-3.7	-22.6	4.6	.224
4-5642.3	4-5910	.224	11.7	12.4	2.0	1.374	85.5	.365	1.121	16.8	205.7	.712D	1.531	76.7	.700	-3.8	-35.0	240.7	.199
4-5910	4-6160	.201	283.7	-19.9	1.1	.652	93.3	.389	1.046	185.3	466.6	.639	1.452D	112.7	1.022	-1.3	-5.2	163.9	.383
		15.29	11.05	6.77	4.24	7.64	4.28	15.90	1/2/2	118.0	9.3	55.8	1.199	3.257	79.0	283.8	-77.8	96.2D	2.706

STOPOVER TIME = 0 DAYS — 1984 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS; MARS ARRIVAL DATE = 2445800 (9 APR 1984)

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445800 (9 APR 1984)																				
4-5470	4-5628.2	.140	186.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.3	23.1	.233
4-5628.2	4-5800	.233	15.0	-24.7	-4.0	1.394	89.5	.400	1.202	1.7	155.2	.722D	1.683A	104.7	.656	2.8	-17.3	275.2	.274
4-5800	4-6110	.227	257.9	-18.3	2.0	.614	81.9	.424	1.130	168.7	458.3	.651	1.608	114.1	1.068	.5	16.1	142.1	.426
		14.95	8.85	3.93	6.09	9.47	4.92	16.85	2/1/2	32.1	5.2	46.7	1.107	2.521	93.3	13.7	-4.9	82.8L	1.683
MARS ARRIVAL DATE = 2445810 (19 APR 1984)																				
4-5470	4-5628.2	.140	186.3	52.8	6.8	.910	87.8	.169	.868	169.0	356.5	.721A	1.015	89.5	1.273	-10.0	-71.3	23.1	.233
4-5628.2	4-5810	.233	12.3	-26.9	-4.7	1.386	89.2	.385	1.173	3.1	161.4	.721D	1.625A	100.9	.647	3.4	-14.9	273.9	.244
4-5810	4-6110	.209	258.3	-17.9	1.9	.619	84.6	.407	1.126	172.0	456.8	.668	1.585	113.0	1.067	.3	15.5	142.7	.407
		13.75	8.42	3.93	5.33	8.72	4.48	16.42	2/1/2	38.4	4.4	42.8	1.105	2.743	94.4	10.1	-3.2	79.2L	1.926
4-5480	4-5632.3	.135	185.5	54.3	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.1	20.3	.232
4-5632.3	4-5810	.232	7.4	-22.3	-3.6	1.387	87.4	.387	1.172	9.5	161.3	.716D	1.627A	101.1	.647	2.3	-17.9	274.1	.244
4-5810	4-6120	.248	264.6	-19.1	2.0	.611	80.4	.440	1.114	167.3	462.1	.623	1.604	115.4	1.061	.3	13.0	150.1	.445
		14.65	9.33	3.89	5.33	8.71	5.44	17.26	2/1/2	37.8	6.9	49.3	1.119	2.396	95.0	5.9	-6.4	71.1L	1.563
MARS ARRIVAL DATE = 2445820 (29 APR 1984)																				
4-5470	4-5628.0	.145	189.7	54.0	7.2	.910	87.8	.169	.868	169.0	356.2	.721A	1.015	89.5	1.273	-10.4	-72.3	23.5	.241
4-5628.0	4-5820	.241	10.6	-35.3	-5.8	1.381	89.0	.375	1.153	3.7	167.3	.721D	1.585A	97.4	.643	4.5	-10.9	271.7	.222
4-5820	4-6110	.193	257.8	-17.4	1.9	.625	87.2	.393	1.124	175.6	455.4	.683	1.565	112.1	1.066	.2	15.0	143.2	.391
		12.88	8.10	3.99	4.78	8.17	4.11	16.06	2/1/2	46.1	3.7	37.6	1.033	3.104	95.2	7.1	-1.9	76.4L	2.173
4-5480	4-5632.3	.136	185.6	54.4	6.6	.907	89.2	.169	.867	176.0	360.4	.721	1.013	90.1	1.274	-9.9	-71.2	20.3	.232
4-5632.3	4-5820	.232	5.6	-25.4	-4.2	1.381	87.2	.377	1.152	10.4	167.2	.718D	1.586A	97.5	.642	2.8	-15.9	272.0	.219
4-5820	4-6120	.227	265.3	-18.8	1.9	.617	83.3	.421	1.111	170.5	460.4	.643	1.578	114.1	1.059	.2	12.4	150.7	.422
		13.52	8.81	3.89	4.71	8.10	4.92	16.75	2/1/2	44.9	6.0	46.5	1.113	2.534	95.9	3.3	-5.3	68.5L	1.708
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5820	.240	1.7	-19.4	-3.3	1.381	85.4	.380	1.149	16.9	167.4	.712D	1.585A	97.5	.641	1.8	-18.6	271.8	.218
4-5820	4-6130	.271	271.4	-19.7	1.9	.609	78.6	.458	1.099	165.9	465.8	.595	1.602	116.7	1.052	.2	9.6	157.9	.464
		14.66	9.96	3.94	4.70	8.09	6.01	17.70	2/1/2	44.8	8.5	52.8	1.043	2.250	95.5	.5	-8.6	65.2L	1.305
MARS ARRIVAL DATE = 2445830 (9 MAY 1984)																				
4-5470	4-5627.4	.170	194.7	57.9	8.9	.910	87.8	.169	.868	169.1	355.3	.721A	1.015	89.3	1.273	-12.1	-76.1	25.5	.276
4-5627.4	4-5830	.276	10.0	-48.0	-8.6	1.377	89.1	.367	1.139	3.2	172.8	.721D	1.557A	94.1	.643	7.2	-1.7	266.5	.213
4-5830	4-6110	.180	256.3	-16.8	1.8	.633	89.6	.381	1.122	179.4	454.3	.695	1.550	111.3	1.066	-.0	14.4	143.6	.377
		12.67	8.09	4.28	4.58	7.97	3.80	15.78	2/1/2	56.0	3.1	28.8	.792	4.017	95.1	4.5	-1.5	74.8L	2.388
4-5480	4-5632.2	.139	186.5	55.0	6.8	.907	89.2	.169	.867	176.0	360.3	.721	1.013	90.0	1.274	-10.2	-71.8	20.3	.237
4-5632.2	4-5830	.237	4.5	-30.0	-5.0	1.377	87.1	.369	1.137	10.8	172.7	.718D	1.557A	94.2	.642	3.5	-12.6	269.1	.200
4-5830	4-6120	.209	265.1	-18.4	1.8	.623	86.0	.404	1.108	174.1	459.0	.660	1.555	113.1	1.058	-.0	11.7	151.3	.403
		12.66	8.40	3.93	4.26	7.65	4.47	16.33	2/1/2	53.0	5.3	42.6	1.070	2.751	96.2	1.4	-4.2	66.4L	1.874
4-5490	4-5636.2	.141	181.8	56.5	6.9	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.3	-71.5	16.4	.240
4-5636.2	4-5830	.240	.7	-21.7	-3.7	1.377	85.3	.373	1.134	17.4	172.9	.712D	1.557A	94.2	.640	2.2	-16.9	268.8	.198
4-5830	4-6130	.247	272.4	-19.4	1.8	.615	81.8	.435	1.095	169.0	464.0	.619	1.572	115.3	1.051	-.0	9.0	158.6	.438
		13.56	9.34	3.95	4.22	7.61	5.39	17.10	2/1/2	52.8	7.6	50.6	1.041	2.3[illegible]	95.9	359.1	-7.7	61.6L	1.394
4-5500	4-5640.2	.155	178.2	58.1	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.4	.256
4-5640.2	4-5830	.256	357.8	-16.1	-3.0	1.376	83.4	.378	1.130	24.3	173.2	.703D	1.556A	94.1	.637	1.4	-19.6	268.0	.198
4-5830	4-6140	.295	278.0	-20.1	1.8	.607	76.7	.478	1.084	164.5	469.4	.566	1.601	118.2	1.044	-.0	6.2	165.5	.484
		14.97	10.74	4.11	4.23	7.62	6.64	18.19	1/1/2	53.3	10.2	56.2	.915	2.122	94.9	357.3	-10.5	58.5L	1.026
MARS ARRIVAL DATE = 2445840 (19 MAY 1984)																				
4-5480	4-5632.0	.149	189.2	56.9	7.6	.907	89.2	.169	.867	176.1	360.1	.721	1.013	90.0	1.274	-10.9	-73.7	20.4	.252
4-5632.0	4-5840	.252	4.1	-30.0	-6.5	1.374	87.2	.363	1.128	10.7	177.9	.718D	1.538A	91.2	.644	5.0	-6.7	265.6	.190
4-5840	4-6120	.193	263.8	-17.9	1.8	.631	88.7	.390	1.106	177.9	457.7	.674	1.538	112.2	1.058	-.2	11.1	151.7	.388
		12.17	8.14	4.04	4.03	7.42	4.10	16.00	2/1/2	62.3	4.7	36.6	.948	3.188	96.0	359.7	-3.0	64.6L	2.073
4-5490	4-5636.2	.142	182.3	56.8	7.0	.905	90.7	.170	.868	183.6	364.7	.720	1.015	90.7	1.275	-10.4	-71.7	16.3	.242
4-5636.2	4-5840	.242	.4	-25.1	-4.3	1.374	85.3	.367	1.125	17.4	178.0	.712D	1.538A	91.1	.642	2.7	-14.3	265.2	.184
4-5840	4-6130	.225	272.4	-19.1	1.8	.621	84.7	.416	1.092	172.5	462.4	.638	1.546	114.0	1.050	-.2	8.3	159.2	.416
		12.71	8.82	3.96	3.89	7.29	4.86	16.61	2/1/2	61.5	6.9	47.5	1.024	2.482	96.1	358.3	-6.5	60.4L	1.518
4-5500	4-5640.2	.154	177.9	58.0	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.6	11.5	.255
4-5640.2	4-5840	.255	357.7	-17.7	-3.3	1.374	83.5	.373	1.120	24.3	178.3	.703D	1.537A	91.0	.640	1.6	-18.2	264.2	.183
4-5840	4-6140	.267	279.3	-19.8	1.7	.613	80.1	.451	1.080	167.5	467.4	.593	1.567	116.4	1.042	-.2	5.4	166.3	.454
		13.88	10.00	4.10	3.88	7.28	5.91	17.47	1/1/2	62.0	9.2	54.5	.925	2.185	95.1	357.0	-9.5	57.8L	1.096
MARS ARRIVAL DATE = 2445850 (29 MAY 1984)																				
4-5470	4-5618.9	.229	129.1	-47.2	-12.9	.908	87.8	.172	.866	169.2	341.6	.717A	1.015	87.3	1.271	9.8	67.6	40.3	.234
4-5618.9	4-5850	.235	22.0	34.4	5.6	1.371	92.7	.359	1.123	349.9	543.5	.720	1.526	88.0	.650	-6.8	-47.8	256.0	.187
4-5850	4-6110	.163	250.0	-15.3	1.9	.649	94.4	.365	1.122	187.8	452.4	.712	1.532D	110.3	1.066	-.3	13.2	144.2	.359
		12.54	8.57	5.13	3.97	7.37	3.43	15.40	1/2/2	73.5	2.4	34.9	1.093	3.338	100.0	14.6	-2.7	91.7D	2.556
4-5480	4-5631.4	.201	199.3	62.2	11.2	.907	89.2	.168	.867	176.2	359.2	.721A	1.013	89.9	1.274	-14.5	-80.5	20.4	.323
4-5631.4	4-5850	.323	3.3	-56.7	-11.4	1.373	87.5	.359	1.122	9.4	182.8	.719D	1.525	88.5	.649	9.8	8.3	262.0	.209
4-5850	4-6120	.181	261.4	-17.4	1.8	.639	91.2	.379	1.105	182.0	456.6	.686	1.525D	111.5	1.057	-.3	10.5	152.0	.378
		13.01	8.53	4.71	4.48	7.87	3.82	15.74	2/1/2	73.9	4.3	24.4	.576	4.735	93.7	357.9	-3.4	63.0L	2.152
4-5490	4-5636.1	.147	183.7	57.6	7.4	.905	90.7	.170	.868	183.6	364.7	.720	1.015D	90.7	1.275	-10.8	-72.6	16.1	.249
4-5636.1	4-5850	.249	.7	-30.5	-5.3	1.373	85.5	.363	1.119	17.0	182.8	.712D	1.525	88.4	.647	3.7	-10.0	261.3	.176
4-5850	4-6130	.207	271.3	-18.7	1.7	.629	87.6	.400	1.090	176.4	461.1	.654	1.526	113.0	1.049	-.4	7.7	159.6	.398
		12.16	8.44	4.01	3.72	7.12	4.42	16.22	2/1/2	71.0	6.3	42.9	.968	2.737	95.8	357.8	-5.0	59.3L	1.681
4-5500	4-5640.2	.154	177.8	57.9	7.5	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-10.9	-71.5	11.6	.254
4-5640.2	4-5850	.254	358.2	-20.1	-3.7	1.372	83.6	.369	1.114	23.8	183.0	.704D	1.525	88.2	.645	2.0	-16.2	260.1	.174
4-5850	4-6140	.242	279.6	-19.4	1.7	.620	83.4	.428	1.077	171.0	465.7	.616	1.538	115.0	1.041	-.4	4.7	166.9	.429
		13.04	9.37	4.09	3.66	7.06	5.28	16.90	1/1/2	71.3	8.4	52.0	.930	2.280	95.0	357.0	-8.1	57.4L	1.191
MARS ARRIVAL DATE = 2445860 (8 JUN 1984)																				
4-5470	4-5618.3	.213	130.4	-46.2	-11.8	.908	87.8	.172	.866	169.2	340.6	.717A	1.015	87.2	1.270	8.8	64.1	39.6	.219
4-5618.3	4-5860	.215	23.5	22.5	3.4	1.369	93.1	.358	1.119	348.3	548.1	.719	1.519	85.5	.656	-4.8	-41.5	251.5	.173
4-5860	4-6110	.161	245.6	-14.3	1.9	.659	96.8	.361	1.124	192.3	451.6	.718	1.530D	110.0	1.066	-.5	12.6	144.4	.354
		11.91	8.27	4.88	3.64	7.04	3.39	15.30	1/2/2	81.7	2.3	43.0	1.299	2.728	99.5	19.1	-2.7	94.0D	2.244
4-5490	4-5636.1	.164	188.4	60.0	8.6	.905	90.7	.170	.868	183.6	364.6	.720	1.015D	90.7	1.275	-12.0	-75.3	14.9	.274
4-5636.1	4-5860	.274	1.0	-41.2	-7.6	1.372	85.7	.361	1.116	16.2	187.3	.713D	1.518	85.9	.654	5.9	-1.5	257.8	.181
4-5860	4-6130	.192	269.1	-18.4	1.7	.637	90.3	.387	1.089	180.5	459.9	.667	1.511D	112.2	1.049	-.5	7.1	160.0	.384
		12.12	8.30	4.22	3.82	7.22	4.08	15.92	2/1/2	80.6	5.8	34.7	.802	3.352	94.6	357.3	-3.4	57.7L	1.887
4-5500	4-5640.2	.155	178.1	58.0	7.6	.905	92.4	.173	.869	191.6	369.7	.719	1.020D	91.4	1.276	-11.0	-71.7	11.5	.256
4-5640.2	4-5860	.256	359.1	-23.8	-4.3	1.371	85.9	.366	1.112	23.0	187.5	.705D	1.518	85.7	.652	2.6	-15.2	256.1	.170
4-5860	4-6140	.221	278.7	-19.2	1.6	.627	86.4	.410	1.075	174.8	464.3	.634	1.515	113.8	1.040	-.5	4.1	167.4	.408
		12.44	8.87	4.10	3.58	6.98	4.76	16.45	1/1/2	80.6	7.6	48.3	.920	2.442	94.7	357.5	-6.4	57.0L	1.327
MARS ARRIVAL DATE = 2445870 (18 JUN 1984)																				
4-5470	4-5618.1	.208	130.7	-45.9	-11.5	.908	87.8	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	63.0	39.5	.210
4-5618.1	4-5870	.210	25.4	15.6	2.4	1.369	93.4	.358	1.118	347.0	552.4	.718	1.517	83.3	.664	-3.8	-37.5	247.1	.169
4-5870	4-6110	.164	240.9	-13.3	1.9	.670	99.1	.360	1.128	196.9	450.9	.722	1.534D	109.9	1.068	-.7	12.0	144.6	.353
		11.81	8.26	4.82	3.55	6.95	3.45	15.26	1/2/2	90.7	2.5	48.4	1.365	2.438	98.2	22.9	-1.6	96.2D	1.963
4-5480	4-5626.7	.224	127.4	-47.2	-12.7	.907	89.3	.169	.867	176.5	351.9	.721A	1.013	88.8	1.273	9.4	69.3	31.4	.222
4-5626.7	4-5870	.222	15.5	32.8	5.0	1.371	90.0	.355	1.116	.0	191.7	.722D	1.515	83.7	.664	-6.6	-47.3	247.2	.181
4-5870	4-6120	.169	253.4	-16.1	1.8	.656	96.1	.367	1.107	190.8	454.9	.701	1.513D	110.7	1.058	-.7	9.4	152.5	.361
		12.44	8.61	5.05	3.83	7.23	3.55	15.43	1/2/2	89.0	3.8	37.6	1.220	3.103	97.7	10.5	-.8	79.8L	2.868

STOPOVER TIME = 0 DAYS — 1984 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS; MARS ARRIVAL DATE = 2445870, 18 JUN 1984

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-5500	4-5640.3	.161	180.0	59.0	8.0	.905	92.4	.173	.869	191.6	369.8	.719	1.020D	91.4	1.276	-11.4	-72.7	10.8	.265
4-5640.3	4-5870	.265	.2	-30.7	-5.7	1.371	84.2	.364	1.111	21.9	191.6	.706D	1.515	83.5	.660	3.9	-7.8	253.0	.173
4-5870	4-6140	.204	276.6	-19.0	1.6	.636	89.3	.395	1.074	179.0	463.1	.649	1.498	112.9	1.040	-.7	3.4	167.8	.392
		12.17	8.53	4.17	3.64	7.05	4.36	16.10	1/1/2	89.6	7.3	42.3	.859	2.772	94.0	358.1	-4.3	56.1L	1.522
4-5510	4-5644.5	.171	173.8	57.5	8.1	.907	94.2	.180	.873	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.4	7.4	.269
4-5644.5	4-5870	.269	359.0	-17.8	-3.5	1.370	82.3	.371	1.106	26.8	191.8	.696D	1.517	83.2	.657	1.7	-16.3	250.8	.170
4-5870	4-6150	.236	286.0	-19.3	1.4	.626	85.2	.420	1.060	173.3	467.3	.614	1.505	114.6	1.031	-.7	.3	175.1	.419
		13.00	9.42	4.29	3.58	6.98	5.12	16.68	1/1/2	90.6	9.2	52.9	.832	2.245	93.4	358.3	-7.1	56.6L	1.036
MARS ARRIVAL DATE = 2445880 (28 JUN 1984)																			
4-5470	4-5618.1	.208	130.8	-45.9	-11.5	.908	87.8	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	62.9	39.5	.210
4-5618.1	4-5880	.210	27.8	10.9	1.7	1.369	93.8	.359	1.118	345.5	556.4	.717	1.519	81.2	.673	-3.2	-34.4	243.5	.170
4-5880	4-6110	.172	236.4	-12.4	2.0	.683	101.4	.362	1.134	201.7	450.2	.724	1.545D	109.9	1.070	-.9	11.4	144.7	.354
		12.03	8.44	4.61	3.59	6.99	3.63	15.29	1/2/2	99.4	2.8	52.7	1.369	2.254	96.5	26.5	.0	98.6D	1.717
4-5480	4-5626.4	.208	128.3	-46.1	-11.6	.907	89.3	.169	.867	176.5	351.3	.721A	1.013	88.7	1.273	8.3	65.9	31.4	.202
4-5626.4	4-5880	.202	18.7	19.5	2.8	1.371	90.5	.355	1.119	358.0	555.7	.722	1.516	81.7	.673	-4.4	-39.4	244.7	.173
4-5880	4-6120	.170	248.5	-15.3	1.8	.669	98.6	.365	1.111	195.5	454.2	.706	1.516D	110.5	1.059	-.8	8.8	152.7	.358
		12.04	8.39	4.81	3.65	7.05	3.59	15.38	1/2/2	97.5	3.8	47.2	1.477	2.499	96.7	16.4	.4	84.5L	2.215
4-5500	4-5640.5	.193	168.9	62.3	10.3	.905	92.4	.173	.869	191.5	370.0	.719	1.020D	91.5	1.276	-13.7	-77.1	6.0	.311
4-5640.5	4-5880	.311	.3	-46.5	-9.5	1.371	84.5	.363	1.112	20.7	195.5	.708D	1.516	81.5	.669	7.7	4.4	251.9	.195
4-5880	4-6140	.192	273.2	-18.8	1.5	.645	92.1	.385	1.074	183.4	462.0	.661	1.487D	112.2	1.040	-.8	2.8	168.0	.380
		12.82	8.66	4.60	4.15	7.55	4.07	15.84	1/1/2	97.1	6.9	50.7	.623	3.782	91.7	356.5	-2.5	53.4L	1.734
4-5510	4-5644.5	.170	173.7	57.4	8.1	.907	94.2	.180	.873	199.9	375.2	.716	1.030D	92.3	1.279	-11.4	-70.3	7.4	.268
4-5644.5	4-5880	.268	.7	-22.0	-4.2	1.371	82.8	.370	1.108	27.2	195.6	.696D	1.517	81.2	.667	2.4	-13.1	248.3	.174
4-5880	4-6150	.216	284.1	-19.3	1.4	.635	88.3	.404	1.059	177.5	466.1	.631	1.486	113.6	1.030	-.9	-.3	175.5	.400
		12.60	8.93	4.29	3.67	7.07	4.64	16.28	1/1/2	98.9	8.7	48.5	.835	2.436	92.8	359.8	-4.8	56.6L	1.199
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																			
4-5470	4-5618.2	.210	130.6	-46.1	-11.6	.908	87.8	.172	.866	169.2	340.5	.717A	1.015	87.2	1.270	8.6	63.5	39.5	.212
4-5618.2	4-5890	.212	30.6	7.5	1.2	1.369	94.3	.361	1.119	343.9	560.1	.715	1.523	79.4	.682	-2.7	-32.0	241.1	.177
4-5890	4-6110	.186	232.6	-11.7	2.1	.696	103.7	.366	1.143	206.6	449.6	.724	1.563D	110.1	1.073	-1.1	10.7	144.8	.358
		12.51	8.78	4.84	3.73	7.13	3.93	15.37	1/2/2	107.4	3.2	56.4	1.337	2.117	94.7	30.2	2.1	101.2D	1.492
4-5480	4-5626.2	.203	128.6	-45.8	-11.3	.907	89.3	.169	.867	176.5	351.1	.721A	1.013	88.7	1.272	8.0	64.9	31.5	.197
4-5626.2	4-5890	.197	22.1	12.1	1.7	1.371	91.0	.356	1.120	356.1	559.5	.721	1.519	79.9	.683	-3.4	-34.9	242.5	.175
4-5890	4-6120	.178	243.7	-14.6	1.9	.681	101.0	.366	1.117	200.4	453.5	.709	1.525D	110.5	1.062	-1.0	8.2	152.8	.359
		12.20	8.50	4.74	3.70	7.10	3.75	15.39	1/2/2	105.6	3.9	53.2	1.556	2.232	94.8	21.3	2.0	88.8L	1.917
4-5490	4-5634.8	.225	126.5	-46.3	-12.7	.906	90.8	.170	.868	183.9	362.6	.721	1.015D	90.4	1.275	9.3	69.1	19.5	.221
4-5634.8	4-5890	.221	11.2	26.1	4.1	1.372	87.5	.358	1.118	9.5	199.1	.718D	1.518	80.0	.682	-5.8	-43.1	241.2	.187
4-5890	4-6130	.177	256.0	-17.0	1.7	.667	98.0	.369	1.095	194.2	457.3	.691	1.499D	111.0	1.051	-1.0	5.3	160.6	.363
		12.76	8.80	5.07	3.95	7.35	3.74	15.49	1/2/2	104.2	5.2	45.3	1.235	2.709	93.9	9.4	1.1	71.7L	2.112
4-5510	4-5644.6	.179	176.5	58.7	8.8	.907	94.2	.180	.873	199.8	375.4	.716	1.030D	92.3	1.279	-12.1	-71.7	8.1	.281
4-5644.6	4-5890	.281	2.4	-31.5	-6.2	1.371	83.2	.369	1.110	25.5	199.2	.701D	1.520	79.5	.677	4.3	-6.4	247.4	.186
4-5890	4-6150	.201	280.8	-19.3	1.3	.644	91.2	.391	1.059	181.9	465.0	.644	1.473D	112.8	1.030	-1.0	-.9	175.8	.387
		12.63	8.69	4.40	3.93	7.33	4.29	15.98	1/1/2	105.8	8.3	40.2	.760	2.907	91.6	1.5	-1.9	55.3L	1.450
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																			
4-5470	4-5618.4	.214	130.2	-46.3	-11.9	.908	87.8	.172	.866	169.2	340.7	.717A	1.015	87.2	1.270	8.9	64.4	39.7	.217
4-5618.4	4-5900	.217	33.9	4.8	.8	1.370	94.8	.364	1.122	342.0	563.6	.713	1.530	77.7	.692	-2.4	-30.1	239.8	.186
4-5900	4-6110	.205	229.8	-11.2	2.2	.711	106.1	.375	1.156	211.6	449.0	.723	1.590D	110.4	1.078	-1.3	10.0	145.0	.365
		13.23	9.29	4.90	3.94	7.34	4.38	15.53	1/2/2	114.6	3.8	59.8	1.280	2.006	92.9	33.9	4.5	104.0D	1.287
4-5470	4-5629.4	.115	181.1	44.9	4.7	.910	87.7	.169	.868	168.8	358.2	.721A	1.015	89.7	1.274	-8.0	-65.2	20.9	.195
4-5629.4	4-5900	.195	22.0	8.7	1.2	1.372	90.3	.357	1.122	358.9	562.8	.721	1.524	78.3	.693	-3.0	-32.8	241.5	.183
4-5900	4-6110	.205	229.8	-11.2	2.2	.711	106.1	.375	1.156	211.6	449.0	.723	1.590D	110.4	1.078	-1.3	10.0	145.0	.365
		11.93	8.07	3.69	3.86	7.26	4.38	15.53	2/2/2	112.4	3.8	73.9	1.585	1.664	89.5	202.8	-61.8	90.3D	1.052
4-5480	4-5626.2	.203	128.6	-45.8	-11.3	.907	89.3	.169	.867	176.5	351.1	.721A	1.013	88.7	1.272	8.0	64.9	31.5	.196
4-5626.2	4-5900	.196	26.0	7.2	1.0	1.372	91.6	.358	1.123	354.0	563.0	.721	1.525	78.2	.693	-2.8	-31.9	241.5	.183
4-5900	4-6120	.191	239.6	-14.0	1.9	.694	103.4	.370	1.126	205.3	452.8	.709	1.543D	110.6	1.065	-1.2	7.5	153.0	.363
		12.66	8.80	4.74	3.86	7.26	4.06	15.48	1/2/2	112.8	4.1	57.7	1.560	2.071	92.7	25.9	3.9	92.9D	1.671
4-5490	4-5634.7	.211	127.0	-45.3	-11.8	.906	90.8	.170	.868	183.9	362.5	.721	1.015D	90.4	1.275	8.4	66.3	20.0	.205
4-5634.7	4-5900	.205	15.3	12.8	1.9	1.373	88.1	.358	1.121	7.2	202.6	.719D	1.523	78.4	.692	-3.7	-35.2	241.3	.185
4-5900	4-6130	.184	251.0	-16.5	1.7	.679	100.5	.370	1.100	199.1	456.6	.694	1.507D	111.0	1.053	-1.2	4.7	160.8	.364
		12.66	8.74	4.85	3.92	7.32	3.89	15.49	1/2/2	111.9	5.1	53.5	1.460	2.221	92.5	14.9	3.1	78.2L	1.783
4-5500	4-5642.4	.293	125.9	-48.5	-17.0	.905	92.3	.174	.869	191.0	372.6	.717	1.020D	91.9	1.276	13.6	76.1	3.7	.309
4-5642.4	4-5900	.309	5.1	47.0	9.5	1.373	84.8	.365	1.116	19.5	202.5	.709D	1.524	78.1	.689	-11.4	-55.6	235.6	.236
4-5900	4-6140	.184	263.5	-18.4	1.5	.666	97.4	.374	1.079	192.8	460.5	.676	1.482D	111.5	1.042	-1.1	1.7	168.5	.366
		15.27	10.14	6.25	5.13	8.52	5.89	15.59	2/2/2	107.6	6.5	29.0	.628	3.989	89.5	185.9	28.5	57.9L	1.879
4-5510	4-5645.5	.255	194.9	63.6	14.2	.907	94.1	.180	.872	199.4	376.3	.715	1.029D	92.5	1.279	-17.5	-79.8	348.9	.389
4-5645.5	4-5900	.390	359.2	-56.4	-13.8	1.372	83.4	.370	1.114	24.6	202.5	.702D	1.525	77.9	.687	11.9	12.4	250.8	.242
4-5900	4-6150	.193	276.3	-19.4	1.3	.654	94.1	.383	1.060	186.6	464.0	.654	1.466D	112.3	1.031	-1.1	-1.4	176.1	.378
		14.94	9.66	5.57	5.29	6.67	4.09	15.79	1/1/2	107.8	8.0	23.4	.398	4.925	87.4	184.1	-21.8	49.8L	1.556
4-5520	4-5648.8	.186	169.9	54.7	8.4	.911	96.1	.190	.878	208.2	380.9	.712	1.045D	93.3	1.282	-11.5	-67.5	5.7	.277
4-5648.8	4-5900	.277	4.6	-19.4	-3.9	1.372	82.0	.376	1.110	29.9	202.5	.693D	1.527	77.8	.685	2.0	-14.7	244.2	.191
4-5900	4-6180	.211	288.3	-19.5	1.1	.642	90.3	.398	1.044	180.5	467.8	.628	1.460D	113.3	1.021	-1.2	-4.8	183.6	.394
		13.09	9.03	4.50	4.06	7.45	4.53	16.13	1/1/2	113.7	9.6	46.1	.783	2.452	90.5	4.5	-1.6	58.4L	1.137
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																			
4-5470	4-5618.6	.220	129.8	-46.7	-12.3	.908	87.8	.172	.866	169.2	341.1	.717A	1.015	87.3	1.270	9.2	65.7	39.9	.223
4-5618.6	4-5910	.224	37.5	2.6	.4	1.371	95.4	.368	1.125	339.9	566.9	.711	1.539	76.1	.702	-2.2	-28.8	239.6	.198
4-5910	4-6110	.230	228.1	-11.0	2.3	.728	108.5	.387	1.174	216.6	448.3	.720	1.629D	110.9	1.084	-1.6	9.3	145.1	.377
		14.19	9.97	4.99	4.22	7.61	4.98	15.77	1/2/2	120.7	4.4	63.1	1.204	1.910	91.1	37.6	7.3	106.8D	1.096
4-5470	4-5629.4	.115	181.1	44.9	4.7	.910	87.7	.169	.868	168.8	358.2	.721A	1.015	89.7	1.274	-8.0	-65.2	20.9	.195
4-5629.4	4-5910	.195	26.6	4.4	.6	1.374	90.9	.360	1.126	356.4	566.1	.721	1.531	76.8	.703	-2.5	-30.3	241.4	.192
4-5910	4-6110	.230	228.1	-11.0	2.3	.728	108.5	.387	1.174	216.6	448.3	.720	1.629D	110.9	1.084	-1.6	9.3	145.1	.377
		12.75	8.67	3.69	4.08	7.47	4.98	15.77	2/2/2	118.8	4.4	69.7	1.584	1.749	87.5	210.7	-59.5	94.3D	1.187
4-5480	4-5626.3	.205	128.5	-45.9	-11.4	.907	89.3	.169	.867	176.5	351.2	.721A	1.013	88.7	1.272	8.2	65.3	31.4	.199
4-5626.3	4-5910	.199	30.4	3.8	.5	1.373	92.2	.361	1.126	351.6	566.3	.720	1.533	76.7	.703	-2.4	-29.9	241.0	.193
4-5910	4-6120	.211	236.6	-13.6	2.0	.710	105.8	.378	1.139	210.4	452.1	.708	1.569D	111.0	1.070	-1.4	6.9	153.1	.370
		13.36	9.28	4.77	4.10	7.49	4.52	15.63	1/2/2	119.2	4.4	61.5	1.523	1.955	90.5	30.4	6.1	97.1D	1.453
4-5480	4-5632.9	.112	177.8	46.9	4.7	.907	89.2	.169	.867	175.9	361.3	.721	1.013	90.2	1.274	-8.0	-65.2	19.8	.195
4-5632.9	4-5910	.195	22.0	5.4	.8	1.374	89.5	.359	1.126	2.0	206.0	.721D	1.530	76.9	.702	-2.6	-30.9	241.6	.192
4-5910	4-6120	.211	236.6	-13.6	2.0	.710	105.8	.378	1.139	210.4	452.1	.708	1.569D	111.0	1.070	-1.4	6.9	153.1	.370
		12.25	8.18	3.66	4.08	7.47	4.52	15.63	2/2/2	118.5	4.4	70.6	1.576	1.731	89.0	203.6	-60.1	87.9L	1.151
4-5490	4-5634.7	.207	127.2	-45.0	-11.5	.906	90.8	.170	.868	183.9	362.5	.721	1.015D	90.4	1.275	8.1	65.3	20.2	.198
4-5634.7	4-5910	.198	19.6	8.0	.9	1.374	88.8	.360	1.125	4.7	205.9	.720D	1.530	76.9	.702	-2.7	-31.3	241.6	.192
4-5910	4-6130	.197	246.7	-16.1	1.8	.693	103.0	.374	1.109	204.1	455.9	.695	1.523D	111.1	1.056	-1.3	4.2	161.0	.367
		13.07	8.98	4.79	4.09	7.48	4.19	15.57	1/2/2	118.4	5.1	59.3	1.541	2.022	90.2	19.8	4.9	83.6L	1.574
4-5490	4-5636.4	.115	172.9	49.3	4.9	.905	90.7	.170	.868	183.6	364.9	.720	1.015D	90.7	1.275	-8.2	-65.4	17.7	.201
4-5636.4	4-5910	.201	17.8	6.7	1.0	1.374	88.0	.361	1.124	7.4	205.9	.719D	1.530	76.9	.702	-2.8	-31.7	241.5	.193
4-5910	4-6130	.197	246.7	-16.1	1.8	.693	103.0	.374	1.109	204.1	455.9	.695	1.523D	111.1	1.056	-1.3	4.2	161.0	.367
		11.99	7.88	3.69	4.10	7.50	4.19	15.57	2/2/2	118.3	5.1	72.2	1.488	1.698	90.0	197.8	-60.7	82.5L	1.038
4-5500	4-5642.8	.229	126.9	-44.9	-12.8	.905	92.3	.174	.868	190.9	373.1	.717	1.020D	91.9	1.276	9.4	66.5	11.1	.227
4-5642.8	4-5910	.227	11.3	13.5	2.2	1.374	85.5	.366	1.121	17.6	205.7	.711D	1.531	76.7	.700	-4.1	-35.6	240.5	.200
4-5910	4-6140	.190	258.3	-18.1	1.5	.678	100.1	.374	1.084	197.8	459.8	.679	1.489D	111.4	1.044	-1.3	1.2	168.7	.368
		13.42	9.15	5.13	4.27	7.66	4.03	15.58	2/2/2	117.9	6.4	53.0	1.167	2.242	89.9	181.8	50.0	69.9L	1.446

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2445910
28 JUL 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5520	4-5849.3	.203	175.3	37.3	9.8	.911	96.1	.190	.878	207.9	381.4	.711	1.044D	93.4	1.282	-12.9	-70.3	5.0	.304
4-5849.3	4-5910	.304	6.3	-34.7	-7.3	1.373	82.4	.376	1.115	28.1	205.6	.696D	1.534	76.2	.696	5.4	-4.8	246.3	.211
4-5910	4-6160	.201	283.7	-19.9	1.1	.652	93.3	.369	1.046	185.3	466.8	.639	1.452D	112.7	1.022	-1.3	-5.2	183.9	.383
		13.56	9.02	4.74	4.53	7.92	4.28	15.90	1/1/2	117.8	9.3	35.6	.651	3.275	88.5	188.8	-37.5	55.4L	1.481

STOPOVER TIME = 0 DAYS | 1984 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2445850
29 MAY 1984

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445850 (29 MAY 1984)																			
4-5470	4-5618.9	.229	129.1	-47.2	-12.9	.908	87.8	.172	.866	169.2	341.6	.717A	1.015	87.3	1.271	9.6	67.6	40.3	.234
4-5618.9	4-5850	.235	22.0	34.4	5.6	1.371	92.7	.359	1.123	349.9	543.5	.720	1.526	88.0	.650	-6.8	-47.8	256.0	.187
4-5850	4-6150	.288	286.2	-19.8	1.6	.612	78.4	.468	1.065	166.1	470.7	.567	1.563	117.7	1.033	-.4	1.8	175.9	.471
		15.57	11.60	5.13	3.97	7.37	6.46	17.88	1/2/2	73.5	10.8	34.9	1.093	3.338	100.0	14.6	-2.7	91.7D	2.556
MARS ARRIVAL DATE = 2445860 (8 JUN 1984)																			
4-5470	4-5618.3	.213	130.4	-46.2	-11.8	.908	87.8	.172	.866	169.2	340.6	.717A	1.015	87.2	1.270	8.8	64.1	39.6	.215
4-5618.3	4-5860	.215	23.5	22.5	3.4	1.369	93.1	.358	1.119	348.3	548.1	.719	1.519	85.5	.656	-4.8	-41.5	251.5	.173
4-5860	4-6150	.260	286.7	-19.5	1.5	.619	81.9	.442	1.062	169.5	468.9	.593	1.531	116.0	1.032	-.6	1.0	174.6	.442
		14.26	10.61	4.88	3.64	7.04	5.73	17.21	1/2/2	81.7	9.9	43.0	1.299	2.728	99.5	19.1	-2.7	94.0D	2.244
MARS ARRIVAL DATE = 2445870 (18 JUN 1984)																			
4-5470	4-5618.1	.208	130.7	-45.9	-11.5	.908	87.8	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	63.0	39.5	.210
4-5618.1	4-5870	.210	25.4	15.6	2.4	1.369	93.4	.358	1.118	347.0	552.4	.718	1.517	83.3	.664	-5.8	-37.5	247.1	.169
4-5870	4-6150	.236	286.0	-19.3	1.4	.626	85.2	.420	1.060	173.3	467.3	.614	1.505	114.6	1.031	-.7	.3	175.1	.419
		13.49	9.94	4.82	3.55	6.95	5.12	16.68	1/2/2	90.7	9.2	48.4	1.365	2.438	98.2	22.9	-1.6	96.2D	1.983
4-5480	4-5626.7	.224	127.4	-47.2	-12.7	.907	89.3	.169	.867	176.5	351.9	.721A	1.013	88.6	1.273	9.4	69.3	31.4	.222
4-5626.7	4-5870	.222	15.5	32.6	5.0	1.371	90.0	.355	1.118	.0	191.7	.722D	1.515	83.7	.664	-6.6	-47.3	247.2	.181
4-5870	4-6160	.279	293.7	-19.3	1.3	.617	80.3	.456	1.048	168.0	471.9	.570	1.525	117.0	1.023	-.8	-2.7	182.2	.457
		15.10	11.26	5.05	3.85	7.23	6.21	17.53	1/2/2	89.0	11.3	37.6	1.220	3.103	97.7	10.5	-.5	79.5L	2.565
MARS ARRIVAL DATE = 2445880 (28 JUN 1984)																			
4-5470	4-5618.1	.208	130.8	-45.9	-11.5	.908	87.8	.172	.866	169.2	340.3	.717A	1.015	87.1	1.270	8.5	62.9	39.5	.210
4-5618.1	4-5880	.210	27.8	10.9	1.7	1.369	93.8	.359	1.118	345.5	556.4	.717	1.519	81.2	.673	-5.2	-34.4	243.5	.170
4-5880	4-6150	.216	284.1	-19.3	1.4	.635	88.3	.404	1.059	177.5	466.1	.631	1.486	113.6	1.030	-.9	-.3	175.5	.400
		13.05	9.45	4.81	3.59	6.99	4.64	16.28	1/2/2	99.4	8.7	52.7	1.369	2.254	96.5	26.5	.0	98.6D	1.717
4-5480	4-5626.4	.208	128.3	-46.1	-11.6	.907	89.3	.169	.867	176.5	351.3	.721A	1.013	88.7	1.273	8.5	65.9	31.4	.202
4-5626.4	4-5880	.202	16.7	19.5	2.8	1.371	90.5	.355	1.119	358.0	555.7	.722	1.516	81.7	.673	-4.4	-39.4	244.7	.173
4-5880	4-6160	.251	293.3	-19.2	1.2	.625	83.9	.431	1.045	171.8	470.3	.594	1.497	115.4	1.022	-.9	-5.4	182.8	.430
		13.96	10.51	4.81	3.65	7.05	5.50	16.92	1/2/2	97.5	10.6	47.2	1.477	2.499	96.7	16.4	.4	84.5L	2.215
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																			
4-5470	4-5618.2	.210	130.6	-46.1	-11.6	.908	87.8	.172	.866	169.2	340.5	.717A	1.015	87.2	1.270	8.6	63.5	39.5	.212
4-5618.2	4-5890	.212	30.6	7.5	1.2	1.369	94.3	.361	1.119	343.9	560.1	.715	1.523	79.4	.682	-2.7	-32.0	241.1	.177
4-5890	4-6150	.201	280.8	-19.3	1.3	.644	91.2	.391	1.059	181.9	465.0	.644	1.473D	112.8	1.030	-1.0	-.9	175.8	.367
		12.37	9.14	4.84	3.73	7.15	4.29	15.98	1/2/2	107.4	8.3	56.4	1.357	2.117	94.7	30.2	2.1	101.2D	1.492
4-5480	4-5626.2	.203	128.6	-45.8	-11.3	.907	89.3	.169	.867	176.5	351.1	.721A	1.013	88.7	1.272	8.0	64.9	31.5	.197
4-5626.2	4-5890	.197	22.1	12.1	1.7	1.371	91.0	.356	1.120	356.1	559.5	.721	1.519	79.9	.683	-3.4	-34.9	242.5	.175
4-5890	4-6160	.228	291.5	-19.3	1.1	.633	87.2	.412	1.044	176.0	468.9	.614	1.475	114.2	1.021	-1.1	-4.1	183.2	.409
		13.58	9.68	4.74	3.70	7.10	4.94	16.46	1/2/2	105.6	10.0	53.2	1.556	2.232	94.8	21.3	2.0	88.8L	1.917
4-5490	4-5634.8	.225	126.5	-46.3	-12.7	.906	90.8	.170	.868	183.9	362.6	.721	1.015D	90.4	1.275	9.3	69.1	19.5	.221
4-5634.8	4-5890	.221	11.2	26.1	4.1	1.372	87.5	.358	1.118	9.5	199.1	.718D	1.518	80.0	.682	-5.8	-43.1	241.2	.187
4-5890	4-6170	.266	300.4	-18.8	.9	.624	82.5	.443	1.032	170.5	473.1	.574	1.489	116.3	1.013	-1.2	-7.1	190.5	.441
		14.92	10.96	5.07	3.95	7.35	5.90	17.19	1/2/2	104.2	11.9	43.3	1.235	2.709	93.9	9.4	1.1	71.7L	2.112
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																			
4-5470	4-5618.4	.214	130.2	-46.3	-11.9	.908	87.8	.172	.866	169.2	340.7	.717A	1.015	87.2	1.270	8.9	64.4	39.7	.217
4-5618.4	4-5900	.217	33.9	4.8	.8	1.370	94.8	.364	1.122	342.0	563.6	.715	1.530	77.7	.692	-2.4	-30.1	239.8	.186
4-5900	4-6150	.193	276.3	-19.4	1.3	.654	94.1	.383	1.060	186.6	464.0	.654	1.466D	112.3	1.031	-1.1	-1.4	176.1	.378
		12.94	9.00	4.90	3.94	7.34	4.09	15.79	1/2/2	114.6	8.0	59.8	1.260	2.006	92.9	35.9	4.5	104.0D	1.287
4-5470	4-5629.4	.115	181.1	44.9	4.7	.910	87.7	.169	.868	168.8	358.2	.721A	1.015	89.7	1.274	-8.0	-65.2	20.9	.195
4-5629.4	4-5900	.195	22.0	8.7	1.2	1.372	90.3	.357	1.122	358.9	562.8	.721	1.524	78.3	.693	-3.0	-32.8	241.5	.183
4-5900	4-6150	.193	276.3	-19.4	1.3	.654	94.1	.383	1.060	186.6	464.0	.654	1.466D	112.3	1.031	-1.1	-1.4	176.1	.378
		11.64	7.78	3.69	3.86	7.26	4.09	15.79	2/2/2	112.4	8.0	73.9	1.585	1.664	89.5	202.8	-61.8	90.3D	1.052
4-5480	4-5626.2	.203	126.6	-45.8	-11.3	.907	89.3	.169	.867	176.5	351.1	.721A	1.013	88.7	1.272	8.0	64.9	31.5	.196
4-5626.2	4-5900	.196	26.0	7.2	1.0	1.372	91.6	.358	1.123	354.0	563.0	.721	1.525	78.2	.693	-2.8	-31.9	241.3	.183
4-5900	4-6160	.211	288.3	-19.5	1.1	.642	90.3	.398	1.044	180.5	467.8	.628	1.460D	113.3	1.021	-1.2	-4.6	183.6	.394
		13.13	9.27	4.74	3.86	7.26	4.53	16.13	1/2/2	112.8	9.6	57.7	1.560	2.071	92.7	25.9	3.9	92.9D	1.671
4-5490	4-5634.7	.211	127.0	-45.3	-11.8	.906	90.8	.170	.868	183.9	362.5	.721	1.015D	90.4	1.275	8.4	66.3	20.0	.203
4-5634.7	4-5900	.203	15.3	12.8	1.9	1.373	88.1	.358	1.121	7.2	202.6	.719D	1.523	78.4	.692	-3.7	-35.2	241.3	.185
4-5900	4-6170	.241	298.8	-18.9	.9	.632	86.0	.422	1.030	174.5	471.6	.596	1.465	114.9	1.012	-1.3	-7.8	191.0	.418
		14.02	10.10	4.85	3.92	7.32	5.24	16.66	1/2/2	111.9	11.3	53.5	1.460	2.221	92.3	14.9	3.1	78.2L	1.765
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																			
4-5470	4-5618.6	.220	129.8	-46.7	-12.3	.908	87.8	.172	.866	169.2	341.1	.717A	1.015	87.3	1.270	9.2	65.7	39.9	.223
4-5618.6	4-5910	.224	37.5	2.6	.4	1.371	95.4	.368	1.125	339.9	566.9	.711	1.539	76.1	.702	-2.2	-28.8	239.6	.198
4-5910	4-6150	.191	270.9	-19.5	1.3	.664	96.9	.378	1.063	191.5	463.2	.661	1.466D	112.0	1.033	-1.3	-2.0	176.3	.373
		13.26	9.04	4.99	4.22	7.61	4.05	15.69	1/2/2	120.7	7.8	63.1	1.204	1.910	91.1	37.8	7.3	106.8D	1.096
4-5470	4-5629.4	.115	181.1	44.9	4.7	.910	87.7	.169	.868	168.8	358.2	.721A	1.015	89.7	1.274	-8.0	-65.2	20.9	.195
4-5629.4	4-5910	.195	26.6	4.4	.6	1.374	90.9	.360	1.126	356.4	566.1	.721	1.531	76.8	.703	-2.5	-30.3	241.4	.192
4-5910	4-6150	.191	270.9	-19.5	1.3	.664	96.9	.378	1.063	191.5	463.2	.661	1.466D	112.0	1.033	-1.3	-2.0	176.3	.373
		11.81	7.74	3.69	4.08	7.47	4.05	15.69	2/2/2	118.8	7.8	69.7	1.584	1.749	87.5	210.7	-59.5	94.3D	1.187
4-5480	4-5626.3	.205	128.5	-45.9	-11.4	.907	89.3	.169	.867	176.5	351.2	.721A	1.013	88.7	1.272	8.2	65.3	31.4	.199
4-5626.3	4-5910	.199	30.4	3.8	.9	1.373	92.2	.361	1.126	351.6	566.3	.720	1.533	76.7	.703	-2.4	-29.9	241.0	.193
4-5910	4-6160	.201	283.7	-19.9	1.1	.652	93.3	.389	1.046	185.3	466.8	.639	1.452D	112.7	1.022	-1.3	-5.2	183.9	.383
		13.15	9.05	4.77	4.10	7.49	4.28	15.90	1/2/2	119.2	9.3	61.5	1.523	1.955	90.5	30.4	6.1	97.1D	1.453
4-5480	4-5632.9	.112	177.8	46.9	4.7	.907	89.2	.169	.867	175.9	361.3	.721	1.013	90.2	1.274	-8.0	-65.2	19.8	.195
4-5632.9	4-5910	.195	22.0	5.4	.8	1.374	89.5	.359	1.126	2.0	206.0	.721D	1.530	76.9	.702	-2.6	-30.9	241.6	.192
4-5910	4-6160	.201	283.7	-19.9	1.1	.652	93.3	.389	1.046	185.3	466.8	.639	1.452D	112.7	1.022	-1.3	-5.2	183.9	.383
		12.02	7.94	3.66	4.08	7.47	4.28	15.90	2/2/2	118.5	9.3	70.6	1.576	1.731	89.0	203.6	-60.1	87.9L	1.151
4-5490	4-5634.7	.207	127.2	-45.0	-11.5	.906	90.8	.170	.868	183.9	362.5	.721	1.015D	90.4	1.275	8.1	65.3	20.2	.198
4-5634.7	4-5910	.198	19.8	6.0	.9	1.374	88.8	.360	1.125	4.7	205.9	.720D	1.530	76.9	.702	-2.7	-31.3	241.6	.196
4-5910	4-6170	.221	295.6	-19.4	.8	.641	89.4	.406	1.030	179.1	470.5	.612	1.448	113.9	1.012	-1.4	-8.3	191.4	.401
		13.64	9.56	4.79	4.09	7.46	4.77	16.28	1/2/2	118.4	10.9	59.3	1.541	2.022	90.2	19.8	4.9	83.6L	1.574
4-5490	4-5636.4	.115	178.9	49.3	4.9	.905	90.7	.170	.868	183.8	364.9	.720	1.015D	90.7	1.275	-8.2	-65.4	17.7	.201
4-5636.4	4-5910	.201	17.8	6.7	1.0	1.374	88.0	.361	1.124	7.4	205.9	.719D	1.530	76.9	.702	-2.8	-31.7	241.5	.193
4-5910	4-6170	.221	295.6	-19.4	.8	.641	89.4	.406	1.030	179.1	470.5	.612	1.448	113.9	1.012	-1.4	-8.3	191.4	.401
		12.56	8.46	3.69	4.10	7.50	4.77	16.28	2/2/2	118.5	10.9	72.2	1.486	1.698	90.0	197.9	-60.7	82.5L	1.038
4-5500	4-5642.8	.229	126.9	-44.9	-12.8	.905	92.5	.174	.868	190.9	373.1	.717	1.020D	91.9	1.276	9.4	66.5	11.1	.227
4-5642.8	4-5910	.227	11.3	13.5	2.2	1.374	85.5	.366	1.121	17.6	205.7	.711D	1.531	76.7	.700	-4.1	-35.6	240.5	.200
4-5910	4-6180	.253	306.0	-18.3	.6	.631	84.8	.432	1.017	173.1	474.2	.578	1.456	115.6	1.003	-1.5	-11.4	198.9	.427
		14.96	10.69	5.13	4.27	7.66	5.56	16.87	2/2/2	117.9	12.6	53.0	1.187	2.242	89.9	191.5	50.0	69.9L	1.448

1984

INBOUND SWINGBY

4.7

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2445900
18 JUL 1984

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH APHEL KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																				
4-5730	4-5900	.112	222.0	-34.1	-1.7	1.121	90.6	.237	1.290	356.8	494.4	.985	1.596A	101.5	.772	2.7	-1.1	336.1	.243
4-5900	4-6099.9	.174	277.0	-20.3	.9	.672	94.0	.347	1.089	187.6	377.6	.710	1.467D	94.6	1.365	-2.8	-17.8	23.6	.220
4-6099.9	4-6170	.220	79.5	-17.8	-2.8	1.380	93.6	.372	1.138	346.6	453.6	.714	1.562A	110.8	1.056	-1.3	-12.0	199.5	.360
		12.63	7.35	3.66	5.30	8.68	3.67	15.42	1/2/1	22.7	3.8	53.0	1.243	2.241	20.0	321.5	-.0	175.3D	1.543
4-5730	4-5900	.112	222.0	-34.1	-1.7	1.121	90.6	.237	1.290	356.8	494.4	.985	1.596A	101.5	.772	2.7	-1.1	336.1	.243
4-5900	4-6100.1	.174	277.1	-20.6	.8	.672	94.0	.348	1.088	187.6	376.0	.710	1.467D	94.6	1.365	-2.8	-17.3	23.5	.220
4-6100.1	4-6170	.220	79.5	-17.8	-2.8	1.380	93.6	.375	1.139	346.8	453.4	.714	1.565A	110.9	1.057	-1.3	-12.0	199.6	.361
		12.63	7.35	3.66	5.30	8.68	3.67	15.44	1/2/1	22.7	3.8	53.1	1.242	2.236	19.7	321.7	.5	175.1D	1.535
4-5740	4-5900	.111	216.7	-30.0	-1.4	1.121	89.0	.240	1.297	5.4	132.8	.986D	1.607A	101.9	.774	2.3	-2.0	337.4	.247
4-5900	4-6086.4	.178	272.6	-40.4	-4.3	.677	95.1	.343	1.096	190.0	358.3	.720A	1.472D	89.6	1.366	2.5	17.7	35.6	.193
4-6086.4	4-6180	.193	75.4	-24.3	-3.5	1.321	95.3	.272	.969	334.8	473.4	.706	1.232A	105.6	.979	.1	-8.3	200.5	.253
		12.81	7.40	3.65	5.41	8.79	3.75	13.40	1/1/1	21.5	11.9	57.3	1.619	2.087	48.6	329.0	48.4	127.1D	1.739
4-5760	4-5900	.134	205.3	-21.2	-1.2	1.117	85.1	.249	1.295	25.2	132.4	.972D	1.618A	102.5	.774	1.8	-3.6	338.2	.254
4-5900	4-6067.5	.180	272.4	-33.0	-2.4	.668	95.2	.360	1.082	189.4	327.3	.693A	1.471D	91.5	1.358	.7	4.0	53.2	.255
4-6067.5	4-6200	.255	66.6	52.1	9.1	1.274	96.6	.205	.872	319.3	507.6	.693	1.051A	97.6	.913	-12.2	-49.3	159.9	.243
		13.27	7.68	3.87	5.59	8.97	3.81	13.23	1/1/2	20.9	63.7	49.5	.927	2.391	79.2	33.7	-59.5	75.5L	1.290
4-5760	4-5900	.134	205.3	-21.2	-1.2	1.117	85.1	.249	1.295	25.2	132.4	.972D	1.618A	102.5	.774	1.8	-3.6	338.2	.254
4-5900	4-6080.3	.174	271.6	-36.2	-3.1	.676	95.3	.345	1.095	190.3	348.8	.718A	1.472D	87.1	1.365	1.4	9.6	43.0	.195
4-6080.3	4-6200	.195	71.3	-45.8	-6.3	1.285	94.8	.207	.890	331.6	499.4	.706	1.074A	99.1	.925	3.0	7.0	207.9	.161
		13.14	7.54	3.87	5.59	8.97	3.67	12.08	1/1/1	20.9	34.2	60.9	1.577	1.974	68.1	1.4	60.6	101.1D	1.536
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																				
4-5710	4-5910	.137	213.6	-36.1	-4.5	1.110	92.9	.215	1.244	343.4	507.0	.976	1.512A	98.1	.760	5.7	8.8	329.1	.215
4-5910	4-6056.7	.200	272.5	-30.7	-2.1	.656	96.6	.393	1.051	190.4	305.3	.638A	1.464D	75.4	1.346	.3	1.3	55.7	.356
4-6056.7	4-6150	.356	54.0	-31.3	-8.1	1.337	102.5	.358	1.024	310.5	467.0	.657	1.391A	110.9	1.015	6.4	17.6	161.8	.367
		12.78	8.16	3.90	4.62	8.01	4.26	15.56	1/1/1	35.5	19.5	32.6	.475	3.567	92.6	47.3	-72.3	75.1L	1.219
4-5730	4-5910	.105	214.6	-36.5	-2.1	1.112	90.1	.217	1.258	359.3	502.6	.985	1.531A	99.0	.766	3.1	1.3	335.6	.214
4-5910	4-6100.8	.174	273.6	-19.5	1.1	.680	96.0	.346	1.087	191.5	377.4	.711	1.464D	94.4	1.365	-3.1	-19.4	25.6	.220
4-6100.8	4-6170	.220	79.4	-17.7	-2.8	1.382	93.4	.375	1.144	347.5	453.1	.715	1.573A	110.9	1.059	-1.3	-12.3	199.7	.363
		11.86	7.27	3.60	4.59	7.98	3.67	15.47	1/2/1	28.5	3.9	50.8	1.245	2.331	20.7	322.0	-1.8	174.1D	1.657
4-5730	4-5910	.105	214.6	-36.5	-2.1	1.112	90.1	.217	1.258	359.3	502.6	.985	1.531A	99.0	.766	3.1	1.3	335.6	.214
4-5910	4-6102.8	.174	274.8	-23.8	.0	.678	95.7	.348	1.085	190.9	380.1	.708	1.462D	95.1	1.365	-2.0	-12.2	25.1	.221
4-6102.8	4-6170	.221	79.0	-17.5	-2.7	1.387	92.9	.384	1.162	349.7	451.9	.716	1.608A	111.2	1.065	-1.5	-12.8	200.1	.370
		11.87	7.28	3.60	4.59	7.96	3.68	15.63	1/2/1	28.5	4.1	52.2	1.236	2.271	17.6	323.5	5.9	170.5D	1.572
4-5730	4-5910	.105	214.6	-36.5	-2.1	1.112	90.1	.217	1.258	359.3	502.6	.985	1.531A	99.0	.766	3.1	1.3	335.6	.214
4-5910	4-6132.5	.217	298.3	-26.6	-1.7	.647	89.2	.394	1.039	178.8	416.0	.629	1.446	105.0	1.350	-.4	-1.3	38.1	.367
4-6132.5	4-6170	.367	60.6	-12.9	-3.3	1.449	79.2	.532	1.458	31.3	65.5	.662D	2.234A	117.0	1.144	-4.0	-17.7	201.4	.508
		12.86	8.27	3.60	4.59	7.98	4.67	18.75	1/2/1	28.5	8.4	25.1	.446	4.604	28.6	323.0	27.5	119.7D	1.608
4-5740	4-5910	.104	209.3	-32.3	-1.7	1.112	88.5	.219	1.261	8.2	141.4	.985D	1.537A	99.4	.767	2.5	-.3	337.0	.216
4-5910	4-6089.5	.176	268.9	-36.8	-3.3	.685	97.0	.342	1.095	193.9	361.1	.720	1.470D	90.3	1.366	1.4	10.3	35.1	.188
4-6089.5	4-6180	.188	76.3	-23.0	-3.2	1.326	94.8	.276	.979	337.6	471.5	.708	1.249A	106.0	.984	-.3	-10.0	200.9	.259
		11.96	7.31	3.59	4.65	8.04	3.72	13.51	1/1/1	27.2	10.9	52.3	1.710	2.269	41.0	350.7	40.2	135.2D	2.169
4-5750	4-5910	.112	203.8	-26.3	-1.5	1.110	86.8	.222	1.260	18.0	141.1	.980D	1.540A	99.6	.767	2.2	-1.5	337.7	.218
4-5910	4-6078.4	.176	267.3	-33.4	-2.4	.683	97.4	.347	1.093	194.4	344.1	.714A	1.472D	85.9	1.364	.6	4.2	47.9	.202
4-6078.4	4-6190	.202	71.2	-38.9	-5.7	1.294	95.7	.228	.909	328.7	489.7	.702	1.116A	101.6	.940	2.5	2.9	204.1	.193
		12.07	7.37	3.66	4.70	8.09	3.71	12.48	1/1/1	26.6	25.3	48.2	1.471	2.451	65.6	.4	59.1	100.6D	2.134
4-5760	4-5910	.128	199.7	-21.2	-1.4	1.106	84.8	.228	1.254	28.7	141.7	.988D	1.540A	99.8	.765	1.9	-2.6	337.7	.221
4-5910	4-6067.7	.183	268.7	-32.1	-2.2	.675	97.2	.361	1.080	193.2	325.7	.690A	1.470D	81.1	1.357	.4	2.2	55.3	.260
4-6067.7	4-6200	.260	67.2	55.4	9.5	1.274	96.6	.205	.873	319.4	507.5	.695	1.052A	97.8	.913	-12.5	-49.7	159.2	.248
		12.44	7.68	3.82	4.75	8.14	3.87	13.32	1/1/2	26.8	64.2	52.1	.887	2.276	61.0	38.8	-60.5	73.8L	1.132
4-5760	4-5910	.128	199.7	-21.2	-1.4	1.106	84.8	.228	1.254	28.7	141.7	.988D	1.540A	99.8	.765	1.9	-2.6	337.7	.221
4-5910	4-6080.2	.175	267.3	-33.7	-2.5	.684	97.4	.345	1.094	194.4	347.0	.717A	1.472D	86.7	1.364	.7	4.7	45.9	.196
4-6080.2	4-6200	.196	71.3	-46.1	-6.3	1.285	94.8	.207	.890	331.5	499.4	.706	1.074A	99.1	.925	3.1	7.4	208.0	.162
		12.27	7.51	3.82	4.75	8.14	3.70	12.08	1/1/1	26.8	34.3	55.5	1.557	2.146	68.9	7.2	59.4	98.7D	1.765
4-5770	4-5910	.154	197.7	-17.6	-1.3	1.100	82.6	.237	1.242	40.5	143.5	.948D	1.536A	99.9	.759	1.6	-3.9	337.0	.223
4-5910	4-6075.1	.177	267.4	-33.0	-2.3	.682	97.4	.350	1.090	194.2	338.5	.709A	1.472D	84.5	1.362	.5	3.4	51.0	.216
4-6075.1	4-6210	.216	69.8	51.8	7.7	1.275	95.2	.193	.871	326.9	512.8	.705	1.040A	96.1	.910	-11.0	-51.8	162.7	.216
		12.65	7.83	4.09	4.82	8.20	3.74	12.82	1/1/2	27.7	66.6	50.9	1.286	2.326	75.2	25.3	-57.8	85.1L	1.705
4-5770	4-5910	.154	197.7	-17.6	-1.3	1.100	82.6	.237	1.242	40.5	143.5	.948D	1.536A	99.9	.759	1.6	-3.9	337.0	.223
4-5910	4-6082.9	.175	267.6	-34.3	-2.6	.685	97.3	.344	1.095	194.4	351.3	.719A	1.472D	87.8	1.365	.8	5.7	42.6	.190
4-6082.9	4-6210	.190	71.1	-51.1	-6.7	1.280	93.9	.192	.879	335.2	506.4	.710	1.049A	96.9	.916	3.3	11.6	210.3	.138
		12.59	7.78	4.09	4.82	8.20	3.69	11.82	1/1/1	27.7	44.1	61.8	1.662	1.949	70.3	8.8	58.7	100.2D	1.577
4-5760	4-5910	.187	197.5	-15.4	-1.3	1.092	80.1	.251	1.223	53.3	146.3	.916D	1.530A	100.0	.751	1.4	-5.5	335.6	.227
4-5910	4-6083.5	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.2	.719A	1.472D	88.0	1.365	.8	6.0	42.1	.189
4-6083.5	4-6220	.189	70.7	54.0	6.9	1.276	93.6	.183	.871	336.4	516.3	.712	1.031A	94.7	.908	-10.3	-54.4	163.4	.199
		13.11	8.20	4.51	4.90	8.29	3.69	12.56	1/1/2	29.4	70.7	55.3	1.679	2.229	69.5	11.6	-51.8	101.1D	2.064
4-5780	4-5910	.187	197.5	-15.4	-1.3	1.092	80.1	.251	1.223	53.3	146.3	.916D	1.530A	100.0	.751	1.4	-5.5	335.6	.227
4-5910	4-6083.8	.175	268.0	-35.1	-2.8	.685	97.2	.343	1.096	194.2	355.8	.720A	1.471D	88.9	1.366	1.0	7.2	39.2	.187
4-6083.8	4-6220	.187	70.4	-55.1	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.7	211.1	.120
		13.11	8.20	4.51	4.90	8.29	3.69	11.65	1/1/1	29.4	55.2	67.5	1.724	1.799	71.5	8.8	58.4	102.6D	1.378
MARS ARRIVAL DATE = 2445920 (7 AUG 1984)																				
4-5710	4-5920	.173	188.2	-71.1	-7.6	1.104	92.5	.202	1.225	345.0	514.4	.976	1.473A	96.1	.759	8.7	19.4	323.0	.214
4-5920	4-6058.9	.204	268.0	-30.4	-2.0	.667	99.1	.391	1.055	194.8	306.8	.642A	1.467D	75.8	1.348	.1	.5	57.5	.349
4-6058.9	4-6150	.349	55.4	-28.4	-7.3	1.343	102.4	.366	1.040	311.7	465.4	.659	1.421A	111.4	1.022	5.5	14.6	161.7	.371
		13.27	8.67	4.32	4.60	7.99	4.35	15.65	1/1/1	47.7	16.7	29.0	.493	3.997	93.8	43.6	-74.6	75.6L	1.477
4-5720	4-5920	.118	206.4	-54.7	-4.0	1.105	91.2	.202	1.231	352.9	512.2	.983	1.475A	96.5	.762	4.9	8.8	330.6	.193
4-5920	4-6061.6	.198	268.6	-30.6	-2.0	.673	99.3	.381	1.065	195.8	312.7	.659A	1.470D	77.5	1.351	.1	.5	57.8	.320
4-6061.6	4-6160	.320	59.8	-35.8	-8.5	1.320	100.6	.315	.978	313.5	472.3	.670	1.286A	108.3	.989	6.1	16.2	169.0	.318
		12.03	7.94	3.72	4.09	7.49	4.22	14.57	1/1/1	38.8	22.2	36.4	.589	3.199	87.3	49.4	72.1	75.5L	1.295
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.8	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.8	4.3	333.9	.190
4-5920	4-6099.7	.193	268.4	-44.7	-3.7	.690	98.3	.346	1.090	196.4	374.6	.713	1.468D	93.7	1.366	3.8	24.4	27.9	.220
4-6099.7	4-6170	.220	79.5	-17.9	-2.8	1.379	93.7	.371	1.136	346.4	453.7	.714	1.557A	110.8	1.056	-1.2	-11.9	199.5	.359
		11.72	7.69	3.59	4.03	7.43	4.10	15.40	1/1/1	35.4	3.8	65.6	1.245	1.845	41.8	321.1	41.6	136.2D	1.092
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.8	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.8	4.3	333.9	.190
4-5920	4-6102.8	.178	269.8	-20.4	.9	.688	98.0	.347	1.088	195.7	378.0	.710	1.465D	94.6	1.365	-2.9	-18.0	27.0	.220
4-6102.8	4-6170	.220	79.2	-17.6	-2.8	1.385	93.0	.381	1.156	349.0	452.3	.715	1.596A	111.1	1.063	-1.5	-12.7	200.0	.366
		11.38	7.36	3.59	4.03	7.43	3.78	15.58	1/2/1	35.4	4.0	49.5	1.241	2.390	19.7	323.0	-.5	173.0D	1.725
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.8	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.8	4.3	333.9	.190
4-5920	4-6104.9	.179	271.5	-27.6	-.9	.686	97.7	.349	1.084	194.8	381.5	.706	1.462D	95.5	1.365	-1.0	-6.1	26.6	.221
4-6104.9	4-6170	.221	78.4	-17.3	-2.7	1.391	92.3	.382	1.179	351.9	450.8	.717	1.641A	111.8	1.071	-1.7	-13.4	200.5	.377
		11.40	7.37	3.59	4.03	7.43	3.78	15.78	1/2/1	35.4	4.4	51.8	1.226	2.290	18.2	324.9	12.8	164.3D	1.581
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.8	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.8	4.3	333.9	.190
4-5920	4-6130.4	.204	293.6	-28.2	+1.8	.657	92.5	.383	1.041	183.8	411.9	.643	1.439D	103.7	1.351	-.2	-.6	37.7	.342
4-6130.4	4-6170	.342	61.7	-13.4	-3.2	1.445	80.7	.516	1.432	27.5	65.0	.691D	2.174A	116.3	1.138	-3.8	-17.6	201.8	.493
		11.98	7.98	3.59	4.03	7.43	4.36	18.38	1/2/1	35.4	8.3	27.0	.513	4.268	29.3	323.4	28.2	122.6D	1.668
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6090.5	.180	264.2	-32.7	-2.3	.684	99.1	.344	1.088	198.5	361.4	.720	1.475D	90.4	1.367	.4	2.9	36.1	.186
4-6090.5	4-6160	.186	76.5	-22.6	-3.1	1.327	94.6	.278	.982	336.6	470.8	.709	1.255A	106.1	.986	-.4	-10.6	201.1	.262
		11.40	7.37	3.87	4.04	7.43	3.80	13.98	1/1/1	33.8	10.6	46.9	1.736	2.513	58.1	332.4	53.1	141.1D	2.629

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2445920
7 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6142.1	.232	304.6	-25.5	-1.9	.641	88.4	.412	1.018	177.7	424.8	.599	1.436	107.6	1.342	-.1	-.4	48.2	.412
4-6142.1	4-6180	.412	50.6	-9.7	-3.1	1.355	73.0	.422	1.056	60.7	108.9	.610D	1.503A	114.8	1.021	-4.6	-18.6	198.6	.426
		12.63	8.60	3.57	4.04	7.43	5.03	16.84	1/2/1	33.8	13.9	9.6	.354	11.956	75.7	338.3	74.8	98.3D	3.874
4-5750	4-5920	.109	197.8	-27.7	-1.8	1.102	86.5	.207	1.233	20.8	149.7	.977D	1.488A	97.3	.763	2.3	-.1	336.5	.191
4-5920	4-6077.4	.183	262.6	-31.6	-2.1	.692	99.6	.350	1.095	198.9	341.1	.712A	1.478D	85.1	1.364	.2	1.2	50.9	.210
4-6077.4	4-6190	.210	71.0	-41.2	-6.2	1.293	95.8	.227	.907	327.8	490.5	.701	1.112A	101.4	.939	3.0	5.5	204.5	.193
		11.56	7.51	3.63	4.06	7.45	3.87	12.48	1/1/1	33.2	27.1	46.2	1.366	2.551	69.0	9.4	60.!	95.2D	2.116
4-5750	4-5920	.109	197.8	-27.7	-1.8	1.102	86.5	.207	1.233	20.8	149.7	.977D	1.488A	97.3	.763	2.3	-.1	336.5	.191
4-5920	4-6149.4	.257	311.0	-23.4	-1.9	.630	85.3	.437	1.005	173.8	432.8	.566	1.443	110.3	1.336	-.1	-.3	55.4	.463
4-6149.4	4-6190	.463	46.9	-6.5	-2.5	1.274	68.6	.397	.864	88.5	134.5	.521D	1.207A	111.4	.909	-4.6	-17.4	192.7	.357
		13.34	9.28	3.63	4.06	7.45	5.65	15.36	1/2/1	33.2	27.2	10.5	.281	10.880	143.7	331.7	-36.1	88.3L	2.774
4-5760	4-5920	.125	195.1	-21.7	-1.6	1.097	84.6	.213	1.226	31.7	150.6	.965D	1.487A	97.3	.760	2.0	-1.7	336.4	.192
4-5920	4-6067.9	.190	264.3	-31.1	-2.0	.684	99.5	.364	1.081	197.5	324.5	.687A	1.475D	80.7	1.358	.1	.7	56.9	.266
4-6067.9	4-6200	.266	67.8	54.6	9.9	1.274	96.6	.205	.873	319.6	507.4	.694	1.052A	97.6	.913	-12.9	-50.1	158.5	.253
		11.91	7.82	3.79	4.09	7.48	4.03	13.41	1/1/2	33.5	64.6	54.6	.848	2.181	82.3	42.7	-61.0	72.6L	1.001
4-5760	4-5920	.125	195.1	-21.7	-1.6	1.097	84.6	.213	1.226	31.7	150.6	.965D	1.487A	97.3	.760	2.0	-1.7	336.4	.192
4-5920	4-6079.9	.182	262.5	-31.8	-2.1	.693	99.6	.348	1.097	199.0	345.3	.715A	1.478D	86.2	1.365	.2	1.4	48.4	.200
4-6079.9	4-6200	.200	71.4	-47.1	-6.6	1.285	94.8	.207	.890	331.2	499.5	.706	1.074A	99.0	.925	3.3	8.7	208.2	.163
		11.72	7.63	3.79	4.09	7.48	3.85	12.09	1/1/1	33.5	35.3	52.5	1.498	2.260	70.4	12.9	58.8	95.7D	1.888
4-5770	4-5920	.150	194.2	-17.7	-1.5	1.091	82.5	.223	1.214	43.6	152.4	.944D	1.484A	97.3	.754	1.7	-3.4	335.5	.194
4-5920	4-6075.2	.184	262.8	-31.5	-2.1	.691	99.6	.353	1.093	198.7	337.3	.707A	1.478D	84.2	1.363	.2	1.1	52.9	.220
4-6075.2	4-6210	.220	70.1	52.9	8.0	1.275	95.2	.193	.871	327.0	512.7	.703	1.040A	96.1	.910	-11.2	-52.2	162.1	.220
		12.08	7.95	4.05	4.13	7.52	3.90	12.88	1/1/2	34.7	66.9	53.8	1.238	2.211	77.2	30.0	-59.4	83.1L	1.499
4-5770	4-5920	.150	194.2	-17.7	-1.5	1.091	82.5	.223	1.214	43.6	152.4	.944D	1.484A	97.3	.754	1.7	-3.4	335.5	.194
4-5920	4-6082.8	.181	262.7	-32.0	-2.1	.694	99.5	.346	1.098	199.0	349.9	.716A	1.478D	87.4	1.366	.2	1.7	45.1	.192
4-6082.8	4-6210	.192	71.2	-51.6	-6.8	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.3	210.5	.138
		12.00	7.87	4.05	4.13	7.52	3.82	11.82	1/1/1	34.7	44.5	57.7	1.628	2.073	71.1	13.3	57.4	98.1D	1.747
4-5780	4-5920	.182	195.0	-15.4	-1.4	1.083	80.1	.237	1.195	56.2	155.1	.911D	1.478A	97.3	.746	1.4	-5.4	333.8	.197
4-5920	4-6083.8	.181	262.8	-32.0	-2.2	.694	99.5	.346	1.098	199.0	351.0	.719A	1.478D	87.7	1.366	.2	1.8	44.3	.191
4-6083.8	4-6220	.191	70.8	54.4	7.0	1.276	93.6	.183	.871	336.4	518.3	.712	1.031A	94.7	.908	-10.4	-54.5	163.1	.200
		12.46	8.27	4.45	4.20	7.59	3.82	12.58	1/1/2	36.8	70.8	56.9	1.653	2.096	71.9	15.8	-55.1	97.9D	1.815
4-5780	4-5920	.182	195.0	-15.4	-1.4	1.083	80.1	.237	1.195	56.2	155.1	.911D	1.478A	97.3	.746	1.4	-5.4	333.8	.197
4-5920	4-6085.8	.180	263.1	-32.2	-2.2	.694	99.4	.345	1.099	198.8	354.6	.720A	1.477D	88.8	1.367	.3	2.1	41.5	.187
4-6085.8	4-6220	.187	70.4	-55.3	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.9	211.1	.121
		12.45	8.26	4.45	4.20	7.59	3.81	11.65	1/1/1	36.8	55.3	62.0	1.716	1.941	71.8	12.7	56.3	101.3D	1.614
4-5790	4-5920	.222	197.0	-14.4	-1.4	1.072	77.5	.260	1.169	69.4	158.3	.866D	1.472A	97.2	.733	1.2	-7.5	331.2	.202
4-5920	4-6088.8	.180	263.8	-32.5	-2.3	.694	99.2	.344	1.098	198.5	359.3	.720A	1.476D	89.8	1.367	.4	2.6	37.6	.186
4-6088.8	4-6230	.186	69.4	-58.4	-7.1	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.7	22.5	210.0	.110
		13.14	8.82	5.02	4.32	7.71	3.80	11.56	1/1/2	39.8	67.7	65.9	1.746	1.838	72.5	11.4	55.5	104.9D	1.463
4-5790	4-5920	.222	197.0	-14.4	-1.4	1.072	77.5	.260	1.169	69.4	158.3	.866D	1.472A	97.2	.733	1.2	-7.5	331.2	.202
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2	.186
4-6092.1	4-6230	.188	67.1	60.8	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.7	-57.0	159.2	.199
		13.14	8.82	5.02	4.32	7.71	3.80	12.57	1/1/1	39.8	77.0	62.5	1.710	1.928	72.7	10.0	-51.5	110.2D	1.566
MARS ARRIVAL DATE = 2445930 (17 AUG 1984)																			
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6050.7	.236	268.0	-29.2	-1.9	.653	101.6	.434	1.024	196.0	269.5	.579A	1.469D	70.3	1.335	-.1	-.2	56.3	.450
4-6050.7	4-6130	.450	44.4	-16.6	-6.1	1.404	106.6	.500	1.267	308.5	454.8	.634	1.900A	117.4	1.108	5.2	16.8	166.6	.505
		12.58	9.20	4.08	3.38	6.78	5.12	18.67	2/1/1	50.9	10.7	21.7	.297	5.304	121.8	346.0	-56.6	73.4L	1.278
4-5720	4-5930	.140	187.2	-65.7	-5.9	1.101	90.9	.191	1.215	354.4	519.6	.983	1.447A	94.6	.762	6.8	16.8	325.4	.185
4-5930	4-6064.1	.208	261.1	-29.9	-1.9	.689	102.0	.380	1.077	201.2	316.2	.668A	1.485D	78.3	1.356	-.1	-.4	58.5	.306
4-6064.1	4-6160	.306	61.5	-31.4	-7.0	1.327	100.5	.323	.993	315.4	470.0	.672	1.314A	108.8	.997	4.8	11.7	188.6	.321
		12.31	8.39	3.93	3.92	7.32	4.46	14.63	1/1/1	49.4	17.9	31.1	.642	3.732	85.6	43.7	73.5	78.4L	1.753
4-5730	4-5930	.108	196.2	-50.9	-3.6	1.100	89.5	.191	1.218	3.2	158.2	.985D	1.450A	94.9	.763	4.3	8.5	330.8	.172
4-5930	4-6103.2	.188	265.4	-22.0	.5	.698	100.3	.350	1.092	200.4	378.4	.709	1.474D	94.7	1.367	-2.5	-15.4	28.2	.220
4-6103.2	4-6170	.220	78.9	-17.5	-2.7	1.387	92.7	.384	1.163	350.1	451.8	.716	1.610A	111.3	1.066	-1.5	-12.9	200.2	.371
		11.23	7.60	3.62	3.63	7.03	3.97	15.64	1/1/1	43.8	4.2	48.6	1.240	2.432	18.3	324.2	2.4	172.2D	1.776
4-5730	4-5930	.108	196.2	-50.9	-3.6	1.100	89.5	.191	1.218	3.2	158.2	.985D	1.450A	94.9	.763	4.3	8.5	330.8	.172
4-5930	4-6126.8	.200	267.6	-29.8	-2.0	.667	95.3	.376	1.044	189.0	408.6	.652	1.437D	102.7	1.352	.1	.5	37.6	.325
4-6126.8	4-6170	.325	62.7	-13.7	-3.1	1.442	81.8	.507	1.413	24.7	84.8	.696D	2.130A	115.8	1.135	-3.6	-17.5	202.0	.482
		11.51	7.66	3.62	3.63	7.03	4.25	18.12	1/2/1	43.8	8.2	28.6	.569	4.044	30.8	323.8	29.9	124.4D	1.731
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6089.3	.191	259.0	-30.0	-1.8	.706	101.6	.348	1.105	203.6	359.2	.720A	1.490D	89.8	1.369	-.2	-1.5	38.8	.188
4-6089.3	4-6180	.188	76.3	-23.0	-3.2	1.326	94.8	.276	.979	337.6	471.5	.708	1.249A	106.0	.984	-.3	-10.0	200.9	.260
		11.20	7.63	3.57	3.57	6.97	4.06	13.51	1/1/1	41.5	10.9	42.3	1.709	2.774	33.5	334.4	30.3	141.3D	3.032
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6140.6	.218	300.2	-27.1	-2.0	.650	91.7	.400	1.020	182.5	421.3	.612	1.427D	106.4	1.343	.1	.3	47.9	.389
4-6140.6	4-6180	.389	50.7	-10.0	-3.0	1.357	74.3	.412	1.061	56.9	107.5	.624D	1.499A	114.2	1.023	-4.4	-18.9	199.3	.414
		11.83	8.26	3.57	3.57	6.97	4.69	16.56	1/2/1	41.5	13.3	10.7	.397	10.747	75.0	336.7	74.2	98.9D	3.873
4-5750	4-5930	.108	192.7	-29.7	-2.1	1.096	86.3	.196	1.214	23.0	157.7	.976D	1.452A	95.2	.761	2.6	1.5	334.2	.169
4-5930	4-6076.4	.197	257.9	-30.0	-1.9	.703	102.1	.356	1.101	203.8	338.6	.709A	1.494D	84.4	1.366	-.1	-.7	53.1	.219
4-6076.4	4-6190	.219	70.8	-43.7	-6.8	1.291	95.9	.226	.905	326.9	491.2	.700	1.109A	101.3	.937	3.7	8.6	205.0	.194
		11.37	7.82	3.63	3.56	6.96	4.19	12.50	1/1/1	40.8	29.3	45.8	1.248	2.569	72.1	17.8	60.6	90.2D	1.959
4-5750	4-5930	.108	192.7	-29.7	-2.1	1.096	86.3	.196	1.214	23.0	157.7	.976D	1.452A	95.2	.761	2.6	1.5	334.2	.169
4-5930	4-6147.6	.235	307.4	-25.0	-2.0	.639	89.0	.419	1.006	178.6	428.7	.585	1.427	108.7	1.337	.1	.3	54.7	.431
4-6147.6	4-6190	.431	46.4	-6.8	-2.4	1.281	70.2	.378	.876	83.3	132.5	.545D	1.207A	110.5	.918	-4.4	-18.2	194.0	.342
		12.30	8.74	3.63	3.56	6.96	5.11	15.05	1/2/1	40.8	26.0	10.9	.324	10.547	139.4	332.1	-40.3	86.7L	3.086
4-5760	4-5930	.124	191.4	-22.8	-1.8	1.091	84.5	.202	1.207	34.0	158.7	.962D	1.451A	95.2	.758	2.1	-.8	334.2	.169
4-5930	4-6079.3	.195	257.7	-30.0	-1.8	.705	102.0	.353	1.104	204.1	343.9	.714A	1.494D	85.8	1.367	-.1	-.9	50.1	.206
4-6079.3	4-6200	.206	71.5	-48.5	-6.9	1.285	94.9	.206	.889	330.9	499.8	.706	1.073A	99.0	.925	3.7	10.5	208.7	.164
		11.49	7.92	3.77	3.57	6.97	4.15	12.11	1/1/1	41.2	36.5	51.1	1.419	2.320	71.9	17.8	58.3	92.9D	1.873
4-5760	4-5930	.124	191.4	-22.8	-1.8	1.091	84.5	.202	1.207	34.0	158.7	.962D	1.451A	95.2	.758	2.1	-.8	334.2	.169
4-5930	4-6153.2	.254	312.8	-23.1	-2.0	.630	86.5	.438	.994	175.5	434.6	.559	1.430	110.7	1.352	.1	.2	60.5	.469
4-6153.2	4-6200	.469	46.4	-4.2	-1.7	1.226	67.4	.392	.783	101.7	151.4	.477D	1.090A	105.9	.836	-4.2	-15.9	187.1	.292
		12.91	9.35	3.77	3.57	6.97	5.56	14.09	1/2/1	41.2	41.9	14.8	.273	7.790	162.4	338.5	-17.4	89.6L	1.857
4-5770	4-5930	.148	191.7	-18.4	-1.7	1.085	82.4	.212	1.195	45.8	160.5	.941D	1.448A	95.1	.752	1.8	-3.0	333.2	.171
4-5930	4-6075.8	.198	258.0	-30.0	-1.9	.703	102.1	.358	1.100	203.7	336.7	.706A	1.493D	83.9	1.365	-.1	-.7	54.0	.225
4-6075.8	4-6210	.225	70.5	54.1	8.3	1.275	95.2	.193	.872	327.1	512.6	.703	1.040A	96.1	.910	-11.5	-52.5	161.4	.224
		11.82	8.23	4.02	3.60	7.00	4.21	12.94	1/1/2	42.7	67.3	56.4	1.186	2.115	78.5	33.1	-60.3	81.9L	1.323
4-5770	4-5930	.148	191.7	-18.4	-1.7	1.085	82.4	.212	1.195	45.8	160.5	.941D	1.448A	95.1	.752	1.8	-3.0	333.2	.171
4-5930	4-6082.7	.194	257.8	-30.0	-1.8	.706	101.9	.351	1.106	204.1	348.9	.717A	1.494D	87.1	1.368	-.1	-1.0	46.6	.196
4-6082.7	4-6210	.196	71.3	-52.5	-7.0	1.280	94.0	.192	.879	335.0	508.5	.710	1.048A	96.8	.916	3.7	13.6	210.9	.140
		11.73	8.14	4.02	3.60	7.00	4.12	11.84	1/1/1	42.7	45.2	55.5	1.565	2.148	72.0	17.0	56.5	96.2D	1.797
4-5760	4-5930	.179	193.3	-15.9	-1.6	1.077	80.2	.228	1.177	58.1	162.9	.909D	1.445A	94.9	.744	1.5	-5.4	331.3	.173
4-5930	4-6083.8	.193	257.9	-30.0	-1.8	.706	101.9	.350	1.106	204.1	350.3	.718A	1.493D	87.5	1.368	-.2	-1.1	45.6	.194
4-6083.8	4-6220	.194	71.0	55.3	7.2	1.276	93.6	.183	.871	336.4	518.2	.712	1.031A	94.7	.908	-10.6	-54.7	162.5	.203
		12.16	8.51	4.40	3.66	7.06	4.11	12.62	1/1/2	45.1	71.1	60.0	1.598	2.000	75.6	18.9	-57.1	95.8D	1.597
4-5780	4-5930	.179	193.3	-15.9	-1.6	1.077	80.2	.228	1.177	58.1	162.9	.909D	1.445A	94.9	.744	1.5	-5.4	331.3	.173
4-5930	4-6085.7	.193	258.2	-30.0	-1.8	.706	101.8	.349	1.106	204.0	353.8	.720A	1.492D	88.4	1.369	-.2	-1.2	45.0	.190
4-6085.7	4-6220	.190	70.6	-56.0	-7.1	1.277	93.2	.183	.873	339.1	517.5	.713	1.032A	94.9	.909	3.7	17.9	211.5	.122
		12.14	8.49	4.40	3.66	7.06	4.09	11.66	1/1/1	45.1	55.8	59.1	1.665	2.027	72.4	15.7	55.0	100.0D	1.711

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2445930
17 AUG 1984

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5790	4-5930	.216	195.9	-14.8	-1.5	1.066	77.7	.250	1.153	70.8	165.7	.865D	1.441A	94.7	.732	1.2	-7.9	328.5	.179
4-5930	4-6088.9	.191	258.9	-30.0	-1.8	.706	101.6	.348	1.105	203.7	358.5	.720A	1.490D	89.6	1.369	-.2	-1.4	39.3	.188
4-6088.9	4-6230	.188	69.5	-56.9	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.9	23.2	210.4	.111
		12.77	8.99	4.93	3.77	7.17	4.06	11.57	1/1/2	48.5	67.9	62.1	1.70P	1.939	72.9	14.1	53.7	104.1D	1.604
4-5790	4-5930	.216	195.9	-14.8	-1.5	1.066	77.7	.250	1.153	70.8	165.7	.865D	1.441A	94.7	.732	1.2	-7.9	328.5	.179
4-5930	4-6092.1	.191	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.3	.720	1.488D	90.9	1.369	-.2	-1.8	35.7	.189
4-6092.1	4-6230	.189	67.2	61.1	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.8	-57.1	159.1	.200
		12.75	8.97	4.93	3.77	7.17	4.04	12.58	1/1/1	48.5	77.0	67.4	1.688	1.803	74.1	12.4	-54.8	107.4D	1.355

MARS ARRIVAL DATE = 2445940 (27 AUG 1984)

4-5680	4-5940	.134	229.6	8.2	3.1	1.091	95.7	.195	1.186	324.1	536.0	.954	1.417A	91.0	.754	-1.7	-23.5	328.3	.134
4-5940	4-6046.7	.270	266.3	-28.5	-2.0	.648	105.1	.471	1.007	198.5	279.8	.533A	1.482D	66.7	1.329	-.3	-.7	55.5	.520
4-6046.7	4-6120	.520	38.4	-14.5	-5.5	1.450	109.0	.592	1.522	307.6	450.2	.621	2.423A	120.7	1.169	5.0	18.2	158.7	.590
		12.70	9.87	3.88	2.84	6.25	5.99	20.76	2/1/1	60.4	8.7	21.8	.222	5.277	139.8	339.1	-39.5	74.6L	.951
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6051.8	.253	263.2	-28.7	-1.9	.669	105.0	.439	1.036	201.1	290.4	.581A	1.491D	70.4	1.340	-.3	-.8	57.6	.452
4-6051.8	4-6130	.452	45.5	-17.8	-5.9	1.410	106.6	.509	1.293	309.3	453.8	.635	1.951A	117.7	1.116	4.9	15.9	166.9	.512
		12.45	9.46	3.89	2.99	6.40	5.57	18.83	2/1/1	57.9	9.8	20.7	.295	5.566	124.3	344.5	-54.6	72.8L	1.345
4-5700	4-5940	.177	246.6	38.9	8.0	1.095	93.3	.187	1.197	338.7	530.4	.973	1.421A	92.2	.760	-7.0	-42.8	345.5	.169
4-5940	4-6056.6	.242	260.3	-28.9	-1.9	.685	104.9	.415	1.060	203.4	300.5	.620A	1.499D	75.5	1.349	-.3	-.9	59.0	.393
4-6056.6	4-6140	.393	52.0	-21.5	-6.1	1.377	104.3	.438	1.155	311.3	458.1	.649	1.661A	114.8	1.071	4.7	13.6	174.6	.442
		13.21	9.65	4.58	3.56	6.96	5.27	17.20	2/1/1	60.6	11.4	21.5	.389	5.370	108.0	358.3	-69.6	73.5L	1.700
4-5730	4-5940	.122	162.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6063.8	.230	256.8	-28.6	-1.8	.702	104.9	.389	1.088	206.5	315.0	.664A	1.511D	77.8	1.359	-.3	-1.3	59.4	.316
4-6063.8	4-6170	.316	64.1	-46.4	-10.3	1.303	99.2	.275	.935	315.3	480.1	.678	1.192A	105.4	.962	7.9	22.1	196.8	.282
		12.17	8.75	3.76	3.44	6.85	4.97	13.90	1/1/1	53.9	32.0	45.3	.596	2.595	85.5	49.3	65.7	71.3L	.950
4-5730	4-5940	.122	162.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6070.7	.222	254.5	-28.7	-1.8	.713	104.9	.373	1.106	208.5	328.2	.693A	1.519D	81.5	1.366	-.3	-1.7	57.4	.260
4-6070.7	4-6170	.260	67.3	-32.2	-6.1	1.316	98.5	.288	.963	320.5	474.5	.666	1.241A	106.6	.978	3.4	6.4	194.7	.276
		11.99	8.55	3.76	3.44	6.85	4.79	13.79	1/1/1	53.9	17.5	31.8	.887	3.645	74.0	16.2	66.3	87.2L	2.346
4-5730	4-5940	.122	162.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6103.3	.204	260.6	-25.1	.2	.711	102.8	.356	1.102	205.8	378.0	.710	1.495D	94.7	1.370	-2.1	-13.2	29.1	.221
4-6103.3	4-6170	.221	78.9	-17.4	-2.7	1.388	92.7	.386	1.165	350.2	451.6	.716	1.615A	111.3	1.066	-1.5	-13.0	200.2	.372
		11.55	8.11	3.76	3.44	6.85	4.35	15.66	1/1/1	53.9	4.2	48.2	1.235	2.451	17.6	325.2	5.1	171.6D	1.795
4-5730	4-5940	.122	162.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6127.9	.204	261.3	-31.4	-2.4	.678	98.3	.374	1.050	194.3	406.5	.658	1.443D	102.2	1.354	.5	2.2	37.8	.317
4-6127.9	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.403	23.2	84.7	.699D	2.107A	115.5	1.132	-3.5	-17.5	202.1	.476
		11.56	8.11	3.76	3.44	6.85	4.36	17.99	1/2/1	53.9	8.1	29.9	.600	3.877	33.4	324.2	32.7	124.6D	1.726
4-5740	4-5940	.106	187.9	-44.4	-3.3	1.095	87.8	.185	1.205	14.1	165.0	.982D	1.428A	93.3	.763	3.8	7.7	329.4	.154
4-5940	4-6070.9	.222	254.4	-28.7	-1.8	.713	104.9	.373	1.106	208.6	328.5	.694A	1.519D	81.6	1.366	-.3	-1.7	57.3	.259
4-6070.9	4-6180	.259	68.4	-43.8	-8.0	1.298	97.4	.250	.921	321.3	484.6	.691	1.150A	103.5	.950	5.2	13.6	201.1	.234
		11.64	8.39	3.61	3.25	6.65	4.79	13.09	1/1/1	50.5	28.4	43.2	.897	2.717	78.3	31.7	64.0	80.5L	1.539
4-5740	4-5940	.106	187.9	-44.4	-3.3	1.095	87.8	.185	1.205	14.1	165.0	.982D	1.428A	93.3	.763	3.8	7.7	329.4	.154
4-5940	4-6139.6	.213	294.6	-28.8	-2.1	.660	94.9	.392	1.023	187.6	418.7	.622	1.425D	105.6	1.344	.4	1.3	47.9	.374
4-6139.6	4-6180	.374	50.9	-10.2	-2.9	1.358	75.1	.406	1.065	54.2	106.5	.633D	1.497A	113.7	1.025	-4.3	-19.0	199.8	.407
		11.42	8.17	3.61	3.25	6.65	4.57	16.43	1/2/1	50.5	13.0	11.9	.430	9.679	75.6	336.2	74.9	98.7D	3.736
4-5750	4-5940	.109	186.2	-32.8	-2.6	1.092	86.2	.189	1.201	24.4	165.2	.974D	1.428A	93.4	.762	2.9	3.4	330.9	.152
4-5940	4-6075.5	.218	253.6	-28.6	-1.7	.718	104.8	.366	1.114	209.4	336.7	.706A	1.522D	83.8	1.369	-.4	-2.1	54.3	.230
4-6075.5	4-6190	.230	70.8	-46.3	-7.5	1.290	96.1	.226	.903	326.0	491.7	.699	1.107A	101.2	.936	4.4	11.8	205.6	.197
		11.53	8.34	3.63	3.19	6.60	4.70	12.54	1/1/1	49.5	31.7	46.5	1.134	2.534	74.3	24.1	60.4	86.4L	1.740
4-5750	4-5940	.109	188.2	-32.8	-2.6	1.092	86.2	.189	1.201	24.4	165.2	.974D	1.428A	93.4	.762	2.9	3.4	330.9	.152
4-5940	4-6146.2	.223	302.3	-26.8	-2.1	.648	92.5	.407	1.008	183.7	425.5	.598	1.419D	107.6	1.336	.3	1.0	54.4	.409
4-6146.2	4-6190	.409	46.2	-7.0	-2.3	1.285	71.4	.365	.885	79.6	130.9	.562D	1.208A	109.9	.924	-4.3	-18.7	194.9	.332
		11.64	8.45	3.63	3.19	6.60	4.82	14.86	1/2/1	49.5	25.2	11.5	.359	10.005	135.6	333.4	-43.9	85.7L	3.229
4-5760	4-5940	.123	188.5	-24.6	-2.1	1.087	84.4	.195	1.194	35.4	166.2	.961D	1.427A	93.3	.758	2.3	.2	331.0	.151
4-5940	4-6079.1	.216	253.4	-28.4	-1.6	.720	104.7	.362	1.118	209.8	342.9	.713A	1.523D	85.5	1.371	-.4	-2.5	50.9	.213
4-6079.1	4-6200	.213	71.7	-50.1	-7.3	1.284	94.9	.206	.889	330.5	500.0	.705	1.072A	99.0	.924	4.1	12.7	209.2	.166
		11.59	8.41	3.76	3.18	6.59	4.65	12.14	1/1/1	50.0	38.0	50.8	1.327	2.353	73.0	21.3	57.8	90.7D	1.769
4-5760	4-5940	.123	188.5	-24.6	-2.1	1.087	84.4	.195	1.194	35.4	166.2	.961D	1.427A	93.3	.758	2.5	.2	331.0	.151
4-5940	4-6151.3	.235	308.1	-25.0	-2.0	.640	90.5	.421	.997	180.6	430.7	.577	1.417D	109.2	1.333	.3	.9	59.6	.439
4-6151.3	4-6200	.439	45.6	-4.4	-1.7	1.234	69.0	.370	.797	97.0	149.8	.502D	1.091A	105.5	.851	-4.1	-16.9	188.3	.279
		12.05	8.67	3.76	3.18	6.59	5.10	13.85	1/2/1	50.0	40.5	14.9	.311	7.689	159.3	337.9	-20.4	87.7L	2.082
4-5770	4-5940	.146	189.8	-19.5	-1.9	1.081	82.5	.205	1.182	47.1	167.8	.939D	1.425A	93.1	.753	1.9	-2.7	330.0	.152
4-5940	4-6075.4	.219	253.6	-28.6	-1.7	.718	104.8	.366	1.114	209.4	336.6	.706A	1.522D	83.8	1.369	-.4	-2.1	54.3	.230
4-6075.4	4-6210	.230	70.9	55.3	8.8	1.275	95.1	.193	.872	327.3	512.5	.703	1.040A	96.1	.910	-11.6	-52.9	160.7	.229
		11.90	8.70	4.00	3.21	6.61	4.70	13.01	1/1/2	51.6	67.8	59.0	1.132	2.030	79.1	34.6	-60.7	81.4L	1.166
4-5770	4-5940	.146	189.8	-19.5	-1.9	1.081	82.5	.205	1.182	47.1	167.8	.939D	1.425A	93.1	.753	1.9	-2.7	330.0	.152
4-5940	4-6062.5	.214	253.5	-28.3	-1.6	.721	104.6	.359	1.120	209.8	348.4	.717A	1.522D	86.9	1.372	-.4	-2.9	47.3	.201
4-6062.5	4-6210	.201	71.6	-53.8	-7.3	1.280	94.0	.192	.879	334.8	508.6	.710	1.048A	96.8	.915	4.0	15.4	211.4	.142
		11.80	8.60	4.00	3.21	6.61	4.60	11.86	1/1/1	51.6	46.2	54.6	1.481	2.179	72.7	19.5	55.4	94.8D	1.748
4-5770	4-5940	.146	189.8	-19.5	-1.9	1.081	82.5	.205	1.182	47.1	167.8	.939D	1.425A	93.1	.753	1.9	-2.7	330.0	.152
4-5940	4-6156.0	.249	313.2	-23.2	-2.0	.632	86.3	.436	.987	177.8	435.5	.557	1.417	110.8	1.328	.3	.8	64.6	.470
4-6156.0	4-6210	.470	47.8	-2.3	-1.0	1.200	67.0	.393	.748	108.1	162.8	.454D	1.042A	100.5	.799	-3.9	-13.7	181.0	.250
		12.65	9.44	4.00	3.21	6.61	5.45	13.35	1/2/1	51.6	57.3	17.1	.272	6.739	169.7	343.4	-10.1	91.1D	1.563
4-5780	4-5940	.175	192.1	-16.7	-1.7	1.073	80.4	.221	1.166	59.1	169.8	.909D	1.423A	92.8	.745	1.5	-5.6	327.9	.155
4-5940	4-6083.5	.214	253.6	-28.5	-1.6	.721	104.5	.359	1.120	209.8	350.1	.718A	1.521D	87.4	1.373	-.4	-3.1	46.1	.199
4-6083.5	4-6220	.199	71.3	58.4	7.5	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-10.9	-55.0	161.8	.207
		12.20	8.93	4.35	3.27	6.67	4.59	12.68	1/1/2	54.3	71.5	62.9	1.522	1.916	74.7	20.8	-58.2	94.7D	1.393
4-5780	4-5940	.175	192.1	-16.7	-1.7	1.073	80.4	.221	1.166	59.1	169.8	.909D	1.423A	92.8	.745	1.5	-5.6	327.9	.155
4-5940	4-6085.7	.213	253.8	-28.2	-1.5	.721	104.4	.358	1.120	209.7	353.4	.719A	1.520D	88.3	1.373	-.3	-3.4	43.6	.195
4-6085.7	4-6220	.195	70.8	-57.1	-7.4	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.9	.909	4.0	19.5	212.1	.124
		12.17	8.91	4.35	3.27	6.67	4.56	11.68	1/1/1	54.3	56.5	57.8	1.586	2.068	72.9	17.8	53.7	99.1D	1.693
4-5790	4-5940	.210	195.2	-15.4	-1.7	1.063	78.0	.242	1.144	71.3	172.2	.867D	1.421A	92.5	.734	1.2	-8.5	325.0	.161
4-5940	4-6088.9	.211	254.5	-28.0	-1.4	.720	104.2	.356	1.119	209.4	356.3	.720A	1.517D	89.6	1.373	-.3	-4.0	39.8	.192
4-6088.9	4-6230	.192	69.7	-59.9	-7.5	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	4.1	24.6	211.1	.114
		12.75	9.36	4.84	3.39	6.79	4.52	11.59	1/1/2	57.9	66.3	60.4	1.632	1.988	73.3	15.8	52.3	103.6D	1.612
4-5790	4-5940	.210	195.2	-15.4	-1.7	1.063	78.0	.242	1.144	71.3	172.2	.867D	1.421A	92.5	.734	1.2	-8.5	325.0	.161
4-5940	4-6092.1	.209	255.4	-27.8	-1.5	.719	104.0	.355	1.117	208.9	362.9	.720	1.514D	90.8	1.373	-.7	-4.7	38.4	.193
4-6092.1	4-6230	.193	67.4	61.9	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.0	-57.3	158.4	.203
		12.71	9.32	4.84	3.39	6.79	4.48	12.63	1/1/1	57.9	77.3	70.7	1.618	1.728	75.2	14.2	-56.4	105.6D	1.176

MARS ARRIVAL DATE = 2445950 (6 SEP 1984)

4-5680	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.756	-1.5	-24.3	323.7	.124
4-5950	4-6047.8	.297	261.7	-28.0	-2.0	.670	109.2	.479	1.028	204.1	281.1	.536A	1.521D	66.7	1.337	-.5	-1.2	56.6	.524
4-6047.8	4-6120	.524	39.5	-13.9	-5.5	1.458	109.0	.605	1.575	308.4	449.2	.622	2.529A	121.0	1.178	4.8	17.5	159.0	.599
		13.20	10.54	3.84	2.66	6.07	6.70	20.99	2/1/1	70.5	8.1	21.2	.219	5.446	142.0	339.0	-37.4	74.0L	.972
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-28.5	330.2	.129
4-5950	4-6082.9	.261	258.6	-26.0	-1.9	.691	108.7	.448	1.059	207.1	292.1	.585A	1.533D	70.5	1.348	-.8	-1.4	58.3	.454
4-6082.9	4-6130	.454	46.6	-17.0	-5.6	1.416	106.6	.518	1.322	310.0	452.6	.637	2.007A	118.0	1.123	4.8	15.1	167.1	.519
		12.82	10.06	3.80	2.74	6.15	6.28	19.00	2/1/1	67.0	9.1	19.5	.292	5.916	135.8	342.9	-33.4	72.2L	1.439

STOPOVER TIME = 0 DAYS 1984 INBOUND SWINGBY MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2445960
16 SEP 1984

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 EVA	SPEED2 SPEED4 SPEED6 PERIC
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	358.4	.141
4-5950	4-6057.7	.270	255.8	-28.0	-1.9	.707	108.4	.424	1.085	209.8	302.5	.625A	1.545D	73.8	1.357	-.5	-1.6	39.4	.393
4-6057.7	4-6140	.393	53.0	-20.4	-5.9	1.382	104.5	.445	1.172	312.0	457.1	.651	1.694A	115.0	1.077	4.3	12.6	174.8	.447
		12.91	9.93	3.94	2.99	6.39	5.99	17.32	2/1/1	65.9	10.4	19.8	.389	5.831	107.8	355.1	-70.3	73.4L	1.878
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6073.1	.250	250.4	-27.3	-1.6	.735	107.9	.383	1.135	215.4	352.8	.700A	1.570D	82.6	1.375	-.5	-3.0	55.6	.252
4-6073.1	4-6170	.252	68.9	-29.2	-5.4	1.321	98.3	.293	.974	322.4	472.6	.668	1.260A	107.0	.984	2.6	.2	194.7	.280
		13.31	9.65	4.17	3.66	7.06	5.48	13.87	1/1/1	66.2	14.7	29.1	.949	3.979	65.6	2.1	70.1	95.4D	2.829
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6101.8	.229	255.9	-24.0	-.2	.728	105.8	.366	1.123	212.3	376.1	.712	1.534D	94.3	1.376	-1.7	-10.9	29.7	.220
4-6101.8	4-6170	.220	79.2	-17.5	-2.8	1.385	93.1	.380	1.154	348.6	452.4	.715	1.392A	111.1	1.062	-1.4	-12.6	199.9	.367
		12.79	9.14	4.17	3.66	7.06	4.97	15.56	1/1/1	66.2	4.0	48.5	1.240	2.443	17.6	326.3	7.9	171.5D	1.769
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6128.0	.217	275.8	-32.8	-2.9	.690	101.1	.377	1.058	199.6	405.8	.659	1.457D	102.1	1.357	1.1	4.6	38.5	.317
4-6128.0	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.404	25.3	84.7	.699D	2.108A	115.5	1.133	-3.5	-17.5	202.1	.477
		12.50	8.85	4.17	3.66	7.06	4.68	18.00	1/2/1	66.2	8.1	30.7	.398	3.780	37.7	24.3	37.2	122.5D	1.662
4-5740	4-5950	.116	179.5	-51.0	-4.4	1.092	87.8	.179	1.196	14.9	171.8	.982D	1.411A	91.8	.763	4.7	12.4	323.9	.147
4-5950	4-6069.5	.253	251.2	-27.5	-1.7	.731	108.0	.389	1.127	214.6	326.2	.689A	1.566D	80.7	1.371	-.5	-2.6	57.7	.277
4-6069.5	4-6180	.277	68.3	-47.7	-9.2	1.296	97.6	.248	.917	320.2	485.7	.689	1.144A	103.2	.998	6.4	18.3	202.0	.239
		12.35	9.26	3.70	3.09	6.50	5.56	13.17	1/1/1	60.8	32.6	46.1	.782	2.555	80.0	37.4	62.6	76.7L	1.216
4-5740	4-5950	.116	179.5	-51.0	-4.4	1.092	87.8	.179	1.196	14.9	171.8	.982D	1.411A	91.8	.765	4.7	12.4	323.9	.147
4-5950	4-6139.0	.217	288.5	-30.2	-2.4	.670	98.0	.391	1.029	192.9	417.0	.627	1.431D	105.1	1.346	.7	2.5	48.2	.366
4-6139.0	4-6180	.366	51.0	-10.3	-2.9	1.359	75.5	.403	1.067	52.9	106.0	.637D	1.497A	113.5	1.026	-4.2	-19.1	200.0	.404
		11.45	8.36	3.70	3.09	6.50	4.67	16.36	1/2/1	60.8	12.8	13.1	.448	8.759	77.8	337.1	77.1	97.8D	3.475
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	5.3	5.8	326.3	.140
4-5950	4-6074.7	.249	250.2	-27.3	-1.6	.736	107.8	.381	1.137	215.7	335.6	.704A	1.571D	83.3	1.376	-.6	-3.2	54.5	.242
4-6074.7	4-6190	.242	70.9	-49.0	-8.2	1.289	96.2	.225	.901	325.3	492.3	.698	1.104A	101.1	.935	5.1	15.1	206.2	.201
		12.06	9.11	3.66	2.95	6.36	5.45	12.59	1/1/1	59.3	34.4	47.9	1.025	2.464	75.5	27.7	59.4	83.8L	1.501
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	5.3	5.8	326.3	.140
4-5950	4-6145.3	.221	296.2	-28.5	-2.2	.659	95.9	.401	1.013	188.9	423.3	.606	1.419D	106.9	1.340	.6	1.9	54.4	.397
4-6145.3	4-6190	.397	46.0	-7.1	-2.3	1.288	72.1	.358	.891	77.2	129.9	.572D	1.210A	109.6	.928	-4.3	-19.0	195.5	.327
		11.38	8.43	3.66	2.95	6.36	4.77	14.76	1/2/1	59.3	24.7	12.3	.382	9.318	132.4	335.5	-46.8	85.0L	3.176
4-5760	4-5950	.123	186.2	-27.2	-2.5	1.085	84.5	.190	1.185	36.1	172.9	.961D	1.410A	91.7	.760	2.5	1.3	326.8	.138
4-5950	4-6078.7	.246	250.0	-27.1	-1.5	.739	107.7	.376	1.142	216.1	342.5	.712A	1.571D	85.3	1.378	-.6	-3.8	50.8	.221
4-6078.7	4-6200	.221	72.0	-52.1	-7.9	1.284	95.0	.206	.888	330.1	500.3	.705	1.071A	98.9	.924	4.6	15.3	209.8	.170
		12.06	9.14	3.76	2.92	6.33	5.38	12.18	1/1/1	59.7	39.8	51.4	1.226	2.305	73.5	23.2	56.5	89.3L	1.599
4-5760	4-5950	.123	186.2	-27.2	-2.5	1.085	84.5	.190	1.185	36.1	172.9	.961D	1.410A	91.7	.760	2.5	1.3	326.8	.138
4-5950	4-6150.0	.227	302.2	-26.9	-2.1	.650	94.1	.412	1.001	185.9	427.9	.589	1.413D	108.3	1.335	.6	1.7	59.2	.421
4-6150.0	4-6200	.421	45.1	-4.5	-1.6	1.240	69.9	.357	.805	94.0	148.7	.517D	1.092A	104.9	.859	-4.1	-17.6	189.2	.271
		11.59	8.67	3.76	2.92	6.33	4.91	13.71	1/2/1	59.7	39.6	15.4	.339	7.467	156.3	338.3	-25.1	86.3L	2.189
4-5770	4-5950	.144	188.5	-21.2	-2.1	1.079	82.6	.200	1.175	47.5	174.3	.940D	1.410A	91.4	.755	2.0	-2.5	325.9	.139
4-5950	4-6075.6	.248	250.1	-27.2	-1.6	.737	107.8	.380	1.139	215.8	337.2	.706A	1.571D	83.8	1.376	-.6	-3.3	53.7	.237
4-6075.6	4-6210	.237	71.5	56.7	9.0	1.275	95.1	.193	.872	327.4	512.5	.703	1.040A	96.2	.910	-12.2	-53.3	159.8	.235
		12.35	9.41	3.98	2.94	6.35	5.43	13.10	1/1/2	61.4	68.2	61.7	1.071	1.951	79.1	34.3	-60.6	81.6L	1.018
4-5770	4-5950	.144	188.5	-21.2	-2.1	1.079	82.6	.200	1.175	47.5	174.3	.940D	1.410A	91.4	.755	2.0	-2.5	325.9	.139
4-5950	4-6082.3	.243	250.1	-26.9	-1.4	.739	107.5	.373	1.143	216.2	348.4	.717A	1.570D	86.8	1.379	-.7	-4.3	47.0	.209
4-6082.3	4-6210	.209	72.0	-55.5	-7.7	1.280	94.0	.192	.879	334.6	508.8	.710	1.048A	96.8	.915	4.4	17.7	212.1	.145
		12.23	9.29	3.98	2.94	6.35	5.31	11.90	1/1/1	61.4	47.6	54.9	1.378	2.169	73.0	20.7	54.2	94.1D	1.611
4-5770	4-5950	.144	188.5	-21.2	-2.1	1.079	82.6	.200	1.175	47.5	174.3	.940D	1.410A	91.4	.755	2.0	-2.5	325.9	.139
4-5950	4-6154.3	.235	307.4	-25.5	-2.1	.642	92.3	.422	.991	183.2	432.0	.573	1.410D	109.6	1.330	.5	1.5	63.7	.445
4-6154.3	4-6210	.445	46.9	-2.4	-.9	1.209	68.3	.373	.759	104.4	161.9	.476D	1.043A	100.2	.812	-3.8	-14.8	181.9	.238
		12.01	9.07	3.98	2.94	6.35	5.10	13.16	1/2/1	61.4	56.1	17.3	.304	6.651	167.2	342.9	-12.4	89.2L	1.716
4-5780	4-5950	.171	191.5	-17.9	-1.9	1.071	80.6	.215	1.159	59.2	176.0	.910D	1.409A	91.1	.748	1.6	-5.9	323.9	.142
4-5950	4-6083.6	.243	250.2	-26.8	-1.4	.739	107.4	.372	1.143	216.2	350.5	.718A	1.569D	87.4	1.379	-.7	-4.6	45.5	.205
4-6083.6	4-6220	.205	71.7	58.0	7.9	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-11.2	-55.5	160.7	.213
		12.59	9.59	4.30	3.00	6.41	5.29	12.76	1/1/2	64.2	71.9	66.0	1.424	1.836	75.2	21.5	-58.4	94.5D	1.191
4-5780	4-5950	.171	191.5	-17.9	-1.9	1.071	80.6	.215	1.159	59.2	176.0	.910D	1.409A	91.1	.748	1.6	-5.9	323.9	.142
4-5950	4-6085.6	.241	250.4	-26.7	-1.3	.739	107.3	.371	1.143	216.1	353.6	.719A	1.567D	88.3	1.379	-.7	-4.9	43.1	.202
4-6085.6	4-6220	.202	71.2	-58.6	-7.8	1.277	93.2	.183	.873	339.0	517.3	.715	1.032A	94.8	.909	4.4	21.7	212.9	.128
		12.56	9.56	4.30	3.00	6.41	5.26	11.72	1/1/1	64.2	57.6	57.9	1.479	2.066	73.2	18.6	52.5	96.8D	1.578
4-5780	4-5950	.171	191.5	-17.9	-1.9	1.071	80.6	.215	1.159	59.2	176.0	.910D	1.409A	91.1	.748	1.6	-5.9	323.9	.142
4-5950	4-6156.6	.243	312.6	-23.5	-2.0	.634	90.4	.435	.981	180.5	436.3	.554	1.408D	111.0	1.326	.5	1.3	66.4	.471
4-6156.6	4-6220	.471	50.5	-.6	-.3	1.188	66.7	.395	.732	111.2	171.3	.443D	1.022A	95.6	.779	-3.5	-11.1	175.4	.228
		12.66	9.66	4.30	3.00	6.41	5.35	12.99	1/2/1	64.2	72.6	18.0	.271	6.381	173.9	347.6	-5.7	91.9D	1.458
4-5790	4-5950	.204	195.1	-16.3	-1.8	1.061	78.3	.236	1.139	71.0	177.9	.870D	1.408A	90.7	.737	1.2	-9.1	321.1	.148
4-5950	4-6089.0	.239	251.1	-26.5	-1.2	.738	107.1	.369	1.141	215.7	358.7	.720A	1.562D	89.6	1.379	-.8	-5.6	39.3	.199
4-6089.0	4-6230	.199	70.0	-61.4	-7.9	1.276	92.5	.177	.869	343.2	525.6	.716	1.022A	93.0	.905	4.5	26.8	212.1	.117
		13.08	9.96	4.76	3.13	6.53	5.20	11.62	1/1/2	67.8	69.0	60.3	1.522	1.992	73.7	16.6	51.0	103.6D	1.510
4-5790	4-5950	.204	195.1	-16.3	-1.8	1.061	78.3	.236	1.139	71.0	177.9	.870D	1.408A	90.7	.737	1.2	-9.1	321.1	.148
4-5950	4-6092.0	.237	251.8	-26.2	-1.1	.737	106.8	.368	1.138	215.1	363.0	.720	1.557D	90.8	1.379	-.9	-6.3	36.2	.200
4-6092.0	4-6230	.199	67.7	63.2	8.0	1.277	91.9	.176	.870	347.1	524.7	.717	1.023A	93.2	.906	-11.4	-57.6	157.5	.209
		13.03	9.91	4.76	3.13	6.53	5.15	12.71	1/1/1	67.8	77.6	73.6	1.510	1.670	75.9	15.1	-56.9	105.0D	1.012

MARS ARRIVAL DATE = 2445960 (16 SEP 1984)

4-5740	4-5960	.139	166.6	-59.0	-6.1	1.090	87.8	.176	1.191	15.0	176.0	.982D	1.400A	90.4	.768	6.4	19.3	316.8	.151
4-5960	4-6139.1	.231	283.0	-31.3	-2.7	.682	101.1	.394	1.037	198.2	416.3	.629	1.446D	105.0	1.349	1.1	3.9	48.8	.367
4-6139.1	4-6180	.367	51.0	-10.3	-2.9	1.359	75.5	.403	1.066	53.1	106.2	.637D	1.495A	113.5	1.025	-4.2	-19.1	200.0	.404
		12.09	8.92	3.92	3.17	6.58	5.00	16.35	1/2/1	71.9	12.8	14.4	.447	7.972	61.5	340.2	60.9	95.9D	3.114
4-5750	4-5960	.118	179.4	-42.8	-3.9	1.087	86.2	.179	1.187	25.2	178.2	.974D	1.400A	90.4	.766	4.0	9.1	320.8	.134
4-5960	4-6073.9	.290	247.8	-26.2	-1.5	.761	111.2	.403	1.177	222.8	335.5	.703A	1.651D	83.0	1.387	-.7	-4.0	53.6	.256
4-6073.9	4-6190	.256	71.2	-51.7	-9.0	1.289	96.3	.225	.900	324.7	492.9	.698	1.102A	101.0	.934	6.0	18.6	207.0	.206
		13.06	10.21	3.72	2.85	6.26	6.50	12.66	1/1/1	69.8	37.3	50.0	.918	2.368	75.8	28.8	57.9	82.3L	1.256
4-5750	4-5960	.118	179.4	-42.8	-3.9	1.087	86.2	.179	1.187	25.2	178.2	.974D	1.400A	90.4	.766	4.0	9.1	320.8	.134
4-5960	4-6145.0	.229	290.3	-29.8	-2.4	.669	99.2	.401	1.020	194.2	422.0	.610	1.429D	106.6	1.342	.9	3.0	54.7	.393
4-6145.0	4-6190	.393	46.0	-7.2	-2.3	1.269	72.3	.356	.892	76.5	129.7	.575D	1.210A	109.5	.929	-4.2	-19.1	195.6	.325
		11.53	8.66	3.72	2.85	6.26	4.97	14.72	1/2/1	69.8	24.5	13.5	.390	8.535	130.6	338.4	-46.3	84.5L	2.937
4-5760	4-5960	.124	184.2	-30.9	-2.9	1.083	84.6	.186	1.181	36.0	178.9	.961D	1.400A	90.3	.763	2.9	2.7	321.9	.130
4-5960	4-6078.2	.266	247.6	-26.0	-1.4	.763	111.0	.397	1.162	223.3	342.6	.712A	1.651D	85.1	1.389	-.8	-4.7	49.7	.233
4-6078.2	4-6200	.233	72.5	-54.4	-8.5	1.283	95.1	.206	.888	329.6	500.6	.705	1.071A	98.9	.924	5.3	18.4	210.6	.174
		12.93	10.17	3.77	2.77	6.18	6.40	12.24	1/1/1	70.1	42.1	53.0	1.109	2.241	73.7	23.6	55.0	86.7L	1.377
4-5760	4-5960	.124	184.2	-30.9	-2.9	1.083	84.6	.186	1.181	36.0	178.9	.961D	1.400A	90.3	.763	2.9	2.7	321.9	.130
4-5960	4-6149.4	.230	295.9	-28.4	-2.3	.660	97.6	.409	1.007	191.3	426.1	.596	1.419D	107.6	1.337	.8	2.6	59.3	.413
4-6149.4	4-6200	.413	44.9	-4.6	-1.6	1.242	70.4	.351	.809	92.5	146.2	.525D	1.093A	104.8	.862	-4.0	-17.9	189.6	.268
		11.53	8.76	3.77	2.77	6.18	4.99	13.65	1/2/1	70.1	39.1	16.1	.352	7.143	153.5	339.5	-25.6	85.5L	2.165
4-5770	4-5960	.142	187.7	-23.6	-2.4	1.077	82.8	.196	1.171	47.1	180.0	.941D	1.400	90.0	.758	2.2	-2.1	321.4	.131
4-5960	4-6082.0	.282	247.7	-25.8	-1.3	.764	110.7	.393	1.183	223.5	346.9	.717A	1.648D	86.9	1.389	-.8	-5.3	45.7	.219
4-6082.0	4-6210	.219	72.6	-57.5	-8.3	1.260	94.1	.192	.879	334.3	508.9	.710	1.047A	96.8	.915	5.0	20.6	213.0	.150
		13.04	10.26	3.95	2.77	6.19	6.31	11.95	1/1/1	71.7	49.5	56.3	1.253	2.121	73.1	20.5	52.7	94.1D	1.404
4-5770	4-5960	.142	187.7	-23.6	-2.4	1.077	82.8	.196	1.171	47.1	180.0	.941D	1.400	90.0	.758	2.2	-2.1	321.4	.131
4-5960	4-6155.8	.233	301.0	-27.1	-2.2	.652	96.1	.416	.997	188.8	429.8	.582	1.412D	108.9	1.332	.8	2.3	63.5	.432
4-6155.8	4-6210	.432	46.3	-2.4	-.9	1.213	69.0	.363	.765	102.3	161.4	.488D	1.043A	100.0	.818	-3.8	-15.4	182.4	.233
		11.79	9.01	3.95	2.77	6.19	5.06	13.07	1/2/1	71.7	55.5	17.8	.322	6.479	164.6	343.5	-14.8	88.1L	1.765

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2445960
16 SEP 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5780	4-5960	.167	191.3	-19.5	-2.1	1.070	80.8	.210	1.157	58.5	181.5	.913D	1.400	89.6	.751	1.7	-6.1	319.6	.134
4-5960	4-6083.7	.281	247.9	-25.7	-1.3	.764	110.6	.392	1.182	223.2	351.5	.719A	1.646D	87.6	1.390	-.9	-5.6	43.8	.215
4-6083.7	4-6220	.215	72.3	60.0	8.4	1.276	93.6	.183	.871	336.6	516.2	.712	1.031A	94.7	.908	-11.8	-56.0	159.4	.220
		15.36	10.52	4.25	2.84	6.25	6.27	12.88	1/1/2	74.5	72.6	69.3	1.302	1.758	75.3	20.6	-57.9	95.0D	.986
4-5780	4-5960	.167	191.3	-19.5	-2.1	1.070	80.8	.210	1.157	58.5	181.5	.913D	1.400	89.6	.751	1.7	-6.1	319.6	.134
4-5960	4-6085.6	.279	248.1	-25.6	-1.2	.763	110.5	.391	1.181	223.1	354.4	.720A	1.642D	88.4	1.390	-.9	-6.0	41.7	.212
4-6085.6	4-6220	.211	71.8	-60.6	-8.3	1.277	93.2	.183	.873	336.9	517.3	.713	1.032A	94.8	.909	4.9	24.6	214.0	.133
		13.32	10.48	4.25	2.84	6.25	6.23	11.77	1/1/1	74.5	59.1	59.1	1.344	2.027	73.4	18.3	51.0	99.2D	1.380
4-5780	4-5960	.167	191.3	-19.5	-2.1	1.070	80.8	.210	1.157	58.5	181.5	.913D	1.400	89.6	.751	1.7	-6.1	319.6	.134
4-5960	4-6157.2	.238	306.1	-25.6	-2.1	.644	94.4	.425	.987	186.0	433.4	.567	1.406D	110.0	1.328	.7	2.1	67.7	.452
4-6157.2	4-6220	.452	49.5	-.6	-.3	1.195	67.7	.380	.741	106.4	170.8	.460D	1.022A	95.5	.789	-3.5	-12.0	175.8	.219
		12.26	9.42	4.25	2.84	6.25	5.17	12.85	1/2/1	74.5	71.9	18.3	.294	6.281	171.5	347.2	-7.8	90.4D	1.555
4-5790	4-5960	.199	195.3	-17.5	-1.9	1.061	78.7	.230	1.139	69.9	183.0	.876D	1.401	89.1	.742	1.3	-9.8	317.1	.141
4-5960	4-6161.4	.245	311.6	-23.8	-2.0	.636	92.5	.436	.976	183.2	437.4	.550	1.402D	111.2	1.323	.7	1.8	72.3	.475
4-6161.4	4-6230	.475	54.2	.9	.4	1.182	66.4	.400	.726	112.8	177.9	.435D	1.016A	91.4	.769	-3.2	-8.5	171.3	.222
		12.99	10.02	4.67	2.97	6.38	5.35	12.90	1/2/1	77.9	86.7	18.2	.266	6.330	176.6	351.5	-2.6	92.6D	1.418

MARS ARRIVAL DATE = 2445970 (26 SEP 1984)

4-5750	4-5970	.131	172.6	-50.3	-5.1	1.087	86.4	.177	1.185	24.5	183.7	.975D	1.394	89.2	.769	5.1	13.9	314.6	.137
4-5970	4-6145.3	.247	285.2	-30.6	-2.7	.682	102.4	.407	1.030	199.5	421.5	.611	1.449D	106.7	1.346	1.3	4.3	55.4	.396
4-6145.3	4-6190	.396	46.0	-7.2	-2.3	1.288	72.1	.358	.892	77.1	129.8	.572D	1.211A	109.8	.929	-4.3	-19.0	195.5	.327
		12.15	9.25	3.84	2.90	6.31	5.41	14.76	1/2/1	80.3	24.6	14.8	.383	7.770	129.3	341.8	-49.0	84.2L	2.592
4-5760	4-5970	.126	182.0	-36.0	-3.5	1.082	84.8	.183	1.179	35.1	184.2	.963D	1.395	89.1	.766	3.4	4.8	316.7	.128
4-5970	4-6149.5	.244	290.4	-29.5	-2.5	.672	101.0	.412	1.016	196.6	425.3	.598	1.434D	107.7	1.340	1.2	3.6	59.9	.413
4-6149.5	4-6200	.413	44.9	-4.6	-1.6	1.242	70.3	.352	.808	92.6	148.3	.524D	1.093A	104.8	.862	-4.0	-17.9	189.5	.268
		11.85	9.13	3.80	2.72	6.13	5.33	13.65	1/2/1	80.5	39.2	17.1	.352	6.744	151.3	341.4	-27.5	85.2L	2.021
4-5770	4-5970	.140	187.0	-26.8	-2.8	1.077	83.0	.193	1.170	46.0	185.1	.944D	1.395	88.8	.762	2.4	-1.4	316.7	.127
4-5970	4-6153.1	.243	295.1	-28.4	-2.4	.663	99.6	.417	1.005	194.0	428.6	.586	1.423D	108.6	1.335	1.1	3.2	63.8	.429
4-6153.1	4-6210	.429	46.2	-2.4	-.9	1.214	69.2	.360	.767	101.8	161.2	.490D	1.043A	100.0	.819	-3.8	-15.6	182.6	.231
		11.94	9.24	3.94	2.70	6.11	5.30	13.04	1/2/1	82.1	55.3	18.4	.327	6.238	162.3	344.4	-16.7	87.5L	1.712
4-5780	4-5970	.163	191.3	-21.6	-2.3	1.070	81.1	.206	1.157	57.1	186.3	.918D	1.396	88.4	.756	1.8	-6.2	315.5	.130
4-5970	4-6156.6	.243	299.8	-27.2	-2.2	.655	98.2	.423	.994	191.5	431.8	.574	1.414D	109.5	1.331	1.0	2.8	67.7	.445
4-6156.6	4-6220	.445	49.2	-.6	-.3	1.197	68.1	.374	.744	107.4	170.6	.466D	1.023A	95.5	.793	-3.5	-12.4	176.0	.215
		12.27	9.51	4.20	2.76	6.17	5.30	12.80	1/2/1	84.6	71.6	18.8	.304	6.112	169.2	347.8	-9.7	89.6L	1.553
4-5790	4-5970	.192	195.7	-19.0	-2.1	1.061	79.1	.225	1.140	68.2	187.5	.883D	1.397	87.8	.747	1.4	-10.2	313.4	.137
4-5970	4-6160.4	.245	304.9	-25.8	-2.1	.647	96.5	.431	.983	188.8	435.2	.560	1.406D	110.6	1.326	1.0	2.6	71.9	.463
4-6160.4	4-6230	.463	53.4	.9	.4	1.187	67.1	.389	.731	111.0	177.6	.447D	1.016A	91.4	.776	-3.2	-9.1	171.4	.215
		12.83	9.93	4.59	2.90	6.31	5.35	12.80	1/2/1	87.7	86.4	18.5	.281	6.208	174.5	351.4	-4.4	91.4D	1.462

MARS ARRIVAL DATE = 2445980 (6 OCT 1984)

4-5760	4-5980	.133	178.7	-42.6	-4.4	1.082	85.0	.181	1.179	33.6	189.0	.965D	1.392	88.0	.770	4.2	7.9	311.6	.131
4-5980	4-6150.1	.267	286.2	-30.0	-2.7	.684	104.4	.420	1.028	201.8	425.2	.596	1.461D	108.0	1.345	1.5	4.7	60.9	.422
4-6150.1	4-6200	.422	45.1	-4.5	-1.6	1.240	69.9	.357	.805	94.0	148.8	.517D	1.092A	105.0	.858	-4.1	-17.6	189.1	.271
		12.56	9.78	3.86	2.78	6.19	5.92	13.71	1/2/1	90.2	39.6	16.2	.338	6.323	149.6	343.9	-28.7	85.3L	1.799
4-5770	4-5980	.139	186.4	-31.0	-3.2	1.077	83.3	.190	1.171	44.3	189.7	.946D	1.393	87.7	.766	2.8	-.3	312.5	.127
4-5980	4-6153.5	.263	290.4	-29.1	-2.5	.675	103.1	.423	1.016	199.2	428.2	.585	1.446D	108.8	1.339	1.4	4.1	64.7	.435
4-6153.5	4-6210	.434	46.4	-2.4	-.9	1.212	68.8	.365	.764	102.7	161.5	.485D	1.043A	100.0	.817	-3.8	-15.3	182.3	.234
		12.44	9.74	3.93	2.70	6.12	5.81	13.08	1/2/1	91.8	55.6	19.3	.318	5.952	160.3	346.3	-18.5	87.9L	1.577
4-5780	4-5980	.159	191.6	-24.4	-2.6	1.071	81.5	.203	1.159	55.2	190.6	.924D	1.395	87.3	.761	2.0	-6.0	311.9	.129
4-5980	4-6156.8	.260	294.6	-28.1	-2.4	.667	101.8	.427	1.004	196.6	431.1	.575	1.433D	109.6	1.334	1.3	3.7	66.4	.447
4-6156.8	4-6220	.447	49.3	-.6	-.3	1.196	68.0	.376	.745	107.8	170.7	.464D	1.022A	95.5	.792	-3.5	-12.3	175.9	.216
		12.65	9.87	4.15	2.75	6.17	5.72	12.82	1/2/1	94.1	71.7	19.5	.300	5.892	167.2	349.2	-11.5	89.4L	1.469
4-5790	4-5980	.186	196.5	-20.9	-2.3	1.063	79.5	.220	1.144	66.0	191.5	.892D	1.397	86.8	.753	1.4	-10.4	310.4	.136
4-5980	4-6160.3	.257	299.2	-27.0	-2.2	.658	100.3	.432	.992	194.2	434.1	.563	1.421D	110.4	1.329	1.2	3.5	72.3	.462
4-6160.3	4-6230	.462	53.4	.9	.4	1.187	67.2	.388	.732	110.8	177.8	.446D	1.016A	91.4	.777	-3.2	-9.1	171.4	.215
		13.05	10.16	4.30	2.88	6.29	5.66	12.79	1/2/1	96.7	86.4	19.1	.282	6.027	172.4	352.3	-6.2	91.0D	1.418

MARS ARRIVAL DATE = 2445990 (16 OCT 1984)

4-5770	4-5990	.141	185.2	-36.6	-3.9	1.076	83.7	.188	1.173	42.1	193.7	.953D	1.394	86.9	.770	3.4	1.8	309.0	.131
4-5990	4-6154.5	.292	287.4	-29.3	-2.8	.689	106.6	.436	1.031	204.3	428.6	.581	1.480D	109.5	1.345	1.8	5.0	66.0	.446
4-6154.5	4-6210	.448	47.0	-2.5	-.9	1.208	68.1	.376	.756	104.9	162.0	.473D	1.043A	100.2	.810	-3.8	-14.7	181.8	.240
		13.27	10.49	3.94	2.78	6.19	6.55	13.18	1/2/1	100.5	56.3	20.4	.299	5.842	158.8	348.7	-19.3	87.9L	1.389
4-5780	4-5990	.155	192.0	-27.9	-3.0	1.072	81.9	.200	1.163	52.7	194.4	.931D	1.396	86.5	.765	2.3	-5.3	309.1	.132
4-5990	4-6157.7	.285	291.1	-26.5	-2.6	.679	103.3	.436	1.017	201.0	431.3	.572	1.462D	110.0	1.339	1.6	4.5	69.7	.459
4-6157.7	4-6220	.459	49.9	-.6	-.3	1.192	67.4	.385	.736	109.4	171.0	.454D	1.022A	95.6	.786	-3.5	-11.7	175.7	.222
		13.50	10.50	4.11	2.80	6.21	6.39	12.90	1/2/1	102.6	72.2	20.4	.286	5.637	165.4	351.2	-12.8	89.7L	1.325

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 480 DAYS | MARS ARRIVAL DATE = 2445900 | 18 JUL 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																				
4-5650	4-5900	.166	210.5	-1.3	1.8	1.088	99.9	.240	1.193	304.6	523.4	.907	1.479A	95.1	.730	.1	-15.5	320.7	.178	
4-5900	4-6047.1	.221	278.5	-29.4	-2.0	.626	93.4	.432	1.022	184.5	289.8	.581A	1.463D	70.5	1.334	.5	1.5	50.4	.447	
4-6047.1	4-6130	.447	41.0	-22.0	-7.2	1.385	106.6	.471	1.191	306.0	458.0	.630/	1.751A	116.5	1.085	6.5	20.2	166.0	.485	
		13.02	9.27	4.50	3.75	7.15	4.77	18.19	2/1/1	40.5	14.2	25.2	.301	4.589	110.9	355.1	-64.9	75.1L	1.080	
4-5660	4-5900	.177	217.8	.5	2.4	1.094	98.9	.236	1.205	310.1	518.9	.921	1.490A	96.2	.736	-.6	-18.6	325.5	.187	
4-5900	4-6051.4	.209	277.1	-30.2	-2.1	.636	93.9	.410	1.039	185.7	297.8	.612A	1.465D	73.0	1.341	.5	1.7	52.3	.399	
4-6051.4	4-6140	.399	47.3	-27.3	-8.0	1.356	104.5	.406	1.084	307.6	462.8	.644	1.524A	113.5	1.044	6.8	19.6	174.1	.420	
		12.81	8.85	4.38	3.96	7.36	4.47	16.71	2/1/1	36.6	17.5	29.5	.378	3.929	99.1	23.8	-71.2	75.0L	1.106	
4-5700	4-5900	.164	215.4	-57.2	-5.5	1.114	94.7	.232	1.258	334.8	502.9	.986	1.549A	99.8	.759	6.8	9.3	326.3	.240	
4-5900	4-6086.4	.178	272.8	-40.4	-4.3	.677	95.1	.343	1.096	190.0	356.3	.720A	1.472D	89.6	1.366	2.5	17.7	35.6	.193	
4-6086.4	4-6180	.193	75.4	-24.3	-3.5	1.321	95.3	.272	.969	334.8	473.4	.706	1.232A	105.6	.979	.1	-8.3	200.5	.253	
		13.20	7.97	4.22	5.23	8.61	3.75	13.40	1/1/1	33.9	11.9	57.3	1.619	2.087	48.6	329.0	48.4	127.1D	1.759	
4-5720	4-5900	.119	224.8	-38.4	-2.1	1.120	92.1	.235	1.281	349.0	496.7	.981	1.582A	101.0	.768	3.3	.2	334.3	.239	
4-5900	4-6067.5	.180	272.4	-33.0	-2.4	.668	95.2	.360	1.082	189.4	327.3	.693A	1.471D	81.5	1.358	.7	4.0	53.2	.255	
4-6067.5	4-6200	.255	66.6	52.1	9.1	1.274	96.6	.205	.872	319.3	507.6	.693	1.051A	97.6	.913	-12.2	-49.3	159.9	.243	
		12.73	7.53	3.72	5.19	8.58	3.81	13.23	1/1/2	24.6	63.7	49.5	.927	2.391	79.2	33.7	-59.5	75.5L	1.290	
4-5720	4-5900	.119	224.8	-38.4	-2.1	1.120	92.1	.235	1.281	349.0	496.7	.981	1.582A	101.0	.768	3.3	.2	334.3	.239	
4-5900	4-6080.3	.174	271.6	-36.2	-3.1	.676	95.3	.345	1.095	190.3	348.8	.718A	1.472D	87.1	1.365	1.4	9.6	43.0	.195	
4-6080.3	4-6200	.195	71.3	-45.8	-6.3	1.285	94.8	.207	.890	331.6	499.4	.706	1.074A	99.1	.925	3.0	7.0	207.9	.161	
		12.59	7.40	3.72	5.19	8.58	3.67	12.08	1/1/1	24.6	34.2	60.9	1.577	1.974	68.1	1.4	60.6	101.1D	1.536	
4-5730	4-5900	.112	222.0	-34.1	-1.7	1.121	90.6	.237	1.290	356.8	494.4	.985	1.596A	101.5	.772	2.7	-1.1	336.1	.243	
4-5900	4-6074.9	.175	271.5	-34.5	-2.7	.674	95.4	.349	1.092	190.2	340.0	.711A	1.472D	84.9	1.363	1.0	6.4	48.6	.213	
4-6074.9	4-6210	.213	69.5	50.9	7.5	1.275	95.2	.193	.871	326.8	512.8	.703	1.040A	96.1	.910	-10.7	-51.5	163.2	.213	
		12.66	7.36	3.66	5.30	8.68	3.70	12.77	1/1/2	22.7	60.3	47.8	1.327	2.469	72.4	19.4	-55.1	88.0L	1.949	
4-5730	4-5900	.112	222.0	-34.1	-1.7	1.121	90.6	.237	1.290	356.8	494.4	.985	1.596A	101.5	.772	2.7	-1.1	336.1	.243	
4-5900	4-6082.8	.175	271.9	-37.5	-3.5	.677	95.3	.343	1.096	190.3	352.8	.719A	1.472D	88.2	1.365	1.7	12.0	40.0	.191	
4-6082.8	4-6210	.191	71.1	-51.4	-6.7	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.0	210.5	.138	
		12.65	7.35	3.66	5.30	8.68	3.69	11.82	1/1/1	22.7	44.3	66.9	1.641	1.768	70.2	3.9	61.0	101.7D	1.260	
4-5740	4-5900	.111	216.7	-30.0	-1.4	1.121	89.0	.240	1.297	5.4	132.8	.986D	1.607A	101.9	.774	2.3	-2.0	337.4	.247	
4-5900	4-6083.5	.175	272.0	-37.9	-3.6	.677	95.3	.343	1.096	190.2	353.8	.720A	1.472D	88.4	1.365	1.8	12.8	39.2	.191	
4-6083.5	4-6220	.191	70.8	54.5	7.0	1.276	93.6	.183	.871	336.4	516.2	.712	1.031A	94.7	.908	-10.4	-54.5	163.0	.200	
		12.75	7.35	3.65	5.41	8.79	3.69	12.59	1/1/2	21.5	70.9	48.5	1.648	2.434	66.6	6.7	-46.2	105.7D	2.364	
4-5740	4-5900	.111	216.7	-30.0	-1.4	1.121	89.0	.240	1.297	5.4	132.8	.986D	1.607A	101.9	.774	2.3	-2.0	337.4	.247	
4-5900	4-6085.7	.177	272.5	-39.7	-4.1	.677	95.2	.343	1.096	190.1	357.3	.720A	1.472D	89.3	1.366	2.3	16.3	36.4	.192	
4-6085.7	4-6220	.192	70.6	-56.4	-7.2	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.8	18.5	211.7	.123	
		12.79	7.39	3.65	5.41	8.79	3.73	11.67	1/1/1	21.5	56.0	78.2	1.636	1.586	72.2	4.5	62.1	103.0D	.958	
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																				
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160	
4-5910	4-6048.4	.221	275.9	-29.5	-2.0	.633	95.9	.431	1.019	187.8	289.4	.580A	1.458D	70.4	1.333	.3	.9	52.7	.447	
4-6048.4	4-6130	.447	42.2	-20.6	-6.8	1.392	106.6	.480	1.215	306.9	456.9	.632	1.799A	116.8	1.093	6.0	18.9	166.2	.491	
		12.53	9.17	4.40	3.36	6.76	4.77	18.34	2/1/1	47.6	12.8	23.8	.300	4.842	114.9	350.8	-62.2	74.6L	1.154	
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167	
4-5910	4-6052.9	.208	274.1	-30.2	-2.0	.646	96.3	.408	1.037	189.3	298.1	.614A	1.461D	73.2	1.341	.3	1.1	54.6	.396	
4-6052.9	4-6140	.396	48.6	-25.2	-7.3	1.362	104.4	.415	1.104	308.7	461.4	.645	1.562A	113.9	1.052	6.0	17.5	174.1	.426	
		12.24	8.72	4.26	3.52	6.92	4.46	16.83	2/1/1	43.1	15.4	26.9	.384	4.301	102.1	15.5	-71.2	74.8L	1.267	
4-5670	4-5910	.161	224.9	5.2	3.1	1.095	97.5	.222	1.204	316.5	520.9	.937	1.471A	95.2	.742	-1.5	-19.2	329.9	.175	
4-5910	4-6056.7	.200	272.5	-30.7	-2.1	.656	96.6	.393	1.051	190.4	305.3	.638A	1.464D	75.4	1.346	.3	1.3	55.7	.356	
4-6056.7	4-6150	.356	54.0	-31.3	-8.1	1.337	102.5	.358	1.024	310.5	467.0	.657	1.391A	110.9	1.015	6.4	17.6	181.8	.367	
		12.14	8.43	4.18	3.70	7.10	4.26	15.56	2/1/1	39.6	19.5	32.6	.475	3.567	92.6	47.3	-72.3	75.4L	1.219	
4-5710	4-5910	.157	213.6	-56.1	-4.5	1.110	92.9	.215	1.244	343.4	507.0	.976	1.512A	98.1	.760	5.7	8.8	329.1	.215	
4-5910	4-6078.4	.176	267.3	-33.4	-2.4	.683	97.4	.347	1.093	194.4	344.1	.714A	1.472D	85.9	1.364	.6	4.2	47.9	.202	
4-6078.4	4-6190	.202	71.2	-38.9	-5.7	1.294	95.7	.228	.909	328.7	489.7	.702	1.116A	101.6	.940	2.5	2.9	204.1	.193	
		12.23	7.61	3.90	4.62	8.01	3.71	12.48	1/1/1	35.5	25.3	48.2	1.471	2.451	65.6	.4	59.1	100.6D	2.134	
4-5720	4-5910	.114	217.2	-45.5	-2.9	1.111	91.6	.216	1.252	351.0	504.5	.982	1.522A	98.6	.764	3.9	3.7	333.3	.212	
4-5910	4-6067.7	.183	268.7	-32.1	-2.2	.675	97.2	.361	1.080	193.2	325.7	.690A	1.470D	81.1	1.357	.4	2.2	55.3	.260	
4-6067.7	4-6200	.260	67.2	53.4	9.5	1.274	96.6	.205	.873	319.4	507.5	.693	1.052A	97.6	.913	-12.5	-49.7	159.2	.248	
		12.10	7.55	3.68	4.55	7.94	3.87	13.32	1/1/2	30.8	64.2	52.1	.887	2.276	81.0	38.8	-60.5	73.8L	1.132	
4-5720	4-5910	.114	217.2	-45.5	-2.9	1.111	91.6	.216	1.252	351.0	504.5	.982	1.522A	98.6	.764	3.9	3.7	333.3	.212	
4-5910	4-6080.2	.175	267.3	-33.7	-2.5	.684	97.4	.345	1.094	194.4	347.0	.717A	1.472D	86.7	1.364	.7	4.7	45.9	.196	
4-6080.2	4-6200	.196	71.3	-46.1	-6.3	1.285	94.8	.207	.890	331.5	499.4	.706	1.074A	99.1	.925	3.1	7.4	208.0	.162	
		11.93	7.38	3.68	4.55	7.94	3.70	12.08	1/1/1	30.8	34.5	55.5	1.557	2.146	68.9	7.2	59.4	98.7D	1.785	
4-5730	4-5910	.105	214.6	-38.5	-2.1	1.112	90.1	.217	1.258	359.3	502.6	.985	1.531A	99.0	.766	3.1	1.3	335.6	.214	
4-5910	4-6075.1	.177	267.4	-33.0	-2.3	.682	97.4	.350	1.090	194.2	338.5	.709A	1.472D	84.5	1.362	.5	3.4	51.0	.216	
4-6075.1	4-6210	.216	69.8	51.8	7.7	1.275	95.2	.193	.871	326.9	513.8	.703	1.040A	96.1	.910	-11.0	-51.8	162.7	.216	
		11.93	7.34	3.60	4.59	7.98	3.74	12.82	1/1/2	28.5	66.6	50.9	1.286	2.326	75.2	25.3	-57.8	85.1L	1.705	
4-5730	4-5910	.105	214.6	-38.5	-2.1	1.112	90.1	.217	1.258	359.3	502.6	.985	1.531A	99.0	.766	3.1	1.3	335.6	.214	
4-5910	4-6082.9	.175	267.6	-34.3	-2.6	.685	97.3	.344	1.095	194.4	351.3	.719A	1.472D	87.8	1.365	.8	5.7	42.8	.190	
4-6082.9	4-6210	.190	71.1	-51.1	-6.7	1.280	93.9	.192	.879	335.2	508.4	.710	1.049A	96.9	.916	3.3	11.6	210.3	.138	
		11.88	7.29	3.60	4.59	7.98	3.69	11.82	1/1/1	28.5	44.1	61.8	1.662	1.949	70.3	8.8	58.7	100.2D	1.577	
4-5740	4-5910	.104	209.3	-32.3	-1.7	1.112	88.5	.219	1.261	8.2	141.4	.985D	1.537A	99.4	.767	2.5	-.3	337.0	.216	
4-5910	4-6083.5	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.2	.719A	1.472D	88.0	1.365	.8	6.0	42.1	.189	
4-6083.5	4-6220	.189	70.7	54.0	6.9	1.276	93.6	.183	.871	336.4	518.3	.712	1.031A	94.7	.908	-10.3	-54.4	163.4	.199	
		11.93	7.28	3.59	4.65	8.04	3.69	12.56	1/1/2	27.2	70.7	53.3	1.679	2.229	69.5	11.6	-51.8	101.1D	2.064	
4-5740	4-5910	.104	209.3	-32.3	-1.7	1.112	88.5	.219	1.261	8.2	141.4	.985D	1.537A	99.4	.767	2.5	-.3	337.0	.216	
4-5910	4-6085.8	.175	268.0	-35.1	-2.8	.685	97.2	.343	1.096	194.2	355.8	.720A	1.471D	88.9	1.366	1.0	7.2	39.2	.187	
4-6085.8	4-6220	.187	70.4	-55.1	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.7	211.1	.120	
		11.93	7.28	3.59	4.65	8.04	3.69	11.65	1/1/1	27.2	55.2	67.5	1.724	1.799	71.5	8.8	58.4	102.6D	1.376	
4-5750	4-5910	.112	203.8	-26.3	-1.5	1.110	86.8	.222	1.260	18.0	141.1	.980D	1.540A	99.6	.767	2.2	-1.5	337.7	.218	
4-5910	4-6088.9	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.5	.720	1.470D	90.1	1.366	1.3	9.8	35.5	.187	
4-6088.9	4-6230	.187	69.5	-58.8	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.8	23.0	210.3	.111	
		12.07	7.37	3.66	4.70	8.09	3.71	11.56	1/1/2	26.6	67.8	73.9	1.717	1.664	72.7	8.0	58.6	105.3D	1.141	
4-5750	4-5910	.112	203.8	-26.3	-1.5	1.110	86.8	.222	1.260	18.0	141.1	.980D	1.540A	99.6	.767	2.2	-1.5	337.7	.218	
4-5910	4-6092.1	.179	269.9	-39.6	-4.1	.684	96.8	.343	1.094	193.4	365.2	.719	1.469D	91.3	1.366	2.2	15.5	32.0	.194	
4-6092.1	4-6230	.194	67.4	62.1	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.1	-57.3	158.3	.204	
		12.14	7.44	3.66	4.70	8.09	3.78	12.64	1/1/1	26.6	77.3	52.8	1.605	2.247	70.9	7.0	-43.8	115.4D	2.002	
4-5770	4-5910	.154	197.7	-17.6	-1.3	1.100	82.6	.237	1.242	40.5	143.5	.948D	1.536A	99.9	.759	1.6	-3.9	337.0	.223	
4-5910	4-6098.4	.197	272.1	1.5	7.2	.681	96.2	.345	1.089	192.1	374.1	.714	1.465D	93.6	1.366	-9.1	-49.1	24.6	.285	
4-6098.4	4-6250	.285	67.0	-76.8	-12.5	1.277	90.9	.172	.868	354.0	540.6	.719	1.017	89.9	.903	9.4	47.7	218.6	.174	
		13.09	8.27	4.09	4.82	8.20	4.19	12.23	1/2/2	27.7	90.7	32.2	.742	3.606	79.1	7.1	23.1	132.0D	1.934	
4-5780	4-5910	.187	197.5	-15.4	-1.3	1.092	80.1	.251	1.223	53.3	146.3	.916D	1.530A	100.0	.751	1.4	-5.5	335.6	.227	
4-5910	4-6100.9	.174	273.6	-19.8	1.1	.680	96.0	.346	1.087	191.5	377.5	.711	1.463D	94.5	1.365	-3.0	-18.9	25.6	.219	
4-6100.9	4-6260	.219	65.0	-69.1	-9.2	1.277	90.6	.172	.869	355.7	547.7	.719	1.018	88.4	.904	6.2	40.8	208.1	.132	
		13.09	8.16	4.51	4.90	8.29	3.67	11.76	1/2/2	29.4	99.9	55.7	1.248	2.139	75.0	7.0	40.8	125.9D	1.422	
MARS ARRIVAL DATE = 2445920 (7 AUG 1984)																				
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	318.8	.145	
4-5920	4-6049.6	.226	272.4	-29.5	-2.0	.641	98.6	.432	1.019	191.6	289.3	.579A	1.459D	70.4	1.333	.1	.3	54.7	.448	
4-6049.6	4-6130	.448	43.4	-19.5	-6.4	1.398	106.6	.490	1.241	307.7	455.8	.633	1.849A	117.2	1.101	5.8	17.7	166.4	.498	
		12.25	9.20	4.33	3.05	6.46	4.87	18.51	2/1/1	56.0	11.7	22.7	.299	5.075	118.6	348.0	-59.3	74.0L	1.218	

STOPOVER TIME = 0 DAYS

1984 INBOUND SWINGBY

MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2445920
7 AUG 1984

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6054.3	.213	270.0	-30.0	-2.0	.656	98.9	.408	1.039	193.3	298.5	.615A	1.464D	73.3	1.341	.1	.4	56.5	.394
4-6054.3	4-6140	.394	49.8	-23.6	-6.8	1.367	104.4	.423	1.121	309.6	460.2	.647	1.596A	114.2	1.058	5.5	16.0	174.3	.431
		11.91	8.75	4.18	3.16	6.57	4.56	16.95	2/1/1	50.8	13.8	24.9	.387	4.645	104.7	8.4	-70.6	74.3L	1.411
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.745	-1.2	-19.2	320.4	.157
4-5920	4-6058.5	.204	268.0	-30.4	-2.0	.667	99.1	.391	1.055	194.8	306.8	.642A	1.467D	75.8	1.348	.1	.5	57.5	.349
4-6058.5	4-6150	.349	55.4	-28.4	-7.3	1.343	102.4	.366	1.040	311.7	465.4	.659	1.421A	111.4	1.022	5.5	14.8	181.7	.371
		11.72	8.42	4.08	3.30	6.70	4.35	15.65	2/1/1	46.6	16.7	29.0	.493	3.997	93.8	43.6	-74.6	75.6L	1.477
4-5680	4-5920	.152	231.9	13.1	4.1	1.096	96.1	.208	1.202	323.4	523.5	.951	1.452A	94.2	.749	-2.6	-23.8	334.3	.165
4-5920	4-6061.6	.198	266.6	-30.6	-2.0	.673	99.3	.381	1.065	195.8	312.7	.659A	1.470D	77.5	1.351	.1	.5	57.8	.320
4-6061.6	4-6160	.320	59.8	-35.8	-6.3	1.320	100.6	.315	.976	313.5	472.3	.670	1.286A	108.3	.989	6.1	16.2	189.0	.318
		11.77	8.29	4.06	3.48	6.89	4.22	14.57	2/1/1	44.1	22.2	36.4	.589	3.199	87.5	49.4	72.1	75.5L	1.295
4-5690	4-5920	.192	244.4	33.7	8.1	1.099	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7	.192
4-5920	4-6099.7	.193	268.4	-44.7	-5.7	.690	98.3	.346	1.090	196.4	374.6	.713	1.468D	93.7	1.366	3.8	24.4	27.9	.220
4-6099.7	4-6170	.220	79.5	-17.9	-2.8	1.379	93.7	.371	1.136	346.4	453.7	.714	1.557A	110.8	1.056	-1.2	-11.9	199.5	.359
		12.76	8.68	4.58	4.08	7.47	4.10	15.40	2/1/1	47.9	3.8	65.6	1.245	1.845	41.8	321.1	41.6	138.2D	1.052
4-5690	4-5920	.192	244.4	33.7	8.1	1.099	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7	.192
4-5920	4-6102.2	.178	269.8	-20.4	.9	.688	98.0	.347	1.088	195.7	378.0	.710	1.465D	94.6	1.365	-2.9	-18.0	27.0	.220
4-6102.2	4-6170	.220	79.2	-17.6	-2.8	1.385	93.0	.381	1.156	349.0	452.3	.715	1.596A	111.1	1.065	-1.5	-12.7	200.0	.368
		12.42	8.34	4.58	4.08	7.47	3.76	15.58	2/2/1	47.9	4.0	49.5	1.241	2.390	19.7	323.0	-.5	173.0D	1.725
4-5690	4-5920	.192	244.4	33.7	8.1	1.099	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7	.192
4-5920	4-6104.9	.179	271.5	-27.6	-.9	.686	97.7	.349	1.084	194.8	381.5	.706	1.462D	95.5	1.365	-1.0	-6.1	26.6	.221
4-6104.9	4-6170	.221	78.4	-17.3	-2.7	1.391	92.3	.392	1.179	351.9	450.8	.717	1.641A	111.5	1.071	-1.7	-13.4	200.5	.377
		12.44	8.36	4.58	4.08	7.47	3.78	15.78	2/2/1	47.9	4.4	51.8	1.226	2.290	18.2	324.9	12.6	164.3D	1.581
4-5690	4-5920	.192	244.4	33.7	8.1	1.099	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7	.192
4-5920	4-6130.4	.204	293.6	-28.2	-1.8	.657	92.3	.383	1.041	183.8	411.9	.643	1.439D	103.7	1.351	-.2	-.6	37.7	.542
4-6130.4	4-6170	.342	61.7	-13.4	-3.2	1.445	80.7	.518	1.432	27.5	85.0	.691D	2.174A	116.3	1.139	-3.8	-17.6	201.6	.495
		13.02	8.94	4.58	4.08	7.47	4.36	18.38	2/2/1	47.9	8.3	27.0	.513	4.288	29.3	323.4	28.2	122.6D	1.688
4-5710	4-5920	.173	188.2	-71.1	-7.6	1.104	92.5	.202	1.225	345.0	514.4	.978	1.473A	96.1	.759	6.7	19.4	325.0	.214
4-5920	4-6077.4	.183	262.6	-31.6	-2.1	.692	99.6	.350	1.095	198.9	341.1	.712A	1.478D	85.1	1.364	.2	1.2	50.9	.210
4-6077.4	4-6190	.210	71.0	-41.2	-6.2	1.293	95.8	.227	.907	327.8	490.5	.701	1.112A	101.4	.939	3.0	5.5	204.5	.193
		12.79	8.19	4.32	4.60	7.99	3.87	12.48	1/1/1	47.7	27.1	46.2	1.366	2.551	69.0	9.4	60.1	95.2D	2.118
4-5720	4-5920	.118	206.4	-54.7	-4.0	1.105	91.2	.202	1.231	352.9	512.2	.983	1.479A	96.5	.762	4.9	6.8	330.6	.193
4-5920	4-6067.9	.190	264.3	-31.1	-2.0	.684	99.5	.364	1.081	197.5	324.5	.687A	1.475D	80.7	1.358	.1	.7	56.9	.266
4-6067.9	4-6200	.266	67.8	54.6	9.9	1.274	96.6	.205	.873	319.6	507.4	.694	1.052A	97.6	.913	-12.9	-50.1	156.5	.253
		11.85	7.75	3.72	4.09	7.49	4.03	13.41	1/1/2	38.8	64.6	54.6	.848	2.181	82.3	42.7	-61.0	72.6L	1.001
4-5720	4-5920	.118	206.4	-54.7	-4.0	1.105	91.2	.202	1.231	352.9	512.2	.983	1.479A	96.5	.762	4.9	6.8	330.6	.193
4-5920	4-6079.9	.182	262.5	-31.8	-2.1	.693	99.6	.348	1.097	199.0	345.3	.715A	1.478D	86.2	1.365	.2	1.4	48.4	.200
4-6079.9	4-6200	.200	71.4	-47.1	-6.6	1.285	94.8	.207	.890	331.2	499.5	.706	1.074A	99.0	.925	3.3	8.7	208.2	.163
		11.66	7.56	3.72	4.09	7.49	3.85	12.09	1/1/1	38.8	35.3	52.5	1.498	2.260	70.4	12.9	58.8	95.7D	1.888
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.8	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.6	4.3	333.9	.190
4-5920	4-6075.2	.184	262.8	-31.5	-2.1	.691	99.6	.353	1.093	198.7	337.3	.707A	1.478D	84.2	1.363	.2	1.1	52.9	.220
4-6075.2	4-6210	.220	70.1	52.9	8.0	1.275	95.2	.193	.871	327.0	512.7	.703	1.040A	96.1	.910	-11.2	-52.2	162.1	.220
		11.52	7.49	3.59	4.03	7.43	3.90	12.88	1/1/2	35.4	66.9	53.8	1.238	2.211	77.2	30.0	-59.4	83.1L	1.499
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.8	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.6	4.3	333.9	.190
4-5920	4-6082.8	.181	262.7	-32.0	-2.1	.694	99.5	.346	1.098	199.0	349.9	.718A	1.478D	87.4	1.366	.2	1.7	45.1	.192
4-6082.8	4-6210	.192	71.2	-51.6	-6.8	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	5.4	12.3	210.5	.138
		11.44	7.41	3.59	4.03	7.43	3.82	11.82	1/1/1	35.4	44.5	57.7	1.628	2.073	71.1	13.3	57.4	98.1D	1.747
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6083.5	.181	262.8	-32.0	-2.2	.694	99.5	.346	1.098	199.0	351.0	.719A	1.478D	87.7	1.366	.2	1.8	44.3	.191
4-6083.5	4-6220	.191	70.8	54.4	7.0	1.276	93.6	.183	.871	336.4	518.3	.712	1.031A	94.7	.908	-10.4	-54.5	163.1	.200
		11.43	7.39	3.57	4.04	7.43	3.82	12.58	1/1/2	33.8	70.8	56.9	1.653	2.098	71.9	15.8	-55.1	87.9D	1.815
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6085.8	.180	263.1	-32.2	-2.2	.694	99.4	.345	1.099	198.8	354.6	.720A	1.477D	88.6	1.367	.3	2.1	41.5	.187
4-6085.8	4-6220	.187	70.4	-55.3	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.9	211.1	.121
		11.41	7.38	3.57	4.04	7.43	3.81	11.65	1/1/1	33.8	55.3	62.0	1.716	1.941	71.8	12.7	56.3	101.3D	1.614
4-5750	4-5920	.109	197.8	-27.7	-1.8	1.102	86.5	.207	1.233	20.8	149.7	.977D	1.488A	97.3	.763	2.3	-.1	336.5	.191
4-5920	4-6088.6	.180	263.8	-32.5	-2.3	.694	99.2	.344	1.098	198.5	359.3	.720A	1.476D	89.8	1.367	.4	2.6	37.8	.186
4-6088.6	4-6250	.186	69.4	-58.4	-7.1	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.7	22.5	210.0	.110
		11.49	7.43	3.63	4.06	7.45	3.80	11.56	1/1/2	33.2	67.7	65.9	1.746	1.838	72.5	11.4	55.5	104.9D	1.463
4-5750	4-5920	.109	197.8	-27.7	-1.8	1.102	86.5	.207	1.233	20.8	149.7	.977D	1.488A	97.3	.763	2.3	-.1	336.5	.191
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2	.188
4-6092.1	4-6230	.188	67.1	60.8	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.7	-57.0	159.2	.199
		11.49	7.43	3.63	4.06	7.45	3.80	12.57	1/1/1	33.2	77.0	62.5	1.710	1.928	72.7	10.0	-51.5	110.2D	1.586
4-5760	4-5920	.125	195.1	-21.7	-1.6	1.097	84.6	.213	1.226	31.7	150.6	.965D	1.487A	97.3	.760	2.0	-1.7	336.4	.192
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2	.188
4-6092.1	4-6240	.187	68.3	-61.1	-7.4	1.276	92.0	.175	.867	346.7	533.8	.717	1.018A	91.3	.903	4.1	28.4	207.9	.107
		11.47	7.59	3.79	4.09	7.48	3.80	11.53	1/1/2	33.5	80.4	69.8	1.710	1.747	73.3	9.8	55.0	108.7D	1.278
4-5760	4-5920	.125	195.1	-21.7	-1.6	1.097	84.6	.213	1.226	31.7	150.6	.965D	1.487A	97.3	.760	2.0	-1.7	336.4	.192
4-5920	4-6099.8	.194	268.4	-45.5	-6.0	.690	98.3	.346	1.090	196.4	374.7	.713	1.468D	93.8	1.366	4.1	25.7	27.9	.222
4-6099.8	4-6240	.222	56.5	69.7	9.4	1.277	90.3	.172	.869	357.6	532.1	.719	1.018A	91.6	.904	-12.8	-58.8	151.5	.223
		12.00	7.92	3.79	4.09	7.48	4.13	12.93	1/1/1	33.5	84.2	47.4	1.219	2.467	77.5	11.5	-38.8	123.1D	1.612
4-5770	4-5920	.150	194.2	-17.7	-1.5	1.091	82.5	.223	1.214	43.6	152.4	.944D	1.484A	97.3	.754	1.7	-3.4	335.5	.194
4-5920	4-6095.9	.181	266.4	-34.5	-2.8	.692	98.7	.345	1.094	197.3	369.4	.717	1.471D	92.4	1.367	.8	5.9	30.8	.194
4-6095.9	4-6250	.194	67.2	-64.0	-7.9	1.276	91.4	.172	.867	350.6	541.0	.718	1.017	89.8	.903	4.6	33.6	206.1	.111
		11.99	7.87	4.05	4.13	7.52	3.82	11.57	1/1/2	34.7	91.9	75.1	1.595	1.642	74.4	8.7	55.3	111.9D	1.023
4-5780	4-5920	.182	195.0	-15.4	-1.4	1.083	80.1	.237	1.195	56.2	155.1	.911D	1.478A	97.3	.746	1.4	-5.4	333.8	.197
4-5920	4-6101.6	.183	269.5	-12.1	3.2	.688	98.1	.347	1.088	195.9	377.2	.711	1.466D	94.4	1.366	-5.1	-30.7	26.7	.237
4-6101.6	4-6260	.237	64.0	-71.7	-10.2	1.278	90.5	.172	.869	356.7	547.7	.719	1.018	88.4	.904	7.2	43.5	211.0	.145
		12.51	8.31	4.45	4.20	7.59	3.86	11.69	1/2/2	36.8	98.9	43.7	1.067	2.576	76.8	9.5	34.5	128.8D	1.683
4-5790	4-5920	.222	197.0	-14.4	-1.2	1.072	77.5	.260	1.169	69.4	158.3	.866D	1.472A	97.2	.733	1.2	-7.5	331.2	.202
4-5920	4-6105.1	.179	271.6	-27.8	-1.0	.686	97.6	.349	1.084	194.7	381.8	.706	1.462D	95.6	1.364	-.9	-5.7	26.6	.222
4-6105.1	4-6270	.222	63.5	-69.4	-9.4	1.279	90.1	.174	.871	359.5	554.1	.719	1.022	87.1	.906	6.6	41.0	207.1	.141
		13.13	8.81	5.02	4.32	7.71	3.78	11.85	1/2/2	39.8	106.9	68.1	1.216	1.786	76.9	10.1	48.3	122.8D	.956

MARS ARRIVAL DATE = 2445930 (17 AUG 1984)

4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6050.7	.236	268.0	-29.2	-1.9	.653	101.6	.434	1.024	196.0	289.5	.579A	1.469D	70.3	1.335	-.1	-.2	56.3	.450
4-6050.7	4-6130	.450	44.4	-18.6	-6.1	1.404	106.6	.500	1.267	308.5	454.8	.634	1.900A	117.4	1.108	5.2	16.8	166.6	.505
		12.25	9.41	4.29	2.84	6.25	5.12	16.67	2/1/1	65.7	10.7	21.7	.297	5.304	121.8	346.0	-56.6	73.4L	1.278
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6055.5	.223	265.3	-29.6	-1.9	.668	101.8	.410	1.046	198.0	299.2	.617A	1.475D	73.4	1.344	-.1	-.3	58.0	.393
4-6055.5	4-6140	.393	50.9	-22.4	-6.5	1.373	104.4	.430	1.136	310.5	459.1	.648	1.628A	114.5	1.065	5.0	14.7	174.4	.456
		11.84	8.85	4.15	2.90	6.51	4.82	17.07	2/1/1	59.8	12.5	23.1	.389	4.988	106.8	2.7	-69.9	73.9L	1.551
4-5670	4-5930	.146	223.8	3.8	2.6	1.089	96.9	.206	1.185	317.3	533.4	.941	1.429A	91.7	.748	-1.0	-19.8	325.8	.141
4-5930	4-6060.0	.214	262.9	-29.8	-1.9	.680	101.9	.392	1.063	199.8	308.2	.646A	1.481D	76.1	1.351	-.1	-.3	58.8	.345
4-6060.0	4-6190	.345	56.7	-26.6	-6.7	1.347	102.3	.372	1.053	312.8	464.1	.661	1.444A	111.6	1.028	4.0	12.9	181.8	.375
		11.59	8.61	4.01	2.98	6.39	4.60	18.73	2/1/1	55.0	14.8	26.3	.504	4.388	94.3	40.6	-76.5	75.9L	1.709
4-5680	4-5930	.141	230.5	10.3	3.5	1.093	95.8	.201	1.192	323.9	529.9	.953	1.432A	92.5	.751	-2.1	-23.2	331.8	.148
4-5930	4-6064.1	.208	261.1	-29.9	-1.9	.669	102.0	.380	1.077	201.2	316.2	.668A	1.485D	78.3	1.356	-.1	-.4	58.8	.306
4-6064.1	4-6180	.306	61.5	-31.4	-7.0	1.327	100.5	.323	.993	315.4	470.0	.672	1.314A	106.8	.997	4.8	11.7	188.8	.321
		11.51	8.40	3.95	3.11	6.52	4.46	14.63	2/1/1	51.8	17.9	31.1	.642	3.782	85.6	43.7	75.5	78.4L	1.755

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2445930
17 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6103.2	.188	265.4	-22.0	.5	.698	100.5	.350	1.092	200.4	378.4	.709	1.474D	94.7	1.367	-2.5	-15.4	28.2	.220
4-6103.2	4-6170	.220	78.9	-17.5	-2.7	1.387	92.7	.384	1.163	350.1	451.8	.716	1.610A	111.3	1.066	-1.5	-12.9	200.2	.371
		11.44	8.06	4.08	3.38	6.78	3.97	15.64	2/1/1	50.9	4.2	48.6	1.240	2.432	18.3	324.2	2.4	172.2D	1.776
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6128.8	.200	287.6	-29.8	-2.0	.667	95.3	.376	1.044	189.0	408.6	.652	1.437D	102.7	1.352	.1	.5	37.6	.325
4-6128.8	4-6170	.325	62.7	-13.7	-3.1	1.442	81.8	.507	1.413	24.7	84.8	.696D	2.130A	115.8	1.135	-3.6	-17.5	202.0	.482
		11.72	8.34	4.08	3.38	6.78	4.25	18.12	2/2/1	50.9	8.2	28.6	.569	4.044	30.8	323.8	29.9	124.4D	1.731
4-5720	4-5930	.140	187.2	-65.7	-5.9	1.101	90.9	.191	1.215	354.4	519.6	.983	1.447A	94.6	.762	6.8	16.8	325.4	.185
4-5930	4-6079.5	.195	257.7	-30.0	-1.8	.705	102.0	.353	1.104	204.1	343.9	.714A	1.494D	85.8	1.367	-.1	-.9	50.1	.206
4-6079.5	4-6200	.206	71.5	-48.5	-6.9	1.285	94.9	.206	.889	330.9	499.8	.706	1.073A	99.0	.925	3.7	10.5	208.7	.164
		12.01	8.08	3.93	3.92	7.32	4.15	12.11	1/1/1	49.4	36.5	51.1	1.419	2.320	71.9	17.8	58.3	92.9D	1.873
4-5730	4-5930	.108	196.2	-50.9	-3.6	1.100	89.5	.191	1.218	3.2	158.2	.985D	1.450A	94.9	.763	4.3	8.5	330.8	.172
4-5930	4-6075.5	.198	258.0	-30.0	-1.9	.703	102.1	.358	1.100	203.7	336.7	.706A	1.493D	83.9	1.365	-.1	-.7	54.0	.225
4-6075.5	4-6210	.225	70.5	54.1	8.3	1.275	95.2	.193	.872	327.1	512.6	.703	1.040A	96.1	.910	-11.5	-52.5	161.4	.224
		11.46	7.83	3.62	3.63	7.03	4.21	12.94	1/1/2	43.8	67.3	56.4	1.186	2.115	78.5	33.1	-60.3	81.9L	1.323
4-5730	4-5930	.108	196.2	-50.9	-3.6	1.100	89.5	.191	1.218	3.2	158.2	.985D	1.450A	94.9	.763	4.3	8.5	330.8	.172
4-5930	4-6082.7	.194	257.6	-30.0	-1.8	.706	101.9	.351	1.106	204.1	348.9	.717A	1.494D	87.1	1.368	-.1	-1.0	46.6	.196
4-6082.7	4-6210	.196	71.3	-52.5	-7.0	1.280	94.0	.192	.879	335.0	508.5	.710	1.048A	96.8	.916	3.7	13.6	210.9	.140
		11.37	7.74	3.62	3.63	7.03	4.12	11.84	1/1/1	43.8	45.2	55.5	1.565	2.148	72.0	17.0	86.5	96.2D	1.797
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6083.5	.193	257.9	-30.0	-1.8	.706	101.9	.350	1.106	204.1	350.3	.716A	1.493D	87.5	1.368	-.2	-1.1	45.6	.194
4-6083.5	4-6220	.194	71.0	55.3	7.2	1.276	93.6	.183	.871	336.4	516.2	.712	1.031A	94.7	.908	-10.6	-54.7	162.5	.203
		11.25	7.68	3.57	3.57	6.97	4.11	12.62	1/1/2	41.5	71.1	60.0	1.598	2.000	73.6	18.9	-57.1	95.8D	1.597
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6085.7	.193	258.2	-30.0	-1.8	.706	101.8	.349	1.106	204.0	353.8	.720A	1.492D	88.4	1.369	-.2	-1.2	45.0	.190
4-6085.7	4-6220	.190	70.6	-56.0	-7.1	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.7	17.9	211.5	.122
		11.23	7.66	3.57	3.57	6.97	4.09	11.66	1/1/1	41.5	55.8	59.1	1.665	2.027	72.4	15.7	55.0	100.0D	1.711
4-5750	4-5930	.108	192.7	-29.7	-2.1	1.096	86.3	.196	1.214	23.0	157.7	.976D	1.452A	95.2	.761	2.6	1.5	334.2	.169
4-5930	4-6088.9	.191	258.9	-30.0	-1.8	.706	101.6	.348	1.105	203.7	358.5	.720A	1.490D	89.6	1.369	-.2	-1.4	39.3	.188
4-6088.9	4-6230	.188	69.5	-58.9	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.9	23.2	210.4	.111
		11.25	7.69	3.63	3.56	6.96	4.06	11.57	1/1/2	40.8	67.9	62.1	1.708	1.939	72.9	14.1	53.7	104.1D	1.604
4-5750	4-5930	.108	192.7	-29.7	-2.1	1.096	86.3	.196	1.214	23.0	157.7	.976D	1.452A	95.2	.761	2.6	1.5	334.2	.169
4-5930	4-6092.1	.191	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.5	.720	1.488D	90.9	1.369	-.2	-1.6	35.7	.189
4-6092.1	4-6230	.189	67.2	61.1	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.8	-57.1	159.1	.200
		11.23	7.67	3.63	3.56	6.96	4.04	12.58	1/1/1	40.8	77.0	67.4	1.688	1.803	74.1	12.4	-54.8	107.4D	1.355
4-5760	4-5930	.124	191.4	-22.8	-1.8	1.091	84.5	.202	1.207	34.0	158.7	.962D	1.451A	95.2	.758	2.1	-.8	334.2	.169
4-5930	4-6092.2	.190	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.4	.720	1.488D	90.9	1.369	-.2	-1.6	35.6	.189
4-6092.2	4-6240	.189	68.4	-61.5	-7.5	1.276	91.9	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	26.6	208.2	.108
		11.38	7.81	3.77	3.57	6.97	4.04	11.54	1/1/2	41.2	80.4	64.6	1.687	1.872	73.4	12.2	52.5	108.6D	1.471
4-5770	4-5930	.148	191.7	-16.4	-1.7	1.085	82.4	.212	1.195	45.8	160.5	.941D	1.448A	95.1	.752	1.8	-3.0	333.2	.171
4-5930	4-6095.9	.190	261.3	-29.6	-1.6	.703	101.1	.348	1.101	202.4	368.6	.717	1.484D	92.2	1.369	-.4	-2.5	32.3	.194
4-6095.9	4-6250	.194	67.3	-64.0	-7.9	1.276	91.4	.172	.867	350.5	541.0	.716	1.017	89.8	.903	4.6	33.8	206.0	.111
		11.64	8.04	4.02	3.60	7.00	4.02	11.57	1/1/2	42.7	91.9	66.5	1.597	1.823	74.1	10.8	51.2	113.2D	1.314
4-5770	4-5930	.148	191.7	-16.4	-1.7	1.085	82.4	.212	1.195	45.8	160.5	.941D	1.448A	95.1	.752	1.8	-3.0	333.2	.171
4-5930	4-6107.5	.191	267.9	-34.4	-2.9	.694	99.7	.352	1.085	198.9	383.8	.703	1.468D	96.1	1.365	1.0	5.8	27.8	.230
4-6107.5	4-6250	.230	46.5	69.4	9.7	1.277	88.8	.172	.867	8.3	179.8	.718D	1.017A	90.0	.903	-12.7	-58.1	149.2	.223
		11.68	8.08	4.02	3.60	7.00	4.06	12.92	1/2/1	42.7	90.0	64.8	1.141	1.866	82.9	18.1	-51.2	116.8D	.988
4-5780	4-5930	.179	193.3	-15.9	-1.6	1.077	80.2	.228	1.177	58.1	162.9	.909D	1.445A	94.9	.744	1.5	-5.4	331.3	.173
4-5930	4-6100.2	.188	263.4	-28.4	-1.2	.700	100.6	.349	1.096	201.3	374.4	.713	1.478D	93.7	1.368	-.7	-4.7	32.5	.205
4-6100.2	4-6260	.205	65.8	-66.6	-8.5	1.277	90.8	.173	.869	354.7	547.8	.719	1.019	88.4	.904	5.4	37.9	205.4	.123
		12.05	8.39	4.40	3.66	7.06	3.99	11.67	1/1/2	45.1	100.9	66.8	1.436	1.816	75.2	10.4	49.4	118.0D	1.172

MARS ARRIVAL DATE = 2445940 (27 AUG 1984)

4-5640	4-5940	.186	204.7	.2	1.7	1.074	100.3	.228	1.159	298.1	550.5	.895	1.424	86.9	.742	.4	-18.8	300.2	.128
4-5940	4-6046.7	.270	266.3	-26.5	-2.0	.648	105.1	.471	1.007	198.5	279.8	.533A	1.482D	66.7	1.329	-.5	-.7	55.5	.520
4-6046.7	4-6120	.520	38.4	-14.5	-5.5	1.450	109.0	.592	1.522	307.6	450.2	.621	2.423A	120.7	1.169	5.0	18.2	158.7	.590
		13.22	10.49	-4.50	2.73	6.15	5.99	20.76	2/1/1	83.7	8.7	21.8	.222	5.277	139.8	359.1	-39.5	74.6L	.951
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6051.8	.253	263.2	-26.7	-1.9	.669	105.0	.439	1.036	201.1	290.4	.581A	1.491D	70.4	1.340	-.3	-.8	37.6	.452
4-6051.8	4-6130	.452	45.5	-17.8	-5.9	1.410	106.6	.509	1.293	309.3	453.8	.635	1.951A	117.7	1.116	4.9	15.9	166.9	.512
		12.55	9.85	4.28	2.71	6.12	5.57	18.83	2/1/1	76.4	9.8	20.7	.295	5.566	124.3	344.5	-54.6	72.8L	1.345
4-5660	4-5940	.155	217.4	.4	2.1	1.083	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.128
4-5940	4-6056.6	.242	260.3	-26.9	-1.9	.685	104.9	.415	1.060	203.4	300.5	.620A	1.499D	73.5	1.349	-.3	-.9	59.0	.393
4-6056.6	4-6140	.393	52.0	-21.3	-6.1	1.377	104.3	.438	1.155	311.3	458.1	.649	1.661A	114.8	1.071	4.7	13.6	174.6	.442
		12.09	9.37	4.10	2.72	6.13	5.27	17.20	2/1/1	70.0	11.4	21.5	.389	5.370	108.0	358.3	-69.6	73.5L	1.700
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6061.3	.233	257.9	-26.9	-1.8	.697	104.9	.397	1.079	205.5	309.9	.650A	1.507D	76.4	1.356	-.3	-1.1	59.5	.343
4-6061.3	4-6150	.343	57.8	-25.2	-6.3	1.351	102.2	.378	1.065	313.7	463.0	.662	1.467A	111.9	1.033	4.4	11.4	181.9	.379
		11.79	9.03	3.96	2.76	6.18	5.06	15.82	2/1/1	64.6	13.3	24.1	.512	4.793	93.9	40.3	-78.4	76.4L	1.941
4-5680	4-5940	.134	229.6	8.2	3.1	1.091	95.7	.195	1.186	324.1	536.0	.954	1.417A	91.0	.754	-1.7	-23.5	328.3	.134
4-5940	4-6065.8	.227	256.0	-26.8	-1.8	.706	104.9	.384	1.094	207.1	316.8	.674A	1.514D	78.9	1.361	-.3	-1.4	59.1	.300
4-6065.8	4-6160	.300	62.6	-29.1	-6.4	1.331	100.3	.328	1.004	316.6	466.6	.674	1.333A	109.2	1.002	4.1	9.3	186.6	.324
		11.63	8.79	3.86	2.84	6.25	4.91	14.69	2/1/1	60.4	15.6	27.9	.669	4.142	83.1	35.3	73.2	80.7L	2.101
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6063.8	.230	256.8	-26.8	-1.8	.702	104.9	.389	1.088	206.5	315.0	.664A	1.511D	77.8	1.359	-.3	-1.3	59.4	.318
4-6063.8	4-6170	.318	64.1	-46.4	-10.3	1.303	99.2	.275	.935	315.3	480.1	.676	1.192A	105.4	.962	7.9	22.1	196.6	.262
		11.85	8.86	3.89	2.99	6.40	4.97	13.90	2/1/1	57.9	32.0	45.3	.596	2.595	85.5	49.3	65.7	71.3L	.950
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6070.7	.222	254.5	-26.7	-1.8	.713	104.9	.373	1.106	208.5	328.2	.693A	1.519D	81.5	1.366	-.3	-1.7	57.4	.260
4-6070.7	4-6170	.260	67.3	-32.2	-6.1	1.316	98.5	.288	.963	320.5	474.5	.686	1.241A	106.6	.978	3.4	6.4	194.7	.276
		11.67	8.68	3.89	2.99	6.40	4.79	13.79	2/1/1	57.9	17.5	31.8	.887	3.645	74.0	16.2	66.3	87.2L	2.346
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6103.5	.204	260.6	-23.1	.2	.711	102.8	.356	1.102	205.8	378.0	.710	1.495D	94.7	1.370	-2.1	-13.2	29.1	.221
4-6103.5	4-6170	.221	78.9	-17.4	-2.7	1.388	92.7	.386	1.165	350.2	451.6	.716	1.615A	111.3	1.066	-1.5	-13.0	200.2	.372
		11.23	8.25	3.89	2.99	6.40	4.35	15.66	2/1/1	57.9	4.2	48.2	1.235	2.451	17.6	325.2	5.1	171.8D	1.793
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6127.9	.204	281.3	-31.4	-2.4	.678	98.3	.374	1.050	194.3	406.5	.658	1.443D	102.2	1.354	.5	2.2	37.8	.317
4-6127.9	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.403	23.2	84.7	.699D	2.107A	115.5	1.132	-3.3	-17.5	202.1	.478
		11.24	8.25	3.89	2.99	6.40	4.36	17.99	2/2/1	57.9	8.1	29.9	.600	3.877	33.4	324.2	32.7	124.6D	1.726
4-5700	4-5940	.177	246.6	38.9	8.0	1.095	93.3	.187	1.197	338.7	530.4	.973	1.421A	92.2	.760	-7.0	-42.8	345.5	.169
4-5940	4-6070.9	.222	254.4	-28.7	-1.8	.713	104.9	.373	1.106	208.6	328.5	.694A	1.519D	81.6	1.366	-.3	-1.7	57.3	.259
4-6070.9	4-6180	.259	68.4	-43.8	-8.0	1.298	97.4	.250	.921	321.3	484.6	.691	1.150A	103.5	.950	5.2	13.6	201.1	.234
		12.73	9.17	4.38	3.56	6.96	4.79	13.09	2/1/1	60.6	28.4	43.2	.897	2.717	78.3	31.7	64.0	80.5L	1.539
4-5700	4-5940	.177	246.6	38.9	8.0	1.095	93.3	.187	1.197	338.7	530.4	.973	1.421A	92.2	.760	-7.0	-42.8	345.5	.169
4-5940	4-6139.6	.213	294.6	-28.8	-2.1	.660	94.9	.392	1.023	187.6	418.7	.622	1.425D	105.6	1.344	.4	1.3	47.9	.374
4-6139.6	4-6180	.374	50.9	-10.2	-2.9	1.356	75.1	.406	1.065	54.2	106.5	.633D	1.497A	113.7	1.025	-4.3	-19.0	199.6	.407
		12.51	8.93	4.38	3.56	6.96	4.57	16.43	2/2/1	60.6	13.0	11.9	.430	9.679	75.6	336.2	74.9	98.7D	3.736
4-5730	4-5940	.122	182.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6078.4	.219	253.6	-28.6	-1.7	.716	104.8	.366	1.114	209.4	336.6	.706A	1.522D	83.6	1.369	-.4	-2.1	54.3	.230
4-6078.4	4-6210	.230	70.9	55.3	8.6	1.275	95.1	.193	.872	327.3	512.5	.703	1.040A	96.1	.910	-11.8	-52.9	160.7	.229
		11.90	8.46	3.76	3.44	6.89	4.70	13.01	1/1/2	53.9	67.8	59.0	1.132	2.030	79.1	34.6	-60.7	81.4L	1.166

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2445940
27 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERC	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-5730	4-5940	.122	182.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6082.5	.214	255.5	-28.3	-1.6	.721	104.6	.359	1.120	209.8	348.4	.717A	1.522D	86.9	1.372	-.4	-2.9	47.3	.201
4-6082.5	4-6210	.201	71.6	-53.8	-7.3	1.280	94.0	.192	.879	334.8	508.6	.710	1.048A	96.8	.915	4.0	15.4	211.4	.142
		11.80	8.36	3.76	3.44	6.85	4.60	11.86	1/1/1	53.9	46.2	54.6	1.481	2.179	72.7	19.5	55.4	94.8D	1.746
4-5730	4-5940	.122	182.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6156.0	.249	313.2	-23.2	-2.0	.632	88.3	.436	.987	177.8	435.5	.557	1.417	110.8	1.328	.3	.8	64.6	.470
4-6156.0	4-6210	.470	47.8	-2.3	-1.0	1.200	67.0	.393	.748	108.1	162.8	.454D	1.042A	100.5	.799	-3.9	-13.7	181.0	.250
		12.65	9.20	3.76	3.44	6.85	5.45	13.35	1/2/1	53.9	57.3	17.1	.272	6.739	169.7	343.4	-10.1	91.1D	1.563
4-5740	4-5940	.106	187.9	-44.4	-3.3	1.095	87.8	.185	1.205	14.1	165.0	.982D	1.428A	93.3	.763	3.8	7.7	329.4	.154
4-5940	4-6083.5	.214	253.6	-28.3	-1.6	.721	104.5	.359	1.120	209.8	350.1	.716A	1.521D	87.4	1.373	-.4	-3.1	46.1	.199
4-6083.5	4-6220	.199	71.3	56.4	7.5	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.906	-10.9	-55.0	161.8	.207
		11.44	8.19	3.61	3.25	6.65	4.59	12.68	1/1/2	50.5	71.5	62.9	1.522	1.916	74.7	20.8	-58.2	94.7D	1.393
4-5740	4-5940	.106	187.9	-44.4	-3.3	1.095	87.8	.185	1.205	14.1	165.0	.982D	1.428A	93.3	.763	3.8	7.7	329.4	.154
4-5940	4-6085.7	.213	253.8	-28.2	-1.5	.721	104.4	.358	1.120	209.7	353.4	.719A	1.520D	88.3	1.373	-.5	-3.4	43.6	.195
4-6085.7	4-6220	.195	70.8	-57.1	-7.4	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.9	.909	4.0	19.5	212.1	.124
		11.41	8.17	3.61	3.25	6.65	4.56	11.68	1/1/1	50.5	56.5	57.8	1.586	2.068	72.9	17.8	53.7	99.1D	1.693
4-5740	4-5940	.106	187.9	-44.4	-3.3	1.095	87.8	.185	1.205	14.1	165.0	.982D	1.428A	93.3	.763	3.8	7.7	329.4	.154
4-5940	4-6161.1	.267	318.2	-21.2	-1.9	.623	85.7	.455	.977	174.9	440.7	.532	1.421	112.7	1.323	.3	.7	70.0	.506
4-6161.1	4-6220	.506	52.1	-.6	-.3	1.175	64.9	.425	.717	115.9	172.0	.412D	1.022A	95.8	.760	-3.5	-9.7	174.8	.246
		12.77	9.53	3.61	3.25	6.65	5.92	13.29	1/2/1	50.5	73.7	18.0	.235	6.398	176.0	349.1	-3.8	94.3D	1.270
4-5750	4-5940	.109	188.2	-32.8	-2.6	1.092	86.2	.189	1.201	24.4	165.2	.974D	1.428A	93.4	.762	2.9	5.4	330.9	.152
4-5940	4-6088.9	.211	254.5	-28.0	-1.4	.720	104.2	.356	1.119	209.4	350.3	.720A	1.517D	89.6	1.373	-.6	-4.0	39.8	.192
4-6088.9	4-6230	.192	69.7	-59.9	-7.5	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	4.1	24.6	211.1	.114
		11.35	8.15	3.63	3.19	6.60	4.52	11.59	1/1/2	49.5	68.3	60.4	1.632	1.988	73.3	15.8	52.3	103.6D	1.612
4-5750	4-5940	.109	188.2	-32.8	-2.6	1.092	86.2	.189	1.201	24.4	165.2	.974D	1.428A	93.4	.762	2.9	5.4	330.9	.152
4-5940	4-6092.1	.209	255.4	-27.8	-1.3	.719	104.0	.355	1.117	208.9	362.9	.720	1.514D	90.8	1.373	-.7	-4.7	36.4	.193
4-6092.1	4-6230	.193	67.4	61.9	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.0	-57.3	158.4	.203
		11.31	8.12	3.63	3.19	6.60	4.48	12.65	1/1/1	49.5	77.3	70.7	1.618	1.728	75.2	14.2	-56.4	105.8D	1.878
4-5760	4-5940	.123	188.5	-24.6	-2.1	1.087	84.4	.195	1.194	35.4	166.2	.961D	1.427A	93.3	.758	2.3	.2	331.0	.151
4-5940	4-6092.3	.209	255.4	-27.7	-1.3	.719	104.0	.355	1.116	208.8	363.2	.720	1.513D	90.9	1.373	-.7	-4.7	36.1	.193
4-6092.3	4-6240	.193	68.4	-62.4	-7.7	1.276	91.9	.173	.867	346.9	533.6	.717	1.018A	91.3	.903	4.4	30.1	208.9	.110
		11.43	8.24	3.76	3.18	6.59	4.48	11.56	1/1/2	50.0	80.6	62.4	1.615	1.930	73.8	13.9	50.9	108.4D	1.502
4-5770	4-5940	.146	189.8	-19.5	-1.9	1.081	82.5	.205	1.182	47.1	167.8	.939D	1.425A	93.1	.753	1.9	-2.7	330.0	.152
4-5940	4-6096.1	.207	256.8	-27.2	-1.1	.717	103.8	.355	1.113	208.0	368.5	.717	1.508D	92.2	1.372	-.9	-5.9	32.8	.198
4-6096.1	4-6250	.198	67.2	-64.8	-8.1	1.276	91.3	.172	.867	350.8	541.0	.718	1.017	89.8	.903	4.9	34.9	206.9	.114
		11.64	8.43	4.00	3.21	6.61	4.44	11.59	1/1/2	51.6	91.8	63.7	1.530	1.895	74.6	12.4	49.4	113.4D	1.369
4-5780	4-5940	.175	192.1	-16.7	-1.7	1.073	80.4	.221	1.166	59.1	169.8	.909D	1.423A	92.8	.745	1.5	-5.6	327.9	.155
4-5940	4-6100.4	.205	258.9	-25.7	-.6	.713	103.2	.355	1.107	206.8	374.2	.713	1.500D	93.7	1.371	-1.3	-8.7	30.2	.209
4-6100.4	4-6260	.208	65.5	-67.4	-8.7	1.277	90.7	.173	.869	355.0	547.8	.719	1.019	88.4	.904	5.7	38.8	206.3	.126
		12.00	8.73	4.35	3.27	6.67	4.39	11.70	1/1/2	54.3	100.6	63.4	1.374	1.904	75.8	12.0	47.4	118.6D	1.242
MARS ARRIVAL DATE = 2445950 (6 SEP 1984)																			
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	303.5	551.9	.911	1.416	86.7	.750	.0	-20.3	302.8	.125
4-5950	4-6052.9	.261	256.6	-28.0	-1.9	.691	108.7	.448	1.059	207.1	292.1	.585A	1.533D	70.5	1.348	-.5	-1.4	58.3	.454
4-6052.9	4-6130	.454	46.6	-17.0	-5.6	1.416	106.6	.518	1.322	310.0	452.8	.637	2.007A	118.0	1.123	4.6	15.1	167.1	.519
		13.25	10.57	4.29	2.67	6.09	6.28	19.00	2/1/1	87.7	9.1	19.5	.292	3.916	125.8	342.9	-53.4	72.2L	1.435
4-5660	4-5950	.155	217.8	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.8	.753	-.3	-20.9	310.3	.123
4-5950	4-6057.7	.270	255.8	-28.0	-1.9	.707	108.4	.424	1.085	209.8	302.5	.625A	1.545D	73.8	1.357	-.5	-1.6	59.4	.393
4-6057.7	4-6140	.393	53.0	-20.4	-5.9	1.382	104.3	.445	1.172	312.0	457.1	.651	1.694A	115.0	1.077	4.3	12.6	174.8	.447
		12.72	10.09	4.10	2.63	6.05	5.99	17.32	2/1/1	81.1	10.4	19.8	.389	5.631	107.5	355.1	-70.5	73.4L	1.878
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	96.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6062.5	.262	253.5	-27.8	-1.8	.719	108.2	.407	1.105	212.0	312.4	.655A	1.555D	76.7	1.364	-.5	-1.9	59.5	.341
4-6062.5	4-6150	.341	58.9	-23.9	-6.0	1.356	102.2	.384	1.077	314.5	461.9	.664	1.490A	112.2	1.038	4.0	10.1	162.0	.384
		12.36	9.72	3.95	2.63	6.05	5.78	15.92	2/1/1	75.3	12.0	22.0	.517	5.238	91.5	50.0	-80.8	77.8L	2.190
4-5680	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.758	-1.5	-24.3	323.7	.124
4-5950	4-6067.3	.256	251.8	-27.6	-1.7	.728	108.1	.394	1.122	213.9	322.0	.680A	1.563D	79.5	1.370	-.5	-2.3	58.5	.295
4-6067.3	4-6160	.295	64.1	-27.3	-5.9	1.335	100.2	.333	1.014	317.8	467.3	.676	1.352A	109.5	1.007	3.5	7.4	188.7	.328
		12.12	9.46	3.84	2.66	6.07	5.62	14.77	2/1/1	70.5	13.8	25.5	.689	4.532	78.6	21.8	71.1	84.2L	2.432
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-28.5	330.2	.129
4-5950	4-6073.1	.250	250.4	-27.3	-1.6	.735	107.9	.383	1.135	215.4	332.8	.700A	1.570D	82.6	1.375	-.5	-3.0	55.6	.252
4-6073.1	4-6170	.252	68.9	-29.2	-5.4	1.321	98.3	.293	.974	322.4	472.6	.668	1.260A	107.0	.984	2.8	3.2	194.7	.280
		12.02	9.28	3.80	2.74	6.15	5.48	13.87	2/1/1	67.0	14.7	29.1	.949	3.979	85.6	2.1	60.1	95.4D	2.829
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-28.5	330.2	.129
4-5950	4-6101.8	.229	255.9	-24.0	-.2	.726	105.8	.366	1.123	212.3	376.1	.712	1.534D	94.3	1.376	-1.7	-10.9	29.7	.220
4-6101.8	4-6170	.220	79.2	-17.6	-2.8	1.385	93.1	.380	1.154	348.6	452.4	.715	1.592A	111.1	1.062	-1.4	-12.6	199.9	.367
		11.51	8.77	3.80	2.74	6.15	4.97	15.36	2/1/1	67.0	4.0	48.3	1.240	2.443	17.6	326.3	7.9	171.5D	1.789
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-28.5	330.2	.129
4-5950	4-6128.0	.217	275.8	-32.8	-2.9	.690	101.1	.377	1.058	199.6	405.8	.659	1.457D	102.1	1.357	1.1	4.6	38.5	.317 *
4-6128.0	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.404	23.3	84.7	.699D	2.108A	115.5	1.133	-3.5	-17.5	202.1	.477
		11.22	8.48	3.80	2.74	6.15	4.68	18.00	2/2/1	67.0	8.1	30.7	.598	3.780	37.7	324.3	37.2	122.5D	1.662
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	338.4	.141
4-5950	4-6069.5	.253	251.2	-27.5	-1.7	.731	108.0	.389	1.127	214.6	326.2	.689A	1.566D	80.7	1.372	-.5	-2.6	57.7	.277
4-6069.5	4-6160	.277	68.3	-47.7	-9.2	1.296	97.6	.248	.917	320.2	485.7	.689	1.144A	103.2	.948	6.4	18.3	202.0	.239
		12.49	9.51	3.94	2.99	6.39	5.56	13.17	2/1/1	65.9	32.6	46.1	.782	2.555	80.0	37.4	62.6	76.7L	1.216
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	338.4	.141
4-5950	4-6139.0	.217	288.5	-30.2	-2.4	.670	98.0	.391	1.029	192.9	417.0	.627	1.431D	105.1	1.346	.7	2.5	48.2	.366
4-6139.0	4-6180	.366	51.0	-10.3	-2.9	1.359	75.5	.403	1.067	52.9	106.0	.637D	1.497A	113.5	1.026	-4.2	-19.1	200.0	.404
		11.60	8.61	3.94	2.99	6.39	4.67	16.36	2/2/1	65.9	12.8	13.1	.448	8.759	77.6	337.1	77.1	97.8D	3.475
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6075.6	.248	250.1	-27.2	-1.6	.737	107.8	.380	1.139	215.8	337.2	.706A	1.571D	83.6	1.376	-.6	-3.3	53.7	.237
4-6075.6	4-6210	.237	71.5	56.7	9.0	1.275	95.1	.193	.872	327.4	512.5	.703	1.040A	96.2	.910	-12.2	-53.3	159.6	.235
		13.26	9.60	4.17	3.66	7.06	5.43	13.10	1/1/2	66.2	68.2	61.7	1.071	1.951	79.1	34.3	-60.6	81.6L	1.018
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6082.3	.243	250.1	-26.9	-1.4	.739	107.5	.373	1.143	216.2	348.4	.717A	1.570D	86.8	1.379	-.7	-4.3	47.0	.209
4-6082.3	4-6210	.209	72.0	-55.5	-7.7	1.280	94.0	.192	.879	334.6	508.8	.710	1.048A	96.8	.915	4.4	17.7	212.1	.145
		15.14	9.48	4.17	3.66	7.06	5.31	11.90	1/1/1	66.2	47.6	54.9	1.378	2.169	73.0	20.7	54.2	94.1D	1.611
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6154.3	.235	307.4	-25.3	-2.1	.642	92.3	.422	.991	183.2	432.0	.573	1.410D	109.6	1.330	.5	1.5	63.7	.445
4-6154.3	4-6210	.445	46.9	-2.4	-.9	1.209	68.3	.373	.759	104.4	161.9	.476D	1.043A	100.2	.812	-3.8	-14.8	181.9	.238
		12.92	9.27	4.17	3.66	7.06	5.10	13.16	1/2/1	66.2	56.1	17.3	.304	6.651	167.2	342.9	-12.4	89.2L	1.716
4-5740	4-5950	.116	179.5	-51.0	-4.4	1.092	87.8	.179	1.196	14.9	171.8	.982D	1.411A	91.8	.765	4.7	12.4	323.9	.147
4-5950	4-6083.6	.243	250.2	-26.8	-1.4	.739	107.4	.372	1.143	216.2	350.5	.718A	1.569D	87.4	1.379	-.7	-4.8	45.5	.205
4-6083.6	4-6220	.205	71.7	58.0	7.9	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-11.2	-55.5	160.7	.213
		12.08	8.99	3.70	3.09	6.50	5.29	12.76	1/1/2	60.8	71.9	66.0	1.424	1.836	75.2	21.3	-58.4	94.5D	1.191
4-5740	4-5950	.116	179.5	-51.0	-4.4	1.092	87.8	.179	1.196	14.9	171.8	.982D	1.411A	91.8	.765	4.7	12.4	323.9	.147
4-5950	4-6085.6	.241	250.4	-26.7	-1.3	.739	107.3	.371	1.143	216.1	353.6	.719A	1.567D	88.3	1.379	-.7	-4.9	45.1	.202
4-6085.6	4-6220	.202	71.2	-58.6	-7.8	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.8	.909	4.4	21.7	212.9	.128
		12.04	8.95	3.70	3.09	6.50	5.26	11.72	1/1/1	60.8	57.6	57.9	1.479	2.068	73.2	18.8	52.8	98.8D	1.576
4-5740	4-5950	.116	179.5	-51.0	-4.4	1.092	87.8	.179	1.196	14.9	171.8	.982D	1.411A	91.8	.765	4.7	12.4	323.9	.147
4-5950	4-6156.6	.245	312.6	-23.5	-2.0	.634	90.4	.435	.981	180.5	436.5	.554	1.408D	111.0	1.326	.5	1.3	68.4	.471
4-6156.6	4-6220	.471	50.5	-.6	-.3	1.186	66.7	.395	.732	111.2	171.3	.443D	1.022A	95.6	.779	-3.5	-11.1	175.4	.226
		12.14	9.05	3.70	3.09	6.50	5.35	12.99	1/2/1	60.8	72.6	18.0	.271	6.361	173.9	347.6	-5.7	91.9D	1.458

STOPOVER TIME = 0 DAYS — 1964 INBOUND SWINGBY — MISSION DURATION = 480 DAYS; MARS ARRIVAL DATE = 2445950 6 SEP 1964

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	3.3	5.8	326.3	.140	
4-5950	4-6089.0	.239	251.1	-26.5	-1.2	.738	107.1	.369	1.141	215.7	358.7	.720A	1.562D	89.6	1.379	-.8	-5.6	39.3	.199	
4-6089.0	4-6230	.199	70.0	-61.4	-7.9	1.276	92.5	.177	.869	343.2	525.6	.716	1.022A	93.0	.905	4.5	26.8	212.1	.117	
		11.81	8.86	3.66	2.95	6.36	5.20	11.62	1/1/2	59.3	69.0	60.3	1.522	1.992	73.7	16.6	51.0	103.6D	1.510	
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	3.3	5.8	326.3	.140	
4-5950	4-6092.0	.237	251.8	-26.2	-1.1	.737	106.8	.368	1.138	215.1	363.0	.720	1.557D	90.8	1.379	-.9	-6.3	36.2	.200	
4-6092.0	4-6230	.199	67.7	63.2	8.0	1.277	91.9	.176	.870	347.1	524.7	.717	1.023A	93.2	.906	-11.4	-57.6	157.5	.209	
		11.76	8.81	3.66	2.95	6.36	5.15	12.71	1/1/1	59.3	77.6	73.6	1.510	1.670	75.9	15.1	-56.9	105.0D	1.012	
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	3.3	5.8	326.3	.140	
4-5950	4-6163.5	.260	318.1	-21.4	-1.9	.625	87.9	.452	.970	177.4	441.2	.531	1.409	112.7	1.320	.5	1.2	73.7	.503	
4-6163.5	4-6230	.503	55.7	.8	.4	1.171	64.9	.424	.714	116.4	178.2	.411D	1.016A	91.3	.754	-3.2	-7.4	171.3	.237	
		12.35	9.40	3.66	2.95	6.36	5.74	13.13	1/2/1	59.3	87.2	18.0	.237	6.376	178.4	352.8	-.8	94.6D	1.277	
4-5760	4-5950	.123	186.2	-27.2	-2.5	1.085	84.5	.190	1.185	36.1	172.9	.961D	1.410A	91.7	.760	2.5	1.3	326.6	.138	
4-5950	4-6092.5	.236	252.0	-26.2	-1.1	.736	106.8	.368	1.138	215.0	363.7	.719	1.556D	91.0	1.379	-.9	-6.5	35.7	.200	
4-6092.5	4-6240	.200	68.6	-63.9	-8.1	1.276	91.9	.173	.868	347.2	533.5	.717	1.018A	91.3	.903	4.8	32.1	210.2	.114	
		11.82	8.90	3.76	2.92	6.33	5.14	11.59	1/1/2	59.7	80.9	62.0	1.504	1.940	74.4	14.8	49.6	108.6D	1.414	
4-5760	4-5950	.123	186.2	-27.2	-2.5	1.085	84.5	.190	1.185	36.1	172.9	.961D	1.410A	91.7	.760	2.5	1.3	326.6	.138	
4-5950	4-6169.5	.285	324.4	-18.7	-1.8	.614	84.4	.478	.958	173.8	447.2	.500	1.415	115.0	1.314	.5	1.1	80.3	.548	
4-6169.5	4-6240	.548	62.6	1.9	1.0	1.155	62.5	.463	.696	121.7	183.3	.373D	1.018	87.1	.729	-2.8	-4.3	170.4	.263	
		13.05	10.13	3.76	2.92	6.33	6.37	13.57	1/2/1	59.7	98.6	17.7	.200	6.499	176.9	359.1	3.1	97.6D	1.101	
4-5770	4-5950	.144	188.5	-21.2	-2.1	1.079	82.6	.200	1.175	47.5	174.3	.940D	1.410A	91.4	.755	2.0	-2.5	325.9	.139	
4-5950	4-6096.4	.234	253.3	-25.6	-.8	.734	106.4	.367	1.132	214.0	369.0	.717	1.548D	92.4	1.378	-1.1	-7.7	32.6	.206	
4-6096.4	4-6250	.206	67.0	-66.3	-8.5	1.276	91.3	.172	.868	351.2	540.9	.718	1.017	89.8	.903	5.3	36.7	208.3	.119	
		11.98	9.05	3.98	2.94	6.35	5.07	11.63	1/1/2	61.4	91.6	63.2	1.422	1.910	75.3	13.5	48.2	113.6D	1.294	
4-5780	4-5950	.171	191.5	-17.9	-1.9	1.071	80.6	.215	1.159	59.2	176.0	.910D	1.409A	91.1	.748	1.6	-5.9	323.9	.142	
4-5950	4-6100.7	.230	255.3	-24.4	-.4	.730	106.0	.366	1.125	212.7	374.7	.713	1.537D	93.9	1.376	-1.6	-10.0	30.1	.217	
4-6100.7	4-6260	.217	65.1	-68.7	-9.1	1.277	90.7	.172	.869	355.5	547.8	.719	1.018	88.4	.904	6.1	40.3	207.7	.131	
		12.29	9.29	4.30	3.00	6.41	4.99	11.74	1/1/2	64.2	100.1	62.9	1.281	1.916	76.7	15.3	46.5	118.7D	1.174	
4-5790	4-5950	.204	195.1	-16.3	-1.8	1.061	78.5	.236	1.139	71.0	177.9	.870D	1.408A	90.7	.737	1.2	-9.1	321.1	.148	
4-5950	4-6105.9	.227	256.3	-20.5	1.0	.724	105.3	.366	1.114	210.8	381.1	.706	1.522D	95.6	1.374	-2.9	-16.9	28.8	.238	
4-6105.9	4-6270	.238	62.0	-71.6	-10.2	1.279	89.9	.174	.871	.6	194.0	.719D	1.022	87.1	.906	7.5	43.3	209.7	.152	
		12.79	9.66	4.76	3.13	6.53	4.91	11.97	1/1/2	67.8	105.6	58.1	1.061	2.060	78.8	14.8	42.7	124.9D	1.124	
MARS ARRIVAL DATE = 2445960 (16 SEP 1964)																				
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120	
4-5960	4-6063.8	.301	250.1	-26.7	-1.7	.748	111.9	.424	1.150	219.7	316.0	.663A	1.637D	77.3	1.377	-.7	-2.7	58.5	.340	
4-6063.8	4-6150	.340	60.0	-22.8	-5.7	1.360	102.1	.390	1.090	315.5	460.8	.665	1.516A	112.5	1.044	3.6	8.9	182.2	.389	
		13.34	10.76	3.95	2.58	6.00	6.81	16.03	2/1/1	86.6	10.8	20.1	.521	5.732	86.0	41.2	76.6	80.9L	2.464	
4-5680	4-5960	.129	229.2	4.5	2.5	1.088	95.7	.191	1.178	323.2	547.4	.953	1.403	88.3	.762	-1.3	-25.2	316.3	.120	
4-5960	4-6069.0	.295	248.6	-26.5	-1.6	.756	111.5	.411	1.167	221.6	326.2	.687A	1.647D	80.3	1.383	-.7	-3.3	56.7	.292	
4-6069.0	4-6160	.292	65.4	-25.6	-5.5	1.339	100.0	.339	1.025	319.0	465.9	.678	1.372A	109.7	1.012	3.0	5.6	188.6	.333	
		13.03	10.46	3.82	2.57	5.99	6.63	14.86	2/1/1	81.5	12.1	23.8	.706	4.843	70.4	5.0	65.3	90.6D	2.713	
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-28.6	324.7	.121	
4-5960	4-6075.9	.288	247.7	-26.1	-1.5	.763	111.1	.400	1.160	223.1	338.7	.708A	1.652D	84.0	1.388	-.8	-4.3	52.0	.245	
4-6075.9	4-6170	.245	70.8	-26.5	-4.8	1.327	97.9	.300	.987	324.6	470.3	.691	1.264A	107.4	.991	1.9	.3	194.9	.267	
		12.80	10.20	3.75	2.60	6.02	6.45	14.00	2/1/1	77.4	12.2	28.6	1.005	4.052	83.0	349.4	48.7	108.0D	3.066	
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-28.6	324.7	.121	
4-5960	4-6098.8	.267	251.6	-24.3	-.5	.753	109.3	.384	1.160	220.1	372.0	.715	1.605D	95.3	1.386	-1.9	-9.2	30.6	.220	
4-6098.8	4-6170	.220	79.6	-18.0	-2.8	1.377	94.0	.367	1.126	345.0	454.5	.713	1.540A	110.6	1.052	-1.1	-11.5	199.2	.355	
		12.26	9.66	3.75	2.60	6.02	5.91	15.32	2/1/1	77.4	3.8	48.3	1.238	2.444	18.4	327.4	10.5	168.8D	1.788	
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-28.6	324.7	.121	
4-5960	4-6129.0	.239	271.9	-34.1	-3.5	.702	103.9	.385	1.068	204.6	406.3	.657	1.480D	102.4	1.360	1.9	7.6	39.6	.327	
4-6129.0	4-6170	.327	62.6	-13.7	-3.1	1.442	81.6	.508	1.415	25.0	84.8	.696D	2.134A	115.8	1.135	-3.6	-17.5	202.0	.483	
		11.56	8.96	3.75	2.60	6.02	5.21	18.15	2/2/1	77.4	8.2	31.1	.563	3.728	43.5	323.9	43.3	118.2D	1.556	
4-5700	4-5960	.124	238.7	22.9	4.4	1.092	93.2	.180	1.187	338.6	542.5	.973	1.401	89.5	.766	-3.5	-34.9	331.8	.128	
4-5960	4-6068.5	.295	248.7	-26.5	-1.6	.756	111.5	.412	1.166	221.5	325.3	.685A	1.646D	80.1	1.383	-.7	-3.3	56.9	.296	
4-6068.5	4-6180	.296	68.6	-51.1	-10.3	1.294	97.7	.247	.914	319.4	486.5	.688	1.139A	103.1	.948	7.6	22.4	202.8	.247	
		13.14	10.42	3.78	2.72	6.13	6.65	13.29	2/1/1	74.7	36.3	48.8	.688	2.421	80.3	38.6	60.8	74.6L	.977	
4-5700	4-5960	.124	238.7	22.9	4.4	1.092	93.2	.180	1.187	338.6	542.5	.973	1.401	89.5	.766	-3.5	-34.9	331.8	.128	
4-5960	4-6139.1	.231	283.0	-31.3	-2.7	.682	101.1	.394	1.037	198.2	416.3	.629	1.446D	105.0	1.349	1.1	3.9	48.8	.367	
4-6139.1	4-6180	.367	51.0	-10.3	-2.9	1.359	75.5	.403	1.066	53.1	106.2	.637D	1.495A	113.5	1.025	-4.2	-19.1	200.0	.404	
		11.50	8.78	3.78	2.72	6.13	5.00	16.35	2/2/1	74.7	12.8	14.4	.447	7.972	81.5	340.2	80.9	95.9D	3.114	
4-5710	4-5960	.162	246.1	41.5	7.5	1.093	92.0	.177	1.190	346.6	540.5	.979	1.400	89.9	.767	-6.8	-47.5	342.7	.152	
4-5960	4-6145.0	.229	290.3	-29.8	-2.4	.689	99.2	.401	1.020	194.2	422.0	.610	1.429D	106.6	1.342	.9	3.0	54.7	.393	
4-6145.0	4-6190	.393	46.0	-7.2	-2.3	1.269	72.3	.356	.892	76.5	129.7	.575D	1.210A	109.5	.929	-4.2	-19.1	195.6	.325	
		12.36	9.15	4.19	3.21	6.62	4.97	14.72	2/2/1	75.0	24.5	13.5	.390	6.535	130.6	338.4	-48.3	64.5L	2.937	
4-5740	4-5960	.139	166.6	-59.0	-6.1	1.090	87.8	.176	1.191	15.0	178.0	.982D	1.400A	90.4	.768	6.4	19.3	316.8	.151	
4-5960	4-6063.7	.281	247.9	-25.7	-1.3	.764	110.6	.392	1.182	223.2	351.5	.719A	1.646D	87.6	1.390	-.9	-5.6	43.8	.215	
4-6063.7	4-6220	.215	72.3	60.0	8.4	1.276	93.6	.183	.871	336.6	516.2	.712	1.031A	94.7	.908	-11.6	-56.0	159.4	.220	
		13.36	10.19	3.92	3.17	6.58	6.27	12.88	1/1/2	71.9	72.6	69.3	1.302	1.758	75.3	20.6	-57.9	95.0D	.986	
4-5740	4-5960	.139	166.6	-59.0	-6.1	1.090	87.8	.176	1.191	15.0	178.0	.982D	1.400A	90.4	.768	6.4	19.3	316.8	.151	
4-5960	4-6085.6	.279	248.1	-25.6	-1.2	.763	110.5	.391	1.181	223.1	354.4	.720A	1.642D	88.4	1.390	-.9	-6.0	41.7	.212	
4-6085.6	4-6220	.211	71.8	-60.6	-8.3	1.277	93.2	.183	.873	338.9	517.3	.713	1.032A	94.6	.909	4.9	24.6	214.0	.133	
		13.32	10.15	3.92	3.17	6.58	6.25	11.77	1/1/1	71.9	59.1	59.1	1.344	2.027	73.4	18.3	51.0	99.2D	1.380	
4-5740	4-5960	.139	166.6	-59.0	-6.1	1.090	87.8	.176	1.191	15.0	178.0	.982D	1.400A	90.4	.768	6.4	19.3	316.8	.151	
4-5960	4-6157.2	.238	306.1	-25.6	-2.1	.644	94.4	.425	.987	186.0	433.4	.567	1.406D	110.0	1.328	.7	2.1	67.7	.452	
4-6157.2	4-6220	.452	49.5	-.6	-.3	1.195	67.7	.380	.741	108.4	170.8	.460D	1.022A	95.5	.769	-3.5	-12.0	175.8	.219	
		12.26	9.09	3.92	3.17	6.58	5.17	12.85	1/2/1	71.9	71.9	18.3	.294	6.261	171.5	347.2	-7.8	90.4D	1.555	
4-5750	4-5960	.118	179.4	-42.8	-3.9	1.087	86.2	.179	1.187	25.2	178.2	.974D	1.400A	90.4	.766	4.0	9.1	320.8	.134	
4-5960	4-6089.1	.276	248.8	-25.3	-1.1	.761	110.2	.388	1.177	222.6	359.6	.720A	1.634D	89.9	1.389	-1.0	-6.7	37.8	.209	
4-6089.1	4-6230	.209	70.5	-63.4	-8.4	1.276	92.5	.177	.869	343.3	525.6	.716	1.023A	93.0	.905	5.0	29.8	213.4	.123	
		12.71	9.66	3.72	2.85	6.26	6.14	11.67	1/1/2	69.8	70.0	61.4	1.378	1.959	74.1	16.4	49.6	104.3D	1.321	
4-5750	4-5960	.118	179.4	-42.8	-3.9	1.087	86.2	.179	1.187	25.2	178.2	.974D	1.400A	90.4	.766	4.0	9.1	320.8	.134	
4-5960	4-6161.4	.245	311.6	-25.8	-2.0	.636	92.5	.436	.976	183.2	437.4	.550	1.402D	111.2	1.323	.7	1.8	72.5	.475	
4-6161.4	4-6230	.475	54.2	.9	.4	1.182	66.4	.400	.726	112.8	177.9	.435D	1.016A	91.4	.769	-3.2	-8.5	171.3	.222	
		11.91	9.07	3.72	2.85	6.26	5.35	12.90	1/2/1	69.8	86.7	18.2	.266	6.350	176.6	351.5	-2.6	92.6D	1.418	
4-5760	4-5960	.124	184.2	-30.9	-2.9	1.083	84.6	.186	1.181	36.0	178.9	.961D	1.400A	90.3	.763	2.9	2.7	321.9	.130	
4-5960	4-6092.8	.273	249.7	-25.0	-.9	.759	109.9	.386	1.172	221.8	364.7	.719	1.624D	91.3	1.388	-1.1	-7.5	34.5	.211	
4-6092.8	4-6240	.211	68.8	-65.9	-8.7	1.276	91.8	.173	.868	347.5	533.5	.717	1.018A	91.4	.903	5.4	34.7	211.9	.121	
		12.59	9.63	3.77	2.77	6.18	6.05	11.65	1/1/2	70.1	81.3	63.1	1.355	1.912	75.1	14.9	48.4	109.3D	1.236	
4-5760	4-5960	.124	184.2	-30.9	-2.9	1.083	84.6	.186	1.181	36.0	178.9	.961D	1.400A	90.3	.763	2.9	2.7	321.9	.130	
4-5960	4-6166.3	.257	317.7	-21.6	-1.9	.626	90.0	.452	.964	180.0	442.0	.528	1.400D	112.8	1.317	.7	1.7	77.7	.505	
4-6166.3	4-6240	.505	60.1	2.0	1.0	1.171	64.8	.426	.714	116.5	183.4	.410D	1.018	87.5	.753	-2.9	-5.6	169.8	.238	
		12.19	9.42	3.77	2.77	6.18	5.65	13.16	1/2/1	70.1	98.7	17.6	.236	6.519	177.8	356.5	1.7	94.9D	1.301	
4-5770	4-5960	.142	187.7	-23.6	-2.4	1.077	82.8	.196	1.171	47.1	180.0	.941D	1.400	90.0	.758	2.2	-2.1	321.4	.131	
4-5960	4-6096.8	.269	251.0	-24.6	-.7	.755	109.5	.384	1.164	220.6	370.0	.716	1.611D	92.8	1.387	-1.3	-8.6	31.4	.217	
4-6096.8	4-6250	.217	66.9	-66.3	-9.1	1.276	91.2	.172	.868	351.6	540.9	.718	1.017	89.6	.903	5.9	39.1	210.2	.126	
		12.66	9.91	3.95	2.77	6.19	5.95	11.70	1/1/2	71.7	91.4	64.0	1.278	1.886	76.3	14.1	47.3	114.2D	1.133	
4-5770	4-5960	.142	187.7	-23.6	-2.4	1.077	82.8	.196	1.171	47.1	180.0	.941D	1.400	90.0	.758	2.2	-2.1	321.4	.131	
4-5960	4-6172.3	.278	324.7	-16.6	-1.8	.614	86.5	.476	.951	176.1	447.9	.498	1.403	115.0	1.311	.7	1.8	84.5	.547	
4-6172.3	4-6250	.547	67.6	2.9	1.6	1.159	62.6	.461	.701	120.8	187.5	.376D	1.024	83.7	.736	-2.5	-5.5	171.2	.269	
		12.91	10.14	3.95	2.77	6.19	6.19	13.66	1/2/1	71.7	107.7	17.0	.201	6.765	174.7	2.9	5.3	97.6D	1.162	

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5780	4-5960	.167	191.3	-19.5	-2.1	1.070	80.8	.210	1.157	58.5	181.5	.913D	1.400	89.6	.751	1.7	-6.1	319.6	.134
4-5960	4-6101.2	.264	252.9	-23.7	-.2	.750	108.9	.383	1.153	219.1	375.7	.712	1.594D	94.3	1.384	-1.7	-10.5	29.4	.228
4-6101.2	4-6260	.228	64.5	-70.5	-9.7	1.277	90.6	.172	.869	356.2	547.7	.719	1.018	88.4	.904	6.7	42.2	209.6	.138
		12.92	10.08	4.25	2.84	6.25	5.83	11.82	1/1/2	74.5	99.4	63.8	1.155	1.891	77.9	14.3	46.0	116.9D	1.029
4-5790	4-5960	.199	195.3	-17.5	-1.9	1.061	78.7	.230	1.139	69.9	183.0	.876D	1.401	89.1	.742	1.3	-9.8	317.1	.141
4-5960	4-6106.2	.259	255.5	-21.4	.7	.743	108.3	.382	1.139	217.0	381.7	.705	1.574D	96.0	1.381	-2.6	-14.7	28.6	.247
4-6106.2	4-6270	.247	61.2	-72.7	-10.6	1.279	89.8	.174	.871	1.1	194.0	.719D	1.022	87.1	.906	7.9	44.3	210.9	.158
		13.34	10.37	4.67	2.97	6.36	5.70	12.04	1/1/2	77.9	104.9	61.0	.989	1.970	79.8	16.0	43.7	123.9D	.960
MARS ARRIVAL DATE = 2445970 (26 SEP 1984)																			
4-5690	4-5970	.120	233.9	8.0	2.8	1.090	94.6	.184	1.181	329.8	550.1	.963	1.399	87.7	.767	-1.8	-28.8	318.8	.119
4-5970	4-6130.6	.268	269.7	-35.3	-4.4	.716	106.7	.398	1.083	209.6	407.8	.651	1.514D	103.1	1.365	2.8	10.9	41.1	.345
4-6130.6	4-6170	.345	61.6	-13.3	-3.2	1.445	80.5	.519	1.435	27.9	85.0	.690D	2.180A	116.3	1.139	-3.8	-17.6	201.7	.494
		12.24	9.68	3.73	2.55	5.97	5.95	18.42	2/2/1	88.3	8.3	31.6	.505	3.677	50.4	322.6	50.4	112.4D	1.552
4-5700	4-5970	.116	237.7	17.3	3.6	1.091	93.3	.179	1.184	337.8	547.9	.972	1.397	88.3	.769	-2.8	-33.6	325.1	.121
4-5970	4-6139.7	.253	278.7	-32.0	-3.1	.695	104.2	.402	1.049	203.5	416.3	.627	1.471D	105.5	1.353	1.6	5.8	49.7	.375
4-6139.7	4-6180	.375	50.9	-10.2	-2.9	1.358	75.0	.406	1.065	54.4	106.6	.632D	1.498A	113.3	1.025	-4.3	-19.0	199.7	.408
		11.86	9.27	3.70	2.60	6.01	5.56	16.44	2/2/1	84.9	13.0	15.9	.428	7.237	65.7	346.2	65.1	95.6D	2.669
4-5710	4-5970	.130	241.8	32.0	5.4	1.002	92.1	.175	1.187	346.1	546.0	.979	1.395	88.7	.770	-4.7	-42.2	333.2	.132
4-5970	4-6145.3	.247	285.2	-30.6	-2.7	.682	102.4	.407	1.030	199.5	421.5	.611	1.449D	106.7	1.345	1.3	4.3	55.4	.396
4-6145.3	4-6190	.396	46.0	-7.2	-2.3	1.288	72.1	.358	.892	77.1	129.8	.572D	1.211A	109.6	.929	-4.3	-19.0	195.5	.327
		12.04	9.24	3.83	2.80	6.21	5.41	14.76	2/2/1	82.6	24.6	14.8	.383	7.770	129.3	341.6	-49.0	84.2L	2.592
4-5750	4-5970	.131	172.6	-50.3	-5.1	1.087	86.4	.177	1.185	24.5	183.7	.975D	1.394	89.2	.769	5.1	13.9	314.6	.137
4-5970	4-6160.4	.245	304.9	-25.8	-2.1	.647	96.5	.431	.983	188.8	435.2	.560	1.406D	110.6	1.326	1.0	2.8	71.9	.463
4-6160.4	4-6230	.463	55.4	.9	.4	1.187	67.1	.389	.731	111.0	177.8	.447D	1.016A	91.4	.776	-3.2	-9.1	171.4	.215
		12.09	9.19	3.84	2.90	6.31	5.35	12.80	1/2/1	80.3	86.4	18.5	.281	6.208	174.5	351.4	-4.4	91.4D	1.462
4-5760	4-5970	.126	182.0	-36.0	-3.5	1.082	84.8	.183	1.179	35.1	184.2	.963D	1.395	89.1	.768	3.4	4.8	316.7	.126
4-5970	4-6164.6	.249	310.6	-23.9	-2.0	.657	94.6	.441	.971	185.8	439.0	.543	1.400D	111.7	1.321	.9	2.3	76.7	.484
4-6164.6	4-6240	.484	56.8	2.1	1.0	1.179	65.9	.408	.723	113.8	183.4	.428D	1.018	87.7	.765	-2.9	-6.3	169.5	.227
		11.97	9.25	3.80	2.72	6.13	5.46	12.98	1/2/1	80.5	98.6	17.9	.256	6.442	177.7	355.6	.1	93.3D	1.394
4-5770	4-5970	.140	187.0	-26.8	-2.8	1.077	83.0	.193	1.170	46.0	185.1	.944D	1.395	88.8	.762	2.4	-1.4	316.7	.127
4-5970	4-6169.6	.258	317.3	-21.5	-1.9	.626	92.0	.455	.958	182.4	443.5	.522	1.395D	113.3	1.314	.9	2.1	82.3	.513
4-6169.6	4-6250	.513	65.3	3.1	1.5	1.172	64.5	.431	.715	116.7	187.8	.407D	1.024	84.2	.755	-2.6	-4.4	170.4	.249
		12.32	9.62	3.94	2.70	6.11	5.68	13.32	1/2/1	82.1	108.1	17.0	.229	6.769	175.7	.7	4.1	95.4D	1.320
4-5760	4-5970	.163	191.3	-21.6	-2.3	1.070	81.1	.206	1.157	57.1	186.3	.918D	1.396	88.4	.756	1.8	-6.2	315.5	.130
4-5970	4-6175.7	.275	325.1	-18.3	-1.7	.613	88.4	.478	.944	178.3	449.2	.493	1.394	115.4	1.307	.9	1.9	89.3	.553
4-6175.7	4-6260	.553	73.3	3.6	2.0	1.162	62.4	.465	.706	120.4	191.2	.378D	1.033	80.6	.742	-2.1	-3.3	173.7	.280
		13.09	10.33	4.20	2.76	6.17	6.13	13.87	1/2/1	84.6	115.0	16.1	.197	7.151	172.6	7.1	7.3	97.9D	1.211
MARS ARRIVAL DATE = 2445980 (6 OCT 1984)																			
4-5690	4-5980	.120	234.5	4.8	2.5	1.090	94.8	.186	1.180	328.5	555.0	.961	1.399	86.7	.771	-1.6	-28.8	313.5	.120
4-5980	4-6132.8	.305	269.1	-36.4	-5.5	.731	109.7	.416	1.103	214.4	409.8	.644	1.562D	104.1	1.371	4.0	14.4	42.9	.371
4-6132.8	4-6170	.371	60.4	-12.9	-3.3	1.450	79.0	.535	1.463	31.9	85.6	.681D	2.245A	117.1	1.145	-4.1	-17.7	201.4	.511
		13.22	10.64	3.74	2.58	6.00	6.90	18.82	2/2/1	99.0	8.4	32.3	.436	3.594	57.9	320.4	57.8	105.8D	1.130
4-5700	4-5980	.113	237.7	12.3	3.1	1.091	93.5	.180	1.184	336.5	552.9	.971	1.396	87.2	.772	-2.4	-32.6	319.0	.120
4-5980	4-6140.7	.284	276.2	-32.5	-3.6	.709	107.5	.416	1.067	208.7	417.0	.623	1.510D	105.9	1.359	2.2	7.5	50.9	.390
4-6140.7	4-6180	.390	50.6	-10.0	-3.0	1.357	74.2	.413	1.062	57.0	107.5	.623D	1.501A	114.2	1.024	-4.4	-18.8	199.3	.416
		12.61	10.03	3.67	2.58	5.99	6.36	16.61	2/2/1	95.4	13.4	17.5	.394	6.575	90.4	49.4	-73.7	91.0D	2.198
4-5710	4-5980	.116	240.2	24.1	4.2	1.092	92.2	.175	1.186	344.9	551.1	.978	1.394	87.7	.773	-3.6	-38.8	325.4	.125
4-5980	4-6146.1	.274	281.7	-31.0	-3.0	.695	105.8	.418	1.044	204.8	421.7	.608	1.460D	107.1	1.351	1.8	5.6	56.5	.408
4-6146.1	4-6190	.408	46.1	-7.0	-2.5	1.286	71.5	.364	.886	79.2	130.8	.563D	1.209A	109.9	.925	-4.3	-18.7	195.0	.332
		12.44	9.78	3.69	2.66	6.08	6.09	14.85	2/2/1	92.4	25.1	16.3	.362	7.044	129.3	345.4	-48.2	84.1L	2.185
4-5720	4-5980	.146	244.2	41.1	6.7	1.092	90.9	.172	1.188	353.7	549.7	.985	1.393	88.0	.774	-6.3	-49.9	335.3	.144
4-5980	4-6150.1	.287	286.2	-30.0	-2.7	.684	104.4	.420	1.028	201.8	425.2	.596	1.461D	108.0	1.345	1.5	4.7	60.9	.422
4-6150.1	4-6200	.422	45.1	-4.5	-1.6	1.240	69.9	.357	.805	94.0	148.8	.517D	1.092A	105.0	.858	-4.1	-17.8	189.1	.271
		12.97	9.92	4.00	3.05	6.45	5.92	13.71	2/2/1	90.4	39.6	18.2	.336	6.323	149.6	343.9	-28.7	85.3L	1.799
4-5750	4-5980	.161	159.5	-59.2	-7.3	1.086	86.6	.175	1.184	23.2	188.6	.977D	1.392	88.2	.772	7.2	21.3	306.0	.154
4-5980	4-6160.3	.257	299.2	-27.0	-2.2	.658	100.3	.432	.992	194.2	434.1	.563	1.421D	110.4	1.329	1.2	3.3	72.3	.462
4-6160.3	4-6230	.462	55.4	.9	.4	1.187	67.2	.388	.732	110.8	177.8	.448D	1.016A	91.4	.777	-3.2	-9.1	171.4	.215
		13.06	9.84	4.17	3.24	6.65	5.66	12.79	1/2/1	89.4	86.4	19.1	.282	6.027	172.4	352.3	-6.2	91.0D	1.418
4-5760	4-5980	.133	178.7	-42.6	-4.4	1.082	85.0	.181	1.179	33.6	189.0	.965D	1.392	88.0	.770	4.2	7.9	311.6	.131
4-5980	4-6164.1	.256	304.3	-25.6	-2.1	.646	98.6	.439	.980	191.3	437.4	.549	1.410D	111.4	1.324	1.2	3.0	76.7	.476
4-6164.1	4-6240	.476	58.4	2.1	1.0	1.181	66.3	.403	.726	113.0	183.4	.434D	1.018	87.7	.768	-3.0	-8.9	169.4	.224
		12.28	9.50	3.86	2.78	6.19	5.84	12.93	1/2/1	90.2	98.6	18.3	.263	6.293	176.3	355.9	-1.7	92.6D	1.390
4-5770	4-5980	.139	186.4	-31.0	-3.2	1.077	83.3	.190	1.171	44.3	189.7	.946D	1.393	87.7	.766	2.8	-.3	312.5	.127
4-5980	4-6168.4	.258	310.4	-23.7	-1.9	.637	96.5	.449	.967	188.2	441.1	.533	1.400D	112.5	1.318	1.1	2.7	81.7	.499
4-6168.4	4-6250	.499	64.4	3.2	1.5	1.177	65.2	.419	.721	115.0	187.9	.419D	1.024	84.4	.762	-2.8	-4.8	170.0	.241
		12.51	9.61	3.93	2.70	6.12	5.66	13.20	1/2/1	91.8	106.2	17.3	.241	6.656	176.6	.2	2.4	94.3D	1.366
4-5780	4-5980	.159	191.6	-24.4	-2.6	1.071	81.5	.203	1.159	55.2	190.6	.924D	1.395	87.3	.761	2.0	-6.0	311.9	.129
4-5980	4-6173.5	.264	317.4	-21.2	-1.8	.625	93.8	.462	.952	184.5	445.6	.512	1.392D	114.0	1.311	1.1	2.4	87.5	.526
4-6173.5	4-6260	.526	71.4	4.0	2.0	1.172	63.6	.441	.717	117.2	191.6	.400D	1.033	81.1	.757	-2.3	-3.9	172.9	.265
		12.73	9.98	4.15	2.75	6.17	5.83	13.60	1/2/1	94.1	115.5	16.2	.217	7.095	173.7	5.4	6.1	96.2D	1.324
MARS ARRIVAL DATE = 2445990 (16 OCT 1984)																			
4-5710	4-5990	.109	240.4	17.2	3.4	1.092	92.5	.176	1.187	343.2	555.7	.977	1.396	86.7	.776	-3.0	-36.2	319.2	.124
4-5990	4-6147.3	.309	279.9	-31.1	-3.4	.711	109.2	.434	1.064	209.9	422.6	.602	1.527D	107.8	1.357	2.3	6.9	58.0	.427
4-6147.3	4-6190	.427	46.4	-6.8	-2.4	1.281	70.5	.375	.878	82.6	132.2	.549D	1.208A	110.4	.920	-4.4	-18.3	194.2	.340
		13.29	10.63	3.64	2.65	6.07	7.00	19.01	2/2/1	102.3	25.9	18.0	.330	6.402	129.9	349.1	-46.8	84.2L	1.763
4-5720	4-5990	.120	241.8	31.1	4.9	1.092	91.2	.173	1.188	352.0	554.3	.983	1.394	87.1	.777	-4.6	-43.9	325.8	.132
4-5990	4-6151.2	.299	283.8	-30.1	-3.0	.699	107.8	.435	1.046	206.9	425.8	.591	1.500D	108.6	1.350	2.0	5.7	62.3	.438
4-6151.2	4-6200	.438	45.6	-4.4	-1.7	1.235	69.0	.369	.798	96.7	149.6	.503D	1.092A	105.3	.852	-4.1	-17.0	188.4	.276
		13.29	10.46	3.74	2.81	6.22	6.75	13.84	2/2/1	99.5	40.4	19.5	.314	5.901	148.6	346.8	-29.2	85.8L	1.537
4-5760	4-5990	.148	172.3	-51.3	-5.9	1.083	85.3	.180	1.181	31.6	193.2	.968D	1.393	87.1	.773	5.5	13.1	307.1	.142
4-5990	4-6164.5	.275	299.5	-28.4	-2.2	.659	102.4	.445	.990	196.5	436.9	.550	1.431D	111.5	1.328	1.4	3.6	77.6	.463
4-6164.5	4-6240	.463	58.7	2.1	1.0	1.179	66.0	.407	.725	113.7	183.4	.429D	1.018	87.7	.766	-2.8	-6.5	169.5	.226
		13.14	10.14	4.02	2.99	6.40	6.12	12.97	1/2/1	98.2	98.6	18.9	.257	6.090	174.6	357.5	-3.4	92.5D	1.311
4-5770	4-5990	.141	185.2	-36.6	-3.9	1.078	83.7	.188	1.173	42.1	193.7	.953D	1.394	86.9	.770	5.4	1.8	309.0	.131
4-5990	4-6168.4	.272	304.8	-25.0	-2.0	.648	100.6	.451	.976	193.5	440.2	.536	1.416D	112.4	1.322	1.3	3.3	82.2	.499
4-6168.4	4-6250	.499	64.4	3.2	1.5	1.177	65.2	.419	.721	115.0	187.9	.419D	1.024	84.4	.762	-2.8	-4.8	170.0	.241
		12.76	9.97	3.94	2.76	6.19	6.03	13.20	1/2/1	100.5	108.2	17.8	.242	6.474	176.7	1.0	.7	99.9D	1.322
4-5760	4-5990	.155	192.0	-27.9	-3.0	1.072	81.9	.200	1.163	52.7	194.4	.931D	1.396	86.5	.765	2.5	-5.3	309.1	.132
4-5990	4-6172.9	.270	311.0	-23.0	-1.9	.636	98.3	.460	.961	190.1	443.9	.519	1.403D	113.5	1.315	1.3	3.0	87.4	.519
4-6172.9	4-6260	.519	70.8	4.0	2.0	1.174	64.2	.435	.720	116.3	191.7	.406D	1.033	81.3	.761	-2.3	-4.1	172.7	.261
		12.91	10.11	4.11	2.80	6.21	6.00	13.33	1/2/1	102.8	113.6	16.8	.223	6.942	174.9	5.5	4.8	95.4D	1.328

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 520 DAYS; MARS ARRIVAL DATE = 2445890 (8 JUL 1984)

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / PSI 5 / EVA	PSI 1 / PSI 3 / ECCEN / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																				
4-5660	4-5890	.189	218.2	.3	2.5	1.099	99.4	.250	1.222	309.6	512.7	.916	1.527A	98.4	.735	-.7	-16.9	325.5	.210
4-5890	4-6082.6	.182	275.4	-42.5	5.0	.670	93.4	.345	1.099	186.5	354.4	.720A	1.477D	88.6	1.366	3.2	22.6	36.8	.201
4-6082.6	4-6180	.201	74.0	-26.7	-4.0	1.316	95.9	.266	.957	331.3	475.9	.702	1.211A	105.1	.972	.7	-5.5	199.9	.245
		12.88	8.38	4.53	4.50	7.89	3.84	13.27	2/1/1	31.1	13.7	61.1	1.494	1.968	55.3	328.2	55.2	119.7D	1.447
4-5670	4-5890	.191	227.7	9.2	4.4	1.105	98.5	.249	1.237	315.1	508.2	.929	1.546A	99.5	.742	-2.7	-21.7	330.7	.224
4-5890	4-6078.7	.178	274.8	-38.5	-3.8	.669	93.5	.346	1.098	186.7	348.1	.717A	1.478D	87.0	1.365	2.1	14.7	41.5	.201
4-6078.7	4-6190	.200	71.3	-38.4	-5.5	1.294	95.6	.228	.909	328.9	489.6	.702	1.116A	101.6	.941	2.4	2.3	204.0	.193
		13.14	8.31	4.56	4.83	8.22	3.75	12.48	2/1/1	29.3	24.9	60.0	1.495	2.000	64.3	347.9	61.1	105.7D	1.496
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																				
4-5610	4-5900	.241	182.6	4.3	1.2	1.063	103.9	.270	1.150	283.8	542.4	.839	1.460	89.1	.708	1.2	-16.2	293.4	.148
4-5900	4-6047.1	.221	278.5	-29.4	-2.0	.626	93.4	.432	1.022	184.5	289.8	.581A	1.463D	70.5	1.334	.5	1.5	50.4	.447
4-6047.1	4-6130	.447	41.0	-22.0	-7.2	1.385	106.6	.471	1.191	306.0	458.0	.630	1.751A	116.5	1.085	6.5	20.2	166.0	.465
		13.22	10.10	5.33	3.12	6.53	4.77	18.19	2/1/1	66.4	14.2	25.2	.301	4.569	110.9	355.1	-64.9	75.1L	1.080
4-5620	4-5900	.224	189.5	2.0	1.2	1.069	102.8	.259	1.160	288.8	537.6	.859	1.460A	90.8	.713	1.0	-15.8	302.0	.153
4-5900	4-6051.4	.209	277.1	-30.2	-2.1	.638	93.9	.410	1.039	185.7	297.8	.612A	1.465D	73.0	1.341	.5	1.7	52.3	.399
4-6051.4	4-6140	.399	47.3	-27.3	-8.0	1.356	104.5	.406	1.084	307.6	462.8	.644	1.524A	113.5	1.044	6.8	19.6	174.1	.420
		12.76	9.53	5.06	3.23	6.64	4.47	16.71	2/1/1	58.1	17.5	29.5	.378	3.929	99.1	23.8	-71.2	75.0L	1.106
4-5650	4-5900	.186	210.5	-1.3	1.8	1.088	99.9	.240	1.193	304.6	523.4	.907	1.479A	95.1	.730	.1	-15.5	320.7	.178
4-5900	4-6099.9	.174	277.0	-20.3	.9	.672	94.0	.347	1.089	187.6	377.8	.710	1.467D	94.6	1.365	-2.6	-17.8	23.6	.220
4-6099.9	4-6170	.220	79.5	-17.8	-2.8	1.380	93.6	.372	1.138	346.6	453.6	.714	1.562A	110.8	1.056	-1.3	-12.0	199.5	.360
		11.92	8.16	4.50	3.75	7.15	3.67	15.42	2/2/1	40.5	5.8	53.0	1.243	2.241	20.0	321.5	-.0	175.3D	1.543
4-5650	4-5900	.186	210.5	-1.3	1.8	1.088	99.9	.240	1.193	304.6	523.4	.907	1.479A	95.1	.730	.1	-15.5	320.7	.178
4-5900	4-6100.1	.174	277.1	-20.6	.8	.672	94.0	.348	1.088	187.6	378.0	.710	1.467D	94.6	1.365	-2.8	-17.8	23.5	.220
4-6100.1	4-6170	.220	79.5	-17.8	-2.8	1.380	93.6	.373	1.139	346.8	453.4	.714	1.565A	110.9	1.057	-1.3	-12.0	199.6	.361
		11.92	8.17	4.50	3.75	7.15	3.67	15.44	2/2/1	40.5	5.8	53.1	1.242	2.236	19.7	321.7	.5	175.1D	1.535
4-5660	4-5900	.177	217.8	.5	2.4	1.094	98.9	.236	1.205	310.1	518.9	.921	1.490A	96.2	.736	-.6	-16.6	325.5	.187
4-5900	4-6086.4	.178	272.6	-40.4	-4.3	.677	95.1	.343	1.096	190.0	358.3	.720A	1.472D	89.6	1.366	2.5	17.7	35.6	.193
4-6086.4	4-6180	.193	75.4	-24.3	-3.5	1.321	95.3	.272	.969	334.8	473.4	.706	1.232A	105.6	.979	.1	-8.3	200.5	.253
		12.09	8.13	4.38	3.96	7.36	3.75	13.40	2/1/1	36.6	11.9	57.3	1.619	2.087	48.6	329.0	48.4	127.1D	1.759
4-5680	4-5900	.206	239.2	25.9	7.6	1.105	96.9	.233	1.231	321.8	510.4	.945	1.518A	98.2	.747	-6.1	-31.8	338.4	.221
4-5900	4-6067.8	.180	272.4	-33.0	-2.4	.668	95.2	.360	1.082	189.4	327.3	.693A	1.471D	81.5	1.358	.7	4.0	53.2	.255
4-6067.8	4-6200	.255	66.6	52.1	9.1	1.274	96.6	.205	.872	319.3	507.6	.693	1.051A	97.6	.913	-12.2	-49.3	159.9	.243
		15.36	8.59	4.77	4.77	8.16	3.61	13.23	2/1/2	36.8	63.7	49.5	.927	2.391	79.2	33.7	-59.5	75.5L	1.290
4-5680	4-5900	.206	239.2	25.9	7.6	1.105	96.9	.233	1.231	321.8	510.4	.945	1.518A	98.2	.747	-6.1	-31.8	338.4	.221
4-5900	4-6080.3	.174	271.6	-36.2	-3.1	.676	95.3	.345	1.095	190.3	348.8	.718A	1.472D	87.1	1.365	1.4	9.6	43.0	.195
4-6080.3	4-6200	.195	71.3	-45.8	-6.3	1.285	94.8	.207	.890	331.6	499.4	.706	1.074A	99.1	.925	3.0	7.0	207.9	.161
		13.22	8.45	4.77	4.77	8.16	3.67	12.08	2/1/1	36.8	34.2	60.9	1.577	1.974	68.1	1.4	60.6	101.1D	1.536
4-5700	4-5900	.164	215.4	-57.2	-5.5	1.114	94.7	.232	1.258	334.8	502.9	.966	1.549A	99.8	.759	6.8	9.3	326.3	.240
4-5900	4-6085.8	.175	272.0	-37.9	-3.8	.677	95.3	.343	1.096	190.2	353.8	.720A	1.472D	88.4	1.365	1.8	12.8	39.2	.191
4-6085.8	4-6220	.191	70.8	54.5	7.0	1.276	93.6	.183	.871	336.4	518.2	.712	1.031A	94.7	.908	-10.4	-54.5	163.0	.200
		13.14	7.91	4.22	5.23	8.61	3.69	12.59	1/1/2	33.9	70.9	48.5	1.648	2.434	66.6	6.7	-46.2	105.7D	2.364
4-5700	4-5900	.164	215.4	-57.2	-5.5	1.114	94.7	.232	1.258	334.8	502.9	.966	1.549A	99.8	.759	6.8	9.3	326.3	.240
4-5900	4-6085.7	.177	272.5	-39.7	-4.1	.677	95.2	.343	1.096	190.1	357.3	.720A	1.472D	89.3	1.366	2.3	16.3	36.4	.192
4-6085.7	4-6220	.192	70.6	-56.4	-7.2	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.8	18.5	211.7	.123
		13.18	7.95	4.22	5.25	8.61	3.73	11.67	1/1/1	33.9	56.0	78.2	1.636	1.586	72.2	4.5	62.1	103.0D	.958
4-5730	4-5900	.112	222.0	-34.1	-1.7	1.121	90.6	.237	1.290	356.8	494.4	.985	1.396A	101.5	.772	2.7	-1.1	336.1	.243
4-5900	4-6097.2	.176	275.4	-12.0	3.1	.674	94.3	.346	1.091	188.3	374.0	.714	1.468D	93.6	1.366	-5.0	-31.1	24.5	.230
4-6097.2	4-6250	.230	66.8	-70.3	-9.8	1.276	91.1	.172	.868	352.3	540.7	.719	1.017	89.8	.903	6.6	41.4	212.3	.135
		12.69	7.39	3.66	5.30	8.68	3.73	11.79	1/2/2	22.7	91.2	45.6	1.134	2.581	74.3	4.1	33.2	126.2D	1.793
4-5740	4-5900	.111	216.7	-30.0	-1.4	1.121	89.0	.240	1.297	5.4	132.6	.986D	1.607A	101.9	.774	2.3	-2.0	337.4	.247
4-5900	4-6100.9	.174	277.6	-21.8	.5	.672	93.9	.348	1.088	187.3	379.1	.709	1.466D	94.9	1.365	-2.4	-15.2	23.3	.221
4-6100.9	4-6260	.221	64.9	-69.4	-9.5	1.277	90.6	.172	.869	355.8	547.7	.719	1.018	88.4	.904	6.3	41.1	208.4	.134
		12.73	7.33	3.65	5.41	8.79	3.68	11.77	1/2/2	21.5	99.8	60.0	1.229	1.999	74.9	4.9	42.3	126.2D	1.229
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																				
4-5610	4-5910	.240	183.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	288.5	.142
4-5910	4-6048.4	.221	275.9	-29.5	-2.0	.633	95.9	.431	1.019	187.8	289.4	.580A	1.458D	70.4	1.333	.5	.9	52.7	.447
4-6048.4	4-6130	.447	42.2	-20.6	-6.8	1.392	106.6	.480	1.215	306.9	456.9	.632	1.799A	116.8	1.093	6.0	18.9	166.2	.491
		13.07	10.08	5.31	2.99	6.40	4.77	18.34	2/1/1	76.7	12.8	23.8	.300	4.842	114.9	350.8	-62.2	74.6L	1.154
4-5620	4-5910	.221	189.9	2.5	1.3	1.067	102.6	.255	1.154	288.5	543.0	.860	1.449	89.0	.718	1.0	-16.4	298.1	.143
4-5910	4-6052.9	.208	274.1	-30.2	-2.0	.646	96.3	.408	1.037	189.3	298.1	.614A	1.461D	73.2	1.341	.5	1.1	54.6	.396
4-6052.9	4-6140	.396	48.6	-25.2	-7.3	1.362	104.4	.415	1.104	308.7	461.4	.645	1.562A	113.9	1.052	6.0	17.5	174.1	.426
		12.49	9.47	5.01	3.02	6.42	4.46	16.83	2/1/1	67.6	15.4	26.9	.384	4.301	102.1	15.5	-71.2	74.8L	1.267
4-5630	4-5910	.205	196.8	.7	1.4	1.073	101.5	.245	1.163	293.8	538.4	.878	1.448A	90.5	.723	.7	-16.0	306.3	.147
4-5910	4-6056.7	.200	272.5	-30.7	-2.1	.656	96.6	.393	1.051	190.4	305.3	.638A	1.464D	75.4	1.348	.5	1.3	55.7	.356
4-6056.7	4-6150	.356	54.0	-31.3	-8.1	1.337	102.5	.358	1.024	310.5	467.0	.657	1.391A	110.9	1.015	6.4	17.6	181.8	.367
		12.12	9.02	4.77	3.10	6.51	4.26	15.56	2/1/1	59.8	19.5	32.6	.475	3.567	92.6	47.3	-72.3	75.1L	1.219
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160
4-5910	4-6100.8	.174	273.6	-19.5	1.1	.680	96.0	.346	1.087	191.5	377.4	.711	1.464D	94.4	1.365	-3.1	-19.4	25.6	.220
4-6100.8	4-6170	.220	79.4	-17.7	-2.8	1.382	93.4	.375	1.144	347.5	453.1	.715	1.573A	110.9	1.059	-1.3	-12.3	199.7	.363
		11.43	8.07	4.40	3.36	6.76	3.67	15.47	2/2/1	47.6	3.9	50.8	1.245	2.331	20.7	322.0	-1.8	174.1D	1.657
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160
4-5910	4-6102.8	.174	274.8	-23.8	.0	.678	95.7	.348	1.085	190.9	380.1	.708	1.462D	95.1	1.365	-2.0	-12.2	25.1	.221
4-6102.8	4-6170	.221	79.0	-17.5	-2.7	1.387	92.9	.384	1.162	349.7	451.9	.716	1.608A	111.2	1.065	-1.5	-12.8	200.1	.370
		11.43	8.08	4.40	3.36	6.76	3.68	15.63	2/2/1	47.6	4.1	52.2	1.236	2.271	17.6	323.5	5.9	170.5D	1.572
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160
4-5910	4-6132.5	.217	298.3	-26.6	-1.7	.647	89.2	.394	1.039	178.8	416.0	.629	1.448	103.0	1.350	-.4	-1.3	38.1	.367
4-6132.5	4-6170	.367	60.6	-12.9	-3.3	1.449	79.2	.532	1.458	31.3	85.5	.682D	2.234A	117.0	1.144	-4.0	-17.7	201.4	.508
		12.43	9.07	4.40	3.36	6.76	4.67	18.75	2/2/1	47.6	8.4	25.1	.446	4.604	28.6	323.0	27.5	119.7D	1.608
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167
4-5910	4-6089.3	.176	266.9	-36.8	-3.3	.685	97.0	.342	1.095	193.9	361.1	.720	1.470D	90.3	1.366	1.4	10.3	35.1	.188
4-6089.3	4-6180	.188	76.3	-25.0	-3.2	1.326	94.8	.276	.979	337.6	471.5	.708	1.249A	106.0	.984	-.3	-10.0	200.9	.259
		11.50	7.98	4.26	3.52	6.92	3.72	13.51	2/1/1	43.1	10.9	52.3	1.710	2.269	41.0	330.7	40.2	135.2D	2.169
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167
4-5910	4-6144.0	.253	307.5	-24.2	-1.6	.632	84.9	.430	1.018	173.1	429.1	.580	1.456	109.2	1.342	-.3	-.9	46.7	.444
4-6144.0	4-6180	.444	50.5	-9.3	-5.2	1.353	71.5	.457	1.050	65.7	110.9	.591D	1.509A	115.6	1.018	-4.8	-18.2	197.6	.442
		13.35	9.83	4.26	3.52	6.92	5.57	17.21	2/2/1	43.1	14.6	8.6	.304	13.316	77.9	342.1	76.8	97.4D	3.749
4-5670	4-5910	.161	224.9	5.2	3.1	1.095	97.5	.222	1.204	316.5	520.9	.937	1.471A	95.2	.742	-1.5	-19.2	329.9	.175
4-5910	4-6078.4	.176	267.3	-33.4	-2.4	.683	97.4	.347	1.093	194.4	344.1	.714A	1.472D	85.9	1.364	.6	4.2	47.9	.202
4-6078.4	4-6190	.202	71.2	-38.9	-5.7	1.294	95.7	.228	.909	328.7	489.7	.702	1.116A	101.6	.940	2.5	2.9	204.1	.193
		11.59	7.89	4.18	3.70	7.10	3.71	12.48	2/1/1	39.6	25.3	48.2	1.471	2.451	65.6	.4	59.1	100.6D	2.134
4-5680	4-5910	.169	234.4	17.4	5.2	1.100	96.4	.219	1.214	322.7	517.0	.949	1.480A	96.1	.747	-3.7	-26.0	336.2	.188
4-5910	4-6067.7	.183	268.7	-32.1	-2.2	.675	97.2	.361	1.080	193.2	325.7	.690A	1.470D	81.1	1.357	.4	2.2	55.5	.260
4-6067.7	4-6200	.260	67.2	53.4	9.5	1.274	96.6	.205	.873	319.4	507.5	.693	1.052A	97.6	.913	-12.5	-49.7	159.2	.248
		12.14	8.14	4.27	4.00	7.39	3.67	13.32	2/1/2	38.7	64.2	52.1	.887	2.276	81.0	38.8	-60.5	75.8L	1.132
4-5680	4-5910	.169	234.4	17.4	5.2	1.100	96.4	.219	1.214	322.7	517.0	.949	1.480A	96.1	.747	-3.7	-26.0	336.2	.188
4-5910	4-6080.2	.175	267.3	-33.7	-2.5	.684	97.4	.345	1.094	194.4	347.0	.717A	1.472D	86.7	1.364	.7	4.7	45.9	.196
4-6080.2	4-6200	.196	71.3	-46.1	-6.3	1.285	94.8	.207	.890	331.5	499.4	.706	1.074A	99.1	.925	3.1	7.4	208.0	.162
		11.97	7.97	4.27	4.00	7.39	3.70	12.08	2/1/1	36.7	34.5	55.5	1.587	2.146	68.9	7.2	59.4	98.7D	1.705

STOPOVER TIME = 0 DAYS 1984 INBOUND SWINGBY MISSION DURATION = 320 DAYS
MARS ARRIVAL DATE = 2445910.
28 JUL 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / V 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5710	4-5910	.137	213.6	-56.1	-4.5	1.110	92.9	.215	1.244	343.4	507.0	.976	1.512A	98.1	.760	5.7	8.6	329.1		.215
4-5910	4-6088.9	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.5	.720	1.470D	90.1	1.366	1.3	9.8	35.5		.167
4-6088.9	4-6230	.187	69.5	-58.8	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.903	3.8	23.0	210.3		.111
		12.23	7.61	3.90	4.62	8.01	3.71	11.56	1/1/2	35.5	67.8	73.9	1.717	1.664	72.7	8.0	58.6	105.3D	1.141	
4-5710	4-5910	.137	213.6	-56.1	-4.5	1.110	92.9	.215	1.244	343.4	507.0	.976	1.512A	98.1	.760	5.7	8.6	329.1		.215
4-5910	4-6092.1	.179	269.9	-39.6	-4.1	.684	96.8	.343	1.094	193.4	365.2	.719	1.469D	91.3	1.366	2.2	15.5	32.0		.194
4-6092.1	4-6230	.194	67.4	62.1	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.1	-57.3	156.3		.204
		12.31	7.68	3.90	4.62	8.01	3.78	12.64	1/1/1	35.5	77.3	52.8	1.605	2.247	70.9	7.0	-43.8	115.4D	2.002	
4-5730	4-5910	.105	214.6	-38.5	-2.1	1.112	90.1	.217	1.258	359.3	502.6	.985	1.531A	99.0	.766	3.1	1.3	335.6		.214
4-5910	4-6098.4	.197	272.1	1.5	7.2	.681	96.2	.345	1.089	192.1	374.1	.714	1.465D	93.6	1.366	-9.1	-49.1	24.6		.285
4-6098.4	4-6250	.285	67.0	-76.8	-12.5	1.277	90.9	.172	.868	354.0	540.6	.719	1.017	89.9	.903	9.4	47.7	218.6		.174
		12.38	7.79	3.60	4.59	7.98	4.19	12.23	1/2/2	28.5	90.7	32.2	.742	3.606	79.1	7.1	23.1	132.0D	1.934	
4-5740	4-5910	.104	209.3	-32.3	-1.7	1.112	88.5	.219	1.261	8.2	141.4	.985D	1.537A	99.4	.767	2.5	-.3	337.0		.216
4-5910	4-6100.9	.174	273.6	-19.8	1.1	.680	96.0	.346	1.087	191.5	377.5	.711	1.463D	94.5	1.365	-3.0	-18.9	25.6		.219
4-6100.9	4-6260	.219	65.0	-69.1	-9.2	1.277	90.6	.172	.869	355.7	547.7	.719	1.018	88.4	.904	6.2	40.8	208.1		.132
		11.91	7.26	3.59	4.65	8.04	3.67	11.76	1/2/2	27.2	99.9	55.7	1.248	2.139	75.0	7.0	40.6	125.9D	1.422	
4-5780	4-5910	.187	197.5	-15.4	-1.3	1.092	80.1	.251	1.223	53.3	146.3	.916D	1.530A	100.0	.751	1.4	-5.5	335.6		.227
4-5910	4-6083.3	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.0	.719A	1.472D	87.9	1.365	.8	5.9	42.3		.189
4-6083.3	4-6300	.189	89.9	-22.7	-3.3	1.279	97.1	.215	.876	317.6	576.2	.687	1.065	81.3	.915	-.4	-3.0	181.7		.153
		13.11	8.20	4.51	4.90	8.29	3.69	11.98	1/1/2	29.4	146.1	54.6	1.675	2.180	33.8	340.9	32.2	129.3D	1.976	
MARS ARRIVAL DATE = 2445920 (7 AUG 1984)																				
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1		.140
4-5920	4-6049.6	.226	272.4	-29.5	-2.0	.641	98.6	.432	1.019	191.6	289.3	.579A	1.459D	70.4	1.333	.1	.3	54.7		.446
4-6049.6	4-6130	.446	43.4	-19.5	-6.4	1.398	106.6	.490	1.241	307.7	455.8	.633	1.849A	117.2	1.101	5.6	17.7	166.4		.498
		13.17	10.21	5.34	2.96	6.37	4.67	16.51	2/1/1	87.7	11.7	22.7	.299	5.075	116.6	348.0	-59.3	74.0L	1.218	
4-5620	4-5920	.221	190.4	2.8	1.4	1.066	102.6	.254	1.150	288.0	548.4	.859	1.442	87.2	.723	1.0	-17.1	293.1		.137
4-5920	4-6054.3	.213	270.0	-30.0	-2.0	.656	98.9	.408	1.039	193.3	298.5	.615A	1.464D	73.3	1.341	.1	.4	56.5		.394
4-6054.3	4-6140	.394	49.8	-23.6	-6.8	1.367	104.4	.423	1.121	309.6	460.2	.647	1.596A	114.2	1.058	5.5	16.0	174.3		.431
		12.46	9.57	5.00	2.90	6.31	4.56	16.95	2/1/1	78.2	13.6	24.9	.387	4.645	104.7	8.4	-70.6	74.3L	1.411	
4-5630	4-5920	.203	197.1	1.1	1.5	1.071	101.4	.241	1.158	293.5	543.9	.879	1.438	88.8	.728	.7	-16.8	302.1		.137
4-5920	4-6058.5	.204	268.0	-30.4	-2.0	.667	99.1	.391	1.055	194.8	306.8	.642A	1.467D	75.6	1.348	.1	.5	57.5		.349
4-6058.5	4-6150	.349	55.4	-28.4	-7.3	1.343	102.4	.366	1.040	311.7	465.4	.659	1.421A	111.4	1.022	5.5	14.8	181.7		.371
		11.99	9.08	4.73	2.91	6.32	4.35	15.65	2/1/1	69.7	16.7	29.0	.493	3.997	93.8	43.6	-74.6	75.6L	1.477	
4-5640	4-5920	.187	203.*	-.1	1.6	1.077	100.3	.231	1.167	299.1	539.6	.897	1.437A	90.1	.732	.4	-16.6	310.0		.140
4-5920	4-6061.6	.198	266.6	-30.6	-2.0	.673	99.3	.381	1.065	195.8	312.7	.659A	1.470D	77.5	1.351	.1	.5	57.8		.320
4-6061.6	4-6160	.320	59.0	-35.8	-6.3	1.320	100.6	.315	.978	313.5	472.3	.670	1.286A	108.5	.989	6.1	16.2	189.0		.318
		11.70	8.73	4.51	2.96	6.37	4.22	14.57	2/1/1	62.3	22.2	36.4	.589	3.199	87.3	49.4	72.1	75.5L	1.295	
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	316.8		.145
4-5920	4-6099.7	.193	268.4	-44.7	-2.7	.690	98.3	.346	1.090	196.4	374.6	.715	1.468D	93.7	1.366	3.8	24.4	27.9		.220
4-6099.7	4-6170	.220	79.5	-17.9	-2.8	1.379	93.7	.371	1.136	346.4	453.7	.714	1.557A	110.8	1.058	-1.2	-11.9	199.5		.359
		11.48	8.43	4.33	3.05	6.46	4.10	15.40	2/1/1	56.0	3.8	65.6	1.245	1.845	41.8	321.1	41.6	138.2D	1.052	
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	316.8		.145
4-5920	4-6102.2	.178	269.8	-20.4	.9	.688	98.0	.347	1.088	195.7	378.0	.710	1.465D	94.6	1.365	-2.9	-18.0	27.0		.220
4-6102.2	4-6170	.220	79.2	-17.6	-2.8	1.385	93.0	.381	1.156	349.0	452.3	.715	1.596A	111.1	1.063	-1.5	-12.7	200.0		.368
		11.14	8.09	4.33	3.05	6.46	3.76	15.58	2/2/1	56.0	4.0	49.5	1.241	2.390	19.7	323.0	-.5	173.0D	1.725	
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	316.8		.145
4-5920	4-6104.9	.179	271.5	-27.6	-.9	.686	97.7	.349	1.084	194.8	381.5	.706	1.462D	95.5	1.365	-1.0	-6.1	26.6		.221
4-6104.9	4-6170	.221	78.4	-17.3	-2.7	1.391	92.3	.392	1.179	351.9	450.8	.717	1.641A	111.5	1.071	-1.7	-13.4	200.5		.377
		11.16	8.11	4.33	3.05	6.46	3.78	15.78	2/2/1	56.0	4.4	51.8	1.226	2.290	18.2	324.9	12.6	164.3D	1.581	
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	316.8		.145
4-5920	4-6130.4	.204	293.6	-28.2	-1.8	.657	92.3	.383	1.041	183.8	411.9	.643	1.439D	103.7	1.351	-.2	-.6	37.7		.342
4-6130.4	4-6170	.342	61.7	-13.4	-3.2	1.445	80.7	.518	1.432	27.5	85.0	.691D	2.174A	116.3	1.139	-3.8	-17.6	201.8		.493
		11.74	8.69	4.33	3.05	6.46	4.36	18.38	2/2/1	56.0	8.3	27.0	.513	4.286	29.3	323.4	28.2	122.6D	1.688	
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8		.150
4-5920	4-6090.3	.180	264.2	-32.7	-2.3	.694	99.1	.344	1.098	198.3	361.4	.720	1.475D	90.4	1.367	.4	2.9	36.1		.186
4-6090.3	4-6180	.186	76.5	-22.8	-3.1	1.327	94.6	.276	.982	338.6	470.8	.709	1.255A	106.1	.986	-.4	-10.6	201.1		.262
		11.14	7.98	4.18	3.16	6.57	3.80	13.55	2/1/1	50.8	10.6	46.9	1.738	2.513	35.1	332.4	33.1	141.1D	2.629	
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8		.150
4-5920	4-6142.1	.232	304.6	-25.5	-1.9	.641	88.4	.412	1.018	177.7	424.8	.599	1.438	107.6	1.342	-.1	-.4	46.2		.412
4-6142.1	4-6180	.412	50.6	-9.7	-5.1	1.355	73.0	.422	1.056	60.7	108.9	.610D	1.503A	114.8	1.021	-4.6	-18.6	198.6		.426
		12.37	9.21	4.18	3.16	6.57	5.03	16.84	2/2/1	50.8	13.9	9.6	.354	11.956	75.7	338.3	74.8	98.3D	3.874	
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.745	-1.2	-19.2	328.4		.157
4-5920	4-6077.4	.183	262.6	-31.6	-2.1	.692	99.6	.350	1.095	198.9	341.1	.712A	1.478D	85.1	1.364	.2	1.2	50.9		.210
4-6077.4	4-6190	.210	71.0	-41.2	-6.2	1.293	95.8	.227	.907	327.8	490.5	.701	1.112A	101.4	.939	3.0	5.5	204.5		.193
		11.24	7.95	4.08	3.30	6.70	3.87	12.48	2/1/1	46.6	27.1	46.2	1.366	2.551	69.0	9.4	60.1	95.2D	2.118	
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.745	-1.2	-19.2	328.4		.157
4-5920	4-6149.4	.257	311.0	-23.4	-1.9	.630	85.3	.437	1.005	173.8	432.8	.566	1.443	110.3	1.336	-.1	-.3	55.4		.463
4-6149.4	4-6190	.463	46.9	-6.5	-2.5	1.274	68.6	.397	.864	86.5	134.5	.521D	1.207A	111.4	.909	-4.6	-17.4	192.7		.357
		13.02	9.73	4.08	3.30	6.70	5.65	15.36	2/2/1	46.6	27.2	10.5	.281	10.880	143.7	331.7	-36.1	88.3L	2.774	
4-5680	4-5920	.152	231.9	13.1	4.1	1.096	96.1	.208	1.202	323.4	523.5	.951	1.452A	94.2	.749	-2.6	-23.8	334.3		.165
4-5920	4-6067.9	.190	264.3	-31.1	-2.0	.684	99.5	.364	1.081	197.5	324.5	.687A	1.475D	80.7	1.358	.1	.7	56.9		.266
4-6067.9	4-6200	.266	67.8	54.6	9.9	1.274	96.6	.205	.873	319.6	507.4	.694	1.052A	97.6	.913	-12.9	-50.1	158.5		.253
		11.56	8.10	4.06	3.48	6.89	4.03	13.41	2/1/2	44.1	64.6	54.6	.848	2.181	82.3	42.7	-61.0	72.6L	1.001	
4-5680	4-5920	.152	231.9	13.1	4.1	1.096	96.1	.208	1.202	323.4	523.5	.951	1.452A	94.2	.749	-2.6	-23.8	334.3		.165
4-5920	4-6079.9	.182	262.5	-31.8	-2.1	.693	99.8	.348	1.097	199.0	345.3	.715A	1.478D	86.2	1.365	.2	1.4	48.4		.200
4-6079.9	4-6200	.200	71.4	-47.1	-6.6	1.285	94.8	.207	.890	331.2	499.5	.706	1.074A	99.0	.925	3.3	8.7	208.2		.163
		11.40	7.91	4.06	3.48	6.89	3.85	12.09	2/1/1	44.1	55.5	52.5	1.498	2.260	70.4	12.9	56.8	95.7D	1.868	
4-5690	4-5920	.192	244.4	33.7	8.1	1.099	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7		.192
4-5920	4-6075.2	.184	262.8	-31.5	-2.1	.691	99.6	.353	1.093	198.7	337.3	.707A	1.478D	84.2	1.363	.2	1.1	52.9		.220
4-6075.2	4-6210	.220	70.1	52.9	8.0	1.275	95.2	.193	.871	327.0	512.7	.703	1.040A	96.1	.910	-11.2	-52.2	162.1		.220
		12.56	8.48	4.58	4.08	7.47	3.90	12.88	2/1/2	47.9	66.9	53.8	1.236	2.211	77.2	30.0	-59.4	83.1L	1.499	
4-5690	4-5920	.192	244.4	33.7	8.1	1.099	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7		.192
4-5920	4-6082.8	.181	262.7	-32.0	-2.1	.694	99.5	.346	1.098	199.0	349.9	.718A	1.478D	87.4	1.366	.2	1.7	45.1		.192
4-6082.8	4-6210	.192	71.2	-51.6	-6.8	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.3	210.5		.138
		12.48	8.40	4.58	4.08	7.47	3.82	11.82	2/1/1	47.9	44.5	57.7	1.628	2.075	71.1	13.3	57.4	98.1D	1.747	
4-5710	4-5920	.173	188.2	-71.1	-7.6	1.104	92.5	.202	1.225	345.0	514.4	.978	1.473A	96.1	.759	8.7	19.4	323.0		.214
4-5920	4-6088.8	.180	263.8	-32.5	-2.3	.694	99.2	.344	1.098	198.5	359.3	.720A	1.476D	89.8	1.367	.4	2.6	37.8		.186
4-6088.8	4-6230	.186	69.4	-58.4	-7.1	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.7	22.5	210.0		.110
		12.72	8.12	4.32	4.60	7.99	3.80	11.56	1/1/2	47.7	67.7	65.9	1.746	1.838	72.5	11.4	55.5	104.9D	1.483	
4-5710	4-5920	.173	188.2	-71.1	-7.6	1.104	92.5	.202	1.225	345.0	514.4	.978	1.473A	96.1	.759	8.7	19.4	323.0		.214
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2		.188
4-6092.1	4-6230	.188	67.1	60.8	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.7	-57.0	159.2		.199
		12.72	8.12	4.32	4.60	7.99	3.80	12.57	1/1/1	47.7	77.0	62.5	1.710	1.928	72.7	10.0	-51.5	110.2D	1.586	
4-5720	4-5920	.116	206.4	-54.7	-4.0	1.105	91.2	.202	1.231	352.9	512.2	.983	1.479A	96.5	.762	4.9	8.8	330.6		.193
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2		.188
4-6092.1	4-6240	.187	68.3	-61.1	-7.4	1.276	92.0	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.4	207.9		.107
		11.61	7.52	3.72	4.09	7.49	3.80	11.53	1/1/2	38.8	80.4	69.8	1.710	1.747	73.3	9.8	55.0	108.7D	1.278	
4-5720	4-5920	.116	206.4	-54.7	-4.0	1.105	91.2	.202	1.231	352.9	512.2	.983	1.479A	96.5	.762	4.9	8.8	330.6		.193
4-5920	4-6099.8	.194	266.4	-45.5	-6.0	.690	98.3	.346	1.090	196.4	374.7	.713	1.468D	93.8	1.366	4.1	25.7	27.9		.222
4-6099.8	4-6240	.222	58.5	69.7	9.4	1.277	90.3	.172	.869	357.6	532.1	.719	1.018A	91.6	.904	-12.8	-58.8	181.8		.223
		11.94	7.85	3.72	4.09	7.49	4.13	12.93	1/1/1	38.8	84.2	47.4	1.219	2.487	77.5	11.5	-38.8	123.1D	1.612	

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 520 DAYS; MARS ARRIVAL DATE = 2445920 (7 AUG 1984)

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-5730	4-5920	.103	206.2	-44.1	-2.7	1.105	89.6	.202	1.234	1.5	150.6	.985D	1.484A	96.9	.763	3.6	4.3	333.9	.190
4-5920	4-6095.9	.181	266.4	-34.5	-2.8	.692	98.7	.345	1.094	197.3	369.4	.717	1.471D	92.4	1.367	.8	5.9	30.8	.194
4-6095.9	4-6250	.194	67.2	-64.0	-7.9	1.276	91.4	.172	.867	350.6	541.0	.718	1.017	89.8	.903	4.6	33.8	206.1	.111
		11.44	7.41	3.39	4.03	7.43	3.82	11.57	1/1/2	35.4	91.9	75.1	1.595	1.642	74.4	8.7	55.3	111.9D	1.023
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.6	335.7	.190
4-5920	4-6101.6	.185	269.5	-12.1	3.2	.688	98.1	.347	1.088	195.9	377.2	.711	1.466D	94.4	1.366	-5.1	-30.7	26.7	.237
4-6101.6	4-6260	.237	64.0	-71.7	-10.2	1.278	90.5	.172	.869	356.7	547.7	.719	1.018	88.4	.904	7.2	43.5	211.0	.145
		11.47	7.43	3.57	4.04	7.43	3.86	11.89	1/2/2	33.8	98.9	45.7	1.067	2.576	76.8	9.5	34.5	128.8D	1.683
4-5750	4-5920	.109	197.8	-27.7	-1.8	1.102	86.5	.207	1.233	20.8	149.7	.977D	1.488A	97.3	.763	2.3	-.1	336.5	.191
4-5920	4-6105.1	.179	271.6	-27.8	-1.0	.686	97.6	.349	1.084	194.7	381.8	.706	1.462D	95.6	1.364	-.9	-5.7	26.6	.222
4-6105.1	4-6270	.222	65.5	-69.4	-9.4	1.279	90.1	.174	.871	359.5	554.1	.719	1.022	87.1	.906	6.6	41.0	207.1	.141
		11.47	7.42	3.63	4.06	7.45	3.78	11.85	1/2/2	33.2	106.9	68.1	1.216	1.786	76.9	10.1	48.3	122.8D	.956
4-5760	4-5920	.182	195.0	-15.4	-1.4	1.083	80.1	.237	1.195	56.2	155.1	.911D	1.478A	97.3	.746	1.4	-5.4	333.8	.197
4-5920	4-6064.5	.194	265.4	-30.9	-2.0	.679	99.4	.372	1.073	196.6	318.2	.673A	1.472D	79.0	1.355	.1	.6	57.7	.294
4-6064.5	4-6300	.294	77.0	-14.6	-3.4	1.271	103.0	.278	.868	292.9	561.7	.627	1.110	76.9	.910	-2.1	-6.6	174.1	.223
		12.77	8.58	4.45	4.20	7.59	4.13	12.91	1/1/2	36.8	150.7	24.4	.697	4.729	39.2	342.8	38.3	102.7D	2.597
4-5780	4-5920	.182	195.0	-15.4	-1.4	1.083	80.1	.237	1.195	56.2	155.1	.911D	1.478A	97.3	.746	1.4	-5.4	333.8	.197
4-5920	4-6082.4	.181	262.7	-31.9	-2.1	.694	99.5	.346	1.098	199.0	349.2	.718A	1.478D	87.2	1.366	.2	1.7	45.6	.193
4-6082.4	4-6300	.193	89.4	-22.1	-3.3	1.278	97.4	.217	.876	316.4	576.4	.685	1.066	81.1	.915	-.4	-3.4	181.2	.155
		12.47	8.28	4.45	4.20	7.59	3.83	12.00	1/1/2	36.8	146.4	48.9	1.611	2.417	31.7	342.9	29.3	128.0D	2.282
4-5790	4-5920	.222	197.0	-14.4	-1.4	1.072	77.5	.260	1.169	69.4	158.3	.866D	1.472A	97.2	.733	1.2	-7.5	331.2	.202
4-5920	4-6089.2	.180	263.9	-32.6	-2.3	.694	99.2	.344	1.098	198.5	359.7	.720A	1.476D	89.9	1.367	.4	2.7	37.4	.186
4-6089.2	4-6310	.186	96.7	-24.2	-3.4	1.283	96.7	.216	.882	320.7	579.5	.691	1.073	80.6	.922	.2	-2.8	189.5	.159
		13.14	8.82	5.02	4.32	7.71	3.80	12.05	1/1/2	39.8	148.8	63.5	1.746	1.901	29.0	341.7	25.7	139.2D	1.572

MARS ARRIVAL DATE = 2445930 (17 AUG 1984)

4-5620	4-5930	.223	191.0	3.0	1.5	1.065	102.7	.254	1.148	287.3	553.5	.856	1.440	85.5	.729	1.0	-17.8	287.8	.136
4-5930	4-6055.5	.223	265.3	-29.6	-1.9	.668	101.8	.410	1.046	198.0	299.2	.617A	1.475D	73.4	1.344	-.1	-.3	58.0	.393
4-6055.5	4-6140	.393	50.9	-22.4	-6.5	1.373	104.4	.430	1.138	310.5	459.1	.648	1.628A	114.5	1.065	5.0	14.7	174.4	.436
		12.73	9.85	5.03	2.88	6.29	4.82	17.07	2/1/1	89.4	12.5	23.1	.389	4.988	106.8	2.7	-69.9	73.9L	1.551
4-5630	4-5930	.203	197.6	1.3	1.6	1.070	101.4	.240	1.155	293.0	549.3	.878	1.432	87.1	.733	.7	-17.8	297.0	.132
4-5930	4-6060.0	.214	262.9	-29.8	-1.9	.680	101.9	.392	1.063	199.8	308.2	.646A	1.481D	76.1	1.351	-.1	-.3	58.8	.345
4-6060.0	4-6150	.345	56.7	-26.6	-6.7	1.347	102.3	.372	1.053	312.8	464.1	.661	1.444A	111.6	1.028	4.9	12.9	181.8	.375
		12.14	9.33	4.73	2.81	6.22	4.60	15.73	2/1/1	80.5	14.8	26.3	.504	4.388	94.3	40.6	-76.5	75.9L	1.709
4-5640	4-5930	.185	204.2	.1	1.7	1.075	100.2	.229	1.162	298.8	545.1	.897	1.426	88.5	.737	.4	-17.7	305.5	.132
4-5930	4-6064.1	.208	261.1	-29.9	-1.9	.689	102.0	.380	1.077	201.2	316.2	.668A	1.485D	78.3	1.356	-.1	-.4	58.8	.306
4-6064.1	4-6160	.306	61.5	-31.4	-7.0	1.327	100.5	.323	.993	315.4	470.0	.672	1.314A	108.8	.997	4.6	11.7	186.6	.321
		11.75	8.94	4.49	2.80	6.21	4.46	14.63	2/1/1	72.6	17.9	31.1	.642	3.732	85.6	43.7	73.5	76.4L	1.753
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6103.2	.188	265.4	-22.0	.5	.698	100.3	.350	1.092	200.4	378.4	.709	1.474D	94.7	1.367	-2.5	-15.4	28.2	.220
4-6103.2	4-6170	.220	78.9	-17.5	-2.7	1.387	92.7	.384	1.163	350.1	451.8	.716	1.610A	111.3	1.066	-1.5	-12.9	200.2	.371
		11.10	8.26	4.29	2.84	6.25	3.97	15.64	2/1/1	65.7	4.2	48.6	1.240	2.432	18.3	324.2	2.4	172.2D	1.776
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6128.8	.200	267.6	-29.8	-2.0	.667	95.3	.376	1.044	189.0	408.6	.652	1.437D	102.7	1.352	.1	.5	37.6	.325
4-6128.8	4-6170	.325	62.7	-13.7	-5.1	1.442	81.8	.507	1.413	24.7	84.8	.696D	2.130A	115.8	1.135	-3.6	-17.5	202.0	.482
		11.38	8.54	4.29	2.84	6.25	4.25	18.12	2/2/1	65.7	8.2	28.6	.569	4.044	30.8	323.8	29.9	124.4D	1.731
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6089.3	.191	259.0	-30.0	-1.8	.706	101.6	.348	1.105	203.6	359.2	.720A	1.490D	89.8	1.369	-.2	-1.5	38.8	.188
4-6089.3	4-6180	.188	76.3	-23.0	-3.2	1.326	94.8	.276	.979	337.6	471.5	.708	1.249A	106.0	.984	-.3	-10.0	200.9	.260
		11.09	8.19	4.13	2.90	6.31	4.06	13.51	2/1/1	59.8	10.9	42.3	1.709	2.774	33.5	334.4	30.3	141.3D	3.032
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6140.6	.218	300.2	-27.1	-2.0	.650	91.7	.400	1.020	182.5	421.3	.612	1.427D	106.4	1.343	.1	.3	47.9	.389
4-6140.6	4-6180	.389	50.7	-10.0	-3.0	1.357	74.3	.412	1.061	56.9	107.5	.624D	1.499A	114.2	1.023	-4.4	-18.8	199.3	.414
		11.72	8.82	4.13	2.90	6.31	4.69	16.58	2/2/1	59.8	13.3	10.7	.397	10.747	75.0	336.7	74.2	98.9D	3.873
4-5670	4-5930	.146	223.8	3.6	2.6	1.089	96.9	.206	1.185	317.3	533.4	.941	1.429A	91.7	.748	-1.0	-19.8	325.8	.141
4-5930	4-6076.4	.197	257.9	-30.0	-1.9	.703	102.1	.356	1.101	203.8	338.6	.709A	1.494D	84.4	1.366	-.1	-.7	53.1	.219
4-6076.4	4-6190	.219	70.8	-43.7	-6.8	1.291	95.9	.226	.905	326.9	491.2	.700	1.109A	101.3	.937	3.7	8.6	205.0	.194
		11.18	8.20	4.01	2.98	6.39	4.19	12.50	2/1/1	55.0	29.3	45.8	1.248	2.569	72.1	17.8	60.6	90.2D	1.959
4-5670	4-5930	.146	223.8	3.6	2.6	1.089	96.9	.206	1.185	317.3	533.4	.941	1.429A	91.7	.748	-1.0	-19.8	325.8	.141
4-5930	4-6147.6	.235	307.4	-25.0	-2.0	.639	89.0	.419	1.006	176.6	428.7	.585	1.427	108.7	1.337	.1	.3	54.7	.431
4-6147.6	4-6190	.431	46.4	-6.8	-2.4	1.281	70.2	.378	.876	83.3	132.5	.545D	1.207A	110.5	.918	-4.4	-18.2	194.0	.342
		12.10	9.12	4.01	2.98	6.39	5.11	15.05	2/2/1	55.0	26.0	10.9	.324	10.547	139.4	332.1	-40.3	66.7L	3.088
4-5680	4-5930	.141	230.5	10.3	3.5	1.093	95.8	.201	1.192	323.9	529.9	.953	1.432A	92.5	.751	-2.1	-23.2	331.8	.148
4-5930	4-6079.5	.195	257.7	-30.0	-1.8	.705	102.0	.353	1.104	204.1	343.9	.714A	1.494D	85.8	1.367	-.1	-.9	50.1	.206
4-6079.5	4-6200	.206	71.5	-48.5	-6.9	1.285	94.9	.206	.889	330.9	499.8	.706	1.073A	99.0	.925	3.7	10.5	208.7	.164
		11.21	8.10	3.95	3.11	6.52	4.15	12.11	2/1/1	51.5	36.5	51.1	1.419	2.320	71.9	17.8	58.3	92.9D	1.873
4-5680	4-5930	.141	230.5	10.3	3.5	1.093	95.8	.201	1.192	323.9	529.9	.953	1.432A	92.5	.751	-2.1	-23.2	331.8	.148
4-5930	4-6153.2	.254	312.8	-23.1	-2.0	.630	86.5	.438	.994	175.5	434.6	.559	1.430	110.7	1.332	.1	.2	60.5	.469
4-6153.2	4-6200	.469	46.4	-4.2	-1.7	1.226	67.4	.392	.783	101.7	151.4	.477D	1.090A	105.9	.836	-4.2	-15.9	187.1	.292
		12.63	9.52	3.95	3.11	6.52	5.58	14.09	2/2/1	51.5	41.9	14.8	.273	7.790	162.4	338.3	-17.4	89.8L	1.857
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6075.8	.198	258.0	-30.0	-1.9	.703	102.1	.358	1.100	203.7	336.7	.706A	1.493D	83.9	1.365	-.1	-.7	54.0	.225
4-6075.8	4-6210	.225	70.5	54.1	8.3	1.275	95.2	.193	.872	327.1	512.6	.703	1.040A	96.1	.910	-11.5	-52.5	161.4	.224
		11.67	8.29	4.08	3.38	6.78	4.21	12.94	2/1/2	50.9	67.3	56.4	1.186	2.115	78.5	33.1	-60.3	81.9L	1.323
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6082.7	.194	257.8	-30.0	-1.8	.706	101.9	.351	1.106	204.1	348.9	.717A	1.494D	87.1	1.368	-.1	-1.0	46.6	.196
4-6082.7	4-6210	.196	71.3	-52.5	-7.0	1.280	94.0	.192	.879	335.0	508.5	.710	1.048A	96.8	.916	3.7	13.6	210.9	.140
		11.58	8.20	4.08	3.38	6.78	4.12	11.84	2/1/1	50.9	45.2	55.5	1.565	2.148	72.0	17.0	56.5	96.2D	1.797
4-5720	4-5930	.140	187.2	-65.7	-5.9	1.101	90.9	.191	1.215	354.4	519.6	.983	1.447A	94.6	.762	6.8	16.8	325.4	.185
4-5930	4-6092.2	.190	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.4	.720	1.488D	90.9	1.369	-.2	-1.8	35.6	.189
4-6092.2	4-6240	.189	68.4	-61.5	-7.5	1.276	91.9	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.8	208.2	.108
		11.90	7.97	3.93	3.92	7.32	4.04	11.54	1/1/2	49.4	80.4	64.6	1.687	1.872	73.4	12.2	52.5	108.6D	1.471
4-5730	4-5930	.108	196.2	-50.9	-3.6	1.100	89.5	.191	1.218	3.2	158.2	.985D	1.450A	94.9	.763	4.3	8.5	330.8	.172
4-5930	4-6095.9	.190	261.3	-29.6	-1.6	.703	101.1	.348	1.101	202.4	368.6	.717	1.484D	92.2	1.369	-.4	-2.5	32.3	.194
4-6095.9	4-6250	.194	67.3	-64.0	-7.9	1.276	91.4	.172	.867	350.5	541.0	.718	1.017	89.8	.903	4.6	33.8	206.0	.111
		11.28	7.64	3.62	3.63	7.03	4.02	11.57	1/1/2	43.8	91.9	66.5	1.597	1.823	74.1	10.8	51.2	113.2D	1.314
4-5730	4-5930	.108	196.2	-50.9	-3.6	1.100	89.5	.191	1.218	3.2	158.2	.985D	1.450A	94.9	.763	4.3	8.5	330.8	.172
4-5930	4-6107.5	.191	267.9	-34.4	-2.9	.694	99.7	.352	1.085	198.9	383.8	.703	1.468D	96.1	1.365	1.0	5.8	27.8	.230
4-6107.5	4-6250	.230	46.5	69.4	9.7	1.277	86.8	.172	.867	8.3	179.8	.718D	1.017A	90.0	.903	-12.7	-58.1	149.2	.223
		11.32	7.69	3.62	3.63	7.03	4.06	12.92	1/2/1	43.8	90.0	64.8	1.141	1.866	82.9	16.1	-51.2	116.8D	.988
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	86.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6100.2	.188	263.4	-28.4	-1.2	.700	100.6	.349	1.096	201.3	374.4	.713	1.478D	93.7	1.368	-.7	-4.7	29.5	.205
4-6100.2	4-6260	.205	65.8	-66.6	-8.5	1.277	90.8	.173	.869	354.7	547.8	.719	1.019	88.4	.904	5.4	37.9	205.4	.123
		11.14	7.57	3.57	3.57	6.97	3.99	11.67	1/1/2	41.5	100.9	66.8	1.436	1.816	75.2	10.4	49.4	118.0D	1.172
4-5760	4-5930	.179	193.3	-15.9	-1.6	1.077	80.2	.228	1.177	58.1	162.9	.909D	1.445A	94.9	.744	1.5	-5.4	331.5	.173
4-5930	4-6072.9	.199	256.4	-30.0	-1.9	.701	102.1	.361	1.096	203.4	332.5	.701A	1.492D	82.8	1.364	-.1	-.6	55.7	.239
4-6072.9	4-6300	.239	83.6	-17.3	-3.3	1.275	100.1	.244	.872	303.9	579.2	.660	1.084	79.3	.912	-1.3	-5.7	177.1	.184
		12.30	8.64	4.40	3.66	7.06	4.25	12.37	1/1/2	45.1	148.8	32.1	1.052	3.618	32.9	345.0	31.3	115.4D	2.754
4-5780	4-5930	.179	193.3	-15.9	-1.6	1.077	80.2	.228	1.177	58.1	162.9	.909D	1.445A	94.9	.744	1.5	-5.4	331.5	.173
4-5930	4-6078.8	.196	257.7	-30.0	-1.8	.705	102.0	.354	1.103	204.0	342.6	.713A	1.494D	85.5	1.367	-.1	-.8	50.8	.209
4-6078.8	4-6300	.209	87.5	-20.1	-3.2	1.277	98.4	.226	.874	311.6	577.4	.677	1.072	80.5	.914	-.8	-4.4	179.6	.165
		12.21	8.56	4.40	3.66	7.06	4.16	12.12	1/1/2	45.1	147.4	40.6	1.360	2.880	30.7	344.5	28.2	122.3D	2.595

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445930
17 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5790	4-5930	.216	195.9	-14.8	-1.5	1.066	77.7	.250	1.153	70.8	165.7	.865D	1.441A	94.7	.732	1.2	-7.9	326.5	.179
4-5930	4-6088.6	.192	258.8	-30.0	-1.8	.706	101.6	.348	1.105	203.7	358.2	.720A	1.491D	89.5	1.369	-.2	-1.4	39.5	.188
4-6088.6	4-6310	.188	96.5	-23.9	-3.4	1.282	96.8	.217	.882	319.9	579.6	.690	1.073	80.6	.921	.2	-3.0	189.3	.160
		12.77	8.99	4.93	3.77	7.17	4.07	12.06	1/1/2	48.5	148.9	59.5	1.707	2.016	27.1	342.7	22.5	139.4D	1.734
MARS ARRIVAL DATE = 2445940 (27 AUG 1984)																			
4-5620	4-5940	.227	191.7	3.0	1.6	1.064	103.0	.258	1.146	286.2	558.5	.851	1.442	83.8	.735	1.0	-18.5	282.3	.140
4-5940	4-6056.6	.242	260.3	-26.9	-1.9	.685	104.9	.415	1.060	203.4	300.5	.620A	1.499D	73.5	1.349	-.3	-.9	59.0	.393
4-6056.6	4-6140	.393	52.0	-21.3	-6.1	1.377	104.3	.438	1.155	311.3	458.1	.649	1.661A	114.8	1.071	4.7	13.6	174.6	.442
		13.34	10.38	5.11	2.97	6.38	5.27	17.20	2/1/1	100.4	11.4	21.5	.389	5.37D	108.0	358.3	-69.6	73.5L	1.700
4-5630	4-5940	.205	198.2	1.3	1.6	1.069	101.6	.241	1.153	292.1	554.4	.875	1.431	85.5	.738	.7	-18.7	291.5	.133
4-5940	4-6061.5	.233	257.9	-28.9	-1.8	.697	104.9	.397	1.079	205.5	309.9	.650A	1.507D	76.4	1.356	-.3	-1.1	59.5	.343
4-6061.5	4-6150	.343	57.8	-25.2	-6.3	1.351	102.2	.378	1.065	313.7	463.0	.662	1.467A	111.9	1.033	4.4	11.4	181.9	.379
		12.64	9.83	4.77	2.81	6.22	5.06	15.82	2/1/1	91.8	13.3	24.1	.512	4.793	93.9	40.3	-78.4	76.4L	1.941
4-5640	4-5940	.186	204.7	.2	1.7	1.074	100.3	.228	1.159	298.1	550.5	.895	1.424	86.9	.742	.4	-18.8	300.2	.128
4-5940	4-6065.8	.227	256.0	-28.8	-1.8	.706	104.9	.384	1.094	207.1	318.8	.674A	1.514D	78.9	1.361	-.3	-1.4	59.1	.300
4-6065.8	4-6160	.300	62.8	-29.1	-6.4	1.331	100.3	.328	1.004	316.6	468.6	.674	1.333A	109.2	1.002	4.1	9.3	188.6	.324
		12.14	9.41	4.50	2.73	6.15	4.91	14.69	2/1/1	83.7	15.6	27.9	.669	4.142	85.1	35.5	73.2	80.7L	2.101
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6063.8	.230	256.8	-28.8	-1.8	.702	104.9	.389	1.088	206.5	315.0	.664A	1.511D	77.8	1.359	-.3	-1.3	59.4	.318
4-6063.8	4-6170	.318	64.1	-46.4	-10.3	1.303	99.2	.275	.935	315.5	480.1	.678	1.192A	105.4	.962	7.9	22.1	196.6	.282
		11.96	9.25	4.28	2.71	6.12	4.97	13.90	2/1/1	76.4	32.0	45.3	.596	2.595	85.5	49.3	65.7	71.3L	.950
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6070.7	.222	254.5	-28.7	-1.8	.713	104.9	.373	1.106	208.5	328.2	.693A	1.519D	81.5	1.366	-.3	-1.7	57.4	.260
4-6070.7	4-6170	.260	67.3	-32.2	-6.1	1.316	98.5	.288	.963	320.5	474.5	.686	1.241A	106.6	.978	3.4	6.4	194.7	.276
		11.78	9.07	4.28	2.71	6.12	4.79	13.79	2/1/1	76.4	17.5	31.8	.887	3.645	74.0	16.2	66.3	87.2L	2.346
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6103.3	.204	260.6	-23.1	.2	.711	102.8	.356	1.102	205.8	378.0	.710	1.495D	94.7	1.370	-2.1	-13.2	29.1	.221
4-6103.3	4-6170	.221	78.9	-17.4	-2.7	1.388	92.7	.386	1.165	350.2	451.6	.716	1.615A	111.3	1.066	-1.5	-13.0	200.2	.372
		11.34	8.65	4.28	2.71	6.12	4.35	15.66	2/1/1	76.4	4.2	48.2	1.235	2.451	17.6	325.2	5.1	171.6D	1.793
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6127.9	.204	281.3	-31.4	-2.4	.678	98.3	.374	1.050	194.3	406.5	.658	1.443D	102.2	1.354	.5	2.2	37.6	.317
4-6127.9	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.403	23.2	84.7	.699D	2.107A	115.5	1.132	-3.5	-17.5	202.1	.476 *
		11.34	8.63	4.28	2.71	6.12	4.36	17.99	2/2/1	76.4	8.1	29.9	.600	3.877	33.4	324.2	32.7	124.6D	1.726
4-5660	4-5940	.155	217.4	.4	2.1	1.063	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.128
4-5940	4-6070.9	.222	254.4	-28.7	-1.8	.713	104.9	.373	1.106	208.6	328.5	.694A	1.519D	81.6	1.366	-.3	-1.7	57.3	.259
4-6070.9	4-6180	.259	68.4	-43.8	-8.0	1.298	97.4	.250	.921	321.3	484.6	.691	1.150A	103.5	.950	5.2	13.6	201.1	.234
		11.61	8.89	4.10	2.72	6.13	4.79	13.09	2/1/1	70.0	28.4	43.2	.897	2.717	78.3	31.7	64.0	80.9L	1.539
4-5660	4-5940	.155	217.4	.4	2.1	1.063	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.128
4-5940	4-6139.6	.213	294.6	-28.8	-2.1	.660	94.9	.392	1.023	187.6	418.7	.622	1.425D	105.6	1.344	.4	1.3	47.9	.374
4-6139.6	4-6180	.374	50.9	-10.2	-2.9	1.358	75.1	.406	1.065	54.2	106.5	.633D	1.497A	113.7	1.025	-4.3	-19.0	199.8	.407
		11.39	8.67	4.10	2.72	6.13	4.57	16.43	2/2/1	70.0	13.0	11.9	.430	9.879	75.6	336.2	74.9	98.7D	3.736
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6075.5	.216	253.6	-28.6	-1.7	.716	104.6	.366	1.114	209.4	336.7	.706A	1.522D	83.8	1.369	-.4	-2.1	54.3	.230
4-6075.5	4-6190	.230	70.8	-46.3	-7.5	1.290	96.1	.226	.903	326.0	491.7	.699	1.107A	101.2	.936	4.4	11.8	205.6	.197
		11.43	8.67	3.96	2.76	6.18	4.70	12.54	2/1/1	64.6	31.7	46.5	1.134	2.534	74.3	24.1	60.4	86.4L	1.740
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6146.2	.223	302.5	-26.8	-2.1	.648	92.5	.407	1.006	183.7	425.5	.598	1.419D	107.6	1.338	.5	1.0	54.4	.409
4-6146.2	4-6190	.409	46.2	-7.0	-2.3	1.285	71.4	.365	.885	79.6	130.9	.562D	1.208A	109.9	.924	-4.3	-18.7	194.9	.332
		11.55	8.78	3.96	2.76	6.18	4.82	14.86	2/2/1	64.6	25.2	11.5	.359	10.005	155.6	335.4	-43.9	85.7L	3.229
4-5680	4-5940	.134	229.6	8.2	3.1	1.091	95.7	.195	1.186	324.1	536.0	.954	1.417A	91.0	.754	-1.7	-25.5	328.3	.134
4-5940	4-6079.1	.216	253.4	-28.4	-1.6	.720	104.7	.362	1.118	209.8	342.9	.713A	1.523D	85.5	1.371	-.4	-2.5	50.9	.213
4-6079.1	4-6200	.213	71.7	-50.1	-7.3	1.284	94.9	.206	.889	330.5	500.0	.705	1.072A	99.0	.924	4.1	12.7	209.2	.166
		11.36	8.52	3.88	2.84	6.25	4.65	12.14	2/1/1	60.4	38.0	50.8	1.327	2.333	73.0	21.3	57.6	90.7D	1.769
4-5680	4-5940	.134	229.6	8.2	3.1	1.091	95.7	.195	1.186	324.1	536.0	.954	1.417A	91.0	.754	-1.7	-25.5	328.3	.134
4-5940	4-6151.3	.235	308.1	-25.0	-2.0	.640	90.5	.421	.997	180.6	430.7	.577	1.417D	109.2	1.333	.5	.9	59.6	.439
4-6151.3	4-6200	.439	45.6	-4.4	-1.7	1.234	69.0	.370	.797	97.0	149.8	.502D	1.091A	105.3	.851	-4.1	-16.9	186.3	.279
		11.82	8.98	3.88	2.84	6.25	5.10	13.85	2/2/1	60.4	40.5	14.9	.311	7.689	159.3	357.9	-20.4	87.7L	2.082
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6075.4	.219	253.6	-28.6	-1.7	.718	104.6	.366	1.114	209.4	336.6	.706A	1.522D	83.8	1.369	-.4	-2.1	54.3	.230
4-6075.4	4-6210	.230	70.9	55.3	8.6	1.275	95.1	.193	.872	327.3	512.5	.703	1.040A	96.1	.910	-11.8	-52.9	160.7	.229
		11.58	8.59	3.89	2.99	6.40	4.70	13.01	2/1/2	57.9	67.8	59.0	1.132	2.030	79.1	34.6	-60.7	81.4L	1.166
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6082.5	.214	253.5	-28.3	-1.6	.721	104.6	.359	1.120	209.8	348.4	.717A	1.522D	86.9	1.372	-.4	-2.9	47.5	.201
4-6082.5	4-6210	.201	71.6	-55.6	-7.5	1.280	94.0	.192	.879	334.8	508.6	.710	1.048A	96.8	.915	4.0	15.4	211.4	.142
		11.48	8.49	3.89	2.99	6.40	4.60	11.86	2/1/1	57.9	46.2	54.6	1.481	2.179	72.7	19.5	55.4	94.8D	1.746
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6156.0	.249	313.2	-23.2	-2.0	.632	88.3	.436	.987	177.8	435.5	.557	1.417	110.8	1.328	.3	.6	64.6	.470
4-6156.0	4-6210	.470	47.8	-2.3	-1.0	1.200	67.0	.393	.748	108.1	162.8	.454D	1.042A	100.5	.799	-3.9	-13.7	181.0	.250
		12.33	9.34	3.89	2.99	6.40	5.45	13.35	2/2/1	57.9	57.3	17.1	.272	6.739	169.7	343.4	-10.1	91.1D	1.563
4-5700	4-5940	.177	246.6	38.9	8.0	1.095	93.3	.187	1.197	338.7	530.4	.973	1.421A	92.2	.760	-7.0	-42.8	345.5	.169
4-5940	4-6083.5	.214	253.6	-28.3	-1.6	.721	104.5	.359	1.120	209.6	350.1	.718A	1.521D	87.4	1.373	-.4	-3.1	46.1	.199
4-6083.5	4-6220	.199	71.3	56.4	7.5	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-10.9	-55.0	161.8	.207
		12.53	8.97	4.38	3.56	6.96	4.59	12.68	2/1/2	60.6	71.5	62.9	1.522	1.916	74.7	20.8	-58.2	94.7D	1.393
4-5700	4-5940	.177	246.6	38.9	8.0	1.095	93.3	.187	1.197	338.7	530.4	.973	1.421A	92.2	.760	-7.0	-42.8	345.5	.169
4-5940	4-6085.7	.213	253.8	-28.2	-1.5	.721	104.4	.358	1.120	209.7	353.4	.719A	1.520D	88.3	1.373	-.5	-3.4	43.6	.195
4-6085.7	4-6220	.195	70.8	-57.1	-7.4	1.277	93.2	.185	.873	339.0	517.3	.713	1.032A	94.9	.909	4.0	19.5	212.1	.124
		12.50	8.94	4.38	3.56	6.96	4.56	11.68	2/1/1	60.6	56.5	57.8	1.586	2.066	72.9	17.8	53.7	99.1D	1.693
4-5730	4-5940	.122	182.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.164
4-5940	4-6096.1	.207	256.8	-27.2	-1.1	.717	103.6	.355	1.113	208.0	368.5	.717	1.508D	92.2	1.372	-.9	-5.9	32.8	.198
4-6096.1	4-6250	.198	67.2	-64.8	-8.1	1.276	91.3	.172	.867	350.8	541.0	.718	1.017	89.8	.903	4.9	34.9	206.9	.114
		11.64	8.19	3.76	3.44	6.85	4.44	11.59	1/1/2	53.9	91.8	63.7	1.530	1.895	74.6	12.4	49.4	113.4D	1.369
4-5740	4-5940	.106	187.9	-44.4	-3.3	1.095	87.6	.185	1.205	14.1	165.0	.982D	1.428A	93.3	.763	3.8	7.7	329.4	.154
4-5940	4-6100.4	.205	256.9	-25.7	-.6	.715	103.2	.355	1.107	206.8	374.2	.713	1.500D	93.7	1.371	-1.3	-8.7	30.2	.209
4-6100.4	4-6260	.209	65.5	-67.4	-8.7	1.277	90.7	.173	.869	355.0	547.8	.719	1.019	88.4	.904	5.7	38.8	206.3	.126
		11.24	7.99	3.61	3.25	6.65	4.39	11.70	1/1/2	50.5	100.6	63.4	1.374	1.904	75.8	12.0	47.4	118.6D	1.242
4-5790	4-5940	.210	195.2	-15.4	-1.7	1.063	78.0	.242	1.144	71.3	172.2	.867D	1.421A	92.5	.734	1.2	-8.5	325.0	.161
4-5940	4-6087.4	.212	254.1	-28.1	-1.5	.721	104.3	.357	1.119	209.5	356.0	.720A	1.519D	86.9	1.373	-.5	-3.7	41.6	.193
4-6087.4	4-6310	.193	96.1	-23.0	-3.4	1.282	97.2	.220	.881	318.2	579.9	.687	1.075	80.4	.921	.0	-3.5	188.7	.163
		12.77	9.38	4.84	3.39	6.79	4.54	12.10	1/1/2	57.9	149.3	56.0	1.616	2.126	25.7	343.3	20.4	138.2D	1.825
MARS ARRIVAL DATE = 2445950 (6 SEP 1984)																			
4-5640	4-5950	.189	205.3	-.0	1.7	1.074	100.5	.230	1.158	297.2	555.6	.892	1.423	85.5	.747	.4	-19.9	294.8	.130
4-5950	4-6067.8	.256	251.8	-27.6	-1.7	.728	108.1	.394	1.122	215.9	322.0	.680A	1.563D	79.5	1.370	-.5	-2.3	58.5	.295
4-6067.8	4-6180	.295	84.1	-27.3	-5.9	1.335	100.2	.333	1.014	317.8	467.3	.676	1.352A	109.5	1.007	3.5	7.4	188.7	.328
		12.92	10.16	4.54	2.76	6.17	5.62	14.77	2/1/1	95.0	13.8	25.5	.689	4.532	78.6	21.8	71.1	84.2L	2.432
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	303.5	551.9	.911	1.416	86.7	.750	.0	-20.3	308.8	.125
4-5950	4-6073.1	.250	250.4	-27.3	-1.6	.735	107.9	.383	1.135	215.4	332.8	.700A	1.570D	82.6	1.375	-.5	-3.0	55.6	.252
4-6073.1	4-6170	.252	88.9	-29.2	-5.4	1.321	98.3	.293	.974	322.4	472.6	.688	1.260A	107.0	.984	2.6	3.2	194.7	.280
		12.48	9.78	4.29	2.87	6.09	5.48	13.87	2/1/1	87.7	14.7	29.1	.949	3.978	85.6	2.1	60.1	98.4D	2.829

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 520 DAYS; MARS ARRIVAL DATE = 2445960, 6 SEP 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	303.5	551.9	.911	1.416	86.7	.750	.0	-20.3	302.8	.125
4-5950	4-6101.8	.229	255.9	-24.0	-.2	.728	105.8	.366	1.123	212.3	376.1	.712	1.534D	94.3	1.376	-1.7	-10.9	29.7	.220
4-6101.8	4-6170	.220	79.2	-17.6	-2.8	1.385	93.1	.380	1.154	348.6	452.4	.715	1.592A	111.1	1.062	-1.4	-12.6	199.9	.367
		11.94	9.26	4.29	2.67	6.09	4.97	15.56	2/1/1	87.7	4.0	48.3	1.240	2.443	17.6	326.3	7.9	171.5D	1.789
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	303.5	551.9	.911	1.416	86.7	.750	.0	-20.3	302.8	.125
4-5950	4-6128.0	.217	275.8	-32.8	-2.9	.690	101.1	.377	1.058	199.6	405.8	.659	1.457D	102.1	1.357	1.1	4.6	36.5	.317
4-6128.0	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.404	23.3	84.7	.699D	2.108A	115.5	1.133	-3.5	-17.5	202.1	.477
		11.65	8.97	4.29	2.67	6.09	4.68	18.00	2/2/1	87.7	8.1	30.7	.598	3.780	37.7	324.3	37.2	122.5D	1.662
4-5660	4-5950	.155	217.8	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.8	.753	-.3	-20.9	310.3	.123
4-5950	4-6069.5	.253	251.2	-27.5	-1.7	.731	108.0	.389	1.127	214.6	326.2	.689A	1.566D	80.7	1.372	-.5	-2.6	37.7	.277
4-6069.5	4-6160	.277	68.3	-47.7	-9.2	1.296	97.6	.248	.917	320.2	485.7	.689	1.144A	103.2	.948	6.4	18.3	202.0	.239
		12.30	9.66	4.10	2.63	6.05	5.56	13.17	2/1/1	81.1	32.6	46.1	.782	2.555	60.0	37.4	62.6	76.7L	1.216
4-5660	4-5950	.155	217.8	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.8	.753	-.3	-20.9	310.3	.123
4-5950	4-6139.0	.217	288.5	-30.2	-2.4	.610	98.0	.391	1.029	192.9	417.0	.627	1.431D	105.1	1.346	.7	2.5	46.2	.366
4-6139.0	4-6180	.366	51.0	-10.3	-2.9	1.359	75.5	.403	1.067	52.9	106.0	.637D	1.497A	113.5	1.026	-4.2	-19.1	200.0	.404
		11.40	8.77	4.10	2.63	6.05	4.67	16.36	2/2/1	81.1	12.8	13.1	.448	8.759	77.8	337.1	77.1	97.6D	3.475
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	96.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6074.7	.249	250.2	-27.3	-1.8	.736	107.8	.381	1.137	215.7	335.6	.704A	1.571D	83.3	1.376	-.6	-3.2	54.5	.242
4-6074.7	4-6190	.242	70.9	-49.0	-8.2	1.289	96.2	.225	.901	325.3	492.3	.698	1.104A	101.1	.935	5.1	15.1	206.2	.201
		12.03	9.40	3.95	2.63	6.05	5.45	12.59	2/1/1	75.3	34.4	47.9	1.025	2.464	75.5	27.7	59.4	83.8L	1.501
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	96.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6145.3	.221	296.2	-28.5	-2.2	.659	95.9	.401	1.013	188.9	423.3	.606	1.419D	106.9	1.340	.6	1.9	54.4	.397
4-6145.3	4-6190	.397	46.0	-7.1	-2.3	1.288	72.1	.358	.891	77.2	129.9	.572D	1.210A	109.6	.928	-4.3	-19.0	195.5	.327
		11.35	8.72	3.95	2.63	6.05	4.77	14.76	2/2/1	75.3	24.7	12.3	.382	9.318	132.4	335.5	-46.8	85.0L	3.176
4-5680	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.758	-1.5	-24.3	323.7	.124
4-5950	4-6078.7	.246	250.0	-27.1	-1.5	.739	107.7	.376	1.142	216.1	342.5	.712A	1.571D	83.3	1.378	-.6	-3.8	50.6	.221
4-6078.7	4-6200	.221	72.0	-52.1	-7.9	1.284	95.0	.206	.888	330.1	500.3	.705	1.071A	98.9	.924	4.6	15.3	209.8	.170
		11.88	9.22	3.84	2.66	6.07	5.38	12.18	2/1/1	70.5	39.8	51.4	1.226	2.305	73.5	23.2	56.5	89.3L	1.599
4-5680	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.758	-1.5	-24.3	323.7	.124
4-5950	4-6150.0	.227	302.2	-26.9	-2.1	.650	94.1	.412	1.001	185.9	427.9	.589	1.413D	108.3	1.335	.6	1.7	59.2	.421
4-6150.0	4-6200	.421	45.1	-4.5	-1.6	1.240	69.9	.357	.805	94.0	148.7	.517D	1.092A	104.9	.859	-4.1	-17.6	189.2	.271
		11.41	8.75	3.84	2.66	6.07	4.91	13.71	2/2/1	70.5	39.6	15.4	.339	7.467	156.3	338.5	-23.1	86.5L	2.189
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-26.5	330.2	.129
4-5950	4-6075.6	.248	250.1	-27.2	-1.6	.737	107.8	.380	1.139	215.8	337.2	.706A	1.571D	83.8	1.376	-.6	-3.3	53.7	.237
4-6075.6	4-6210	.237	71.5	56.7	9.0	1.275	95.1	.193	.872	327.4	512.5	.703	1.040A	96.2	.910	-12.2	-53.3	159.8	.235
		11.97	9.23	3.80	2.74	6.15	5.43	13.10	2/1/2	67.0	68.2	61.7	1.071	1.951	79.1	34.3	-60.6	81.6L	1.018
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-26.5	330.2	.129
4-5950	4-6082.3	.243	250.1	-26.9	-1.4	.739	107.5	.373	1.143	216.2	348.4	.717A	1.570D	86.8	1.379	-.7	-4.3	47.0	.209
4-6082.3	4-6210	.209	72.0	-55.5	-7.7	1.280	94.0	.192	.879	334.6	508.8	.710	1.048A	96.8	.915	4.4	17.7	212.1	.145
		11.85	9.11	3.80	2.74	6.15	5.31	11.90	2/1/1	67.0	47.6	54.9	1.378	2.169	73.0	20.7	54.2	94.1D	1.611
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-26.5	330.2	.129
4-5950	4-6154.3	.235	307.4	-25.3	-2.1	.642	92.3	.422	.991	183.2	432.0	.573	1.410D	109.6	1.330	.5	1.5	63.7	.445
4-6154.3	4-6210	.445	46.9	-2.4	-.9	1.209	66.3	.373	.759	104.4	161.9	.476D	1.043A	100.2	.812	-3.8	-14.8	181.9	.238
		11.64	8.89	3.80	2.74	6.15	5.10	13.16	2/2/1	67.0	56.1	17.3	.304	6.651	167.2	342.9	-12.4	89.2L	1.716
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	338.4	.141
4-5950	4-6083.6	.243	250.2	-26.8	-1.4	.739	107.4	.372	1.143	216.2	350.5	.718A	1.569D	87.4	1.379	-.7	-4.6	45.5	.205
4-6083.6	4-6220	.205	71.7	58.0	7.9	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-11.2	-55.5	160.7	.213
		12.22	9.24	3.94	2.99	6.39	5.29	12.76	2/1/2	65.9	71.9	66.0	1.424	1.836	75.2	21.3	-58.4	94.9D	1.191
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	338.4	.141
4-5950	4-6085.6	.241	250.4	-26.7	-1.3	.739	107.3	.371	1.143	216.1	353.6	.719A	1.567D	88.3	1.379	-.7	-4.9	43.1	.202
4-6085.6	4-6220	.202	71.2	-56.6	-7.8	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.8	.909	4.4	21.7	212.9	.126
		12.19	9.20	3.94	2.99	6.39	5.26	11.72	2/1/1	65.9	57.6	57.9	1.479	2.068	73.2	18.6	52.5	98.8D	1.578
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	338.4	.141
4-5950	4-6158.6	.245	312.6	-23.5	-2.0	.634	90.4	.435	.981	180.5	436.3	.554	1.408D	111.0	1.326	.5	1.3	68.4	.471
4-6158.6	4-6220	.471	50.5	-.6	-.3	1.188	66.7	.395	.732	111.2	171.3	.443D	1.022A	95.6	.779	-3.5	-11.1	175.4	.228
		12.28	9.30	3.94	2.99	6.39	5.35	12.99	2/2/1	65.9	72.6	18.0	.271	6.381	173.9	347.8	-5.7	91.9D	1.458
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6096.4	.234	253.3	-25.6	-.8	.734	106.4	.367	1.132	214.0	369.0	.717	1.548D	92.4	1.378	-1.1	-7.7	32.6	.206
4-6096.4	4-6250	.206	67.0	-66.3	-8.5	1.276	91.3	.172	.868	351.2	540.9	.718	1.017	89.8	.903	5.3	36.7	208.3	.119
		12.89	9.24	4.17	3.66	7.06	5.07	11.63	1/1/2	68.2	91.6	63.2	1.422	1.910	75.3	13.5	48.2	113.6D	1.294
4-5740	4-5950	.116	179.5	-51.0	-4.4	1.092	87.8	.179	1.196	14.9	171.8	.982D	1.411A	91.8	.765	4.7	12.4	323.9	.147
4-5950	4-6100.7	.230	255.3	-24.4	-.4	.730	106.0	.366	1.125	212.7	374.7	.713	1.537D	93.9	1.376	-1.6	-10.0	30.1	.217
4-6100.7	4-6260	.217	65.1	-68.7	-9.1	1.277	90.7	.172	.869	355.5	547.8	.719	1.018	86.4	.904	6.1	40.3	207.7	.131
		11.77	8.69	3.70	3.09	6.50	4.99	11.74	1/1/2	60.8	100.1	62.9	1.281	1.916	76.7	13.3	46.5	118.7D	1.174
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	3.3	5.8	326.3	.140
4-5950	4-6105.9	.227	256.3	-20.5	1.0	.724	105.3	.366	1.114	210.8	381.1	.706	1.522D	95.6	1.374	-2.9	-16.9	28.6	.236
4-6105.9	4-6270	.238	62.0	-71.6	-10.2	1.279	89.9	.174	.871	.6	194.0	.719D	1.022	87.1	.906	7.5	43.3	209.7	.152
		11.52	8.57	3.66	2.95	6.36	4.91	11.97	1/1/2	59.3	105.6	58.1	1.061	2.060	76.8	14.8	42.7	124.9D	1.124
4-5790	4-5950	.204	195.1	-16.3	-1.8	1.061	78.3	.236	1.139	71.0	177.9	.870D	1.408A	90.7	.737	1.2	-9.1	321.1	.148
4-5950	4-6085.2	.241	250.4	-26.7	-1.4	.739	107.3	.371	1.143	216.1	353.0	.719A	1.567D	88.1	1.379	-.7	-4.9	43.6	.202
4-6085.2	4-6310	.202	95.1	-21.7	-3.4	1.281	97.8	.225	.881	315.2	580.4	.682	1.079	80.0	.921	-.2	-4.3	187.8	.169
		13.15	10.02	4.76	3.13	6.53	5.26	12.17	1/1/2	67.8	149.6	52.6	1.470	2.258	24.2	343.5	18.8	135.6D	1.850

MARS ARRIVAL DATE = 2445960 (16 SEP 1984)

4-5650	4-5960	.174	212.3	-1.0	1.8	1.078	99.4	.219	1.162	302.4	556.9	.907	1.417	85.4	.754	.0	-21.3	297.5	.128
4-5960	4-6098.3	.267	251.6	-24.3	-.5	.753	109.3	.384	1.160	220.1	372.0	.715	1.605D	93.3	1.388	-1.5	-9.2	30.6	.220
4-6098.3	4-6170	.220	79.6	-18.0	-2.8	1.377	94.0	.367	1.126	345.0	454.5	.713	1.540A	110.6	1.052	-1.1	-11.5	199.2	.355
		12.98	10.25	4.34	2.73	6.14	5.91	15.32	2/1/1	98.9	3.8	48.3	1.238	2.444	18.4	327.4	10.5	168.8D	1.788
4-5650	4-5960	.174	212.3	-1.0	1.8	1.078	99.4	.219	1.162	302.4	556.9	.907	1.417	85.4	.754	.0	-21.3	297.5	.128
4-5960	4-6129.0	.239	271.9	-34.1	-3.5	.702	103.9	.385	1.068	204.6	406.3	.657	1.480D	102.4	1.360	1.9	7.6	39.6	.327
4-6129.0	4-6170	.327	62.6	-13.7	-3.1	1.442	81.6	.508	1.415	25.0	84.8	.696D	2.134A	115.8	1.135	-3.6	-17.5	202.0	.483
		12.26	9.55	4.34	2.73	6.14	5.21	18.15	2/2/1	98.9	8.2	31.1	.563	3.728	45.5	323.9	43.3	118.2D	1.536
4-5660	4-5960	.157	218.3	-.7	2.0	1.082	98.1	.208	1.168	309.1	553.6	.925	1.411	86.5	.757	-.3	-22.1	304.8	.123
4-5960	4-6139.1	.231	283.0	-31.3	-2.7	.682	101.1	.394	1.037	198.2	416.3	.629	1.446D	105.0	1.349	1.1	3.9	48.8	.367
4-6139.1	4-6180	.367	51.0	-10.3	-2.9	1.359	75.5	.403	1.066	53.1	106.2	.637D	1.495A	113.5	1.025	-4.2	-19.1	200.0	.404
		11.76	9.12	4.12	2.63	6.05	5.00	16.35	2/2/1	92.4	12.6	14.4	.447	7.972	81.5	340.2	80.9	95.9D	3.114
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120
4-5960	4-6073.9	.290	247.8	-26.2	-1.5	.761	111.2	.403	1.177	222.8	335.3	.703A	1.651D	83.0	1.387	-.7	-4.0	53.6	.256
4-6073.9	4-6190	.256	71.2	-51.7	-9.0	1.289	96.3	.225	.900	324.7	492.9	.698	1.102A	101.0	.934	6.0	18.6	207.0	.206
		13.04	10.45	3.95	2.58	6.00	6.50	12.66	2/1/1	86.6	37.3	50.0	.918	2.368	75.8	28.8	57.9	82.3L	1.256
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120
4-5960	4-6145.0	.229	290.3	-29.8	-2.4	.669	99.2	.401	1.020	194.2	422.0	.610	1.429D	106.6	1.342	.9	3.0	54.7	.393
4-6145.0	4-6190	.393	46.0	-7.2	-2.3	1.289	72.3	.356	.892	76.5	129.7	.575D	1.210A	109.5	.929	-4.2	-19.1	195.6	.325
		11.50	8.92	3.95	2.58	6.00	4.97	14.72	2/2/1	86.6	24.5	13.9	.390	8.535	130.6	336.4	-48.3	84.3L	2.937
4-5680	4-5960	.129	229.2	4.5	2.5	1.088	95.7	.191	1.178	323.2	547.4	.933	1.403	88.3	.762	-1.3	-25.2	318.3	.120
4-5960	4-6078.2	.286	247.6	-26.0	-1.4	.763	111.0	.397	1.182	223.3	342.8	.712A	1.651D	85.1	1.389	-.8	-4.7	49.7	.253
4-6078.2	4-6200	.253	72.5	-54.4	-8.5	1.283	95.1	.206	.888	329.6	500.6	.705	1.071A	98.9	.924	5.3	18.4	210.6	.174
		12.79	10.22	3.82	2.57	5.99	6.40	12.24	2/1/1	61.5	42.1	53.0	1.109	2.241	73.7	23.6	55.0	88.7L	1.377
4-5680	4-5960	.129	229.2	4.5	2.5	1.088	95.7	.191	1.178	323.2	547.4	.933	1.403	88.3	.762	-1.3	-25.2	318.3	.120
4-5960	4-6149.4	.230	295.9	-28.4	-2.3	.660	97.6	.409	1.007	191.3	426.1	.596	1.419D	107.8	1.357	.8	2.6	59.3	.413
4-6149.4	4-6200	.413	44.9	-4.6	-1.6	1.242	70.4	.351	.809	92.5	148.2	.525D	1.093A	104.8	.862	-4.0	-17.9	189.6	.268
		11.59	8.82	3.82	2.57	5.99	4.99	13.65	2/2/1	61.5	39.1	16.1	.352	7.143	153.5	339.5	-25.6	85.5L	2.165

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445960
16 SEP 1984

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-28.6	324.7	.121
4-5960	4-6082.0	.282	247.7	-25.8	-1.3	.764	110.7	.393	1.183	223.3	348.9	.717A	1.648D	86.9	1.389	-.8	-5.3	45.7	.219
4-6082.0	4-6210	.219	72.6	-57.5	-8.3	1.280	94.1	.192	.879	334.3	508.9	.710	1.047A	96.8	.915	5.0	20.6	213.0	.150
		12.66	10.06	3.75	2.60	6.02	6.31	11.95	2/1/1	77.4	49.5	56.3	1.253	2.121	73.1	20.5	52.7	94.1D	1.404
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-28.6	324.7	.121
4-5960	4-6153.3	.233	301.0	-27.1	-2.2	.652	96.1	.416	.997	188.6	429.6	.582	1.412D	108.9	1.332	.8	2.3	63.5	.432
4-6153.3	4-6210	.432	46.3	-2.4	-.9	1.213	69.0	.363	.765	102.3	161.4	.488D	1.043A	100.0	.818	-3.8	-15.4	182.4	.233
		11.41	8.81	3.75	2.60	6.02	5.06	13.07	2/2/1	77.4	55.5	17.8	.322	6.479	164.6	343.3	-14.6	88.1L	1.765
4-5700	4-5960	.124	238.7	22.9	4.4	1.092	93.2	.180	1.187	338.6	542.5	.973	1.401	89.5	.766	-3.5	-34.9	331.8	.128
4-5960	4-6083.7	.281	247.9	-25.7	-1.3	.764	110.6	.392	1.182	223.2	351.5	.719A	1.646D	87.6	1.390	-.9	-5.6	43.8	.215
4-6083.7	4-6220	.215	72.3	60.0	8.4	1.276	93.6	.183	.871	336.6	518.2	.712	1.031A	94.7	.908	-11.8	-56.0	159.4	.220
		12.77	10.05	3.78	2.72	6.13	6.27	12.88	2/1/2	74.7	72.6	69.3	1.302	1.758	75.3	20.6	-57.9	95.0D	.986
4-5700	4-5960	.124	238.7	22.9	4.4	1.092	93.2	.180	1.187	338.6	542.5	.973	1.401	89.5	.766	-3.5	-34.9	331.8	.128
4-5960	4-6085.6	.279	248.1	-25.6	-1.2	.763	110.5	.391	1.181	223.1	354.4	.720A	1.642D	88.4	1.390	-.9	-6.0	41.7	.212
4-6085.6	4-6220	.211	71.8	-60.6	-8.3	1.277	93.2	.183	.873	338.9	517.3	.713	1.032A	94.8	.909	4.9	24.6	214.0	.133
		12.72	10.00	3.78	2.72	6.13	6.23	11.77	2/1/1	74.7	59.1	59.1	1.344	2.027	73.4	18.3	51.0	99.2D	1.380
4-5700	4-5960	.124	238.7	22.9	4.4	1.092	93.2	.180	1.187	338.6	542.5	.973	1.401	89.5	.766	-3.5	-34.9	331.8	.128
4-5960	4-6157.2	.238	306.1	-25.6	-2.1	.644	94.4	.425	.987	186.0	433.4	.567	1.406D	110.0	1.328	.7	2.1	67.7	.452
4-6157.2	4-6220	.452	49.5	-.6	-.3	1.195	67.7	.380	.741	108.4	170.8	.460D	1.022A	95.5	.789	-3.5	-12.0	175.8	.219
		11.66	8.94	3.78	2.72	6.13	5.17	12.85	2/2/1	74.7	71.9	18.3	.294	6.281	171.5	347.2	-7.8	90.4D	1.555
4-5710	4-5960	.162	246.1	41.5	7.5	1.093	92.0	.177	1.190	346.8	540.5	.979	1.400	89.9	.767	-6.8	-47.5	342.7	.152
4-5960	4-6161.4	.245	311.6	-23.8	-2.0	.636	92.5	.436	.976	183.2	437.4	.550	1.402D	111.2	1.323	.7	1.8	72.3	.475
4-6161.4	4-6230	.475	54.2	.9	.4	1.182	66.4	.400	.726	112.8	177.9	.435D	1.016A	91.4	.769	-3.2	-8.5	171.3	.222
		12.75	9.54	4.19	3.21	6.62	5.35	12.90	2/2/1	75.0	86.7	18.2	.266	6.350	176.6	351.5	-2.6	92.6D	1.418
4-5740	4-5960	.139	166.6	-59.0	-6.1	1.090	87.8	.176	1.191	15.0	178.0	.982D	1.400A	90.4	.768	6.4	19.3	316.8	.151
4-5960	4-6101.2	.264	252.9	-23.7	-.2	.750	108.9	.383	1.153	219.1	375.7	.712	1.594D	94.3	1.384	-1.7	-10.5	29.4	.228
4-6101.2	4-6260	.228	64.5	-70.5	-9.7	1.277	90.6	.172	.869	356.2	547.7	.719	1.018	88.4	.904	6.7	42.2	209.6	.138
		12.92	9.75	3.92	3.17	6.58	5.83	11.82	1/1/2	71.9	99.4	63.8	1.155	1.891	77.9	14.3	46.0	118.9D	1.029
4-5750	4-5960	.118	179.4	-42.8	-3.9	1.087	86.2	.179	1.187	25.2	178.2	.974D	1.400A	90.4	.766	4.0	9.1	320.8	.134
4-5960	4-6106.2	.259	255.5	-21.4	.7	.743	108.3	.382	1.139	217.0	381.7	.705	1.574D	96.0	1.381	-2.6	-14.7	28.6	.247
4-6106.2	4-6270	.247	61.2	-72.7	-10.6	1.279	89.8	.174	.871	1.1	194.0	.719D	1.022	87.1	.906	7.9	44.3	210.9	.158
		12.26	9.41	3.72	2.85	6.26	5.70	12.04	1/1/2	69.8	104.9	61.0	.989	1.970	79.8	16.0	43.7	123.9D	.960

MARS ARRIVAL DATE = 2445970 (26 SEP 1984)

4-5650	4-5970	.180	213.1	-1.7	1.8	1.078	99.8	.224	1.162	300.9	561.6	.902	1.422	84.0	.758	.0	-22.1	293.1	.136
4-5970	4-6130.6	.268	269.7	-35.3	-4.4	.716	106.7	.398	1.083	209.6	407.8	.651	1.514D	103.1	1.365	2.8	10.9	41.1	.345
4-6130.6	4-6170	.345	61.6	-13.3	-3.2	1.445	80.5	.519	1.435	27.9	85.0	.690D	2.180A	116.3	1.139	-3.8	-17.6	201.7	.494
		13.24	10.37	4.42	2.87	6.28	5.95	18.42	2/2/1	109.3	8.3	31.6	.505	3.677	50.4	322.8	50.4	112.4D	1.352
4-5660	4-5970	.161	219.0	-1.7	1.9	1.081	98.4	.211	1.167	307.8	558.4	.921	1.413	85.2	.761	-.3	-23.0	299.9	.128
4-5970	4-6139.7	.253	278.7	-32.0	-3.1	.695	104.2	.402	1.049	203.5	416.3	.627	1.471D	105.3	1.353	1.6	5.6	49.7	.375
4-6139.7	4-6180	.375	50.9	-10.2	-2.9	1.358	75.0	.406	1.065	54.4	106.6	.632D	1.498A	113.8	1.025	-4.3	-19.0	199.7	.408
		12.46	9.74	4.17	2.72	6.13	5.56	16.44	2/2/1	103.3	13.0	15.9	.428	7.237	85.7	34.2	85.1	93.6D	2.669
4-5670	4-5970	.144	224.6	-.4	2.1	1.085	97.1	.200	1.172	314.9	555.4	.938	1.406	86.2	.763	-.7	-24.2	306.4	.122
4-5970	4-6145.3	.247	285.2	-30.6	-2.7	.682	102.4	.407	1.030	199.5	421.5	.611	1.449D	106.7	1.348	1.3	4.3	55.4	.396
4-6145.3	4-6190	.396	46.0	-7.2	-2.3	1.288	72.1	.358	.892	77.1	129.8	.572D	1.211A	109.6	.929	-4.3	-19.0	195.5	.327
		12.01	9.39	3.98	2.62	6.04	5.41	14.76	2/2/1	97.7	24.6	14.8	.383	7.770	129.3	341.8	-49.0	84.2L	2.592
4-5680	4-5970	.130	229.6	2.5	2.4	1.088	95.8	.191	1.177	322.2	552.6	.951	1.402	87.1	.765	-1.2	-26.0	312.7	.119
4-5970	4-6149.5	.244	290.4	-29.5	-2.5	.672	101.0	.412	1.016	196.6	425.3	.598	1.434D	107.7	1.340	1.2	3.6	59.9	.413
4-6149.5	4-6200	.413	44.9	-4.6	-1.6	1.242	70.3	.352	.808	92.6	148.3	.524D	1.093A	104.8	.862	-4.0	-17.9	189.5	.268
		11.73	9.17	3.83	2.57	5.98	5.33	13.65	2/2/1	92.6	39.2	17.1	.352	6.744	151.3	341.4	-27.5	85.2L	2.021
4-5690	4-5970	.120	233.9	6.0	2.8	1.090	94.6	.184	1.181	329.8	550.1	.963	1.399	87.7	.767	1.8	-28.6	318.8	.119
4-5970	4-6153.1	.243	295.1	-28.4	-2.4	.663	99.6	.417	1.005	194.0	428.6	.586	1.423D	108.6	1.335	1.1	3.2	63.8	.429
4-6153.1	4-6210	.429	46.2	-2.4	-.9	1.214	69.2	.360	.767	101.8	161.2	.490D	1.043A	100.0	.819	-3.8	-15.6	182.6	.231
		11.59	9.03	3.73	2.55	5.97	5.30	13.04	2/2/1	88.3	55.3	18.4	.327	6.238	162.3	344.4	-16.7	87.5L	1.712
4-5700	4-5970	.116	237.7	17.3	3.6	1.091	93.3	.179	1.184	337.8	547.9	.972	1.397	88.3	.769	-2.8	-33.6	325.1	.121
4-5970	4-6156.6	.243	299.8	-27.2	-2.2	.655	98.2	.423	.994	191.5	431.6	.574	1.414D	109.5	1.331	1.0	2.8	67.7	.445
4-6156.6	4-6220	.445	49.2	-.6	-.3	1.197	68.1	.374	.744	107.4	170.6	.466D	1.023A	95.5	.793	-3.5	-12.4	176.0	.215
		11.60	9.00	3.70	2.60	6.01	5.30	12.80	2/2/1	84.9	71.6	18.8	.304	6.112	169.2	347.8	-9.7	89.6L	1.553
4-5710	4-5970	.130	241.8	32.0	5.4	1.092	92.1	.175	1.187	346.1	546.0	.979	1.395	88.7	.770	-4.7	-42.2	333.2	.132
4-5970	4-6160.4	.245	304.9	-25.8	-2.1	.647	96.5	.431	.983	188.8	435.2	.560	1.406D	110.6	1.326	1.0	2.6	71.9	.463
4-6160.4	4-6230	.463	53.4	.9	.4	1.187	67.1	.389	.731	111.0	177.8	.447D	1.016A	91.4	.776	-3.2	-9.1	171.4	.215
		11.98	9.16	3.83	2.60	6.21	5.35	12.80	2/2/1	82.8	86.4	18.5	.281	6.208	174.5	351.4	-4.4	91.4D	1.462

MARS ARRIVAL DATE = 2445980 (6 OCT 1984)

4-5670	4-5980	.149	225.5	-1.9	2.0	1.085	97.4	.203	1.172	313.3	560.1	.934	1.410	85.1	.767	-.7	-24.7	302.0	.126
4-5980	4-6146.1	.274	281.7	-31.0	-3.0	.695	105.6	.418	1.044	204.8	421.7	.608	1.480D	107.1	1.351	1.8	5.6	56.5	.408
4-6146.1	4-6190	.408	46.1	-7.0	-2.3	1.286	71.5	.364	.886	79.2	130.8	.563D	1.209A	109.9	.925	-4.3	-18.7	195.0	.332
		12.85	10.12	4.03	2.74	6.15	6.09	14.85	2/2/1	108.0	25.1	16.3	.362	7.044	129.3	345.4	-48.2	84.1L	2.185
4-5680	4-5980	.133	230.4	.4	2.2	1.087	96.1	.194	1.176	320.7	557.4	.949	1.404	85.9	.769	-1.1	-26.4	307.7	.123
4-5980	4-6150.1	.267	286.2	-30.0	-2.7	.684	104.4	.420	1.028	201.8	425.2	.596	1.461D	108.0	1.345	1.5	4.7	60.9	.422
4-6150.1	4-6200	.422	45.1	-4.5	-1.6	1.240	69.9	.357	.805	94.0	146.6	.517D	1.092A	105.0	.858	-4.1	-17.6	189.1	.271
		12.42	9.78	3.86	2.64	6.05	5.92	13.71	2/2/1	103.3	39.6	18.2	.338	6.323	149.6	343.9	-28.7	85.3L	1.799
4-5690	4-5980	.120	234.5	4.8	2.5	1.090	94.8	.186	1.180	328.5	555.0	.961	1.399	86.7	.771	-1.6	-28.8	313.3	.120
4-5980	4-6153.5	.263	290.4	-29.1	-2.5	.675	103.1	.423	1.016	199.2	428.2	.585	1.446D	108.6	1.339	1.4	4.1	64.7	.435
4-6153.5	4-6210	.434	46.4	-2.4	-.9	1.212	68.8	.365	.764	102.7	161.5	.485D	1.043A	100.0	.817	-3.8	-15.3	182.3	.234
		12.13	9.54	3.74	2.58	6.00	5.81	13.08	2/2/1	99.0	55.6	19.3	.318	5.952	160.3	346.3	-18.3	87.5L	1.577
4-5700	4-5980	.113	237.7	12.3	3.1	1.091	93.5	.180	1.184	336.5	552.9	.971	1.396	87.2	.772	-2.4	-32.6	319.0	.120
4-5980	4-6156.8	.260	294.6	-28.1	-2.4	.667	101.8	.427	1.004	196.8	431.1	.575	1.435D	109.6	1.334	1.3	3.7	68.4	.447
4-6156.8	4-6220	.447	49.3	-.6	-.3	1.196	68.0	.376	.743	107.8	170.7	.464D	1.022A	95.5	.792	-3.5	-12.3	175.9	.216
		11.97	9.39	3.67	2.58	5.99	5.72	12.82	2/2/1	95.4	71.7	19.5	.300	5.892	167.2	349.2	-11.5	89.4L	1.469
4-5710	4-5980	.116	240.2	24.1	4.2	1.092	92.2	.175	1.186	344.9	551.1	.978	1.394	87.7	.773	-3.6	-38.8	325.4	.125
4-5980	4-6160.3	.257	299.2	-27.0	-2.2	.656	100.3	.432	.992	194.2	434.1	.563	1.421D	110.4	1.329	1.2	3.3	72.3	.462
4-6160.3	4-6230	.462	53.4	.9	.4	1.187	67.2	.388	.732	110.8	177.8	.448D	1.016A	91.4	.777	-3.2	-9.1	171.4	.215
		12.02	9.36	3.69	2.66	6.06	5.66	12.79	2/2/1	92.4	86.4	19.1	.282	6.027	172.4	352.3	-6.2	91.0D	1.418
4-5720	4-5980	.146	244.2	41.1	6.7	1.092	90.9	.172	1.188	353.7	549.7	.983	1.393	88.0	.774	-6.3	-49.9	335.3	.144
4-5980	4-6164.1	.256	304.5	-25.6	-2.1	.648	98.6	.439	.980	191.3	437.4	.549	1.410D	111.4	1.324	1.2	3.0	76.7	.478
4-6164.1	4-6240	.478	58.4	2.1	1.0	1.181	66.3	.403	.726	113.0	183.4	.434D	1.018	87.7	.766	-3.0	-6.5	169.4	.224
		12.69	9.64	4.00	3.05	6.43	5.64	12.93	2/2/1	90.4	98.6	18.3	.263	6.293	176.3	355.9	-1.7	92.6D	1.390

MARS ARRIVAL DATE = 2445990 (16 OCT 1984)

4-5690	4-5990	.123	235.6	1.8	2.3	1.090	95.1	.189	1.181	326.7	559.4	.958	1.403	85.6	.773	-1.5	-28.5	309.0	.126
4-5990	4-6154.8	.292	287.4	-29.3	-2.6	.689	106.6	.436	1.031	204.3	428.6	.581	1.480D	109.3	1.345	1.8	5.0	66.0	.448
4-6154.8	4-6210	.448	47.0	-2.3	-.9	1.208	68.1	.376	.758	104.9	162.0	.473D	1.043A	100.2	.810	-3.6	-14.7	181.8	.240
		13.00	10.32	3.77	2.68	6.10	6.55	13.18	2/2/1	108.9	56.3	20.4	.299	5.642	158.8	348.7	-19.3	87.9L	1.389
4-5700	4-5990	.113	238.6	7.8	2.7	1.091	93.8	.182	1.184	334.6	557.4	.969	1.399	86.2	.775	-2.1	-31.5	315.9	.123
4-5990	4-6157.7	.285	291.1	-28.5	-2.6	.679	105.3	.436	1.017	201.6	431.3	.572	1.462D	110.0	1.339	1.6	4.8	69.7	.459
4-6157.7	4-6220	.459	49.9	-.6	-.3	1.192	67.4	.385	.738	109.4	171.0	.454D	1.022A	95.6	.786	-3.5	-11.7	175.7	.222
		12.69	10.06	3.87	2.64	6.05	6.39	12.90	2/2/1	105.4	72.2	20.4	.286	5.637	165.4	351.2	-12.8	89.7L	1.325
4-5710	4-5990	.109	240.4	17.2	3.4	1.092	92.5	.176	1.187	343.2	555.7	.977	1.396	86.7	.776	-3.0	-36.2	319.2	.124
4-5990	4-6161.0	.280	295.0	-27.5	-2.4	.670	104.0	.441	1.004	199.3	434.0	.561	1.446D	110.7	1.334	1.5	4.0	73.5	.470
4-6161.0	4-6230	.470	53.9	.9	.4	1.184	66.7	.395	.728	112.0	177.9	.440D	1.016A	91.4	.776	-3.2	-8.7	171.3	.219
		12.83	9.88	3.84	2.65	6.07	6.25	12.86	2/2/1	102.3	86.6	19.8	.272	5.802	170.5	354.1	-7.8	91.1D	1.306

STOPOVER TIME = 0 DAYS

1984 INBOUND SWINGBY

MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2445990
16 OCT 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5720	4-5990	.120	241.8	31.1	4.9	1.092	91.2	.173	1.188	352.0	554.3	.983	1.394	87.1	.777	-4.6	-43.9	325.8	.132
4-5990	4-6164.5	.275	299.5	-26.4	-2.2	.659	102.4	.445	.990	196.5	436.9	.550	1.431D	111.5	1.328	1.4	3.6	77.6	.483
4-6164.5	4-6240	.483	36.7	2.1	1.0	1.179	66.0	.407	.725	113.7	183.4	.429D	1.018	87.7	.766	-2.9	-6.3	169.5	.226
		12.67	9.86	3.74	2.81	6.22	6.12	12.97	2/2/1	99.5	98.6	18.9	.257	6.090	174.6	357.3	-3.4	92.5D	1.311
4-5760	4-5990	.148	172.3	-51.3	-5.9	1.083	85.3	.180	1.181	31.6	193.2	.968D	1.393	87.1	.773	5.5	13.1	307.1	.142
4-5990	4-6164.6	.284	327.6	-16.7	-1.4	.605	91.3	.495	.927	181.3	453.9	.468	1.385D	117.1	1.298	1.2	2.4	101.2	.583
4-6164.6	4-6280	.583	87.1	4.9	2.8	1.164	60.9	.487	.710	121.2	196.9	.364D	1.056	75.2	.751	-1.3	-4.5	182.9	.320
		13.37	10.37	4.02	2.99	6.40	6.35	14.61	1/2/1	98.2	125.3	14.2	.177	8.092	169.3	17.9	10.6	99.4D	1.253
MARS ARRIVAL DATE = 2446000 (26 OCT 1984)																			
4-5720	4-6000	.108	242.0	22.2	3.8	1.092	91.5	.175	1.190	349.9	558.5	.982	1.397	86.2	.779	-3.6	-39.4	319.8	.131
4-6000	4-6165.6	.303	296.6	-26.7	-2.3	.672	106.2	.457	1.004	201.4	437.3	.545	1.462D	112.0	1.333	1.7	4.2	79.2	.497
4-6165.6	4-6240	.497	39.6	2.1	1.0	1.174	65.3	.416	.717	115.5	183.4	.417D	1.018	87.6	.758	-2.9	-5.8	169.7	.234
		13.27	10.49	3.63	2.76	6.19	6.86	13.09	2/2/1	108.5	98.7	19.7	.243	5.846	173.1	359.5	-4.7	93.0D	1.180

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445880
28 JUN 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2445880 (28 JUN 1984)																				
4-5620	4-5880	.238	188.9	.6	1.0	1.075	103.4	.275	1.177	289.0	326.6	.853	1.500A	95.0	.705	1.1	-15.3	306.2	.186
4-5880	4-6078.9	.188	277.1	-43.9	-5.6	.664	91.8	.348	1.103	183.3	350.7	.719A	1.486D	87.6	1.367	3.9	26.2	37.5	.211
4-6078.9	4-6180	.211	72.1	-30.1	-4.7	1.310	96.4	.260	.945	328.0	478.6	.699	1.191A	104.6	.965	1.6	-1.7	199.7	.238
		13.19	9.25	5.27	3.93	7.33	3.98	13.15	2/1/1	42.9	16.3	65.3	1.350	1.853	61.0	328.1	60.9	113.2D	1.152
4-5630	4-5880	.227	196.0	-1.1	1.1	1.082	102.6	.271	1.191	293.8	521.5	.869	1.514A	96.6	.713	.9	-15.0	311.7	.198
4-5880	4-6060.4	.192	277.6	-32.9	-2.7	.650	91.2	.374	1.081	182.0	319.7	.677A	1.486D	79.3	1.357	1.3	5.8	49.7	.291
4-6060.4	4-6190	.291	61.8	51.6	10.4	1.273	98.0	.219	.874	312.8	503.0	.682	1.066A	99.1	.916	-13.1	-46.0	157.0	.267
		13.37	9.16	5.09	4.21	7.61	4.07	13.64	2/1/2	37.6	60.7	46.9	.711	2.515	79.8	31.2	-59.1	71.3L	1.077
4-5630	4-5880	.227	196.0	-1.1	1.1	1.082	102.6	.271	1.191	293.8	521.5	.869	1.514A	96.6	.713	.9	-15.0	311.7	.198
4-5880	4-6077.5	.185	276.9	-41.9	-5.0	.663	91.8	.349	1.102	183.4	348.5	.718A	1.486D	87.0	1.366	3.3	22.3	39.1	.209
4-6077.5	4-6190	.209	71.0	-40.9	-6.1	1.293	95.6	.227	.907	327.9	490.4	.701	1.113A	101.4	.939	3.0	5.2	204.4	.193
		13.23	9.02	5.09	4.21	7.61	3.92	12.48	2/1/1	37.6	26.9	69.6	1.376	1.747	66.8	344.6	64.7	104.4D	1.028
4-5640	4-5880	.217	203.1	-2.5	1.4	1.090	101.8	.268	1.207	298.7	516.4	.883	1.530A	98.1	.720	.6	-15.0	316.4	.210
4-5880	4-6067.1	.184	276.8	-35.1	-3.1	.657	91.6	.360	1.093	182.9	331.3	.700A	1.486D	82.5	1.361	1.6	9.1	47.9	.244
4-6067.1	4-6200	.244	65.6	49.7	8.5	1.273	96.7	.205	.872	316.9	507.9	.693	1.051A	97.5	.912	-11.5	-48.4	161.2	.234
		13.35	8.85	4.94	4.51	7.90	3.90	13.08	2/1/2	53.2	62.8	43.3	1.006	2.713	73.5	19.9	-55.2	80.6L	1.723
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																				
4-5620	4-5890	.230	189.2	1.5	1.1	1.072	103.0	.266	1.167	289.0	532.1	.856	1.477A	92.8	.709	1.1	-15.5	304.7	.188
4-5890	4-6082.6	.182	275.4	-42.5	-5.0	.670	93.4	.345	1.099	186.5	354.4	.720A	1.477D	88.6	1.366	3.2	22.6	36.8	.201
4-6082.6	4-6180	.201	74.0	-26.7	-4.0	1.316	95.9	.266	.957	331.3	475.9	.702	1.211A	105.1	.972	.7	-5.5	199.9	.245
		12.53	8.99	5.15	3.54	6.94	3.84	13.27	2/1/1	49.9	13.7	61.1	1.494	1.968	55.3	328.2	55.2	119.7D	1.447
4-5630	4-5890	.217	196.2	-.4	1.2	1.079	102.1	.260	1.179	293.9	527.1	.873	1.485A	94.4	.715	.8	-15.1	311.0	.178
4-5890	4-6078.7	.178	274.8	-38.5	-3.6	.669	93.5	.346	1.098	186.7	348.1	.717A	1.478D	87.0	1.365	2.1	14.7	41.5	.201
4-6078.7	4-6190	.200	71.3	-36.4	-5.5	1.294	95.6	.228	.909	328.9	489.6	.702	1.116A	101.6	.941	2.4	2.3	204.0	.193
		12.45	8.70	4.95	3.75	7.15	3.75	12.48	2/1/1	43.8	24.9	60.0	1.499	2.000	64.3	347.9	61.1	105.7D	1.496
4-5640	4-5890	.206	203.3	-1.7	1.4	1.085	101.2	.255	1.192	299.0	522.2	.889	1.496A	95.9	.721	.5	-15.0	316.4	.188
4-5890	4-6067.3	.181	275.1	-33.9	-2.7	.662	93.5	.359	1.086	185.9	329.2	.696A	1.477D	82.0	1.359	1.1	6.2	50.7	.249
4-6067.3	4-6200	.249	66.1	50.9	8.6	1.273	96.6	.205	.872	319.1	507.8	.693	1.051A	97.5	.913	-11.8	-48.9	160.6	.236
		12.60	8.61	4.78	3.99	7.39	3.83	13.15	2/1/2	38.8	63.2	46.5	.968	2.534	76.8	27.3	-57.8	77.7L	1.484
4-5640	4-5890	.206	203.3	-1.7	1.4	1.085	101.2	.255	1.192	299.0	522.2	.889	1.496A	95.9	.721	.5	-15.0	316.4	.188
4-5890	4-6080.0	.178	274.9	-39.6	-4.1	.670	93.5	.346	1.098	186.7	350.3	.719A	1.478D	87.5	1.365	2.4	16.8	40.0	.199
4-6080.0	4-6200	.195	71.4	-46.7	-6.5	1.285	94.8	.207	.890	331.3	499.5	.706	1.074A	99.0	.925	3.2	8.3	208.1	.162
		12.53	8.54	4.78	3.99	7.39	3.77	12.09	2/1/1	38.8	35.0	69.5	1.519	1.754	68.6	356.2	63.1	102.2D	1.145
4-5650	4-5890	.196	210.5	-1.9	1.8	1.092	100.3	.252	1.207	304.2	517.4	.903	1.510A	97.2	.726	.1	-15.4	321.1	.199
4-5890	4-6074.9	.177	274.6	-36.4	-3.3	.668	93.5	.349	1.095	186.6	342.0	.715A	1.478D	85.4	1.364	1.8	10.6	45.5	.211
4-6074.9	4-6210	.211	69.3	50.3	7.3	1.275	95.2	.193	.871	326.7	512.9	.703	1.039A	96.1	.910	-10.6	-51.3	163.6	.211
		12.61	8.37	4.63	4.24	7.63	3.74	12.74	2/1/2	34.5	66.1	44.2	1.354	2.656	68.7	12.6	-51.0	92.0D	2.243
4-5660	4-5890	.189	218.2	.3	2.5	1.099	99.4	.250	1.222	309.6	512.7	.916	1.527A	98.4	.735	-.7	-16.9	325.5	.210
4-5890	4-6083.6	.184	275.6	-44.1	-5.5	.670	93.4	.344	1.099	186.5	355.9	.720A	1.477D	88.9	1.366	3.7	25.7	35.6	.204
4-6083.6	4-6220	.204	71.5	57.6	7.8	1.276	93.6	.183	.871	336.5	516.2	.712	1.031A	94.7	.908	-11.1	-55.4	161.0	.211
		12.93	8.43	4.53	4.50	7.89	3.90	12.74	2/1/2	31.1	71.6	40.8	1.449	2.868	64.3	1.6	-36.1	112.5D	2.706
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																				
4-5610	4-5900	.241	182.6	4.3	1.2	1.063	103.9	.270	1.150	283.6	542.4	.839	1.460	89.1	.708	1.2	-16.2	293.4	.148
4-5900	4-6099.9	.174	277.0	-20.3	.9	.672	94.0	.347	1.089	187.6	377.8	.710	1.467D	94.6	1.365	-2.8	-17.8	23.6	.220
4-6099.9	4-6170	.220	79.5	-17.8	-2.8	1.380	93.8	.372	1.138	346.8	453.6	.714	1.562A	110.8	1.056	-1.3	-12.0	199.5	.360
		12.12	8.99	5.33	3.12	6.53	3.67	15.42	2/2/1	66.4	3.8	53.0	1.243	2.241	20.0	321.5	-.0	175.3D	1.543
4-5610	4-5900	.241	182.6	4.3	1.2	1.063	103.9	.270	1.150	283.8	542.4	.839	1.460	89.1	.708	1.2	-16.2	293.4	.148
4-5900	4-6100.1	.174	277.1	-20.6	.8	.672	94.0	.348	1.088	187.6	378.0	.710	1.467D	94.6	1.365	-2.8	-17.3	23.5	.220
4-6100.1	4-6170	.220	79.5	-17.8	-2.8	1.380	93.8	.373	1.139	346.8	453.4	.714	1.565A	110.9	1.057	-1.3	-12.0	199.6	.361
		12.12	8.99	5.33	3.12	6.53	3.67	15.44	2/2/1	66.4	3.8	53.1	1.242	2.236	19.7	321.7	.5	175.1D	1.535
4-5620	4-5900	.224	189.5	2.0	1.2	1.069	102.8	.259	1.160	288.8	537.6	.859	1.460A	90.8	.713	1.0	-15.8	302.0	.153
4-5900	4-6086.4	.178	272.6	-40.4	-4.3	.677	95.1	.343	1.096	190.0	358.3	.720A	1.472D	89.6	1.366	2.5	17.7	35.6	.193
4-6086.4	4-6180	.193	75.4	-24.3	-3.5	1.321	95.3	.272	.969	334.8	473.4	.706	1.232A	105.6	.979	.1	-6.3	200.5	.253
		12.04	8.81	5.06	3.23	6.64	3.75	13.40	2/1/1	58.1	11.9	57.3	1.619	2.087	48.6	329.0	46.4	127.1D	1.759
4-5640	4-5900	.197	203.4	-1.0	1.5	1.082	100.8	.244	1.181	299.2	528.1	.893	1.470A	93.8	.724	.5	-15.2	315.4	.169
4-5900	4-6067.5	.180	272.4	-33.0	-2.4	.668	95.2	.360	1.082	189.4	327.3	.693A	1.471D	81.5	1.358	.7	4.0	53.2	.255
4-6067.5	4-6200	.255	66.6	52.1	9.1	1.274	96.6	.205	.872	319.3	507.6	.693	1.051A	97.6	.913	-12.2	-49.3	159.9	.243
		12.02	8.46	4.65	3.56	6.96	3.81	13.23	2/1/2	45.4	63.7	49.5	.927	2.391	79.2	33.7	-59.5	75.5L	1.290
4-5640	4-5900	.197	203.4	-1.0	1.5	1.082	100.8	.244	1.181	299.2	528.1	.893	1.470A	93.8	.724	.5	-15.2	315.4	.169
4-5900	4-6080.3	.174	271.6	-36.2	-3.1	.676	95.3	.345	1.095	190.3	348.8	.718A	1.472D	87.1	1.365	1.4	9.6	43.0	.195
4-6080.3	4-6200	.195	71.3	-45.8	-6.3	1.285	94.8	.207	.890	331.6	499.4	.706	1.074A	99.1	.925	3.0	7.0	207.9	.161
		11.89	8.33	4.65	3.56	6.96	3.67	12.08	2/1/1	45.4	34.2	60.9	1.577	1.974	68.1	1.4	60.6	101.1D	1.536
4-5650	4-5900	.186	210.5	-1.3	1.8	1.088	99.9	.240	1.193	304.6	523.4	.907	1.479A	95.1	.730	.1	-15.5	320.7	.176
4-5900	4-6074.9	.175	271.5	-34.5	-2.7	.674	95.4	.349	1.092	190.2	340.0	.711A	1.472D	84.9	1.363	1.0	6.4	48.6	.213
4-6074.9	4-6210	.213	69.5	50.9	7.5	1.275	95.2	.193	.871	326.8	512.8	.703	1.040A	96.1	.910	-10.7	-51.5	163.2	.213
		11.95	8.19	4.50	3.75	7.15	3.70	12.77	2/1/2	40.5	66.3	47.8	1.327	2.469	72.4	19.4	-55.1	88.0L	1.949
4-5650	4-5900	.186	210.5	-1.3	1.8	1.088	99.9	.240	1.193	304.6	523.4	.907	1.479A	95.1	.730	.1	-15.5	320.7	.176
4-5900	4-6082.8	.175	271.9	-37.5	-3.5	.677	95.3	.343	1.096	190.3	352.8	.719A	1.472D	88.2	1.365	1.7	12.0	40.0	.191
4-6082.8	4-6210	.191	71.1	-51.4	-6.7	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.0	210.5	.138
		11.94	8.18	4.50	3.75	7.15	3.69	11.82	2/1/1	40.5	44.3	68.9	1.641	1.768	70.2	3.9	61.0	101.7D	1.260
4-5660	4-5900	.177	217.8	.5	2.4	1.094	98.9	.236	1.205	310.1	518.9	.921	1.490A	96.2	.736	-.6	-16.6	325.5	.187
4-5900	4-6083.5	.175	272.0	-37.9	-3.6	.677	95.3	.343	1.096	190.2	353.8	.720A	1.472D	88.4	1.365	1.8	12.8	39.2	.191
4-6083.5	4-6220	.191	70.8	54.5	7.0	1.276	93.6	.183	.871	336.4	516.2	.712	1.031A	94.7	.908	-10.4	-54.5	163.0	.200
		12.03	8.07	4.38	3.96	7.36	3.69	12.59	2/1/2	36.6	70.9	48.5	1.648	2.434	66.6	6.7	-46.2	105.7D	2.364
4-5660	4-5900	.177	217.8	.5	2.4	1.094	98.9	.236	1.205	310.1	518.9	.921	1.490A	96.2	.736	-.6	-16.6	325.5	.187
4-5900	4-6085.7	.177	272.5	-38.7	-4.1	.677	95.2	.343	1.096	190.1	357.3	.720A	1.472D	89.3	1.366	2.3	16.3	36.4	.192
4-6085.7	4-6220	.192	70.6	-56.4	-7.2	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.8	16.5	211.7	.123
		12.07	8.11	4.38	3.96	7.36	3.73	11.67	2/1/1	36.6	56.0	78.2	1.636	1.586	72.2	4.5	62.1	103.0D	.956
4-5670	4-5900	.173	226.0	6.5	3.5	1.100	97.9	.234	1.218	315.9	514.6	.933	1.503A	97.3	.741	-1.9	-19.9	330.6	.198
4-5900	4-6091.6	.217	274.9	-57.8	-10.3	.676	94.8	.343	1.095	189.3	365.9	.719	1.470D	91.5	1.366	6.5	49.2	28.7	.266
4-6091.6	4-6230	.266	72.2	72.6	11.5	1.277	92.0	.176	.870	346.5	524.8	.717	1.023A	93.2	.906	-14.9	-59.3	150.3	.261
		13.21	9.00	4.35	4.21	7.60	4.67	13.53	2/1/1	33.8	80.2	30.3	.848	3.826	74.7	3.8	-22.3	125.5D	2.399
4-5700	4-5900	.164	215.4	-57.2	-5.5	1.114	94.7	.232	1.256	334.8	502.9	.966	1.549A	99.8	.759	6.8	9.3	326.3	.240
4-5900	4-6100.9	.174	277.6	-21.8	.5	.672	93.9	.348	1.088	187.3	379.1	.709	1.466D	94.9	1.365	-2.4	-15.2	23.5	.221
4-6100.9	4-6260	.221	64.9	-69.4	-9.3	1.277	90.6	.172	.869	355.8	547.7	.719	1.018	88.4	.904	6.3	41.1	208.4	.134
		13.12	7.69	4.22	5.25	8.61	5.68	11.77	1/2/2	33.9	99.8	60.0	1.229	1.999	74.9	4.9	42.3	126.2D	1.229
4-5740	4-5900	.111	216.7	-30.0	-1.4	1.121	89.0	.240	1.297	5.4	132.8	.986D	1.607A	101.9	.774	2.3	-2.0	337.4	.247
4-5900	4-6082.8	.175	271.9	-37.5	-3.5	.677	95.3	.343	1.096	190.3	352.8	.719A	1.472D	88.2	1.365	1.7	12.0	40.0	.191
4-6082.8	4-6300	.191	89.6	-22.4	-3.3	1.278	97.3	.216	.876	316.9	576.3	.686	1.065	61.2	.915	-.4	-3.2	181.5	.154
		12.74	7.34	3.65	5.41	8.79	5.69	11.99	1/1/2	21.5	146.3	59.6	1.641	2.012	36.9	336.3	36.3	128.3D	1.661
4-5750	4-5900	.118	210.5	-25.4	-1.3	1.120	87.1	.244	1.299	14.8	132.1	.982D	1.615A	102.2	.775	2.0	-2.8	338.0	.251
4-5900	4-6087.0	.179	272.8	-41.3	-4.5	.677	95.1	.343	1.096	189.9	359.3	.720A	1.471D	89.6	1.366	2.7	19.4	34.8	.194
4-6087.0	4-6310	.194	95.9	-22.8	-3.4	1.282	97.3	.221	.881	317.7	580.0	.687	1.076	80.3	.921	.0	-3.7	188.5	.184
		12.99	7.49	3.71	5.50	8.88	5.78	12.11	1/1/2	20.9	149.5	75.1	1.593	1.680	37.2	336.5	37.2	133.1D	1.083
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																				
4-5610	4-5910	.240	185.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	288.5	.142
4-5910	4-6100.8	.174	275.6	-19.5	1.1	.680	96.0	.346	1.087	191.5	377.4	.711	1.464D	94.4	1.365	-3.1	-19.4	25.6	.220
4-6100.8	4-6170	.220	79.4	-17.7	-2.8	1.382	93.4	.375	1.144	347.5	453.1	.715	1.573A	110.9	1.059	-1.3	-12.3	199.7	.363
		11.97	8.98	5.31	2.99	6.40	3.67	15.47	2/2/1	76.7	3.9	50.8	1.245	2.331	20.7	322.0	-1.8	174.1D	1.697

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2445910 (28 JUL 1984)

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5610	4-5910	.240	183.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	268.5	.142	
4-5910	4-6102.8	.174	274.8	-23.8	.0	.678	95.7	.348	1.085	190.9	380.1	.708	1.462D	95.1	1.365	-2.0	-12.2	25.1	.221	
4-6102.8	4-6170	.221	79.0	-17.5	-2.7	1.387	92.9	.384	1.162	349.7	451.9	.716	1.608A	111.2	1.065	-1.5	-12.8	200.1	.370	
		11.98	8.99	5.31	2.99	6.40	3.68	15.63	2/2/1	76.7	4.1	52.2	1.236	2.271	17.6	323.5	5.9	170.5D	1.572	
4-5610	4-5910	.240	183.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	268.5	.142	
4-5910	4-6132.5	.217	298.3	-26.6	-1.7	.647	89.2	.394	1.039	178.8	416.0	.629	1.448	105.0	1.350	-.4	-1.3	38.1	.367	
4-6132.5	4-6170	.367	60.6	-12.9	-3.3	1.449	79.2	.532	1.458	31.3	85.5	.682D	2.234A	117.0	1.144	-4.0	-17.7	201.4	.508	
		12.97	9.98	5.31	2.99	6.40	4.67	18.75	2/2/1	76.7	8.4	25.1	.446	4.604	28.6	323.0	27.5	119.7D	1.608	
4-5620	4-5910	.221	189.9	2.5	1.3	1.067	102.6	.255	1.154	288.5	543.0	.860	1.449	89.0	.718	1.0	-16.4	298.1	.143	
4-5910	4-6089.5	.176	268.9	-36.8	-3.3	.685	97.0	.342	1.095	193.9	361.1	.720	1.470D	90.3	1.366	1.4	10.3	35.1	.188	
4-6089.5	4-6180	.188	76.3	-23.0	-3.2	1.326	94.8	.276	.979	337.6	471.5	.708	1.249A	106.0	.984	-.3	-10.0	200.9	.259	
		11.74	8.73	5.01	3.02	6.42	3.72	13.51	2/1/1	67.6	10.9	52.3	1.710	2.269	41.0	330.7	40.2	135.2D	2.169	
4-5630	4-5910	.205	196.8	.7	1.4	1.073	101.5	.245	1.163	293.6	536.4	.878	1.448A	90.5	.723	.7	-16.0	306.3	.147	
4-5910	4-6078.4	.176	267.3	-33.4	-2.4	.683	97.4	.347	1.093	194.4	344.1	.714A	1.472D	85.9	1.364	.6	4.2	47.9	.202	
4-6078.4	4-6190	.202	71.2	-38.9	-5.7	1.294	95.7	.228	.909	328.7	489.7	.702	1.116A	101.6	.940	2.5	2.9	204.1	.193	
		11.57	8.48	4.77	3.10	6.51	3.71	12.48	2/1/1	59.8	25.3	48.2	1.471	2.451	65.6	.4	59.1	100.6D	2.134	
4-5640	4-5910	.191	203.6	-.5	1.6	1.079	100.5	.237	1.173	299.2	533.8	.895	1.451A	91.9	.728	.4	-15.8	313.3	.153	
4-5910	4-6067.7	.183	268.7	-32.1	-2.2	.675	97.2	.361	1.080	193.2	325.7	.690A	1.470D	81.1	1.357	.4	2.2	55.3	.260	
4-6067.7	4-6200	.260	67.2	53.4	9.5	1.274	96.6	.205	.873	319.4	507.5	.693	1.052A	97.6	.913	-12.5	-49.7	159.2	.248	
		11.65	8.43	4.57	3.22	6.62	3.87	13.32	2/1/2	55.2	64.2	52.1	.887	2.276	81.0	38.8	-60.5	73.8L	1.132	
4-5640	4-5910	.191	203.6	-.5	1.6	1.079	100.5	.237	1.173	299.2	533.8	.895	1.451A	91.9	.728	.4	-15.8	313.3	.153	
4-5910	4-6080.2	.175	267.3	-33.7	-2.5	.684	97.4	.345	1.094	194.4	347.0	.717A	1.472D	86.7	1.364	.7	4.7	45.9	.196	
4-6080.2	4-6200	.196	71.3	-46.1	-6.3	1.285	94.8	.207	.890	331.5	499.4	.706	1.074A	99.1	.925	3.1	7.4	208.0	.162	
		11.48	8.26	4.57	3.22	6.62	3.70	12.08	2/1/1	53.2	34.5	55.5	1.557	2.146	66.9	7.2	59.4	98.7D	1.765	
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160	
4-5910	4-6075.1	.177	267.4	-33.0	-2.3	.682	97.4	.350	1.090	194.2	338.5	.709A	1.472D	84.5	1.362	.5	3.4	51.0	.216	
4-6075.1	4-6210	.216	69.8	51.8	7.7	1.275	95.2	.193	.871	326.9	512.8	.703	1.040A	96.1	.910	-11.0	-51.8	162.7	.216	
		11.50	8.14	4.40	3.36	6.76	3.74	12.82	2/1/2	47.6	66.6	50.9	1.286	2.326	75.2	25.3	-57.8	85.1L	1.705	
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160	
4-5910	4-6082.9	.175	267.6	-34.3	-2.6	.685	97.3	.344	1.095	194.4	351.3	.719A	1.472D	87.8	1.365	.8	5.7	42.8	.190	
4-6082.9	4-6210	.190	71.1	-51.1	-6.7	1.280	93.9	.192	.879	335.2	508.4	.710	1.049A	96.9	.916	3.5	11.6	210.3	.138	
		11.44	8.08	4.40	3.36	6.76	3.69	11.82	2/1/1	47.6	44.1	61.8	1.662	1.949	70.3	8.8	58.7	100.2D	1.577	
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167	
4-5910	4-6083.8	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.2	.719A	1.472D	88.0	1.365	.8	6.0	42.1	.189	
4-6083.8	4-6220	.169	70.7	54.0	6.9	1.276	93.6	.183	.871	336.4	518.3	.712	1.031A	94.7	.908	-10.3	-54.4	163.4	.199	
		11.47	7.95	4.26	3.52	6.92	3.69	12.56	2/1/2	43.1	70.7	53.3	1.679	2.229	69.5	11.6	-51.8	101.1D	2.064	
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167	
4-5910	4-6085.8	.175	268.0	-35.1	-2.8	.685	97.2	.343	1.096	194.2	355.8	.720A	1.471D	88.9	1.366	1.0	7.2	39.2	.187	
4-6085.8	4-6220	.187	70.4	-55.1	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.7	211.1	.120	
		11.47	7.95	4.26	3.52	6.92	3.69	11.65	2/1/1	43.1	55.2	67.5	1.724	1.799	71.5	8.8	58.4	102.6D	1.378	
4-5670	4-5910	.161	224.9	5.2	3.1	1.095	97.5	.222	1.204	316.5	520.9	.937	1.471A	95.2	.742	-1.5	-19.2	329.9	.175	
4-5910	4-6088.9	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.5	.720	1.470D	90.1	1.366	1.3	9.8	35.5	.187	
4-6088.9	4-6230	.187	69.5	-58.8	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.8	23.0	210.3	.111	
		11.59	7.89	4.18	3.70	7.10	3.71	11.56	2/1/2	39.6	67.8	73.9	1.717	1.664	72.7	8.0	58.6	105.3D	1.141	
4-5670	4-5910	.161	224.9	5.2	3.1	1.095	97.5	.222	1.204	316.5	520.9	.937	1.471A	95.2	.742	-1.5	-19.2	329.9	.175	
4-5910	4-6092.1	.179	269.9	-39.6	-4.1	.684	96.8	.343	1.094	193.4	365.2	.719	1.469D	91.3	1.366	2.2	15.5	32.0	.194	
4-6092.1	4-6230	.194	67.4	62.1	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.1	-57.3	158.3	.204	
		11.66	7.96	4.18	3.70	7.10	3.78	12.64	2/1/1	39.6	77.3	52.8	1.605	2.247	70.9	7.0	-43.8	115.4D	2.002	
4-5740	4-5910	.104	209.3	-32.3	-1.7	1.112	88.5	.219	1.261	8.2	141.4	.985D	1.537A	99.4	.767	2.5	-.3	337.0	.216	
4-5910	4-6083.3	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.0	.719A	1.472D	87.9	1.365	.8	5.9	42.3	.189	
4-6083.3	4-6300	.189	89.9	-22.7	-3.3	1.279	97.1	.215	.876	317.6	576.2	.687	1.065	81.3	.915	-.4	-3.0	181.7	.153	
		11.93	7.28	3.59	4.65	8.04	3.69	11.98	1/1/2	27.2	146.1	54.6	1.675	2.180	33.8	340.9	32.2	129.3D	1.976	
4-5750	4-5910	.112	203.8	-26.3	-1.5	1.110	86.8	.222	1.260	18.0	141.1	.980D	1.540A	99.6	.767	2.2	-1.5	337.7	.218	
4-5910	4-6088.8	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.3	.720	1.470D	90.1	1.366	1.3	9.7	35.6	.187	
4-6088.8	4-6310	.187	96.6	-24.0	-3.4	1.282	96.8	.217	.882	320.2	579.5	.690	1.073	80.6	.921	.2	-2.9	189.3	.160	
		12.07	7.37	3.66	4.70	8.09	3.71	12.06	1/1/2	26.6	148.9	68.4	1.718	1.780	32.1	339.8	30.8	137.0D	1.339	

MARS ARRIVAL DATE = 2445920 (7 AUG 1984)

4-5600	4-5920	.267	177.0	7.2	1.4	1.055	105.5	.289	1.135	277.3	557.3	.807	1.463	83.2	.715	1.5	-17.0	272.4	.148	
4-5920	4-6061.6	.198	266.6	-30.6	-2.0	.673	99.3	.381	1.065	195.8	312.7	.659A	1.470D	77.5	1.351	.1	.5	57.8	.320	
4-6061.6	4-6160	.320	59.8	-35.8	-8.3	1.320	100.6	.315	.978	313.5	472.3	.670	1.286A	108.5	.989	6.1	16.2	189.0	.318	
		13.12	9.99	5.77	3.12	6.53	4.22	14.57	2/1/1	98.0	22.2	36.4	.589	3.199	87.3	49.4	72.1	75.5L	1.295	
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140	
4-5920	4-6099.7	.193	268.4	-44.7	-5.7	.690	98.3	.346	1.090	196.4	374.6	.713	1.468D	93.7	1.366	3.8	24.4	27.9	.220	
4-6099.7	4-6170	.220	79.5	-17.9	-2.8	1.379	93.7	.371	1.136	346.4	453.7	.714	1.557A	110.8	1.056	-1.2	-11.9	199.5	.359	
		12.40	9.44	5.34	2.96	6.37	4.10	15.40	2/1/1	67.7	3.8	65.6	1.245	1.845	41.8	321.1	41.6	136.2D	1.052	
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140	
4-5920	4-6102.2	.178	269.8	-20.4	.9	.688	98.0	.347	1.088	195.7	378.0	.710	1.465D	94.6	1.365	-2.9	-18.0	27.0	.220	
4-6102.2	4-6170	.220	79.2	-17.6	-2.8	1.385	93.0	.381	1.156	349.0	452.3	.715	1.596A	111.1	1.063	-1.5	-12.7	200.0	.368	
		12.06	9.10	5.34	2.96	6.37	3.76	15.58	2/2/1	67.7	4.0	49.5	1.241	2.390	19.7	323.0	-.5	173.0D	1.725	
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140	
4-5920	4-6104.9	.179	271.5	-27.6	-.9	.686	97.7	.349	1.084	194.8	381.5	.706	1.462D	95.5	1.365	-1.0	-8.1	26.6	.221	
4-6104.9	4-6170	.221	78.4	-17.3	-2.7	1.391	92.3	.392	1.179	351.9	450.6	.717	1.641A	111.5	1.071	-1.7	-13.4	200.5	.377	
		12.08	9.12	5.34	2.96	6.37	3.78	15.78	2/2/1	67.7	4.4	51.8	1.226	2.290	18.2	324.9	12.6	164.3D	1.581	
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140	
4-5920	4-6130.4	.204	293.6	-28.2	-1.8	.657	92.3	.383	1.041	183.8	411.9	.643	1.439D	103.7	1.351	-.2	-.6	37.7	.342	
4-6130.4	4-6170	.342	61.7	-13.4	-3.2	1.445	80.7	.518	1.432	27.5	85.0	.691D	2.174A	116.5	1.139	-3.8	-17.6	201.8	.493	
		12.66	9.70	5.34	2.96	6.37	4.36	18.38	2/2/1	67.7	8.3	27.0	.513	4.288	29.3	323.4	28.2	122.6D	1.668	
4-5620	4-5920	.221	190.4	2.8	1.4	1.066	102.6	.254	1.150	288.0	548.4	.859	1.442	87.2	.723	1.0	-17.1	293.1	.137	
4-5920	4-6090.3	.180	264.2	-32.7	-2.3	.694	99.1	.344	1.098	198.3	361.4	.720	1.475D	90.4	1.367	.4	2.9	36.1	.186	
4-6090.3	4-6180	.186	76.5	-22.6	-3.1	1.327	94.6	.278	.982	338.6	470.8	.709	1.255A	106.1	.986	-.4	-10.6	201.1	.262	
		11.70	8.80	5.00	2.90	6.31	3.80	13.55	2/1/1	78.2	10.6	46.9	1.738	2.513	35.1	332.4	33.1	141.1D	2.629	
4-5620	4-5920	.221	190.4	2.8	1.4	1.066	102.6	.254	1.150	288.0	548.4	.859	1.442	87.2	.723	1.0	-17.1	293.1	.137	
4-5920	4-6142.1	.232	304.6	-25.5	-1.9	.641	88.4	.412	1.018	177.7	424.8	.598	1.436	107.6	1.342	-.1	-.4	48.2	.412	
4-6142.1	4-6180	.412	50.6	-9.7	-3.1	1.355	73.0	.422	1.056	60.7	108.9	.610D	1.503A	114.8	1.021	-4.6	-18.6	198.6	.426	
		12.92	10.03	5.00	2.90	6.31	5.03	16.84	2/2/1	78.2	13.9	9.6	.354	11.956	75.7	336.3	74.8	98.3D	3.874	
4-5630	4-5920	.203	197.1	1.1	1.5	1.071	101.4	.241	1.158	293.5	543.9	.879	1.438	88.8	.728	.7	-16.8	302.1	.137	
4-5920	4-6077.4	.183	262.6	-31.6	-2.1	.692	99.6	.350	1.095	198.9	341.1	.712A	1.478D	85.1	1.364	.2	1.2	50.9	.210	
4-6077.4	4-6190	.210	71.0	-41.2	-6.2	1.293	95.8	.227	.907	327.8	490.5	.701	1.112A	101.4	.939	3.0	5.5	204.5	.193	
		11.51	8.60	4.73	2.91	6.32	3.87	12.48	2/1/1	69.7	27.1	46.2	1.366	2.551	69.0	9.4	60.1	95.2D	2.118	
4-5630	4-5920	.203	197.1	1.1	1.5	1.071	101.4	.241	1.158	293.5	543.9	.879	1.438	88.8	.728	.7	-16.8	302.1	.137	
4-5920	4-6149.4	.257	311.0	-23.4	-1.9	.630	85.3	.437	1.005	173.8	432.8	.566	1.443	110.3	1.336	-.1	-.3	35.4	.463	
4-6149.4	4-6190	.463	46.9	-6.5	-2.5	1.274	68.8	.397	.864	88.5	134.5	.321D	1.207A	111.4	.909	-4.8	-17.4	192.7	.357	
		13.29	10.38	4.73	2.91	6.32	5.65	15.36	2/2/1	69.7	27.2	10.5	.281	10.880	143.7	331.7	-36.1	88.3L	2.774	
4-5640	4-5920	.187	203.9	-.1	1.6	1.077	100.3	.231	1.167	299.1	539.6	.897	1.437A	90.1	.732	.4	-16.6	310.0	.140	
4-5920	4-6067.9	.190	264.3	-31.1	-2.0	.684	99.5	.364	1.081	197.5	324.5	.687A	1.475D	80.7	1.358	.1	.7	56.9	.266	
4-6067.9	4-6200	.266	67.8	54.6	9.9	1.274	96.6	.205	.873	319.6	507.4	.694	1.052A	97.6	.913	-12.9	-50.1	158.5	.253	
		11.51	8.55	4.51	2.96	6.37	4.03	13.41	2/1/2	62.3	64.6	54.6	.848	2.181	82.3	42.7	-61.0	72.6L	1.001	
4-5640	4-5920	.187	203.9	-.1	1.6	1.077	100.3	.231	1.167	299.1	539.6	.897	1.437A	90.1	.732	.4	-16.6	310.0	.140	
4-5920	4-6079.9	.182	262.5	-31.8	-2.1	.693	99.6	.348	1.097	199.0	345.3	.715A	1.478D	86.2	1.365	.2	1.4	48.4	.200	
4-6079.9	4-6200	.200	71.4	-47.1	-6.6	1.285	94.8	.207	.890	331.2	499.5	.706	1.074A	99.0	.925	3.3	8.7	208.2	.163	
		11.52	8.56	4.51	2.96	6.37	3.85	12.09	2/1/1	62.3	35.3	52.5	1.498	2.260	70.4	12.9	58.8	99.7D	1.868	

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	V 6	RAP	DECLP	ETA	PERIC
		PROP	AERO	DVL	DVA	EVA	DVD								INC				
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	316.6	.145
4-5920	4-6075.2	.184	262.6	-31.5	-2.1	.691	99.6	.353	1.093	198.7	337.3	.707A	1.478D	84.2	1.563	.2	1.1	52.9	.220
4-6075.2	4-6210	.220	70.1	52.9	8.0	1.275	95.2	.193	.871	327.0	512.7	.703	1.040A	96.1	.910	-11.2	-52.2	162.1	.220
		11.28	8.23	4.33	3.05	6.46	3.90	12.68	2/1/2	56.0	66.9	53.8	1.238	2.211	77.2	30.0	-59.4	83.1L	1.499
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.438A	91.4	.736	.0	-16.7	316.6	.145
4-5920	4-6082.8	.181	262.7	-32.0	-2.1	.694	99.5	.346	1.098	199.0	349.9	.718A	1.478D	87.4	1.566	.2	1.7	45.1	.192
4-6082.8	4-6210	.192	71.2	-51.6	-6.8	1.260	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.3	210.5	.136
		11.21	8.15	4.33	3.05	6.46	3.82	11.82	2/1/1	56.0	44.5	57.7	1.626	2.073	71.1	13.3	57.4	98.1D	1.747
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6083.5	.181	262.8	-32.0	-2.2	.694	99.5	.346	1.098	199.0	351.0	.719A	1.478D	87.7	1.566	.2	1.8	44.3	.191
4-6083.5	4-6220	.191	70.8	54.4	7.0	1.276	93.6	.183	.871	336.4	516.3	.712	1.031A	94.7	.908	-10.4	-54.5	163.1	.200
		11.16	8.00	4.18	3.16	6.57	3.82	12.58	2/1/2	50.8	70.6	56.9	1.653	2.098	71.9	15.8	-55.1	97.9D	1.615
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6085.8	.180	263.1	-32.2	-2.2	.694	99.4	.345	1.099	198.8	354.6	.720A	1.477D	88.6	1.567	.3	2.1	41.5	.187
4-6085.8	4-6220	.187	70.4	-55.3	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.9	211.1	.121
		11.15	7.99	4.18	3.16	6.57	3.81	11.65	2/1/1	50.8	55.3	62.0	1.716	1.941	71.8	12.7	56.5	101.3D	1.614
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.745	-1.2	-19.2	328.4	.157
4-5920	4-6088.8	.180	263.8	-32.5	-2.3	.694	99.2	.344	1.098	198.5	359.3	.720A	1.476D	89.8	1.567	.4	2.6	37.8	.186
4-6088.8	4-6230	.186	69.4	-58.4	-7.1	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.7	22.3	210.0	.110
		11.17	7.87	4.08	3.30	6.70	3.80	11.56	2/1/2	46.6	67.7	65.9	1.746	1.838	72.5	11.4	55.5	104.9D	1.463
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.745	-1.2	-19.2	328.4	.157
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.567	.5	3.5	34.2	.188
4-6092.1	4-6230	.186	67.1	60.8	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.7	-57.0	159.2	.199
		11.17	7.87	4.08	3.30	6.70	3.80	12.57	2/1/1	46.6	77.0	62.5	1.710	1.928	72.7	10.0	-51.5	110.2D	1.586
4-5680	4-5920	.152	231.9	13.1	4.1	1.096	96.1	.208	1.202	323.4	523.5	.951	1.452A	94.2	.749	-2.6	-23.8	334.3	.165
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.567	.5	3.5	34.2	.188
4-6092.1	4-6240	.187	68.3	-61.1	-7.4	1.276	92.0	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.4	207.9	.107
		11.35	7.86	4.06	3.48	6.89	3.80	11.53	2/1/2	44.1	80.4	69.8	1.710	1.747	73.5	9.8	55.0	108.7D	1.278
4-5680	4-5920	.152	231.9	13.1	4.1	1.096	96.1	.208	1.202	323.4	523.5	.951	1.452A	94.2	.749	-2.6	-23.8	334.3	.165
4-5920	4-6099.8	.194	268.4	-45.5	-6.0	.690	98.3	.346	1.090	196.4	374.7	.713	1.466D	93.8	1.568	4.1	25.7	27.9	.222
4-6099.8	4-6240	.222	58.5	69.7	9.4	1.277	90.3	.172	.869	357.6	532.1	.719	1.018A	91.6	.904	-12.6	-58.8	151.5	.223
		11.68	8.20	4.06	3.48	6.89	4.13	12.93	2/1/1	44.1	84.2	47.4	1.219	2.487	77.5	11.5	-38.6	125.1D	1.612
4-5690	4-5920	.192	244.4	33.7	8.1	1.069	95.0	.206	1.210	330.1	520.1	.961	1.459A	95.0	.753	-6.8	-37.3	343.7	.192
4-5920	4-6095.9	.181	266.4	-34.5	-2.8	.692	98.7	.345	1.094	197.3	369.4	.717	1.471D	92.4	1.567	.8	5.8	30.8	.194
4-6095.9	4-6250	.194	67.2	-64.0	-7.9	1.276	91.4	.172	.867	350.6	541.0	.718	1.017	89.8	.903	4.6	33.8	206.1	.111
		12.48	8.40	4.58	4.08	7.47	3.82	11.57	2/1/2	47.9	91.9	75.1	1.595	1.642	74.4	8.7	55.3	111.9D	1.023
4-5710	4-5920	.173	188.2	-71.1	-7.6	1.104	92.5	.202	1.225	345.0	514.4	.978	1.473A	96.1	.759	8.7	19.4	323.0	.214
4-5920	4-6105.1	.179	271.6	-27.8	-1.0	.686	97.6	.349	1.084	194.7	381.8	.706	1.462D	95.6	1.564	-.9	-5.7	26.6	.222
4-6105.1	4-6270	.222	63.5	-69.4	-9.4	1.279	90.1	.174	.871	359.5	554.1	.719	1.022	87.1	.906	6.6	41.0	207.1	.141
		12.70	8.10	4.32	4.60	7.99	3.78	11.85	1/2/2	47.7	106.9	66.1	1.216	1.786	76.9	10.1	48.3	122.8D	.956
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6049.8	.225	272.2	-29.5	-2.0	.642	98.6	.430	1.020	191.7	289.8	.581A	1.459D	70.5	1.534	.1	.3	54.8	.445
4-6049.8	4-6300	.445	64.7	-11.7	-4.4	1.265	110.5	.381	.862	272.5	584.6	.534	1.190	69.9	.905	-3.9	-6.9	170.8	.336
		12.46	8.42	3.57	4.04	7.43	4.85	14.93	1/1/2	33.8	152.9	15.5	.303	7.395	51.0	336.6	50.5	89.4L	1.940
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6064.5	.194	265.4	-30.9	-2.0	.679	99.4	.372	1.073	196.6	318.2	.673A	1.472D	79.0	1.555	.1	.6	57.7	.294
4-6064.5	4-6300	.294	77.0	-14.6	-3.4	1.271	103.0	.278	.868	292.9	581.7	.627	1.110	76.9	.910	-2.1	-6.6	174.1	.223
		11.73	7.70	3.57	4.04	7.43	4.13	12.91	1/1/2	33.8	150.7	24.4	.697	4.729	39.2	342.8	38.5	102.7D	2.597
4-5740	4-5920	.101	202.1	-35.3	-2.1	1.104	88.2	.204	1.235	10.7	149.7	.984D	1.487A	97.1	.764	2.8	1.8	335.7	.190
4-5920	4-6082.4	.181	262.7	-31.9	-2.1	.694	99.5	.346	1.098	199.0	349.2	.718A	1.478D	87.2	1.566	.2	1.7	45.6	.193
4-6082.4	4-6300	.193	89.4	-22.1	-3.3	1.278	97.4	.217	.876	316.4	576.4	.685	1.066	81.1	.915	-.4	-3.4	181.2	.155
		11.43	7.40	3.57	4.04	7.43	3.83	12.00	1/1/2	33.8	146.4	48.9	1.611	2.417	31.7	342.9	29.5	126.0D	2.282
4-5750	4-5920	.109	197.8	-27.7	-1.8	1.102	86.5	.207	1.233	20.8	149.7	.977D	1.486A	97.3	.763	2.3	-.1	336.5	.191
4-5920	4-6089.2	.180	263.9	-32.6	-2.3	.694	99.2	.344	1.098	198.5	359.7	.720A	1.476D	89.9	1.567	.4	2.7	37.4	.186
4-6089.2	4-6310	.186	96.7	-24.2	-3.4	1.283	98.7	.216	.882	320.7	579.5	.691	1.073	80.6	.922	.2	-2.8	189.5	.159
		11.49	7.43	3.63	4.06	7.45	3.80	12.05	1/1/2	33.2	146.8	63.5	1.746	1.901	29.0	341.7	25.7	139.2D	1.572
4-5760	4-5920	.125	195.1	-21.7	-1.8	1.097	84.6	.213	1.226	31.7	150.6	.965D	1.487A	97.3	.760	2.0	-1.7	336.4	.192
4-5920	4-6093.2	.180	265.2	-33.3	-2.5	.693	98.9	.344	1.096	197.9	365.6	.719	1.473D	91.4	1.567	.5	3.9	33.2	.189
4-6093.2	4-6320	.189	103.0	-23.8	-3.4	1.286	96.8	.221	.867	321.0	583.0	.691	1.084	79.8	.928	.6	-3.6	196.7	.170
		11.67	7.59	3.79	4.09	7.48	3.80	12.18	1/1/2	33.5	151.4	73.4	1.685	1.674	26.6	341.6	23.3	145.4D	1.135

MARS ARRIVAL DATE = 2445930 (17 AUG 1984)

4-5610	4-5930	.246	184.4	5.1	1.5	1.060	104.2	.273	1.141	281.7	557.8	.830	1.452	83.6	.725	1.2	-17.7	277.7	.144
4-5930	4-6103.2	.186	265.4	-22.0	.5	.696	100.5	.350	1.092	200.4	378.4	.709	1.474D	94.7	1.567	-2.5	-15.4	28.2	.220
4-6103.2	4-6170	.220	78.9	-17.5	-2.7	1.387	92.7	.384	1.163	350.1	451.8	.716	1.610A	111.3	1.066	-1.5	-12.9	200.2	.371
		12.43	9.39	5.41	3.04	6.44	3.97	15.64	2/1/1	98.8	4.2	48.6	1.240	2.432	18.3	324.2	2.4	172.2D	1.776
4-5610	4-5930	.246	184.4	5.1	1.5	1.060	104.2	.273	1.141	281.7	557.8	.830	1.452	83.6	.725	1.2	-17.7	277.7	.144
4-5930	4-6128.8	.200	287.6	-29.8	-2.0	.667	95.3	.376	1.044	189.0	408.8	.652	1.437D	102.7	1.552	.1	.5	37.6	.325
4-6128.8	4-6170	.325	62.7	-13.7	-3.1	1.442	81.8	.507	1.413	24.7	84.8	.696D	2.130A	115.8	1.135	-3.6	-17.5	202.0	.482
		12.70	9.67	5.41	3.04	6.44	4.25	18.12	2/2/1	98.8	8.2	28.6	.569	4.044	30.8	323.8	29.9	124.4D	1.731
4-5620	4-5930	.223	191.0	3.0	1.5	1.065	102.7	.254	1.148	287.3	553.5	.856	1.440	85.5	.729	1.0	-17.8	287.6	.136
4-5930	4-6089.3	.191	259.0	-30.0	-1.8	.706	101.6	.348	1.105	203.6	359.2	.720A	1.490D	89.8	1.569	-.2	-1.3	38.8	.188
4-6089.3	4-6180	.188	76.3	-23.0	-3.2	1.326	94.8	.276	.979	337.6	471.5	.708	1.249A	106.0	.984	-.3	-10.0	200.9	.260
		11.97	9.09	5.03	2.88	6.29	4.06	13.51	2/1/1	89.4	10.9	42.3	1.709	2.774	33.5	334.4	30.3	141.3D	3.032
4-5620	4-5930	.223	191.0	3.0	1.5	1.065	102.7	.254	1.148	287.3	553.5	.856	1.440	85.5	.729	1.0	-17.8	287.6	.136
4-5930	4-6140.6	.218	300.2	-27.1	-2.0	.650	91.7	.400	1.020	182.5	421.3	.612	1.427D	106.4	1.543	.1	.3	47.9	.369
4-6140.6	4-6180	.369	50.7	-19.0	-3.0	1.357	74.3	.412	1.061	56.9	107.5	.624D	1.499A	114.2	1.023	-4.4	-18.9	199.3	.414
		12.60	9.72	7.03	2.88	6.29	4.69	16.58	2/2/1	89.4	13.3	10.7	.397	10.747	75.0	336.7	74.2	98.9D	3.873
4-5630	4-5930	.203	197.6	1.3	1.6	1.070	101.4	.240	1.155	293.0	549.3	.878	1.432	87.1	.733	.7	-17.8	297.0	.132
4-5930	4-6076.4	.197	257.9	-30.0	-1.9	.703	102.1	.356	1.101	203.8	336.6	.709A	1.494D	84.4	1.566	-.1	-.7	53.1	.219
4-6076.4	4-6190	.219	70.2	-43.7	-6.8	1.291	95.9	.226	.905	326.9	491.2	.700	1.109A	101.3	.937	3.7	8.6	205.0	.194
		11.73	8.02	4.73	2.81	6.22	4.19	12.50	2/1/1	60.5	29.3	45.8	1.248	2.569	72.1	17.8	60.6	90.2D	1.959
4-5630	4-5930	.203	197.6	1.3	1.6	1.070	101.4	.240	1.155	293.0	549.3	.878	1.432	87.1	.733	.7	-17.8	297.0	.132
4-5930	4-6147.6	.235	307.4	-25.0	-2.0	.639	89.0	.419	1.006	178.6	428.7	.585	1.427	108.7	1.537	.1	.3	54.7	.431
4-6147.6	4-6190	.431	46.4	-6.8	-2.4	1.281	70.2	.378	.876	83.3	132.5	.545D	1.207A	110.5	.918	-4.4	-18.2	194.0	.342
		12.66	9.84	4.73	2.81	6.22	5.11	15.05	2/2/1	60.5	26.0	10.9	.324	10.547	139.4	332.1	-40.3	86.7L	3.088
4-5640	4-5930	.193	204.2	.1	1.7	1.075	100.2	.229	1.162	298.8	545.1	.897	1.426	88.5	.737	.4	-17.7	305.5	.132
4-5930	4-6079.5	.195	257.7	-30.0	-1.8	.705	102.0	.353	1.104	204.1	343.9	.714A	1.494D	85.8	1.567	-.1	-.9	50.1	.206
4-6079.5	4-6200	.206	71.5	-48.5	-6.9	1.285	94.9	.206	.889	330.9	499.8	.706	1.073A	99.0	.925	3.7	10.5	208.7	.164
		11.44	8.64	4.49	2.80	6.21	4.15	12.11	2/1/1	72.8	36.5	51.1	1.419	2.320	71.9	17.8	58.3	92.9D	1.873
4-5640	4-5930	.193	204.2	.1	1.7	1.075	100.2	.229	1.162	298.8	545.1	.897	1.426	88.5	.737	.4	-17.7	305.5	.132
4-5930	4-6153.2	.254	312.8	-23.1	-2.0	.630	86.5	.458	.994	175.5	434.6	.559	1.430	110.7	1.532	.1	.2	60.5	.469
4-6153.2	4-6200	.469	46.4	-4.2	-1.7	1.226	67.4	.392	.783	101.7	151.4	.477D	1.090A	105.9	.838	-4.2	-15.9	187.1	.292
		12.87	10.06	4.49	2.80	6.21	5.56	14.09	2/2/1	72.8	41.9	14.8	.273	7.790	162.4	338.3	-17.4	89.8L	1.857
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6074.8	.198	258.0	-30.0	-1.9	.703	102.1	.358	1.100	203.7	336.7	.706A	1.493D	83.9	1.565	-.1	-.7	54.0	.225
4-6074.8	4-6210	.225	70.5	54.1	8.3	1.275	95.2	.193	.872	327.1	512.6	.703	1.040A	96.1	.910	-11.5	-52.5	161.4	.224
		11.33	8.50	4.29	2.84	6.25	4.21	12.84	2/1/2	65.7	87.3	58.4	1.186	2.115	78.5	33.1	-60.3	81.9L	1.523
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6082.7	.194	257.8	-30.0	-1.8	.706	101.9	.351	1.106	204.1	348.9	.717A	1.494D	87.1	1.568	-.1	-1.0	46.6	.196
4-6082.7	4-6210	.196	71.3	-52.5	-7.0	1.280	94.0	.192	.879	335.0	508.5	.710	1.048A	96.8	.916	3.7	13.6	210.9	.140
		11.24	8.41	4.29	2.84	6.25	4.12	11.84	2/1/1	65.7	45.2	58.5	1.565	2.148	72.0	17.0	58.5	98.2D	1.797

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445930
17 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6158.6	.276	317.6	-21.3	-1.9	.622	83.7	.460	.984	172.5	440.5	.532	1.437	112.8	1.327	.1	.2	66.2	.510
4-6158.6	4-6210	.510	49.3	-2.1	-1.0	1.186	64.8	.420	.730	113.6	164.1	.419D	1.041A	101.2	.779	-4.0	-12.1	179.8	.271
		13.28	10.44	4.29	2.84	6.25	6.15	13.70	2/2/1	65.7	58.9	17.1	.231	6.732	172.0	344.8	-7.9	93.8D	1.326
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6085.5	.193	257.9	-30.0	-1.8	.706	101.9	.350	1.106	204.1	350.3	.718A	1.493D	87.5	1.368	-.2	-1.1	45.6	.194
4-6085.5	4-6220	.194	71.0	55.3	7.2	1.276	93.6	.183	.871	336.4	518.2	.712	1.031A	94.7	.908	-10.6	-54.7	162.5	.203
		11.13	8.24	4.13	2.90	6.31	4.11	12.62	2/1/2	59.8	71.1	60.0	1.598	2.000	73.6	18.9	-57.1	95.8D	1.597
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6085.7	.193	258.2	-30.0	-1.8	.706	101.8	.349	1.106	204.0	353.8	.720A	1.492D	88.4	1.369	-.2	-1.2	43.0	.190
4-6085.7	4-6220	.190	70.6	-56.0	-7.1	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.7	17.9	211.5	.122
		11.11	8.22	4.13	2.90	6.31	4.09	11.66	2/1/1	59.8	55.8	59.1	1.665	2.027	72.4	15.7	55.0	100.0D	1.711
4-5670	4-5930	.146	223.8	3.6	2.6	1.089	96.9	.206	1.185	317.3	533.4	.941	1.429A	91.7	.748	-1.0	-19.8	325.8	.141
4-5930	4-6088.9	.191	258.9	-30.0	-1.8	.706	101.6	.348	1.105	203.7	358.5	.720A	1.490D	89.6	1.369	-.2	-1.4	39.3	.188
4-6088.9	4-6230	.188	69.5	-56.9	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.9	23.2	210.4	.111
		11.05	8.07	4.01	2.98	6.39	4.06	11.57	2/1/2	55.0	67.9	62.1	1.708	1.939	72.9	14.1	53.7	104.1D	1.604
4-5670	4-5930	.146	223.8	3.6	2.6	1.089	96.9	.206	1.185	317.3	533.4	.941	1.429A	91.7	.748	-1.0	-19.8	325.8	.141
4-5930	4-6092.1	.191	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.3	.720	1.488D	90.9	1.369	-.2	-1.8	35.7	.189
4-6092.1	4-6230	.189	67.2	61.1	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.8	-57.1	159.1	.200
		11.03	8.05	4.01	2.98	6.39	4.04	12.58	2/1/1	55.0	77.0	67.4	1.688	1.803	74.1	12.4	-54.8	107.4D	1.355
4-5680	4-5930	.141	230.5	10.3	3.5	1.093	95.8	.201	1.192	323.9	529.9	.953	1.432A	92.5	.751	-2.1	-23.2	331.8	.148
4-5930	4-6092.2	.190	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.4	.720	1.488D	90.9	1.369	-.2	-1.8	35.6	.189
4-6092.2	4-6240	.189	68.4	-61.5	-7.5	1.276	91.9	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.8	208.2	.106
		11.10	7.99	3.95	3.11	6.52	4.04	11.54	2/1/2	51.5	80.4	64.6	1.687	1.872	73.4	12.2	52.5	108.6D	1.471
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6095.9	.190	261.3	-29.6	-1.6	.703	101.1	.348	1.101	202.4	368.6	.717	1.484D	92.2	1.369	-.4	-2.5	32.3	.184
4-6095.9	4-6250	.194	67.3	-64.0	-7.9	1.276	91.4	.172	.867	350.5	541.0	.718	1.017	89.8	.903	4.6	33.8	206.0	.111
		11.48	8.10	4.08	3.38	6.78	4.02	11.57	2/1/2	50.9	91.9	66.5	1.597	1.823	74.1	10.8	51.2	113.2D	1.314
4-5690	4-5930	.153	238.9	24.7	5.6	1.096	94.7	.197	1.199	330.8	526.7	.963	1.436A	93.2	.754	-4.3	-31.4	339.2	.161
4-5930	4-6107.5	.191	267.9	-34.4	-2.9	.694	99.7	.352	1.085	198.9	383.8	.703	1.468D	96.1	1.365	1.0	5.8	27.8	.230
4-6107.5	4-6250	.230	46.5	69.4	9.7	1.277	88.8	.172	.867	8.3	179.8	.718D	1.017A	90.0	.903	-12.7	-56.1	149.2	.223
		11.53	8.15	4.08	3.38	6.78	4.06	12.92	2/2/1	50.9	90.0	64.8	1.141	1.866	82.9	18.1	-51.2	118.8D	.988
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6044.9	.255	271.2	-28.7	-1.9	.629	101.5	.471	.993	193.5	277.9	.525A	1.461D	66.3	1.323	-.1	-.2	53.6	.526
4-6044.9	4-6300	.526	60.9	-11.1	-5.0	1.263	114.4	.437	.860	264.6	564.5	.484	1.237	66.0	.904	-4.9	-7.0	170.6	.399
		12.76	9.19	3.57	3.57	6.97	5.62	16.24	1/1/2	41.5	153.0	13.1	.217	8.789	56.6	335.6	56.0	85.7L	1.694
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6072.9	.199	258.4	-30.0	-1.9	.701	102.1	.361	1.096	203.4	532.5	.701A	1.492D	82.8	1.364	-.1	-.6	55.7	.239
4-6072.9	4-6300	.239	83.6	-17.3	-3.3	1.275	100.1	.244	.872	303.9	579.2	.660	1.084	79.3	.912	-1.3	-5.7	177.1	.184
		11.39	7.82	3.57	3.57	6.97	4.25	12.37	1/1/2	41.5	148.8	32.1	1.052	3.618	32.9	345.0	31.3	113.4D	2.754
4-5740	4-5930	.101	195.1	-39.2	-2.6	1.099	88.0	.193	1.217	12.7	157.6	.983D	1.452A	95.1	.763	3.2	4.3	333.2	.169
4-5930	4-6078.8	.196	257.7	-30.0	-1.8	.705	102.0	.354	1.103	204.0	342.6	.713A	1.494D	85.5	1.367	-.1	-.8	50.8	.209
4-6078.8	4-6300	.209	87.5	-20.1	-3.2	1.277	98.4	.226	.874	311.6	577.4	.677	1.072	80.5	.914	-.8	-4.4	179.6	.165
		11.30	7.73	3.57	3.57	6.97	4.16	12.12	1/1/2	41.5	147.4	40.6	1.380	2.880	30.7	344.5	28.2	122.5D	2.595
4-5750	4-5930	.108	192.7	-29.7	-2.1	1.096	86.3	.196	1.214	23.0	157.7	.976D	1.452A	95.2	.761	2.6	1.5	334.2	.169
4-5930	4-6088.6	.192	258.8	-30.0	-1.8	.706	101.6	.348	1.105	203.7	358.2	.720A	1.491D	89.5	1.369	-.2	-1.4	39.5	.188
4-6088.6	4-6310	.188	96.5	-23.9	-3.4	1.282	96.8	.217	.882	319.9	579.6	.690	1.073	80.6	.921	.2	-3.0	189.3	.160
		11.25	7.69	3.63	3.56	6.96	4.07	12.06	1/1/2	40.8	148.9	59.5	1.707	2.016	27.1	342.7	22.5	139.4D	1.734
4-5760	4-5930	.124	191.4	-22.8	-1.8	1.091	84.5	.202	1.207	34.0	158.7	.962D	1.451A	95.2	.758	2.1	-.8	334.2	.169
4-5930	4-6093	.190	260.1	-29.8	-1.7	.705	101.3	.348	1.103	203.0	364.5	.719	1.487D	91.2	1.369	-.3	-1.9	34.8	.190
4-6093	4-6320	.190	103.0	-23.7	-3.4	1.286	96.8	.222	.887	320.8	583.1	.690	1.084	79.8	.928	.6	-3.7	196.6	.170
		11.37	7.81	3.77	3.57	6.97	4.04	12.19	1/1/2	41.2	151.4	69.3	1.672	1.759	24.7	342.6	18.9	147.0D	1.870
MARS ARRIVAL DATE = 2445940 (27 AUG 1984)																			
4-5610	4-5940	.254	185.2	5.1	1.7	1.059	104.7	.279	1.140	280.4	562.5	.822	1.458	81.8	.732	1.2	-18.1	273.0	.153
4-5940	4-6103.3	.204	260.6	-23.1	.2	.711	102.8	.356	1.102	205.8	378.0	.710	1.495D	94.7	1.370	-2.1	-13.2	29.1	.221
4-6103.3	4-6170	.221	78.9	-17.4	-2.7	1.388	92.7	.386	1.165	350.2	451.6	.716	1.615A	111.3	1.066	-1.5	-13.0	200.2	.372
		13.13	9.90	5.55	3.23	6.64	4.35	15.66	2/1/1	109.2	4.2	48.2	1.235	2.451	17.6	325.2	5.1	171.8D	1.793
4-5610	4-5940	.254	185.2	5.1	1.7	1.059	104.7	.279	1.140	280.4	562.5	.822	1.458	81.8	.732	1.2	-18.1	273.0	.153
4-5940	4-6127.9	.204	281.3	-31.4	-2.4	.678	98.3	.374	1.050	194.3	406.5	.658	1.443D	102.2	1.354	.5	2.2	37.8	.317
4-6127.9	4-6170	.317	63.2	-13.9	-3.1	1.440	82.3	.502	1.403	23.2	84.7	.699D	2.107A	115.5	1.152	-3.5	-17.5	202.1	.476
		13.14	9.91	5.55	3.23	6.64	4.36	17.99	2/2/1	109.2	8.1	29.9	.600	3.877	33.4	324.2	32.7	124.6D	1.726
4-5620	4-5940	.227	191.7	3.0	1.6	1.064	103.0	.258	1.146	286.2	558.5	.851	1.442	83.8	.735	1.0	-18.5	282.3	.140
4-5940	4-6070.9	.222	254.4	-28.7	-1.8	.713	104.9	.373	1.106	208.6	328.5	.694A	1.519D	81.8	1.366	-.3	-1.7	57.3	.259
4-6070.9	4-6180	.259	68.4	-43.8	-8.0	1.298	97.4	.250	.921	321.3	484.6	.691	1.150A	103.5	.950	5.2	13.6	201.1	.234
		12.86	9.89	5.11	2.97	6.38	4.79	13.09	2/1/1	100.4	28.4	43.2	.897	2.717	78.3	31.7	64.0	80.5L	1.539
4-5620	4-5940	.227	191.7	3.0	1.6	1.064	103.0	.258	1.146	286.2	558.5	.851	1.442	83.8	.735	1.0	-18.5	282.3	.140
4-5940	4-6139.6	.213	294.6	-28.8	-2.1	.660	94.9	.392	1.023	187.6	418.7	.622	1.425D	105.6	1.344	.4	1.3	47.9	.374
4-6139.6	4-6180	.374	50.9	-10.2	-2.9	1.358	75.1	.406	1.065	54.2	106.5	.633D	1.497A	113.7	1.025	-4.3	-19.0	199.8	.407
		12.64	9.67	5.11	2.97	6.38	4.57	16.43	2/2/1	100.4	13.0	11.9	.430	9.679	75.6	336.2	74.9	98.7D	3.736
4-5630	4-5940	.205	198.2	1.3	1.6	1.069	101.6	.241	1.153	292.1	554.4	.875	1.431	85.5	.738	.7	-18.7	291.5	.133
4-5940	4-6075.5	.218	253.6	-28.6	-1.7	.718	104.8	.366	1.114	209.4	336.7	.706A	1.522D	83.8	1.369	-.4	-2.1	54.3	.230
4-6075.5	4-6190	.230	70.8	-46.3	-7.5	1.290	96.1	.226	.903	326.0	491.7	.699	1.107A	101.2	.936	4.4	11.8	205.6	.197
		12.28	9.47	4.77	2.81	6.22	4.70	12.54	2/1/1	91.8	31.7	46.5	1.134	2.534	74.3	24.1	60.4	86.4L	1.740
4-5630	4-5940	.205	198.2	1.3	1.6	1.069	101.6	.241	1.153	292.1	554.4	.875	1.431	85.5	.738	.7	-18.7	291.5	.133
4-5940	4-6146.2	.223	302.3	-26.8	-2.1	.648	92.5	.407	1.008	183.7	425.5	.598	1.419D	107.6	1.338	.3	1.0	54.4	.409
4-6146.2	4-6190	.409	46.2	-7.0	-2.3	1.285	71.4	.365	.885	79.6	130.9	.562D	1.208A	109.9	.924	-4.3	-18.7	194.9	.332
		12.40	9.59	4.77	2.81	6.22	4.82	14.86	2/2/1	91.8	25.2	11.5	.359	10.005	135.6	333.4	-43.9	85.7L	3.229
4-5640	4-5940	.186	204.7	.2	1.7	1.074	100.3	.228	1.159	298.1	550.5	.895	1.424	86.9	.742	.4	-18.8	300.2	.128
4-5940	4-6079.1	.216	253.4	-28.4	-1.6	.720	104.7	.362	1.118	209.8	342.9	.713A	1.523D	85.5	1.371	-.4	-2.5	50.9	.213
4-6079.1	4-6200	.213	71.7	-50.1	-7.3	1.284	94.9	.206	.889	330.5	500.0	.705	1.072A	99.0	.924	4.1	12.7	209.2	.166
		11.88	9.14	4.50	2.73	6.15	4.65	12.14	2/1/1	83.7	38.0	50.8	1.327	2.333	73.0	21.3	57.6	90.7D	1.769
4-5640	4-5940	.186	204.7	.2	1.7	1.074	100.3	.228	1.159	298.1	550.5	.895	1.424	86.9	.742	.4	-18.8	300.2	.128
4-5940	4-6151.3	.235	308.1	-25.0	-2.0	.640	90.5	.421	.997	180.6	430.7	.577	1.417D	109.2	1.333	.3	.9	59.6	.439
4-6151.3	4-6200	.439	45.6	-4.4	-1.7	1.234	69.0	.370	.797	97.0	149.8	.502D	1.091A	105.3	.851	-4.1	-16.9	186.3	.279
		12.33	9.60	4.50	2.73	6.15	5.10	13.85	2/2/1	83.7	40.5	14.9	.311	7.689	159.3	337.9	-20.4	87.7L	2.082
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6075.4	.219	253.6	-28.6	-1.7	.718	104.8	.366	1.114	209.4	336.6	.706A	1.522D	83.8	1.369	-.4	-2.1	54.3	.230
4-6075.4	4-6210	.230	70.9	55.3	6.6	1.275	95.1	.193	.872	327.3	512.5	.703	1.040A	96.1	.910	-11.8	-52.9	160.7	.229
		11.69	8.98	4.28	2.71	6.12	4.70	13.01	2/1/2	76.4	67.8	59.0	1.132	2.030	79.1	34.6	-60.7	81.4L	1.166
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6082.5	.214	253.5	-28.3	-1.6	.721	104.6	.359	1.120	209.8	348.4	.717A	1.522D	86.9	1.372	-.4	-2.9	47.3	.201
4-6082.5	4-6210	.201	71.8	-53.8	-7.3	1.280	94.0	.192	.879	334.8	508.6	.710	1.048A	96.8	.915	4.0	15.4	211.4	.142
		11.59	8.88	4.28	2.71	6.12	4.60	11.86	2/1/1	76.4	46.2	54.6	1.461	2.179	72.7	19.5	55.4	94.6D	1.746
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6156.0	.249	313.2	-23.2	-2.0	.632	86.3	.436	.987	177.8	435.5	.557	1.417	110.8	1.326	.3	.8	64.6	.470
4-6156.0	4-6210	.470	47.8	-2.3	-1.0	1.200	67.0	.393	.748	108.1	162.6	.454D	1.042A	100.5	.799	-3.9	-13.7	181.0	.250
		12.43	9.72	4.28	2.71	6.12	5.45	15.35	2/2/1	76.4	57.3	17.1	.272	6.739	169.7	343.4	-10.1	91.1D	1.563
4-5660	4-5940	.155	217.4	.4	2.1	1.083	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.128
4-5940	4-6083.9	.214	253.6	-26.3	-1.6	.721	104.5	.359	1.120	209.8	350.1	.718A	1.521D	87.4	1.373	-.4	-3.1	46.1	.199
4-6083.9	4-6220	.199	71.3	56.4	7.5	1.276	95.6	.185	.871	336.5	518.2	.712	1.031A	94.7	.908	-10.9	-55.0	161.8	.207
		11.41	8.69	4.10	2.72	6.13	4.59	12.68	2/1/2	70.0	71.5	62.9	1.522	1.916	74.7	20.8	-58.2	94.7D	1.393

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445940
27 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5660	4-5940	.155	217.4	.4	2.1	1.083	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.126
4-5940	4-6085.7	.213	253.8	-28.2	-1.5	.721	104.4	.358	1.120	209.7	353.4	.719A	1.520D	88.3	1.373	-.5	-3.4	43.6	.195
4-6085.7	4-6220	.195	70.8	-57.1	-7.4	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.9	.909	4.0	19.5	212.1	.124
		11.36	8.66	4.10	2.72	6.13	4.56	11.68	2/1/1	70.0	56.5	57.8	1.586	2.068	72.9	17.8	53.7	99.1D	1.693
4-5660	4-5940	.155	217.4	.4	2.1	1.083	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.126
4-5940	4-6161.1	.267	318.2	-21.2	-1.9	.623	85.7	.455	.977	174.9	440.7	.532	1.421	112.7	1.323	.3	.7	70.0	.506
4-6161.1	4-6220	.506	52.1	-.6	-.3	1.175	64.9	.425	.717	115.9	172.0	.412D	1.022A	95.8	.760	-3.5	-9.7	174.8	.246
		12.74	10.02	4.10	2.72	6.13	5.92	13.29	2/2/1	70.0	73.7	18.0	.235	6.398	176.0	349.1	-3.8	94.3D	1.270
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6088.9	.211	254.5	-28.0	-1.4	.720	104.2	.356	1.119	209.4	358.3	.720A	1.517D	89.6	1.373	-.6	-4.0	39.8	.192
4-6088.9	4-6230	.192	69.7	-59.9	-7.5	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	4.1	24.6	211.1	.114
		11.25	8.49	3.96	2.76	6.18	4.52	11.59	2/1/2	64.6	68.3	60.4	1.632	1.988	73.3	15.8	52.3	103.6D	1.612
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6092.1	.209	255.4	-27.8	-1.3	.719	104.0	.355	1.117	208.9	362.9	.720	1.514D	90.8	1.373	-.7	-4.7	36.4	.193
4-6092.1	4-6230	.193	67.4	61.9	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.0	-57.3	158.4	.203
		11.21	8.45	3.96	2.76	6.18	4.48	12.63	2/1/1	64.6	77.3	70.7	1.618	1.728	75.2	14.2	-56.4	105.8D	1.178
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6167.2	.295	323.7	-18.9	-1.9	.613	82.2	.483	.965	171.5	447.1	.498	1.431	115.2	1.317	.3	.6	76.5	.554
4-6167.2	4-6230	.554	58.3	.8	.4	1.151	62.1	.469	.692	122.6	178.5	.367D	1.016A	91.3	.724	-3.1	-5.7	171.5	.266
		13.38	10.62	3.96	2.76	6.18	6.65	13.61	2/2/1	64.6	87.6	18.2	.196	6.322	179.2	355.6	.6	97.8D	1.042
4-5680	4-5940	.134	229.6	8.2	3.1	1.091	95.7	.195	1.186	324.1	536.0	.954	1.417A	91.0	.754	-1.7	-23.5	328.3	.134
4-5940	4-6092.3	.209	255.4	-27.7	-1.3	.719	104.0	.355	1.116	208.8	363.2	.720	1.513D	90.9	1.373	-.7	-4.7	36.1	.193
4-6092.3	4-6240	.193	68.4	-62.4	-7.7	1.276	91.9	.173	.867	346.9	533.6	.717	1.018A	91.3	.903	4.4	30.1	208.9	.110
		11.19	8.36	3.86	2.84	6.25	4.48	11.56	2/1/2	60.4	80.6	62.4	1.615	1.930	73.8	13.9	50.9	106.4D	1.502
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6096.1	.207	256.8	-27.2	-1.1	.717	103.6	.355	1.113	208.0	368.5	.717	1.508D	92.2	1.372	-.9	-5.9	32.8	.198
4-6096.1	4-6250	.198	67.2	-64.6	-8.1	1.276	91.3	.172	.867	350.8	541.0	.718	1.017	89.8	.903	4.9	34.9	206.9	.114
		11.32	8.33	3.89	2.99	6.40	4.44	11.59	2/1/2	57.9	91.8	63.7	1.530	1.895	74.6	12.4	49.4	113.4D	1.369
4-5700	4-5940	.177	246.6	38.9	8.0	1.095	93.5	.187	1.197	338.7	530.4	.973	1.421A	92.2	.760	-7.0	-42.8	345.5	.169
4-5940	4-6100.4	.205	258.9	-25.7	-.6	.713	103.2	.355	1.107	206.8	374.2	.713	1.500D	93.7	1.371	-1.3	-8.7	30.2	.209
4-6100.4	4-6260	.209	65.5	-67.4	-8.7	1.277	90.7	.173	.869	355.0	547.6	.719	1.019	88.4	.904	5.7	38.8	206.3	.126
		12.32	8.77	4.38	3.56	6.96	4.39	11.70	2/1/2	60.6	100.6	63.4	1.374	1.904	75.8	12.0	47.4	118.6D	1.242
4-5750	4-5940	.109	188.2	-32.8	-2.6	1.092	86.2	.189	1.201	24.4	165.2	.974D	1.428A	93.4	.762	2.9	3.4	330.9	.152
4-5940	4-6087.4	.212	254.1	-28.1	-1.5	.721	104.3	.357	1.119	209.5	356.0	.720A	1.519D	88.9	1.373	-.5	-3.7	41.6	.193
4-6087.4	4-6310	.193	96.1	-23.0	-3.4	1.282	97.2	.220	.881	318.2	579.9	.687	1.075	80.4	.921	.0	-3.5	188.7	.163
		11.36	8.17	3.63	3.19	6.60	4.54	12.10	1/1/2	49.5	149.3	56.0	1.616	2.128	25.7	343.5	20.4	138.2D	1.825
4-5760	4-5940	.123	188.5	-24.6	-2.1	1.087	84.4	.195	1.194	35.4	166.2	.961D	1.427A	93.3	.758	2.3	.2	331.0	.151
4-5940	4-6092.2	.209	255.4	-27.7	-1.3	.719	104.0	.355	1.116	208.8	363.1	.720	1.513D	90.8	1.373	-.7	-4.7	36.2	.193
4-6092.2	4-6320	.193	102.7	-23.2	-3.4	1.286	97.0	.223	.887	319.7	583.2	.689	1.085	79.6	.928	.5	-4.1	196.3	.172
		11.43	8.24	3.76	3.18	6.59	4.48	12.21	1/1/2	50.0	151.6	66.6	1.616	1.822	23.7	343.0	16.5	146.8D	1.328
4-5770	4-5940	.146	189.8	-19.5	-1.9	1.081	82.5	.205	1.182	47.1	167.8	.939D	1.425A	93.1	.753	1.9	-2.7	330.0	.152
4-5940	4-6096.0	.207	256.8	-27.2	-1.1	.717	103.6	.355	1.113	208.0	366.4	.716	1.506D	92.2	1.372	-.9	-5.9	32.9	.198
4-6096.0	4-6330	.198	109.3	-22.0	-3.3	1.289	97.3	.230	.892	319.3	586.5	.687	1.097	78.8	.954	.9	-5.4	203.8	.184
		11.64	8.43	4.00	3.21	6.61	4.44	12.37	1/1/2	51.6	153.7	75.2	1.532	1.639	22.0	343.6	12.9	153.2D	.980

MARS ARRIVAL DATE = 2445950 (6 SEP 1984)

4-5620	4-5950	.235	192.5	2.9	1.7	1.064	103.5	.264	1.146	284.8	563.1	.843	1.449	82.2	.741	1.0	-19.1	277.9	.150
4-5950	4-6139.0	.217	286.5	-30.2	-2.4	.670	98.0	.391	1.029	192.9	417.0	.627	1.431D	105.1	1.346	.7	2.5	48.2	.366
4-6139.0	4-6180	.366	51.0	-10.3	-2.9	1.359	75.5	.403	1.067	52.9	106.0	.637D	1.497A	113.5	1.026	-4.2	-19.1	200.0	.404
		13.07	9.90	5.23	3.16	6.57	4.67	16.36	2/2/1	110.7	12.8	13.1	.448	8.759	77.8	337.1	77.1	97.6D	3.475
4-5630	4-5950	.210	196.9	1.2	1.7	1.069	101.9	.245	1.152	291.0	559.4	.869	1.434	84.0	.744	.7	-19.5	286.4	.138
4-5950	4-6074.7	.249	250.2	-27.3	-1.6	.736	107.8	.381	1.137	215.7	335.6	.704A	1.571D	83.3	1.376	-.6	-3.2	54.5	.242
4-6074.7	4-6190	.242	70.9	-49.0	-8.2	1.289	96.2	.225	.901	325.3	492.3	.698	1.104A	101.1	.935	5.1	15.1	206.2	.201
		13.21	10.29	4.84	2.91	6.32	5.45	12.59	2/1/1	102.8	34.4	47.9	1.025	2.464	75.5	27.7	59.4	83.8L	1.501
4-5630	4-5950	.210	196.9	1.2	1.7	1.069	101.9	.245	1.152	291.0	559.4	.869	1.434	84.0	.744	.7	-19.5	286.4	.138
4-5950	4-6145.5	.221	296.2	-28.5	-2.2	.659	95.9	.401	1.013	188.9	423.3	.606	1.419D	106.9	1.340	.6	1.9	54.4	.397
4-6145.5	4-6190	.397	46.0	-7.1	-2.3	1.288	72.1	.358	.891	77.2	129.9	.572D	1.210A	109.6	.928	-4.3	-19.0	195.5	.327
		12.53	9.61	4.84	2.91	6.32	4.77	14.76	2/2/1	102.8	24.7	12.3	.382	9.318	132.4	338.5	-46.8	85.0L	5.176
4-5640	4-5950	.189	205.3	-.0	1.7	1.074	100.5	.230	1.158	297.2	555.6	.892	1.423	85.5	.747	.4	-19.9	294.8	.130
4-5950	4-6078.7	.246	250.0	-27.1	-1.5	.739	107.7	.376	1.142	216.1	342.5	.712A	1.571D	85.3	1.378	-.6	-3.8	50.8	.221
4-6078.7	4-6200	.221	72.0	-52.1	-7.9	1.284	95.0	.206	.888	330.1	500.3	.705	1.071A	98.9	.924	4.6	15.3	209.8	.170
		12.67	9.91	4.54	2.76	6.17	5.38	12.18	2/1/1	95.0	39.8	51.4	1.226	2.305	73.5	23.2	56.5	89.3L	1.599
4-5640	4-5950	.189	205.3	-.0	1.7	1.074	100.5	.230	1.158	297.2	555.6	.892	1.423	85.5	.747	.4	-19.9	294.8	.130
4-5950	4-6150.0	.227	302.2	-26.9	-2.1	.650	94.1	.412	1.001	185.9	427.9	.589	1.413D	108.3	1.335	.6	1.7	59.2	.421
4-6150.0	4-6200	.421	45.1	-4.5	-1.6	1.240	69.9	.357	.805	94.0	148.7	.517D	1.092A	104.9	.859	-4.1	-17.6	189.2	.271
		12.21	9.45	4.54	2.76	6.17	4.91	13.71	2/2/1	95.0	39.6	15.4	.339	7.467	156.3	338.3	-23.1	86.3L	2.189
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	305.5	551.9	.911	1.416	86.7	.750	.0	-20.3	302.8	.125
4-5950	4-6075.6	.248	250.1	-27.2	-1.6	.737	107.8	.380	1.139	215.8	337.2	.706A	1.571D	83.8	1.376	-.6	-3.3	53.7	.237
4-6075.6	4-6210	.237	71.5	56.7	9.0	1.275	95.1	.193	.872	327.4	512.5	.703	1.040A	96.2	.910	-12.2	-53.3	159.8	.235
		12.40	9.73	4.29	2.67	6.09	5.43	13.10	2/1/2	87.7	68.2	61.7	1.071	1.951	79.1	34.5	-60.6	81.6L	1.018
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	305.5	551.9	.911	1.416	86.7	.750	.0	-20.3	302.8	.125
4-5950	4-6082.3	.243	250.1	-26.9	-1.4	.739	107.5	.373	1.143	216.2	348.4	.717A	1.570D	86.8	1.379	-.7	-4.3	47.0	.209
4-6082.3	4-6210	.209	72.0	-55.5	-7.7	1.280	94.0	.192	.879	334.6	508.8	.710	1.048A	96.8	.915	4.4	17.7	212.1	.145
		12.28	9.61	4.29	2.67	6.09	5.31	11.90	2/1/1	87.7	47.6	54.9	1.378	2.169	73.0	20.7	54.2	94.1D	1.611
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	303.5	551.9	.911	1.416	86.7	.750	.0	-20.3	302.8	.125
4-5950	4-6154.3	.235	307.4	-25.3	-2.1	.642	92.3	.422	.991	183.2	432.0	.573	1.410D	109.6	1.330	.5	1.5	63.7	.445
4-6154.3	4-6210	.445	46.9	-2.4	-.9	1.209	68.3	.373	.759	104.4	161.9	.476D	1.043A	100.2	.812	-3.8	-14.8	181.9	.236
		12.07	9.39	4.29	2.67	6.09	5.10	13.16	2/2/1	87.7	56.1	17.3	.304	6.651	167.2	342.9	-12.4	89.2L	1.716
4-5660	4-5950	.155	217.6	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.6	.753	-.3	-20.9	310.3	.123
4-5950	4-6083.6	.243	250.2	-26.8	-1.4	.739	107.4	.372	1.143	216.2	350.5	.718A	1.569D	87.4	1.379	-.7	-4.6	45.5	.205
4-6083.6	4-6220	.205	71.7	58.0	7.9	1.276	93.6	.183	.871	336.5	516.2	.712	1.031A	94.7	.908	-11.2	-55.5	160.7	.213
		12.03	9.39	4.10	2.63	6.05	5.29	12.76	2/1/2	81.1	71.9	66.0	1.424	1.836	75.2	21.3	-58.4	94.5D	1.191
4-5660	4-5950	.155	217.6	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.6	.753	-.3	-20.9	310.3	.123
4-5950	4-6085.6	.241	250.4	-26.7	-1.3	.739	107.3	.371	1.143	216.1	353.6	.719A	1.567D	88.3	1.379	-.7	-4.9	43.1	.202
4-6085.6	4-6220	.202	71.2	-58.6	-7.8	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.8	.909	4.4	21.7	212.9	.126
		11.99	9.36	4.10	2.63	6.05	5.26	11.72	2/1/1	81.1	57.6	57.9	1.479	2.066	73.2	18.6	52.5	96.6D	1.576
4-5660	4-5950	.155	217.6	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.6	.753	-.3	-20.9	310.3	.123
4-5950	4-6158.6	.245	312.6	-23.5	-2.0	.634	90.4	.435	.981	180.5	436.3	.554	1.408D	111.0	1.326	.5	1.3	68.4	.471
4-6158.6	4-6220	.471	50.5	-.6	-.3	1.188	66.7	.395	.732	111.2	171.3	.443D	1.022A	95.6	.779	-3.5	-11.1	175.4	.228
		12.09	9.45	4.10	2.63	6.05	5.35	12.99	2/2/1	81.1	72.6	18.0	.271	6.381	173.9	347.6	-5.7	91.9D	1.458
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	98.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6089.0	.239	251.1	-26.5	-1.2	.738	107.1	.369	1.141	215.7	356.7	.720A	1.562D	89.8	1.379	-.8	-5.6	39.3	.199
4-6089.0	4-6230	.199	70.0	-61.4	-7.9	1.276	92.5	.177	.869	343.2	525.6	.716	1.022A	93.0	.905	4.5	26.8	212.1	.117
		11.78	9.15	3.95	2.63	6.05	5.20	11.62	2/1/2	75.3	69.0	60.3	1.522	1.992	75.7	16.6	51.0	103.6D	1.510
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	98.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6092.0	.237	251.8	-26.2	-1.1	.737	106.8	.368	1.138	215.1	363.0	.720	1.557D	90.8	1.379	-.9	-6.3	36.2	.200
4-6092.0	4-6230	.199	67.7	63.2	8.0	1.277	91.9	.176	.870	347.1	524.7	.717	1.023A	93.2	.906	-11.4	-57.6	157.5	.209
		11.73	9.10	3.95	2.63	6.05	5.15	12.71	2/1/1	75.3	77.6	73.6	1.510	1.670	75.9	15.1	-56.9	105.0D	1.012
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	98.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6163.5	.260	316.1	-21.4	-1.9	.625	87.9	.452	.970	177.4	441.2	.531	1.409	112.7	1.320	.5	1.2	73.7	.503
4-6163.5	4-6230	.503	55.7	.8	.4	1.171	64.9	.424	.714	116.4	176.2	.411D	1.016A	91.3	.754	-3.2	-7.4	171.5	.257
		12.31	9.68	3.95	2.63	6.05	5.74	13.13	2/2/1	75.3	87.2	18.0	.257	6.376	178.4	352.8	-.8	94.6D	1.277

STOPOVER TIME = 0 DAYS

1984 INBOUND SWINGBY

MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2445950
6 SEP 1984

LAUNCH DEPART	ARRIVE SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	RETURN	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
		SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5660	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.758	-1.5	-24.3	323.7	.124
4-5950	4-6092.5	.236	252.0	-26.2	-1.1	.736	106.8	.368	1.138	215.0	363.7	.719	1.556D	91.0	1.379	-.9	-6.5	35.7	.200
4-6092.5	4-6240	.200	68.6	-63.9	-8.1	1.276	91.9	.173	.868	347.2	533.5	.717	1.018A	91.3	.903	4.8	32.1	210.2	.114
		11.64	8.98	3.84	2.66	6.07	5.14	11.59	2/1/2	70.5	80.9	62.0	1.504	1.940	74.4	14.8	49.6	108.6D	1.414
4-5680	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.758	-1.5	-24.3	323.7	.124
4-5950	4-6169.5	.285	324.4	-18.7	-1.8	.614	84.4	.478	.958	173.8	447.2	.500	1.415	115.0	1.314	.5	1.1	80.3	.548
4-6169.5	4-6240	.548	62.6	1.9	1.0	1.155	62.5	.463	.696	121.7	183.3	.373D	1.018	87.1	.729	-2.8	-4.3	170.4	.263
		12.87	10.21	3.84	2.66	6.07	6.37	13.57	2/2/1	70.5	98.6	17.7	.200	6.499	176.9	359.1	3.1	97.6D	1.101
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-26.5	330.2	.129
4-5950	4-6096.4	.234	253.3	-25.6	-.8	.734	106.4	.367	1.132	214.0	369.0	.717	1.548D	92.4	1.378	-1.1	-7.7	32.6	.206
4-6096.4	4-6250	.206	67.0	-66.3	-8.5	1.276	91.3	.172	.868	351.2	540.9	.718	1.017	89.8	.903	5.3	36.7	208.3	.119
		11.61	8.87	3.80	2.74	6.15	5.07	11.63	2/1/2	67.0	91.6	63.2	1.422	1.910	75.3	13.5	46.2	113.6D	1.294
4-5700	4-5950	.141	241.2	29.8	5.6	1.093	93.2	.183	1.191	338.9	536.6	.973	1.408A	90.8	.763	-4.6	-37.4	338.4	.141
4-5950	4-6100.7	.230	255.3	-24.4	-.4	.730	106.0	.366	1.125	212.7	374.7	.713	1.537D	93.9	1.376	-1.6	-10.0	30.1	.217
4-6100.7	4-6260	.217	65.1	-68.7	-9.1	1.277	90.7	.172	.869	355.5	547.8	.719	1.018	88.4	.904	6.1	40.3	207.7	.131
		11.92	8.93	3.94	2.99	6.39	4.99	11.74	2/1/2	65.9	100.1	62.9	1.281	1.916	76.7	13.3	46.5	118.7D	1.174
4-5750	4-5950	.112	184.1	-37.0	-3.1	1.089	86.2	.183	1.192	25.2	172.0	.974D	1.411A	91.8	.763	3.3	5.8	326.3	.140
4-5950	4-6085.2	.241	250.4	-26.7	-1.4	.739	107.3	.371	1.143	216.1	353.0	.719A	1.567D	88.1	1.379	-.7	-4.9	43.6	.202
4-6085.2	4-6310	.202	95.1	-21.7	-3.4	1.281	97.8	.225	.881	315.2	580.4	.682	1.079	80.0	.921	-.2	-4.3	187.8	.169
		11.88	8.92	3.66	2.95	6.36	5.26	12.17	1/1/2	59.3	149.8	52.6	1.470	2.258	24.2	343.5	18.8	135.6D	1.850
4-5760	4-5950	.123	186.2	-27.2	-2.5	1.085	84.5	.190	1.185	36.1	172.9	.961D	1.410A	91.7	.760	2.5	1.3	326.8	.136
4-5950	4-6090.9	.238	251.5	-26.3	-1.2	.737	106.9	.368	1.139	215.3	361.4	.720	1.559D	90.4	1.379	-.9	-6.1	37.3	.199
4-6090.9	4-6320	.199	102.3	-22.4	-3.4	1.285	97.4	.227	.886	317.8	583.5	.686	1.087	79.4	.927	.4	-4.6	195.8	.175
		11.85	8.93	3.76	2.92	6.33	5.17	12.25	1/1/2	59.7	151.9	64.6	1.520	1.872	22.7	343.0	14.9	145.6D	1.326
4-5770	4-5950	.144	188.5	-21.2	-2.1	1.079	82.6	.200	1.175	47.5	174.3	.940D	1.410A	91.4	.755	2.0	-2.5	325.9	.139
4-5950	4-6095.0	.235	252.8	-25.9	-.9	.735	106.6	.367	1.135	214.4	367.0	.718	1.551D	91.9	1.378	-1.1	-7.2	33.6	.203
4-6095.0	4-6330	.203	108.9	-21.4	-3.3	1.288	97.6	.233	.892	317.8	586.7	.684	1.099	78.6	.934	.8	-5.8	203.5	.187
		12.01	9.07	3.98	2.94	6.35	5.10	12.40	1/1/2	61.4	154.0	73.7	1.458	1.667	21.4	343.6	11.5	152.3D	.972
MARS ARRIVAL DATE = 2445960 (16 SEP 1984)																			
4-5630	4-5960	.218	199.8	.9	1.8	1.069	102.3	.251	1.151	289.4	564.0	.862	1.441	82.4	.749	.7	-20.1	282.3	.148
4-5960	4-6145.0	.229	290.3	-29.8	-2.4	.669	99.2	.401	1.020	194.2	422.0	.610	1.429D	106.8	1.342	.9	3.0	54.7	.393
4-6145.0	4-6190	.393	46.0	-7.2	-2.3	1.269	72.3	.356	.892	76.5	129.7	.575D	1.210A	109.5	.929	-4.2	-19.1	195.6	.325
		13.05	9.93	4.96	3.12	6.53	4.97	14.72	2/2/1	112.9	24.5	13.5	.390	8.535	130.6	338.4	-48.3	84.5L	2.937
4-5640	4-5960	.194	206.1	-.4	1.8	1.073	100.8	.234	1.157	295.9	560.4	.887	1.427	84.0	.751	.4	-20.7	269.9	.136
4-5960	4-6149.4	.230	295.9	-28.4	-2.3	.660	97.6	.409	1.007	191.3	426.1	.596	1.419D	107.8	1.357	.8	2.6	59.3	.413
4-6149.4	4-6200	.413	44.9	-4.6	-1.6	1.242	70.4	.351	.809	92.5	148.2	.525D	1.093A	104.8	.862	-4.0	-17.9	189.6	.268
		12.49	9.61	4.61	2.88	6.29	4.99	13.65	2/2/1	105.8	39.1	16.1	.352	7.143	153.5	339.5	-25.6	85.5L	2.165
4-5650	4-5960	.174	212.3	-1.0	1.8	1.078	99.4	.219	1.162	302.4	556.9	.907	1.417	85.4	.754	.0	-21.3	297.5	.128
4-5960	4-6082.0	.282	247.7	-25.8	-1.3	.764	110.7	.393	1.183	223.3	348.9	.717A	1.648D	86.9	1.369	-.8	-5.3	45.7	.219
4-6082.0	4-6210	.219	72.6	-57.5	-8.3	1.280	94.1	.192	.879	334.3	508.9	.710	1.047A	96.8	.915	5.0	20.6	215.0	.150
		13.58	10.65	4.34	2.73	6.14	6.31	11.95	2/1/1	98.9	49.5	56.3	1.253	2.121	73.1	20.5	52.7	94.1D	1.404
4-5650	4-5960	.174	212.3	-1.0	1.8	1.078	99.4	.219	1.162	302.4	556.9	.907	1.417	85.4	.754	.0	-21.3	297.5	.128
4-5960	4-6153.3	.233	301.0	-27.1	-2.2	.652	96.1	.416	.997	188.6	429.8	.582	1.412D	108.9	1.332	.8	2.3	63.5	.432
4-6153.3	4-6210	.432	46.3	-2.4	-.9	1.213	69.0	.363	.765	102.3	161.4	.488D	1.043A	100.0	.818	-3.8	-15.4	182.4	.233
		12.13	9.40	4.34	2.73	6.14	5.06	13.07	2/2/1	98.9	55.5	17.8	.322	6.479	164.6	343.3	-14.6	88.1L	1.765
4-5660	4-5960	.157	218.3	-.7	2.0	1.082	98.1	.208	1.168	309.1	553.6	.925	1.411	86.5	.757	-.3	-22.1	304.8	.123
4-5960	4-6083.7	.281	247.9	-25.7	-1.3	.764	110.6	.392	1.182	223.2	351.5	.719A	1.646D	87.6	1.390	-.9	-5.6	43.8	.215
4-6083.7	4-6220	.215	72.3	60.0	8.4	1.276	93.6	.183	.871	336.6	516.2	.712	1.031A	94.7	.908	-11.8	-56.0	159.4	.220
		13.03	10.39	4.12	2.63	6.05	6.27	12.88	2/1/2	92.4	72.6	69.3	1.302	1.758	75.3	20.6	-57.9	95.0D	.986
4-5660	4-5960	.157	218.3	-.7	2.0	1.082	98.1	.208	1.168	309.1	553.6	.925	1.411	86.5	.757	-.3	-22.1	304.8	.123
4-5960	4-6085.6	.279	248.1	-25.6	-1.2	.763	110.5	.391	1.181	223.1	354.4	.720A	1.642D	88.4	1.390	-.9	-6.0	41.7	.212
4-6085.6	4-6220	.211	71.6	-60.6	-8.3	1.277	93.2	.183	.873	336.9	517.3	.713	1.032A	94.8	.909	4.9	24.6	214.0	.133
		12.99	10.35	4.12	2.63	6.05	6.23	11.77	2/1/1	92.4	59.1	59.1	1.344	2.027	75.4	18.3	51.0	99.2D	1.380
4-5660	4-5960	.157	218.3	-.7	2.0	1.082	98.1	.208	1.168	309.1	553.6	.925	1.411	86.5	.757	-.3	-22.1	304.8	.123
4-5960	4-6157.2	.238	306.1	-25.6	-2.1	.644	94.4	.425	.987	186.0	433.4	.567	1.406D	110.0	1.328	.7	2.1	67.7	.452
4-6157.2	4-6220	.452	49.5	-.6	-.3	1.193	67.7	.380	.741	108.4	170.8	.460D	1.022A	95.5	.789	-3.5	-12.0	175.8	.219
		11.93	9.29	4.12	2.63	6.05	5.17	12.85	2/2/1	92.4	71.9	18.3	.294	6.281	171.5	347.2	-7.8	90.4D	1.555
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120
4-5960	4-6089.1	.276	248.8	-25.3	-1.1	.761	110.2	.388	1.177	222.6	359.6	.720A	1.634D	89.9	1.389	-1.0	-6.7	37.6	.209
4-6089.1	4-6230	.209	70.5	-63.4	-8.4	1.278	92.5	.177	.869	343.3	525.6	.716	1.023A	93.0	.905	5.0	29.6	213.4	.123
		12.68	10.10	3.95	2.58	6.00	6.14	11.67	2/1/2	86.6	70.0	61.4	1.378	1.959	74.1	16.4	49.6	104.3D	1.321
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120
4-5960	4-6161.4	.245	311.6	-25.8	-2.0	.636	92.5	.436	.976	183.2	437.4	.550	1.402D	111.2	1.323	.7	1.8	72.3	.475
4-6161.4	4-6230	.475	54.2	.9	.4	1.182	66.4	.400	.726	112.8	177.9	.435D	1.016A	91.4	.769	-3.2	-8.5	171.3	.222
		11.89	9.30	3.95	2.58	6.00	5.35	12.90	2/2/1	86.6	86.7	18.2	.266	6.330	176.6	351.5	-2.8	92.6D	1.418
4-5680	4-5960	.129	229.2	4.5	2.5	1.088	95.7	.191	1.178	323.2	547.4	.953	1.403	88.3	.762	-1.3	-25.2	318.3	.120
4-5960	4-6092.8	.273	249.7	-25.0	-.9	.759	109.9	.386	1.172	221.8	364.7	.719	1.624D	91.3	1.388	-1.1	-7.5	34.3	.211
4-6092.8	4-6240	.211	68.8	-65.9	-8.7	1.278	91.8	.173	.868	347.5	533.5	.717	1.018A	91.4	.903	5.4	34.7	211.9	.121
		12.45	9.88	3.82	2.57	5.99	6.05	11.85	2/1/2	81.5	81.3	63.1	1.355	1.912	75.1	14.9	48.4	109.3D	1.236
4-5680	4-5960	.129	229.2	4.5	2.5	1.088	95.7	.191	1.178	323.2	547.4	.953	1.403	88.3	.762	-1.3	-25.2	318.3	.120
4-5960	4-6166.3	.257	317.7	-21.6	-1.9	.626	90.0	.452	.964	180.0	442.0	.528	1.400D	112.8	1.317	.7	1.7	77.7	.505
4-6166.3	4-6240	.505	60.1	2.0	1.0	1.171	64.8	.426	.714	116.5	183.4	.410D	1.018	87.5	.753	-2.9	-5.6	169.8	.238
		12.05	9.48	3.82	2.57	5.99	5.65	13.16	2/2/1	81.5	98.7	17.6	.236	6.519	177.8	356.5	1.7	94.0D	1.301
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-26.6	324.7	.121
4-5960	4-6096.8	.269	251.0	-24.6	-.7	.755	109.5	.384	1.164	220.6	370.0	.716	1.611D	92.8	1.387	-1.3	-8.8	31.4	.217
4-6096.8	4-6250	.217	66.9	-66.3	-9.1	1.276	91.2	.172	.868	351.8	540.9	.718	1.017	89.8	.903	5.9	39.1	210.2	.126
		12.30	9.70	3.75	2.60	6.02	5.95	11.70	2/1/2	77.4	91.4	64.0	1.278	1.886	76.3	14.1	47.3	114.2D	1.133
4-5690	4-5960	.122	233.9	11.2	3.2	1.090	94.4	.185	1.183	330.7	544.8	.964	1.401	88.9	.764	-2.1	-26.6	324.7	.121
4-5960	4-6172.3	.278	324.7	-18.6	-1.8	.614	86.5	.476	.951	176.1	447.9	.498	1.403	115.0	1.311	.7	1.5	84.5	.547
4-6172.3	4-6250	.547	67.6	2.9	1.6	1.159	62.6	.461	.701	120.8	187.5	.378D	1.024	83.7	.736	-2.5	-3.5	171.2	.266
		12.54	9.94	3.75	2.60	6.02	6.19	13.66	2/2/1	77.4	107.7	17.0	.201	6.785	174.7	2.9	5.3	97.6D	1.162
4-5700	4-5960	.124	238.7	22.9	4.4	1.092	93.2	.180	1.187	338.6	542.5	.973	1.401	89.5	.766	-3.5	-34.9	331.8	.128
4-5960	4-6101.2	.264	252.9	-23.7	-.2	.750	108.9	.383	1.153	219.1	375.7	.712	1.594D	94.3	1.384	-1.7	-10.5	29.4	.228
4-6101.2	4-6260	.228	64.5	-70.5	-9.7	1.277	90.6	.172	.869	356.2	547.7	.719	1.018	88.4	.904	6.7	42.2	209.6	.136
		12.33	9.81	3.78	2.72	6.13	5.83	11.82	2/1/2	74.7	99.4	63.8	1.155	1.891	77.9	14.3	46.0	118.9D	1.029
4-5710	4-5960	.162	246.1	41.5	7.5	1.093	92.0	.177	1.190	346.8	540.5	.979	1.400	89.9	.767	-6.8	-47.5	342.7	.152
4-5960	4-6106.2	.259	255.5	-21.4	.7	.743	108.3	.382	1.139	217.0	381.7	.705	1.574D	96.0	1.381	-2.6	-14.7	28.6	.247
4-6106.2	4-6270	.247	61.2	-72.7	-10.6	1.279	89.8	.174	.871	1.1	194.0	.719D	1.022	87.1	.906	7.9	44.3	210.9	.158
		13.09	9.88	4.19	3.21	6.62	5.70	12.04	2/1/2	75.0	104.9	61.0	.989	1.970	79.8	16.0	43.7	123.9D	.960
4-5750	4-5960	.118	179.4	-42.8	-3.9	1.087	86.2	.179	1.187	25.2	176.2	.974D	1.400A	90.4	.766	4.0	9.1	320.8	.134
4-5960	4-6081.4	.283	247.7	-25.8	-1.3	.764	110.8	.394	1.183	223.3	347.9	.717A	1.649D	86.6	1.389	-.8	-5.2	46.4	.221
4-6081.4	4-6310	.221	93.0	-19.6	-3.4	1.280	98.9	.236	.879	310.0	581.3	.672	1.086	79.3	.920	-.5	-5.6	186.2	.160
		12.86	10.04	3.72	2.85	6.26	6.52	12.31	1/1/2	69.8	150.6	47.6	1.232	2.477	22.5	343.4	17.7	130.5D	1.820
4-5760	4-5960	.124	184.2	-30.9	-2.9	1.083	84.6	.186	1.181	36.0	178.9	.961D	1.400A	90.3	.763	2.9	2.7	321.9	.130
4-5960	4-6088.8	.276	248.7	-25.4	-1.1	.762	110.2	.388	1.178	222.6	359.1	.720A	1.635D	89.8	1.389	-1.0	-6.6	38.2	.209
4-6088.8	4-6320	.209	101.4	-21.1	-3.4	1.284	98.1	.232	.886	314.8	583.9	.680	1.091	79.1	.927	.2	-5.5	195.0	.161
		12.69	9.92	3.77	2.77	6.18	6.15	12.32	1/1/2	70.1	152.4	62.6	1.377	1.923	21.4	342.7	13.6	143.3D	1.272
MARS ARRIVAL DATE = 2445970 (26 SEP 1984)																			
4-5640	4-5970	.203	207.0	-1.0	1.8	1.073	101.3	.240	1.157	294.2	564.9	.879	1.435	82.6	.756	.4	-21.3	266.3	.147
4-5970	4-6149.5	.244	290.4	-29.5	-2.5	.672	101.0	.412	1.016	196.6	425.3	.598	1.434D	107.7	1.340	1.2	5.6	59.9	.413
4-6149.5	4-6200	.413	44.9	-4.6	-1.6	1.242	70.3	.352	.808	92.6	148.3	.524D	1.093A	104.8	.862	-4.0	-17.9	189.5	.268
		13.17	10.07	4.73	3.10	6.51	5.33	13.65	2/2/1	115.5	39.2	17.1	.352	6.744	151.3	341.4	-27.5	85.2L	2.021

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-5650	4-5970	.180	213.1	-1.7	1.8	1.078	99.8	.224	1.162	300.9	561.6	.902	1.422	84.0	.758	.0	-22.1	293.1	.136
4-5970	4-6153.1	.243	295.1	-28.4	-2.4	.663	99.6	.417	1.005	194.0	428.6	.586	1.423D	108.6	1.335	1.1	3.2	63.8	.429
4-6153.1	4-6210	.429	46.2	-2.4	-.9	1.214	69.2	.360	.767	101.8	161.2	.490D	1.043A	100.0	.819	-3.8	-15.6	182.6	.231
		12.59	9.72	4.42	2.87	6.28	5.30	13.04	2/2/1	109.3	55.3	18.4	.327	6.258	162.3	344.4	-16.7	87.5L	1.712
4-5660	4-5970	.161	219.0	-1.7	1.9	1.081	98.4	.211	1.167	307.8	558.4	.921	1.413	85.2	.761	-.3	-23.0	299.9	.128
4-5970	4-6156.6	.243	299.8	-27.2	-2.2	.655	98.2	.423	.994	191.5	431.8	.574	1.414D	109.5	1.331	1.0	2.8	67.7	.445
4-6156.6	4-6220	.445	49.2	-.6	-.3	1.197	68.1	.374	.744	107.4	170.6	.466D	1.023A	95.5	.793	-3.5	-12.4	176.0	.215
		12.19	9.48	4.17	2.72	6.13	5.30	12.80	2/2/1	103.3	71.6	18.6	.304	6.112	169.2	347.8	-9.7	89.6L	1.553
4-5670	4-5970	.144	224.6	-.4	2.1	1.085	97.1	.200	1.172	314.9	555.4	.938	1.406	86.2	.763	-.7	-24.2	306.4	.122
4-5970	4-6160.4	.245	304.9	-25.8	-2.1	.647	96.5	.431	.983	188.8	435.2	.560	1.406D	110.6	1.326	1.0	2.6	71.9	.463
4-6160.4	4-6230	.463	53.4	.9	.4	1.187	67.1	.389	.731	111.0	177.8	.447D	1.016A	91.4	.776	-3.2	-9.1	171.4	.215
		11.95	9.33	3.98	2.62	6.04	5.35	12.80	2/2/1	97.7	86.4	18.5	.281	6.208	174.5	351.4	-4.4	91.4D	1.462
4-5680	4-5970	.130	229.6	2.5	2.4	1.088	95.8	.191	1.177	322.2	552.6	.951	1.402	87.1	.765	-1.2	-26.0	312.7	.119
4-5970	4-6164.8	.249	310.6	-23.9	-2.0	.637	94.6	.441	.971	185.8	439.0	.543	1.400D	111.7	1.321	.9	2.3	76.7	.484
4-6164.8	4-6240	.484	58.8	2.1	1.0	1.179	65.9	.408	.723	113.8	183.4	.426D	1.018	87.7	.765	-2.9	-6.3	169.5	.227
		11.86	9.29	3.83	2.57	5.98	5.46	12.98	2/2/1	92.6	98.6	17.9	.256	6.442	177.7	355.8	.1	93.3D	1.394
4-5690	4-5970	.120	233.9	8.0	2.8	1.090	94.6	.184	1.181	329.8	550.1	.963	1.399	87.7	.767	-1.8	-28.8	318.8	.119
4-5970	4-6169.6	.258	317.3	-21.5	-1.9	.626	92.0	.455	.958	182.4	443.5	.522	1.395D	113.3	1.314	.9	2.1	82.3	.513
4-6169.6	4-6230	.515	65.3	3.1	1.5	1.172	64.5	.431	.715	116.7	187.8	.407D	1.024	84.2	.755	-2.6	-4.4	170.4	.249
		11.97	9.41	3.73	2.55	5.97	5.68	13.32	2/2/1	88.3	108.1	17.0	.229	6.769	175.7	.7	4.1	95.4D	1.320
4-5700	4-5970	.116	237.7	17.3	3.6	1.091	93.5	.179	1.184	337.6	547.9	.972	1.397	88.3	.769	-2.8	-33.6	325.1	.121
4-5970	4-6175.7	.275	325.1	-18.3	-1.7	.613	88.4	.478	.944	178.3	449.2	.493	1.394	115.4	1.307	.9	1.9	89.3	.553
4-6175.7	4-6260	.553	73.3	3.8	2.0	1.162	62.4	.465	.706	120.4	191.2	.378D	1.033	80.6	.742	-2.1	-3.3	173.7	.280
		12.43	9.83	3.70	2.60	6.01	6.13	13.87	2/2/1	84.9	115.0	16.1	.197	7.151	172.6	7.1	7.3	97.9D	1.211

MARS ARRIVAL DATE = 2445980 (6 OCT 1984)

4-5660	4-5980	.167	220.0	-2.8	1.9	1.081	98.8	.216	1.167	306.0	563.0	.916	1.419	84.0	.764	-.3	-23.5	296.0	.136
4-5980	4-6156.8	.260	294.6	-26.1	-2.4	.667	101.8	.427	1.004	196.8	431.1	.575	1.433D	109.6	1.334	1.3	3.7	68.4	.447
4-6156.8	4-6220	.447	49.3	-.6	-.3	1.196	68.0	.376	.743	107.8	170.7	.464D	1.022A	95.5	.792	-3.5	-12.3	175.9	.216
		12.86	9.97	4.25	2.89	6.30	5.72	12.82	2/2/1	113.1	71.7	19.5	.300	5.892	167.2	349.2	-11.5	89.4L	1.469
4-5670	4-5980	.149	225.5	-1.9	2.0	1.085	97.4	.203	1.172	313.3	560.1	.934	1.410	85.1	.767	-.7	-24.7	302.0	.128
4-5980	4-6160.3	.257	299.2	-27.0	-2.2	.658	100.3	.432	.992	194.2	434.1	.563	1.421D	110.4	1.329	1.2	3.3	72.3	.462
4-6160.3	4-6230	.462	53.4	.9	.4	1.187	67.2	.388	.732	110.8	177.8	.448D	1.016A	91.4	.777	-3.2	-9.1	171.4	.215
		12.43	9.69	4.03	2.74	6.15	5.66	12.79	2/2/1	108.0	86.4	19.1	.282	6.027	172.4	352.3	-6.2	91.0D	1.418
4-5680	4-5980	.133	230.4	.4	2.2	1.087	96.1	.194	1.176	320.7	557.4	.949	1.404	85.9	.769	-1.1	-26.4	307.7	.123
4-5980	4-6164.1	.256	304.3	-25.6	-2.1	.648	98.6	.439	.980	191.3	437.4	.549	1.410D	111.4	1.324	1.2	3.0	76.7	.478
4-6164.1	4-6240	.478	58.4	2.1	1.0	1.181	66.3	.403	.726	113.0	183.4	.434D	1.018	87.7	.768	-3.0	-6.5	169.4	.224
		12.14	9.50	3.86	2.64	6.05	5.64	12.93	2/2/1	103.3	98.6	18.3	.263	6.293	176.3	355.9	-1.7	92.6D	1.390
4-5690	4-5980	.120	234.5	4.8	2.5	1.090	94.8	.186	1.180	328.5	555.0	.961	1.399	86.7	.771	-1.6	-28.8	313.5	.120
4-5980	4-6168.4	.258	310.4	-23.7	-1.9	.637	96.5	.449	.967	188.7	441.1	.533	1.400D	112.5	1.318	1.1	2.7	81.7	.499
4-6168.4	4-6250	.499	64.4	3.2	1.5	1.177	65.2	.419	.721	115.0	187.9	.419D	1.024	84.4	.762	-2.6	-4.8	170.0	.241
		12.00	9.42	3.74	2.58	6.00	5.68	13.20	2/2/1	99.0	108.2	17.3	.241	6.656	176.6	.2	2.4	94.3D	1.366
4-5700	4-5980	.113	237.7	12.3	3.1	1.091	93.5	.180	1.184	336.5	552.9	.971	1.396	87.2	.772	-2.4	-32.6	319.0	.120
4-5980	4-6173.5	.264	317.4	-21.2	-1.8	.625	93.8	.462	.952	184.5	445.6	.512	1.392D	114.0	1.311	1.1	2.4	87.5	.526
4-6173.5	4-6260	.526	71.4	4.0	2.0	1.172	63.8	.441	.717	117.2	191.6	.400D	1.033	81.1	.757	-2.3	-3.9	172.9	.265
		12.07	9.50	3.67	2.58	5.99	5.83	13.60	2/2/1	95.4	115.5	16.2	.217	7.095	173.7	5.4	6.1	96.2D	1.324
4-5710	4-5980	.116	240.2	24.1	4.2	1.092	92.2	.175	1.186	344.9	551.1	.978	1.394	87.7	.773	-3.6	-38.8	325.4	.125
4-5980	4-6179.8	.278	325.9	-17.7	-1.6	.610	90.0	.484	.936	180.0	451.2	.483	1.389D	116.1	1.303	1.1	2.2	94.8	.565
4-6179.8	4-6270	.565	79.8	4.5	2.3	1.164	61.8	.473	.709	120.5	194.3	.373D	1.044	77.8	.747	-1.8	-3.7	177.7	.298
		12.54	9.88	3.69	2.66	6.08	6.19	14.19	2/2/1	92.4	120.8	15.1	.189	7.586	170.8	12.1	9.2	98.5D	1.242

MARS ARRIVAL DATE = 2445990 (16 OCT 1984)

4-5670	4-5990	.155	226.7	-3.5	1.9	1.085	97.9	.209	1.173	311.2	564.4	.928	1.417	85.9	.770	-.6	-24.9	298.8	.136
4-5990	4-6161.0	.260	295.0	-27.5	-2.4	.670	104.0	.441	1.004	199.3	434.0	.561	1.446D	110.7	1.334	1.5	4.0	73.5	.470
4-6161.0	4-6230	.470	53.9	.9	.4	1.184	66.7	.395	.728	112.0	177.9	.440D	1.016A	91.4	.772	-3.2	-8.7	171.3	.219
		13.28	10.35	4.11	2.92	6.33	6.25	12.86	2/2/1	117.1	86.6	19.8	.272	5.802	170.5	354.1	-7.6	91.1D	1.306
4-5680	4-5990	.138	231.6	-1.7	2.1	1.088	96.5	.197	1.177	318.8	561.8	.944	1.409	84.9	.772	-1.0	-26.4	304.0	.131
4-5990	4-6164.5	.275	299.5	-26.4	-2.2	.659	102.4	.445	.990	196.5	436.9	.550	1.431D	111.5	1.328	1.4	3.6	77.6	.483
4-6164.5	4-6240	.483	58.7	2.1	1.0	1.179	66.0	.407	.723	113.7	183.4	.429D	1.018	87.7	.766	-2.9	-6.3	169.5	.226
		12.81	10.04	3.91	2.78	6.19	6.12	12.97	2/2/1	112.8	98.6	18.9	.257	6.090	174.6	357.3	-3.4	92.5D	1.311
4-5690	4-5990	.123	235.6	1.8	2.3	1.090	95.1	.189	1.181	326.7	559.4	.958	1.403	85.6	.773	-1.5	-28.5	309.0	.126
4-5990	4-6168.4	.272	304.8	-25.0	-2.0	.648	100.6	.451	.976	193.5	440.2	.536	1.416D	112.4	1.322	1.3	3.3	82.2	.499
4-6168.4	4-6250	.499	64.4	3.2	1.5	1.177	65.2	.419	.721	115.0	187.9	.419D	1.024	84.4	.762	-2.6	-4.8	170.0	.241
		12.48	9.80	3.77	2.69	6.10	6.03	13.20	2/2/1	108.9	108.2	17.8	.242	6.474	176.7	1.0	.7	93.9D	1.322
4-5700	4-5990	.113	238.6	7.8	2.7	1.091	93.8	.182	1.184	334.8	557.4	.969	1.399	86.2	.775	-2.1	-31.5	313.9	.123
4-5990	4-6172.9	.27D	311.0	-23.0	-1.9	.636	98.3	.460	.961	190.1	443.9	.519	1.403D	115.5	1.315	1.3	3.0	87.4	.519
4-6172.9	4-6260	.519	70.8	4.0	2.0	1.174	64.2	.435	.720	116.3	191.7	.406D	1.033	81.3	.761	-2.3	-4.1	172.7	.261
		12.30	9.67	3.67	2.64	6.05	6.00	13.53	2/2/1	105.4	115.6	16.6	.223	6.942	174.9	5.5	4.5	95.4D	1.328
4-5710	4-5990	.109	240.4	17.2	3.4	1.092	92.5	.176	1.187	343.2	555.7	.977	1.396	86.7	.776	-3.0	-36.2	319.2	.124
4-5990	4-6178.1	.273	316.4	-20.4	-1.7	.622	95.4	.473	.945	186.1	448.3	.496	1.392D	115.0	1.307	1.2	2.7	93.5	.545
4-6178.1	4-6270	.545	78.3	4.6	2.4	1.171	62.9	.456	.717	118.2	194.7	.390D	1.044	78.3	.758	-1.9	-4.0	177.0	.286
		12.35	9.70	3.64	2.65	6.07	6.07	13.97	2/2/1	102.3	121.3	15.4	.203	7.484	171.9	10.9	7.9	97.2D	1.313
4-5720	4-5990	.120	241.8	31.1	4.9	1.092	91.2	.173	1.188	352.0	554.3	.983	1.394	87.1	.777	-4.6	-43.9	325.8	.132
4-5990	4-6184.6	.284	327.6	-16.7	-1.4	.605	91.3	.495	.927	181.3	453.9	.468	1.385D	117.1	1.298	1.2	2.4	101.2	.583
4-6184.6	4-6280	.583	87.1	4.9	2.8	1.164	60.9	.487	.710	121.2	196.9	.364D	1.056	75.2	.751	-1.3	-4.5	182.9	.320
		12.90	10.09	3.74	2.81	6.22	6.35	14.61	2/2/1	99.5	125.3	14.2	.177	8.092	169.3	17.9	10.6	99.4D	1.253

MARS ARRIVAL DATE = 2446000 (26 OCT 1984)

4-5690	4-6000	.128	237.2	-1.2	2.1	1.090	95.5	.193	1.182	324.4	563.5	.954	1.410	84.7	.775	-1.4	-27.9	306.0	.134
4-6000	4-6169.3	.296	301.0	-25.5	-2.1	.660	104.5	.460	.988	198.4	440.2	.534	1.443D	112.8	1.326	1.6	3.8	83.5	.509
4-6169.3	4-6250	.509	65.1	3.1	1.5	1.173	64.7	.428	.717	116.3	187.8	.410D	1.024	84.2	.757	-2.6	-4.5	170.3	.247
		13.33	10.48	3.81	2.65	6.26	6.67	13.29	2/2/1	117.6	108.1	18.4	.232	6.239	175.9	2.8	-.8	94.1D	1.215
4-5700	4-6000	.115	240.1	3.5	2.4	1.092	94.2	.185	1.185	332.6	561.5	.966	1.404	85.3	.777	-1.9	-30.4	310.5	.130
4-6000	4-6173.5	.290	306.5	-24.0	-1.9	.647	102.5	.465	.972	195.2	443.4	.520	1.424D	113.7	1.319	1.5	3.5	88.4	.524
4-6173.5	4-6260	.524	71.2	4.0	2.0	1.172	63.9	.440	.717	117.0	191.6	.402D	1.033	81.2	.758	-2.3	-3.9	172.8	.264
		12.95	10.19	3.69	2.76	6.17	6.50	13.58	2/2/1	114.3	115.5	17.1	.219	6.719	175.8	6.8	2.9	95.4D	1.252
4-5710	4-6000	.107	241.7	11.0	2.9	1.092	92.8	.179	1.188	341.0	559.8	.975	1.400	85.8	.776	-2.6	-35.9	314.7	.128
4-6000	4-6177.9	.286	312.6	-22.0	-1.7	.633	100.0	.474	.955	191.5	447.1	.503	1.407D	114.8	1.311	1.4	3.1	93.9	.543
4-6177.9	4-6270	.543	78.1	4.7	2.4	1.172	63.0	.454	.718	118.0	194.7	.391D	1.044	78.4	.759	-1.9	-4.0	176.9	.285
		12.74	10.01	3.62	2.73	6.14	6.39	13.95	2/2/1	111.3	121.3	15.8	.204	7.282	173.3	11.5	6.3	96.8D	1.281
4-5720	4-6000	.108	242.0	22.2	3.8	1.092	91.5	.175	1.190	349.9	558.5	.982	1.397	86.2	.779	-3.6	-39.4	319.6	.131
4-6000	4-6183.3	.285	320.4	-19.2	-1.5	.616	98.8	.487	.937	187.3	451.5	.481	1.393D	116.2	1.302	1.4	2.9	100.4	.569
4-6183.3	4-6280	.569	86.0	5.1	2.8	1.169	61.7	.475	.716	119.6	197.2	.376D	1.056	75.6	.758	-1.4	-4.7	182.4	.311
		12.79	10.01	3.63	2.76	6.19	6.58	14.44	2/2/1	108.5	125.7	14.5	.186	7.937	170.4	17.2	9.4	98.4D	1.289

MARS ARRIVAL DATE = 2446010 (5 NOV 1984)

4-5720	4-6010	.104	243.8	14.4	3.1	1.093	91.9	.178	1.192	347.2	562.1	.980	1.403	85.4	.781	-3.0	-35.9	315.8	.135
4-6010	4-6183.6	.303	315.3	-20.8	-1.5	.627	101.5	.490	.948	192.4	450.7	.483	1.413D	116.3	1.307	1.6	3.2	101.1	.572
4-6183.6	4-6280	.571	86.2	5.0	2.8	1.168	61.5	.477	.715	119.9	197.2	.374D	1.056	75.5	.757	-1.4	-4.7	182.5	.312
		13.28	10.43	3.59	2.86	6.27	6.84	14.47	2/2/1	110.8	125.6	15.0	.184	7.678	171.9	18.2	7.8	98.2D	1.229
4-5730	4-6010	.111	242.7	28.9	4.3	1.092	90.5	.174	1.193	356.3	561.1	.985	1.401	85.7	.781	-4.4	-42.2	320.7	.140
4-6010	4-6189.2	.300	323.4	-17.6	-1.3	.608	97.9	.504	.927	187.9	455.2	.460	1.395D	117.7	1.297	1.5	2.9	107.9	.597
4-6189.2	4-6290	.597	94.5	5.2	3.1	1.166	60.2	.497	.714	121.3	199.2	.359D	1.069	72.8	.758	-.9	-5.9	188.8	.339
		13.37	10.41	3.66	2.96	6.37	6.76	14.99	2/2/1	114.0	129.0	13.6	.168	8.455	169.4	24.3	10.5	99.8D	1.256

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 600 DAYS — MARS ARRIVAL DATE = 2445880 — 28 JUN 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2445880 (28 JUN 1984)																			
4-5600	4-5880	.266	174.9	5.8	.8	1.061	105.3	.292	1.150	279.6	536.9	.815	1.486A	91.3	.692	1.5	-16.2	291.7	.165
4-5880	4-6067.1	.184	276.8	-35.1	-3.1	.657	91.6	.360	1.093	182.9	331.3	.700A	1.486D	82.5	1.361	1.6	9.1	47.9	.244
4-6067.1	4-6200	.244	65.6	49.7	8.5	1.273	96.7	.205	.872	318.9	507.9	.693	1.051A	97.5	.912	-11.5	-48.4	161.2	.234
		13.13	9.65	5.75	3.47	6.88	3.90	13.08	2/1/2	56.9	62.8	43.3	1.006	2.713	73.5	19.9	-55.2	80.6L	1.723
4-5610	4-5880	.251	181.9	3.2	.9	1.068	104.3	.282	1.163	284.3	531.7	.835	1.491A	93.2	.698	1.3	-15.8	299.7	.175
4-5880	4-6074.9	.183	276.7	-39.3	-4.2	.662	91.8	.350	1.101	183.4	344.3	.715A	1.486D	85.9	1.365	2.6	17.1	41.9	.212
4-6074.9	4-6210	.212	69.4	50.6	7.4	1.275	95.2	.193	.871	326.7	512.9	.703	1.040A	96.1	.910	-10.7	-51.4	163.4	.212
		13.04	9.36	5.49	3.68	7.08	3.67	12.76	2/1/2	49.2	66.2	40.0	1.342	2.923	64.2	5.2	-44.3	97.6D	2.581
4-5640	4-5880	.217	203.1	-2.5	1.4	1.090	101.8	.268	1.207	298.7	516.4	.883	1.530A	98.1	.720	.6	-15.0	316.4	.210
4-5880	4-6093.1	.182	278.4	-15.0	2.9	.662	91.0	.350	1.101	181.9	372.2	.716	1.485D	93.2	1.368	-4.7	-29.9	20.9	.227
4-6093.1	4-6240	.227	69.3	-68.6	-9.5	1.276	91.8	.173	.868	348.0	533.4	.717	1.018A	91.4	.903	6.2	38.1	214.2	.132
		13.29	8.78	4.94	4.51	7.90	3.84	11.76	2/2/2	33.2	81.9	47.6	1.167	2.476	71.4	357.4	32.4	128.8D	1.725
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																			
4-5600	4-5890	.262	175.3	6.3	1.0	1.058	105.1	.287	1.144	279.3	542.1	.816	1.473	89.1	.697	1.4	-16.3	288.0	.153
4-5890	4-6067.3	.181	275.1	-33.9	-2.7	.662	93.3	.359	1.086	185.9	329.2	.696A	1.477D	82.0	1.359	1.1	6.2	50.7	.249
4-6067.3	4-6200	.249	66.1	50.9	8.8	1.273	96.6	.205	.872	319.1	507.8	.693	1.051A	97.5	.913	-11.8	-48.9	160.6	.238
		12.74	9.51	5.68	3.23	6.63	3.83	13.15	2/1/2	65.9	63.2	46.5	.968	2.534	76.8	27.3	-57.8	77.7L	1.484
4-5600	4-5890	.262	175.3	6.3	1.0	1.058	105.1	.287	1.144	279.3	542.1	.816	1.473	89.1	.697	1.4	-16.3	288.0	.153
4-5890	4-6080.0	.178	274.9	-39.6	-4.1	.670	93.5	.346	1.098	186.7	350.3	.719A	1.478D	87.5	1.365	2.4	16.8	40.0	.199
4-6080.0	4-6200	.199	71.4	-46.7	-6.5	1.285	94.8	.207	.890	331.3	499.5	.706	1.074A	99.0	.925	3.2	8.3	208.1	.162
		12.68	9.45	5.68	3.23	6.63	3.77	12.09	2/1/1	65.9	35.0	69.5	1.519	1.754	68.6	356.2	63.1	102.2D	1.145
4-5610	4-5890	.245	182.2	3.8	1.0	1.065	104.0	.275	1.155	284.1	537.1	.838	1.473A	91.1	.702	1.3	-15.9	297.1	.160
4-5890	4-6074.9	.177	274.6	-36.4	-3.3	.668	93.5	.349	1.095	186.6	342.0	.713A	1.478D	85.4	1.364	1.8	10.6	45.5	.211
4-6074.9	4-6210	.211	69.3	50.3	7.3	1.275	95.2	.193	.871	326.7	512.9	.703	1.039A	96.1	.910	-10.6	-51.3	163.6	.211
		12.48	9.13	5.39	3.36	6.76	3.74	12.74	2/1/2	57.2	66.1	44.2	1.354	2.656	68.7	12.6	-51.0	92.0D	2.243
4-5620	4-5890	.230	189.2	1.5	1.1	1.072	103.0	.266	1.167	289.0	532.1	.856	1.477A	92.8	.709	1.1	-15.5	304.7	.168
4-5890	4-6083.6	.184	275.6	-44.1	-5.5	.670	93.4	.344	1.099	186.5	355.9	.720A	1.477D	88.9	1.366	3.7	25.7	35.6	.204
4-6083.6	4-6220	.204	71.5	57.6	7.8	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-11.1	-55.4	161.0	.211
		12.58	9.04	5.15	3.54	6.94	3.90	12.74	2/1/2	49.9	71.8	40.8	1.449	2.868	64.3	1.8	-38.1	112.5D	2.706
4-5640	4-5890	.206	203.3	-1.7	1.4	1.085	101.2	.255	1.192	299.0	522.2	.889	1.496A	95.9	.721	.5	-15.0	316.4	.188
4-5890	4-6093.5	.186	276.2	-4.6	5.3	.668	92.8	.346	1.096	185.2	370.8	.717	1.476D	92.8	1.367	-7.1	-42.1	23.4	.252
4-6093.5	4-6240	.252	70.4	-72.1	-10.8	1.276	91.7	.173	.868	348.5	533.3	.718	1.018A	91.4	.904	7.5	42.1	217.1	.149
		12.70	8.71	4.78	3.99	7.39	3.93	11.94	2/2/2	38.8	82.7	37.4	.948	3.117	74.1	.6	25.9	129.8D	2.007
4-5650	4-5890	.196	210.5	-1.9	1.8	1.092	100.3	.252	1.207	304.2	517.4	.903	1.510A	97.2	.728	.1	-15.4	321.1	.199
4-5890	4-6096.9	.176	278.5	-17.3	1.7	.667	92.4	.348	1.094	184.5	375.5	.713	1.475D	94.0	1.367	-3.6	-22.7	22.0	.221
4-6096.9	4-6250	.221	66.9	-69.0	-9.3	1.276	91.2	.172	.868	352.0	540.8	.718	1.017	89.8	.903	6.1	39.9	210.9	.129
		12.60	8.36	4.63	4.24	7.63	3.72	11.73	2/2/2	34.5	91.3	33.5	1.228	2.223	73.1	1.3	37.5	127.5D	1.503
4-5660	4-5890	.189	218.2	.3	2.5	1.099	99.4	.250	1.222	309.6	512.7	.916	1.527A	98.4	.735	-.7	-16.9	325.5	.210
4-5890	4-6101.2	.179	280.5	-22.5	.3	.665	91.9	.352	1.090	183.5	381.4	.706	1.474D	95.5	1.366	-2.2	-13.4	20.6	.228
4-6101.2	4-6260	.228	64.5	-70.4	-9.7	1.277	90.6	.172	.869	356.2	547.7	.719	1.018	88.4	.904	6.7	42.2	209.5	.138
		12.81	8.31	4.53	4.50	7.89	3.77	11.82	2/2/2	31.1	99.4	33.1	1.159	1.912	75.3	3.0	42.8	127.1D	1.057
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																			
4-5600	4-5900	.261	175.7	6.7	1.1	1.057	105.1	.285	1.140	278.9	547.3	.816	1.465	87.1	.702	1.4	-16.5	283.2	.146
4-5900	4-6067.5	.180	272.4	-33.0	-2.4	.668	95.2	.360	1.082	189.4	327.3	.693A	1.471D	81.5	1.358	.7	4.0	53.2	.255
4-6067.5	4-6200	.255	66.8	52.1	9.1	1.274	96.6	.205	.872	319.3	507.6	.693	1.051A	97.6	.913	-12.2	-49.3	159.9	.243
		12.55	9.47	5.66	3.09	6.49	3.81	13.23	2/1/2	76.1	63.7	49.5	.927	2.391	79.2	33.7	-59.5	75.5L	1.290
4-5600	4-5900	.261	175.7	6.7	1.1	1.057	105.1	.285	1.140	278.9	547.3	.816	1.465	87.1	.702	1.4	-16.5	283.2	.146
4-5900	4-6080.3	.174	271.6	-36.2	-3.1	.676	95.3	.345	1.095	190.3	348.8	.718A	1.472D	87.1	1.365	1.4	9.6	43.0	.195
4-6080.3	4-6200	.195	71.3	-45.8	-6.3	1.285	94.8	.207	.890	331.6	499.4	.706	1.074A	99.1	.925	3.0	7.0	207.9	.161
		12.42	9.33	5.66	3.09	6.49	3.67	12.08	2/1/1	76.1	34.2	60.9	1.577	1.974	68.1	1.4	60.6	101.1D	1.536
4-5610	4-5900	.241	182.6	4.3	1.2	1.063	103.9	.270	1.150	283.8	542.4	.839	1.460	89.1	.708	1.2	-16.2	293.4	.148
4-5900	4-6074.9	.175	271.5	-34.5	-2.7	.674	95.4	.349	1.092	190.2	340.0	.711A	1.472D	84.9	1.363	1.0	6.4	48.6	.213
4-6074.9	4-6210	.213	69.5	50.9	7.5	1.275	95.2	.193	.871	326.8	512.8	.703	1.040A	96.1	.910	-10.7	-51.5	163.2	.213
		12.15	9.02	5.33	3.12	6.53	3.70	12.77	2/1/2	66.4	66.3	47.8	1.327	2.469	72.4	19.4	-55.1	88.0L	1.949
4-5610	4-5900	.241	182.6	4.3	1.2	1.063	103.9	.270	1.150	283.8	542.4	.839	1.460	89.1	.708	1.2	-16.2	293.4	.148
4-5900	4-6082.8	.175	271.9	-37.5	-3.5	.677	95.3	.343	1.096	190.3	352.8	.719A	1.472D	88.2	1.365	1.7	12.0	40.0	.191
4-6082.8	4-6210	.191	71.1	-51.4	-6.7	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.0	210.5	.138
		12.14	9.01	5.33	3.12	6.53	3.69	11.82	2/1/1	66.4	44.3	68.9	1.641	1.768	70.2	3.9	61.0	101.7D	1.260
4-5620	4-5900	.224	189.5	2.0	1.2	1.069	102.8	.259	1.160	288.8	537.6	.859	1.460A	90.8	.713	1.0	-15.8	302.0	.153
4-5900	4-6083.5	.175	272.0	-37.9	-3.6	.677	95.3	.343	1.096	190.2	353.8	.720A	1.472D	88.4	1.365	1.8	12.8	39.2	.191
4-6083.5	4-6220	.191	70.8	54.5	7.0	1.276	93.6	.183	.871	336.4	518.2	.712	1.031A	94.7	.908	-10.4	-54.5	163.0	.200
		11.98	8.75	5.06	3.23	6.64	3.69	12.59	2/1/2	58.1	70.9	48.5	1.648	2.434	66.6	6.7	-46.2	105.7D	2.364
4-5620	4-5900	.224	189.5	2.0	1.2	1.069	102.8	.259	1.160	288.8	537.6	.859	1.460A	90.8	.713	1.0	-15.8	302.0	.153
4-5900	4-6085.7	.177	272.5	-39.7	-4.1	.677	95.2	.343	1.096	190.1	357.3	.720A	1.472D	89.3	1.366	2.3	16.3	36.4	.192
4-6085.7	4-6220	.192	70.6	-56.4	-7.2	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.8	18.5	211.7	.123
		12.02	8.79	5.06	3.23	6.64	3.73	11.67	2/1/1	58.1	56.0	78.2	1.636	1.586	72.2	4.5	62.1	103.0D	.958
4-5630	4-5900	.210	196.5	.2	1.3	1.075	101.8	.251	1.170	293.9	532.8	.877	1.464A	92.4	.718	.8	-15.4	309.2	.161
4-5900	4-6091.6	.217	274.9	-57.8	-10.3	.676	94.8	.343	1.095	189.3	365.9	.719	1.470D	91.5	1.366	6.5	49.2	28.7	.266
4-6091.6	4-6230	.266	72.2	72.8	11.5	1.277	92.0	.176	.870	346.5	524.8	.717	1.023A	93.2	.906	-14.9	-59.3	150.3	.261
		12.89	9.51	4.94	3.38	6.78	4.67	13.53	2/1/1	51.2	80.2	30.3	.848	3.828	74.7	3.8	-22.3	125.5D	2.399
4-5650	4-5900	.186	210.5	-1.3	1.8	1.088	99.9	.240	1.193	304.6	523.4	.907	1.479A	95.1	.730	.1	-15.5	320.7	.178
4-5900	4-6097.2	.176	275.4	-12.0	3.1	.674	94.3	.346	1.091	188.3	374.0	.714	1.468D	93.6	1.366	-5.0	-31.1	24.5	.230
4-6097.2	4-6250	.230	66.8	-70.3	-9.8	1.276	91.1	.172	.868	352.3	540.7	.719	1.017	89.8	.903	6.6	41.4	212.3	.135
		11.98	8.22	4.50	3.75	7.15	3.73	11.79	2/2/2	40.5	91.2	45.6	1.134	2.581	74.3	4.1	33.2	128.2D	1.793
4-5660	4-5900	.177	217.8	.5	2.4	1.094	98.9	.236	1.205	310.1	518.9	.921	1.490A	96.2	.736	-.6	-16.6	325.5	.187
4-5900	4-6100.9	.174	277.6	-21.8	.5	.672	93.9	.348	1.088	187.3	379.1	.709	1.466D	94.9	1.365	-2.4	-15.2	25.3	.221
4-6100.9	4-6260	.221	64.9	-69.4	-9.3	1.277	90.6	.172	.869	355.8	547.7	.719	1.018	88.4	.904	6.3	41.1	208.4	.134
		12.02	8.05	4.38	3.96	7.36	3.68	11.77	2/2/2	36.6	99.8	60.0	1.229	1.999	74.9	4.9	42.3	126.2D	1.229
4-5700	4-5900	.164	215.4	-57.2	-5.5	1.114	94.7	.232	1.258	334.8	502.9	.966	1.549A	99.8	.759	6.8	9.3	326.3	.240
4-5900	4-6082.8	.175	271.9	-37.5	-3.5	.677	95.3	.343	1.096	190.3	352.8	.719A	1.472D	88.2	1.365	1.7	12.0	40.0	.191
4-6082.8	4-6300	.191	89.6	-22.4	-3.3	1.278	97.3	.216	.876	316.9	576.3	.686	1.065	81.2	.915	-.4	-3.2	181.5	.154
		13.13	7.90	4.22	5.23	8.61	3.69	11.99	1/1/2	33.9	146.3	59.6	1.641	2.012	36.9	338.3	36.3	128.3D	1.661
4-5710	4-5900	.132	223.7	-44.3	-3.0	1.117	93.4	.233	1.270	341.6	499.6	.974	1.566A	100.4	.764	4.3	2.7	331.5	.235
4-5900	4-6087.0	.179	272.8	-41.3	-4.5	.677	95.1	.343	1.096	189.9	359.3	.720A	1.471D	89.8	1.366	2.7	19.4	34.8	.194
4-6087.0	4-6310	.194	95.9	-22.8	-3.4	1.282	97.3	.221	.881	317.7	580.0	.687	1.076	80.3	.921	.0	-3.7	188.5	.164
		12.74	7.63	3.85	5.11	8.50	3.78	12.11	1/1/2	27.5	149.3	73.1	1.593	1.680	37.2	336.5	37.2	133.1D	1.083
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																			
4-5600	4-5910	.262	176.3	7.0	1.3	1.056	105.2	.285	1.137	278.2	552.4	.813	1.461	85.2	.709	1.4	-16.8	277.8	.145
4-5910	4-6067.7	.183	268.7	-32.1	-2.2	.675	97.2	.361	1.080	193.2	325.7	.690A	1.470D	81.1	1.357	.4	2.2	55.3	.260
4-6067.7	4-6200	.260	67.2	53.4	9.5	1.274	96.6	.205	.873	319.4	507.5	.693	1.052A	97.6	.913	-12.5	-49.7	159.2	.248
		12.60	9.55	5.69	3.05	6.46	3.87	13.32	2/1/2	87.0	64.2	52.1	.887	2.276	81.0	36.8	-60.5	73.8L	1.132
4-5600	4-5910	.262	176.3	7.0	1.3	1.056	105.2	.285	1.137	278.2	552.4	.813	1.461	85.2	.709	1.4	-16.8	277.8	.145
4-5910	4-6080.2	.175	267.3	-33.7	-2.5	.684	97.4	.345	1.094	194.4	347.0	.717A	1.472D	86.7	1.364	.7	4.7	45.9	.196
4-6080.2	4-6200	.196	71.3	-46.1	-6.3	1.285	94.8	.207	.890	331.5	499.4	.706	1.074A	99.1	.925	3.1	7.4	208.0	.162
		12.43	9.38	5.69	3.05	6.46	3.70	12.08	2/1/1	67.0	34.5	55.5	1.557	2.146	68.9	7.2	59.4	98.7D	1.785
4-5610	4-5910	.240	183.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	288.5	.142
4-5910	4-6075.1	.177	267.4	-33.0	-2.3	.682	97.4	.350	1.090	194.2	338.5	.709A	1.472D	84.5	1.362	.5	3.4	51.0	.216
4-6075.1	4-6210	.216	69.8	51.8	7.7	1.275	95.2	.193	.871	326.9	512.8	.703	1.040A	96.1	.910	-11.0	-51.8	162.7	.216
		12.04	9.05	5.31	2.99	6.40	3.74	12.82	2/1/2	76.7	66.6	50.9	1.286	2.326	75.2	25.3	-57.8	85.1L	1.705

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 600 DAYS

MARS ARRIVAL DATE = 2445910
28 JUL 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5610	4-5910	.240	183.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	288.5	.142
4-5910	4-6082.9	.175	267.6	-34.3	-2.6	.685	97.3	.344	1.095	194.4	351.3	.719A	1.472D	87.8	1.365	.8	5.7	42.8	.190
4-6082.9	4-6210	.190	71.1	-51.1	-6.7	1.280	93.9	.192	.879	335.2	508.4	.710	1.049A	96.9	.916	3.3	11.6	210.3	.138
		11.99	9.00	5.31	2.99	6.40	3.69	11.82	2/1/1	76.7	44.1	61.8	1.662	1.949	70.3	8.8	58.7	100.2D	1.577
4-5620	4-5910	.221	189.9	2.5	1.3	1.067	102.6	.255	1.154	288.5	543.0	.860	1.449	89.0	.718	1.0	-16.4	298.1	.143
4-5910	4-6083.5	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.2	.719A	1.472D	88.0	1.365	.8	6.0	42.1	.189
4-6083.5	4-6220	.189	70.7	54.0	6.9	1.276	93.6	.183	.871	336.4	518.3	.712	1.031A	94.7	.908	-10.3	-54.4	163.4	.199
		11.71	8.70	5.01	3.02	6.42	3.69	12.56	2/1/2	67.6	70.7	53.3	1.679	2.229	69.5	11.6	-51.8	101.1D	2.064
4-5620	4-5910	.221	189.9	2.5	1.3	1.067	102.6	.255	1.154	288.5	543.0	.860	1.449	89.0	.718	1.0	-16.4	298.1	.143
4-5910	4-6085.8	.175	268.0	-35.1	-2.8	.685	97.2	.343	1.096	194.2	355.8	.720A	1.471D	88.9	1.366	1.0	7.2	39.2	.187
4-6085.8	4-6220	.187	70.4	-55.1	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.7	211.1	.120
		11.72	8.70	5.01	3.02	6.42	3.69	11.65	2/1/1	67.6	55.2	67.5	1.724	1.799	71.5	8.8	58.4	102.6D	1.578
4-5630	4-5910	.205	196.8	.7	1.4	1.073	101.5	.245	1.163	293.8	538.4	.878	1.448A	90.5	.723	.7	-16.0	306.3	.147
4-5910	4-6088.9	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.5	.720	1.470D	90.1	1.366	1.3	9.8	35.5	.187
4-6088.9	4-6230	.187	69.5	-58.8	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.8	23.0	210.3	.111
		11.58	8.48	4.77	3.10	6.51	3.71	11.56	2/1/2	59.8	67.8	73.9	1.717	1.664	72.7	8.0	58.6	105.3D	1.141
4-5630	4-5910	.205	196.8	.7	1.4	1.073	101.5	.245	1.163	293.8	538.4	.878	1.448A	90.5	.723	.7	-16.0	306.3	.147
4-5910	4-6092.1	.179	269.9	-39.6	-4.1	.684	96.8	.343	1.094	193.4	365.2	.719	1.469D	91.3	1.366	2.2	15.5	32.0	.194
4-6092.1	4-6230	.194	67.4	62.1	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.1	-57.3	158.3	.204
		11.65	8.55	4.77	3.10	6.51	3.78	12.64	2/1/1	59.8	77.3	52.8	1.605	2.247	70.9	7.0	-43.8	115.4D	2.002
4-5650	4-5910	.179	210.5	-.8	1.8	1.085	99.5	.230	1.183	304.8	529.4	.911	1.455A	93.1	.732	.0	-15.9	319.3	.160
4-5910	4-6098.4	.197	272.1	1.5	7.2	.681	96.2	.345	1.089	192.1	374.1	.714	1.465D	93.6	1.366	-9.1	-49.1	24.8	.285
4-6098.4	4-6250	.285	67.0	-76.8	-12.5	1.277	90.9	.172	.868	354.0	540.6	.719	1.017	89.9	.903	9.4	47.7	218.6	.174
		11.94	8.58	4.40	3.36	6.76	4.19	12.23	2/2/2	47.6	90.7	32.2	.742	3.606	79.1	7.1	23.1	132.0D	1.934
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167
4-5910	4-6100.9	.174	273.6	-19.8	1.1	.680	96.0	.346	1.087	191.5	377.5	.711	1.463D	94.5	1.365	-3.0	-18.9	25.6	.219
4-6100.9	4-6260	.219	65.0	-69.1	-9.2	1.277	90.6	.172	.869	355.7	547.7	.719	1.018	88.4	.904	6.2	40.8	208.1	.132
		11.45	7.93	4.26	3.52	6.92	3.67	11.76	2/2/2	43.1	99.9	55.7	1.248	2.139	75.0	7.0	40.8	125.9D	1.422
4-5710	4-5910	.137	213.6	-56.1	-4.5	1.110	92.9	.215	1.244	343.4	507.0	.976	1.512A	98.1	.760	5.7	8.8	329.1	.215
4-5910	4-6088.8	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.3	.720	1.470D	90.1	1.366	1.3	9.7	35.6	.187
4-6088.8	4-6310	.187	96.6	-24.0	-3.4	1.282	96.8	.217	.882	320.2	579.5	.690	1.073	80.6	.921	.2	-2.9	189.3	.160
		12.23	7.61	3.90	4.62	8.01	3.71	12.06	1/1/2	35.5	148.9	68.4	1.718	1.780	32.1	339.8	30.8	137.0D	1.339

MARS ARRIVAL DATE = 2445920 (7 AUG 1984)

4-5600	4-5920	.267	177.0	7.2	1.4	1.055	105.5	.289	1.135	277.3	557.3	.807	1.463	83.2	.715	1.5	-17.0	272.4	.148
4-5920	4-6067.9	.190	264.3	-31.1	-2.0	.684	99.5	.364	1.081	197.5	324.5	.687A	1.475D	80.7	1.358	.1	.7	56.9	.266
4-6067.9	4-6200	.266	67.8	54.6	9.9	1.274	96.6	.205	.873	319.6	507.4	.694	1.052A	97.6	.913	-12.9	-50.1	158.5	.253
		12.93	9.80	5.77	3.12	6.53	4.03	13.41	2/1/2	98.0	64.6	54.6	.848	2.181	82.3	42.7	-61.0	72.6L	1.001
4-5600	4-5920	.267	177.0	7.2	1.4	1.055	105.5	.289	1.135	277.3	557.3	.807	1.463	83.2	.715	1.5	-17.0	272.4	.148
4-5920	4-6079.9	.182	262.5	-31.8	-2.1	.693	99.6	.348	1.097	199.0	345.3	.715A	1.478D	86.2	1.365	.2	1.4	48.4	.200
4-6079.9	4-6200	.200	71.4	-47.1	-6.6	1.285	94.8	.207	.890	331.2	499.5	.706	1.074A	99.0	.925	3.3	8.7	208.2	.163
		12.74	9.62	5.77	3.12	6.53	3.85	12.09	2/1/1	98.0	35.3	52.5	1.498	2.260	70.4	12.9	58.8	95.7D	1.888
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140
4-5920	4-6075.2	.184	262.8	-31.5	-2.1	.691	99.6	.353	1.093	198.7	337.3	.707A	1.478D	84.2	1.363	.2	1.1	52.9	.220
4-6075.2	4-6210	.220	70.1	52.9	8.0	1.275	95.2	.193	.871	327.0	512.7	.703	1.040A	96.1	.910	-11.2	-52.2	162.1	.220
		12.20	9.24	5.34	2.96	6.37	3.90	12.88	2/1/2	87.7	66.9	53.8	1.238	2.211	77.2	30.0	-59.4	83.1L	1.499
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140
4-5920	4-6082.8	.181	262.7	-32.0	-2.1	.694	99.5	.346	1.098	199.0	349.9	.718A	1.478D	87.4	1.366	.2	1.7	45.1	.192
4-6082.8	4-6210	.192	71.2	-51.6	-6.8	1.280	93.9	.192	.879	335.2	508.5	.710	1.048A	96.9	.916	3.4	12.3	210.5	.138
		12.12	9.16	5.34	2.96	6.37	3.82	11.82	2/1/1	87.7	44.5	57.7	1.628	2.073	71.1	13.3	57.4	98.1D	1.747
4-5620	4-5920	.221	190.4	2.8	1.4	1.086	102.6	.254	1.150	288.0	548.4	.859	1.442	87.2	.723	1.0	-17.1	293.1	.137
4-5920	4-6083.8	.181	262.8	-32.0	-2.2	.694	99.5	.346	1.098	199.0	351.0	.719A	1.478D	87.7	1.366	.2	1.8	44.3	.191
4-6083.8	4-6220	.191	70.8	54.4	7.0	1.276	93.6	.183	.871	336.4	518.3	.712	1.031A	94.7	.908	-10.4	-54.5	163.1	.200
		11.72	8.62	5.00	2.90	6.51	3.82	12.58	2/1/2	78.2	70.8	56.9	1.653	2.096	71.9	15.8	-55.1	97.9D	1.819
4-5620	4-5920	.221	190.4	2.8	1.4	1.086	102.6	.254	1.150	288.0	548.4	.859	1.442	87.2	.723	1.0	-17.1	293.1	.137
4-5920	4-6085.8	.180	263.1	-32.2	-2.2	.694	99.4	.345	1.099	198.8	354.6	.720A	1.477D	88.6	1.367	.3	2.1	41.5	.187
4-6085.8	4-6220	.187	70.4	-55.3	-6.9	1.277	93.2	.183	.873	339.1	517.2	.713	1.032A	94.9	.909	3.5	16.9	211.1	.121
		11.71	8.81	5.00	2.90	6.31	3.81	11.65	2/1/1	78.2	55.3	62.0	1.716	1.941	71.8	12.7	58.3	101.3D	1.614
4-5630	4-5920	.203	197.1	1.1	1.5	1.071	101.4	.241	1.158	293.5	543.9	.879	1.438	88.8	.728	.7	-16.8	302.1	.137
4-5920	4-6088.8	.180	263.8	-32.5	-2.3	.694	99.2	.344	1.098	198.5	359.3	.720A	1.476D	89.8	1.367	.4	2.6	37.8	.186
4-6088.8	4-6230	.186	69.4	-58.4	-7.1	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.7	22.5	210.0	.110
		11.44	8.53	4.73	2.91	6.32	3.80	11.56	2/1/2	69.7	67.7	65.9	1.746	1.838	72.5	11.4	55.5	104.9D	1.463
4-5630	4-5920	.203	197.1	1.1	1.5	1.071	101.4	.241	1.158	293.5	543.9	.879	1.438	88.8	.728	.7	-16.8	302.1	.137
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2	.186
4-6092.1	4-6230	.186	67.1	60.8	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.7	-57.0	159.2	.199
		11.44	8.53	4.73	2.91	6.32	3.80	12.57	2/1/1	69.7	77.0	62.5	1.710	1.926	72.7	10.0	-51.5	110.2D	1.586
4-5640	4-5920	.187	203.9	-.1	1.6	1.077	100.3	.231	1.167	299.1	539.6	.897	1.437A	90.1	.732	.4	-16.6	310.0	.140
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2	.186
4-6092.1	4-6240	.187	68.3	-61.1	-7.4	1.276	92.0	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.4	207.9	.107
		11.27	8.31	4.51	2.96	6.37	3.80	11.53	2/1/2	62.3	80.4	69.8	1.710	1.747	73.3	9.8	55.0	108.7D	1.278
4-5640	4-5920	.187	203.9	-.1	1.6	1.077	100.3	.231	1.167	299.1	539.6	.897	1.437A	90.1	.732	.4	-16.6	310.0	.140
4-5920	4-6099.8	.194	268.4	-45.5	-6.0	.690	98.3	.346	1.090	196.4	374.7	.713	1.468D	93.6	1.366	4.1	25.7	27.9	.222
4-6099.8	4-6240	.222	58.5	69.7	9.4	1.277	90.3	.172	.869	357.6	532.1	.719	1.018A	91.6	.904	-12.6	-58.8	151.5	.223
		11.61	8.64	4.51	2.96	6.37	4.13	12.93	2/1/1	62.3	84.2	47.4	1.219	2.487	77.5	11.5	-38.8	123.1D	1.612
4-5650	4-5920	.173	210.6	-.4	1.8	1.082	99.2	.224	1.175	304.9	535.3	.913	1.436A	91.4	.736	.0	-16.7	316.8	.145
4-5920	4-6095.9	.181	266.4	-34.5	-2.8	.692	98.7	.345	1.094	197.3	369.4	.717	1.471D	92.4	1.367	.8	5.9	30.8	.194
4-6095.9	4-6250	.194	67.2	-64.0	-7.9	1.276	91.4	.172	.867	350.6	541.0	.718	1.017	89.8	.903	4.6	33.8	206.1	.111
		11.20	8.15	4.33	3.05	6.46	3.82	11.57	2/1/2	56.0	91.9	75.1	1.595	1.642	74.4	8.7	55.3	111.9D	1.023
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6101.6	.183	269.5	-12.1	3.2	.688	98.1	.347	1.088	195.9	377.2	.711	1.466D	94.4	1.366	-5.1	-30.7	26.7	.237
4-6101.6	4-6260	.237	64.0	-71.7	-10.2	1.276	90.5	.172	.869	356.7	547.7	.719	1.018	88.4	.904	7.2	43.5	211.0	.145
		11.20	8.04	4.18	3.16	6.57	3.86	11.89	2/2/2	50.8	98.9	45.7	1.067	2.576	76.8	9.5	34.5	128.8D	1.683
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.745	-1.2	-19.2	326.4	.157
4-5920	4-6105.1	.179	271.6	-27.8	-1.0	.686	97.6	.349	1.084	194.7	381.8	.706	1.462D	95.6	1.364	-.9	-5.7	26.6	.222
4-6105.1	4-6270	.222	63.5	-69.4	-9.4	1.279	90.1	.174	.871	359.5	554.1	.719	1.022	87.1	.906	6.6	41.0	207.1	.141
		11.15	7.86	4.08	3.30	6.70	3.78	11.85	2/2/2	46.6	106.9	68.1	1.216	1.786	76.9	10.1	46.3	122.8D	.956
4-5710	4-5920	.173	188.2	-71.1	-7.6	1.104	92.5	.202	1.225	345.0	514.4	.978	1.473A	96.1	.759	8.7	19.4	323.0	.214
4-5920	4-6089.2	.180	265.9	-32.6	-2.3	.694	99.2	.344	1.098	198.5	359.7	.720A	1.476D	89.9	1.367	.4	2.7	37.4	.186
4-6089.2	4-6310	.186	96.7	-24.2	-3.4	1.283	96.7	.216	.882	320.7	579.5	.691	1.073	80.6	.922	.2	-2.8	189.5	.159
		12.72	8.12	4.32	4.60	7.99	3.80	12.05	1/1/2	47.7	148.8	63.5	1.746	1.901	29.0	341.7	25.7	139.2D	1.572
4-5720	4-5920	.118	206.4	-54.7	-4.0	1.105	91.2	.202	1.231	352.9	512.2	.983	1.479A	96.5	.782	4.9	8.8	330.6	.193
4-5920	4-6093.2	.180	265.2	-33.3	-2.5	.695	98.9	.344	1.096	197.9	365.6	.719	1.473D	91.4	1.367	.5	3.9	33.2	.189
4-6093.2	4-6320	.189	103.0	-23.8	-3.4	1.286	96.8	.221	.867	321.0	583.0	.691	1.084	79.8	.928	.6	-3.8	196.7	.170
		11.61	7.52	3.72	4.09	7.49	3.80	12.18	1/1/2	38.8	151.4	73.4	1.685	1.674	26.8	341.6	23.3	145.4D	1.135

MARS ARRIVAL DATE = 2445930 (17 AUG 1984)

4-5610	4-5930	.246	184.4	5.1	1.5	1.060	104.2	.273	1.141	281.7	557.8	.830	1.452	83.6	.725	1.2	-17.7	277.7	.144
4-5930	4-6075.3	.198	256.0	-30.0	-1.9	.703	102.1	.356	1.100	203.7	336.7	.706A	1.493D	83.9	1.363	-.1	-.7	54.0	.225
4-6075.3	4-6210	.225	70.5	54.1	8.3	1.275	95.2	.193	.872	327.1	512.6	.703	1.040A	96.1	.910	-11.5	-52.5	161.4	.224
		12.66	9.62	5.41	3.04	6.44	4.21	12.94	2/1/2	98.8	67.3	56.4	1.186	2.115	78.5	33.1	-60.3	81.9L	1.323

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445930
17 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5610	4-5930	.246	184.4	5.1	1.5	1.060	104.2	.273	1.141	261.7	557.8	.830	1.452	83.6	.725	1.2	-17.7	277.7	.144
4-5930	4-6082.7	.194	257.8	-30.0	-1.8	.706	101.9	.351	1.106	204.1	348.9	.717A	1.494D	87.1	1.368	-.1	-1.0	46.6	.196
4-6082.7	4-6210	.196	71.3	-52.5	-7.0	1.280	94.0	.192	.879	335.0	508.5	.710	1.048A	96.8	.918	3.7	13.6	210.9	.140
		12.57	9.53	5.41	3.04	6.44	4.12	11.84	2/1/1	98.8	45.2	55.5	1.565	2.148	72.0	17.0	56.5	96.2D	1.797
4-5620	4-5930	.223	191.0	3.0	1.5	1.065	102.7	.254	1.148	287.3	553.5	.856	1.440	85.5	.729	1.0	-17.8	287.6	.136
4-5930	4-6083.5	.193	257.9	-30.0	-1.8	.706	101.9	.350	1.106	204.1	350.3	.718A	1.493D	87.5	1.368	-.2	-1.1	45.6	.194
4-6083.5	4-6220	.194	71.0	55.3	7.2	1.276	93.6	.183	.871	336.4	518.2	.712	1.031A	94.7	.908	-10.6	-54.7	162.5	.203
		12.02	9.14	5.03	2.88	6.29	4.11	12.62	2/1/2	89.4	71.1	60.0	1.598	2.000	73.6	18.9	-57.1	95.8D	1.597
4-5620	4-5930	.223	191.0	3.0	1.5	1.065	102.7	.254	1.148	287.3	553.5	.856	1.440	85.5	.729	1.0	-17.8	287.6	.136
4-5930	4-6085.7	.193	256.2	-30.0	-1.8	.706	101.8	.349	1.106	204.0	353.8	.720A	1.492D	88.4	1.369	-.2	-1.2	43.0	.190
4-6085.7	4-6220	.190	70.6	-56.0	-7.1	1.277	93.2	.183	.873	339.1	517.3	.713	1.032A	94.9	.909	3.7	17.9	211.5	.122
		12.00	9.12	5.03	2.88	6.29	4.09	11.66	2/1/1	89.4	55.8	59.1	1.665	2.027	72.4	15.7	55.0	100.0D	1.711
4-5630	4-5930	.203	197.6	1.3	1.6	1.070	101.4	.240	1.155	293.0	549.3	.878	1.432	87.1	.733	.7	-17.8	297.0	.132
4-5930	4-6088.9	.191	256.9	-30.0	-1.8	.706	101.6	.348	1.105	203.7	356.5	.720A	1.490D	89.6	1.369	-.2	-1.4	39.5	.188
4-6088.9	4-6230	.188	69.5	-58.9	-7.2	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	3.9	23.2	210.4	.111
		11.61	8.80	4.73	2.81	6.22	4.06	11.57	2/1/2	80.5	67.9	62.1	1.708	1.939	72.9	14.1	53.7	104.1D	1.604
4-5630	4-5930	.203	197.6	1.3	1.6	1.070	101.4	.240	1.155	293.0	549.3	.878	1.432	87.1	.733	.7	-17.8	297.0	.132
4-5930	4-6092.1	.191	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.3	.720	1.488D	90.9	1.369	-.2	-1.8	35.7	.189
4-6092.1	4-6230	.189	67.2	61.1	7.4	1.277	91.9	.176	.870	347.3	524.7	.717	1.023A	93.2	.906	-10.8	-57.1	159.1	.200
		11.58	8.77	4.73	2.81	6.22	4.04	12.58	2/1/1	80.5	77.0	67.4	1.688	1.803	74.1	12.4	-54.6	107.4D	1.555
4-5640	4-5930	.185	204.2	.1	1.7	1.075	100.2	.229	1.162	298.8	545.1	.897	1.428	88.5	.737	.4	-17.7	305.5	.132
4-5930	4-6092.2	.190	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.4	.720	1.488D	90.9	1.369	-.2	-1.8	35.8	.189
4-6092.2	4-6240	.189	68.4	-61.5	-7.5	1.276	91.9	.175	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	26.8	208.2	.108
		11.33	8.53	4.49	2.80	6.21	4.04	11.54	2/1/2	72.6	80.4	64.6	1.687	1.872	73.4	12.2	52.5	108.6D	1.471
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6095.9	.190	261.3	-29.6	-1.6	.703	101.1	.348	1.101	202.4	368.6	.717	1.484D	92.2	1.369	-.4	-2.5	32.3	.194
4-6095.9	4-6250	.194	67.3	-64.0	-7.9	1.276	91.4	.172	.867	350.5	541.0	.718	1.017	89.8	.903	4.6	33.8	206.0	.111
		11.14	8.31	4.29	2.84	6.25	4.02	11.57	2/1/2	69.7	91.9	66.5	1.597	1.823	74.1	10.8	51.2	113.2D	1.314
4-5650	4-5930	.170	210.8	-.2	1.8	1.080	99.1	.219	1.170	304.7	541.0	.913	1.426	89.7	.740	.0	-17.8	313.0	.134
4-5930	4-6107.5	.191	267.9	-34.4	-2.9	.694	99.7	.352	1.085	198.9	383.8	.703	1.468D	96.1	1.365	1.0	5.8	27.8	.230
4-6107.5	4-6250	.230	46.5	69.4	9.7	1.277	88.8	.172	.867	8.3	179.8	.718D	1.017A	90.0	.903	-12.7	-58.1	149.2	.223
		11.19	8.35	4.29	2.84	6.25	4.06	12.92	2/2/1	65.7	90.0	64.8	1.141	1.866	82.9	18.1	-51.2	116.8D	.988
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.5	319.7	.137
4-5930	4-6100.2	.186	263.4	-28.4	-1.2	.700	100.6	.349	1.096	201.3	374.4	.713	1.478D	93.7	1.368	-.7	-4.7	29.5	.205
4-6100.2	4-6260	.205	65.8	-66.6	-8.5	1.277	90.6	.173	.869	354.7	547.8	.719	1.019	88.4	.904	5.4	37.9	205.4	.123
		11.02	8.12	4.13	2.90	6.31	3.99	11.67	2/1/2	59.8	100.9	66.8	1.436	1.816	75.2	10.4	49.4	116.0D	1.172
4-5720	4-5930	.140	187.2	-65.7	-5.9	1.101	90.9	.191	1.215	354.4	519.6	.983	1.447A	94.6	.762	6.8	16.8	325.4	.185
4-5930	4-6093	.190	260.1	-29.8	-1.7	.705	101.3	.348	1.103	203.0	364.5	.719	1.487D	91.2	1.369	-.3	-1.9	34.8	.190
4-6093	4-6320	.190	103.0	-23.7	-3.4	1.286	96.8	.222	.887	320.8	583.1	.690	1.084	79.8	.928	-6	-3.7	196.6	.170
		11.89	7.97	3.93	3.92	7.32	4.04	12.19	1/1/2	49.4	151.4	69.3	1.672	1.759	24.7	342.6	18.9	147.0D	1.270

MARS ARRIVAL DATE = 2445940 (27 AUG 1984)

4-5620	4-5940	.227	191.7	3.0	1.6	1.064	103.0	.258	1.146	286.2	558.5	.851	1.442	83.8	.735	1.0	-18.5	282.3	.140
4-5940	4-6083.5	.214	253.6	-28.3	-1.6	.721	104.5	.359	1.120	209.8	350.1	.718A	1.521D	87.4	1.373	-.4	-3.1	46.1	.199
4-6083.5	4-6220	.199	71.3	56.4	7.5	1.276	93.6	.183	.871	336.5	518.2	.712	1.031A	94.7	.908	-10.9	-55.0	161.8	.207
		12.66	9.69	5.11	2.97	6.38	4.59	12.00	[illegible]	00.4	71.5	62.9	1.522	1.916	74.7	20.8	-58.2	94.7D	1.393
4-5620	4-5940	.227	191.7	3.0	1.6	1.064	103.0	.258		16.2	558.5	.851	1.442	83.8	.735	1.0	-18.5	282.3	.140
4-5940	4-6085.7	.213	253.8	-28.2	-1.5	.721	104.4	.358	1.120	209.7	353.4	.719A	1.520D	88.3	1.373	-.5	-3.4	43.6	.195
4-6085.7	4-6220	.195	70.8	-57.1	-7.4	1.277	93.2	.183	.873	339.0	517.3	.713	1.032A	94.9	.909	4.0	19.5	212.1	.124
		12.63	9.67	5.11	2.97	6.38	4.56	11.68	2/1/1	100.4	56.5	57.8	1.586	2.068	72.9	17.8	53.7	99.1D	1.693
4-5630	4-5940	.205	198.2	1.3	1.6	1.069	101.6	.241	1.153	292.1	554.4	.875	1.431	85.5	.738	.7	-18.7	291.5	.133
4-5940	4-6088.9	.211	254.5	-28.0	-1.4	.720	104.2	.356	1.119	209.4	356.3	.720A	1.517D	89.6	1.373	-.6	-4.0	39.8	.192
4-6088.9	4-6230	.192	69.7	-59.9	-7.5	1.276	92.5	.177	.869	343.0	525.7	.716	1.022A	93.0	.905	4.1	24.6	211.1	.114
		12.10	9.29	4.77	2.81	6.22	4.52	11.59	2/1/2	91.8	68.3	60.4	1.632	1.988	73.3	15.8	52.3	103.6D	1.612
4-5630	4-5940	.205	198.2	1.3	1.6	1.069	101.6	.241	1.153	292.1	554.4	.875	1.431	85.5	.738	.7	-18.7	291.5	.133
4-5940	4-6092.1	.209	255.4	-27.8	-1.3	.719	104.0	.355	1.117	208.9	362.9	.720	1.514D	90.8	1.373	-.7	-4.7	36.4	.193
4-6092.1	4-6230	.193	67.4	61.9	7.7	1.277	91.9	.176	.870	347.2	524.7	.717	1.023A	93.2	.906	-11.0	-57.3	156.4	.203
		12.06	9.25	4.77	2.81	6.22	4.48	12.63	2/1/1	91.8	77.3	70.7	1.618	1.728	75.2	14.2	-56.4	105.8D	1.178
4-5640	4-5940	.186	204.7	.2	1.7	1.074	100.3	.228	1.159	298.1	550.5	.895	1.424	86.9	.742	.4	-18.8	300.2	.128
4-5940	4-6092.3	.209	255.4	-27.7	-1.3	.719	104.0	.355	1.116	208.8	363.2	.720	1.513D	90.9	1.373	-.7	-4.7	36.1	.193
4-6092.3	4-6240	.193	68.4	-62.4	-7.7	1.276	91.9	.173	.867	346.9	533.6	.717	1.018A	91.3	.903	4.4	30.1	208.9	.110
		11.71	8.98	4.50	2.73	6.15	4.48	11.56	2/1/2	83.7	80.6	62.4	1.615	1.930	73.8	13.9	50.9	108.4D	1.502
4-5650	4-5940	.169	211.1	-.3	1.8	1.079	99.1	.217	1.166	304.3	546.6	.913	1.419	88.2	.745	.0	-19.0	308.2	.127
4-5940	4-6096.1	.207	256.8	-27.2	-1.1	.717	103.6	.355	1.113	208.0	368.5	.717	1.508D	92.2	1.372	-.9	-5.9	32.8	.198
4-6096.1	4-6250	.198	67.2	-64.6	-8.1	1.276	91.3	.172	.867	350.8	541.0	.718	1.017	89.8	.903	4.9	34.9	206.9	.114
		11.42	8.71	4.28	2.71	6.12	4.44	11.59	2/1/2	76.4	91.8	63.7	1.530	1.895	74.6	12.4	49.4	113.4D	1.369
4-5660	4-5940	.155	217.4	.4	2.1	1.083	97.9	.208	1.173	310.6	542.9	.928	1.417	89.2	.748	-.4	-19.6	315.4	.128
4-5940	4-6100.4	.205	258.9	-25.7	-.6	.713	103.2	.355	1.107	206.8	374.2	.713	1.500D	93.7	1.371	-1.3	-8.7	30.2	.209
4-6100.4	4-6260	.209	65.5	-67.4	-8.7	1.277	90.7	.173	.869	355.0	547.8	.719	1.019	88.4	.904	5.7	38.8	206.3	.126
		11.21	8.49	4.10	2.72	6.13	4.39	11.70	2/1/2	70.0	100.6	63.4	1.374	1.904	75.8	12.0	47.4	116.6D	1.242
4-5730	4-5940	.122	182.6	-59.1	-5.0	1.097	89.3	.183	1.206	4.5	165.5	.985D	1.427A	93.2	.764	5.6	14.7	325.5	.184
4-5940	4-6096.0	.207	256.8	-27.2	-1.1	.717	103.6	.355	1.113	208.0	368.4	.718	1.508D	92.2	1.372	-.9	-5.9	32.9	.198
4-6096.0	4-6330	.198	109.3	-22.0	-3.3	1.289	97.3	.230	.892	319.5	586.5	.687	1.097	78.8	.934	.9	-5.4	203.8	.164
		11.64	8.19	3.76	3.44	6.85	4.44	12.37	1/1/2	53.9	153.7	75.2	1.532	1.639	22.0	343.6	12.9	153.2D	.980

MARS ARRIVAL DATE = 2445950 (6 SEP 1984)

4-5630	4-5950	.210	198.9	1.2	1.7	1.069	101.9	.245	1.152	291.0	559.4	.869	1.434	84.0	.744	.7	-19.5	286.4	.138
4-5950	4-6089.0	.239	251.1	-26.5	-1.2	.738	107.1	.369	1.141	215.7	358.7	.720A	1.562D	89.6	1.379	-.8	-5.6	39.3	.199
4-6089.0	4-6230	.199	70.0	-61.4	-7.9	1.276	92.5	.177	.869	343.2	525.6	.716	1.022A	93.0	.905	4.5	26.8	212.1	.117
		12.96	10.04	4.84	2.91	6.32	5.20	11.62	2/1/2	102.8	69.0	60.3	1.522	1.992	73.7	16.6	51.0	103.6D	1.510
4-5630	4-5950	.210	198.9	1.2	1.7	1.069	101.9	.245	1.152	291.0	559.4	.869	1.434	84.0	.744	.7	-19.5	286.4	.138
4-5950	4-6092.0	.237	251.8	-26.2	-1.1	.737	106.8	.368	1.138	215.1	363.0	.720	1.557D	90.8	1.379	-.9	-6.3	36.2	.200
4-6092.0	4-6230	.199	67.7	63.2	8.0	1.277	91.9	.176	.870	347.1	524.7	.717	1.023A	93.2	.906	-11.4	-57.6	157.5	.209
		12.90	9.99	4.84	2.91	6.32	5.15	12.71	2/1/1	102.8	77.6	73.6	1.510	1.670	75.9	15.1	-56.9	105.0D	1.012
4-5640	4-5950	.189	205.3	-.0	1.7	1.074	100.5	.230	1.158	297.2	555.6	.892	1.423	85.5	.747	.4	-19.9	294.8	.130
4-5950	4-6092.5	.236	252.0	-26.2	-1.1	.736	106.8	.368	1.138	215.0	363.7	.719	1.556D	91.0	1.379	-.9	-6.5	35.7	.200
4-6092.5	4-6240	.200	68.6	-63.9	-8.1	1.276	91.9	.173	.868	347.2	533.5	.717	1.018A	91.3	.903	4.8	32.1	210.2	.114
		12.44	9.68	4.54	2.76	6.17	5.14	11.59	2/1/2	95.0	80.9	62.0	1.504	1.940	74.4	14.8	49.6	108.6D	1.414
4-5650	4-5950	.171	211.6	-.5	1.8	1.078	99.2	.217	1.164	303.5	551.9	.911	1.416	86.7	.750	.0	-20.5	302.8	.125
4-5950	4-6096.4	.234	253.3	-25.6	-.8	.734	106.4	.367	1.132	214.0	369.0	.717	1.548D	92.4	1.378	-1.1	-7.7	32.6	.206
4-6096.4	4-6250	.206	67.0	-66.3	-8.5	1.276	91.3	.172	.868	351.2	540.9	.718	1.017	89.6	.903	5.3	36.7	208.3	.119
		12.04	9.36	4.29	2.67	6.09	5.07	11.63	2/1/2	87.7	91.6	63.2	1.422	1.910	75.3	13.5	48.2	113.6D	1.294
4-5660	4-5950	.155	217.6	-.1	2.0	1.082	98.0	.207	1.170	310.1	548.4	.927	1.412	87.8	.753	-.3	-20.9	310.3	.123
4-5950	4-6100.7	.230	255.3	-24.4	-.4	.730	106.0	.366	1.125	212.7	374.7	.713	1.537D	93.9	1.376	-1.6	-10.0	30.1	.217
4-6100.7	4-6260	.217	65.1	-68.7	-9.1	1.277	90.7	.172	.869	355.5	547.8	.719	1.018	88.4	.904	6.1	40.3	207.7	.131
		11.72	9.09	4.10	2.63	6.05	4.99	11.74	2/1/2	81.1	100.1	62.9	1.281	1.916	76.7	13.3	46.5	118.7D	1.174
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	96.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6108.9	.227	256.3	-20.5	1.0	.724	105.3	.366	1.114	210.8	381.1	.706	1.522D	95.6	1.374	-2.9	-16.9	28.8	.236
4-6108.9	4-6270	.238	62.0	-71.6	-10.2	1.279	89.9	.174	.871	.6	194.0	.719D	1.022	87.1	.906	7.5	43.3	209.7	.152
		11.49	8.85	3.95	2.63	6.05	4.91	11.97	2/1/2	75.3	105.6	58.1	1.061	2.060	78.8	14.6	42.7	124.9D	1.184

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2445950
6 SEP 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-5730	4-5950	.160	158.3	-67.3	-7.6	1.094	89.2	.178	1.198	5.2	172.2	.984D	1.411A	91.7	.766	8.1	24.2	317.5	.173
4-5950	4-6095.0	.235	252.8	-25.9	-.9	.735	106.6	.367	1.135	214.4	367.0	.718	1.551D	91.9	1.378	-1.1	-7.2	33.6	.203
4-6095.0	4-6330	.203	108.9	-21.4	-3.3	1.288	97.6	.233	.892	317.8	586.7	.684	1.099	78.6	.934	.8	-5.8	203.5	.187
		12.92	9.26	4.17	3.66	7.06	5.10	12.40	1/1/2	66.2	154.0	73.7	1.458	1.667	21.4	343.6	11.5	152.3D	.972
MARS ARRIVAL DATE = 2445960 (16 SEP 1984)																			
4-5640	4-5960	.194	206.1	-.4	1.8	1.073	100.8	.234	1.157	295.9	560.4	.887	1.427	84.0	.751	.4	-20.7	289.9	.136
4-5960	4-6166.3	.257	317.7	-21.6	-1.9	.626	90.0	.452	.964	180.0	442.0	.528	1.400D	112.8	1.317	.7	1.7	77.7	.505
4-6166.3	4-6240	.505	60.1	2.0	1.0	1.171	64.8	.426	.714	116.5	183.4	.410D	1.018	87.5	.753	-2.9	-5.6	169.8	.238
		13.15	10.26	4.61	2.88	6.29	5.65	13.16	2/2/1	105.8	98.7	17.6	.236	6.519	177.8	356.5	1.7	94.9D	1.301
4-5650	4-5960	.174	212.3	-1.0	1.8	1.078	99.4	.219	1.162	302.4	556.9	.907	1.417	85.4	.754	.0	-21.3	297.5	.128
4-5960	4-6096.8	.269	251.0	-24.6	-.7	.755	109.5	.384	1.164	220.6	370.0	.716	1.611D	92.8	1.387	-1.3	-8.6	31.4	.217
4-6096.8	4-6250	.217	66.9	-68.3	-9.1	1.276	91.2	.172	.868	351.8	540.9	.718	1.017	89.8	.903	5.9	39.1	210.2	.126
		13.02	10.29	4.34	2.73	6.14	5.95	11.70	2/1/2	98.9	91.4	64.0	1.278	1.886	76.3	14.1	47.3	114.2D	1.133
4-5650	4-5960	.174	212.3	-1.0	1.8	1.078	99.4	.219	1.162	302.4	556.9	.907	1.417	85.4	.754	.0	-21.3	297.5	.128
4-5960	4-6172.3	.278	324.7	-18.6	-1.8	.614	86.5	.476	.951	176.1	447.9	.498	1.403	115.0	1.311	.7	1.5	84.5	.547
4-6172.3	4-6250	.547	67.6	2.9	1.6	1.159	62.6	.461	.701	120.8	187.5	.378D	1.024	83.7	.736	-2.5	-3.5	171.2	.268
		13.25	10.52	4.34	2.73	6.14	6.19	13.66	2/2/1	98.9	107.7	17.0	.201	6.765	174.7	2.9	5.3	97.6D	1.162
4-5660	4-5960	.157	218.3	-.7	2.0	1.082	98.1	.208	1.168	309.1	553.6	.925	1.411	86.5	.757	-.3	-22.1	304.8	.123
4-5960	4-6101.2	.264	252.9	-23.7	-.2	.750	108.9	.383	1.153	219.1	375.7	.712	1.594D	94.3	1.384	-1.7	-10.5	29.4	.228
4-6101.2	4-6260	.228	64.5	-70.3	-9.7	1.277	90.6	.172	.869	356.2	547.7	.719	1.018	88.4	.904	6.7	42.2	209.6	.136
		12.59	9.95	4.12	2.63	6.05	5.83	11.82	2/1/2	92.4	99.4	63.8	1.155	1.891	77.9	14.3	46.0	118.9D	1.029
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120
4-5960	4-6106.2	.259	255.5	-21.4	.7	.743	108.3	.382	1.139	217.0	381.7	.705	1.574D	96.0	1.381	-2.6	-14.7	28.6	.247
4-6106.2	4-6270	.247	61.2	-72.7	-10.6	1.279	89.8	.174	.871	1.1	194.0	.719D	1.022	87.1	.906	7.9	44.3	210.9	.156
		12.23	9.65	3.95	2.58	6.00	5.70	12.04	2/1/2	86.6	104.9	61.0	.989	1.970	79.8	16.0	43.7	123.9D	.960
MARS ARRIVAL DATE = 2445970 (26 SEP 1984)																			
4-5640	4-5970	.203	207.0	-1.0	1.8	1.073	101.3	.240	1.157	294.2	564.9	.879	1.435	82.6	.756	.4	-21.3	286.3	.147
4-5970	4-6164.6	.249	310.6	-23.9	-2.0	.637	94.6	.441	.971	185.8	439.0	.543	1.400D	111.7	1.321	.9	2.3	76.7	.484
4-6164.6	4-6240	.484	58.8	2.1	1.0	1.179	65.9	.408	.723	113.6	183.4	.428D	1.018	87.7	.765	-2.9	-6.3	169.5	.227
		13.29	10.19	4.73	3.10	6.51	5.46	12.98	2/2/1	115.5	98.6	17.9	.256	6.442	177.7	355.6	.1	93.3D	1.394
4-5650	4-5970	.180	213.1	-1.7	1.8	1.078	99.8	.224	1.162	300.9	561.6	.902	1.422	84.0	.758	.0	-22.1	293.1	.136
4-5970	4-6169.6	.258	317.5	-21.5	-1.9	.626	92.0	.455	.958	182.4	443.5	.522	1.395D	113.3	1.314	.9	2.1	82.3	.513
4-6169.6	4-6250	.513	65.3	3.1	1.5	1.172	64.5	.431	.715	116.7	187.8	.407D	1.024	84.2	.755	-2.6	-4.4	170.4	.249
		12.97	10.10	4.42	2.87	6.28	5.68	13.32	2/2/1	109.3	108.1	17.0	.229	6.769	175.7	.7	4.1	95.4D	1.320
4-5660	4-5970	.161	219.0	-1.7	1.9	1.081	98.4	.211	1.167	307.8	558.4	.921	1.413	85.2	.761	-.3	-23.0	299.9	.128
4-5970	4-6175.7	.275	325.1	-18.3	-1.7	.613	88.4	.478	.944	178.3	449.2	.493	1.394	115.4	1.307	.9	1.9	89.3	.553
4-6175.7	4-6260	.553	73.3	3.8	2.0	1.162	62.4	.465	.706	120.4	191.2	.378D	1.033	80.6	.742	-2.1	-3.3	173.7	.280
		13.02	10.30	4.17	2.72	6.15	6.13	13.87	2/2/1	103.3	115.0	16.1	.197	7.151	172.6	7.1	7.3	97.9D	1.211
MARS ARRIVAL DATE = 2445980 (6 OCT 1984)																			
4-5650	4-5980	.189	214.2	-2.6	1.8	1.078	100.3	.231	1.163	299.0	566.0	.894	1.431	82.7	.762	.0	-22.5	290.0	.147
4-5980	4-6168.4	.258	310.4	-23.7	-1.9	.637	96.5	.449	.967	188.2	441.1	.533	1.400D	112.5	1.318	1.1	2.7	81.7	.499
4-6168.4	4-6250	.499	64.4	3.2	1.5	1.177	65.2	.419	.721	115.0	187.9	.419D	1.024	84.4	.762	-2.6	-4.8	170.0	.241
		13.32	10.21	4.53	3.11	6.51	5.68	13.20	2/2/1	118.5	108.2	17.3	.241	6.656	176.6	.2	2.4	94.3D	1.366
4-5660	4-5980	.167	220.0	-2.8	1.9	1.081	98.8	.216	1.167	306.0	563.0	.916	1.419	84.0	.764	-.3	-23.5	296.0	.136
4-5980	4-6173.5	.264	317.4	-21.2	-1.8	.625	93.8	.462	.952	184.5	445.8	.512	1.392D	114.0	1.311	1.1	2.4	87.5	.526
4-6173.5	4-6260	.526	71.4	4.0	2.0	1.172	63.8	.441	.717	117.2	191.6	.400D	1.033	81.1	.757	-2.3	-3.9	172.9	.265
		12.96	10.08	4.25	2.89	6.30	5.83	13.60	2/2/1	113.1	115.5	16.2	.217	7.095	173.7	5.4	6.1	96.2D	1.324
4-5670	4-5980	.149	225.5	-1.9	2.0	1.085	97.4	.203	1.172	313.3	560.1	.934	1.410	85.1	.767	-.7	-24.7	302.0	.128
4-5980	4-6178.8	.278	325.9	-17.7	-1.6	.610	90.0	.484	.936	180.0	451.2	.483	1.389D	116.1	1.303	1.1	2.2	94.8	.565
4-6178.8	4-6270	.565	79.8	4.5	2.5	1.164	61.8	.473	.709	120.5	194.3	.373D	1.044	77.8	.747	-1.8	-3.7	177.7	.298
		12.95	10.22	4.03	2.74	6.15	6.19	14.19	2/2/1	108.0	120.8	15.1	.189	7.586	170.8	12.1	9.2	98.5D	1.242
MARS ARRIVAL DATE = 2445990 (16 OCT 1984)																			
4-5670	4-5990	.155	226.7	-3.5	1.9	1.085	97.9	.209	1.173	311.2	564.4	.928	1.417	83.9	.770	-.6	-24.9	298.8	.138
4-5990	4-6176.1	.273	316.4	-20.4	-1.7	.622	95.4	.473	.945	186.1	448.3	.498	1.392D	115.0	1.307	1.2	2.7	93.5	.545
4-6176.1	4-6270	.545	78.3	4.6	2.4	1.171	62.9	.456	.717	118.2	194.7	.390D	1.044	78.3	.756	-1.9	-4.0	177.0	.286
		13.10	10.17	4.11	2.92	6.33	6.07	13.97	2/2/1	117.1	121.3	15.4	.203	7.464	171.9	10.9	7.9	97.2D	1.313
4-5680	4-5990	.138	231.6	-1.7	2.1	1.088	96.5	.197	1.177	318.8	561.8	.944	1.409	84.9	.772	-1.0	-26.4	304.0	.131
4-5990	4-6184.6	.284	327.6	-16.7	-1.4	.605	91.3	.495	.927	181.3	453.9	.468	1.385D	117.1	1.298	1.2	2.4	101.2	.583
4-6184.6	4-6280	.583	87.1	4.9	2.8	1.164	60.9	.487	.710	121.2	196.9	.364D	1.056	75.2	.751	-1.3	-4.5	182.9	.320
		13.04	10.27	3.91	2.78	6.19	6.35	14.61	2/2/1	112.8	125.3	14.2	.177	8.092	169.3	17.9	10.6	99.4D	1.253
MARS ARRIVAL DATE = 2446000 (26 OCT 1984)																			
4-5680	4-6000	.145	233.0	-3.9	2.0	1.088	96.9	.203	1.178	316.5	565.8	.939	1.417	83.8	.774	-1.0	-26.1	301.6	.141
4-6000	4-6183.5	.285	320.4	-19.2	-1.5	.616	98.8	.487	.937	187.3	451.5	.481	1.393D	116.2	1.302	1.4	2.9	100.4	.589
4-6183.5	4-6280	.589	86.0	5.1	2.8	1.169	61.7	.475	.716	119.6	197.2	.376D	1.056	75.6	.758	-1.4	-4.7	182.4	.311
		13.36	10.37	3.99	2.99	6.40	6.38	14.44	2/2/1	121.2	125.7	14.5	.186	7.937	170.4	17.2	9.4	99.4D	1.289
4-5690	4-6000	.128	237.2	-1.2	2.1	1.090	95.5	.193	1.182	324.4	563.5	.954	1.410	84.7	.775	-1.4	-27.9	306.0	.134
4-6000	4-6190.1	.294	330.1	-19.2	-1.2	.597	92.2	.509	.917	182.2	457.2	.450	1.383D	118.3	1.292	1.4	2.8	108.4	.608
4-6190.1	4-6290	.608	95.3	5.1	3.1	1.163	59.6	.506	.710	122.4	198.9	.351D	1.069	72.5	.753	-.8	-5.8	189.1	.346
		13.27	10.42	3.81	2.85	6.26	6.61	15.12	2/2/1	117.8	126.7	13.2	.163	8.672	168.3	24.6	11.6	100.5D	1.248

STOPOVER TIME = 0 DAYS | 1984 INBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2445880 | 28 JUN 1984

LAUNCH	ARRIVE	$PEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	$PEED2
DEPART	$WNGBY	$PEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	$PEED4
$WNGBY	RETURN	$PEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	$PEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2445880 (28 JUN 1984)																			
4-5600	4-5880	.266	174.9	5.8	.8	1.061	105.3	.292	1.150	279.6	536.9	.815	1.486A	91.3	.692	1.5	-16.2	291.7	.165
4-5880	4-6093.1	.182	278.4	-15.0	2.9	.662	91.0	.350	1.101	181.9	372.2	.716	1.465D	93.2	1.368	-4.7	-29.9	20.9	.227
4-6093.1	4-6240	.227	69.3	-66.6	-9.5	1.276	91.8	.173	.868	348.0	533.4	.717	1.018A	91.4	.903	6.2	38.1	214.2	.132
		13.06	9.59	5.75	3.47	6.88	3.84	11.76	2/2/2	56.9	81.9	47.6	1.167	2.476	71.4	357.4	32.4	126.6D	1.723
4-5610	4-5880	.251	181.9	3.2	.9	1.068	104.3	.282	1.163	284.3	531.7	.835	1.491A	93.2	.698	1.3	-15.8	299.7	.175
4-5880	4-6097.0	.181	280.2	-19.5	1.1	.661	90.6	.353	1.098	181.1	377.7	.711	1.485D	94.6	1.368	-3.0	-18.5	18.9	.224
4-6097.0	4-6250	.224	66.8	-69.4	-9.5	1.276	91.2	.172	.868	352.1	540.8	.718	1.017	89.8	.903	6.3	40.4	211.3	.131
		13.01	9.32	5.49	3.68	7.08	3.83	11.75	2/2/2	49.2	91.3	58.6	1.199	2.043	73.1	358.8	39.2	128.1D	1.251
MARS ARRIVAL DATE = 2445890 (8 JUL 1984)																			
4-5600	4-5890	.262	175.3	6.3	1.0	1.058	105.1	.287	1.144	279.3	542.1	.816	1.473	89.1	.697	1.4	-16.3	288.0	.153
4-5890	4-6093.5	.186	276.2	-4.6	5.3	.668	92.8	.346	1.096	185.2	370.8	.717	1.476D	92.8	1.367	-7.1	-42.1	23.4	.252
4-6093.5	4-6240	.252	70.4	-72.1	-10.8	1.276	91.7	.173	.868	348.5	533.3	.718	1.018A	91.4	.904	7.5	42.1	217.1	.149
		12.84	9.61	5.68	3.23	6.63	3.93	11.94	2/2/2	65.9	82.7	37.4	.948	3.117	74.1	.6	25.9	129.6D	2.007
4-5610	4-5890	.245	182.2	3.8	1.0	1.065	104.0	.275	1.155	284.1	537.1	.838	1.473A	91.1	.702	1.3	-15.9	297.1	.160
4-5890	4-6096.9	.176	278.3	-17.3	1.7	.667	92.4	.348	1.094	184.5	375.5	.713	1.475D	94.0	1.367	-3.6	-22.7	22.0	.221
4-6096.9	4-6250	.221	66.9	-69.0	-9.3	1.276	91.2	.172	.868	352.0	540.8	.718	1.017	89.8	.903	6.1	39.9	210.9	.129
		12.47	9.11	5.39	3.36	6.76	3.72	11.73	2/2/2	57.2	91.3	53.5	1.228	2.223	73.1	1.3	37.5	127.5D	1.503
4-5620	4-5890	.230	189.2	1.5	1.1	1.072	103.0	.266	1.167	289.0	532.1	.856	1.477A	92.8	.709	1.1	-15.5	304.7	.168
4-5890	4-6101.2	.179	280.5	-22.5	.3	.665	91.9	.352	1.090	183.5	381.4	.706	1.474D	95.5	1.366	-2.2	-13.4	20.6	.228
4-6101.2	4-6260	.228	64.5	-70.4	-9.7	1.277	90.6	.172	.869	356.2	547.7	.719	1.018	88.4	.904	6.7	42.2	209.5	.138
		12.46	8.92	5.15	3.54	6.94	3.77	11.82	2/2/2	49.9	99.4	63.1	1.159	1.912	75.3	3.0	42.8	127.1D	1.057
4-5660	4-5890	.189	218.2	.3	2.5	1.099	99.4	.250	1.222	309.6	512.7	.916	1.527A	98.4	.735	-.7	-16.9	325.5	.210
4-5890	4-6061.1	.179	275.1	-40.6	-4.4	.670	93.5	.345	1.098	186.6	351.9	.719A	1.477D	87.9	1.366	2.7	18.9	38.7	.199
4-6061.1	4-6300	.199	88.8	-21.3	-3.3	1.278	97.7	.220	.875	314.6	576.8	.682	1.068	80.9	.914	-.6	-3.8	180.6	.158
		12.83	8.32	4.53	4.50	7.89	3.79	12.04	2/1/2	31.1	146.8	63.4	1.523	1.904	40.9	334.7	40.8	126.1D	1.377
MARS ARRIVAL DATE = 2445900 (18 JUL 1984)																			
4-5610	4-5900	.241	182.6	4.3	1.2	1.063	103.9	.270	1.150	283.8	542.4	.839	1.460	89.1	.708	1.2	-16.2	293.4	.148
4-5900	4-6097.2	.176	275.4	-12.0	3.1	.674	94.3	.346	1.091	188.3	374.0	.714	1.468D	93.6	1.366	-5.0	-31.1	24.5	.230
4-6097.2	4-6250	.230	66.8	-70.3	-9.8	1.276	91.1	.172	.868	352.3	540.7	.719	1.017	89.8	.903	6.6	41.4	212.3	.135
		12.18	9.05	5.33	3.12	6.53	3.73	11.79	2/2/2	66.4	91.2	45.6	1.134	2.381	74.3	4.1	33.2	128.2D	1.793
4-5620	4-5900	.224	189.5	2.0	1.2	1.069	102.8	.259	1.160	288.8	537.6	.859	1.460A	90.8	.713	1.0	-15.8	302.0	.153
4-5900	4-6100.9	.174	277.6	-21.8	.5	.672	93.9	.348	1.088	187.3	379.1	.709	1.466D	94.9	1.365	-2.4	-15.2	23.3	.221
4-6100.9	4-6260	.221	64.9	-69.4	-9.3	1.277	90.6	.172	.869	355.8	547.7	.719	1.018	88.4	.904	6.3	41.1	208.4	.134
		11.97	8.74	5.06	3.25	6.64	3.68	11.77	2/2/2	58.1	99.8	60.0	1.229	1.999	74.9	4.9	42.3	126.2D	1.229
4-5660	4-5900	.177	217.8	.5	2.4	1.094	98.9	.236	1.205	310.1	518.9	.921	1.490A	96.2	.736	-.6	-16.6	325.5	.187
4-5900	4-6082.8	.175	271.9	-37.5	-3.5	.677	95.3	.343	1.096	190.3	352.8	.719A	1.472D	88.2	1.365	1.7	12.0	40.0	.191
4-6082.8	4-6300	.191	89.6	-22.4	-3.3	1.278	97.3	.216	.876	316.9	576.3	.686	1.065	81.2	.915	-.4	-3.2	181.5	.154
		12.03	8.06	4.38	3.96	7.36	3.69	11.99	2/1/2	36.6	146.3	59.6	1.641	2.012	36.9	338.3	36.3	126.3D	1.661
4-5670	4-5900	.173	226.0	6.5	3.5	1.100	97.9	.234	1.218	315.9	514.6	.933	1.503A	97.3	.741	-1.9	-19.9	330.6	.198
4-5900	4-6087.0	.179	272.8	-41.3	-4.5	.677	95.1	.343	1.096	189.9	359.3	.720A	1.471D	89.8	1.366	2.7	19.4	34.8	.194
4-6087.0	4-6310	.194	95.9	-22.8	-3.4	1.282	97.3	.221	.881	317.7	580.0	.687	1.076	80.3	.921	.0	-3.7	188.5	.164
		12.31	8.11	4.33	4.21	7.60	3.78	12.11	2/1/2	33.8	149.3	73.1	1.593	1.680	37.2	336.5	37.2	133.1D	1.083
MARS ARRIVAL DATE = 2445910 (28 JUL 1984)																			
4-5610	4-5910	.240	183.1	4.7	1.3	1.061	103.8	.268	1.145	283.3	547.7	.838	1.453	87.2	.713	1.2	-16.7	288.5	.142
4-5910	4-6098.4	.197	272.1	1.5	7.2	.681	96.2	.345	1.089	192.1	374.1	.714	1.465D	93.6	1.366	-9.1	-49.1	24.6	.285
4-6098.4	4-6250	.285	67.0	-76.8	-12.5	1.277	90.9	.172	.868	354.0	540.6	.719	1.017	89.9	.903	9.4	47.7	218.6	.174
		12.48	9.49	5.31	2.99	6.40	4.19	12.25	2/2/2	76.7	90.7	32.2	.742	3.606	79.1	7.1	23.1	132.0D	1.934
4-5620	4-5910	.221	189.9	2.5	1.3	1.067	102.6	.255	1.154	288.5	543.0	.860	1.449	89.0	.718	1.0	-16.4	298.1	.143
4-5910	4-6100.9	.174	273.6	-19.8	1.1	.680	96.0	.340	1.087	191.5	377.5	.711	1.463D	94.5	1.365	-3.0	-18.9	25.8	.219
4-6100.9	4-6260	.219	65.0	-69.1	-9.2	1.277	90.6	.172	.869	355.7	547.7	.719	1.018	88.4	.904	6.2	40.8	208.1	.132
		11.70	8.68	5.01	3.02	6.42	3.67	11.76	2/2/2	67.6	99.9	55.7	1.248	2.139	75.0	7.0	40.8	125.9D	1.422
4-5660	4-5910	.168	217.5	.6	2.2	1.090	98.5	.225	1.193	310.6	525.1	.924	1.462A	94.2	.737	-.5	-16.8	324.7	.167
4-5910	4-6083.3	.175	267.6	-34.4	-2.7	.685	97.3	.344	1.095	194.4	352.0	.719A	1.472D	87.9	1.365	.8	5.9	42.3	.189
4-6083.3	4-6300	.189	89.9	-22.7	-3.3	1.279	97.1	.215	.876	317.6	576.2	.687	1.065	81.3	.915	-.4	-3.0	181.7	.153
		11.47	7.95	4.26	3.52	6.92	3.69	11.98	2/1/2	43.1	146.1	54.6	1.675	2.180	33.8	340.9	32.2	129.3D	1.976
4-5670	4-5910	.161	224.9	5.2	3.1	1.095	97.5	.222	1.204	316.5	520.9	.937	1.471A	95.2	.742	-1.5	-19.2	329.9	.175
4-5910	4-6088.8	.176	268.8	-36.5	-3.2	.685	97.0	.342	1.095	193.9	360.3	.720	1.470D	90.1	1.366	1.3	9.7	35.6	.187
4-6088.8	4-6310	.187	96.6	-24.0	-3.4	1.282	96.8	.217	.882	320.2	579.5	.690	1.073	80.6	.921	.2	-2.9	189.3	.160
		11.59	7.89	4.18	3.70	7.10	3.71	12.06	2/1/2	33.6	148.9	68.4	1.718	1.780	32.1	339.8	30.8	137.0D	1.339
MARS ARRIVAL DATE = 2445920 (7 AUG 1984)																			
4-5600	4-5920	.267	177.0	7.2	1.4	1.055	105.5	.289	1.135	277.3	557.3	.807	1.463	83.2	.715	1.5	-17.0	272.4	.148
4-5920	4-6092.1	.180	264.8	-33.1	-2.4	.693	99.0	.344	1.097	198.1	364.1	.719	1.474D	91.1	1.367	.5	3.5	34.2	.188
4-6092.1	4-6240	.187	68.3	-61.1	-7.4	1.276	92.0	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.4	207.9	.107
		12.69	9.57	5.77	3.12	6.53	3.80	11.53	2/1/2	98.0	80.4	69.8	1.710	1.747	73.3	9.8	55.0	106.7D	1.278
4-5600	4-5920	.267	177.0	7.2	1.4	1.055	105.5	.289	1.135	277.3	557.3	.807	1.463	83.2	.715	1.5	-17.0	272.4	.148
4-5920	4-6099.8	.194	266.4	-45.5	-6.0	.690	98.3	.346	1.090	196.4	374.7	.713	1.468D	93.8	1.366	4.1	25.7	27.9	.222
4-6099.8	4-6240	.222	56.5	69.7	9.4	1.277	90.3	.172	.869	357.6	532.1	.719	1.018A	91.6	.904	-12.6	-58.8	151.5	.223
		13.03	9.90	5.77	3.12	6.53	4.13	12.93	2/1/1	98.0	84.2	47.4	1.219	2.487	77.5	11.5	-38.8	123.1D	1.812
4-5610	4-5920	.242	183.7	4.9	1.4	1.060	103.9	.269	1.143	282.6	552.8	.835	1.450	85.4	.719	1.2	-17.2	283.1	.140
4-5920	4-6095.9	.181	266.4	-34.5	-2.8	.692	98.7	.345	1.094	197.3	369.4	.717	1.471D	92.4	1.367	.8	5.9	30.8	.194
4-6095.9	4-6250	.194	67.2	-64.0	-7.9	1.276	91.4	.172	.867	350.6	541.0	.718	1.017	89.8	.903	4.6	33.8	206.1	.111
		12.12	9.16	5.34	2.96	6.37	3.82	11.57	2/1/2	87.7	91.9	75.1	1.595	1.642	74.4	8.7	55.3	111.9D	1.023
4-5620	4-5920	.221	190.4	2.8	1.4	1.066	102.6	.254	1.150	288.0	548.4	.859	1.442	87.2	.723	1.0	-17.1	293.1	.137
4-5920	4-6101.6	.183	269.5	-12.1	3.2	.688	98.1	.347	1.088	195.9	377.2	.711	1.466D	94.4	1.366	-5.1	-30.7	26.7	.237
4-6101.6	4-6260	.237	64.0	-71.7	-10.2	1.278	90.5	.172	.869	356.7	547.7	.719	1.018	88.4	.904	7.2	43.5	211.0	.145
		11.76	8.86	5.00	2.90	6.31	3.86	11.89	2/2/2	78.2	98.9	45.7	1.067	2.576	76.8	9.5	34.5	128.8D	1.683
4-5630	4-5920	.203	197.1	1.1	1.5	1.071	101.4	.241	1.158	293.5	543.9	.879	1.438	88.8	.728	.7	-16.8	302.1	.137
4-5920	4-6105.1	.179	271.6	-27.8	-1.0	.686	97.6	.349	1.084	194.7	381.8	.706	1.462D	95.6	1.364	-.9	-5.7	26.6	.222
4-6105.1	4-6270	.222	63.5	-69.4	-9.4	1.279	90.1	.174	.871	359.5	554.1	.719	1.022	87.1	.906	6.6	41.0	207.1	.141
		11.42	8.52	4.73	2.91	6.32	3.78	11.85	2/2/2	69.7	106.9	68.1	1.216	1.786	76.9	10.1	48.3	122.6D	.956
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6049.8	.225	272.2	-29.5	-2.0	.642	98.6	.430	1.020	191.7	289.8	.581A	1.459D	70.5	1.334	.1	.3	54.6	.445
4-6049.8	4-6300	.445	64.7	-11.7	-4.4	1.265	110.5	.381	.862	272.5	584.6	.534	1.190	69.9	.905	-3.9	-6.9	170.8	.336
		12.20	9.03	4.18	3.16	6.57	4.85	14.93	2/1/2	50.8	152.9	15.5	.303	7.395	51.0	336.6	50.5	89.4L	1.940
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6064.5	.194	265.4	-30.9	-2.0	.679	99.4	.372	1.073	196.6	318.2	.673A	1.472D	79.0	1.355	.1	.6	57.7	.294
4-6064.5	4-6300	.294	77.0	-14.6	-3.4	1.271	103.0	.276	.868	292.9	581.7	.627	1.110	76.9	.910	-2.1	-6.6	174.1	.223
		11.47	8.31	4.18	3.16	6.57	4.13	12.91	2/1/2	50.8	150.7	24.4	.697	4.729	39.2	342.8	38.3	102.7D	2.597
4-5660	4-5920	.161	217.3	.7	2.2	1.087	98.2	.217	1.184	310.9	531.2	.927	1.442A	92.4	.740	-.4	-17.4	322.8	.150
4-5920	4-6082.4	.181	262.7	-31.9	-2.1	.694	99.5	.346	1.098	199.0	349.2	.718A	1.478D	87.2	1.366	.2	1.7	45.6	.193
4-6082.4	4-6300	.193	89.4	-22.1	-3.3	1.278	97.4	.217	.876	316.4	576.4	.685	1.066	81.1	.915	-.4	-3.4	181.2	.155
		11.17	8.01	4.18	3.16	6.57	3.83	12.00	2/1/2	50.8	146.4	48.9	1.611	2.417	31.7	342.9	29.3	126.0D	2.282
4-5670	4-5920	.153	224.2	4.3	2.8	1.092	97.1	.212	1.193	317.0	527.2	.940	1.446A	93.4	.748	-1.2	-19.2	328.4	.157
4-5920	4-6089.2	.180	263.9	-32.6	-2.3	.694	99.2	.344	1.098	198.3	359.7	.720A	1.476D	89.9	1.367	.4	2.7	37.4	.188
4-6089.2	4-6310	.186	96.7	-24.2	-3.4	1.283	96.7	.216	.882	320.7	579.5	.691	1.073	80.6	.922	.2	-2.8	189.5	.159
		11.17	7.87	4.08	3.50	6.70	3.80	12.05	2/1/2	46.6	148.8	63.5	1.748	1.901	29.0	341.7	28.7	139.2D	1.872

STOPOVER TIME = 0 DAYS — 1984 INBOUND SWINGBY — MISSION DURATION = 640 DAYS; MARS ARRIVAL DATE = 2445920 = 7 AUG 1984

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-5660	4-5920	.152	231.9	13.1	4.1	1.096	96.1	.208	1.202	323.4	523.5	.951	1.452A	94.2	.749	-2.6	-23.8	334.3	.165
4-5920	4-6093.2	.180	265.2	-33.3	-2.5	.693	98.9	.344	1.096	197.9	365.6	.719	1.473D	91.4	1.367	.5	3.9	33.2	.169
4-6093.2	4-6320	.189	103.0	-23.8	-3.4	1.286	96.8	.221	.887	321.0	583.0	.691	1.084	79.8	.928	.6	-3.6	196.7	.170
		11.35	7.87	4.06	3.48	6.89	3.80	12.18	2/1/2	44.1	151.4	73.4	1.685	1.674	26.6	341.6	23.3	145.4D	1.135
MARS ARRIVAL DATE = 2445930 (17 AUG 1984)																			
4-5600	4-5930	.275	177.8	7.3	1.6	1.055	105.9	.296	1.134	276.0	561.9	.799	1.470	81.3	.722	1.5	-17.2	267.6	.158
4-5930	4-6092.2	.190	259.8	-29.9	-1.7	.705	101.4	.348	1.104	203.2	363.4	.720	1.488D	90.9	1.369	-.2	-1.8	35.6	.189
4-6092.2	4-6240	.189	68.4	-61.5	-7.5	1.276	91.9	.173	.867	346.7	533.6	.717	1.018A	91.3	.903	4.1	28.8	208.2	.108
		13.28	9.96	5.91	3.32	6.73	4.04	11.54	2/1/2	108.4	80.4	64.6	1.687	1.872	73.4	12.2	52.5	108.6D	1.471
4-5610	4-5930	.246	184.4	5.1	1.5	1.060	104.2	.273	1.141	281.7	557.8	.630	1.452	83.6	.725	1.2	-17.7	277.7	.144
4-5930	4-6095.9	.190	261.3	-29.6	-1.6	.703	101.1	.348	1.101	202.4	368.6	.717	1.484D	92.2	1.369	-.4	-2.5	32.3	.194
4-6095.9	4-6250	.194	67.3	-64.0	-7.9	1.276	91.4	.172	.867	350.5	541.0	.718	1.017	89.8	.903	4.6	33.8	206.0	.111
		12.47	9.43	5.41	3.04	6.44	4.02	11.57	2/1/2	98.8	91.9	66.5	1.597	1.823	74.1	10.8	51.2	113.2D	1.314
4-5610	4-5930	.246	184.4	5.1	1.5	1.060	104.2	.273	1.141	281.7	557.8	.630	1.452	83.6	.725	1.2	-17.7	277.7	.144
4-5930	4-6107.5	.191	267.9	-34.4	-2.9	.694	99.7	.352	1.085	198.9	363.8	.703	1.466D	96.1	1.365	1.0	5.8	27.8	.230
4-6107.5	4-6250	.230	46.5	69.4	9.7	1.277	88.8	.172	.867	6.3	179.8	.718D	1.017A	90.0	.903	-12.7	-58.1	149.2	.223
		12.51	9.48	5.41	3.04	6.44	4.06	12.92	2/2/1	98.8	90.0	64.8	1.141	1.866	82.9	16.1	-51.2	116.8D	.988
4-5620	4-5930	.223	191.0	3.0	1.5	1.065	102.7	.254	1.148	287.3	553.5	.656	1.440	85.5	.729	1.0	-17.8	287.6	.136
4-5930	4-6100.2	.188	263.4	-28.4	-1.2	.700	100.6	.349	1.096	201.3	374.4	.713	1.478D	93.7	1.368	-.7	-4.7	29.5	.205
4-6100.2	4-6260	.205	65.8	-66.6	-8.5	1.277	90.8	.173	.869	354.7	547.8	.719	1.019	88.4	.904	5.4	37.9	205.4	.123
		11.91	9.03	5.03	2.88	6.29	3.99	11.67	2/1/2	89.4	100.9	66.8	1.436	1.816	75.2	10.4	49.4	116.0D	1.172
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6044.9	.255	271.2	-28.7	-1.9	.629	101.5	.471	.993	193.5	277.9	.525A	1.461D	66.3	1.323	-.1	-.2	53.6	.526
4-6044.9	4-6300	.526	60.9	-11.1	-5.0	1.263	114.4	.437	.860	264.6	584.5	.484	1.237	66.0	.904	-4.9	-7.0	170.6	.399
		12.64	9.74	4.13	2.90	6.31	5.62	16.24	2/1/2	59.8	153.0	13.1	.217	8.789	56.6	335.6	56.0	85.7L	1.694
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6072.9	.199	258.4	-30.0	-1.9	.701	102.1	.361	1.096	203.4	332.5	.701A	1.492D	82.8	1.364	-.1	-.6	55.7	.239
4-6072.9	4-6300	.239	83.6	-17.3	-3.3	1.275	100.1	.244	.872	303.9	579.2	.660	1.084	79.3	.912	-1.3	-5.7	177.1	.184
		11.27	8.37	4.13	2.90	6.31	4.25	12.37	2/1/2	59.8	148.8	32.1	1.052	3.618	32.9	345.0	31.3	113.4D	2.754
4-5660	4-5930	.157	217.3	.6	2.1	1.085	98.0	.212	1.177	310.9	537.1	.928	1.427A	90.8	.744	-.4	-18.3	319.7	.137
4-5930	4-6078.8	.196	257.7	-30.0	-1.8	.705	102.0	.354	1.103	204.0	342.6	.713A	1.494D	85.5	1.367	-.1	-.8	50.8	.209
4-6078.8	4-6300	.209	87.5	-20.1	-3.2	1.277	98.4	.226	.874	311.6	577.4	.677	1.072	80.5	.914	-.8	-4.4	179.6	.165
		11.19	8.29	4.15	2.90	6.31	4.16	12.12	2/1/2	59.8	147.4	40.6	1.380	2.880	30.7	344.5	28.2	122.5D	2.595
4-5670	4-5930	.146	223.8	3.6	2.6	1.089	96.9	.206	1.185	317.3	533.4	.941	1.429A	91.7	.748	-1.0	-19.8	325.8	.141
4-5930	4-6088.6	.192	258.8	-30.0	-1.8	.706	101.6	.348	1.105	203.7	358.2	.720A	1.491D	89.5	1.369	-.2	-1.4	39.5	.188
4-6088.6	4-6310	.188	96.5	-23.9	-3.4	1.282	96.8	.217	.882	319.9	579.6	.690	1.075	80.6	.921	.2	-3.0	189.3	.160
		11.06	8.07	4.01	2.98	6.39	4.07	12.06	2/1/2	55.0	148.9	59.5	1.707	2.016	27.1	342.7	22.5	139.4D	1.734
4-5660	4-5930	.141	230.5	10.3	3.5	1.093	95.8	.201	1.192	323.9	529.9	.955	1.432A	92.5	.751	-2.1	-23.2	331.8	.148
4-5930	4-6093	.190	260.1	-29.8	-1.7	.705	101.3	.348	1.103	203.0	364.5	.719	1.487D	91.2	1.369	-.3	-1.9	34.8	.190
4-6093	4-6320	.190	103.0	-23.7	-3.4	1.286	96.8	.222	.887	320.8	583.1	.690	1.084	79.8	.928	.6	-3.7	196.6	.170
		11.09	7.98	3.95	3.11	6.52	4.04	12.19	2/1/2	51.5	151.4	69.3	1.672	1.759	24.7	342.6	18.9	147.0D	1.270
MARS ARRIVAL DATE = 2445940 (27 AUG 1984)																			
4-5610	4-5940	.254	185.2	5.1	1.7	1.059	104.7	.279	1.140	280.4	562.5	.822	1.458	81.8	.732	1.2	-18.1	273.0	.153
4-5940	4-6096.1	.207	256.6	-27.2	-1.1	.717	103.6	.355	1.113	208.0	368.5	.717	1.508D	92.2	1.372	-.9	-5.9	32.8	.196
4-6096.1	4-6250	.198	67.2	-64.8	-8.1	1.276	91.3	.172	.867	350.8	541.0	.718	1.017	89.8	.903	4.9	34.9	206.9	.114
		13.22	9.99	5.55	3.23	6.64	4.44	11.59	2/1/2	109.2	91.8	63.7	1.530	1.895	74.6	12.4	49.4	113.4D	1.369
4-5620	4-5940	.227	191.7	3.0	1.6	1.064	103.0	.258	1.146	286.2	558.5	.651	1.442	83.8	.735	1.0	-18.5	282.3	.140
4-5940	4-6100.4	.205	258.9	-25.7	-.6	.713	103.2	.355	1.107	206.8	374.2	.713	1.500D	93.7	1.371	-1.3	-8.7	30.2	.209
4-6100.4	4-6260	.209	65.5	-67.4	-8.7	1.277	90.7	.173	.869	355.0	547.8	.719	1.019	88.4	.904	5.7	38.8	206.3	.126
		12.46	9.49	5.11	2.97	6.38	4.39	11.70	2/1/2	100.4	100.6	63.4	1.374	1.904	75.8	12.0	47.4	118.6D	1.242
4-5670	4-5940	.143	223.6	2.8	2.4	1.087	96.8	.201	1.179	317.2	539.3	.942	1.417A	90.2	.751	-.9	-20.8	322.0	.130
4-5940	4-6087.4	.212	254.1	-28.1	-1.5	.721	104.3	.357	1.119	209.5	356.0	.720A	1.519D	88.9	1.373	-.5	-3.7	41.6	.193
4-6087.4	4-6310	.193	96.1	-23.0	-3.4	1.282	97.2	.220	.881	318.2	579.9	.687	1.075	80.4	.921	.0	-3.5	188.7	.163
		11.27	8.50	3.96	2.76	6.18	4.54	12.10	2/1/2	64.6	149.3	56.0	1.618	2.128	25.7	343.3	20.4	138.2D	1.825
4-5680	4-5940	.134	229.6	8.2	3.1	1.091	95.7	.195	1.186	324.1	536.0	.954	1.417A	91.0	.754	-1.7	-23.5	326.3	.134
4-5940	4-6092.2	.209	255.4	-27.7	-1.3	.719	104.0	.355	1.116	208.8	363.1	.720	1.513D	90.8	1.373	-.7	-4.7	36.2	.193
4-6092.2	4-6320	.193	102.7	-23.2	-3.4	1.286	97.0	.223	.887	319.7	583.2	.689	1.085	79.6	.928	.5	-4.1	196.5	.172
		11.20	8.36	3.88	2.84	6.25	4.48	12.21	2/1/2	60.4	151.6	66.6	1.616	1.822	25.7	343.0	18.5	146.8D	1.328
4-5690	4-5940	.136	236.1	19.0	4.4	1.093	94.5	.191	1.192	331.2	533.0	.964	1.419A	91.6	.757	-3.2	-29.1	335.1	.141
4-5940	4-6096.0	.207	256.8	-27.2	-1.1	.717	103.6	.355	1.113	208.0	368.4	.718	1.508D	92.2	1.372	-.9	-5.9	32.9	.198
4-6096.0	4-6330	.198	109.3	-22.0	-3.3	1.280	97.3	.230	.892	319.5	586.5	.687	1.097	78.6	.934	.9	-5.4	205.8	.184
		11.32	8.33	3.89	2.99	6.40	4.44	12.37	2/1/2	57.9	153.7	75.2	1.532	1.639	22.0	343.6	12.9	153.2D	.980
MARS ARRIVAL DATE = 2445950 (6 SEP 1984)																			
4-5630	4-5950	.210	198.9	1.2	1.7	1.069	101.9	.245	1.152	291.0	559.4	.869	1.434	84.0	.744	.7	-19.5	286.4	.138
4-5950	4-6105.9	.227	256.3	-20.5	1.0	.724	105.3	.366	1.114	210.8	381.1	.706	1.522D	95.6	1.374	-2.9	-16.9	28.8	.238
4-6105.9	4-6270	.238	62.0	-71.6	-10.2	1.279	89.9	.174	.871	.6	194.0	.719D	1.022	87.1	.906	7.5	43.3	209.7	.152
		12.66	9.75	4.84	2.91	6.32	4.91	11.97	2/1/2	102.8	105.6	58.1	1.061	2.060	78.6	14.8	42.7	124.9D	1.124
4-5670	4-5950	.141	223.6	1.9	2.3	1.086	96.8	.199	1.175	316.8	545.0	.942	1.409	88.8	.755	-.8	-22.1	317.2	.123
4-5950	4-6085.2	.241	250.4	-26.7	-1.4	.739	107.3	.371	1.143	216.1	353.0	.719A	1.567D	88.1	1.379	-.7	-4.9	43.6	.202
4-6085.2	4-6310	.202	95.1	-21.7	-3.4	1.281	97.8	.225	.881	315.2	580.4	.682	1.079	80.0	.921	-.2	-4.3	187.8	.169
		11.84	9.21	3.95	2.63	6.05	5.26	12.17	2/1/2	75.3	149.8	52.6	1.470	2.258	24.2	343.5	18.8	135.6D	1.850
4-5680	4-5950	.131	229.2	6.3	2.8	1.089	95.6	.192	1.181	323.9	541.9	.954	1.408	89.5	.758	-1.5	-24.3	323.7	.124
4-5950	4-6090.9	.238	251.5	-26.3	-1.2	.737	106.9	.368	1.139	215.3	361.4	.720	1.559D	90.4	1.379	-.9	-6.1	37.3	.199
4-6090.9	4-6320	.199	102.3	-22.4	-3.4	1.285	97.4	.227	.886	317.8	583.5	.686	1.087	79.4	.927	.4	-4.6	195.8	.175
		11.67	9.01	3.84	2.66	6.07	5.17	12.25	2/1/2	70.5	151.8	64.6	1.520	1.672	22.7	343.0	14.9	145.8D	1.326
4-5690	4-5950	.127	234.6	14.8	3.7	1.092	94.4	.187	1.186	331.2	539.1	.965	1.408A	90.2	.760	-2.5	-28.5	330.2	.129
4-5950	4-6095.0	.235	252.8	-25.9	-.9	.735	106.6	.367	1.135	214.4	367.0	.718	1.551D	91.9	1.378	-1.1	-7.2	33.8	.203
4-6095.0	4-6330	.203	108.9	-21.4	-3.3	1.288	97.6	.233	.892	317.8	586.7	.684	1.099	78.6	.934	.8	-5.8	203.5	.187
		11.63	8.89	3.80	2.74	6.15	5.10	12.40	2/1/2	67.0	154.0	73.7	1.456	1.667	21.4	343.6	11.5	152.3D	.972
MARS ARRIVAL DATE = 2445960 (16 SEP 1984)																			
4-5670	4-5960	.142	224.0	.9	2.2	1.085	96.9	.198	1.173	316.1	550.4	.940	1.406	87.5	.759	-.7	-23.3	311.7	.120
4-5960	4-6081.4	.263	247.7	-25.8	-1.3	.764	110.8	.394	1.185	223.5	347.9	.717A	1.649D	86.6	1.389	-.8	-5.2	46.4	.221
4-6081.4	4-6310	.221	93.0	-19.6	-3.4	1.280	98.9	.236	.879	310.0	581.3	.672	1.086	79.3	.920	-.5	-5.6	186.2	.160
		12.86	10.28	3.98	2.58	6.00	6.32	12.31	2/1/2	66.6	150.6	47.6	1.232	2.477	22.3	343.4	17.7	130.5D	1.020
4-5680	4-5960	.129	229.2	4.5	2.5	1.088	95.7	.191	1.178	323.2	547.4	.953	1.403	88.3	.762	-1.3	-25.2	316.5	.120
4-5960	4-6088.8	.276	248.7	-25.4	-1.1	.762	110.2	.388	1.178	222.6	359.1	.720A	1.635D	89.8	1.389	-1.0	-6.6	38.2	.209
4-6088.8	4-6320	.209	101.4	-21.1	-3.4	1.284	98.1	.232	.886	314.8	583.9	.680	1.091	79.1	.927	.6	-5.6	195.0	.181
		12.58	9.98	3.82	2.67	5.99	6.15	12.32	2/1/2	81.8	152.4	62.6	1.377	1.923	21.4	342.7	13.6	143.3D	1.278

1986

OUTBOUND SWINGBY

4.8

STOPOVER TIME = 0 DAYS — 1986 OUTBOUND SWINGBY — MISSION DURATION = 480 DAYS; MARS ARRIVAL DATE = 2446470 (8 FEB 1986)

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2446470 (8 FEB 1986)																				
4-6160	4-6315.2	.156	72.0	20.4	-.4	.869	94.2	.255	.804	192.5	440.2	.599	1.008D	103.5	1.239	-3.2	-12.9	315.0	.304
4-6315.2	4-6470	.304	351.4	-10.4	-2.3	1.395	80.8	.425	1.198	31.2	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.8	.278
4-6470	4-6640	.115	216.3	-4.4	1.8	.657	93.7	.315	1.225	188.0	286.1	.840A	1.611D	74.5	1.075	-.7	18.6	116.1	.286
		12.79	6.60	4.11	6.19	9.57	2.49	13.98	2/1/1	32.3	169.6	35.7	.648	3.265	12.9	242.4	-4.1	111.3D	1.468
MARS ARRIVAL DATE = 2446480 (18 FEB 1986)																				
4-6140	4-6315.7	.139	90.4	21.1	-.4	.868	88.0	.253	.795	174.1	442.4	.594	.996	103.6	1.234	-3.4	-13.3	314.7	.306
4-6315.7	4-6480	.305	349.6	-10.5	-2.3	1.387	80.4	.412	1.166	33.5	162.1	.685D	1.647A	101.8	.631	.8	-21.8	263.9	.246
4-6480	4-6620	.162	218.3	-9.0	1.6	.614	94.4	.406	1.138	186.5	260.7	.675A	1.600D	66.8	1.044	-.6	20.7	110.5	.412
		12.71	7.33	3.92	5.38	8.77	3.40	16.52	2/1/1	38.8	176.3	34.3	.644	3.395	13.3	241.2	-4.6	109.4D	1.543
4-6150	4-6315.0	.139	79.2	21.1	-.5	.868	91.2	.250	.799	183.6	440.8	.599	.998D	103.3	1.236	-3.3	-13.4	314.3	.300
4-6315.0	4-6480	.300	349.8	-10.9	-2.4	1.387	80.8	.411	1.168	32.2	162.0	.686D	1.648A	101.8	.632	.9	-21.7	264.2	.246
4-6480	4-6630	.136	218.0	-6.9	1.7	.640	94.7	.357	1.181	188.5	272.3	.759A	1.603D	70.6	1.060	-.6	19.9	114.2	.348
		12.19	6.81	3.93	5.38	8.76	2.88	15.18	2/1/1	38.6	177.0	34.8	.668	3.347	13.4	241.2	-4.0	110.5D	1.568
4-6160	4-6315.6	.155	72.8	20.2	-.4	.869	94.1	.255	.803	192.1	440.4	.598	1.008D	103.6	1.239	-3.2	-12.8	315.6	.305
4-6315.6	4-6460	.305	349.6	-10.6	-2.3	1.387	80.4	.412	1.166	33.4	162.1	.685D	1.648A	101.8	.631	.6	-21.8	264.0	.246
4-6460	4-6640	.117	216.9	-4.2	1.8	.660	95.0	.319	1.218	190.9	284.2	.830A	1.607D	74.0	1.073	-.6	19.0	117.4	.293
		12.02	6.63	4.10	5.39	8.77	2.53	14.10	2/1/1	38.6	170.6	33.4	.646	3.482	12.8	241.8	-3.8	110.1D	1.603
4-6170	4-6317.1	.180	70.9	19.4	-.6	.871	96.9	.267	.809	199.7	440.7	.593	1.025D	104.2	1.242	-3.1	-11.7	317.9	.317
4-6317.1	4-6480	.317	349.2	-9.6	-2.3	1.386	79.6	.416	1.163	36.1	162.4	.679D	1.647A	101.8	.629	.7	-22.1	263.4	.247
4-6480	4-6650	.103	215.4	-1.2	1.9	.675	95.3	.290	1.249	193.4	296.2	.887A	1.611D	77.0	1.083	-.6	18.1	119.5	.244
		12.10	6.70	4.41	5.40	8.79	2.28	13.26	2/1/1	39.2	163.5	30.8	.597	3.764	11.7	242.9	-3.6	108.8D	1.651
4-6180	4-6319.1	.211	72.1	18.8	-.9	.875	99.7	.284	.817	206.7	441.2	.585	1.049D	105.0	1.248	-2.8	-10.2	321.0	.335
4-6319.1	4-6480	.335	348.9	-8.9	-2.2	1.385	78.5	.421	1.157	39.9	162.9	.670D	1.644A	101.7	.626	.5	-22.5	262.6	.248
4-6480	4-6660	.093	213.8	1.9	2.0	.686	95.6	.269	1.273	195.6	308.1	.930A	1.615D	79.7	1.091	-.6	17.2	120.4	.203
		12.40	6.98	4.85	5.42	8.80	2.13	12.62	2/1/1	40.0	154.8	27.5	.535	4.201	10.2	244.5	-2.7	107.1D	1.713
MARS ARRIVAL DATE = 2446490 (28 FEB 1986)																				
4-6140	4-6316.2	.140	91.6	20.7	-.4	.868	87.6	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.4	.307
4-6316.2	4-6490	.307	348.4	-10.7	-2.4	1.381	80.0	.404	1.144	35.4	167.9	.682D	1.606A	97.9	.625	.8	-21.4	261.3	.220
4-6490	4-6620	.168	217.2	-8.7	1.6	.614	96.3	.416	1.127	188.9	258.4	.658A	1.596D	66.0	1.040	-.4	20.9	111.8	.423
		12.22	7.48	3.95	4.75	8.14	3.54	16.78	2/1/1	46.1	175.3	32.4	.636	3.581	13.2	241.0	-4.4	108.3D	1.642
4-6150	4-6315.4	.139	80.2	20.9	-.4	.868	91.1	.251	.798	183.2	441.1	.598	.998D	103.4	1.235	-3.3	-13.3	314.9	.301
4-6315.4	4-6490	.301	348.6	-11.2	-2.5	1.381	80.5	.402	1.146	33.9	167.7	.685D	1.607A	98.0	.626	.9	-21.2	261.6	.220
4-6490	4-6630	.141	216.5	-6.6	1.7	.642	96.3	.364	1.173	191.2	270.2	.746A	1.600D	70.0	1.057	-.4	20.2	115.5	.357
		11.65	6.91	3.93	4.74	8.13	2.98	15.36	2/1/1	45.8	178.2	33.0	.664	3.518	13.3	241.0	-3.6	109.6D	1.672
4-6160	4-6316.0	.154	73.6	20.1	-.4	.868	93.9	.256	.802	191.7	440.7	.597	1.007D	103.6	1.238	-3.2	-12.7	316.1	.306
4-6316.0	4-6490	.306	348.5	-10.8	-2.4	1.381	80.1	.403	1.144	35.0	167.9	.683D	1.606A	98.0	.625	.8	-21.4	261.3	.220
4-6490	4-6640	.121	215.0	-3.9	1.8	.663	96.5	.323	1.215	193.9	282.4	.821A	1.604D	73.6	1.071	-.4	19.4	116.5	.300
		11.43	6.69	4.10	4.75	8.13	2.59	14.23	2/1/1	46.0	171.9	31.7	.643	3.657	12.7	241.6	-3.5	109.2D	1.710
4-6170	4-6317.5	.179	71.4	19.3	-.6	.870	96.7	.267	.808	199.3	440.9	.592	1.024D	104.2	1.242	-3.0	-11.6	318.4	.318
4-6317.5	4-6490	.318	348.2	-10.0	-2.3	1.380	79.4	.407	1.141	37.7	168.2	.676D	1.605A	97.9	.623	.7	-21.7	260.7	.221
4-6490	4-6650	.106	215.1	-.9	1.9	.679	96.7	.293	1.245	196.7	294.8	.881A	1.610D	76.7	1.082	-.4	18.6	120.7	.250
		11.49	6.73	4.40	4.76	8.15	2.33	13.34	2/1/1	46.6	164.5	29.3	.596	3.950	11.6	242.7	-3.2	108.0D	1.758
4-6180	4-6319.5	.209	72.6	18.7	-.9	.874	99.6	.284	.816	206.4	441.4	.584	1.047D	105.1	1.247	-2.8	-10.1	321.5	.335
4-6319.5	4-6490	.335	348.1	-9.0	-2.2	1.379	78.2	.412	1.136	41.4	168.6	.667D	1.604A	97.8	.620	.6	-22.1	259.7	.222
4-6490	4-6660	.096	211.0	2.1	1.9	.691	96.8	.271	1.271	199.2	306.9	.926A	1.615D	79.4	1.091	-.4	18.0	121.6	.207
		11.79	7.00	4.83	4.79	8.17	2.17	12.68	2/1/1	47.4	155.9	26.3	.535	4.404	10.1	244.4	-2.4	106.4D	1.820
4-6190	4-6322.0	.245	75.9	16.3	-1.3	.880	102.5	.305	.827	212.8	442.1	.574	1.079D	106.2	1.254	-2.4	-8.2	325.2	.358
4-6322.0	4-6490	.358	348.2	-7.9	-2.1	1.377	76.8	.420	1.128	46.0	169.3	.655D	1.602A	97.6	.615	.4	-22.5	258.4	.223
4-6490	4-6670	.089	209.4	4.8	2.0	.699	97.0	.256	1.289	201.3	318.6	.959A	1.620D	81.9	1.098	-.5	17.4	120.7	.171
		12.29	7.47	5.40	4.82	8.21	2.07	12.20	2/1/1	48.6	145.5	22.8	.468	5.068	8.2	246.7	-.5	104.7D	1.905
MARS ARRIVAL DATE = 2446500 (10 MAR 1986)																				
4-6140	4-6316.9	.141	93.1	20.4	-.5	.867	87.6	.256	.794	173.0	443.2	.591	.997	103.9	1.233	-3.4	-13.1	316.2	.310
4-6316.9	4-6500	.310	347.9	-10.8	-2.5	1.376	79.7	.398	1.128	36.9	173.3	.679D	1.578A	94.4	.623	.8	-20.9	257.8	.200
4-6500	4-6620	.177	215.7	-8.3	1.7	.615	98.4	.428	1.117	191.6	256.1	.639A	1.594D	65.2	1.036	-.3	21.1	113.1	.436
		11.95	7.66	3.95	4.27	7.66	3.73	17.07	2/1/1	54.3	174.2	31.1	.627	3.732	13.1	241.2	-4.2	107.4D	1.714
4-6150	4-6315.9	.139	81.4	20.6	-.4	.867	90.9	.251	.797	182.7	441.4	.597	.998D	103.5	1.235	-3.3	-13.2	315.6	.302
4-6315.9	4-6500	.302	348.0	-11.4	-2.5	1.377	80.2	.396	1.130	35.2	173.1	.683D	1.578A	94.5	.624	.9	-20.6	258.2	.200
4-6500	4-6630	.148	214.7	-6.1	1.8	.645	98.1	.372	1.166	194.2	268.2	.733A	1.599D	69.4	1.054	-.3	20.5	116.6	.367
		11.30	7.04	3.93	4.26	7.65	3.11	15.56	2/1/1	53.9	179.2	31.8	.658	3.695	13.2	241.1	-3.1	108.9D	1.748
4-6160	4-6316.5	.154	74.5	19.9	-.5	.868	93.8	.256	.802	191.2	441.0	.596	1.007D	103.7	1.238	-3.2	-12.6	316.7	.306
4-6316.5	4-6500	.306	348.0	-11.1	-2.5	1.376	79.9	.397	1.129	36.2	173.2	.680D	1.578A	94.4	.623	.9	-20.8	258.0	.200
4-6500	4-6640	.126	212.8	-3.4	1.8	.668	98.0	.328	1.206	197.1	280.8	.811A	1.605D	73.1	1.069	-.3	19.8	119.6	.307
		11.04	6.78	4.09	4.27	7.66	2.69	14.36	2/1/1	54.1	172.9	30.6	.640	3.769	12.6	241.7	-2.9	108.6D	1.786
4-6170	4-6317.9	.178	72.1	19.1	-.7	.869	96.6	.267	.807	198.9	441.1	.591	1.023D	104.2	1.242	-3.0	-11.5	319.0	.318
4-6317.9	4-6500	.318	347.8	-10.2	-2.4	1.376	79.2	.401	1.126	38.8	173.5	.674D	1.577A	94.3	.621	.7	-21.2	257.2	.201
4-6500	4-6650	.111	210.4	-.5	1.8	.685	98.1	.296	1.243	200.3	293.5	.875A	1.611D	76.3	1.081	-.3	19.2	121.7	.255
		11.08	6.80	4.39	4.28	7.67	2.41	13.43	2/1/1	54.7	165.4	28.3	.595	4.066	11.5	242.9	-2.7	107.5D	1.835
4-6180	4-6319.9	.208	73.1	18.8	-.9	.873	99.4	.284	.815	205.9	441.7	.584	1.046D	105.1	1.247	-2.8	-10.0	322.1	.335
4-6319.9	4-6500	.335	347.8	-9.1	-2.3	1.375	78.1	.407	1.121	42.4	173.9	.665D	1.577A	94.2	.618	.6	-21.7	256.2	.202
4-6500	4-6660	.100	207.9	2.4	1.9	.698	98.2	.274	1.270	203.1	305.9	.922A	1.618D	79.2	1.091	-.3	18.7	122.6	.211
		11.36	7.05	4.81	4.31	7.71	2.24	12.73	2/1/1	55.7	156.7	25.4	.535	4.549	10.0	244.6	-2.0	105.9D	1.897
4-6190	4-6322.4	.243	76.4	18.2	-1.3	.879	102.4	.305	.825	212.3	442.3	.574	1.077D	106.2	1.253	-2.4	-8.1	325.8	.358
4-6322.4	4-6500	.358	348.1	-8.0	-2.1	1.373	76.7	.414	1.114	47.0	174.5	.652D	1.576A	93.9	.614	.4	-22.1	254.7	.204
4-6500	4-6670	.093	205.9	4.8	1.9	.706	98.2	.258	1.290	205.4	317.9	.957A	1.624D	81.7	1.098	-.3	18.4	121.7	.174
		11.85	7.50	5.37	4.35	7.75	2.13	12.24	2/1/1	57.0	146.3	22.1	.469	5.229	8.2	246.9	-.2	104.3D	1.982
4-6200	4-6325.2	.284	81.5	17.8	-1.8	.888	105.4	.330	.840	218.1	443.0	.562	1.117D	107.5	1.262	-1.9	-5.9	330.1	.386
4-6325.2	4-6500	.386	348.7	-6.9	-2.0	1.371	75.1	.424	1.106	52.2	175.1	.636D	1.575A	93.6	.608	.2	-22.6	252.8	.207
4-6500	4-6680	.089	204.9	6.7	2.0	.712	98.2	.248	1.303	207.0	329.1	.979A	1.627D	84.0	1.104	-.3	18.5	118.6	.146
		12.56	8.14	6.07	4.42	7.81	2.07	11.90	2/1/1	58.6	133.8	18.5	.403	6.216	7.3	249.8	3.3	102.5D	2.102
MARS ARRIVAL DATE = 2446510 (20 MAR 1986)																				
4-6140	4-6317.7	.143	94.8	19.9	-.6	.866	87.3	.258	.793	172.2	443.7	.588	.998	104.0	1.233	-3.4	-13.0	317.3	.312
4-6317.7	4-6510	.312	347.9	-10.9	-2.5	1.373	79.4	.395	1.117	38.3	178.3	.676D	1.559A	91.1	.624	.8	-20.3	253.6	.186
4-6510	4-6620	.189	213.8	-7.8	1.8	.618	100.8	.441	1.108	194.4	254.0	.620A	1.597D	64.3	1.033	-.1	21.3	114.3	.451
		11.91	7.97	3.97	3.94	7.33	4.00	17.40	2/1/1	63.2	173.1	30.0	.616	3.858	13.0	241.8	-4.0	106.7D	1.760
4-6150	4-6316.6	.140	82.6	20.3	-.5	.866	90.7	.252	.797	182.0	441.8	.595	.998D	103.6	1.235	-3.3	-13.1	316.4	.304
4-6316.6	4-6510	.304	348.0	-11.7	-2.6	1.374	80.0	.392	1.120	36.3	178.1	.681D	1.559A	91.2	.625	1.0	-19.9	254.2	.185
4-6510	4-6650	.157	212.4	-5.6	1.8	.650	100.1	.380	1.160	197.3	266.4	.719A	1.602D	66.7	1.052	-.1	20.7	117.7	.378
		11.15	7.23	3.93	3.92	7.32	3.30	15.79	2/1/1	62.7	179.4	30.9	.652	3.758	13.1	241.6	-2.6	108.4D	1.798
4-6160	4-6317.0	.153	75.6	19.7	-.5	.867	93.6	.257	.801	190.6	441.3	.595	1.006D	103.7	1.237	-3.2	-12.5	317.4	.307
4-6317.0	4-6510	.307	347.9	-11.3	-2.6	1.374	79.8	.393	1.119	37.1	178.2	.679D	1.559A	91.2	.625	.9	-20.1	253.9	.185
4-6510	4-6640	.134	210.2	-2.9	1.8	.674	99.8	.335	1.206	200.7	279.4	.802A	1.609D	72.6	1.068	-.1	20.1	120.5	.315
		10.85	6.92	4.08	3.93	7.32	2.84	14.51	2/1/1	62.9	173.7	29.8	.637	3.883	12.6	242.2	-2.3	106.2D	1.836
4-6170	4-6318.4	.176	73.0	19.0	-.7	.868	96.4	.268	.806	198.3	441.4	.590	1.022D	104.3	1.241	-3.0	-11.4	319.7	.318
4-6318.4	4-6510	.318	347.9	-10.4	-2.4	1.373	79.0	.397	1.116	39.6	178.4	.673D	1.559A	91.1	.623	.8	-20.5	255.2	.186
4-6510	4-6650	.116	207.4	-.0	1.8	.692	99.6	.301	1.243	204.1	292.4	.869A	1.617D	76.0	1.081	-.1	19.7	122.6	.261
		10.86	6.91	4.37	3.95	7.35	2.54	13.53	2/1/1	63.5	166.1	27.7	.593	4.177	11.4	243.4	-2.1	107.1D	1.884

STOPOVER TIME = 0 DAYS — 1986 OUTBOUND SWINGBY — MISSION DURATION = 460 DAYS; MARS ARRIVAL DATE = 2446510 (20 MAR 1986)

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-6180	4-6320.5	.206	73.8	18.4	-1.0	.872	99.3	.284	.814	205.3	441.9	.583	1.044D	105.1	1.246	-2.7	-9.9	322.8	.335
4-6320.5	4-6510	.335	348.0	-9.2	-2.3	1.372	76.0	.403	1.111	43.2	178.7	.664D	1.559A	90.9	.620	.6	-21.1	252.0	.188
4-6510	4-6660	.107	204.6	2.7	1.9	.706	99.6	.277	1.272	207.3	305.2	.919A	1.625D	78.9	1.091	-.1	19.4	123.4	.215
		11.12	7.13	4.79	3.99	7.38	2.35	12.80	2/1/1	64.5	157.3	24.9	.534	4.641	9.9	245.1	-1.5	105.6D	1.945
4-6190	4-6322.9	.241	77.0	18.0	-1.4	.878	102.2	.304	.824	211.7	442.6	.573	1.074D	106.2	1.252	-2.4	-8.0	326.5	.358
4-6322.9	4-6510	.358	348.4	-8.0	-2.1	1.370	76.6	.411	1.105	47.6	179.2	.651D	1.559A	90.6	.615	.3	-21.6	250.5	.190
4-6510	4-6670	.100	202.4	4.9	1.9	.715	99.6	.262	1.293	209.9	317.3	.955A	1.632D	81.5	1.099	-.1	19.4	122.5	.177
		11.61	7.57	5.33	4.04	7.44	2.23	12.28	2/1/1	65.8	146.9	21.7	.469	5.321	8.1	247.5	.2	104.0D	2.028
4-6200	4-6325.8	.281	81.8	17.6	-1.8	.886	105.2	.330	.838	217.5	443.4	.562	1.114D	107.5	1.261	-1.9	-5.8	330.9	.386
4-6325.8	4-6510	.386	349.2	-6.9	-2.0	1.368	75.0	.421	1.097	52.8	179.7	.635D	1.558A	90.2	.610	.1	-22.1	248.5	.194
4-6510	4-6680	.095	201.1	6.4	1.9	.720	99.5	.251	1.307	211.5	328.7	.978A	1.636D	83.9	1.105	-.1	19.8	119.5	.148
		12.30	8.18	6.02	4.12	7.52	2.16	11.93	2/1/1	67.6	134.3	18.2	.404	6.307	7.3	250.4	3.5	102.3D	2.145
MARS ARRIVAL DATE = 2446520 (30 MAR 1986)																			
4-6140	4-6303.0	.133	61.7	26.9	.9	.882	91.9	.230	.810	186.2	434.1	.624	.996D	101.8	1.241	-3.6	-16.3	298.5	.273
4-6303.0	4-6520	.273	354.7	-42.4	-7.7	1.375	86.5	.367	1.131	13.0	181.7	.717D	1.546	89.0	.641	6.3	-.7	255.6	.185
4-6520	4-6620	.205	211.7	-7.2	1.9	.622	103.6	.456	1.103	197.4	252.0	.600A	1.605D	63.2	1.030	.1	21.5	115.4	.468
		12.16	8.25	3.86	3.92	7.31	4.38	17.79	2/1/1	70.1	172.1	54.3	.804	2.192	43.5	250.3	25.5	132.9D	.959
4-6140	4-6318.8	.145	97.1	19.3	-.7	.865	86.9	.261	.792	171.2	444.5	.585	.999	104.2	1.232	-3.4	-12.8	318.6	.316
4-6318.8	4-6520	.316	348.4	-10.8	-2.5	1.371	79.1	.394	1.110	39.6	182.9	.673D	1.547	88.1	.627	.8	-19.7	249.0	.177
4-6520	4-6620	.205	211.7	-7.2	1.9	.622	103.6	.456	1.103	197.4	252.0	.600A	1.605D	63.2	1.030	.1	21.5	115.4	.468
		12.11	8.38	3.99	3.74	7.14	4.38	17.79	2/1/1	72.6	172.1	29.2	.601	3.966	12.8	242.7	-3.9	105.9D	1.782
4-6150	4-6317.4	.140	84.6	19.9	-.5	.865	90.4	.254	.796	181.2	442.3	.594	.998D	103.7	1.234	-3.3	-12.9	317.4	.306
4-6317.4	4-6520	.306	348.4	-11.8	-2.7	1.372	79.8	.390	1.113	37.2	182.7	.679D	1.547	88.3	.629	1.0	-19.1	249.8	.176
4-6520	4-6630	.170	210.0	-4.9	1.9	.656	102.3	.391	1.158	200.7	264.9	.705A	1.610D	68.0	1.051	.1	21.0	118.6	.390
		11.22	7.51	3.93	3.71	7.11	3.58	16.04	2/1/1	71.9	178.6	30.2	.644	3.854	13.0	242.5	-2.0	107.9D	1.824
4-6160	4-6317.7	.152	77.0	19.4	-.6	.866	93.4	.258	.800	189.9	441.7	.594	1.006D	103.8	1.237	-3.2	-12.4	318.4	.308
4-6317.7	4-6520	.308	348.4	-11.6	-2.6	1.372	79.6	.391	1.112	37.8	182.8	.677D	1.547	88.2	.629	.9	-19.3	249.6	.176
4-6520	4-6640	.145	207.4	-2.3	1.9	.682	101.6	.342	1.206	204.5	278.2	.794A	1.618D	72.1	1.069	.1	20.5	121.3	.523
		10.84	7.12	4.07	3.72	7.12	3.05	14.68	2/1/1	72.1	174.4	29.4	.632	3.947	12.5	243.0	-1.6	107.9D	1.863
4-6170	4-6319.1	.175	74.1	18.8	-.8	.867	96.2	.268	.805	197.7	441.8	.589	1.020D	104.3	1.240	-3.0	-11.3	320.6	.319
4-6319.1	4-6520	.319	348.4	-10.6	-2.5	1.371	78.9	.395	1.109	40.2	183.0	.672D	1.547	88.1	.627	.8	-19.8	248.8	.177
4-6520	4-6650	.127	204.3	.4	1.9	.701	101.3	.307	1.246	208.4	291.6	.864A	1.628D	75.6	1.082	.1	20.2	123.2	.267 *
		10.81	7.07	4.35	3.74	7.14	2.72	13.64	2/1/1	72.7	166.6	27.3	.591	4.233	11.3	244.2	-1.5	106.9D	1.909
4-6180	4-6321.1	.204	74.7	18.2	-1.1	.870	99.1	.283	.812	204.7	442.3	.582	1.042D	105.1	1.245	-2.7	-9.7	323.6	.336
4-6321.1	4-6520	.336	348.6	-9.3	-2.3	1.370	77.9	.400	1.105	43.7	183.2	.663D	1.548	87.9	.624	.5	-20.4	247.6	.179
4-6520	4-6660	.116	201.4	2.9	1.8	.715	101.1	.282	1.277	211.9	304.7	.916A	1.638D	78.7	1.093	.1	20.1	123.9	.219
		11.05	7.27	4.76	3.79	7.19	2.51	12.86	2/1/1	73.7	157.7	24.6	.534	4.688	9.8	245.9	-1.0	105.4D	1.968
4-6190	4-6323.6	.239	77.7	17.9	-1.4	.876	102.0	.304	.822	211.1	443.0	.572	1.072D	106.2	1.251	-2.3	-7.8	327.4	.358
4-6323.6	4-6520	.358	349.1	-8.0	-2.1	1.369	76.6	.408	1.099	46.0	183.6	.650D	1.548	87.5	.620	.3	-21.1	246.1	.182
4-6520	4-6670	.109	199.0	4.9	1.8	.725	101.0	.266	1.300	214.7	317.1	.954A	1.646D	81.4	1.101	.1	20.4	123.0	.181
		11.53	7.67	5.29	3.86	7.25	2.38	12.32	2/1/1	75.0	147.1	21.5	.470	5.356	8.1	246.3	.5	103.8D	2.047
4-6200	4-6326.4	.278	82.4	17.5	-1.9	.884	105.0	.329	.835	216.8	443.7	.561	1.109D	107.5	1.259	-1.8	-5.7	331.7	.385
4-6326.4	4-6520	.385	350.0	-6.8	-2.0	1.367	75.0	.419	1.091	53.1	184.0	.634D	1.549	87.1	.615	.1	-21.5	244.1	.186
4-6520	4-6680	.104	197.7	6.1	1.8	.730	100.8	.256	1.314	216.5	328.6	.978A	1.650D	83.8	1.107	.1	21.1	119.9	.151
		12.21	8.26	5.97	3.95	7.35	2.30	11.96	2/1/1	76.7	134.5	18.2	.406	6.321	7.3	251.3	3.7	102.0D	2.158
MARS ARRIVAL DATE = 2446530 (9 APR 1986)																			
4-6140	4-6305.7	.132	67.7	25.9	.6	.879	91.1	.234	.807	183.6	435.8	.618	.995D	102.1	1.239	-3.5	-15.5	301.9	.279
4-6305.7	4-6530	.279	352.9	-40.9	-7.7	1.374	85.5	.367	1.126	16.7	186.2	.713D	1.538	86.4	.646	6.2	.0	251.7	.179
4-6530	4-6620	.227	209.5	-6.6	2.0	.630	106.8	.474	1.101	200.8	250.2	.579A	1.623D	62.0	1.030	.3	21.8	116.5	.488
		12.56	8.77	3.85	3.79	7.19	4.92	18.26	2/1/1	78.7	171.2	50.7	.774	2.335	42.9	251.6	26.8	129.9D	1.033
4-6140	4-6320.1	.149	99.9	18.5	-.8	.864	86.4	.265	.791	169.9	445.4	.581	1.000	104.5	1.231	-3.4	-12.6	320.3	.322
4-6320.1	4-6530	.322	349.3	-10.5	-2.5	1.370	78.7	.394	1.105	41.0	187.2	.670D	1.541	85.4	.633	.7	-19.2	244.3	.173
4-6530	4-6620	.227	209.5	-6.6	2.0	.630	106.8	.474	1.101	200.8	250.2	.579A	1.623D	62.0	1.030	.3	21.8	116.5	.488
		12.61	8.95	4.03	3.66	7.06	4.92	18.26	2/1/1	82.1	171.2	28.5	.581	4.068	12.7	244.0	-4.2	105.0D	1.783
4-6150	4-6305.4	.148	59.3	24.6	.7	.880	94.0	.238	.812	193.2	434.9	.619	1.006D	102.2	1.242	-3.7	-15.9	301.8	.283
4-6305.4	4-6530	.283	353.1	-42.6	-8.0	1.374	85.7	.366	1.126	16.2	186.2	.714D	1.538	86.5	.646	6.6	1.3	251.9	.181
4-6530	4-6630	.187	207.5	-4.3	2.0	.665	104.8	.404	1.159	204.6	263.6	.691A	1.627D	67.2	1.052	.3	21.3	119.5	.404
		11.83	7.99	4.03	3.83	7.23	3.97	16.35	2/1/1	78.8	177.8	51.0	.750	2.322	44.8	253.0	27.9	130.9D	.992
4-6150	4-6318.4	.140	87.0	19.4	-.6	.864	90.1	.256	.794	180.2	443.0	.591	.997D	103.8	1.234	-3.3	-12.7	318.8	.308
4-6318.4	4-6530	.308	349.2	-11.9	-2.7	1.371	79.6	.389	1.109	38.0	187.1	.677D	1.540	85.5	.635	1.0	-18.4	245.3	.172
4-6530	4-6630	.187	207.5	-4.3	2.0	.665	104.8	.404	1.159	204.6	263.6	.691A	1.627D	67.2	1.052	.3	21.3	119.5	.404
		11.52	7.91	3.94	3.62	7.02	3.97	16.35	2/1/1	81.3	177.8	29.8	.633	3.894	12.9	243.7	-1.6	107.5D	1.831
4-6160	4-6318.8	.151	76.7	19.1	-.7	.865	93.1	.259	.798	189.0	442.2	.592	1.005D	103.9	1.236	-3.1	-12.2	319.5	.310
4-6318.8	4-6530	.310	349.2	-11.7	-2.7	1.371	79.5	.390	1.108	38.4	187.0	.676D	1.541	85.5	.635	.9	-18.5	245.2	.172
4-6530	4-6640	.160	204.6	-1.7	1.9	.692	103.7	.351	1.211	208.8	277.4	.785A	1.636D	71.6	1.070	.2	21.0	121.9	.333
		11.04	7.42	4.06	3.62	7.02	3.36	14.88	2/1/1	81.4	174.8	29.1	.626	3.986	12.4	244.2	-1.0	107.6D	1.869
4-6170	4-6319.9	.173	75.4	18.5	-.9	.866	96.0	.268	.803	196.8	442.3	.588	1.019D	104.4	1.240	-2.9	-11.1	321.6	.320
4-6319.9	4-6530	.320	349.3	-10.7	-2.5	1.370	78.8	.393	1.106	40.6	187.2	.671D	1.541	85.4	.633	.8	-19.1	244.4	.173
4-6530	4-6650	.141	201.4	.8	1.9	.712	103.1	.314	1.253	213.1	291.2	.859A	1.647D	75.3	1.084	.2	20.7	123.7	.274
		10.95	7.30	4.33	3.65	7.05	2.98	13.76	2/1/1	82.0	166.9	27.2	.588	4.257	11.3	245.3	-.9	106.7D	1.914
4-6160	4-6321.9	.202	75.8	18.0	-1.1	.869	98.8	.283	.810	203.9	442.7	.581	1.040D	105.2	1.244	-2.7	-9.6	324.7	.336
4-6321.9	4-6530	.336	349.6	-9.3	-2.3	1.369	77.8	.399	1.102	44.0	187.4	.662D	1.542	85.1	.630	.5	-19.8	243.3	.175
4-6530	4-6660	.129	198.4	3.1	1.8	.727	102.7	.289	1.286	217.0	304.7	.915A	1.658D	76.5	1.095	.2	20.8	124.2	.225
		11.17	7.46	4.72	3.70	7.10	2.74	12.94	2/1/1	82.9	157.8	24.6	.533	4.697	9.7	247.0	-.6	105.2D	1.969
4-6190	4-6324.3	.236	78.6	17.6	-1.5	.874	101.7	.303	.820	210.2	443.4	.571	1.068D	106.2	1.250	-2.3	-7.7	326.4	.357
4-6324.3	4-6530	.357	350.2	-8.0	-2.1	1.368	76.6	.407	1.096	48.3	187.7	.650D	1.542	84.8	.627	.3	-20.4	241.8	.179
4-6530	4-6670	.121	196.0	4.8	1.8	.736	102.5	.273	1.310	219.9	317.3	.953A	1.667D	81.2	1.104	.2	21.3	123.1	.185
		11.62	7.84	5.25	3.76	7.18	2.59	12.37	2/1/1	84.2	147.0	21.6	.470	5.342	8.0	249.4	.7	103.6D	2.043
4-6200	4-6327.2	.275	83.1	17.3	-1.9	.882	104.7	.328	.832	216.0	444.2	.560	1.105D	107.5	1.258	-1.8	-5.6	332.8	.384
4-6327.2	4-6530	.384	351.2	-6.7	-2.0	1.366	75.0	.418	1.089	53.2	188.0	.634D	1.544	84.3	.622	.0	-21.0	240.0	.184
4-6530	4-6680	.115	194.7	5.8	1.8	.742	102.2	.262	1.325	221.8	328.9	.978A	1.672D	83.7	1.110	.2	22.3	119.9	.154
		12.29	8.40	5.90	3.89	7.29	2.49	11.99	2/1/1	85.7	134.2	18.4	.407	6.271	7.2	252.4	3.6	101.9D	2.146
MARS ARRIVAL DATE = 2446540 (19 APR 1986)																			
4-6150	4-6308.2	.144	64.8	23.7	.4	.877	93.3	.241	.808	190.4	436.6	.613	1.003D	102.5	1.240	-3.5	-15.0	305.5	.287
4-6308.2	4-6540	.287	352.3	-40.2	-7.8	1.373	84.7	.368	1.122	19.8	190.4	.709D	1.535	84.1	.652	6.2	.9	248.0	.179
4-6540	4-6630	.211	205.1	-3.8	2.1	.678	107.7	.419	1.167	208.8	262.7	.678A	1.656D	66.3	1.055	.5	21.7	120.1	.421
		12.28	8.50	3.98	3.78	7.18	4.52	16.73	2/1/1	87.3	177.2	47.7	.729	2.472	43.4	254.0	28.5	127.9D	1.074
4-6150	4-6319.7	.141	89.8	18.8	-.8	.863	89.7	.256	.793	179.0	443.8	.588	.998	104.0	1.233	-3.2	-12.5	320.4	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.8	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6630	.211	205.1	-3.8	2.1	.678	107.7	.419	1.167	208.8	262.7	.678A	1.656D	66.3	1.055	.5	21.7	120.1	.421
		12.09	8.47	3.95	3.82	7.02	4.52	16.73	2/1/1	90.4	177.2	29.4	.619	3.942	12.7	245.1	-1.4	106.9D	1.821
4-6160	4-6307.6	.171	58.9	22.6	.5	.881	96.5	.250	.817	200.2	435.7	.612	1.021D	102.9	1.246	-3.6	-15.1	305.1	.296
4-6307.6	4-6540	.296	352.3	-43.7	-8.6	1.373	85.0	.367	1.123	18.9	190.4	.711D	1.535	84.1	.652	7.0	3.5	248.5	.184
4-6540	4-6640	.179	202.0	-1.3	2.0	.705	106.1	.363	1.222	213.6	277.0	.778A	1.665D	70.9	1.074	.4	21.4	122.3	.345
		11.97	8.08	4.29	3.88	7.28	3.79	15.12	2/1/1	87.3	175.0	49.1	.685	2.405	47.4	256.9	31.2	129.5D	.962
4-6160	4-6319.7	.150	80.9	18.7	-.8	.863	92.6	.260	.797	187.9	442.9	.590	1.004D	104.0	1.235	-3.1	-12.0	320.9	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.9	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6640	.179	202.0	-1.3	2.0	.705	106.1	.363	1.222	213.6	277.0	.778A	1.665D	70.9	1.074	.4	21.4	122.3	.345
		11.46	7.84	4.05	3.82	7.02	3.79	15.12	2/1/1	90.4	175.0	28.9	.618	4.006	12.3	245.6	-.5	107.3D	1.859

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2446540
19 APR 1986

LAUNCH SWNGBY DEPART	SWNGBY ARRIVE RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-6170	4-6320.9	.171	77.1	18.1	-.9	.864	95.6	.269	.802	195.8	442.8	.586	1.017D	104.5	1.259	-2.9	-10.9	322.9	.321
4-6320.9	4-6540	.321	350.6	-10.7	-2.5	1.370	78.8	.393	1.104	40.9	191.1	.670D	1.539	83.0	.641	.7	-18.4	240.5	.173
4-6540	4-6650	.159	198.8	1.1	1.9	.726	105.1	.324	1.267	218.4	291.3	.856A	1.678D	74.9	1.088	.4	21.4	123.8	.283
		11.30	7.64	4.30	3.66	7.06	3.34	13.91	2/1/1	90.9	166.8	27.2	.584	4.257	11.1	246.7	-.5	106.5D	1.902
4-6180	4-6322.8	.199	77.1	17.7	-1.2	.867	98.5	.283	.808	202.9	443.3	.579	1.037D	105.2	1.243	-2.8	-9.4	325.9	.336
4-6322.8	4-6540	.336	350.9	-9.3	-2.5	1.369	77.8	.399	1.100	44.2	191.3	.661D	1.540	82.7	.638	.5	-19.2	239.5	.176
4-6540	4-6660	.145	195.8	3.1	1.9	.740	104.5	.298	1.302	222.6	305.1	.913A	1.690D	78.2	1.100	.4	21.6	124.1	.231
		11.46	7.74	4.68	3.72	7.12	3.06	13.04	2/1/1	91.8	157.5	24.7	.531	4.675	9.6	248.4	-.3	105.0D	1.953
4-6190	4-6325.2	.233	79.6	17.4	-1.6	.872	101.4	.303	.817	209.3	443.9	.570	1.064D	106.3	1.249	-2.2	-7.6	329.6	.357
4-6325.2	4-6540	.357	351.6	-7.9	-2.1	1.368	76.5	.407	1.095	48.3	191.5	.649D	1.541	82.3	.635	.2	-19.9	238.1	.180
4-6540	4-6670	.136	193.6	4.5	1.8	.750	104.1	.282	1.326	225.7	317.9	.953A	1.700D	81.1	1.108	.4	22.3	122.6	.169
		11.88	8.08	5.19	3.80	7.20	2.89	12.43	2/1/1	92.8	146.5	21.8	.471	5.290	7.9	250.7	.8	103.4D	2.021
4-6200	4-6326.1	.271	84.0	17.0	-2.0	.880	104.4	.326	.829	215.1	444.7	.559	1.100D	107.5	1.256	-1.7	-5.5	333.9	.364
4-6326.1	4-6540	.384	352.7	-6.6	-1.9	1.366	75.0	.417	1.088	53.2	191.7	.634D	1.543	81.9	.630	-.0	-20.5	236.6	.185
4-6540	4-6680	.130	192.3	5.3	1.7	.756	103.7	.271	1.341	227.6	329.5	.978A	1.704D	83.6	1.114	.4	23.5	119.5	.158
		12.53	8.60	5.83	3.93	7.32	2.77	12.04	2/1/1	94.1	133.5	18.6	.409	6.172	7.0	253.7	3.4	101.8D	2.114
MARS ARRIVAL DATE = 2446550 (29 APR 1986)																			
4-6160	4-6310.6	.164	63.7	21.9	.1	.876	95.6	.252	.811	197.2	437.5	.607	1.015D	103.1	1.243	-3.5	-14.1	306.9	.299
4-6310.6	4-6550	.299	352.4	-40.7	-8.2	1.373	84.0	.370	1.120	22.2	194.3	.706D	1.535	81.9	.660	6.5	2.3	245.0	.184
4-6550	4-6640	.206	199.8	-.9	2.1	.723	108.7	.379	1.242	219.1	277.2	.771A	1.713D	70.2	1.080	.7	22.0	122.4	.360
		12.50	8.61	4.21	3.89	7.29	4.40	15.42	2/1/1	95.4	174.7	46.2	.673	2.551	45.5	257.7	31.4	126.6D	1.044
4-6160	4-6321.0	.149	83.7	18.1	-.9	.861	92.3	.262	.795	186.6	443.6	.587	1.003D	104.2	1.234	-3.1	-11.8	322.6	.314
4-6321.0	4-6550	.314	352.1	-11.6	-2.7	1.370	79.2	.391	1.106	39.4	194.8	.674D	1.539	80.9	.651	.9	-17.4	237.9	.176
4-6550	4-6640	.206	199.8	-.9	2.1	.723	108.7	.379	1.242	219.1	277.2	.771A	1.713D	70.2	1.080	.7	22.0	122.4	.360
		12.15	8.44	4.04	3.71	7.11	4.40	15.42	2/1/1	98.8	174.7	28.8	.609	4.015	12.1	247.3	-.4	106.9D	1.835
4-6170	4-6322.0	.169	79.2	17.7	-1.0	.862	95.3	.270	.799	194.6	443.5	.584	1.015D	104.6	1.237	-2.9	-10.7	324.5	.322
4-6322.0	4-6550	.322	352.2	-10.6	-2.5	1.370	78.7	.394	1.104	41.2	194.8	.669D	1.540	80.8	.650	.7	-18.0	237.4	.177
4-6550	4-6650	.182	196.6	1.2	2.0	.743	107.3	.338	1.290	224.3	292.0	.854A	1.726D	74.4	1.095	.6	22.1	123.6	.293
		11.86	8.12	4.27	3.74	7.14	3.85	14.10	2/1/1	99.2	166.4	27.3	.579	4.240	11.0	248.3	-.3	106.2D	1.876
4-6180	4-6325.9	.196	78.6	17.3	-1.3	.865	98.1	.284	.806	201.7	443.9	.577	1.034D	105.3	1.242	-2.6	-9.2	327.4	.337
4-6325.9	4-6550	.337	352.6	-9.1	-2.3	1.369	77.8	.400	1.101	44.3	194.9	.661D	1.541	80.5	.647	.4	-18.9	236.5	.180
4-6550	4-6660	.166	193.7	3.0	1.9	.758	106.4	.311	1.326	228.6	306.0	.913A	1.739D	78.0	1.106	.6	22.5	123.7	.238
		11.95	8.14	4.64	3.81	7.21	3.51	13.16	2/1/1	99.9	156.8	24.9	.530	4.631	9.4	249.9	-.3	104.9D	1.923
4-6190	4-6326.3	.229	80.9	17.1	-1.6	.869	101.0	.302	.814	208.2	444.5	.566	1.060D	106.3	1.247	-2.2	-7.4	331.0	.357
4-6326.3	4-6550	.357	353.3	-7.6	-2.0	1.368	76.5	.407	1.096	48.3	195.0	.649D	1.543	80.1	.644	.1	-19.6	235.3	.184
4-6550	4-6670	.156	191.7	4.1	1.6	.767	105.6	.294	1.351	232.0	318.9	.954A	1.749D	81.0	1.114	.6	23.4	122.1	.195
		12.32	8.42	5.13	3.91	7.30	3.29	12.52	2/1/1	100.6	145.5	22.1	.471	5.209	7.7	252.3	.6	103.3D	1.984
MARS ARRIVAL DATE = 2446560 (9 MAY 1986)																			
4-6170	4-6323.4	.167	81.7	17.2	-1.2	.860	94.6	.271	.797	193.2	444.3	.581	1.013D	104.7	1.236	-2.8	-10.5	326.3	.324
4-6323.4	4-6560	.324	354.2	-10.2	-2.5	1.371	78.6	.396	1.106	41.5	198.3	.668D	1.543	78.6	.659	.6	-18.0	235.1	.184
4-6560	4-6650	.212	194.8	1.2	2.1	.766	109.7	.358	1.328	231.0	293.3	.852A	1.803D	73.9	1.105	.8	22.9	123.0	.307
		12.69	8.76	4.24	3.90	7.30	4.54	14.36	2/1/1	106.7	165.6	27.5	.573	4.212	10.7	250.2	-.6	105.8D	1.839
4-6160	4-6325.2	.193	80.5	16.9	-1.4	.862	97.7	.284	.803	200.4	444.6	.575	1.031D	105.4	1.240	-2.5	-9.0	329.1	.338
4-6325.2	4-6560	.338	354.6	-8.8	-2.2	1.370	77.7	.401	1.103	44.4	198.3	.660D	1.545	78.5	.657	.3	-18.8	234.4	.187
4-6560	4-6660	.193	192.2	2.7	1.9	.779	108.5	.330	1.364	235.7	307.5	.914A	1.815D	77.7	1.115	.8	23.4	122.7	.249
		12.66	8.70	4.59	3.97	7.37	4.11	13.32	2/1/1	107.2	155.6	25.3	.527	4.970	9.1	251.8	-.6	104.6D	1.882

STOPOVER TIME = 0 DAYS — 1986 OUTBOUND SWINGBY — MISSION DURATION = 520 DAYS

MARS ARRIVAL DATE = 2446470
6 FEB 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2446470 (6 FEB 1986)																				
4-6130	4-6318.2	.163	102.7	19.6	-.6	.869	84.1	.271	.792	163.5	445.8	.577	1.007	104.9	1.232	-3.5	-12.6	317.0	.330	
4-6318.2	4-6470	.330	350.5	-9.0	-2.2	1.393	79.2	.432	1.190	36.7	156.6	.677D	1.704A	105.8	.638	.6	-22.6	264.8	.279	
4-6470	4-6650	.101	217.2	-1.4	1.9	.671	94.1	.287	1.254	190.2	297.9	.893A	1.614D	77.4	1.085	-.7	17.6	118.3	.240	
		12.69	6.46	4.20	6.23	9.61	2.26	13.18	2/1/1	33.2	162.3	33.1	.553	3.514	13.0	242.6	-6.3	106.6D	1.392	
4-6140	4-6315.1	.138	89.2	21.4	-.3	.869	88.2	.252	.796	174.6	442.0	.595	.996	103.5	1.234	-3.4	-13.4	313.9	.304	
4-6315.1	4-6470	.304	351.4	-10.4	-2.3	1.395	80.9	.425	1.198	31.0	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.8	.278	
4-6470	4-6660	.092	216.0	1.8	2.1	.681	94.4	.268	1.276	192.3	309.5	.935A	1.617D	80.0	1.092	-.8	16.4	119.1	.199	
		12.22	6.02	3.91	6.19	9.57	2.11	12.57	2/1/1	32.3	153.6	36.8	.652	3.168	13.4	241.8	-4.6	110.6D	1.414	
4-6150	4-6314.5	.140	78.2	21.3	-.3	.869	91.4	.249	.799	184.1	440.5	.600	.998D	103.3	1.236	-3.3	-13.5	313.7	.299	
4-6314.5	4-6470	.299	351.7	-10.7	-2.3	1.395	81.2	.423	1.200	29.8	155.7	.692D	1.708A	105.8	.644	.9	-22.0	266.0	.278	
4-6470	4-6670	.086	215.3	5.0	2.2	.688	94.6	.254	1.292	193.9	320.8	.964A	1.620D	82.4	1.099	-.9	15.1	117.9	.166	
		12.14	5.95	3.93	6.19	9.57	2.02	12.14	2/1/1	32.2	143.1	37.3	.673	3.130	13.5	241.8	-4.2	111.9D	1.434	
4-6160	4-6315.2	.156	72.0	20.4	-.4	.869	94.2	.255	.804	192.5	440.2	.599	1.008D	103.5	1.239	-3.2	-12.9	315.0	.304	
4-6315.2	4-6470	.304	351.4	-10.4	-2.3	1.395	80.8	.425	1.198	31.2	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.8	.278	
4-6470	4-6680	.082	215.3	7.9	2.5	.693	94.7	.245	1.303	195.0	331.5	.984A	1.622D	84.5	1.104	-1.0	13.4	114.4	.141	
		12.28	6.09	4.11	6.19	9.57	1.98	11.85	2/1/1	32.3	130.2	35.7	.648	3.265	12.9	242.4	-4.1	111.3D	1.468	
4-6170	4-6316.7	.181	70.3	19.5	-.6	.871	97.0	.267	.809	200.1	440.5	.593	1.025D	104.1	1.243	-3.1	-11.8	317.4	.317	
4-6316.7	4-6470	.317	350.9	-9.6	-2.2	1.394	80.0	.428	1.195	34.0	156.1	.683D	1.707A	105.9	.641	.7	-22.4	265.3	.279	
4-6470	4-6690	.082	216.5	10.8	2.8	.695	94.7	.239	1.309	195.4	341.6	.995A	1.622D	86.5	1.108	-1.3	10.9	108.3	.124	
		12.61	6.39	4.42	6.22	9.60	1.97	11.68	2/1/1	32.7	114.8	32.9	.598	3.529	11.8	243.5	-3.8	109.9D	1.513	
MARS ARRIVAL DATE = 2446480 (18 FEB 1986)																				
4-6130	4-6318.9	.166	103.9	19.1	-.7	.868	83.8	.274	.792	162.9	446.4	.575	1.009	105.1	1.232	-3.5	-12.5	317.9	.333	
4-6318.9	4-6480	.333	348.9	-8.9	-2.2	1.385	78.6	.420	1.158	39.5	162.9	.671D	1.644A	101.7	.626	.6	-22.4	262.6	.247	
4-6480	4-6650	.103	215.4	-1.2	1.9	.675	95.3	.290	1.249	193.4	296.2	.887A	1.611D	77.0	1.083	-.6	18.1	119.5	.244	
		11.94	6.52	4.24	5.42	8.80	2.28	13.26	2/1/1	39.9	163.5	30.6	.541	3.785	13.0	242.2	-6.7	105.0D	1.506	
4-6140	4-6315.7	.139	90.4	21.1	-.4	.868	88.0	.253	.795	174.1	442.4	.594	.996	103.6	1.234	-3.4	-13.3	314.7	.306	
4-6315.7	4-6480	.305	349.6	-10.5	-2.3	1.387	80.4	.412	1.166	33.5	162.1	.685D	1.647A	101.8	.631	.8	-21.8	263.9	.246	
4-6480	4-6660	.093	213.8	1.9	2.0	.686	95.6	.269	1.275	195.6	308.1	.930A	1.615D	79.7	1.091	-.6	17.2	120.4	.203	
		11.44	6.05	3.92	5.38	8.77	2.13	12.62	2/1/1	38.8	154.8	34.3	.644	3.395	13.3	241.2	-4.6	109.4D	1.543	
4-6150	4-6315.0	.139	79.2	21.1	-.3	.868	91.2	.250	.799	183.6	440.8	.599	.998D	103.3	1.236	-3.3	-13.4	314.3	.300	
4-6315.0	4-6480	.300	349.8	-10.9	-2.4	1.387	80.8	.411	1.168	32.2	162.0	.688D	1.648A	101.8	.632	.9	-21.7	264.2	.246	
4-6480	4-6670	.087	212.6	4.8	2.1	.693	95.8	.255	1.290	197.5	319.6	.961A	1.619D	82.1	1.098	-.7	16.3	119.4	.169	
		11.34	5.97	3.93	5.38	8.76	2.04	12.17	2/1/1	38.6	144.4	34.8	.668	3.347	13.4	241.2	-4.0	110.5D	1.568	
4-6160	4-6315.6	.155	72.8	20.2	-.4	.869	94.1	.255	.803	192.1	440.4	.598	1.008D	103.6	1.239	-3.2	-12.8	315.6	.305	
4-6315.6	4-6480	.305	349.6	-10.6	-2.3	1.387	80.4	.412	1.166	33.4	162.1	.685D	1.648A	101.8	.631	.8	-21.8	264.0	.246	
4-6480	4-6680	.083	212.2	7.3	2.3	.698	95.9	.245	1.301	198.7	330.5	.982A	1.621D	84.3	1.103	-.8	15.3	116.1	.142	
		11.47	6.09	4.10	5.39	8.77	1.98	11.86	2/1/1	38.8	131.7	33.4	.646	3.482	12.8	241.8	-3.8	110.1D	1.603	
4-6170	4-6317.1	.180	70.9	19.4	-.6	.871	96.9	.267	.809	199.7	440.7	.593	1.025D	104.2	1.242	-3.1	-11.7	317.9	.317	
4-6317.1	4-6480	.317	349.2	-9.8	-2.3	1.386	79.6	.416	1.163	36.1	162.4	.679D	1.647A	101.8	.629	.7	-22.1	263.4	.247	
4-6480	4-6690	.081	213.0	9.5	2.5	.701	95.8	.240	1.308	199.2	340.7	.994A	1.621D	86.3	1.107	-.9	14.0	110.2	.124	
		11.78	6.57	4.41	5.40	8.79	1.96	11.68	2/1/1	39.2	116.5	30.8	.597	3.764	11.7	242.9	-3.8	108.8D	1.651	
4-6180	4-6319.1	.211	72.1	18.8	-.9	.875	99.7	.284	.817	206.7	441.2	.585	1.049D	105.0	1.248	-2.8	-10.2	321.0	.335	
4-6319.1	4-6480	.335	348.9	-8.9	-2.2	1.385	78.5	.421	1.157	39.9	162.9	.670D	1.644A	101.7	.626	.5	-22.5	262.6	.246	
4-6480	4-6700	.082	215.2	11.7	2.8	.702	95.7	.237	1.310	199.0	350.2	1.000A	1.620D	88.1	1.110	-1.2	11.5	102.7	.116	
		12.24	6.82	4.85	5.42	8.80	1.97	11.60	2/1/1	40.0	99.8	27.5	.535	4.201	10.2	244.5	-2.7	107.1D	1.713	
MARS ARRIVAL DATE = 2446490 (28 FEB 1986)																				
4-6130	4-6319.8	.170	105.3	18.6	-.8	.868	83.4	.278	.791	162.2	447.1	.571	1.010	105.3	1.232	-3.5	-12.4	319.0	.336	
4-6319.8	4-6490	.338	348.1	-8.8	-2.2	1.379	78.1	.413	1.135	41.9	168.7	.666D	1.604A	97.7	.619	.5	-22.2	259.6	.222	
4-6490	4-6650	.106	213.1	-.9	1.9	.679	96.7	.293	1.245	196.7	294.8	.881A	1.610D	76.7	1.082	-.4	18.6	120.7	.250	
		11.41	6.62	4.29	4.79	8.18	2.33	13.34	2/1/1	47.6	164.5	28.8	.526	4.018	13.1	242.2	-7.1	103.7D	1.589	
4-6140	4-6316.2	.140	91.6	20.7	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.4	.307	
4-6316.2	4-6490	.307	348.4	-10.7	-2.4	1.381	80.0	.404	1.144	35.4	167.9	.682D	1.606A	97.9	.625	.8	-21.4	261.3	.220	
4-6490	4-6660	.096	211.0	2.1	1.9	.691	96.8	.271	1.271	199.2	306.9	.926A	1.615D	79.4	1.091	-.4	18.0	121.6	.207	
		10.85	6.10	3.93	4.75	8.14	2.17	12.68	2/1/1	46.1	155.9	32.4	.636	3.581	13.2	241.0	-4.4	108.3D	1.642	
4-6150	4-6315.4	.139	80.2	20.9	-.4	.868	91.1	.251	.798	183.2	441.1	.598	.998D	103.4	1.235	-3.3	-13.3	314.9	.301	
4-6315.4	4-6490	.301	348.6	-11.2	-2.5	1.381	80.5	.402	1.146	33.9	167.7	.685D	1.607A	98.0	.626	.9	-21.2	261.6	.220	
4-6490	4-6670	.089	209.4	4.8	2.0	.699	97.0	.256	1.289	201.3	318.6	.959A	1.620D	81.9	1.098	-.5	17.4	120.7	.171	
		10.74	6.00	3.93	4.74	8.13	2.07	12.20	2/1/1	45.8	145.5	33.0	.664	3.518	13.3	241.0	-3.6	109.6D	1.672	
4-6160	4-6316.0	.154	73.6	20.1	-.4	.868	93.9	.256	.802	191.7	440.7	.597	1.007D	103.6	1.238	-3.2	-12.7	316.1	.306	
4-6316.0	4-6490	.306	348.5	-10.8	-2.4	1.381	80.1	.403	1.144	35.0	167.9	.683D	1.606A	98.0	.625	.8	-21.4	261.3	.220	
4-6490	4-6680	.085	208.6	7.0	2.1	.704	97.0	.247	1.301	202.7	329.7	.981A	1.622D	84.1	1.103	-.5	17.0	117.5	.144	
		10.65	6.11	4.10	4.75	8.13	2.01	11.88	2/1/1	46.0	132.9	31.7	.643	3.657	12.7	241.6	-3.5	109.2D	1.710	
4-6170	4-6317.5	.179	71.4	19.3	-.6	.870	96.7	.267	.808	199.3	440.9	.592	1.024D	104.2	1.242	-3.0	-11.6	318.4	.318	
4-6317.5	4-6490	.318	348.2	-10.0	-2.3	1.380	79.4	.407	1.141	37.7	168.2	.676D	1.605A	97.9	.623	.7	-21.7	260.7	.221	
4-6490	4-6690	.083	209.1	8.6	2.2	.707	97.0	.241	1.308	203.5	340.0	.994A	1.623D	86.2	1.108	-.6	16.5	111.8	.125	
		11.14	6.38	4.40	4.76	8.15	1.98	11.69	2/1/1	46.6	117.9	29.3	.596	3.950	11.6	242.7	-3.2	108.0D	1.758	
4-6180	4-6319.5	.209	72.6	18.7	-.9	.874	99.6	.284	.816	206.4	441.4	.584	1.047D	105.1	1.247	-2.8	-10.1	321.5	.335	
4-6319.5	4-6490	.335	348.1	-9.0	-2.2	1.379	78.2	.412	1.136	41.4	168.6	.667D	1.604A	97.8	.620	.6	-22.1	259.7	.222	
4-6490	4-6700	.082	210.9	9.9	2.4	.708	96.8	.237	1.310	203.1	349.6	.999A	1.622D	88.0	1.111	-.8	15.5	104.4	.115	
		11.59	6.80	4.83	4.79	8.17	1.97	11.60	2/1/1	47.4	101.1	26.3	.535	4.404	10.1	244.4	-2.4	106.4D	1.820	
4-6190	4-6322.0	.245	75.9	18.3	-1.3	.880	102.5	.305	.827	212.8	442.1	.574	1.079D	106.2	1.254	-2.4	-8.2	325.2	.358	
4-6322.0	4-6490	.358	348.2	-7.9	-2.1	1.377	76.8	.420	1.128	46.0	169.3	.655D	1.602A	97.6	.615	.4	-22.5	256.4	.223	
4-6490	4-6710	.083	214.3	11.4	2.8	.708	96.5	.236	1.309	202.1	358.4	1.000A	1.618D	89.7	1.113	-1.0	13.1	97.1	.114	
		12.21	7.39	5.40	4.82	8.21	1.99	11.59	2/1/1	48.6	84.5	22.8	.468	5.068	8.2	246.7	-.5	104.7D	1.905	
MARS ARRIVAL DATE = 2446500 (10 MAR 1986)																				
4-6130	4-6320.9	.175	107.0	18.0	-.9	.867	82.9	.282	.790	161.2	447.9	.567	1.013	105.6	1.231	-3.5	-12.3	320.3	.344	
4-6320.9	4-6500	.344	347.9	-8.7	-2.2	1.374	77.6	.409	1.118	44.2	174.1	.660D	1.576A	94.1	.616	.5	-21.9	255.6	.203	
4-6500	4-6650	.111	210.4	-.5	1.8	.685	98.1	.296	1.243	200.5	293.5	.875A	1.611D	76.3	1.081	-.3	19.2	121.7	.255	
		11.09	6.77	4.35	4.33	7.72	2.41	13.43	2/1/1	56.1	165.4	27.3	.509	4.231	13.2	242.7	-7.6	102.4D	1.643	
4-6140	4-6316.9	.141	93.1	20.4	-.5	.867	87.6	.256	.794	173.0	443.2	.591	.997	103.9	1.233	-3.4	-13.1	316.2	.310	
4-6316.9	4-6500	.310	347.9	-10.8	-2.5	1.376	79.7	.398	1.128	36.9	173.3	.679D	1.578A	94.4	.623	.8	-20.9	257.8	.200	
4-6500	4-6660	.100	207.9	2.4	1.9	.698	98.2	.274	1.270	203.1	305.9	.922A	1.618D	79.2	1.091	-.3	18.7	122.6	.211	
		10.46	6.19	3.95	4.27	7.66	2.24	12.73	2/1/1	54.3	156.7	31.1	.627	3.732	13.1	241.2	-4.2	107.4D	1.714	
4-6150	4-6315.9	.139	81.4	20.6	-.4	.867	90.9	.251	.797	182.7	441.4	.597	.998D	103.5	1.235	-3.3	-13.2	315.6	.302	
4-6315.9	4-6500	.302	348.0	-11.4	-2.5	1.377	80.2	.396	1.130	35.2	173.1	.683D	1.578A	94.5	.624	.9	-20.6	256.2	.200	
4-6500	4-6670	.093	205.8	4.8	1.9	.706	98.2	.258	1.290	205.4	317.9	.957A	1.624D	81.7	1.098	-.3	18.4	121.7	.174	
		10.32	6.06	3.93	4.26	7.65	2.13	12.24	2/1/1	53.9	146.3	31.8	.656	3.655	13.2	241.1	-3.1	106.9D	1.748	
4-6160	4-6316.5	.154	74.5	19.9	-.5	.868	93.8	.256	.802	191.2	441.0	.596	1.007D	103.7	1.238	-3.2	-12.6	316.7	.306	
4-6316.5	4-6500	.306	348.0	-11.1	-2.5	1.376	79.9	.397	1.129	36.2	173.2	.680D	1.578A	94.4	.623	.9	-20.8	258.0	.200	
4-6500	4-6680	.089	204.9	6.7	2.0	.712	98.2	.248	1.303	207.0	329.1	.979A	1.627D	84.0	1.104	-.3	18.5	118.6	.146	
		10.42	6.16	4.09	4.27	7.66	2.07	11.90	2/1/1	54.1	133.8	30.6	.640	3.789	12.8	241.7	-2.9	108.6D	1.786	
4-6170	4-6317.9	.178	72.1	19.1	-.7	.869	96.6	.267	.807	198.9	441.1	.591	1.023D	104.2	1.242	-3.0	-11.5	319.0	.318	
4-6317.9	4-6500	.318	347.8	-10.2	-2.4	1.376	79.2	.401	1.126	38.8	173.5	.674D	1.577A	94.3	.621	.7	-21.2	257.2	.201	
4-6500	4-6690	.086	205.0	7.9	2.1	.715	98.1	.242	1.310	207.6	339.5	.993A	1.628D	86.0	1.108	-.4	18.6	113.1	.126	
		10.70	6.41	4.39	4.28	7.67	2.03	11.70	2/1/1	54.7	116.8	28.3	.595	4.086	11.5	242.9	-2.7	107.9D	1.835	
4-6180	4-6319.9	.208	73.1	18.6	-.9	.873	99.4	.284	.815	205.9	441.7	.584	1.046D	105.1	1.247	-2.8	-10.0	322.1	.335	
4-6319.9	4-6500	.335	347.8	-9.1	-2.3	1.375	78.1	.407	1.121	42.4	173.9	.665D	1.577A	94.2	.618	.6	-21.7	256.2	.202	
4-6500	4-6700	.085	206.5	8.6	2.2	.716	97.9	.239	1.312	207.4	349.0	.999A	1.626D	87.9	1.111	-.4	18.6	108.8	.115	
		11.13	6.82	4.81	4.31	7.71	2.01	11.60	2/1/1	55.7	102.2	25.4	.535	4.549	10.0	244.6	-2.0	105.9D	1.897	

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2446500
10 MAR 1986

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6190	4-6322.4	.243	76.4	18.2	-1.3	.879	102.4	.305	.825	212.3	442.3	.574	1.077D	106.2	1.253	-2.4	-8.1	325.8	.358
4-6322.4	4-6500	.358	348.1	-8.0	-2.1	1.373	76.7	.414	1.114	47.0	174.5	.652D	1.576A	93.9	.614	.4	-22.1	254.7	.204
4-6500	4-6710	.084	209.4	8.9	2.3	.715	97.6	.237	1.311	206.4	357.9	.999A	1.622D	89.6	1.113	-.5	17.8	98.4	.113
		11.73	7.37	5.37	4.35	7.75	2.00	11.58	2/1/1	57.0	85.5	22.1	.469	5.229	8.2	246.9	-.2	104.3D	1.982
4-6200	4-6325.2	.284	81.3	17.8	-1.8	.888	105.4	.330	.840	218.1	443.0	.562	1.117D	107.5	1.262	-1.9	-5.9	330.1	.386
4-6325.2	4-6500	.386	348.7	-6.9	-2.0	1.371	75.1	.424	1.106	52.2	175.1	.636D	1.575A	93.6	.608	.2	-22.8	252.8	.207
4-6500	4-6720	.085	213.9	9.6	2.6	.713	97.2	.237	1.306	204.8	366.1	.996	1.616D	91.2	1.115	-.8	15.7	93.0	.118
		12.51	8.09	6.07	4.42	7.81	2.02	11.63	2/1/1	58.6	70.6	18.5	.403	6.216	7.3	249.8	3.3	102.5D	2.102
MARS ARRIVAL DATE = 2446510 (20 MAR 1986)																			
4-6130	4-6322.3	.182	109.2	17.2	-1.1	.866	82.3	.288	.789	160.0	449.0	.561	1.016	106.0	1.230	-3.6	-12.1	322.1	.352
4-6322.3	4-6510	.352	348.3	-8.3	-2.2	1.371	77.0	.409	1.106	46.5	179.1	.654D	1.559A	90.6	.616	.4	-21.5	250.9	.190
4-6510	4-6650	.118	207.4	-.0	1.8	.692	99.6	.301	1.243	204.1	292.4	.869A	1.617D	76.0	1.081	-.1	19.7	122.6	.261
		11.01	6.98	4.45	4.03	7.42	2.54	13.53	2/1/1	65.5	166.1	26.0	.485	4.439	13.5	243.7	-6.4	101.1D	1.667
4-6140	4-6317.7	.143	94.8	19.9	-.6	.866	87.3	.258	.793	172.2	443.7	.588	.998	104.0	1.233	-3.4	-13.0	317.3	.312
4-6317.7	4-6510	.312	347.9	-10.9	-2.5	1.373	79.4	.395	1.117	38.3	176.3	.676D	1.559A	91.1	.624	.8	-20.3	253.6	.186
4-6510	4-6660	.107	204.6	2.7	1.9	.706	99.6	.277	1.272	207.3	305.2	.919A	1.625D	78.9	1.091	-.1	19.4	123.4	.215
		10.25	6.32	3.97	3.94	7.33	2.35	12.80	2/1/1	63.2	157.3	30.0	.616	3.858	13.0	241.8	-4.0	106.7D	1.760
4-6150	4-6316.6	.140	82.8	20.3	-.5	.866	90.7	.252	.797	182.0	441.8	.595	.998D	103.6	1.235	-3.3	-13.1	316.4	.304
4-6316.6	4-6510	.304	348.0	-11.7	-2.6	1.374	80.0	.392	1.120	36.3	176.1	.681D	1.559A	91.2	.625	1.0	-19.9	254.2	.185
4-6510	4-6670	.100	202.4	4.9	1.9	.715	99.6	.262	1.293	209.9	317.3	.955A	1.632D	81.5	1.099	-.1	19.4	122.5	.177
		10.08	6.16	3.93	3.92	7.32	2.25	12.28	2/1/1	62.7	146.9	30.9	.652	3.758	13.1	241.6	-2.6	108.4D	1.798
4-6160	4-6317.0	.153	75.6	19.7	-.5	.867	93.6	.257	.801	190.6	441.3	.595	1.006D	103.7	1.237	-3.2	-12.5	317.4	.307
4-6317.0	4-6510	.307	347.9	-11.3	-2.6	1.374	79.8	.395	1.119	37.1	178.2	.679D	1.559A	91.2	.625	.9	-20.1	253.9	.185
4-6510	4-6680	.095	201.1	6.4	1.9	.720	99.5	.251	1.307	211.5	328.7	.978A	1.636D	83.9	1.105	-.1	19.8	119.5	.148
		10.17	6.24	4.08	3.93	7.32	2.16	11.93	2/1/1	62.9	134.3	29.8	.657	3.883	12.6	242.2	-2.3	108.2D	1.836
4-6170	4-6318.4	.176	73.0	19.0	-.7	.868	96.4	.268	.806	196.3	441.4	.590	1.022D	104.3	1.241	-3.0	-11.4	319.7	.318
4-6318.4	4-6510	.318	347.9	-10.4	-2.4	1.373	79.0	.397	1.116	39.6	178.4	.673D	1.559A	91.1	.623	.8	-20.5	253.2	.186
4-6510	4-6690	.092	201.1	7.3	1.9	.723	99.4	.245	1.314	212.3	339.2	.992A	1.636D	85.9	1.109	-.1	20.5	114.0	.128
		10.43	6.48	4.37	3.95	7.35	2.11	11.72	2/1/1	63.5	119.4	27.7	.593	4.177	11.4	243.4	-2.1	107.1D	1.884
4-6180	4-6320.5	.206	73.8	18.4	-1.0	.872	99.3	.284	.814	205.3	441.9	.583	1.044D	105.1	1.246	-2.7	-9.9	322.8	.335
4-6320.5	4-6510	.335	348.0	-9.2	-2.3	1.372	78.0	.403	1.111	43.2	178.7	.664D	1.559A	90.9	.620	.6	-21.1	252.0	.188
4-6510	4-6700	.090	202.3	7.5	2.0	.724	99.1	.241	1.316	212.1	348.7	.999A	1.634D	87.8	1.112	-.2	21.1	106.7	.116
		10.85	6.87	4.79	3.99	7.38	2.08	11.61	2/1/1	64.5	102.8	24.9	.534	4.641	9.9	245.1	-1.5	105.6D	1.945
4-6190	4-6322.9	.241	77.0	18.0	-1.4	.878	102.2	.304	.824	211.7	442.6	.573	1.074D	106.2	1.252	-2.4	-8.0	326.5	.358
4-6322.9	4-6510	.358	348.4	-8.0	-2.1	1.370	76.6	.411	1.105	47.6	179.2	.651D	1.559A	90.6	.615	.5	-21.6	250.5	.190
4-6510	4-6710	.088	204.8	7.2	2.0	.723	98.8	.239	1.314	211.0	357.5	.999A	1.629D	89.5	1.114	-.2	21.3	99.4	.114
		11.43	7.39	5.33	4.04	7.44	2.06	11.59	2/1/1	65.8	86.2	21.7	.469	5.321	8.1	247.5	.2	104.0D	2.028
4-6200	4-6325.8	.281	81.8	17.6	-1.8	.886	105.2	.330	.838	217.5	443.4	.562	1.114D	107.5	1.261	-1.9	-5.8	330.9	.386
4-6325.8	4-6510	.386	349.2	-6.9	-2.0	1.368	75.0	.421	1.097	52.8	179.7	.635D	1.558A	90.2	.610	.1	-22.1	248.5	.194
4-6510	4-6720	.087	208.6	6.5	2.1	.721	98.4	.239	1.308	209.3	365.7	.996	1.621D	91.1	1.115	-.3	21.0	95.9	.118
		12.19	8.07	6.02	4.12	7.52	2.05	11.62	2/1/1	67.6	71.2	18.2	.404	6.307	7.3	250.4	3.5	102.3D	2.145
MARS ARRIVAL DATE = 2446520 (30 MAR 1986)																			
4-6130	4-6324.4	.194	112.0	16.2	-1.3	.864	81.3	.298	.787	158.3	450.6	.552	1.022	106.7	1.230	-3.7	-11.9	324.6	.365
4-6324.4	4-6520	.365	349.3	-7.7	-2.1	1.368	76.2	.411	1.097	49.4	183.7	.646D	1.548	87.4	.619	.2	-21.2	245.5	.183
4-6520	4-6650	.127	204.3	.4	1.9	.701	101.3	.307	1.246	208.4	291.8	.864A	1.628D	75.6	1.082	.1	20.2	123.2	.267
		11.20	7.32	4.61	3.88	7.28	2.72	13.64	2/1/1	75.5	166.6	24.7	.451	4.672	14.1	245.3	-9.8	99.3D	1.657
4-6140	4-6303.0	.133	61.7	26.9	.9	.882	91.9	.230	.810	186.2	434.1	.624	.996D	101.8	1.241	-3.6	-16.5	296.5	.273
4-6303.0	4-6520	.273	354.7	-42.4	-7.7	1.375	86.5	.367	1.131	13.0	181.7	.717D	1.546	89.0	.641	6.3	-.7	255.6	.185
4-6520	4-6660	.116	201.4	2.9	1.8	.715	101.1	.282	1.277	211.9	304.7	.916A	1.638D	78.7	1.093	.1	20.1	123.9	.219
		10.29	6.37	3.86	3.92	7.31	2.51	12.86	2/1/1	70.1	157.7	54.3	.804	2.192	43.5	250.3	25.5	132.9D	.959
4-6140	4-6318.8	.145	97.1	19.3	-.7	.865	86.9	.261	.792	171.2	444.5	.585	.999	104.2	1.232	-3.4	-12.8	316.6	.316
4-6318.8	4-6520	.316	348.4	-10.8	-2.5	1.371	79.1	.394	1.110	39.6	182.9	.673D	1.547	88.1	.627	.8	-19.7	249.0	.177
4-6520	4-6660	.116	201.4	2.9	1.8	.715	101.1	.282	1.277	211.9	304.7	.916A	1.638D	78.7	1.093	.1	20.1	123.9	.219
		10.24	6.50	3.99	3.74	7.14	2.51	12.86	2/1/1	72.6	157.7	29.2	.601	3.966	12.8	242.7	-3.9	105.9D	1.782
4-6150	4-6317.4	.140	84.6	19.9	-.5	.865	90.4	.254	.796	181.2	442.3	.594	.998D	103.7	1.234	-3.3	-12.9	317.4	.306
4-6317.4	4-6520	.306	348.4	-11.8	-2.7	1.372	79.8	.390	1.113	37.2	182.7	.679D	1.547	88.3	.629	1.0	-19.1	249.8	.176 *
4-6520	4-6670	.109	199.0	4.9	1.8	.725	101.0	.266	1.300	214.7	317.1	.954A	1.646D	81.4	1.101	.1	20.4	123.0	.181
		10.03	6.31	3.93	3.71	7.11	2.38	12.32	2/1/1	71.9	147.1	30.2	.644	3.834	13.0	242.5	-2.0	107.9D	1.824
4-6160	4-6317.7	.152	77.0	19.4	-.6	.866	93.4	.258	.800	189.9	441.7	.594	1.006D	103.8	1.237	-3.2	-12.4	318.4	.308
4-6317.7	4-6520	.308	348.4	-11.6	-2.6	1.372	79.6	.391	1.112	37.8	182.8	.677D	1.547	88.2	.629	.9	-19.3	249.6	.176
4-6520	4-6660	.104	197.7	6.1	1.8	.730	100.8	.256	1.314	216.5	326.6	.976A	1.650D	83.6	1.107	.1	21.1	119.9	.151
		10.09	6.37	4.07	3.72	7.12	2.30	11.96	2/1/1	72.1	134.5	29.4	.632	3.947	12.5	243.0	-1.6	107.9D	1.863
4-6170	4-6319.1	.175	74.1	18.8	-.8	.867	96.2	.268	.805	197.7	441.8	.589	1.020D	104.3	1.240	-3.0	-11.3	320.6	.319
4-6319.1	4-6520	.319	348.4	-10.6	-2.5	1.371	78.9	.395	1.109	40.2	183.0	.672D	1.547	88.1	.627	.8	-19.8	248.8	.177
4-6520	4-6690	.100	197.5	6.7	1.8	.733	100.7	.249	1.321	217.2	339.1	.992A	1.650D	85.9	1.111	.1	22.1	114.4	.130
		10.33	6.59	4.35	3.74	7.14	2.24	11.74	2/1/1	72.7	119.6	27.3	.591	4.233	11.3	244.2	-1.5	106.9D	1.909
4-6180	4-6321.1	.204	74.7	18.2	-1.1	.870	99.1	.283	.812	204.7	442.3	.582	1.042D	105.1	1.245	-2.7	-9.7	323.6	.336
4-6321.1	4-6520	.336	348.8	-9.3	-2.3	1.370	77.9	.400	1.105	43.7	183.2	.663D	1.548	87.9	.624	.5	-20.4	247.6	.179
4-6520	4-6700	.097	198.5	6.6	1.8	.734	100.4	.245	1.323	217.0	348.7	.999A	1.647D	87.8	1.114	.1	23.3	107.2	.118
		10.74	6.95	4.76	3.79	7.19	2.19	11.63	2/1/1	73.7	103.1	24.6	.534	4.688	9.8	245.9	-1.0	105.4D	1.968
4-6190	4-6323.8	.239	77.7	17.9	-1.4	.876	102.0	.304	.822	211.1	443.0	.572	1.072D	106.2	1.251	-2.3	-7.8	327.4	.358
4-6323.8	4-6520	.358	349.1	-8.0	-2.1	1.369	76.8	.408	1.099	48.0	183.8	.650D	1.548	87.5	.620	.3	-21.1	246.1	.182
4-6520	4-6710	.095	200.7	5.8	1.8	.733	100.1	.243	1.320	215.9	357.4	.999A	1.640D	89.5	1.116	.1	24.1	100.0	.115
		11.31	7.45	5.29	3.86	7.25	2.16	11.60	2/1/1	75.0	86.6	21.5	.470	5.356	8.1	248.3	.5	103.8D	2.047
4-6200	4-6326.4	.278	82.4	17.5	-1.9	.884	105.0	.329	.835	216.8	443.7	.561	1.109D	107.5	1.259	-1.8	-5.7	331.7	.385
4-6326.4	4-6520	.385	350.0	-6.8	-2.0	1.367	75.0	.419	1.091	55.1	184.0	.634D	1.549	87.1	.615	.1	-21.5	244.1	.186
4-6520	4-6720	.093	204.0	4.5	1.7	.730	99.6	.242	1.313	214.1	365.5	.996	1.631D	91.1	1.117	.1	24.5	94.6	.119
		12.04	8.09	5.97	3.95	7.35	2.12	11.63	2/1/1	76.7	71.7	18.2	.406	6.321	7.3	251.3	3.7	102.0D	2.156
MARS ARRIVAL DATE = 2446530 (9 APR 1986)																			
4-6130	4-6305.5	.130	77.2	26.9	.6	.880	88.4	.235	.804	174.9	436.8	.615	.993	102.2	1.238	-3.4	-14.9	301.2	.281
4-6305.5	4-6530	.281	353.0	-41.6	-7.8	1.374	85.6	.366	1.126	16.5	186.2	.713D	1.538	86.5	.646	6.3	.6	251.8	.180
4-6530	4-6650	.141	201.4	.8	1.9	.712	103.1	.314	1.253	213.1	291.2	.859A	1.647D	75.3	1.084	.2	20.7	123.7	.274
		10.62	6.81	3.83	3.81	7.21	2.98	13.76	2/1/1	78.8	166.9	51.8	.764	2.287	43.8	251.8	27.7	129.9D	.983
4-6130	4-6327.6	.215	116.1	14.6	-1.7	.862	79.7	.316	.784	155.8	453.3	.537	1.032	107.8	1.228	-3.8	-11.6	328.5	.388
4-6327.6	4-6530	.388	351.3	-6.6	-1.9	1.366	74.8	.419	1.088	53.8	188.0	.632D	1.544	84.3	.621	.0	-21.0	239.8	.185
4-6530	4-6650	.141	201.4	.8	1.9	.712	103.1	.314	1.253	213.1	291.2	.859A	1.647D	75.3	1.084	.2	20.7	123.7	.274
		11.79	7.88	4.91	3.91	7.30	2.98	13.76	2/1/1	85.9	166.9	23.1	.400	5.001	15.6	247.9	-12.4	96.7D	1.599
4-6140	4-6305.7	.132	67.7	25.9	.6	.879	91.1	.234	.807	183.6	435.8	.618	.993D	102.1	1.239	-3.5	-15.5	301.9	.279
4-6305.7	4-6530	.279	352.9	-40.9	-7.7	1.374	85.5	.367	1.126	16.7	186.2	.713D	1.538	86.4	.646	6.2	.0	251.7	.179
4-6530	4-6660	.129	198.4	3.1	1.8	.727	102.7	.289	1.286	217.0	304.7	.915A	1.658D	78.5	1.095	.2	20.8	124.2	.225
		10.58	6.59	3.85	3.79	7.19	2.74	12.94	2/1/1	78.7	157.8	50.7	.774	2.335	42.9	251.6	26.8	129.9D	1.033
4-6140	4-6320.1	.149	99.9	18.5	-.8	.864	86.4	.265	.791	169.9	445.4	.581	1.000	104.5	1.231	-3.4	-12.6	320.3	.322
4-6320.1	4-6530	.322	349.3	-10.5	-2.5	1.370	78.7	.394	1.103	41.0	187.2	.670D	1.541	85.4	.633	.7	-19.2	244.3	.173
4-6530	4-6660	.129	198.4	3.1	1.8	.727	102.7	.289	1.286	217.0	304.7	.915A	1.658D	78.5	1.095	.2	20.8	124.2	.225
		10.43	6.77	4.03	3.66	7.06	2.74	12.94	2/1/1	82.1	157.8	28.5	.581	4.068	12.7	244.0	-4.2	105.0D	1.765
4-6150	4-6305.4	.148	59.3	24.6	.7	.880	94.0	.238	.812	193.2	434.9	.619	1.006D	102.2	1.242	-3.7	-15.9	301.8	.283
4-6305.4	4-6530	.283	353.1	-42.6	-8.0	1.374	85.7	.366	1.126	16.2	186.2	.714D	1.538	86.5	.646	6.6	1.3	251.9	.181
4-6530	4-6670	.121	196.0	4.6	1.8	.736	102.5	.273	1.310	219.9	317.3	.953A	1.667D	81.2	1.104	.2	21.3	123.1	.185
		10.45	6.62	4.03	3.83	7.23	2.59	12.57	2/1/1	78.8	147.0	51.0	.750	2.322	44.8	253.0	27.9	130.8D	.992

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2446530
9 APR 1986

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6150	4-6318.4	.140	87.0	19.4	-.6	.864	90.1	.256	.794	180.2	443.0	.591	.997D	103.8	1.234	-3.3	-12.7	318.8	.308
4-6318.4	4-6530	.308	349.2	-11.9	-2.7	1.371	79.6	.389	1.109	38.0	187.1	.677D	1.540	85.5	.635	1.0	-18.4	245.3	.172
4-6530	4-6670	.121	196.0	4.8	1.8	.736	102.5	.273	1.310	219.9	317.3	.953A	1.667D	81.2	1.104	.2	21.3	123.1	.185
		10.15	6.53	3.94	3.62	7.02	2.59	12.37	2/1/1	81.3	147.0	29.8	.633	3.894	12.9	243.7	-1.6	107.5D	1.831
4-6160	4-6318.6	.151	78.7	19.1	-.7	.865	93.1	.259	.798	189.0	442.2	.592	1.005D	103.9	1.236	-3.1	-12.2	319.5	.310
4-6318.6	4-6530	.310	349.2	-11.7	-2.7	1.371	79.5	.390	1.108	38.4	187.0	.676D	1.541	85.5	.635	.9	-18.5	245.2	.172
4-6530	4-6680	.115	194.7	5.8	1.8	.742	102.2	.262	1.325	221.8	328.9	.978A	1.672D	83.7	1.110	.2	22.3	119.9	.154
		10.18	6.56	4.06	3.62	7.02	2.49	11.99	2/1/1	81.4	134.2	29.1	.626	3.986	12.4	244.2	-1.0	107.6D	1.869
4-6170	4-6319.9	.173	75.4	18.5	-.9	.866	96.0	.268	.803	196.8	442.3	.588	1.019D	104.4	1.240	-2.9	-11.1	321.6	.320
4-6319.9	4-6530	.320	349.3	-10.7	-2.5	1.370	78.8	.393	1.106	40.6	187.2	.671D	1.541	85.4	.633	.8	-19.1	244.4	.173
4-6530	4-6690	.111	194.4	6.1	1.7	.745	102.0	.255	1.332	222.6	339.4	.992A	1.672D	85.8	1.114	.3	23.7	114.4	.153
		10.40	6.75	4.33	3.65	7.05	2.42	11.76	2/1/1	82.0	119.3	27.2	.588	4.257	11.5	245.3	-.9	106.7D	1.914
4-6180	4-6321.9	.202	75.8	18.0	-1.1	.869	98.8	.283	.810	203.9	442.7	.581	1.040D	105.2	1.244	-2.7	-9.6	324.7	.336
4-6321.9	4-6530	.336	349.6	-9.3	-2.3	1.369	77.8	.399	1.102	44.0	187.4	.662D	1.542	85.1	.630	.5	-19.8	243.3	.175
4-6530	4-6700	.108	195.3	5.7	1.7	.745	101.7	.251	1.333	222.3	348.9	.999A	1.667D	87.8	1.116	.3	25.1	107.3	.121
		10.79	7.08	4.72	3.70	7.10	2.36	11.65	2/1/1	82.9	102.9	24.6	.533	4.697	9.7	247.0	-.6	105.2D	1.969
4-6190	4-6324.3	.236	78.6	17.6	-1.5	.874	101.7	.303	.820	210.2	443.4	.571	1.068D	106.2	1.250	-2.3	-7.7	328.4	.357
4-6324.3	4-6530	.357	350.2	-8.0	-2.1	1.368	76.6	.407	1.096	48.3	187.7	.650D	1.542	84.8	.627	.3	-20.4	241.8	.179
4-6530	4-6710	.104	197.2	4.7	1.6	.743	101.3	.248	1.329	221.1	357.5	.999A	1.658D	89.5	1.118	.3	26.2	100.2	.117
		11.33	7.55	5.25	3.78	7.18	2.31	11.62	2/1/1	84.2	86.6	21.6	.470	5.342	8.0	249.4	.7	103.6D	2.043
4-6200	4-6327.2	.275	83.1	17.3	-1.9	.882	104.7	.328	.832	216.0	444.2	.560	1.105D	107.5	1.258	-1.8	-5.6	332.8	.384
4-6327.2	4-6530	.384	351.2	-6.7	-2.0	1.366	75.0	.416	1.089	53.2	188.0	.634D	1.544	84.3	.622	.0	-21.0	240.0	.184
4-6530	4-6720	.101	200.2	3.1	1.5	.740	100.9	.246	1.321	219.2	365.4	.996	1.645D	91.1	1.116	.4	27.1	94.9	.121
		12.05	8.16	5.90	3.89	7.29	2.25	11.65	2/1/1	85.7	72.0	18.4	.407	6.271	7.2	252.4	3.6	101.9D	2.146
MARS ARRIVAL DATE = 2446540 (19 APR 1986)																			
4-6130	4-6308.1	.134	83.0	25.5	.3	.877	87.6	.241	.802	172.5	438.6	.609	.995	102.7	1.237	-3.4	-14.4	304.4	.289
4-6308.1	4-6540	.289	352.3	-40.8	-7.9	1.373	84.8	.368	1.122	19.6	190.4	.710D	1.535	84.1	.652	6.4	1.4	248.1	.180
4-6540	4-6650	.159	198.8	1.1	1.9	.726	105.1	.324	1.267	218.4	291.3	.856A	1.678D	74.9	1.088	.4	21.4	123.8	.283
		11.01	7.21	3.87	3.80	7.20	3.34	13.91	2/1/1	87.3	166.8	49.2	.722	2.403	44.0	253.8	29.2	127.5D	1.013
4-6140	4-6308.4	.132	73.8	24.8	.3	.876	90.3	.238	.803	181.1	437.6	.612	.995D	102.5	1.238	-3.5	-14.8	305.3	.285
4-6308.4	4-6540	.285	352.3	-39.2	-7.6	1.373	84.6	.368	1.122	20.1	190.4	.709D	1.535	84.1	.652	6.0	.2	247.9	.178
4-6540	4-6660	.145	195.8	3.1	1.9	.740	104.5	.298	1.302	222.6	305.1	.913A	1.690D	78.2	1.100	.4	21.6	124.1	.231
		10.67	6.91	3.85	3.75	7.15	3.06	13.04	2/1/1	87.3	157.5	47.7	.741	2.474	42.2	253.0	27.7	127.2D	1.092
4-6140	4-6321.9	.154	103.4	17.4	-1.0	.862	85.7	.271	.789	168.3	446.6	.575	1.002	104.9	1.230	-3.4	-12.4	322.6	.329
4-6321.9	4-6540	.329	350.8	-9.9	-2.4	1.369	78.3	.396	1.102	42.7	191.2	.665D	1.539	82.8	.640	.6	-18.9	240.0	.175
4-6540	4-6660	.145	195.8	3.1	1.9	.740	104.5	.298	1.302	222.6	305.1	.913A	1.690D	78.2	1.100	.4	21.6	124.1	.231
		10.85	7.16	4.10	3.69	7.09	3.06	13.04	2/1/1	91.4	157.5	27.7	.556	4.174	12.6	245.7	-5.0	103.8D	1.763
4-6150	4-6308.2	.144	64.8	23.7	.4	.877	93.3	.241	.808	190.4	436.6	.613	1.003D	102.5	1.240	-3.5	-15.0	305.5	.287
4-6308.2	4-6540	.287	352.3	-40.2	-7.8	1.373	84.7	.368	1.122	19.8	190.4	.709D	1.535	84.1	.652	6.2	.9	248.0	.179
4-6540	4-6670	.136	193.6	4.5	1.8	.750	104.1	.282	1.326	225.7	317.9	.953A	1.700D	81.1	1.106	.4	22.3	122.8	.189
		10.65	6.87	3.98	3.78	7.18	2.89	12.43	2/1/1	87.3	146.5	47.7	.729	2.472	43.4	254.0	28.5	127.9D	1.074
4-6150	4-6319.7	.141	89.8	18.8	-.8	.863	89.7	.258	.793	179.0	443.8	.586	.998	104.0	1.233	-3.2	-12.5	320.4	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.8	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6670	.136	193.6	4.5	1.8	.750	104.1	.282	1.326	225.7	317.9	.953A	1.700D	81.1	1.106	.4	22.3	122.8	.189
		10.46	6.83	3.95	3.62	7.02	2.89	12.43	2/1/1	90.4	146.5	29.4	.619	3.942	12.7	245.1	-1.4	106.9D	1.821
4-6160	4-6307.6	.171	58.9	22.8	.5	.881	96.5	.250	.817	200.2	435.7	.612	1.021D	102.9	1.246	-3.6	-15.1	305.1	.296
4-6307.6	4-6540	.296	352.3	-43.7	-8.6	1.373	85.0	.367	1.123	18.9	190.4	.711D	1.535	84.1	.652	7.0	3.5	248.5	.184
4-6540	4-6680	.130	192.3	5.3	1.7	.756	103.7	.271	1.341	227.6	329.5	.978A	1.704D	83.6	1.114	.4	23.5	119.5	.156
		10.94	7.06	4.29	3.88	7.28	2.77	12.04	2/1/1	87.3	133.5	49.1	.685	2.405	47.4	256.9	31.2	129.5D	.962
4-6160	4-6319.7	.150	80.9	18.7	-.8	.863	92.8	.260	.797	187.9	442.9	.590	1.004D	104.0	1.235	-3.1	-12.0	320.9	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.9	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6680	.130	192.3	5.3	1.7	.756	103.7	.271	1.341	227.6	329.5	.978A	1.704D	83.6	1.114	.4	23.5	119.5	.156
		10.44	6.82	4.05	3.62	7.02	2.77	12.04	2/1/1	90.4	133.5	28.9	.618	4.006	12.3	245.6	-.5	107.3D	1.859
4-6170	4-6320.9	.171	77.1	18.1	-.9	.864	95.6	.269	.802	195.8	442.6	.586	1.017D	104.5	1.239	-2.9	-10.9	322.9	.321
4-6320.9	4-6540	.321	350.6	-10.7	-2.5	1.370	78.8	.393	1.104	40.9	191.1	.670D	1.539	83.0	.641	.7	-18.4	240.5	.173
4-6540	4-6690	.125	192.1	5.4	1.7	.758	103.4	.263	1.348	228.4	339.9	.993A	1.703D	85.9	1.118	.4	25.1	113.9	.136
		10.63	6.98	4.30	3.66	7.06	2.67	11.80	2/1/1	90.9	118.5	27.2	.584	4.257	11.1	246.7	-.5	106.5D	1.902
4-6180	4-6322.8	.199	77.1	17.7	-1.2	.867	98.5	.283	.808	202.9	443.3	.579	1.037D	105.2	1.243	-2.6	-9.4	325.9	.336
4-6322.8	4-6540	.336	350.9	-9.3	-2.3	1.369	77.8	.399	1.100	44.2	191.3	.661D	1.540	82.7	.638	.5	-19.2	239.5	.176
4-6540	4-6700	.121	192.8	4.9	1.6	.758	103.1	.258	1.347	228.0	349.3	.999A	1.695D	87.8	1.120	.5	26.7	106.8	.124
		10.99	7.28	4.68	3.72	7.12	2.59	11.68	2/1/1	91.8	102.2	24.7	.531	4.675	9.6	248.4	-.3	105.0D	1.953
4-6190	4-6325.2	.233	79.6	17.4	-1.6	.872	101.4	.303	.817	209.3	443.9	.570	1.064D	106.3	1.249	-2.2	-7.6	329.6	.357
4-6325.2	4-6540	.357	351.6	-7.9	-2.1	1.368	76.5	.407	1.095	48.3	191.5	.649D	1.541	82.3	.635	.2	-19.9	238.1	.180
4-6540	4-6710	.117	194.6	3.8	1.5	.756	102.7	.255	1.341	226.6	357.8	.999A	1.683D	89.6	1.121	.5	28.0	99.9	.121
		11.51	7.71	5.19	3.80	7.20	2.52	11.65	2/1/1	92.6	86.2	21.8	.471	5.290	7.9	250.7	.6	103.4D	2.021
4-6200	4-6328.1	.271	84.0	17.0	-2.0	.880	104.4	.326	.829	215.1	444.7	.559	1.100D	107.5	1.256	-1.7	-5.5	333.9	.384
4-6328.1	4-6540	.384	352.7	-6.6	-1.9	1.366	75.0	.417	1.088	53.2	191.7	.634D	1.543	81.9	.630	-.0	-20.5	236.6	.185
4-6540	4-6720	.112	197.2	2.0	1.3	.752	102.2	.252	1.332	224.5	365.6	.996	1.667D	91.1	1.121	.6	29.0	94.9	.124
		12.20	8.28	5.83	3.93	7.32	2.44	11.68	2/1/1	94.1	71.9	18.6	.409	6.172	7.0	253.7	3.4	101.8D	2.114
MARS ARRIVAL DATE = 2446550 (29 APR 1986)																			
4-6130	4-6310.6	.139	88.4	24.1	.1	.875	86.8	.247	.799	170.2	440.4	.602	.997	103.2	1.235	-3.4	-13.6	307.6	.297
4-6310.6	4-6550	.297	352.4	-40.1	-8.1	1.373	84.0	.370	1.120	22.4	194.3	.706D	1.535	81.9	.660	6.4	1.9	244.9	.183
4-6550	4-6650	.182	196.6	1.2	2.0	.743	107.3	.338	1.290	224.3	292.0	.854A	1.726D	74.4	1.095	.6	22.1	123.6	.293
		11.65	7.77	3.92	3.88	7.27	3.85	14.10	2/1/1	95.4	166.4	47.1	.680	2.503	44.4	256.1	30.4	125.6D	1.021
4-6140	4-6311.0	.133	79.9	23.5	.1	.873	89.5	.243	.800	178.5	439.3	.606	.995	102.9	1.236	-3.4	-14.2	308.7	.292
4-6311.0	4-6550	.292	352.5	-37.6	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.0	244.4	.180
4-6550	4-6660	.166	193.7	3.0	1.9	.758	106.4	.311	1.326	228.8	306.0	.913A	1.739D	78.0	1.106	.6	22.5	123.7	.238
		11.18	7.37	3.86	3.81	7.21	3.51	13.16	2/1/1	95.6	156.8	45.2	.707	2.600	41.5	254.7	28.3	124.6D	1.131
4-6140	4-6324.2	.163	107.7	16.1	-1.2	.860	84.8	.279	.787	166.2	448.2	.567	1.006	105.4	1.229	-3.4	-12.1	325.5	.339
4-6324.2	4-6550	.339	352.7	-8.9	-2.3	1.369	77.6	.401	1.100	44.8	194.9	.660D	1.541	80.4	.647	.4	-19.0	236.3	.181
4-6550	4-6660	.166	193.7	3.0	1.9	.758	106.4	.311	1.326	228.8	306.0	.913A	1.739D	78.0	1.106	.6	22.5	123.7	.238
		11.52	7.70	4.20	3.82	7.22	3.51	13.16	2/1/1	100.0	156.8	26.9	.522	4.296	12.7	247.9	-6.7	102.2D	1.721
4-6150	4-6311.0	.141	70.6	22.7	.1	.873	92.4	.244	.804	187.6	438.4	.608	1.000D	102.8	1.238	-3.4	-14.3	309.2	.292
4-6311.0	4-6550	.292	352.5	-37.7	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.1	244.5	.180
4-6550	4-6670	.156	191.7	4.1	1.8	.767	105.8	.294	1.351	232.0	316.9	.954A	1.749D	81.0	1.114	.6	23.4	122.1	.195
		11.05	7.24	3.95	3.81	7.21	3.29	12.52	2/1/1	95.6	145.5	44.9	.706	2.619	41.8	255.1	28.6	125.1D	1.142
4-6150	4-6321.2	.143	93.4	17.9	-.9	.861	89.1	.262	.791	177.4	444.8	.584	.998	104.3	1.232	-3.2	-12.3	322.4	.316
4-6321.2	4-6550	.316	352.1	-11.3	-2.6	1.370	79.1	.392	1.106	39.9	194.8	.672D	1.539	80.9	.651	.8	-17.6	237.8	.176
4-6550	4-6670	.156	191.7	4.1	1.8	.767	105.8	.294	1.351	232.0	316.9	.954A	1.749D	81.0	1.114	.6	23.4	122.1	.195
		10.97	7.25	3.97	3.72	7.12	3.29	12.52	2/1/1	98.9	145.5	29.0	.601	3.988	12.3	246.9	-1.9	106.1D	1.797
4-6160	4-6310.8	.164	63.7	21.9	.1	.876	95.6	.252	.811	197.2	437.5	.607	1.015D	103.1	1.243	-3.5	-14.1	308.9	.299
4-6310.8	4-6550	.299	352.4	-40.7	-8.2	1.373	84.0	.370	1.120	22.2	194.3	.706D	1.535	81.9	.660	6.5	2.3	245.0	.184
4-6550	4-6680	.149	190.5	4.7	1.7	.772	105.3	.283	1.365	233.9	330.5	.979A	1.752D	83.6	1.120	.6	24.8	118.4	.163
		11.24	7.35	4.21	3.89	7.29	3.13	12.10	2/1/1	95.4	152.3	46.2	.673	2.551	45.5	257.7	31.4	126.6D	1.044
4-6160	4-6321.0	.149	83.7	18.1	-.9	.861	92.3	.262	.795	186.6	443.6	.587	1.003D	104.2	1.234	-3.1	-11.8	322.6	.314
4-6321.0	4-6550	.314	352.1	-11.6	-2.7	1.370	79.2	.391	1.106	39.4	194.8	.674D	1.539	80.9	.651	.9	-17.4	237.9	.176
4-6550	4-6680	.149	190.5	4.7	1.7	.772	105.3	.283	1.365	233.9	330.5	.979A	1.752D	83.6	1.120	.6	24.8	118.4	.163
		10.88	7.17	4.04	3.71	7.11	3.13	12.10	2/1/1	98.8	152.3	28.8	.609	4.015	12.1	247.3	-.4	108.9D	1.835

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2446550
29 APR 1986

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6170	4-6322.0	.169	79.2	17.7	-1.0	.862	95.3	.270	.799	194.6	443.5	.584	1.015D	104.6	1.237	-2.9	-10.7	324.5	.322
4-6322.0	4-6550	.322	352.2	-10.6	-2.5	1.370	78.7	.394	1.104	41.2	194.8	.669D	1.540	80.8	.650	.7	-18.0	237.4	.177
4-6550	4-6690	.143	190.4	4.6	1.6	.773	104.9	.275	1.370	234.5	340.8	.993A	1.747D	85.9	1.123	.6	26.5	112.7	.141
		11.03	7.29	4.27	3.74	7.14	3.01	11.85	2/1/1	99.2	117.2	27.3	.579	4.240	11.0	248.3	-.3	106.2D	1.876
4-6180	4-6323.9	.196	78.6	17.3	-1.3	.865	98.1	.284	.806	201.7	443.9	.577	1.034D	105.3	1.242	-2.6	-9.2	327.4	.337
4-6323.9	4-6550	.337	352.6	-9.1	-2.3	1.369	77.8	.400	1.101	44.3	194.9	.661D	1.541	80.5	.647	.4	-18.9	236.5	.180
4-6550	4-6700	.137	191.1	4.0	1.5	.772	104.5	.269	1.368	234.0	350.0	.999A	1.736D	87.9	1.125	.6	28.1	105.7	.129
		11.35	7.54	4.64	3.81	7.21	2.91	11.73	2/1/1	99.9	101.1	24.9	.530	4.631	9.4	249.9	-.3	104.9D	1.923
4-6190	4-6326.3	.229	80.9	17.1	-1.6	.869	101.0	.302	.814	208.2	444.5	.568	1.060D	106.5	1.247	-2.2	-7.4	331.0	.357
4-6326.3	4-6550	.357	353.3	-7.6	-2.0	1.368	76.5	.407	1.096	46.3	195.0	.649D	1.543	80.1	.644	.1	-19.6	235.3	.184
4-6550	4-6710	.132	192.7	2.8	1.4	.770	104.1	.265	1.359	232.5	358.4	1.000A	1.719D	89.7	1.125	.7	29.3	99.1	.126
		11.84	7.93	5.13	3.91	7.30	2.80	11.70	2/1/1	100.8	85.4	22.1	.471	5.209	7.7	252.3	-.6	103.3D	1.984
4-6200	4-6329.1	.266	85.0	16.8	-2.1	.877	104.0	.325	.826	214.0	445.2	.557	1.094D	107.5	1.254	-1.7	-5.3	335.3	.383
4-6329.1	4-6550	.383	354.4	-6.3	-1.8	1.366	75.1	.418	1.090	53.0	195.2	.635D	1.545	79.6	.640	-.1	-20.5	234.0	.190
4-6550	4-6720	.127	195.1	1.0	1.2	.765	103.5	.261	1.347	230.2	366.0	.996	1.698D	91.2	1.125	.8	30.4	94.4	.129
		12.49	8.46	5.75	4.04	7.43	2.70	11.72	2/1/1	101.9	71.5	19.1	.410	6.036	6.6	255.2	3.0	101.6D	2.067

MARS ARRIVAL DATE = 2446560 (9 MAY 1986)

4-6130	4-6313.2	.146	93.5	22.5	-.1	.873	86.0	.254	.797	167.9	442.2	.594	.999	103.7	1.234	-3.4	-13.4	310.8	.307
4-6313.2	4-6560	.307	353.3	-39.8	-8.5	1.373	83.3	.373	1.120	24.8	198.0	.702D	1.538	79.9	.668	6.5	2.1	242.5	.190
4-6560	4-6650	.212	194.8	1.2	2.1	.766	109.7	.358	1.328	231.0	293.3	.852A	1.803D	73.9	1.105	.8	22.9	123.0	.307
		12.57	8.54	4.00	4.04	7.43	4.54	14.36	2/1/1	102.8	165.6	45.6	.637	2.579	45.0	258.8	31.8	123.9D	1.006
4-6140	4-6313.8	.136	85.9	22.2	-.2	.870	88.7	.248	.797	176.0	441.0	.599	.995	103.3	1.235	-3.4	-13.7	312.1	.299
4-6313.8	4-6560	.299	353.5	-36.4	-7.5	1.373	83.1	.374	1.119	25.5	198.0	.701D	1.538	79.8	.668	5.7	-.4	241.8	.186
4-6560	4-6660	.193	192.2	2.7	1.9	.779	108.5	.330	1.364	235.7	307.5	.914A	1.815D	77.7	1.115	.8	23.4	122.7	.249
		11.94	8.00	3.89	3.95	7.34	4.11	13.32	2/1/1	103.2	155.6	43.4	.672	2.704	41.1	256.7	28.8	122.8D	1.145
4-6140	4-6327.2	.176	113.0	14.4	-1.5	.858	83.5	.291	.784	163.5	450.4	.556	1.011	106.2	1.228	-3.5	-11.7	329.3	.355
4-6327.2	4-6560	.355	355.3	-7.4	-2.0	1.369	76.7	.408	1.099	47.7	198.3	.651D	1.546	78.2	.655	.0	-19.5	233.5	.191
4-6560	4-6660	.193	192.2	2.7	1.9	.779	108.5	.330	1.364	235.7	307.5	.914A	1.815D	77.7	1.115	.8	23.4	122.7	.249
		12.53	8.47	4.36	4.06	7.46	4.11	13.32	2/1/1	107.8	155.6	26.0	.478	4.452	13.7	250.7	-9.5	100.1D	1.650
4-6150	4-6313.8	.140	76.6	21.6	-.2	.870	91.6	.248	.800	184.8	440.1	.602	.999D	103.2	1.237	-3.3	-13.6	312.7	.297
4-6313.8	4-6560	.297	353.6	-35.5	-7.3	1.373	83.1	.374	1.119	25.7	198.0	.701D	1.538	79.8	.668	5.5	-1.0	241.6	.185
4-6560	4-6670	.181	190.4	3.6	1.8	.787	107.7	.312	1.389	236.9	320.4	.955A	1.822D	80.9	1.123	.7	24.5	120.8	.203
		11.68	7.76	3.93	3.93	7.32	3.82	12.65	2/1/1	103.2	144.1	42.6	.680	2.750	40.2	256.5	28.3	122.7D	1.190
4-6150	4-6323.2	.146	97.8	16.8	-1.1	.859	88.4	.266	.789	175.5	446.0	.579	.999	104.6	1.230	-3.2	-12.0	325.0	.322
4-6323.2	4-6560	.322	354.2	-10.4	-2.5	1.371	78.7	.395	1.106	41.1	198.3	.669D	1.543	78.8	.660	.6	-17.9	235.2	.184
4-6560	4-6670	.181	190.4	3.6	1.8	.787	107.7	.312	1.389	236.9	320.4	.955A	1.822D	80.9	1.123	.7	24.5	120.8	.203
		11.71	7.82	4.00	3.89	7.29	3.82	12.65	2/1/1	106.6	144.1	28.7	.578	4.040	12.0	249.0	-3.1	105.0D	1.759
4-6160	4-6313.4	.158	66.8	21.0	-.2	.872	94.7	.253	.806	194.3	439.2	.602	1.011D	103.4	1.240	-3.3	-13.3	312.7	.302
4-6313.4	4-6560	.302	353.4	-37.8	-7.8	1.373	83.2	.373	1.120	25.2	198.0	.702D	1.538	79.8	.668	6.1	.6	242.1	.186
4-6560	4-6680	.172	189.4	4.0	1.7	.791	107.1	.300	1.401	240.7	331.9	.980A	1.821D	83.6	1.128	.7	26.0	116.8	.170
		11.75	7.77	4.15	3.98	7.38	3.62	12.18	2/1/1	103.0	130.6	43.6	.659	2.694	43.3	258.7	30.9	123.8D	1.116
4-6160	4-6322.5	.149	87.0	17.4	-1.0	.859	91.8	.264	.793	185.0	444.6	.583	1.002D	104.4	1.233	-3.0	-11.5	324.7	.318
4-6322.5	4-6560	.318	354.1	-11.1	-2.6	1.371	79.0	.393	1.107	40.1	198.2	.672D	1.543	78.9	.660	.7	-17.4	235.5	.183
4-6560	4-6680	.172	189.4	4.0	1.7	.791	107.1	.300	1.401	240.7	331.9	.980A	1.821D	83.6	1.128	.7	26.0	116.8	.170
		11.92	7.85	4.03	3.87	7.27	3.62	12.18	2/1/1	106.4	130.6	28.8	.596	4.020	11.7	249.2	-.8	106.3D	1.801
4-6170	4-6323.4	.167	81.7	17.2	-1.2	.860	94.8	.271	.797	193.2	444.3	.581	1.013D	104.7	1.236	-2.8	-10.5	326.3	.324
4-6323.4	4-6560	.324	354.2	-10.2	-2.5	1.371	78.6	.396	1.106	41.5	198.3	.668D	1.543	78.8	.659	.6	-18.0	235.1	.184
4-6560	4-6690	.164	189.4	3.8	1.6	.792	106.5	.291	1.403	241.1	342.0	.994A	1.812D	86.0	1.131	.7	27.7	111.0	.148
		11.61	7.71	4.24	3.90	7.30	3.46	11.92	2/1/1	106.7	115.5	27.5	.573	4.212	10.7	250.2	-.6	105.8D	1.639
4-6180	4-6325.2	.195	80.5	16.9	-1.4	.862	97.7	.284	.803	200.4	444.6	.575	1.031D	105.4	1.240	-2.5	-9.0	329.1	.338
4-6325.2	4-6560	.338	354.6	-8.8	-2.2	1.370	77.7	.401	1.103	44.4	198.3	.660D	1.545	78.5	.657	.3	-18.8	234.4	.187
4-6560	4-6700	.156	190.2	3.1	1.4	.790	106.0	.284	1.397	240.4	351.0	1.000A	1.794D	88.0	1.132	.6	29.2	104.1	.156
		11.88	7.91	4.59	3.97	7.37	3.32	11.80	2/1/1	107.2	99.6	25.3	.527	4.570	9.1	251.8	-.6	104.6D	1.682
4-6190	4-6327.8	.225	82.4	16.7	-1.7	.867	100.6	.302	.811	206.9	445.2	.566	1.056D	106.5	1.245	-2.2	-7.2	332.6	.357
4-6327.8	4-6560	.357	355.4	-7.3	-1.9	1.369	76.5	.408	1.098	48.2	198.4	.650D	1.547	78.1	.655	.0	-19.6	233.4	.192
4-6560	4-6710	.151	191.7	1.9	1.3	.786	105.5	.278	1.385	238.6	359.1	1.000A	1.770D	89.8	1.131	.8	30.4	97.9	.132
		12.32	8.24	5.06	4.07	7.47	3.16	11.76	2/1/1	107.9	84.3	22.6	.471	5.107	7.4	254.0	.1	103.1D	1.936

MARS ARRIVAL DATE = 2446570 (19 MAY 1986)

4-6150	4-6316.4	.140	82.5	20.4	-.5	.867	90.7	.252	.797	182.2	441.7	.596	.998D	103.5	1.235	-3.3	-13.1	316.2	.303
4-6316.4	4-6570	.303	355.3	-33.8	-7.1	1.374	82.4	.378	1.120	27.9	201.4	.697D	1.543	78.0	.677	5.3	-2.1	239.8	.194
4-6570	4-6670	.211	189.6	3.1	1.8	.812	109.7	.338	1.446	246.4	322.4	.957A	1.934D	80.8	1.136	.9	25.6	116.9	.214
		12.58	8.46	3.93	4.11	7.51	4.53	12.79	2/1/1	110.1	142.1	41.0	.653	2.853	39.1	256.4	28.1	120.7D	1.211
4-6150	4-6325.7	.151	103.1	15.4	-1.3	.856	87.4	.273	.786	173.1	447.6	.571	1.000	105.1	1.229	-3.2	-11.7	328.2	.331
4-6325.7	4-6570	.331	356.7	-9.0	-2.2	1.371	78.1	.400	1.107	42.8	201.3	.664D	1.550	76.9	.669	.3	-18.7	233.6	.193
4-6570	4-6670	.211	189.6	3.1	1.8	.812	109.7	.338	1.446	246.4	322.4	.957A	1.934D	80.8	1.136	.9	25.6	116.9	.214
		12.73	8.59	4.05	4.15	7.54	4.53	12.79	2/1/1	113.5	142.1	28.2	.549	4.102	12.0	251.5	-5.5	103.3D	1.704
4-6160	4-6316.3	.154	74.1	20.0	-.5	.868	93.9	.256	.802	191.4	440.8	.597	1.007D	103.6	1.238	-3.2	-12.7	316.4	.306
4-6316.3	4-6570	.306	355.2	-35.2	-7.4	1.374	82.5	.377	1.120	27.6	201.4	.697D	1.543	78.0	.677	5.6	-1.2	240.0	.195
4-6570	4-6680	.200	188.9	3.2	1.7	.814	108.9	.324	1.454	247.9	333.6	.982A	1.925D	83.6	1.139	.9	27.1	114.7	.180
		12.50	8.36	4.09	4.14	7.54	4.26	12.30	2/1/1	109.9	128.5	41.5	.642	2.821	41.2	259.9	30.2	121.3D	1.169
4-6160	4-6324.4	.149	91.2	18.5	-1.2	.857	91.1	.267	.790	183.1	445.7	.579	1.001D	104.6	1.232	-3.0	-11.3	327.2	.322
4-6324.4	4-6570	.322	356.4	-10.2	-2.4	1.372	78.7	.396	1.109	40.9	201.5	.669D	1.549	77.1	.670	.5	-18.0	234.0	.193
4-6570	4-6680	.200	188.9	3.2	1.7	.814	108.9	.324	1.454	247.9	333.6	.982A	1.925D	83.6	1.139	.9	27.1	114.7	.180
		12.59	8.29	4.03	4.09	7.49	4.26	12.30	2/1/1	113.2	128.5	28.8	.560	4.027	11.3	251.4	-2.2	105.4D	1.757
4-6170	4-6315.8	.183	68.8	19.8	-.5	.873	97.3	.287	.811	201.1	439.9	.595	1.028D	104.1	1.244	-3.1	-12.0	316.2	.316
4-6315.8	4-6570	.316	354.7	-39.3	-8.4	1.374	82.7	.377	1.121	26.9	201.4	.699D	1.543	78.0	.677	6.6	1.8	240.9	.200
4-6570	4-6690	.191	189.0	2.9	1.5	.813	108.2	.314	1.450	248.1	343.5	.995A	1.905D	86.1	1.141	.9	28.8	108.7	.157
		12.75	8.50	4.45	4.25	7.65	4.04	12.02	2/1/1	109.3	113.4	43.6	.601	2.693	46.8	263.9	34.8	123.2D	1.017
4-6170	4-6325.1	.164	84.7	16.5	-1.3	.858	94.2	.272	.794	191.5	445.3	.578	1.011D	104.9	1.234	-2.8	-10.3	328.5	.326
4-6325.1	4-6570	.326	356.6	-9.5	-2.3	1.371	78.4	.396	1.108	41.9	201.5	.667D	1.549	77.0	.670	.4	-18.4	233.8	.194
4-6570	4-6690	.191	189.0	2.9	1.5	.813	108.2	.314	1.450	248.1	343.5	.995A	1.905D	86.1	1.141	.9	28.8	108.7	.157
		12.38	8.26	4.21	4.12	7.51	4.04	12.02	2/1/1	113.3	113.4	27.7	.564	4.178	10.3	252.3	-1.5	105.3D	1.794
4-6180	4-6326.7	.169	82.8	18.4	-1.5	.860	97.1	.284	.800	198.8	445.4	.573	1.027D	105.5	1.238	-2.5	-8.8	331.0	.339
4-6326.7	4-6570	.339	357.0	-8.2	-2.1	1.371	77.6	.403	1.105	44.5	201.5	.660D	1.551	76.7	.668	.1	-19.2	233.2	.197
4-6570	4-6700	.182	189.8	2.1	1.4	.810	107.7	.305	1.439	247.0	352.2	1.000A	1.877D	88.2	1.141	.9	30.2	102.1	.145
		12.58	8.39	4.54	4.19	7.58	3.85	11.89	2/1/1	113.7	97.7	25.7	.524	4.498	8.8	253.8	-1.5	104.3D	1.832

STOPOVER TIME = 0 DAYS

1986 OUTBOUND SWINGBY

MISSION DURATION = 960 DAYS
MARS ARRIVAL DATE = 2446470
8 FEB 1986

LAUNCH SWNGBY DEPART	SWNGBY ARRIVE RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH APHEL KAPPA	APHEL APHEL PSI 2 PSI 4 PSI 6 -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
									MARS ARRIVAL DATE = 2446470 (8 FEB 1986)											
4-6130	4-6318.2	.163	102.7	19.6	-.6	.869	84.1	.271	.792	163.5	445.8	.577	1.007	104.9	1.232	-3.5	-12.6	317.0	.330
4-6318.2	4-6470	.330	350.5	-9.0	-2.2	1.393	79.2	.432	1.190	36.7	156.6	.677D	1.704A	105.8	.638	.6	-22.6	264.8	.279
4-6470	4-6690	.082	216.5	10.8	2.8	.695	94.7	.239	1.309	195.4	341.6	.995A	1.622D	86.5	1.108	-1.3	10.9	108.3	.124
		12.40	6.17	4.20	6.23	9.61	1.97	11.68	2/1/1	33.2	114.8	33.1	.553	3.514	13.0	242.6	-6.3	106.6D	1.392
4-6140	4-6315.1	.138	89.2	21.4	-.3	.869	88.2	.252	.796	174.6	442.0	.595	.996	103.5	1.234	-3.4	-13.4	313.9	.304
4-6315.1	4-6470	.304	351.4	-10.4	-2.3	1.395	80.9	.425	1.198	31.0	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.8	.278
4-6470	4-6700	.084	219.2	14.3	3.3	.696	94.6	.237	1.311	195.1	351.1	1.000A	1.621D	88.3	1.111	-1.7	6.4	100.7	.118
		12.11	5.91	3.91	6.19	9.57	2.00	11.62	2/1/1	32.3	98.0	36.8	.652	3.168	13.4	241.8	-4.6	110.8D	1.414
4-6150	4-6314.5	.140	78.2	21.3	-.3	.869	91.4	.249	.799	184.1	440.5	.600	.998D	103.3	1.236	-3.3	-13.5	313.7	.299
4-6314.5	4-6470	.299	351.7	-10.7	-2.3	1.395	81.2	.423	1.200	29.8	155.7	.692D	1.708A	105.8	.644	.9	-22.0	266.0	.278
4-6470	4-6710	.093	224.2	20.6	4.5	.696	94.3	.237	1.309	194.1	360.0	1.000A	1.619D	90.0	1.113	-2.9	-3.4	93.6	.125
		12.25	6.07	3.93	6.19	9.57	2.14	11.69	2/1/1	32.2	82.4	37.3	.673	3.130	13.5	241.8	-4.2	111.9D	1.434
									MARS ARRIVAL DATE = 2446480 (18 FEB 1986)											
4-6130	4-6318.9	.166	103.9	19.1	-.7	.868	83.8	.274	.792	162.9	446.4	.575	1.009	105.1	1.232	-3.5	-12.5	317.9	.333
4-6318.9	4-6480	.333	348.9	-8.9	-2.2	1.385	78.6	.420	1.156	39.5	162.9	.671D	1.644A	101.7	.626	.6	-22.4	262.6	.247
4-6480	4-6690	.081	213.0	9.5	2.5	.701	95.8	.240	1.308	199.2	340.7	.994A	1.621D	86.3	1.107	-.9	14.0	110.2	.124
		11.62	6.20	4.24	5.42	8.80	1.96	11.68	2/1/1	39.9	116.5	30.6	.541	3.785	13.0	242.2	-6.7	105.0D	1.506
4-6140	4-6315.7	.139	90.4	21.1	-.4	.868	88.0	.253	.795	174.1	442.4	.594	.996	103.6	1.234	-3.4	-13.3	314.7	.306
4-6315.7	4-6480	.305	349.6	-10.5	-2.3	1.387	80.4	.412	1.166	33.5	162.1	.685D	1.647A	101.8	.631	.8	-21.8	263.9	.246
4-6480	4-6700	.082	215.2	11.7	2.8	.702	95.7	.237	1.310	199.0	350.2	1.000A	1.620D	88.1	1.110	-1.2	11.5	102.7	.116
		11.28	5.89	3.92	5.38	8.77	1.97	11.60	2/1/1	38.8	99.8	34.3	.644	3.395	13.3	241.2	-4.6	109.4D	1.543
4-6150	4-6315.0	.139	79.2	21.1	-.3	.868	91.2	.250	.799	183.6	440.8	.599	.998D	103.3	1.236	-3.3	-13.4	314.3	.300
4-6315.0	4-6480	.300	349.8	-10.9	-2.4	1.387	80.8	.411	1.168	32.2	162.0	.688D	1.648A	101.8	.632	.9	-21.7	264.2	.246
4-6480	4-6710	.086	219.2	15.0	3.4	.701	95.4	.236	1.309	198.0	359.1	1.000A	1.617D	89.8	1.113	-1.7	6.5	95.4	.117
		11.33	5.95	3.93	5.38	8.76	2.02	11.62	2/1/1	38.6	83.4	34.8	.668	3.347	13.4	241.2	-4.0	110.5D	1.568
4-6160	4-6315.6	.155	72.8	20.2	-.4	.869	94.1	.255	.803	192.1	440.4	.598	1.008D	103.6	1.239	-3.2	-12.8	315.6	.305
4-6315.6	4-6480	.305	349.6	-10.6	-2.3	1.387	80.4	.412	1.166	33.4	162.1	.685D	1.648A	101.8	.631	.8	-21.8	264.0	.246
4-6480	4-6720	.101	226.5	23.8	5.3	.699	95.0	.237	1.304	196.4	367.4	.995	1.614D	91.4	1.114	-3.6	-7.7	90.2	.136
		11.75	6.37	4.10	5.39	8.77	2.26	11.80	2/1/1	38.8	71.1	33.4	.646	3.482	12.8	241.6	-5.8	110.1D	1.603
4-6180	4-6319.1	.211	72.1	18.8	-.9	.875	99.7	.284	.817	206.7	441.2	.585	1.049D	105.0	1.248	-2.8	-10.2	321.0	.335
4-6319.1	4-6480	.335	348.9	-8.9	-2.2	1.385	78.5	.421	1.157	39.9	162.9	.670D	1.644A	101.7	.626	.5	-22.5	262.8	.248
4-6480	4-6740	.083	219.9	-26.1	-1.2	.693	93.7	.243	1.290	191.8	382.8	.976	1.604D	94.4	1.115	3.0	45.5	87.0	.154
		12.26	6.84	4.85	5.42	8.80	1.99	11.99	2/1/2	40.0	49.4	27.5	.535	4.201	10.2	244.5	-2.7	107.1D	1.713
									MARS ARRIVAL DATE = 2446490 (28 FEB 1986)											
4-6130	4-6319.8	.170	105.3	18.6	-.8	.868	83.4	.278	.791	162.2	447.1	.571	1.010	105.3	1.232	-3.5	-12.4	319.0	.338
4-6319.8	4-6490	.338	348.1	-8.8	-2.2	1.379	78.1	.413	1.135	41.9	168.7	.666D	1.604A	97.7	.619	.5	-22.2	259.6	.222
4-6490	4-6690	.083	209.1	8.6	2.2	.707	97.0	.241	1.308	203.3	340.0	.994A	1.623D	86.2	1.108	-.6	16.5	111.8	.125
		11.06	6.27	4.29	4.79	8.18	1.98	11.69	2/1/1	47.6	117.9	28.8	.526	4.018	13.1	242.2	-7.1	103.7D	1.589
4-6140	4-6316.2	.140	91.6	20.7	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.4	.307
4-6316.2	4-6490	.307	348.4	-10.7	-2.4	1.381	80.0	.404	1.144	35.4	167.9	.682D	1.606A	97.9	.625	.8	-21.4	261.3	.220
4-6490	4-6700	.082	210.9	9.9	2.4	.708	96.8	.237	1.310	203.1	349.6	.999A	1.622D	88.0	1.111	-.8	15.5	104.4	.115
		10.66	5.91	3.93	4.75	8.14	1.97	11.60	2/1/1	46.1	101.1	32.4	.636	3.581	13.2	241.0	-4.4	108.3D	1.642
4-6150	4-6315.4	.139	80.2	20.9	-.4	.868	91.1	.251	.798	183.2	441.1	.598	.998D	103.4	1.235	-3.3	-13.3	314.9	.301
4-6315.4	4-6490	.301	348.6	-11.2	-2.5	1.381	80.5	.402	1.146	33.9	167.7	.685D	1.607A	98.0	.626	.9	-21.2	261.6	.220
4-6490	4-6710	.083	214.3	11.4	2.8	.708	96.5	.236	1.309	202.1	358.4	1.000A	1.618D	89.7	1.113	-1.0	13.1	97.1	.114
		10.66	5.92	3.93	4.74	8.13	1.99	11.59	2/1/1	45.8	84.5	33.0	.664	3.518	13.3	241.0	-3.6	109.6D	1.672
4-6160	4-6316.0	.154	73.6	20.1	-.4	.868	93.9	.256	.802	191.7	440.7	.597	1.007D	103.6	1.238	-3.2	-12.7	316.1	.306
4-6316.0	4-6490	.306	348.5	-10.8	-2.4	1.381	80.1	.403	1.144	35.0	167.9	.683D	1.606A	98.0	.625	.8	-21.4	261.3	.220
4-6490	4-6720	.088	219.7	14.8	3.5	.706	96.1	.237	1.304	200.5	366.7	.995	1.613D	91.3	1.114	-1.7	7.3	91.7	.122
		10.90	6.16	4.10	4.75	8.13	2.06	11.66	2/1/1	46.0	70.2	31.7	.643	3.657	12.7	241.6	-3.5	109.2D	1.710
4-6170	4-6317.5	.179	71.4	19.3	-.6	.870	96.7	.267	.808	199.3	440.9	.592	1.024D	104.2	1.242	-3.0	-11.6	318.4	.316
4-6317.5	4-6490	.318	348.2	-10.0	-2.3	1.380	79.4	.407	1.141	37.7	168.2	.676D	1.605A	97.9	.623	.7	-21.7	260.7	.221
4-6490	4-6730	.129	231.8	32.0	8.0	.703	95.5	.239	1.298	198.3	374.5	.988	1.607D	92.8	1.115	-6.2	-21.1	88.2	.172
		11.90	7.14	4.40	4.76	8.15	2.74	12.20	2/1/1	46.6	66.1	29.3	.596	3.950	11.6	242.7	-3.2	108.0D	1.758
4-6180	4-6319.5	.209	72.6	18.7	-.9	.874	99.6	.284	.816	206.4	441.4	.584	1.047D	105.1	1.247	-2.8	-10.1	321.5	.335
4-6319.5	4-6490	.335	348.1	-9.0	-2.2	1.379	78.2	.412	1.136	41.4	168.6	.667D	1.604A	97.8	.620	.6	-22.1	259.7	.222
4-6490	4-6740	.085	214.1	-32.1	-2.0	.699	94.9	.242	1.289	195.7	381.9	.977	1.601D	94.2	1.115	3.9	51.8	87.9	.156
		11.63	6.84	4.83	4.79	8.17	2.01	12.04	2/1/2	47.4	52.4	26.3	.535	4.404	10.1	244.4	-2.4	106.4D	1.820
4-6190	4-6322.0	.245	75.9	18.3	-1.3	.880	102.5	.305	.827	212.8	442.1	.574	1.079D	106.2	1.254	-2.4	-8.2	325.2	.358
4-6322.0	4-6490	.358	348.2	-7.9	-2.1	1.377	76.8	.420	1.128	46.0	169.3	.655D	1.602A	97.6	.615	.4	-22.5	258.4	.223
4-6490	4-6750	.086	227.7	-15.1	.4	.695	94.1	.246	1.280	192.7	388.9	.965	1.595D	95.6	1.115	1.5	34.0	91.4	.158
		12.24	7.42	5.40	4.82	8.21	2.02	12.04	2/1/2	48.6	39.9	22.8	.468	5.068	8.2	246.7	-.5	104.7D	1.905
									MARS ARRIVAL DATE = 2446500 (10 MAR 1986)											
4-6130	4-6320.9	.175	107.0	18.0	-.9	.867	82.9	.282	.790	161.2	447.9	.567	1.013	105.6	1.231	-3.5	-12.3	320.3	.344
4-6320.9	4-6500	.344	347.9	-8.7	-2.2	1.374	77.6	.409	1.118	44.2	174.1	.660D	1.576A	94.1	.616	.5	-21.9	255.6	.203
4-6500	4-6690	.086	205.0	7.9	2.1	.715	98.1	.242	1.310	207.6	339.5	.993A	1.628D	86.0	1.108	-.4	18.6	113.1	.126
		10.71	6.38	4.35	4.33	7.72	2.03	11.70	2/1/1	56.1	118.8	27.3	.509	4.231	13.2	242.7	-7.6	102.4D	1.643
4-6140	4-6316.9	.141	93.1	20.4	-.5	.867	87.6	.256	.794	173.0	443.2	.591	.997	103.9	1.233	-3.4	-13.1	316.2	.310
4-6316.9	4-6500	.310	347.9	-10.8	-2.5	1.376	79.7	.398	1.128	36.9	173.3	.679D	1.578A	94.4	.623	.6	-20.9	257.8	.200
4-6500	4-6700	.085	206.5	8.6	2.2	.716	97.9	.239	1.312	207.4	349.0	.999A	1.626D	87.9	1.111	-.4	16.6	105.8	.115
		10.23	5.96	3.95	4.27	7.66	2.01	11.60	2/1/1	54.3	102.2	31.1	.627	3.732	13.1	241.2	-4.2	107.4D	1.714
4-6150	4-6315.9	.139	81.4	20.6	-.4	.867	90.9	.251	.797	182.7	441.4	.597	.998D	103.5	1.235	-3.3	-13.2	315.6	.302
4-6315.9	4-6500	.302	348.0	-11.4	-2.5	1.377	80.2	.396	1.130	35.2	173.1	.683D	1.578A	94.5	.624	.9	-20.6	258.2	.200
4-6500	4-6710	.084	209.4	8.9	2.3	.715	97.6	.237	1.311	206.4	357.9	.999A	1.622D	89.6	1.113	-.5	17.8	98.4	.113
		10.19	5.93	3.93	4.26	7.65	2.00	11.58	2/1/1	53.9	85.5	31.8	.658	3.655	13.2	241.1	-3.1	106.9D	1.748
4-6160	4-6316.5	.154	74.5	19.9	-.5	.868	93.8	.256	.802	191.2	441.0	.596	1.007D	103.7	1.238	-3.2	-12.6	316.7	.306
4-6316.5	4-6500	.306	348.0	-11.1	-2.5	1.376	79.9	.397	1.129	36.2	173.2	.680D	1.578A	94.4	.623	.9	-20.8	258.0	.200
4-6500	4-6720	.085	213.9	9.6	2.6	.713	97.2	.237	1.306	204.6	366.1	.996	1.616D	91.2	1.115	-.8	15.7	93.0	.118
		10.38	6.11	4.09	4.27	7.66	2.02	11.63	2/1/1	54.1	70.6	30.6	.640	3.789	12.6	241.7	-2.9	108.6D	1.786
4-6170	4-6317.9	.178	72.1	19.1	-.7	.869	96.6	.267	.807	198.9	441.1	.591	1.023D	104.2	1.242	-3.0	-11.5	319.0	.316
4-6317.9	4-6500	.316	347.8	-10.2	-2.4	1.376	79.2	.401	1.126	38.8	173.5	.674D	1.577A	94.3	.621	.7	-21.2	257.2	.201
4-6500	4-6730	.092	220.7	13.8	3.5	.710	96.7	.239	1.298	202.5	373.8	.988	1.606D	92.6	1.115	-1.7	8.5	90.2	.131
		10.77	6.49	4.39	4.28	7.67	2.11	11.74	2/1/1	54.7	59.0	28.3	.595	4.086	11.5	242.9	-2.7	107.5D	1.835
4-6180	4-6319.9	.208	73.1	18.6	-.9	.873	99.4	.284	.815	205.9	441.7	.584	1.046D	105.1	1.247	-2.8	-10.0	322.1	.335
4-6319.9	4-6500	.335	347.8	-9.1	-2.3	1.375	78.1	.407	1.121	42.4	173.9	.665D	1.577A	94.2	.618	.6	-21.7	256.2	.202
4-6500	4-6740	.148	184.4	-61.8	-9.6	.706	96.0	.241	1.289	199.8	381.1	.978	1.600D	94.1	1.115	11.4	83.5	59.9	.253
		12.25	7.93	4.81	4.31	7.71	3.13	13.40	2/1/2	55.7	68.3	25.4	.535	4.549	10.0	244.6	-2.0	105.9D	1.897
4-6190	4-6322.4	.243	76.4	18.2	-1.3	.879	102.4	.305	.825	212.3	442.3	.574	1.077D	106.2	1.253	-2.4	-8.1	325.6	.358
4-6322.4	4-6500	.358	348.1	-8.0	-2.1	1.373	76.7	.414	1.114	47.0	174.5	.652D	1.576A	93.9	.614	.4	-22.1	254.7	.204
4-6500	4-6750	.085	225.0	-12.9	.5	.702	95.2	.245	1.279	196.7	388.0	.966	1.592D	95.4	1.114	1.3	33.0	92.5	.155
		11.73	7.38	5.37	4.35	7.75	2.01	12.01	2/1/2	57.0	40.6	22.1	.469	5.229	8.2	248.9	-.2	104.3D	1.982
4-6200	4-6325.2	.284	81.3	17.8	-1.8	.888	105.4	.330	.840	218.1	443.0	.562	1.117D	107.5	1.262	-1.9	-5.9	330.1	.386
4-6325.2	4-6500	.386	348.7	-6.9	-2.0	1.371	75.1	.424	1.106	52.2	175.1	.636D	1.575A	93.6	.608	.2	-22.6	252.8	.207
4-6500	4-6760	.091	233.4	-10.4	1.2	.697	94.3	.249	1.268	193.3	394.7	.952	1.584D	96.7	1.113	.7	28.0	96.4	.169
		12.59	8.17	6.07	4.42	7.81	2.10	12.17	2/1/2	58.6	33.4	18.5	.403	6.216	7.3	249.8	3.3	102.9D	2.102
									MARS ARRIVAL DATE = 2446510 (20 MAR 1986)											
4-6130	4-6322.3	.182	109.2	17.2	-1.1	.866	82.3	.288	.789	160.0	449.0	.561	1.016	106.0	1.230	-3.6	-12.1	322.1	.352
4-6322.3	4-6510	.352	348.3	-8.3	-2.2	1.371	77.0	.409	1.106	46.5	179.1	.654D	1.559A	90.6	.616	.4	-21.5	250.9	.190
4-6510	4-6690	.092	201.1	7.3	1.9	.723	99.4	.245	1.314	212.3	339.2	.992A	1.636D	85.9	1.109	-.1	20.5	114.0	.128
		10.59	6.56	4.45	4.03	7.42	2.11	11.72	2/1/1	65.5	118.4	26.0	.465	4.439	13.5	243.7	-8.4	101.1D	1.667

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2446510
20 MAR 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6140	4-6317.7	.143	94.8	19.9	-.6	.866	87.3	.258	.793	172.2	443.7	.588	.998	104.0	1.233	-3.4	-13.0	317.3	.312
4-6317.7	4-6510	.312	347.9	-10.9	-2.5	1.373	79.4	.395	1.117	38.3	178.3	.676D	1.559A	91.1	.624	.8	-20.3	253.6	.186
4-6510	4-6700	.090	202.3	7.5	2.0	.724	99.1	.241	1.316	212.1	348.7	.999A	1.634D	87.8	1.112	-.2	21.1	106.7	.116
		9.98	6.05	3.97	3.94	7.33	2.08	11.61	2/1/1	63.2	102.8	30.0	.616	3.858	13.0	241.8	-4.0	106.7D	1.760
4-6150	4-6316.6	.140	82.8	20.3	-.5	.866	90.7	.252	.797	182.0	441.8	.595	.998D	103.6	1.235	-3.3	-13.1	316.4	.304
4-6316.6	4-6510	.304	348.0	-11.7	-2.6	1.374	80.0	.392	1.120	36.3	178.1	.681D	1.559A	91.2	.625	1.0	-19.9	254.2	.185
4-6510	4-6710	.088	204.8	7.2	2.0	.723	98.8	.239	1.314	211.0	357.5	.999A	1.629D	89.5	1.114	-.2	21.3	99.4	.114
		9.91	5.99	3.93	3.92	7.32	2.06	11.59	2/1/1	62.7	86.2	30.9	.652	3.758	13.1	241.6	-2.6	108.4D	1.798
4-6160	4-6317.0	.153	75.6	19.7	-.5	.867	93.6	.257	.801	190.6	441.3	.595	1.006D	103.7	1.237	-3.2	-12.5	317.4	.307
4-6317.0	4-6510	.307	347.9	-11.3	-2.6	1.374	79.8	.393	1.119	37.1	178.2	.679D	1.559A	91.2	.625	.9	-20.1	253.9	.185
4-6510	4-6720	.087	208.6	6.5	2.1	.721	98.4	.239	1.308	209.3	365.7	.996	1.621D	91.1	1.115	-.3	21.0	93.9	.118
		10.06	6.13	4.08	3.93	7.32	2.05	11.62	2/1/1	62.9	71.2	29.8	.637	3.883	12.6	242.2	-2.3	108.2D	1.836
4-6170	4-6318.4	.176	73.0	19.0	-.7	.868	96.4	.268	.806	198.3	441.4	.590	1.022D	104.3	1.241	-3.0	-11.4	319.7	.318
4-6318.4	4-6510	.318	347.9	-10.4	-2.4	1.373	79.0	.397	1.116	39.6	178.4	.673D	1.559A	91.1	.623	.8	-20.5	253.2	.186
4-6510	4-6730	.088	215.8	6.0	2.3	.718	97.9	.240	1.300	207.0	373.3	.989	1.612D	92.6	1.116	-.4	19.6	91.2	.127
		10.37	6.42	4.37	3.95	7.35	2.05	11.71	2/1/1	63.5	58.8	27.7	.593	4.177	11.4	243.4	-2.1	107.1D	1.864
4-6180	4-6320.5	.206	73.8	18.4	-1.0	.872	99.3	.284	.814	205.3	441.9	.583	1.044D	105.1	1.246	-2.7	-9.9	322.8	.335
4-6320.5	4-6510	.335	348.0	-9.2	-2.3	1.372	78.0	.403	1.111	43.2	178.7	.664D	1.559A	90.9	.620	.6	-21.1	252.0	.188
4-6510	4-6740	.095	222.2	11.6	3.5	.714	97.2	.241	1.290	204.1	380.5	.979	1.602D	93.9	1.115	-1.6	10.6	90.9	.141
		10.93	6.94	4.79	3.99	7.38	2.15	11.85	2/1/1	64.5	49.8	24.9	.534	4.641	9.9	245.1	-1.5	105.6D	1.945
4-6190	4-6322.9	.241	77.0	18.0	-1.4	.876	102.2	.304	.824	211.7	442.6	.573	1.074D	106.2	1.252	-2.4	-8.0	326.5	.356
4-6322.9	4-6510	.358	348.4	-8.0	-2.1	1.370	76.6	.411	1.105	47.6	179.2	.651D	1.559A	90.6	.615	.5	-21.6	250.5	.190
4-6510	4-6750	.086	222.4	-8.7	.9	.709	96.4	.244	1.279	200.9	387.3	.967	1.592D	95.3	1.113	.9	30.2	93.4	.152
		11.40	7.36	5.33	4.04	7.44	2.03	11.97	2/1/2	65.8	41.0	21.7	.489	5.321	8.1	247.5	.2	104.0D	2.026
4-6200	4-6325.8	.281	81.8	17.6	-1.8	.886	105.2	.330	.838	217.5	443.4	.562	1.114D	107.5	1.261	-1.9	-5.8	330.9	.386
4-6325.8	4-6510	.386	349.2	-6.9	-2.0	1.368	75.0	.421	1.097	52.8	179.7	.635D	1.558A	90.2	.610	.1	-22.1	248.5	.194
4-6510	4-6760	.091	230.9	-7.0	1.5	.704	95.5	.248	1.268	197.4	393.9	.954	1.582D	96.5	1.113	.4	25.7	97.2	.166
		12.24	8.12	6.02	4.12	7.52	2.10	12.13	2/1/2	67.6	34.0	18.2	.404	6.307	7.3	250.4	3.5	102.3D	2.145

MARS ARRIVAL DATE = 2446520 (30 MAR 1986)

4-6130	4-6324.4	.194	112.0	16.2	-1.3	.864	81.3	.298	.787	158.3	450.6	.552	1.022	106.7	1.230	-3.7	-11.9	324.6	.365
4-6324.4	4-6520	.365	349.3	-7.7	-2.1	1.368	76.2	.411	1.097	49.4	183.7	.646D	1.548	87.4	.619	.2	-21.2	245.5	.183
4-6520	4-6690	.100	197.5	6.7	1.6	.733	100.7	.249	1.321	217.2	339.1	.992A	1.650D	85.9	1.111	.1	22.1	114.4	.130
		10.72	6.84	4.61	3.88	7.28	2.24	11.74	2/1/1	75.5	119.6	24.7	.451	4.672	14.1	245.3	-9.8	99.3D	1.657
4-6140	4-6303.0	.133	61.7	26.9	.9	.882	91.9	.230	.810	186.2	434.1	.624	.996D	101.8	1.241	-3.6	-16.3	298.5	.275
4-6303.0	4-6520	.275	354.7	-42.4	-7.7	1.375	86.5	.367	1.131	13.0	181.7	.717D	1.546	89.0	.641	6.3	-.7	255.6	.185
4-6520	4-6700	.097	198.5	6.6	1.8	.734	100.4	.245	1.323	217.0	348.7	.999A	1.647D	87.8	1.114	.1	23.3	107.2	.118
		9.98	6.06	3.86	3.92	7.31	2.19	11.63	2/1/1	70.1	103.1	54.3	.804	2.192	43.5	250.3	25.5	132.9D	.959
4-6140	4-6318.8	.145	97.1	19.3	-.7	.865	86.9	.261	.792	171.2	444.5	.585	.999	104.2	1.232	-3.4	-12.8	316.6	.316
4-6318.8	4-6520	.316	348.4	-10.8	-2.5	1.371	79.1	.394	1.110	39.6	182.9	.673D	1.547	88.1	.627	.8	-19.7	249.0	.177
4-6520	4-6700	.097	198.5	6.6	1.8	.734	100.4	.245	1.323	217.0	348.7	.999A	1.647D	87.8	1.114	.1	23.3	107.2	.118
		9.93	6.19	3.99	3.74	7.14	2.19	11.63	2/1/1	72.6	103.1	29.2	.601	3.966	12.8	242.7	-3.9	105.9D	1.782
4-6150	4-6317.4	.140	84.6	19.9	-.5	.865	90.4	.254	.796	181.2	442.3	.594	.998D	103.7	1.234	-3.3	-12.9	317.4	.306
4-6317.4	4-6520	.306	348.4	-11.6	-2.7	1.372	79.6	.390	1.113	37.2	182.7	.679D	1.547	88.3	.629	1.0	-19.1	249.8	.176
4-6520	4-6710	.095	200.7	5.8	1.8	.733	100.1	.243	1.320	215.9	357.4	.999A	1.640D	89.5	1.116	.1	24.1	100.0	.115
		9.80	6.09	3.93	3.71	7.11	2.16	11.60	2/1/1	71.9	86.6	30.2	.644	3.834	13.0	242.5	-2.0	107.9D	1.824
4-6160	4-6317.7	.152	77.0	19.4	-.6	.866	93.4	.258	.800	189.9	441.7	.594	1.006D	103.8	1.237	-3.2	-12.4	318.4	.308
4-6317.7	4-6520	.308	348.4	-11.6	-2.6	1.372	79.6	.391	1.112	37.8	182.8	.677D	1.547	88.2	.629	.9	-19.3	249.6	.176
4-6520	4-6720	.093	204.0	4.5	1.7	.730	99.6	.242	1.313	214.1	365.5	.996	1.631D	91.1	1.117	.1	24.5	94.6	.119
		9.91	6.20	4.07	3.72	7.12	2.12	11.63	2/1/1	72.1	71.7	29.4	.632	3.947	12.5	243.0	-1.6	107.9D	1.863
4-6170	4-6319.1	.175	74.1	18.8	-.8	.867	96.2	.268	.805	197.7	441.8	.589	1.020D	104.3	1.240	-3.0	-11.3	320.6	.319
4-6319.1	4-6520	.319	348.4	-10.6	-2.5	1.371	78.9	.395	1.109	40.2	183.0	.672D	1.547	88.1	.627	.8	-19.8	248.8	.177
4-6520	4-6730	.091	208.3	2.4	1.7	.726	99.1	.242	1.304	211.6	373.0	.989	1.619D	92.5	1.117	.2	25.1	91.9	.127
		10.19	6.45	4.35	3.74	7.14	2.10	11.71	2/1/1	72.7	59.3	27.3	.591	4.233	11.3	244.2	-1.5	106.9D	1.909
4-6180	4-6321.1	.204	74.7	18.2	-1.1	.870	99.1	.283	.812	204.7	442.3	.582	1.042D	105.1	1.245	-2.7	-9.7	323.8	.336
4-6321.1	4-6520	.336	348.6	-9.3	-2.3	1.370	77.9	.400	1.105	43.7	183.2	.663D	1.548	87.9	.624	.5	-20.4	247.6	.179
4-6520	4-6740	.089	213.3	-1.2	1.5	.722	98.4	.242	1.293	208.7	380.0	.980	1.607D	93.9	1.116	.4	26.6	91.9	.138
		10.62	6.83	4.76	3.79	7.19	2.08	11.82	2/1/1	75.7	49.4	24.6	.534	4.688	9.8	245.9	-1.0	105.4D	1.968
4-6190	4-6323.6	.239	77.7	17.9	-1.4	.876	102.0	.304	.822	211.1	443.0	.572	1.072D	106.2	1.251	-2.5	-7.8	327.4	.358
4-6323.6	4-6520	.358	349.1	-8.0	-2.1	1.369	76.6	.408	1.099	48.0	183.6	.650D	1.548	87.5	.620	.5	-21.1	246.1	.182
4-6520	4-6750	.104	226.3	14.4	4.3	.717	97.6	.244	1.281	205.3	386.7	.968	1.594D	95.2	1.115	-2.5	5.6	93.2	.157
		11.46	7.60	5.29	3.86	7.25	2.31	12.03	2/1/2	75.0	44.0	21.5	.470	5.356	8.1	248.3	.5	103.8D	2.047
4-6200	4-6326.4	.278	82.4	17.5	-1.9	.884	105.0	.329	.835	216.8	443.7	.561	1.109D	107.5	1.259	-1.8	-5.7	331.7	.385
4-6326.4	4-6520	.385	350.0	-6.8	-2.0	1.367	75.0	.419	1.091	53.1	184.0	.634D	1.549	87.1	.615	.1	-21.5	244.1	.186
4-6520	4-6760	.094	228.6	-1.5	2.1	.711	96.8	.247	1.268	201.7	393.1	.955	1.582D	96.4	1.113	-.5	21.2	97.7	.164
		12.06	8.11	5.97	3.95	7.35	2.14	12.10	2/1/2	76.7	34.6	18.2	.406	6.321	7.5	251.3	3.7	102.0D	2.158

MARS ARRIVAL DATE = 2446530 (9 APR 1986)

4-6130	4-6305.5	.130	77.2	26.9	.6	.880	88.4	.235	.804	174.9	436.8	.615	.993	102.2	1.238	-3.4	-14.9	301.2	.281
4-6305.5	4-6530	.281	353.0	-41.6	-7.8	1.374	85.6	.366	1.126	16.5	186.2	.713D	1.538	86.5	.646	6.3	.6	251.8	.180
4-6530	4-6690	.111	194.4	6.1	1.7	.745	102.0	.255	1.332	222.6	339.4	.992A	1.672D	85.8	1.114	.3	23.7	114.4	.133
		10.06	6.25	3.83	3.81	7.21	2.42	11.76	2/1/1	78.8	119.3	51.8	.764	2.287	43.8	251.6	27.7	129.9D	.983
4-6130	4-6327.6	.215	116.1	14.6	-1.7	.862	79.7	.316	.784	155.8	453.3	.537	1.032	107.8	1.228	-3.8	-11.6	328.5	.388
4-6327.6	4-6530	.388	351.3	-6.6	-1.9	1.366	74.8	.419	1.088	53.8	188.0	.632D	1.544	84.3	.621	.0	-21.0	239.8	.185
4-6530	4-6690	.111	194.4	6.1	1.7	.745	102.0	.255	1.332	222.6	339.4	.992A	1.672D	85.8	1.114	.3	23.7	114.4	.133
		11.24	7.33	4.91	3.91	7.30	2.42	11.76	2/1/1	85.9	119.3	23.1	.400	5.001	15.6	247.9	-12.4	96.7D	1.599
4-6140	4-6305.7	.132	67.7	25.9	.6	.879	91.1	.234	.807	183.6	435.8	.618	.995D	102.1	1.239	-3.5	-15.?	301.9	.279
4-6305.7	4-6530	.279	352.9	-40.9	-7.7	1.374	85.5	.367	1.126	16.7	186.2	.713D	1.538	86.4	.646	6.2	.	251.7	.179
4-6530	4-6700	.108	195.3	5.7	1.7	.745	101.7	.251	1.333	222.3	348.9	.999A	1.667D	87.8	1.116	.3	23	07.3	.121
		10.00	6.21	3.85	3.79	7.19	2.36	11.65	2/1/1	78.7	102.9	50.7	.774	2.335	42.9	251.6	2&.	129.9D	1.033
4-6140	4-6320.1	.149	99.9	18.5	-.8	.864	86.4	.265	.791	169.9	445.4	.581	1.000	104.5	1.231	-3.4	-12.6	320.3	.322
4-6320.1	4-6530	.322	349.3	-10.5	-2.5	1.370	78.7	.394	1.105	41.0	187.2	.670D	1.541	85.4	.633	.7	-19.2	244.3	.173
4-6530	4-6700	.108	195.3	5.7	1.7	.745	101.7	.251	1.333	222.3	348.9	.999A	1.667D	87.8	1.116	.3	25.1	107.3	.121
		10.05	6.40	4.03	3.66	7.06	2.36	11.65	2/1/1	82.1	102.9	28.5	.581	4.068	12.7	244.0	-4.2	105.0D	1.783
4-6150	4-6305.4	.148	59.3	24.6	.7	.880	94.0	.236	.812	193.2	434.9	.619	1.006D	102.2	1.242	-3.7	-15.9	301.6	.283
4-6305.4	4-6530	.283	353.1	-42.6	-8.0	1.374	85.7	.366	1.126	16.2	186.2	.714D	1.538	86.5	.646	6.6	1.3	251.9	.181
4-6530	4-6710	.104	197.2	4.7	1.6	.743	101.3	.248	1.329	221.1	357.5	.999A	1.658D	89.5	1.118	.3	26.2	100.2	.117
		10.17	6.33	4.03	3.83	7.23	2.31	11.62	2/1/1	78.8	86.6	51.0	.750	2.322	44.8	253.0	27.9	130.9D	.992
4-6150	4-6318.4	.140	87.0	19.4	-.6	.864	90.1	.256	.794	180.2	443.0	.591	.997D	103.8	1.234	-3.3	-12.7	316.8	.308
4-6318.4	4-6530	.308	349.2	-11.9	-2.7	1.371	79.6	.389	1.109	36.0	187.1	.677D	1.540	85.5	.635	1.0	-18.4	245.3	.172
4-6530	4-6710	.104	197.2	4.7	1.6	.743	101.3	.248	1.329	221.1	357.5	.999A	1.658D	89.5	1.118	.3	26.2	100.2	.117
		9.66	6.24	3.94	3.62	7.02	2.31	11.62	2/1/1	81.3	86.6	29.8	.633	3.894	12.9	243.7	-1.6	107.5D	1.831
4-6160	4-6318.6	.151	78.7	19.1	-.7	.865	93.1	.259	.798	189.0	442.2	.592	1.005D	103.9	1.236	-3.1	-12.2	319.5	.310
4-6318.6	4-6530	.310	349.2	-11.7	-2.7	1.371	79.5	.390	1.108	38.4	187.0	.676D	1.541	85.5	.635	.9	-18.5	245.2	.172
4-6530	4-6720	.101	200.2	3.1	1.5	.740	100.9	.246	1.321	219.2	365.4	.996	1.645D	91.1	1.118	.4	27.1	94.9	.121
		9.94	6.32	4.06	3.62	7.02	2.25	11.65	2/1/1	81.4	72.0	29.1	.626	3.986	12.4	244.2	-1.0	107.6D	1.869
4-6170	4-6319.9	.173	75.4	18.5	-.9	.866	96.0	.268	.803	196.8	442.3	.588	1.019D	104.4	1.240	-2.9	-11.1	321.6	.320
4-6319.9	4-6530	.320	349.3	-10.7	-2.5	1.370	78.8	.393	1.106	40.6	187.2	.671D	1.541	85.4	.633	.8	-19.1	244.4	.173
4-6530	4-6730	.098	204.0	.4	1.3	.736	100.3	.245	1.310	216.6	372.8	.989	1.631D	92.5	1.118	.6	26.3	92.4	.129
		10.18	6.83	4.33	3.65	7.05	2.20	11.72	2/1/1	82.0	59.8	27.2	.588	4.257	11.3	245.3	-.9	106.7D	1.914

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2446530
9 APR 1986

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-6180	4-6321.9	.202	75.8	18.0	-1.1	.869	98.8	.283	.810	203.9	442.7	.581	1.040D	105.2	1.244	-2.7	-9.6	324.7	.336
4-6321.9	4-6530	.336	349.6	-9.3	-2.3	1.369	77.8	.399	1.102	44.0	187.4	.662D	1.542	85.1	.630	.5	-19.8	243.3	.175
4-6530	4-6740	.095	208.2	-4.3	.9	.731	99.6	.245	1.298	213.5	379.7	.980	1.616D	93.8	1.117	.9	31.0	92.5	.139
		10.58	6.68	4.72	3.70	7.10	2.16	11.83	2/1/1	82.9	50.2	24.6	.533	4.697	9.7	247.0	-.6	105.2D	1.969
4-6190	4-6324.3	.236	78.6	17.6	-1.5	.874	101.7	.303	.820	210.2	443.4	.571	1.068D	106.2	1.250	-2.3	-7.7	328.4	.357
4-6324.3	4-6530	.357	350.2	-8.0	-2.1	1.368	76.6	.407	1.096	48.3	187.7	.650D	1.542	84.8	.627	.3	-20.4	241.8	.179
4-6530	4-6750	.095	207.6	-24.6	-1.6	.726	98.9	.246	1.284	210.0	386.3	.969	1.600D	95.1	1.116	3.4	47.5	94.9	.163
		11.19	7.41	5.25	3.78	7.18	2.16	12.10	2/1/1	84.2	46.6	21.6	.470	5.342	8.0	249.4	.7	103.6D	2.043
4-6200	4-6327.2	.275	83.1	17.3	-1.9	.882	104.7	.328	.832	216.0	444.2	.560	1.105D	107.5	1.258	-1.8	-5.6	332.8	.384
4-6327.2	4-6530	.384	351.2	-6.7	-2.0	1.366	75.0	.418	1.089	53.2	188.0	.634D	1.544	84.3	.622	.0	-21.0	240.0	.184
4-6530	4-6760	.106	228.1	9.7	3.8	.720	98.0	.247	1.271	206.2	392.6	.956	1.585D	96.3	1.114	-2.0	9.7	97.4	.167
		12.13	8.24	5.90	3.89	7.29	2.33	12.14	2/1/2	85.7	37.2	18.4	.407	6.271	7.2	252.4	3.6	101.9D	2.148

MARS ARRIVAL DATE = 2446540 (19 APR 1986)

4-6130	4-6308.1	.134	83.0	25.5	.3	.877	87.6	.241	.802	172.5	438.6	.609	.995	102.7	1.237	-3.4	-14.4	304.4	.289
4-6308.1	4-6540	.289	352.3	-40.8	-7.9	1.373	84.8	.368	1.122	19.6	190.4	.710D	1.535	84.1	.652	6.4	1.4	248.1	.180
4-6540	4-6690	.125	192.1	5.4	1.7	.758	103.4	.263	1.348	228.4	339.9	.993A	1.703D	85.9	1.118	.4	25.1	113.9	.136
		10.34	6.54	3.87	3.80	7.20	2.67	11.80	2/1/1	87.3	118.5	49.2	.722	2.403	44.0	253.6	29.2	127.5D	1.013
4-6140	4-6308.4	.132	73.8	24.8	.3	.876	90.3	.238	.803	181.1	437.6	.612	.995D	102.5	1.238	-3.5	-14.8	305.3	.285
4-6308.4	4-6540	.285	352.3	-39.2	-7.6	1.373	84.6	.368	1.122	20.1	190.4	.709D	1.535	84.1	.652	6.0	.2	247.9	.178
4-6540	4-6700	.121	192.8	4.9	1.6	.758	103.1	.258	1.347	228.0	349.3	.999A	1.695D	87.8	1.120	.5	26.7	106.8	.124
		10.20	6.44	3.85	3.75	7.15	2.59	11.68	2/1/1	87.3	102.2	47.7	.741	2.474	42.2	253.0	27.7	127.2D	1.092
4-6140	4-6321.9	.154	103.4	17.4	-1.0	.862	85.7	.271	.789	168.3	446.6	.575	1.002	104.9	1.230	-3.4	-12.4	322.6	.329
4-6321.9	4-6540	.329	350.8	-9.9	-2.4	1.369	78.3	.396	1.102	42.7	191.2	.665D	1.539	82.8	.640	.8	-16.9	240.0	.175
4-6540	4-6700	.121	192.8	4.9	1.6	.758	103.1	.258	1.347	228.0	349.3	.999A	1.695D	87.8	1.120	.5	26.7	106.8	.124
		10.38	6.69	4.10	3.69	7.09	2.59	11.68	2/1/1	91.4	102.2	27.7	.556	4.174	12.6	245.7	-5.0	103.8D	1.763
4-6150	4-6308.2	.144	64.8	23.7	.4	.877	93.3	.241	.808	190.4	436.6	.613	1.003D	102.5	1.240	-3.5	-15.0	305.5	.287
4-6308.2	4-6540	.287	352.3	-40.2	-7.8	1.373	84.7	.368	1.122	19.8	190.4	.709D	1.535	84.1	.652	6.2	.9	248.0	.179
4-6540	4-6710	.117	194.6	3.8	1.5	.756	102.7	.255	1.341	226.6	357.8	.999A	1.683D	89.6	1.121	.5	28.0	99.9	.121
		10.28	6.50	3.98	3.78	7.18	2.52	11.65	2/1/1	87.3	86.2	47.7	.729	2.472	43.4	254.0	28.5	127.9D	1.074
4-6150	4-6319.7	.141	69.8	18.8	-.8	.863	89.7	.258	.793	179.0	443.8	.588	.998	104.0	1.233	-3.2	-12.5	320.4	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.8	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6710	.117	194.6	3.8	1.5	.756	102.7	.255	1.341	226.6	357.8	.999A	1.683D	89.6	1.121	.5	28.0	99.9	.121
		10.09	6.47	3.95	3.62	7.02	2.52	11.65	2/1/1	90.4	86.2	29.4	.619	3.942	12.7	245.1	-1.4	106.9D	1.821
4-6160	4-6307.6	.171	58.9	22.8	.5	.881	96.5	.250	.817	200.2	435.7	.612	1.021D	102.9	1.246	-3.6	-15.1	305.1	.296
4-6307.6	4-6540	.296	352.3	-43.7	-8.6	1.373	85.0	.367	1.123	18.9	190.4	.711D	1.535	84.1	.652	7.0	3.5	248.5	.184
4-6540	4-6720	.112	197.2	2.0	1.3	.752	102.2	.252	1.332	224.5	365.6	.996	1.667D	91.1	1.121	.6	29.0	94.9	.124
		10.62	6.74	4.29	3.88	7.28	2.44	11.68	2/1/1	87.3	71.9	49.1	.685	2.405	47.4	256.9	31.2	129.5D	.962
4-6160	4-6319.7	.150	80.9	18.7	-.8	.863	92.8	.260	.797	187.9	442.9	.590	1.004D	104.0	1.235	-3.1	-12.0	320.9	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.9	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6720	.112	197.2	2.0	1.3	.752	102.2	.252	1.332	224.5	365.6	.996	1.667D	91.1	1.121	.6	29.0	94.9	.124
		10.12	6.49	4.05	3.62	7.02	2.44	11.68	2/1/1	90.4	71.9	28.9	.618	4.006	12.3	245.6	-.5	107.3D	1.859
4-6170	4-6320.9	.171	77.1	18.1	-.9	.864	95.6	.269	.802	195.8	442.8	.586	1.017D	104.5	1.239	-2.9	-10.9	322.9	.321
4-6320.9	4-6540	.321	350.6	-10.7	-2.5	1.370	78.8	.393	1.104	40.9	191.1	.670D	1.539	83.0	.641	.7	-18.4	240.5	.173
4-6540	4-6730	.108	200.5	-.7	1.1	.747	101.6	.250	1.319	221.8	372.8	.989	1.649D	92.6	1.121	.8	30.3	92.5	.131
		10.33	6.67	4.30	3.66	7.06	2.37	11.75	2/1/1	90.9	60.0	27.2	.584	4.257	11.1	246.7	-.5	106.5D	1.902
4-6180	4-6322.8	.199	77.1	17.7	-1.2	.867	98.5	.283	.808	202.9	443.3	.579	1.037D	105.2	1.243	-2.6	-9.4	325.9	.336
4-6322.8	4-6540	.336	350.9	-9.3	-2.3	1.369	77.8	.399	1.100	44.2	191.3	.661D	1.540	82.7	.638	.5	-19.2	239.5	.176
4-6540	4-6740	.104	204.3	-5.3	.7	.742	100.9	.249	1.305	218.6	379.6	.980	1.630D	93.9	1.119	1.2	32.9	92.8	.142
		10.70	6.98	4.68	3.72	7.12	2.50	11.86	2/1/1	91.8	50.7	24.7	.531	4.675	9.6	248.4	-.5	105.0D	1.953
4-6190	4-6325.2	.233	79.6	17.4	-1.6	.872	101.4	.303	.817	209.5	443.9	.570	1.064D	106.3	1.249	-2.2	-7.6	329.6	.357
4-6325.2	4-6540	.357	351.6	-7.9	-2.1	1.368	76.5	.407	1.095	48.3	191.5	.649D	1.541	82.3	.635	.2	-19.9	238.1	.180
4-6540	4-6750	.101	206.8	-16.5	-.7	.736	100.1	.249	1.290	214.9	386.0	.969	1.611D	95.1	1.117	2.5	41.3	95.5	.158
		11.25	7.44	5.19	3.80	7.20	2.25	12.04	2/1/1	92.8	44.9	21.8	.471	5.290	7.9	250.7	.8	103.4D	2.021

MARS ARRIVAL DATE = 2446550 (29 APR 1986)

4-6130	4-6310.8	.139	86.4	24.1	.1	.875	86.8	.247	.799	170.2	440.4	.602	.997	103.2	1.235	-3.4	-13.8	307.6	.297
4-6310.8	4-6550	.297	352.4	-40.1	-8.1	1.373	84.0	.370	1.120	22.4	194.3	.706D	1.535	81.9	.660	6.4	1.9	244.9	.183
4-6550	4-6690	.143	190.4	4.6	1.6	.773	104.9	.275	1.370	234.5	340.8	.993A	1.747D	85.9	1.123	.6	26.5	112.7	.141
		10.81	6.94	3.92	3.88	7.27	3.01	11.85	2/1/1	95.4	117.2	47.1	.680	2.503	44.4	256.1	30.4	125.6D	1.021
4-6140	4-6311.0	.133	79.9	23.5	.1	.873	89.5	.243	.800	178.5	439.3	.606	.995	102.9	1.236	-3.4	-14.2	308.7	.292
4-6311.0	4-6550	.292	352.5	-37.6	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.0	244.4	.180
4-6550	4-6700	.137	191.1	4.0	1.5	.772	104.5	.269	1.368	234.0	350.0	.999A	1.736D	87.9	1.125	.6	28.1	105.7	.129
		10.58	6.77	3.86	3.81	7.21	2.91	11.73	2/1/1	95.6	101.1	45.2	.707	2.600	41.5	254.7	28.3	124.8D	1.131
4-6140	4-6324.2	.163	107.7	16.1	-1.2	.860	84.8	.279	.787	166.2	448.2	.567	1.006	105.4	1.229	-3.4	-12.1	325.5	.339
4-6324.2	4-6550	.339	352.7	-8.9	-2.3	1.369	77.6	.401	1.100	44.8	194.9	.660D	1.541	80.4	.647	.4	-19.0	236.3	.181
4-6550	4-6700	.137	191.1	4.0	1.5	.772	104.5	.269	1.368	234.0	350.0	.999A	1.736D	87.9	1.125	.6	28.1	105.7	.129
		10.92	7.10	4.20	3.82	7.22	2.91	11.73	2/1/1	100.0	101.1	26.9	.522	4.296	12.7	247.9	-6.7	102.2D	1.721
4-6150	4-6311.0	.141	70.6	22.7	.1	.873	92.4	.244	.804	187.6	438.4	.608	1.000D	102.8	1.236	-3.4	-14.3	309.2	.292
4-6311.0	4-6550	.292	352.5	-37.7	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.1	244.5	.180
4-6550	4-6710	.132	192.7	2.8	1.4	.770	104.1	.265	1.359	232.5	358.4	1.000A	1.719D	89.7	1.125	.7	29.3	99.1	.126
		10.57	6.75	3.95	3.81	7.21	2.80	11.70	2/1/1	95.6	85.4	44.9	.706	2.619	41.8	255.1	28.6	125.1D	1.142
4-6150	4-6321.2	.143	93.4	17.9	-.9	.861	89.1	.262	.791	177.4	444.8	.584	.998	104.3	1.232	-3.2	-12.3	322.4	.316
4-6321.2	4-6550	.316	352.1	-11.3	-2.6	1.370	79.1	.392	1.106	39.9	194.8	.672D	1.539	80.9	.651	.8	-17.6	237.8	.176
4-6550	4-6710	.132	192.7	2.8	1.4	.770	104.1	.265	1.359	232.5	358.4	1.000A	1.719D	89.7	1.125	.7	29.3	99.1	.126
		10.49	6.77	3.97	3.72	7.12	2.80	11.70	2/1/1	98.9	85.4	29.0	.601	3.988	12.3	246.9	-1.9	106.1D	1.797
4-6160	4-6310.6	.164	63.7	21.9	.1	.876	95.6	.252	.811	197.2	437.5	.607	1.015D	103.1	1.243	-3.5	-14.1	308.9	.299
4-6310.6	4-6550	.299	352.4	-40.7	-8.2	1.373	84.0	.370	1.120	22.2	194.3	.706D	1.535	81.9	.660	6.5	2.3	245.0	.184
4-6550	4-6720	.127	195.1	1.0	1.2	.765	103.5	.261	1.347	230.2	366.0	.996	1.698D	91.2	1.125	.8	30.4	94.4	.129
		10.81	6.91	4.21	3.89	7.29	2.70	11.72	2/1/1	95.4	71.5	46.2	.673	2.551	45.5	257.7	31.4	126.6D	1.044
4-6160	4-6321.0	.149	83.7	18.1	-.9	.861	92.5	.262	.795	186.6	443.6	.587	1.003D	104.2	1.234	-3.1	-11.8	322.6	.314
4-6321.0	4-6550	.314	352.1	-11.6	-2.7	1.370	79.2	.391	1.106	39.4	194.8	.674D	1.539	80.9	.651	.9	-17.4	237.9	.176
4-6550	4-6720	.127	195.1	1.0	1.2	.765	103.5	.261	1.347	230.2	366.0	.996	1.698D	91.2	1.125	.8	30.4	94.4	.129
		10.45	6.74	4.04	3.71	7.11	2.70	11.72	2/1/1	98.6	71.5	28.8	.609	4.015	12.1	247.3	-.4	106.9D	1.635
4-6170	4-6322.0	.169	79.2	17.7	-1.0	.862	95.3	.270	.799	194.6	443.5	.584	1.015D	104.6	1.237	-2.9	-10.7	324.5	.322
4-6322.0	4-6550	.322	352.2	-10.6	-2.5	1.370	78.7	.394	1.104	41.2	194.8	.669D	1.540	80.6	.650	.7	-18.0	237.4	.177
4-6550	4-6730	.121	198.1	-1.6	1.0	.760	102.9	.258	1.332	227.3	373.0	.989	1.675D	92.7	1.124	1.0	31.6	92.4	.136
		10.62	6.87	4.27	3.74	7.14	2.60	11.79	2/1/1	99.2	60.0	27.3	.579	4.240	11.0	248.3	-.3	106.2D	1.876
4-6180	4-6323.9	.196	78.6	17.3	-1.3	.865	98.1	.284	.806	201.7	443.9	.577	1.034D	105.3	1.242	-2.6	-9.2	327.4	.337
4-6323.9	4-6550	.337	352.6	-9.1	-2.3	1.369	77.8	.400	1.101	44.3	194.9	.661D	1.541	80.5	.647	.4	-18.9	236.5	.180
4-6550	4-6740	.116	201.6	-5.6	.5	.753	102.2	.255	1.315	223.9	379.6	.980	1.651D	93.9	1.122	1.3	33.9	93.0	.145
		10.95	7.14	4.64	3.81	7.21	2.50	11.90	2/1/1	99.9	50.9	24.9	.530	4.631	9.4	249.9	-.3	104.9D	1.923
4-6190	4-6326.3	.229	80.9	17.1	-1.6	.869	101.0	.302	.814	208.2	444.5	.566	1.060D	106.3	1.247	-2.2	-7.4	331.0	.357
4-6326.3	4-6550	.357	353.3	-7.6	-2.0	1.368	76.5	.407	1.096	48.3	195.0	.649D	1.543	80.1	.644	.1	-19.6	235.3	.184
4-6550	4-6750	.111	204.6	-13.5	-.4	.747	101.4	.254	1.298	220.1	385.9	.969	1.627D	95.1	1.120	2.3	39.4	95.8	.159
		11.46	7.55	5.13	3.91	7.30	2.42	12.09	2/1/1	100.8	44.6	22.1	.471	5.209	7.7	252.3	.6	103.3D	1.984
4-6200	4-6329.1	.266	85.0	16.8	-2.1	.877	104.0	.325	.826	214.0	445.2	.557	1.094D	107.5	1.254	-1.7	-8.3	335.3	.383
4-6329.1	4-6550	.383	354.4	-6.3	-1.8	1.366	75.1	.418	1.090	53.0	195.2	.635D	1.545	79.6	.640	-.1	-20.3	234.0	.190
4-6550	4-6760	.133	197.6	-45.1	-5.9	.740	100.6	.253	1.281	218.0	391.6	.957	1.604D	96.3	1.117	7.7	88.4	100.4	.217
		12.62	8.58	5.75	4.04	7.43	2.82	12.82	2/1/1	101.9	52.5	19.1	.410	6.036	6.6	255.2	5.0	101.6D	2.067

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2446560 (9 MAY 1986)																			
4-6130	4-6313.2	.146	93.5	22.5	-.1	.873	86.0	.254	.797	167.9	442.2	.594	.999	103.7	1.234	-3.4	-13.4	310.8	.307
4-6313.2	4-6560	.307	353.3	-39.8	-8.3	1.373	83.3	.373	1.120	24.8	198.0	.702D	1.538	79.9	.666	6.5	2.1	242.5	.190
4-6560	4-6690	.164	189.4	3.8	1.6	.792	106.5	.291	1.403	241.1	342.0	.994A	1.812D	86.0	1.131	.7	27.7	111.0	.148
		11.50	7.46	4.00	4.04	7.43	3.46	11.92	2/1/1	102.8	115.5	45.6	.637	2.579	45.0	256.6	31.9	123.9D	1.006
4-6140	4-6313.6	.136	85.9	22.2	-.2	.870	88.7	.248	.797	176.0	441.0	.599	.995	103.3	1.235	-3.4	-13.7	312.1	.299
4-6313.6	4-6560	.299	353.5	-36.4	-7.5	1.373	83.1	.374	1.119	25.5	198.0	.701D	1.538	79.8	.668	6.7	-.4	241.8	.166
4-6560	4-6700	.158	190.2	3.1	1.4	.790	106.0	.284	1.397	240.4	351.0	1.000A	1.794D	88.0	1.132	.8	29.2	104.1	.136
		11.16	7.21	3.89	3.95	7.34	3.32	11.80	2/1/1	103.2	99.6	43.4	.672	2.704	41.1	256.7	28.8	122.8D	1.145
4-6140	4-6327.2	.178	113.0	14.4	-1.5	.858	83.5	.291	.784	163.5	450.4	.556	1.011	106.2	1.228	-3.5	-11.7	329.3	.355
4-6327.2	4-6560	.355	355.3	-7.4	-2.0	1.369	76.7	.408	1.099	47.7	198.3	.651D	1.546	78.2	.655	.0	-19.5	233.5	.191
4-6560	4-6700	.158	190.2	3.1	1.4	.790	106.0	.284	1.397	240.4	351.0	1.000A	1.794D	88.0	1.132	.8	29.2	104.1	.136
		11.74	7.66	4.36	4.06	7.46	3.32	11.80	2/1/1	107.8	99.6	26.0	.478	4.452	13.7	250.7	-9.5	100.1D	1.650
4-6150	4-6313.8	.140	76.6	21.6	-.2	.870	91.6	.248	.800	184.8	440.1	.602	.999D	103.2	1.237	-3.3	-13.6	312.7	.297
4-6313.8	4-6560	.297	353.6	-35.5	-7.3	1.373	83.1	.374	1.119	25.7	198.0	.701D	1.538	79.8	.668	6.5	-1.0	241.8	.165
4-6560	4-6710	.151	191.7	1.9	1.3	.786	105.5	.278	1.385	238.6	359.1	1.000A	1.770D	89.8	1.131	.8	30.4	97.9	.132
		11.04	7.11	3.93	3.93	7.32	3.18	11.76	2/1/1	103.2	84.3	42.6	.680	2.750	40.2	256.5	28.3	122.7D	1.190
4-6150	4-6323.2	.146	97.8	16.8	-1.1	.859	88.4	.266	.789	175.5	446.0	.579	.999	104.6	1.230	-3.2	-12.0	325.0	.322
4-6323.2	4-6560	.322	354.2	-10.4	-2.5	1.371	78.7	.395	1.106	41.1	198.3	.669D	1.543	78.8	.660	.6	-17.9	235.2	.184
4-6560	4-6710	.151	191.7	1.9	1.3	.786	105.5	.276	1.385	238.6	359.1	1.000A	1.770D	89.8	1.131	.8	30.4	97.9	.132
		11.07	7.18	4.00	3.89	7.29	3.18	11.76	2/1/1	106.6	84.3	28.7	.578	4.040	12.0	249.0	-3.1	105.0D	1.759
4-6160	4-6313.4	.158	68.8	21.0	-.2	.872	94.7	.253	.806	194.3	439.2	.602	1.011D	103.4	1.240	-3.3	-13.3	312.7	.302
4-6313.4	4-6560	.302	353.4	-37.8	-7.8	1.373	83.2	.373	1.120	25.2	198.0	.702D	1.538	79.8	.668	6.1	.6	242.1	.168
4-6560	4-6720	.144	193.8	.2	1.1	.780	105.0	.273	1.369	236.1	366.5	.995	1.742D	91.4	1.130	.9	31.3	93.7	.135
		11.17	7.19	4.15	3.98	7.38	3.05	11.79	2/1/1	103.0	70.9	43.6	.659	2.694	43.3	258.7	30.9	123.8D	1.116
4-6160	4-6322.5	.149	87.0	17.4	-1.0	.859	91.8	.264	.793	185.0	444.6	.583	1.002D	104.4	1.233	-3.0	-11.5	324.7	.316
4-6322.5	4-6560	.318	354.1	-11.1	-2.6	1.371	79.0	.393	1.107	40.1	198.2	.672D	1.543	78.9	.660	.7	-17.4	235.5	.183
4-6560	4-6720	.144	193.8	.2	1.1	.780	105.0	.273	1.369	236.1	366.5	.995	1.742D	91.4	1.130	.9	31.3	93.7	.135
		10.95	7.08	4.03	3.87	7.27	3.05	11.79	2/1/1	106.4	70.9	28.8	.596	4.020	11.7	249.2	-.8	106.3D	1.801
4-6170	4-6323.4	.167	81.7	17.2	-1.2	.860	94.8	.271	.797	193.2	444.3	.581	1.013D	104.7	1.236	-2.8	-10.5	326.5	.324
4-6323.4	4-6560	.324	354.2	-10.2	-2.5	1.371	78.6	.396	1.106	41.5	198.3	.668D	1.543	78.8	.659	.6	-18.0	235.1	.184
4-6560	4-6730	.138	196.6	-2.3	.8	.774	104.3	.268	1.350	233.0	373.4	.988	1.712D	92.8	1.128	1.1	32.4	92.1	.141
		11.06	7.15	4.24	3.90	7.30	2.91	11.85	2/1/1	106.7	59.8	27.5	.573	4.212	10.7	250.2	-.6	105.8D	1.839
4-6180	4-6325.2	.193	80.5	16.9	-1.4	.862	97.7	.284	.803	200.4	444.6	.575	1.031D	105.4	1.240	-2.5	-9.0	329.1	.336
4-6325.2	4-6560	.336	354.6	-8.8	-2.2	1.370	77.7	.401	1.103	44.4	198.3	.660D	1.545	78.5	.657	.5	-18.8	234.4	.187
4-6560	4-6740	.131	199.8	-5.8	.4	.767	103.6	.264	1.330	229.4	379.8	.979	1.681D	94.1	1.126	1.4	34.3	92.9	.150
		11.34	7.37	4.59	3.97	7.37	2.78	11.95	2/1/1	107.2	50.9	25.3	.527	4.570	9.1	251.8	-.8	104.6D	1.882
4-6190	4-6327.5	.225	82.4	16.7	-1.7	.867	100.6	.302	.811	206.9	445.2	.566	1.056D	106.3	1.245	-2.2	-7.2	332.6	.357
4-6327.5	4-6560	.357	355.4	-7.3	-1.9	1.369	76.5	.406	1.098	48.2	198.4	.650D	1.547	78.1	.655	.0	-19.6	233.4	.192
4-6560	4-6750	.125	202.9	-11.8	-.3	.759	102.8	.261	1.310	225.5	385.9	.969	1.651D	95.3	1.123	2.1	36.3	95.9	.162
		11.80	7.72	5.06	4.07	7.47	2.66	12.09	2/1/1	107.9	44.4	22.6	.471	5.107	7.4	254.0	.1	103.1D	1.936
4-6200	4-6330.3	.261	86.2	16.5	-2.1	.873	103.5	.324	.822	212.8	445.9	.556	1.088D	107.5	1.252	-1.7	-5.2	336.8	.362
4-6330.3	4-6560	.382	356.5	-6.0	-1.7	1.367	75.1	.418	1.092	52.7	198.4	.635D	1.549	77.8	.651	-.3	-20.3	232.3	.198
4-6560	4-6760	.124	203.6	-26.8	-2.6	.751	101.9	.258	1.290	221.2	391.7	.957	1.623D	96.3	1.119	4.5	50.2	101.1	.185
		12.53	8.32	5.67	4.21	7.61	2.65	12.38	2/1/1	108.8	43.4	19.6	.412	5.875	6.1	256.9	2.2	101.9D	2.010
MARS ARRIVAL DATE = 2446570 (19 MAY 1986)																			
4-6130	4-6315.7	.154	98.4	21.0	-.4	.871	85.0	.263	.794	165.7	444.0	.586	1.003	104.3	1.233	-3.4	-13.0	314.0	.318
4-6315.7	4-6570	.318	354.7	-39.9	-8.6	1.374	82.8	.377	1.121	26.8	201.4	.699D	1.543	78.0	.677	6.8	2.3	241.0	.201
4-6570	4-6690	.191	189.0	2.9	1.5	.813	106.2	.314	1.450	248.1	343.5	.995A	1.905D	86.1	1.141	.9	28.8	108.7	.157
		12.41	8.13	4.09	4.27	7.67	4.04	12.02	2/1/1	109.2	113.4	44.7	.594	2.631	46.1	262.1	33.2	122.7D	.969
4-6140	4-6316.2	.140	91.6	20.8	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.5	.307
4-6316.2	4-6570	.307	355.1	-35.7	-7.6	1.374	82.6	.377	1.120	27.5	201.4	.698D	1.543	78.0	.677	5.8	-.8	240.1	.195
4-6570	4-6700	.182	189.8	2.1	1.4	.810	107.7	.305	1.439	247.0	352.2	1.000A	1.877D	88.2	1.141	.9	30.2	102.1	.145
		11.94	7.79	3.93	4.16	7.55	3.85	11.89	2/1/1	109.9	97.7	42.2	.637	2.778	41.1	259.2	29.5	121.3D	1.132
4-6150	4-6316.4	.140	82.5	20.4	-.5	.867	90.7	.252	.797	182.2	441.7	.596	.998D	103.5	1.235	-3.3	-13.1	316.2	.303
4-6316.4	4-6570	.303	355.3	-35.8	-7.1	1.374	82.4	.376	1.120	27.9	201.4	.697D	1.543	78.0	.677	5.3	-2.1	239.8	.194
4-6570	4-6710	.174	191.3	.9	1.2	.805	107.1	.296	1.421	245.1	360.1	1.000	1.842D	90.0	1.140	1.0	31.2	96.4	.141
		11.71	7.60	3.93	4.11	7.51	3.67	11.85	2/1/1	110.1	83.0	41.0	.653	2.853	39.1	256.4	28.1	120.7D	1.211
4-6150	4-6325.7	.151	103.1	15.4	-1.3	.856	87.4	.273	.786	173.1	447.6	.571	1.000	105.1	1.229	-3.2	-11.7	328.2	.331
4-6325.7	4-6570	.331	356.7	-9.0	-2.2	1.371	78.1	.400	1.107	42.8	201.5	.664D	1.550	78.9	.669	.3	-18.7	233.6	.195
4-6570	4-6710	.174	191.3	.9	1.2	.805	107.1	.296	1.421	245.1	360.1	1.000	1.842D	90.0	1.140	1.0	31.2	96.4	.141
		11.87	7.72	4.05	4.15	7.54	3.67	11.85	2/1/1	113.5	83.0	28.2	.549	4.102	12.0	251.5	-5.5	103.5D	1.704
4-6160	4-6316.5	.154	74.1	20.0	-.5	.868	93.9	.256	.802	191.4	440.8	.597	1.007D	103.6	1.238	-2.9	-12.7	316.4	.306
4-6316.5	4-6570	.306	355.2	-35.2	-7.4	1.374	82.5	.377	1.120	27.6	201.4	.697D	1.543	78.0	.677	5.6	-1.2	240.0	.195
4-6570	4-6720	.166	193.3	-.7	1.0	.798	106.5	.289	1.399	242.3	367.3	.995	1.803D	91.6	1.137	1.1	32.0	92.7	.143
		11.73	7.59	4.09	4.14	7.54	3.49	11.87	2/1/1	109.9	70.1	41.5	.642	2.821	41.2	259.9	30.2	121.5D	1.169
4-6160	4-6324.4	.149	91.2	16.5	-1.2	.857	91.1	.267	.790	183.1	445.7	.579	1.001D	104.6	1.232	-3.0	-11.3	327.2	.322
4-6324.4	4-6570	.322	356.4	-10.2	-2.4	1.372	78.7	.396	1.109	40.9	201.5	.669D	1.549	77.1	.670	.5	-18.0	234.0	.193
4-6570	4-6720	.166	193.3	-.7	1.0	.798	106.5	.289	1.399	242.3	367.3	.995	1.803D	91.6	1.137	1.1	32.0	92.7	.143
		11.62	7.52	4.03	4.09	7.49	3.49	11.87	2/1/1	113.2	70.1	28.8	.580	4.027	11.3	251.4	-2.2	105.4D	1.757
4-6170	4-6315.8	.183	88.8	19.8	-.5	.873	97.3	.267	.811	201.1	439.9	.595	1.028D	104.1	1.244	-3.1	-12.0	316.2	.316
4-6315.8	4-6570	.316	354.7	-39.3	-8.4	1.374	82.7	.377	1.121	26.9	201.4	.699D	1.543	78.0	.677	6.6	1.8	240.9	.200
4-6570	4-6730	.158	195.9	-3.0	.8	.790	105.8	.282	1.376	239.0	373.9	.988	1.763D	93.0	1.134	1.2	32.9	91.5	.149
		12.03	7.77	4.45	4.25	7.65	3.32	11.94	2/1/1	109.3	59.4	43.6	.601	2.693	46.8	263.9	34.8	123.2D	1.017
4-6170	4-6325.1	.164	84.7	16.5	-1.3	.858	94.2	.272	.794	191.5	445.3	.576	1.011D	104.9	1.234	-2.8	-10.3	328.5	.326
4-6325.1	4-6570	.326	356.6	-9.5	-2.3	1.371	78.4	.398	1.108	41.9	201.5	.667D	1.549	77.0	.670	.4	-18.4	233.8	.194
4-6570	4-6730	.158	195.9	-3.0	.8	.790	105.8	.282	1.376	239.0	373.9	.988	1.763D	93.0	1.134	1.2	32.9	91.5	.149
		11.65	7.53	4.21	4.12	7.51	3.32	11.94	2/1/1	113.5	59.4	27.7	.564	4.178	10.3	252.3	-1.5	105.3D	1.794
4-6180	4-6326.7	.189	82.8	16.4	-1.5	.860	97.1	.284	.800	198.8	445.4	.573	1.027D	105.5	1.236	-2.5	-8.8	331.0	.339
4-6326.7	4-6570	.339	357.0	-8.2	-2.1	1.371	77.6	.403	1.105	44.5	201.5	.660D	1.551	76.7	.668	.1	-19.2	233.2	.197
4-6570	4-6740	.149	198.8	-6.1	.4	.782	105.1	.276	1.351	235.2	380.1	.976	1.724D	94.3	1.131	1.5	34.4	92.7	.157
		11.87	7.68	4.54	4.19	7.58	3.14	12.03	2/1/1	113.7	50.8	25.7	.524	4.498	8.8	253.8	-1.5	104.3D	1.832
4-6190	4-6328.9	.220	84.1	16.3	-1.8	.864	100.1	.301	.807	205.4	445.9	.564	1.051D	106.4	1.243	-2.1	-7.0	334.5	.357
4-6328.9	4-6570	.357	357.7	-6.7	-1.8	1.370	76.5	.410	1.101	48.1	201.5	.650D	1.553	76.4	.665	-.2	-19.9	232.4	.201
4-6570	4-6750	.141	201.9	-10.8	-.2	.773	104.2	.271	1.327	231.1	386.0	.966	1.686D	95.5	1.127	2.1	37.3	95.9	.167
		12.27	7.97	4.99	4.30	7.69	2.98	12.15	2/1/1	114.2	44.2	25.1	.471	4.989	7.1	256.0	-.8	102.9D	1.880
MARS ARRIVAL DATE = 2446580 (29 MAY 1986)																			
4-6150	4-6319.0	.141	88.4	19.1	-.7	.864	89.9	.257	.794	179.6	443.4	.590	.997	103.9	1.233	-3.2	-12.6	319.6	.310
4-6319.0	4-6580	.310	357.5	-32.8	-7.1	1.375	81.9	.382	1.122	29.7	204.6	.694D	1.551	76.3	.687	5.2	-3.1	236.9	.204
4-6580	4-6710	.201	191.5	-.1	1.2	.827	108.7	.321	1.472	251.7	361.2	1.000	1.945D	90.3	1.150	1.1	31.7	94.6	.152
		12.60	8.23	3.94	4.36	7.76	4.29	11.98	2/1/1	116.1	81.5	40.1	.626	2.920	38.5	260.8	28.2	119.2D	1.202
4-6160	4-6319.0	.151	79.5	19.0	-.7	.864	93.0	.259	.798	188.6	442.4	.591	1.004D	103.9	1.236	-3.1	-12.1	320.0	.311
4-6319.0	4-6580	.311	357.4	-33.1	-7.2	1.375	81.9	.382	1.122	29.6	204.6	.694D	1.551	76.3	.687	5.3	-2.9	259.0	.205
4-6580	4-6720	.191	193.5	-1.7	1.0	.818	108.1	.310	1.442	248.7	368.1	.994	1.690D	91.9	1.147	1.2	32.3	91.6	.154
		12.49	8.12	4.06	4.37	7.76	4.06	11.99	2/1/1	116.1	69.2	40.1	.625	2.917	39.4	261.6	29.4	119.5D	1.195
4-6160	4-6326.7	.149	96.5	15.3	-1.4	.854	90.3	.271	.787	180.8	447.1	.573	1.000D	105.0	1.230	-3.0	-11.0	330.2	.328
4-6326.7	4-6580	.328	359.2	-8.6	-2.1	1.373	78.5	.401	1.111	42.0	204.9	.666D	1.557	75.4	.680	.2	-19.1	233.4	.205
4-6580	4-6720	.191	193.5	-1.7	1.0	.818	108.1	.310	1.442	248.7	368.1	.994	1.690D	91.9	1.147	1.2	32.3	91.6	.154
		12.48	8.10	4.04	4.38	7.77	4.06	11.99	2/1/1	119.0	69.2	28.7	.560	4.034	11.1	253.8	-4.7	104.2D	1.700

STOPOVER TIME = 0 DAYS

1986 OUTBOUND SWINGBY

MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2446560
29 MAY 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-6170	4-6318.7	.176	73.3	18.9	-.7	.868	96.4	.268	.806	198.1	441.6	.590	1.021D	104.3	1.241	-3.0	-11.4	320.0	.319
4-6318.7	4-6580	.319	357.1	-36.5	-8.0	1.375	82.1	.381	1.123	29.1	204.6	.695D	1.550	76.4	.687	6.1	-.5	259.7	.208
4-6580	4-6730	.181	195.9	-3.7	.7	.809	107.3	.301	1.411	245.2	374.5	.987	1.835D	93.3	1.142	1.3	33.0	90.9	.159
		12.65	8.20	4.36	4.45	7.85	3.83	12.05	2/1/1	115.5	58.9	41.8	.592	2.606	44.5	265.0	33.9	121.0D	1.070
4-6170	4-6327.0	.162	86.5	15.7	-1.5	.855	93.5	.274	.791	189.5	446.4	.574	1.008D	105.1	1.233	-2.8	-10.0	331.0	.329
4-6327.0	4-6580	.329	359.3	-8.4	-2.0	1.372	78.2	.401	1.111	42.4	204.5	.665D	1.557	75.3	.680	.1	-19.3	233.3	.205
4-6580	4-6730	.181	195.9	-3.7	.7	.809	107.3	.301	1.411	245.2	374.5	.987	1.835D	93.3	1.142	1.3	33.0	90.9	.159
		12.41	8.02	4.18	4.39	7.78	3.83	12.05	2/1/1	119.1	56.9	28.0	.554	4.140	10.0	254.6	-3.3	104.5D	1.739
4-6160	4-6328.3	.185	85.6	15.8	-1.6	.857	96.5	.285	.797	197.0	446.4	.570	1.024D	105.6	1.236	-2.4	-8.6	333.3	.340
4-6328.3	4-6560	.340	359.7	-7.2	-1.8	1.372	77.5	.405	1.109	44.6	204.4	.659D	1.558	75.1	.679	-.1	-19.9	232.9	.208
4-6560	4-6740	.171	198.6	-6.4	.3	.799	106.6	.292	1.360	241.2	380.5	.977	1.782D	94.6	1.138	1.6	34.3	92.4	.166
		12.55	8.09	4.48	4.46	7.85	3.61	12.14	2/1/1	119.5	50.5	26.2	.519	4.417	8.7	256.1	-3.0	103.8D	1.775

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2446470
8 FEB 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2446470 (8 FEB 1986)																				
4-6130	4-6318.2	.163	102.7	19.6	-.6	.869	84.1	.271	.792	163.5	445.8	.577	1.007	104.9	1.232	-3.5	-12.6	317.0	.330
4-6318.2	4-6470	.330	350.5	-9.0	-2.2	1.393	79.2	.432	1.190	36.7	156.6	.677D	1.704A	105.8	.638	.6	-22.6	264.8	.279
4-6470	4-6730	.104	201.5	-51.2	-5.4	.691	93.3	.241	1.299	190.6	376.3	.986	1.613D	93.2	1.115	7.1	71.0	78.4	.186
		12.73	6.51	4.20	6.23	9.61	2.31	12.39	2/1/2	33.2	65.5	33.1	.553	3.514	13.0	242.6	-6.3	106.6D	1.392
4-6140	4-6315.1	.138	89.2	21.4	-.3	.869	88.2	.252	.796	174.6	442.0	.595	.996	103.5	1.234	-3.4	-13.4	313.9	.304
4-6315.1	4-6470	.304	351.4	-10.4	-2.3	1.395	80.9	.425	1.198	31.0	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.8	.278
4-6470	4-6740	.085	223.2	-23.8	-.8	.688	92.6	.246	1.292	188.1	383.8	.975	1.609D	94.6	1.116	2.6	42.6	85.7	.154
		12.11	5.92	3.91	6.19	9.57	2.01	12.00	2/1/2	32.3	47.4	36.8	.652	3.168	13.4	241.8	-4.6	110.8D	1.414
4-6150	4-6314.5	.140	78.2	21.3	-.3	.869	91.4	.249	.799	184.1	440.5	.600	.998D	103.3	1.236	-3.3	-13.5	313.7	.299
4-6314.5	4-6470	.299	351.7	-10.7	-2.3	1.395	81.2	.423	1.200	29.8	155.7	.692D	1.708A	105.8	.644	.9	-22.0	266.0	.278
4-6470	4-6750	.091	231.2	-17.3	.2	.684	91.8	.252	1.283	185.3	391.0	.961	1.606D	96.1	1.116	1.6	34.4	88.9	.166
		12.22	6.03	3.93	6.19	9.57	2.10	12.14	2/1/2	32.2	38.0	37.3	.673	3.130	13.5	241.8	-4.2	111.9D	1.434
4-6160	4-6315.2	.156	72.0	20.4	-.4	.869	94.2	.255	.804	192.5	440.2	.599	1.008D	103.5	1.239	-3.2	-12.9	315.0	.304
4-6315.2	4-6470	.304	351.4	-10.4	-2.3	1.395	80.8	.425	1.198	31.2	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.8	.278
4-6470	4-6760	.101	237.4	-15.5	.7	.680	90.7	.259	1.274	182.1	398.0	.944	1.604D	97.5	1.115	1.2	30.7	93.1	.183
		12.55	6.36	4.11	6.19	9.57	2.25	12.35	2/1/2	32.3	51.0	35.7	.648	3.265	12.9	242.4	-4.1	111.3D	1.468
MARS ARRIVAL DATE = 2446480 (18 FEB 1986)																				
4-6140	4-6315.7	.139	90.4	21.1	-.4	.868	88.0	.253	.795	174.1	442.4	.594	.996	103.6	1.234	-3.4	-13.3	314.7	.306
4-6315.7	4-6480	.305	349.6	-10.5	-2.3	1.387	80.4	.412	1.166	33.5	162.1	.685D	1.647A	101.8	.631	.8	-21.8	263.9	.246
4-6480	4-6740	.083	219.9	-26.1	-1.2	.693	93.7	.243	1.290	191.8	382.8	.976	1.604D	94.4	1.115	3.0	45.5	87.0	.154
		11.30	5.91	3.92	5.38	8.77	1.99	11.99	2/1/2	38.8	49.4	34.3	.644	3.395	13.3	241.2	-4.6	109.4D	1.543
4-6150	4-6315.0	.139	79.2	21.1	-.3	.868	91.2	.250	.799	183.6	440.8	.599	.998D	103.3	1.236	-3.3	-13.4	314.5	.300
4-6315.0	4-6480	.300	349.8	-10.9	-2.4	1.387	80.8	.411	1.168	32.2	162.0	.688D	1.648A	101.8	.632	.9	-21.7	264.2	.246
4-6480	4-6750	.088	229.8	-16.4	.3	.689	92.9	.249	1.281	188.9	389.9	.963	1.600D	95.8	1.115	1.6	34.3	90.2	.162
		11.36	5.98	3.93	5.38	8.76	2.05	12.09	2/1/2	38.6	39.0	34.8	.668	3.347	13.4	241.2	-4.0	110.5D	1.566
4-6160	4-6315.6	.155	72.8	20.2	-.4	.869	94.1	.255	.803	192.1	440.4	.598	1.008D	103.6	1.239	-3.2	-12.8	315.6	.305
4-6315.6	4-6480	.305	349.6	-10.6	-2.3	1.387	80.4	.412	1.166	33.4	162.1	.685D	1.648A	101.8	.631	.8	-21.8	264.0	.246
4-6480	4-6760	.096	236.8	-14.4	.8	.685	91.9	.255	1.272	185.7	396.8	.947	1.596D	97.2	1.114	1.1	30.2	94.3	.178
		11.67	6.29	4.10	5.39	8.77	2.16	12.26	2/1/2	38.8	31.9	33.4	.646	3.482	12.8	241.8	-3.8	110.1D	1.603
4-6170	4-6317.1	.160	70.9	19.4	-.6	.871	96.9	.267	.809	199.7	440.7	.593	1.025D	104.2	1.242	-3.1	-11.7	317.9	.317
4-6317.1	4-6480	.317	349.2	-9.8	-2.5	1.386	79.6	.416	1.163	36.1	162.4	.679D	1.647A	101.8	.629	.7	-22.1	263.4	.247
4-6480	4-6770	.107	242.8	-14.3	1.1	.680	90.8	.264	1.261	182.2	403.5	.929	1.594D	98.7	1.113	.9	26.0	99.5	.196
		12.17	6.76	4.41	5.40	8.79	2.35	12.52	2/1/2	39.2	26.2	30.8	.597	3.764	11.7	242.9	-3.6	108.8D	1.651
MARS ARRIVAL DATE = 2446490 (28 FEB 1986)																				
4-6130	4-6319.8	.170	105.3	18.6	-.8	.866	83.4	.278	.791	162.2	447.1	.571	1.010	105.3	1.232	-3.5	-12.4	319.0	.338
4-6319.8	4-6490	.338	348.1	-8.8	-2.2	1.379	78.1	.413	1.135	41.9	168.7	.666D	1.604A	97.7	.619	.5	-22.2	259.6	.222
4-6490	4-6730	.129	231.8	32.0	8.0	.703	95.5	.239	1.298	198.3	374.5	.988	1.607D	92.6	1.115	-8.2	-21.1	88.2	.172
		11.82	7.03	4.29	4.79	8.18	2.74	12.20	2/1/1	47.6	66.1	28.8	.526	4.018	13.1	242.2	-7.1	103.7D	1.589
4-6140	4-6316.2	.140	91.6	20.7	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.4	.307
4-6316.2	4-6490	.307	348.4	-10.7	-2.4	1.381	80.0	.404	1.144	35.4	167.9	.682D	1.606A	97.9	.625	.8	-21.4	261.3	.220
4-6490	4-6740	.085	214.1	-32.1	-2.0	.699	94.9	.242	1.289	195.7	381.9	.977	1.601D	94.2	1.115	3.9	51.8	87.9	.156
		10.69	5.95	3.93	4.75	8.14	2.01	12.04	2/1/2	46.1	52.4	32.4	.636	3.581	13.2	241.0	-4.4	108.3D	1.642
4-6150	4-6315.4	.139	80.2	20.9	-.4	.868	91.1	.251	.798	183.2	441.1	.598	.998D	103.4	1.235	-3.3	-13.3	314.9	.301
4-6315.4	4-6490	.301	348.6	-11.2	-2.5	1.381	80.5	.402	1.146	33.9	167.7	.685D	1.607A	98.0	.626	.9	-21.2	261.6	.220
4-6490	4-6750	.086	227.7	-15.1	.4	.695	94.1	.246	1.280	192.7	388.9	.965	1.595D	95.6	1.115	1.5	34.0	91.4	.158
		10.70	5.95	3.93	4.74	8.13	2.02	12.04	2/1/2	45.8	39.9	33.0	.664	3.518	13.3	241.0	-3.6	109.6D	1.672
4-6160	4-6316.0	.154	73.6	20.1	-.4	.868	93.9	.256	.802	191.7	440.7	.597	1.007D	103.6	1.238	-3.2	-12.7	316.1	.306
4-6316.0	4-6490	.306	348.5	-10.8	-2.4	1.381	80.1	.403	1.144	35.0	167.9	.683D	1.606A	98.0	.625	.8	-21.4	261.3	.220
4-6490	4-6760	.093	235.4	-12.8	1.0	.691	93.1	.252	1.270	189.4	395.7	.950	1.589D	97.0	1.114	.9	29.4	95.4	.173
		10.97	6.23	4.10	4.75	8.13	2.13	12.22	2/1/2	46.0	32.7	31.7	.643	3.657	12.7	241.6	-3.5	109.2D	1.710
4-6170	4-6317.5	.179	71.4	19.3	-.6	.870	96.7	.267	.808	199.3	440.9	.592	1.024D	104.2	1.242	-3.0	-11.6	318.4	.318
4-6317.5	4-6490	.318	348.2	-10.0	-2.5	1.380	79.4	.407	1.141	37.7	168.2	.676D	1.605A	97.9	.625	.7	-21.7	260.7	.221
4-6490	4-6770	.102	242.1	-13.0	1.2	.686	92.0	.259	1.259	185.8	402.3	.933	1.585D	98.3	1.112	.7	27.2	100.5	.190
		11.43	6.67	4.40	4.76	8.15	2.28	12.44	2/1/2	46.6	27.0	29.3	.596	3.950	11.6	242.7	-3.2	108.0D	1.758
4-6180	4-6319.5	.209	72.6	18.7	-.9	.874	99.6	.284	.816	206.4	441.4	.584	1.047D	105.1	1.247	-2.8	-10.1	321.5	.335
4-6319.5	4-6490	.335	348.1	-9.0	-2.2	1.379	78.2	.412	1.136	41.4	168.6	.667D	1.604A	97.8	.620	.6	-22.1	259.7	.222
4-6490	4-6780	.114	246.1	-13.9	1.4	.681	90.8	.268	1.248	182.1	408.7	.913	1.583D	99.7	1.110	.8	25.6	106.4	.208
		12.08	7.50	4.83	4.79	8.17	2.47	12.70	2/1/2	47.4	22.1	26.3	.535	4.404	10.1	244.4	-2.4	106.4D	1.820
MARS ARRIVAL DATE = 2446500 (10 MAR 1986)																				
4-6130	4-6320.9	.175	107.0	18.0	-.9	.867	82.9	.282	.790	161.2	447.9	.567	1.013	105.6	1.231	-3.5	-12.3	320.3	.344
4-6320.9	4-6500	.344	347.9	-8.7	-2.2	1.374	77.6	.409	1.118	44.2	174.1	.660D	1.576A	94.1	.616	.5	-21.9	255.6	.203
4-6500	4-6730	.092	220.7	13.8	3.5	.710	96.7	.239	1.298	202.5	373.8	.988	1.608D	92.6	1.115	-1.7	8.5	90.2	.131
		10.79	6.46	4.35	4.33	7.72	2.11	11.74	2/1/1	56.1	59.0	27.3	.509	4.231	13.2	242.7	-7.6	102.4D	1.643
4-6140	4-6316.9	.141	93.1	20.4	-.5	.867	87.6	.256	.794	173.0	443.2	.591	.997	103.9	1.233	-3.4	-13.1	316.2	.310
4-6316.9	4-6500	.310	347.9	-10.6	-2.5	1.376	79.7	.398	1.128	36.9	173.3	.679D	1.578A	94.4	.623	.8	-20.9	257.8	.200
4-6500	4-6740	.148	184.4	-61.8	-9.6	.706	96.0	.241	1.289	199.8	381.1	.978	1.600D	94.1	1.115	11.4	83.5	59.9	.253
		11.34	7.07	3.95	4.27	7.66	3.13	13.40	2/1/2	54.3	66.3	31.1	.627	3.732	13.1	241.2	-4.2	107.4D	1.714
4-6150	4-6315.9	.139	81.4	20.6	-.4	.867	90.9	.251	.797	182.7	441.4	.597	.998D	103.5	1.235	-3.3	-13.2	315.6	.302
4-6315.9	4-6500	.302	348.0	-11.4	-2.5	1.377	80.2	.396	1.130	35.2	173.1	.683D	1.578A	94.5	.624	.9	-20.6	258.2	.200
4-6500	4-6750	.085	225.0	-12.9	.5	.702	95.2	.245	1.279	196.7	388.0	.966	1.592D	95.4	1.114	1.3	33.0	92.5	.155
		10.20	5.94	3.93	4.26	7.65	2.01	12.01	2/1/2	53.9	40.6	31.8	.658	3.655	13.2	241.1	-3.1	108.9D	1.748
4-6160	4-6316.5	.154	74.5	19.9	-.5	.868	93.8	.256	.802	191.2	441.0	.596	1.007D	103.7	1.238	-3.2	-12.6	316.7	.306
4-6316.5	4-6500	.306	348.0	-11.1	-2.5	1.376	79.9	.397	1.129	36.2	173.2	.680D	1.578A	94.4	.623	.9	-20.8	258.0	.200
4-6500	4-6760	.091	233.4	-10.4	1.2	.697	94.3	.249	1.268	193.3	394.7	.952	1.584D	96.7	1.113	.7	28.0	96.4	.169
		10.46	6.19	4.09	4.27	7.66	2.10	12.17	2/1/2	54.1	33.4	30.6	.640	3.789	12.6	241.7	-2.9	108.6D	1.786
4-6170	4-6317.9	.178	72.1	19.1	-.7	.869	96.6	.267	.807	198.9	441.1	.591	1.023D	104.2	1.242	-3.0	-11.5	319.0	.318
4-6317.9	4-6500	.318	347.8	-10.2	-2.4	1.376	79.2	.401	1.126	36.8	173.5	.674D	1.577A	94.3	.621	.7	-21.2	257.2	.201
4-6500	4-6770	.099	240.6	-11.1	1.4	.692	93.3	.256	1.257	189.6	401.2	.936	1.578D	98.0	1.112	.5	26.0	101.4	.185
		10.89	6.61	4.39	4.28	7.67	2.22	12.37	2/1/2	54.7	27.7	28.3	.595	4.066	11.5	242.9	-2.7	107.5D	1.835
4-6180	4-6319.9	.208	73.1	18.6	-.9	.873	99.4	.284	.815	205.9	441.7	.584	1.046D	105.1	1.247	-2.8	-10.0	322.1	.335
4-6319.9	4-6500	.335	347.8	-9.1	-2.3	1.375	78.1	.407	1.121	42.4	173.9	.665D	1.577A	94.2	.618	.6	-21.7	256.2	.202
4-6500	4-6780	.109	247.3	-12.4	1.5	.686	92.0	.263	1.246	185.6	407.5	.918	1.573D	99.4	1.109	.4	24.7	107.2	.202
		11.50	7.19	4.81	4.31	7.71	2.38	12.60	2/1/2	55.7	22.9	25.4	.535	4.549	10.0	244.6	-2.0	105.9D	1.897
4-6190	4-6322.4	.243	76.4	18.2	-1.3	.879	102.4	.305	.825	212.3	442.3	.574	1.077D	108.2	1.253	-2.4	-8.1	325.8	.358
4-6322.4	4-6500	.358	348.1	-8.0	-2.1	1.373	76.7	.414	1.114	47.0	174.5	.652D	1.576A	93.9	.614	.4	-22.1	254.7	.204
4-6500	4-6790	.121	253.5	-13.8	1.6	.681	90.7	.273	1.234	181.8	413.7	.898	1.571D	100.7	1.107	.3	25.3	113.7	.220
		12.32	7.96	5.37	4.35	7.75	2.60	12.87	2/1/2	57.0	18.7	22.1	.469	5.229	8.2	246.9	-.2	104.3D	1.982
MARS ARRIVAL DATE = 2446510 (20 MAR 1986)																				
4-6130	4-6322.3	.182	109.2	17.2	-1.1	.866	82.3	.288	.789	160.0	449.0	.561	1.016	106.0	1.230	-3.6	-12.1	322.1	.352
4-6322.3	4-6510	.352	348.3	-8.3	-2.2	1.371	77.0	.409	1.106	46.5	179.1	.654D	1.559A	90.6	.616	.4	-21.5	250.9	.190
4-6510	4-6750	.088	213.8	6.0	2.3	.718	97.9	.240	1.300	207.0	373.3	.989	1.612D	92.8	1.116	-.4	19.6	91.2	.127
		10.53	6.50	4.45	4.03	7.42	2.05	11.71	2/1/1	65.5	58.8	26.0	.485	4.439	13.5	243.7	-8.4	101.1D	1.667
4-6140	4-6317.7	.143	94.8	19.9	-.8	.866	87.3	.258	.793	172.2	443.7	.588	.998	104.0	1.233	-3.4	-13.0	317.3	.312
4-6317.7	4-6510	.312	347.9	-10.9	-2.5	1.373	79.4	.395	1.117	36.3	178.3	.676D	1.559A	91.1	.624	.8	-20.3	253.6	.186
4-6510	4-6740	.095	222.2	11.6	3.5	.714	97.2	.241	1.290	204.1	380.5	.979	1.602D	93.9	1.115	-1.6	10.8	90.9	.141
		10.06	6.12	3.97	3.94	7.33	2.15	11.88	2/1/1	63.2	49.8	30.0	.616	3.858	13.0	241.8	-4.0	106.7D	1.760

STOPOVER TIME = 0 DAYS

1986 OUTBOUND SWINGBY

MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2446510
20 MAR 1986

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6150	4-6316.6	.140	82.8	20.3	-.5	.866	90.7	.252	.797	182.0	441.8	.595	.998D	103.6	1.235	-3.3	-13.1	316.4	.304
4-6316.6	4-6510	.304	348.0	-11.7	-2.6	1.374	80.0	.392	1.120	36.3	178.1	.681D	1.559A	91.2	.625	1.0	-19.9	254.2	.185
4-6510	4-6750	.086	222.4	-8.7	.9	.709	96.4	.244	1.279	200.9	387.3	.967	1.592D	95.3	1.115	.9	30.2	93.4	.152
		9.86	5.96	3.93	3.92	7.32	2.03	11.97	2/1/2	62.7	41.0	30.9	.652	3.758	13.1	241.6	-2.6	108.4D	1.798
4-6160	4-6317.0	.153	75.6	19.7	-.5	.867	93.6	.257	.801	190.6	441.3	.595	1.006D	103.7	1.237	-3.2	-12.5	317.4	.307
4-6317.0	4-6510	.307	347.9	-11.3	-2.6	1.374	79.8	.393	1.119	37.1	178.2	.679D	1.559A	91.2	.625	.9	-20.1	253.9	.185
4-6510	4-6760	.091	230.9	-7.0	1.5	.704	95.5	.248	1.268	197.4	393.9	.954	1.582D	96.5	1.113	.4	25.7	97.2	.166
		10.11	6.18	4.08	3.93	7.32	2.10	12.13	2/1/2	62.9	34.0	29.8	.637	3.883	12.6	242.2	-2.3	108.2D	1.836
4-6170	4-6318.4	.176	73.0	19.0	-.7	.868	96.4	.268	.806	198.3	441.4	.590	1.022D	104.3	1.241	-3.0	-11.4	319.7	.318
4-6318.4	4-6510	.318	347.9	-10.4	-2.4	1.373	79.0	.397	1.116	39.6	178.4	.673D	1.559A	91.1	.623	.8	-20.5	253.2	.186
4-6510	4-6770	.097	238.4	-8.6	1.6	.698	94.5	.253	1.256	193.6	400.2	.938	1.573D	97.8	1.111	.2	24.4	102.1	.181
		10.51	6.56	4.37	3.95	7.35	2.19	12.32	2/1/2	63.5	28.4	27.7	.593	4.177	11.4	243.4	-2.1	107.1D	1.884
4-6180	4-6320.5	.206	73.8	18.4	-1.0	.872	99.3	.284	.814	205.3	441.9	.583	1.044D	105.1	1.246	-2.7	-9.9	322.8	.335
4-6320.5	4-6510	.335	348.0	-9.2	-2.3	1.372	78.0	.403	1.111	43.2	178.7	.664D	1.559A	90.9	.620	.6	-21.1	252.0	.188
4-6510	4-6780	.105	245.7	-10.6	1.7	.693	93.3	.259	1.244	189.6	406.4	.921	1.566D	99.0	1.109	.2	23.4	107.9	.196
		11.09	7.10	4.79	3.99	7.38	2.32	12.53	2/1/2	64.5	23.6	24.9	.534	4.641	9.9	245.1	-1.5	105.8D	1.945
4-6190	4-6322.9	.241	77.0	18.0	-1.4	.878	102.2	.304	.824	211.7	442.6	.573	1.074D	106.2	1.252	-2.4	-8.0	326.5	.358
4-6322.9	4-6510	.358	348.4	-8.0	-2.1	1.370	76.6	.411	1.105	47.6	179.2	.651D	1.559A	90.6	.615	.3	-21.6	250.5	.190
4-6510	4-6790	.115	252.6	-12.4	1.8	.687	92.0	.267	1.232	185.5	412.5	.902	1.561D	100.3	1.106	.1	22.3	114.4	.213
		11.87	7.83	5.33	4.04	7.44	2.49	12.77	2/1/2	65.8	19.4	21.7	.469	5.321	8.1	247.5	.2	104.0D	2.028

MARS ARRIVAL DATE = 2446520 (30 MAR 1986)

4-6130	4-6324.4	.194	112.0	16.2	-1.3	.864	81.3	.298	.787	158.3	450.6	.552	1.022	106.7	1.230	-3.7	-11.9	324.6	.365
4-6324.4	4-6520	.365	349.3	-7.7	-2.1	1.368	76.2	.411	1.097	49.4	183.7	.646D	1.548	87.4	.619	.2	-21.2	245.5	.183
4-6520	4-6730	.091	208.3	2.4	1.7	.726	99.1	.242	1.304	211.6	373.0	.989	1.619D	92.5	1.117	.2	25.1	91.9	.127
		10.58	6.70	4.61	3.88	7.28	2.10	11.71	2/1/1	75.5	59.3	24.7	.451	4.672	14.1	245.3	-9.8	99.3D	1.657
4-6140	4-6303.0	.133	61.7	26.9	.9	.882	91.9	.230	.810	186.2	434.1	.624	.996D	101.8	1.241	-3.6	-16.3	298.5	.273
4-6303.0	4-6520	.273	354.7	-42.4	-7.7	1.375	86.5	.367	1.131	13.0	181.7	.717D	1.546	89.0	.641	6.3	-.7	255.6	.185
4-6520	4-6740	.089	213.3	-1.2	1.5	.722	98.4	.242	1.293	208.7	380.0	.980	1.607D	93.9	1.116	.4	26.6	91.9	.138
		9.86	5.94	3.86	3.92	7.31	2.08	11.82	2/1/1	70.1	49.4	54.3	.804	2.192	43.5	250.3	25.5	132.9D	.959
4-6140	4-6318.8	.145	97.1	19.3	-.7	.865	86.9	.261	.792	171.2	444.5	.585	.999	104.2	1.232	-3.4	-12.8	318.6	.316
4-6318.8	4-6520	.316	348.4	-10.8	-2.5	1.371	79.1	.394	1.110	39.6	182.9	.673D	1.547	88.1	.627	.8	-19.7	249.0	.177
4-6520	4-6740	.089	213.3	-1.2	1.5	.722	98.4	.242	1.293	208.7	380.0	.980	1.607D	93.9	1.116	.4	26.6	91.9	.138
		9.81	6.07	3.99	3.74	7.14	2.08	11.82	2/1/1	72.6	49.4	29.2	.601	3.966	12.8	242.7	-3.9	105.9D	1.782
4-6150	4-6317.4	.140	84.6	19.9	-.5	.865	90.4	.254	.796	181.2	442.3	.594	.998D	103.7	1.234	-3.3	-12.9	317.4	.306
4-6317.4	4-6520	.306	348.4	-11.8	-2.7	1.372	79.8	.390	1.113	37.2	182.7	.679D	1.547	88.3	.629	1.0	-19.1	249.8	.176
4-6520	4-6750	.104	226.3	14.4	4.3	.717	97.6	.244	1.281	205.3	386.7	.968	1.594D	95.2	1.115	-2.5	5.6	93.2	.157
		9.96	6.24	3.93	3.71	7.11	2.31	12.03	2/1/2	71.9	44.0	30.2	.644	3.834	13.0	242.5	-2.0	107.9D	1.824
4-6160	4-6317.7	.152	77.0	19.4	-.6	.866	93.4	.258	.800	189.9	441.7	.594	1.006D	103.8	1.237	-3.2	-12.4	318.4	.308
4-6317.7	4-6520	.308	348.4	-11.6	-2.6	1.372	79.6	.391	1.112	37.8	182.8	.677D	1.547	88.2	.629	.9	-19.3	249.6	.176
4-6520	4-6760	.094	228.6	-1.5	2.1	.711	96.8	.247	1.268	201.7	393.1	.955	1.582D	96.4	1.113	-.3	21.2	97.7	.164
		9.93	6.22	4.07	3.72	7.12	2.14	12.10	2/1/2	72.1	34.6	29.4	.632	3.947	12.5	243.0	-1.6	107.9D	1.863
4-6170	4-6319.1	.175	74.1	18.8	-.8	.867	96.2	.268	.805	197.7	441.8	.589	1.020D	104.3	1.240	-3.0	-11.3	320.6	.319
4-6319.1	4-6520	.319	348.4	-10.6	-2.5	1.371	78.9	.395	1.109	40.2	183.0	.672D	1.547	88.1	.627	.8	-19.8	248.8	.177
4-6520	4-6770	.097	235.8	-5.2	2.0	.706	95.7	.251	1.256	197.8	399.4	.941	1.571D	97.6	1.111	-.2	21.9	102.7	.177
		10.29	6.54	4.35	3.74	7.14	2.19	12.28	2/1/2	72.7	29.1	27.3	.591	4.233	11.3	244.2	-1.5	106.9D	1.909
4-6180	4-6321.1	.204	74.7	18.2	-1.1	.870	99.1	.283	.812	204.7	442.3	.582	1.042D	105.1	1.245	-2.7	-9.7	323.6	.336
4-6321.1	4-6520	.336	348.6	-9.3	-2.3	1.370	77.9	.400	1.105	43.7	183.2	.663D	1.548	87.9	.624	.5	-20.4	247.6	.179
4-6520	4-6780	.103	243.4	-6.1	1.9	.700	94.6	.256	1.243	193.7	405.4	.924	1.561D	98.8	1.109	-.1	21.7	108.5	.192
		10.83	7.04	4.76	3.79	7.19	2.28	12.47	2/1/2	73.7	24.3	24.6	.534	4.688	9.8	245.9	-1.0	105.4D	1.968
4-6190	4-6323.6	.239	77.7	17.9	-1.4	.876	102.0	.304	.822	211.1	443.0	.572	1.072D	106.2	1.251	-2.3	-7.8	327.4	.358
4-6323.6	4-6520	.358	349.1	-8.0	-2.1	1.369	76.6	.408	1.099	48.0	183.6	.650D	1.548	87.5	.620	.3	-21.1	246.1	.182
4-6520	4-6790	.111	250.8	-10.7	1.9	.694	93.3	.263	1.230	189.4	411.4	.907	1.553D	100.0	1.105	-.1	21.0	114.9	.207
		11.57	7.71	5.29	3.86	7.25	2.42	12.69	2/1/2	75.0	20.1	21.5	.470	5.356	8.1	248.3	.5	103.8D	2.047
4-6200	4-6326.4	.278	82.4	17.5	-1.9	.884	105.0	.329	.835	216.8	443.7	.561	1.109D	107.5	1.259	-1.8	-9.7	331.7	.385
4-6326.4	4-6520	.385	350.0	-6.8	-2.0	1.367	75.0	.419	1.091	53.1	184.0	.634D	1.549	87.1	.615	.1	-21.5	244.1	.186
4-6520	4-6800	.122	257.9	-12.7	1.9	.688	91.9	.271	1.218	185.1	417.2	.887	1.548D	101.2	1.102	-.1	19.9	121.7	.224
		12.53	8.56	5.97	3.95	7.35	2.62	12.93	2/1/2	76.7	16.4	18.2	.406	6.321	7.3	251.3	3.7	102.0D	2.158

MARS ARRIVAL DATE = 2446530 (9 APR 1986)

4-6130	4-6305.5	.130	77.2	26.9	.6	.880	88.4	.235	.804	174.9	436.8	.615	.993	102.2	1.236	-3.4	-14.9	301.2	.281
4-6305.5	4-6530	.281	353.0	-41.6	-7.8	1.374	85.6	.366	1.126	16.5	186.2	.713D	1.538	86.5	.646	6.5	.6	251.8	.180
4-6530	4-6730	.098	204.0	.4	1.3	.736	100.3	.245	1.310	216.6	372.8	.989	1.631D	92.5	1.118	.6	28.3	92.4	.129
		9.84	6.04	3.83	3.81	7.21	2.20	11.72	2/1/1	78.8	59.8	51.8	.764	2.287	43.8	251.8	27.7	129.9D	.983
4-6130	4-6327.6	.215	116.1	14.6	-1.7	.862	79.7	.316	.784	155.8	453.3	.537	1.032	107.8	1.228	-3.8	-11.6	328.5	.388
4-6327.6	4-6530	.388	351.3	-6.6	-1.9	1.366	74.8	.419	1.088	53.8	186.0	.632D	1.544	84.3	.621	.0	-21.0	239.8	.185
4-6530	4-6730	.098	204.0	.4	1.3	.736	100.3	.245	1.310	216.6	372.8	.989	1.631D	92.5	1.118	.6	28.3	92.4	.129
		11.02	7.11	4.91	3.91	7.30	2.20	11.72	2/1/1	85.9	59.8	23.1	.400	5.001	15.6	247.9	-12.4	96.7D	1.599
4-6140	4-6305.7	.132	67.7	25.9	.6	.879	91.1	.234	.807	183.6	435.8	.618	.995D	102.1	1.239	-3.5	-15.5	301.9	.279
4-6305.7	4-6530	.279	352.9	-40.9	-7.7	1.374	85.5	.367	1.126	16.7	186.2	.713D	1.538	86.4	.646	6.2	.0	251.7	.179
4-6530	4-6740	.095	208.2	-4.3	.9	.731	99.6	.245	1.298	213.5	379.7	.980	1.616D	93.8	1.117	.9	31.0	92.5	.139
		9.80	6.01	3.85	3.79	7.19	2.16	11.83	2/1/1	78.7	50.2	30.7	.774	2.335	42.9	251.6	26.8	129.9D	1.033
4-6140	4-6320.1	.149	99.9	18.5	-.8	.864	86.4	.265	.791	169.9	445.4	.581	1.000	104.5	1.231	-3.4	-12.6	320.3	.322
4-6320.1	4-6530	.322	349.3	-10.5	-2.5	1.370	78.7	.394	1.105	41.0	187.2	.670D	1.541	85.4	.633	.7	-19.2	244.3	.173
4-6530	4-6740	.095	208.2	-4.3	.9	.731	99.6	.245	1.298	213.5	379.7	.980	1.616D	93.8	1.117	.9	31.0	92.5	.139
		9.85	6.19	4.03	3.66	7.06	2.16	11.83	2/1/1	82.1	50.2	28.5	.581	4.068	12.7	244.0	-4.2	105.0D	1.783
4-6150	4-6305.4	.148	59.3	24.6	.7	.880	94.0	.238	.812	193.2	434.9	.619	1.006D	102.2	1.242	-3.7	-15.9	301.6	.283
4-6305.4	4-6530	.283	353.1	-42.6	-8.0	1.374	85.7	.366	1.126	16.2	186.2	.714D	1.538	86.5	.646	6.6	1.3	251.9	.181
4-6530	4-6750	.095	207.6	-24.6	-1.6	.726	98.9	.246	1.284	210.0	386.3	.969	1.600D	95.1	1.116	3.4	47.5	94.9	.163 *
		10.02	6.19	4.03	3.83	7.23	2.16	12.10	2/1/1	78.8	46.6	31.0	.750	2.322	44.8	253.0	27.9	130.9D	.992
4-6150	4-6318.4	.140	87.0	19.4	-.6	.864	90.1	.256	.794	180.2	443.0	.591	.997D	103.8	1.234	-3.3	-12.7	318.6	.308
4-6318.4	4-6530	.308	349.2	-11.9	-2.7	1.371	79.6	.389	1.109	38.0	187.1	.677D	1.540	85.5	.635	1.0	-16.4	245.3	.172
4-6530	4-6750	.095	207.6	-24.6	-1.6	.726	98.9	.246	1.284	210.0	386.3	.969	1.600D	95.1	1.116	3.4	47.5	94.9	.163
		9.72	6.10	3.94	3.62	7.02	2.16	12.10	2/1/1	81.3	46.6	29.8	.633	3.894	12.9	243.7	-1.6	107.5D	1.831
4-6160	4-6318.6	.151	78.7	19.1	-.7	.865	93.1	.259	.798	189.0	442.2	.592	1.005D	103.9	1.236	-3.1	-12.2	319.5	.310
4-6318.6	4-6530	.310	349.2	-11.7	-2.7	1.371	79.5	.390	1.108	38.4	187.0	.676D	1.541	85.5	.635	.9	-16.5	245.2	.172
4-6530	4-6760	.106	228.1	9.7	3.8	.720	98.0	.247	1.271	206.2	392.6	.956	1.585D	96.3	1.114	-2.0	9.7	97.4	.167
		10.01	6.39	4.06	3.62	7.02	2.33	12.14	2/1/2	81.4	37.2	29.1	.626	3.986	12.4	244.2	-1.0	107.6D	1.869
4-6170	4-6319.9	.173	75.4	18.5	-.9	.866	96.0	.266	.803	196.8	442.3	.588	1.019D	104.4	1.240	-2.9	-11.1	321.6	.320
4-6319.9	4-6530	.320	349.3	-10.7	-2.5	1.370	78.8	.393	1.106	40.6	187.2	.671D	1.541	85.4	.633	.8	-19.1	244.4	.175
4-6530	4-6770	.101	233.1	-.4	2.6	.714	97.0	.250	1.257	202.2	398.7	.942	1.571D	97.4	1.111	-.6	18.0	102.9	.176
		10.25	6.57	4.33	3.65	7.05	2.25	12.26	2/1/2	82.0	30.0	27.2	.588	4.257	11.3	245.3	-.9	106.7D	1.914
4-6180	4-6321.9	.202	75.8	18.0	-1.1	.869	98.8	.283	.810	203.9	442.7	.581	1.040D	105.2	1.244	-2.7	-9.6	324.7	.336
4-6321.9	4-6530	.336	349.6	-9.3	-2.3	1.369	77.8	.399	1.102	44.0	187.4	.662D	1.542	85.1	.630	.5	-19.8	243.3	.175
4-6530	4-6780	.103	240.5	-5.0	2.3	.707	95.9	.254	1.243	197.9	404.6	.927	1.558D	98.6	1.109	-.5	19.4	108.9	.189
		10.71	7.01	4.72	3.70	7.10	2.29	12.43	2/1/2	82.9	25.1	24.6	.533	4.697	9.7	247.0	-.6	105.2D	1.969
4-6190	4-6324.8	.236	78.6	17.6	-1.5	.874	101.7	.303	.820	210.2	443.4	.571	1.068D	106.2	1.250	-2.3	-7.7	328.4	.357
4-6324.8	4-6530	.357	350.2	-8.0	-2.1	1.368	76.6	.407	1.096	48.3	187.7	.650D	1.542	84.8	.627	.3	-20.4	241.8	.179
4-6530	4-6790	.109	248.3	-8.4	2.1	.701	94.6	.260	1.229	193.5	410.4	.910	1.548D	99.7	1.105	-.4	19.4	115.3	.203
		11.41	7.62	5.25	3.78	7.18	2.38	12.62	2/1/2	84.2	20.9	21.6	.470	5.342	8.0	249.4	.7	103.6D	2.043

STOPOVER TIME = 0 DAYS — 1986 OUTBOUND SWINGBY — MISSION DURATION = 600 DAYS

MARS ARRIVAL DATE = 2446530

9 APR 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-6200	4-6327.2	.275	83.1	17.3	-1.9	.882	104.7	.328	.832	216.0	444.2	.560	1.105D	107.5	1.258	-1.6	-5.6	332.8	.364
4-6327.2	4-6530	.384	351.2	-6.7	-2.0	1.366	75.0	.418	1.089	53.2	188.0	.634D	1.544	84.3	.622	.0	-21.0	240.0	.184
4-6530	4-6800	.117	256.0	-11.1	2.0	.695	93.3	.267	1.216	189.1	416.1	.892	1.540D	100.9	1.101	-.3	16.6	122.2	.218
		12.32	8.43	5.90	3.89	7.29	2.53	12.84	2/1/2	85.7	17.2	18.4	.407	6.271	7.2	252.4	3.6	101.9D	2.146
MARS ARRIVAL DATE = 2446540 (19 APR 1986)																			
4-6130	4-6308.1	.134	83.0	25.5	.3	.877	87.6	.241	.802	172.5	438.6	.609	.995	102.7	1.237	-5.4	-14.4	304.4	.289
4-6308.1	4-6540	.289	352.3	-40.8	-7.9	1.373	84.8	.368	1.122	19.6	190.4	.710D	1.535	84.1	.652	6.4	1.4	248.1	.180
4-6540	4-6730	.108	200.5	-.7	1.1	.747	101.6	.250	1.319	221.8	372.8	.989	1.649D	92.6	1.121	.8	30.3	92.5	.131
		10.04	6.24	3.87	3.80	7.20	2.37	11.75	2/1/1	87.3	60.0	49.2	.722	2.403	44.0	253.8	29.2	127.5D	1.013
4-6140	4-6308.4	.132	73.8	24.8	.3	.876	90.3	.238	.803	181.1	437.6	.612	.995D	102.5	1.238	-3.5	-14.8	305.3	.285
4-6308.4	4-6540	.285	352.3	-39.2	-7.6	1.373	84.6	.368	1.122	20.1	190.4	.709D	1.535	84.1	.652	6.0	.2	247.9	.178
4-6540	4-6740	.104	204.3	-5.3	.7	.742	100.9	.249	1.305	218.6	379.6	.980	1.630D	93.9	1.119	1.2	32.9	92.8	.142
		9.90	6.15	3.85	3.75	7.15	2.30	11.86	2/1/1	87.3	50.7	47.7	.741	2.474	42.2	253.0	27.7	127.2D	1.092
4-6140	4-6321.9	.154	103.4	17.4	-1.0	.862	85.7	.271	.789	168.3	436.6	.575	1.002	104.9	1.230	-3.4	-12.4	322.6	.329
4-6321.9	4-6540	.329	350.8	-9.9	-2.4	1.369	78.3	.396	1.102	42.7	191.2	.665D	1.539	82.8	.640	.8	-18.9	240.0	.175
4-6540	4-6740	.104	204.3	-5.3	.7	.742	100.9	.249	1.305	218.6	379.6	.980	1.630D	93.9	1.119	1.2	32.9	92.8	.142
		10.08	6.40	4.10	3.69	7.09	2.30	11.86	2/1/1	91.4	50.7	27.7	.556	4.174	12.6	245.7	-5.0	103.6D	1.765
4-6150	4-6308.2	.144	64.8	23.7	.4	.877	93.3	.241	.808	190.4	436.6	.613	1.003D	102.5	1.240	-3.5	-15.0	305.5	.287
4-6308.2	4-6540	.287	352.3	-40.2	-7.8	1.373	84.7	.368	1.122	19.8	190.4	.709D	1.535	84.1	.652	6.2	.9	248.0	.179
4-6540	4-6750	.101	206.8	-16.5	-.7	.736	100.1	.249	1.290	214.9	386.0	.969	1.611D	95.1	1.117	2.5	41.3	95.5	.158
		10.01	6.23	3.98	3.78	7.18	2.25	12.04	2/1/1	87.3	44.9	47.7	.729	2.472	43.4	254.0	28.5	127.9D	1.074
4-6150	4-6319.7	.141	69.8	18.8	-.8	.863	89.7	.258	.793	179.0	443.6	.588	.998	104.0	1.233	-3.2	-12.5	320.4	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.8	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6750	.101	206.8	-16.5	-.7	.736	100.1	.249	1.290	214.9	386.0	.969	1.611D	95.1	1.117	2.5	41.3	95.5	.158
		9.82	6.20	3.95	3.62	7.02	2.25	12.04	2/1/1	90.4	44.9	29.4	.619	3.942	12.7	245.1	-1.4	106.9D	1.821
4-6170	4-6320.9	.171	77.1	18.1	-.9	.864	95.6	.269	.802	195.8	442.8	.586	1.017D	104.5	1.239	-2.9	-10.9	322.9	.321
4-6320.9	4-6540	.321	350.6	-10.7	-2.5	1.370	78.8	.393	1.104	40.9	191.1	.670D	1.539	83.0	.641	.7	-18.4	240.5	.173
4-6540	4-6770	.110	231.2	7.0	3.8	.723	98.3	.251	1.259	206.8	398.1	.943	1.575D	97.4	1.112	-2.0	10.5	102.6	.178
		10.36	6.71	4.30	3.66	7.06	2.40	12.29	2/1/2	90.9	32.2	27.2	.584	4.257	11.1	246.7	-.5	106.5D	1.902
4-6180	4-6322.8	.199	77.1	17.7	-1.2	.867	98.5	.283	.808	202.9	443.3	.579	1.037D	105.2	1.243	-2.6	-9.4	325.9	.336
4-6322.8	4-6540	.336	350.9	-9.3	-2.3	1.369	77.8	.399	1.100	44.2	191.3	.661D	1.540	82.7	.638	.5	-19.2	239.5	.176
4-6540	4-6780	.106	237.3	-1.0	2.8	.716	97.2	.253	1.244	222.4	403.9	.929	1.559D	98.4	1.109	-1.1	16.0	108.9	.188
		10.71	7.03	4.68	3.72	7.12	2.34	12.41	2/1/2	91.8	26.1	24.7	.531	4.675	9.6	248.4	-.3	105.0D	1.953
4-6190	4-6325.2	.235	79.8	17.4	-1.6	.872	101.4	.303	.817	209.3	443.9	.570	1.064D	106.5	1.249	-2.2	-7.6	329.6	.357
4-6325.2	4-6540	.357	351.6	-7.9	-2.1	1.368	76.5	.407	1.095	48.3	191.5	.649D	1.541	82.3	.635	.2	-19.9	238.1	.180
4-6540	4-6790	.109	245.1	-5.7	2.4	.709	96.0	.257	1.229	197.9	409.5	.913	1.546D	99.5	1.105	-.7	17.5	115.6	.200
		11.38	7.57	5.19	3.80	7.20	2.38	12.58	2/1/2	92.8	21.7	21.8	.471	5.290	7.9	250.7	.8	103.4D	2.021
4-6200	4-6328.1	.271	84.0	17.0	-2.0	.880	104.4	.326	.829	215.1	444.7	.559	1.100D	107.5	1.258	-1.7	-5.5	333.9	.384
4-6328.1	4-6540	.384	352.7	-6.6	-1.9	1.366	75.0	.417	1.088	53.2	191.7	.634D	1.543	81.9	.630	-.0	-20.5	236.6	.185
4-6540	4-6800	.114	253.3	-9.1	2.2	.702	94.6	.263	1.215	193.3	415.1	.896	1.535D	100.6	1.101	-.6	17.1	122.5	.213
		12.24	8.31	5.83	3.93	7.32	2.48	12.77	2/1/2	94.1	16.0	18.6	.409	6.172	7.0	253.7	3.4	101.8D	2.114
MARS ARRIVAL DATE = 2446550 (29 APR 1986)																			
4-6130	4-6310.6	.139	88.4	24.1	.1	.875	86.6	.247	.799	170.2	440.4	.602	.997	103.2	1.235	-3.4	-13.6	307.6	.297
4-6310.6	4-6550	.297	352.4	-40.1	-8.1	1.373	84.0	.370	1.120	22.4	194.3	.706D	1.535	81.9	.660	6.4	1.9	244.9	.183
4-6550	4-6730	.121	198.1	-1.6	1.0	.760	102.9	.258	1.332	227.3	373.0	.989	1.675D	92.7	1.124	1.0	31.6	92.4	.136
		10.40	6.52	3.92	3.88	7.27	2.60	11.79	2/1/1	95.4	60.0	47.1	.680	2.503	44.4	256.1	30.4	125.6D	1.021
4-6140	4-6311.0	.133	79.9	23.5	.1	.873	89.5	.243	.800	178.5	439.3	.606	.995	102.9	1.236	-3.4	-14.2	308.7	.292
4-6311.0	4-6550	.292	352.5	-37.6	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.0	244.4	.180
4-6550	4-6740	.116	201.6	-5.6	.5	.753	102.2	.255	1.315	223.9	379.6	.980	1.651D	93.9	1.122	1.3	33.9	93.0	.145
		10.18	6.37	3.86	3.81	7.21	2.50	11.90	2/1/1	95.6	50.9	45.2	.707	2.600	41.5	254.7	28.3	124.8D	1.131
4-6140	4-6324.2	.165	107.7	18.1	-1.2	.860	84.8	.279	.787	166.2	448.2	.567	1.006	105.4	1.229	-3.4	-12.1	325.5	.339
4-6324.2	4-6550	.339	352.7	-8.9	-2.3	1.369	77.6	.401	1.100	44.6	194.9	.660D	1.541	80.4	.647	.4	-19.0	236.3	.181
4-6550	4-6740	.116	201.6	-5.6	.5	.753	102.2	.255	1.315	223.9	379.6	.980	1.651D	93.9	1.122	1.3	33.9	93.0	.145
		10.52	6.70	4.20	3.82	7.22	2.50	11.90	2/1/1	100.0	50.9	26.9	.522	4.296	12.7	247.9	-6.7	102.2D	1.721
4-6150	4-6311.0	.141	70.6	22.7	.1	.873	92.4	.244	.804	187.6	438.4	.608	1.000D	102.8	1.238	-3.4	-14.3	309.2	.292
4-6311.0	4-6550	.292	352.5	-37.7	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.1	244.5	.180
4-6550	4-6750	.111	204.6	-13.5	-.4	.747	101.4	.254	1.298	220.1	385.9	.969	1.627D	95.1	1.120	2.3	39.4	95.8	.159
		10.18	6.37	3.95	3.81	7.21	2.42	12.05	2/1/1	95.6	44.6	44.9	.706	2.619	41.8	255.1	28.6	125.1D	1.142
4-6150	4-6321.2	.143	93.4	17.9	-.9	.861	89.1	.262	.791	177.4	444.8	.584	.998	104.3	1.232	-3.2	-12.3	322.4	.316
4-6321.2	4-6550	.316	352.1	-11.3	-2.6	1.370	79.1	.392	1.106	39.9	194.8	.672D	1.539	80.9	.651	.8	-17.6	237.8	.176
4-6550	4-6750	.111	204.6	-13.5	-.4	.747	101.4	.254	1.298	220.1	385.9	.969	1.627D	95.1	1.120	2.3	39.4	95.8	.159
		10.10	6.39	3.97	3.72	7.12	2.42	12.05	2/1/1	98.9	44.6	29.0	.601	3.988	12.3	246.9	-1.9	106.1D	1.797
4-6160	4-6310.6	.164	63.7	21.9	.1	.876	95.6	.252	.811	197.2	437.5	.607	1.015D	103.1	1.243	-3.5	-14.1	308.9	.299
4-6310.6	4-6550	.299	352.4	-40.7	-8.2	1.373	84.0	.370	1.120	22.2	194.3	.706D	1.535	81.9	.660	6.5	2.3	245.0	.184
4-6550	4-6760	.133	197.6	-45.1	-5.9	.740	100.8	.253	1.281	216.0	391.8	.957	1.604D	96.3	1.117	7.7	66.4	100.4	.217
		10.93	7.04	4.21	3.89	7.29	2.82	12.82	2/1/1	95.4	52.3	46.2	.673	2.551	45.5	257.7	31.4	126.6D	1.044
4-6160	4-6321.0	.149	83.7	18.1	-.9	.861	92.3	.262	.795	186.6	443.6	.587	1.003D	104.2	1.234	-3.1	-11.8	322.6	.314
4-6321.0	4-6550	.314	352.1	-11.6	-2.7	1.370	79.2	.391	1.106	39.4	194.8	.674D	1.539	80.9	.651	.9	-17.4	237.9	.176
4-6550	4-6760	.133	197.6	-45.1	-5.9	.740	100.8	.253	1.281	216.0	391.8	.957	1.604D	96.3	1.117	7.7	66.4	100.4	.217
		10.57	6.86	4.04	3.71	7.11	2.82	12.82	2/1/1	98.8	52.3	28.8	.609	4.015	12.1	247.3	-.4	106.9D	1.835
4-6170	4-6322.0	.169	79.2	17.7	-1.0	.862	95.3	.270	.799	194.6	443.5	.584	1.015D	104.6	1.237	-2.9	-10.7	324.5	.322
4-6322.0	4-6550	.322	352.2	-10.6	-2.5	1.370	78.7	.394	1.104	41.2	194.8	.669D	1.540	80.8	.650	.7	-18.0	237.4	.177
4-6550	4-6770	.141	232.8	20.8	7.0	.732	99.6	.253	1.263	211.7	397.7	.944	1.583D	97.3	1.113	-5.3	-7.4	100.3	.200
		10.99	7.24	4.27	3.74	7.14	2.97	12.58	2/1/2	99.2	41.2	27.3	.579	4.240	11.0	248.3	-.3	106.2D	1.876
4-6180	4-6323.9	.196	78.6	17.3	-1.3	.865	98.1	.284	.806	201.7	443.9	.577	1.034D	105.3	1.242	-2.6	-9.2	327.4	.337
4-6323.9	4-6550	.337	352.6	-9.1	-2.3	1.369	77.8	.400	1.101	44.3	194.9	.661D	1.541	80.5	.647	.4	-18.9	236.5	.180
4-6550	4-6780	.115	234.7	4.4	3.7	.725	98.5	.254	1.247	207.1	403.3	.930	1.564D	98.4	1.110	-2.0	10.7	108.6	.189
		10.93	7.13	4.64	3.81	7.21	2.49	12.43	2/1/2	99.9	28.1	24.9	.530	4.651	9.4	249.9	-.3	104.9D	1.923
4-6190	4-6326.5	.229	80.9	17.1	-1.6	.869	101.0	.302	.814	208.2	444.5	.568	1.060D	106.3	1.247	-2.2	-7.4	331.0	.357
4-6326.5	4-6550	.357	353.3	-7.6	-2.0	1.368	76.5	.407	1.098	48.3	195.0	.649D	1.543	80.1	.644	.1	-19.6	235.3	.184
4-6550	4-6790	.112	241.6	-2.4	2.9	.718	97.5	.257	1.231	202.5	408.8	.915	1.547D	99.4	1.106	-1.2	14.4	115.5	.199
		11.47	7.57	5.13	3.91	7.30	2.44	12.56	2/1/2	100.8	22.8	22.1	.471	5.209	7.7	252.3	.6	103.3D	1.984
4-6200	4-6329.1	.266	85.0	16.8	-2.1	.877	104.0	.325	.826	214.0	445.2	.557	1.094D	107.5	1.254	-1.7	-5.3	335.5	.383
4-6329.1	4-6550	.383	354.4	-6.3	-1.8	1.366	75.1	.416	1.090	53.0	195.2	.635D	1.545	79.6	.640	-.1	-20.5	234.0	.190
4-6550	4-6800	.114	249.8	-6.8	2.5	.711	96.0	.261	1.215	197.7	414.3	.899	1.532D	100.4	1.101	-.9	15.1	122.6	.210
		12.27	8.23	5.75	4.04	7.43	2.48	12.72	2/1/2	101.9	18.9	19.1	.410	6.036	6.6	255.2	3.0	101.6D	2.067
MARS ARRIVAL DATE = 2446560 (9 MAY 1986)																			
4-6130	4-6313.2	.146	93.5	22.8	-.1	.873	86.0	.254	.797	167.9	442.2	.594	.999	103.7	1.234	-3.4	-13.4	310.8	.307
4-6313.2	4-6560	.307	353.3	-39.8	-8.3	1.373	83.3	.373	1.120	24.8	198.0	.702D	1.538	79.9	.668	6.5	2.1	242.5	.190
4-6560	4-6730	.138	196.6	-2.5	.8	.774	104.3	.266	1.350	233.0	373.4	.986	1.712D	92.8	1.126	1.1	32.4	92.1	.141
		10.94	6.91	4.00	4.04	7.43	2.91	11.85	2/1/1	102.8	59.8	45.6	.637	2.579	45.0	258.8	31.8	123.9D	1.006
4-6140	4-6313.6	.136	85.9	22.2	-.2	.870	88.7	.248	.797	176.0	441.0	.599	.995	103.3	1.235	-3.4	-13.7	312.1	.299
4-6313.6	4-6560	.299	353.5	-36.4	-7.5	1.373	83.1	.374	1.119	25.5	198.0	.701D	1.538	79.8	.668	5.7	-.4	241.6	.186
4-6560	4-6740	.131	199.8	-5.8	.4	.767	105.6	.264	1.330	229.4	379.8	.979	1.681D	94.1	1.126	1.4	34.3	92.9	.150
		10.62	6.87	3.89	3.95	7.34	2.78	11.95	2/1/1	103.2	50.9	43.4	.672	2.704	41.1	256.7	28.8	122.8D	1.148
4-6140	4-6327.2	.176	113.0	14.4	-1.5	.858	83.5	.291	.784	163.5	450.4	.556	1.011	106.2	1.228	-3.5	-11.7	329.3	.355
4-6327.2	4-6560	.355	355.3	-7.4	-2.0	1.369	76.7	.406	1.099	47.7	198.3	.651D	1.546	78.2	.655	.0	-19.5	233.5	.191
4-6560	4-6740	.131	199.8	-5.8	.4	.767	105.6	.264	1.330	229.4	379.8	.979	1.681D	94.1	1.126	1.4	34.3	92.9	.150
		11.20	7.14	4.36	4.06	7.46	2.78	11.95	2/1/1	107.8	50.9	26.0	.478	4.482	13.7	250.7	-9.5	100.1D	1.680

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2446560
9 MAY 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6150	4-6313.8	.140	76.6	21.6	-.2	.870	91.6	.248	.800	184.8	440.1	.602	.999D	103.2	1.237	-3.3	-13.6	312.7	.297
4-6313.8	4-6560	.297	353.6	-35.5	-7.3	1.373	83.1	.374	1.119	25.7	198.0	.701D	1.538	79.8	.668	5.5	-1.0	241.6	.185
4-6560	4-6750	.125	202.9	-11.8	-.3	.759	102.8	.261	1.310	225.5	385.9	.969	1.651D	95.3	1.123	2.1	38.3	95.9	.162
		10.52	6.60	3.93	3.93	7.32	2.66	12.09	2/1/1	103.2	44.4	42.6	.680	2.750	40.2	256.5	28.3	122.7D	1.190
4-6150	4-6323.2	.146	97.8	16.8	-1.1	.859	88.4	.266	.789	175.5	446.0	.579	.999	104.6	1.230	-3.2	-12.0	325.0	.322
4-6323.2	4-6560	.322	354.2	-10.4	-2.5	1.371	78.7	.395	1.106	41.1	198.3	.669D	1.543	78.8	.660	.6	-17.9	235.2	.164
4-6560	4-6750	.125	202.9	-11.8	-.3	.759	102.8	.261	1.310	225.5	385.9	.969	1.651D	95.3	1.123	2.1	38.3	95.9	.162
		10.55	6.66	4.00	3.89	7.29	2.66	12.09	2/1/1	106.6	44.4	28.7	.578	4.040	12.0	249.0	-3.1	105.0D	1.759
4-6160	4-6313.4	.158	68.8	21.0	-.2	.872	94.7	.253	.806	194.3	439.2	.602	1.011D	103.4	1.240	-3.3	-13.3	312.7	.302
4-6313.4	4-6560	.302	353.4	-37.8	-7.8	1.373	83.2	.373	1.120	25.2	198.0	.702D	1.538	79.8	.668	6.1	.6	242.1	.188
4-6560	4-6760	.124	203.6	-26.8	-2.6	.751	101.9	.258	1.290	221.2	391.7	.957	1.623D	96.3	1.119	4.3	50.2	101.1	.165
		10.78	6.80	4.15	3.98	7.38	2.65	12.38	2/1/1	103.0	43.4	43.6	.659	2.694	43.3	258.7	30.9	123.8D	1.116
4-6160	4-6322.5	.149	87.0	17.4	-1.0	.859	91.8	.264	.793	185.0	444.6	.583	1.002D	104.4	1.233	-3.0	-11.5	324.7	.318
4-6322.5	4-6560	.318	354.1	-11.1	-2.6	1.371	79.0	.393	1.107	40.1	198.2	.672D	1.543	78.9	.660	.7	-17.4	235.5	.183
4-6560	4-6760	.124	203.6	-26.8	-2.6	.751	101.9	.258	1.290	221.2	391.7	.957	1.623D	96.3	1.119	4.3	50.2	101.1	.165
		10.55	6.66	4.03	3.87	7.27	2.65	12.38	2/1/1	106.4	43.4	28.8	.596	4.020	11.7	249.2	-.8	106.3D	1.801
4-6180	4-6325.2	.193	80.5	16.9	-1.4	.862	97.7	.284	.803	200.4	444.6	.575	1.031D	105.4	1.240	-2.5	-9.0	329.1	.338
4-6325.2	4-6560	.338	354.6	-8.8	-2.2	1.370	77.7	.401	1.103	44.4	198.3	.660D	1.545	78.5	.657	.3	-18.8	234.4	.187
4-6560	4-6780	.133	233.6	12.5	5.5	.735	99.9	.257	1.252	212.1	402.9	.930	1.573D	98.4	1.111	-3.8	.8	107.2	.199
		11.38	7.41	4.59	3.97	7.37	2.83	12.57	2/1/2	107.2	33.0	25.3	.527	4.570	9.1	251.8	-.6	104.6D	1.682
4-6190	4-6327.5	.225	82.4	16.7	-1.7	.867	100.6	.302	.811	206.9	445.2	.566	1.036D	106.3	1.245	-2.2	-7.2	332.6	.357
4-6327.5	4-6560	.357	355.4	-7.3	-1.9	1.369	76.5	.408	1.098	48.2	198.4	.650D	1.547	78.1	.655	.0	-19.6	233.4	.192
4-6560	4-6790	.120	236.4	1.7	5.6	.727	98.7	.258	1.234	207.3	406.3	.916	1.552D	99.3	1.107	-2.0	10.3	115.1	.200
		11.71	7.64	5.06	4.07	7.47	2.58	12.58	2/1/2	107.9	24.6	22.6	.471	5.107	7.4	254.0	.1	103.1D	1.936
4-6200	4-6330.3	.261	86.2	15.5	-2.1	.873	103.5	.324	.822	212.8	445.9	.556	1.088D	107.5	1.252	-1.7	-5.2	336.8	.362
4-6330.3	4-6560	.362	356.5	-6.0	-1.7	1.367	75.1	.418	1.092	52.7	198.4	.635D	1.549	77.6	.651	-.3	-20.3	232.3	.198
4-6560	4-6800	.117	246.0	-4.0	2.9	.720	97.4	.260	1.217	202.4	413.6	.901	1.534D	100.3	1.102	-1.4	12.7	122.5	.209
		12.41	8.20	5.67	4.21	7.61	2.53	12.70	2/1/2	108.8	20.0	19.6	.412	5.875	6.1	256.9	2.2	101.5D	2.010

MARS ARRIVAL DATE = 2446570 (19 MAY 1986)

4-6130	4-6315.7	.154	98.4	21.0	-.4	.871	85.0	.263	.794	165.7	444.0	.586	1.003	104.3	1.233	-3.4	-13.0	314.0	.316
4-6315.7	4-6570	.316	354.7	-39.9	-8.6	1.374	82.8	.377	1.121	26.8	201.4	.699D	1.543	78.0	.677	6.8	2.3	241.0	.201
4-6570	4-6730	.158	195.9	-3.0	.8	.790	105.8	.282	1.376	239.0	373.9	.988	1.763D	93.0	1.134	1.2	32.9	91.5	.149
		11.66	7.40	4.09	4.27	7.67	3.32	11.94	2/1/1	109.2	59.4	44.7	.594	2.631	46.1	262.1	33.2	122.7D	.969
4-6140	4-6316.2	.140	91.6	20.8	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.5	.307
4-6316.2	4-6570	.307	355.1	-35.7	-7.6	1.374	82.6	.377	1.120	27.5	201.4	.698D	1.543	78.0	.677	5.8	-.8	240.1	.195
4-6570	4-6740	.149	198.8	-6.1	.4	.782	105.1	.276	1.351	235.2	380.1	.978	1.724D	94.3	1.131	1.5	34.4	92.7	.157
		11.23	7.08	3.93	4.16	7.55	3.14	12.03	2/1/1	109.9	50.8	42.2	.637	2.778	41.2	259.2	29.5	121.3D	1.132
4-6140	4-6331.6	.200	119.7	12.0	-2.0	.854	81.3	.311	.780	159.7	453.7	.537	1.023	107.6	1.226	-3.7	-11.3	334.8	.361
4-6331.6	4-6570	.361	358.9	-5.4	-1.6	1.368	75.1	.420	1.096	52.5	201.5	.636D	1.555	75.8	.662	-.4	-20.6	231.5	.208
4-6570	4-6740	.149	198.8	-6.1	.4	.782	105.1	.276	1.351	235.2	380.1	.978	1.724D	94.3	1.131	1.5	34.4	92.7	.157
		12.28	7.83	4.69	4.45	7.84	3.14	12.03	2/1/1	114.9	50.8	24.6	.413	4.703	16.4	254.6	-13.9	97.0D	1.530
4-6150	4-6316.4	.140	82.5	20.4	-.5	.867	90.7	.252	.797	182.2	441.7	.596	.998D	103.5	1.235	-3.3	-13.1	316.2	.303
4-6316.4	4-6570	.303	355.3	-33.8	-7.1	1.374	82.4	.378	1.120	27.9	201.4	.697D	1.543	78.0	.677	5.3	-2.1	239.8	.194
4-6570	4-6750	.141	201.9	-10.8	-.2	.773	104.2	.271	1.327	231.1	386.0	.968	1.686D	95.5	1.127	2.1	37.3	95.9	.167
		11.03	6.92	3.93	4.11	7.51	2.98	12.15	2/1/1	110.1	44.2	41.0	.653	2.853	39.1	258.4	28.1	120.7D	1.211
4-6150	4-6325.7	.151	103.1	15.4	-1.3	.856	87.4	.273	.786	173.1	447.6	.571	1.000	105.1	1.229	-3.2	-11.7	328.2	.331
4-6325.7	4-6570	.331	356.7	-9.0	-2.2	1.371	78.1	.400	1.107	42.8	201.5	.664D	1.550	76.9	.669	.3	-18.7	233.6	.195
4-6570	4-6750	.141	201.9	-10.8	-.2	.773	104.2	.271	1.327	231.1	386.0	.968	1.686D	95.5	1.127	2.1	37.3	95.9	.167
		11.18	7.04	4.05	4.15	7.54	2.98	12.15	2/1/1	113.5	44.2	28.2	.549	4.102	12.0	251.5	-5.5	103.5D	1.704
4-6160	4-6316.3	.154	74.1	20.0	-.5	.868	93.9	.256	.802	191.4	440.8	.597	1.007D	103.6	1.238	-3.2	-12.7	316.4	.306
4-6316.3	4-6570	.306	355.2	-35.2	-7.4	1.374	82.5	.377	1.120	27.6	201.4	.697D	1.543	78.0	.677	5.6	-1.2	240.0	.195
4-6570	4-6760	.136	204.2	-20.1	-1.6	.764	103.3	.266	1.303	226.7	391.7	.956	1.650D	96.5	1.123	3.4	44.3	101.1	.183
		11.11	6.97	4.09	4.14	7.54	2.87	12.34	2/1/1	109.9	41.0	41.5	.642	2.821	41.2	259.9	30.2	121.5D	1.169
4-6160	4-6324.4	.149	91.2	16.5	-1.2	.857	91.1	.267	.790	183.1	445.7	.579	1.001D	104.6	1.232	-3.0	-11.3	327.2	.322
4-6324.4	4-6570	.322	356.4	-10.2	-2.4	1.372	78.7	.396	1.109	40.9	201.5	.669D	1.549	77.1	.670	.5	-18.0	234.0	.193
4-6570	4-6760	.136	204.2	-20.1	-1.6	.764	103.3	.266	1.303	226.7	391.7	.956	1.650D	96.5	1.123	3.4	44.3	101.1	.183
		11.00	6.90	4.03	4.09	7.49	2.87	12.34	2/1/1	113.2	41.0	28.8	.580	4.027	11.3	251.4	-2.2	105.4D	1.757
4-6170	4-6315.8	.163	68.8	19.8	-.5	.873	97.3	.267	.811	201.1	439.9	.595	1.028D	104.1	1.244	-3.1	-12.0	316.2	.316
4-6315.8	4-6570	.316	354.7	-39.3	-8.4	1.374	82.7	.377	1.121	26.9	201.4	.699D	1.543	78.0	.677	6.6	1.8	240.9	.200
4-6570	4-6770	.173	196.5	-51.1	-8.6	.755	102.3	.263	1.280	222.0	397.1	.944	1.617D	97.5	1.118	10.3	72.0	109.1	.262
		12.36	8.11	4.45	4.25	7.65	3.65	13.55	2/1/1	109.3	54.1	43.6	.601	2.693	46.8	263.9	34.8	123.2D	1.017
4-6170	4-6325.1	.164	84.7	16.5	-1.3	.858	94.2	.272	.794	191.5	445.3	.578	1.011D	104.9	1.234	-2.8	-10.3	328.5	.326
4-6325.1	4-6570	.326	356.6	-9.5	-2.3	1.371	78.4	.398	1.108	41.9	201.5	.667D	1.549	77.0	.670	.4	-18.4	233.8	.194
4-6570	4-6770	.173	196.5	-51.1	-8.6	.755	102.3	.263	1.280	222.0	397.1	.944	1.617D	97.5	1.118	10.3	72.0	109.1	.262
		11.98	7.87	4.21	4.12	7.51	3.65	13.55	2/1/1	113.3	54.1	27.7	.564	4.178	10.3	252.3	-1.5	105.3D	1.794
4-6180	4-6326.7	.189	82.8	16.4	-1.5	.860	97.1	.284	.800	198.8	445.4	.573	1.027D	105.5	1.238	-2.5	-8.8	331.0	.339
4-6326.7	4-6570	.339	357.0	-8.2	-2.1	1.371	77.6	.403	1.105	44.5	201.5	.660D	1.551	76.7	.668	.1	-19.2	233.2	.197
4-6570	4-6780	.192	237.7	27.2	10.9	.746	101.3	.261	1.259	217.3	402.6	.930	1.588D	98.4	1.113	-9.4	-21.6	101.7	.256
		12.81	8.62	4.54	4.19	7.58	4.08	13.45	2/1/2	113.7	48.7	25.7	.524	4.498	8.8	253.8	-1.5	104.3D	1.832
4-6190	4-6328.9	.220	84.1	16.3	-1.8	.864	100.1	.301	.807	205.4	445.9	.564	1.051D	106.4	1.243	-2.1	-7.0	334.5	.357
4-6328.9	4-6570	.357	357.7	-6.7	-1.8	1.370	76.5	.410	1.101	48.1	201.5	.650D	1.553	76.4	.665	-.2	-19.9	232.4	.201
4-6570	4-6790	.134	236.2	7.2	4.8	.738	100.1	.260	1.239	212.3	407.8	.917	1.562D	99.3	1.108	-3.3	3.8	114.1	.207
		12.13	7.84	4.99	4.30	7.69	2.85	12.67	2/1/2	114.2	28.1	23.1	.471	4.989	7.1	256.0	-.8	102.9D	1.880
4-6200	4-6331.6	.255	87.6	16.1	-2.2	.870	103.1	.323	.816	211.4	446.6	.554	1.081D	107.5	1.250	-1.6	-5.1	336.6	.381
4-6331.6	4-6570	.381	358.9	-5.4	-1.6	1.368	75.2	.420	1.096	52.4	201.4	.636D	1.555	75.9	.662	-.4	-20.6	231.5	.208
4-6570	4-6800	.125	242.4	-.8	3.4	.729	98.8	.261	1.221	207.3	413.0	.902	1.539D	100.2	1.103	-2.0	9.4	122.1	.210
		12.68	8.24	5.57	4.44	7.84	2.67	12.72	2/1/2	114.9	21.6	20.2	.414	5.696	5.4	258.8	1.0	101.3D	1.944

MARS ARRIVAL DATE = 2446580 (29 MAY 1986)

4-6140	4-6318.7	.145	97.0	19.3	-.7	.865	86.9	.261	.792	171.2	444.4	.585	.999	104.2	1.232	-3.4	-12.8	316.6	.316
4-6318.7	4-6580	.316	357.2	-35.6	-7.8	1.375	82.0	.381	1.122	29.2	204.6	.694D	1.551	76.4	.687	5.9	-1.2	239.5	.207
4-6580	4-6740	.171	198.6	-6.4	.3	.799	106.6	.292	1.380	241.2	380.5	.977	1.782D	94.6	1.138	1.6	34.3	92.4	.166
		12.04	7.61	3.99	4.43	7.82	3.61	12.14	2/1/1	115.6	50.5	41.5	.601	2.821	41.7	262.4	30.6	120.1D	1.094
4-6150	4-6319.0	.141	88.4	19.1	-.7	.864	89.9	.257	.794	179.6	443.4	.590	.997	103.9	1.233	-3.2	-12.6	319.6	.310
4-6319.0	4-6580	.310	357.5	-32.8	-7.1	1.375	81.9	.382	1.122	29.7	204.6	.694D	1.551	76.5	.687	5.2	-3.1	238.9	.204
4-6580	4-6750	.162	201.6	-10.3	-.2	.789	105.7	.284	1.350	236.9	386.3	.966	1.733D	95.7	1.133	2.0	36.5	95.9	.175
		11.71	7.35	3.94	4.36	7.76	3.40	12.24	2/1/1	116.1	44.0	40.1	.626	2.920	38.5	260.8	28.2	119.2D	1.202
4-6150	4-6328.6	.159	109.3	13.7	-1.6	.853	86.2	.282	.783	170.3	449.6	.562	1.003	105.7	1.227	-3.3	-11.3	332.0	.342
4-6328.6	4-6580	.343	359.8	-7.0	-1.8	1.372	77.4	.406	1.108	45.1	204.4	.658D	1.559	75.1	.678	-.2	-20.0	232.8	.209
4-6580	4-6750	.162	201.6	-10.3	-.2	.789	105.7	.284	1.350	236.9	386.3	.966	1.733D	95.7	1.133	2.0	36.5	95.9	.175
		12.02	7.55	4.15	4.47	7.86	3.40	12.24	2/1/1	119.4	44.0	27.7	.513	4.174	13.1	254.5	-9.0	101.6D	1.627
4-6160	4-6319.0	.151	79.5	19.0	-.7	.864	93.0	.259	.798	188.6	442.4	.591	1.004D	103.9	1.236	-3.1	-12.1	320.0	.311
4-6319.0	4-6580	.311	357.4	-33.1	-7.2	1.375	81.9	.382	1.122	29.6	204.6	.694D	1.551	76.3	.687	5.3	-2.9	239.0	.205
4-6580	4-6760	.153	204.3	-16.8	-1.2	.778	104.8	.277	1.321	232.3	391.8	.955	1.688D	96.7	1.127	2.9	41.1	101.0	.186
		11.65	7.28	4.06	4.37	7.76	3.23	12.39	2/1/1	116.1	39.8	40.1	.623	2.917	39.4	261.6	29.4	119.5D	1.195
4-6160	4-6326.7	.149	96.3	15.3	-1.4	.854	90.3	.271	.787	180.8	447.1	.573	1.000D	105.0	1.230	-3.0	-11.0	330.2	.326
4-6326.7	4-6580	.328	359.2	-8.6	-2.1	1.373	78.3	.401	1.111	42.0	204.5	.666D	1.557	75.4	.680	.2	-19.1	233.4	.205
4-6580	4-6760	.153	204.3	-16.8	-1.2	.778	104.8	.277	1.321	232.3	391.8	.955	1.688D	96.7	1.127	2.9	41.1	101.0	.186
		11.64	7.27	4.04	4.38	7.77	3.23	12.39	2/1/1	119.0	39.8	28.7	.560	4.034	11.1	253.9	-4.7	104.2D	1.700

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2446580
29 MAY 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-6170	4-6318.7	.176	73.3	18.9	-.7	.868	96.4	.268	.806	198.1	441.6	.590	1.021D	104.3	1.241	-3.0	-11.4	320.0	.319
4-6318.7	4-6580	.319	357.1	-36.5	-8.0	1.375	82.1	.381	1.123	29.1	204.6	.695D	1.550	76.4	.687	6.1	-.5	239.7	.208
4-6580	4-6770	.154	204.5	-32.1	-4.1	.768	103.8	.272	1.295	227.5	397.1	.943	1.647D	97.7	1.122	5.7	55.8	108.5	.213
		12.06	7.61	4.36	4.45	7.85	3.24	12.77	2/1/1	115.5	42.1	41.8	.592	2.806	44.5	265.0	33.9	121.0D	1.070
4-6170	4-6327.0	.162	88.5	15.7	-1.5	.855	93.5	.274	.791	189.5	446.4	.574	1.006D	105.1	1.233	-2.8	-10.0	331.0	.329
4-6327.0	4-6580	.329	359.3	-8.4	-2.0	1.372	78.2	.401	1.111	42.4	204.5	.665D	1.557	75.3	.680	.1	-19.3	233.3	.205
4-6580	4-6770	.154	204.5	-32.1	-4.1	.768	103.8	.272	1.295	227.5	397.1	.943	1.647D	97.7	1.122	5.7	55.8	108.5	.213
		11.82	7.43	4.18	4.39	7.78	3.24	12.77	2/1/1	119.1	42.1	28.0	.554	4.140	10.0	254.6	-3.3	104.3D	1.739
MARS ARRIVAL DATE = 2446590 (8 JUN 1986)																			
4-6150	4-6321.6	.143	94.1	17.8	-.9	.861	89.0	.262	.790	177.1	445.0	.583	.998	104.3	1.232	-3.2	-12.2	322.9	.317
4-6321.6	4-6590	.317	.1	-32.5	-7.2	1.376	81.5	.386	1.125	31.0	207.5	.691D	1.560	74.8	.697	5.3	-3.9	239.1	.217
4-6590	4-6750	.186	201.9	-10.2	-.2	.807	107.3	.302	1.382	242.9	386.6	.965	1.799D	96.1	1.140	2.0	35.6	95.8	.185
		12.57	7.90	3.97	4.67	8.06	3.93	12.37	2/1/1	121.2	43.8	39.6	.597	2.951	38.7	263.8	28.8	116.1D	1.166
4-6160	4-6321.6	.149	85.1	17.8	-1.0	.861	92.1	.263	.794	186.0	444.0	.585	1.002D	104.3	1.234	-3.1	-11.7	323.5	.316
4-6321.6	4-6590	.316	.1	-31.8	-7.0	1.376	81.5	.386	1.125	31.1	207.5	.691D	1.560	74.8	.697	5.1	-4.4	239.0	.216
4-6590	4-6760	.175	204.8	-15.1	-1.0	.795	106.4	.292	1.347	238.2	391.9	.953	1.740D	97.1	1.134	2.7	38.8	101.0	.193
		12.38	7.73	4.04	4.65	8.04	3.69	12.49	2/1/1	121.3	39.1	39.3	.604	2.976	38.3	265.9	28.9	118.0D	1.193
4-6160	4-6329.4	.152	102.3	13.8	-1.6	.851	89.3	.277	.783	178.1	448.8	.566	1.001	105.4	1.228	-3.0	-10.8	333.7	.335
4-6329.4	4-6590	.335	2.4	-6.4	-1.6	1.374	77.8	.406	1.114	43.5	207.3	.662D	1.567	73.8	.690	-.4	-20.8	233.7	.219
4-6590	4-6760	.175	204.8	-15.1	-1.0	.795	106.4	.292	1.347	238.2	391.9	.953	1.740D	97.1	1.134	2.7	38.8	101.0	.193
		12.48	7.76	4.07	4.72	8.11	3.69	12.49	2/1/1	124.1	39.1	28.7	.535	4.036	12.3	256.8	-8.5	102.7D	1.624
4-6170	4-6321.4	.170	78.1	17.9	-1.0	.863	95.5	.269	.801	195.2	443.2	.585	1.016D	104.5	1.238	-2.9	-10.8	323.7	.322
4-6321.4	4-6590	.321	359.8	-34.3	-7.6	1.376	81.6	.386	1.125	30.8	207.5	.691D	1.560	74.9	.697	5.7	-2.7	239.5	.219
4-6590	4-6770	.168	206.8	-24.2	-2.7	.783	105.3	.284	1.315	233.2	397.1	.941	1.688D	98.0	1.127	4.2	46.0	108.0	.208
		12.53	7.82	4.29	4.71	8.10	3.54	12.70	2/1/1	120.9	36.0	40.4	.582	2.893	42.4	266.5	32.9	119.1D	1.101
4-6170	4-6329.2	.160	93.0	14.7	-1.6	.852	92.7	.277	.788	187.2	447.7	.569	1.006D	105.3	1.231	-2.7	-9.7	334.0	.334
4-6329.2	4-6590	.334	2.5	-6.6	-1.6	1.374	77.9	.405	1.115	43.1	207.2	.663D	1.566	73.8	.691	-.3	-20.7	233.7	.219
4-6590	4-6770	.168	206.8	-24.2	-2.7	.783	105.3	.284	1.315	233.2	397.1	.941	1.688D	98.0	1.127	4.2	46.0	108.0	.208
		12.41	7.69	4.16	4.71	8.10	3.54	12.70	2/1/1	124.1	36.0	28.3	.540	4.094	10.6	257.3	-6.4	103.8D	1.672

STOPOVER TIME = 0 DAYS — 1986 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS

MARS ARRIVAL DATE = 2446470
8 FEB 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2446470 (8 FEB 1986)																				
4-6140	4-6315.1	.138	89.2	21.4	-.5	.869	88.2	.252	.796	174.6	442.0	.595	.996	103.5	1.234	-3.4	-13.4	313.9	.304
4-6315.1	4-6470	.304	351.4	-10.4	-2.3	1.395	80.9	.425	1.198	31.0	155.9	.689D	1.707A	105.8	.643	.8	-22.1	265.6	.278
4-6470	4-6780	.126	247.6	-15.7	1.2	.671	88.2	.280	1.254	175.3	411.5	.903	1.606	100.6	1.112	.9	27.0	104.5	.224
		12.80	6.61	3.91	6.19	9.57	2.69	12.93	2/1/2	32.3	20.5	36.8	.652	3.168	13.4	241.8	-4.6	110.8D	1.414
MARS ARRIVAL DATE = 2446480 (18 FEB 1986)																				
4-6130	4-6318.9	.166	103.9	19.1	-.7	.868	83.8	.274	.792	162.9	446.4	.575	1.009	105.1	1.232	-3.5	-12.5	317.9	.333
4-6318.9	4-6480	.333	348.9	-8.9	-2.2	1.385	78.6	.420	1.158	39.5	162.9	.671D	1.644A	101.7	.626	.6	-22.4	262.6	.247
4-6480	4-6770	.107	242.8	-14.3	1.1	.680	90.8	.264	1.261	182.2	403.5	.929	1.594D	98.7	1.113	.9	28.0	99.5	.196
		12.01	6.59	4.24	5.42	8.80	2.35	12.52	2/1/2	39.9	26.2	30.6	.541	3.785	13.0	242.2	-6.7	105.0D	1.506
4-6140	4-6315.7	.139	90.4	21.1	-.4	.868	88.0	.253	.795	174.1	442.4	.594	.996	103.6	1.234	-3.4	-13.3	314.7	.306
4-6315.7	4-6480	.305	349.6	-10.5	-2.3	1.387	80.4	.412	1.166	33.5	162.1	.685D	1.647A	101.8	.631	.8	-21.8	263.9	.246
4-6480	4-6780	.120	246.2	-14.9	1.3	.676	89.5	.274	1.251	178.6	410.0	.909	1.594	100.1	1.111	.7	26.4	105.5	.215
		11.88	6.50	3.92	5.38	8.77	2.57	12.80	2/1/2	38.8	21.3	34.3	.644	3.395	13.3	241.2	-4.6	109.4D	1.543
4-6150	4-6315.0	.139	79.2	21.1	-.5	.868	91.2	.250	.799	183.6	440.8	.599	.998D	103.3	1.236	-3.3	-13.4	314.5	.300
4-6315.0	4-6480	.300	349.8	-10.9	-2.4	1.387	80.8	.411	1.168	32.2	162.0	.688D	1.648A	101.8	.632	.9	-21.7	264.2	.246
4-6480	4-6790	.135	253.1	-15.8	1.5	.671	88.0	.286	1.241	174.9	416.5	.885	1.596	101.6	1.109	.6	24.9	111.9	.237
		12.17	6.79	3.93	5.36	8.76	2.86	13.14	2/1/2	38.6	17.1	34.8	.668	3.347	13.4	241.2	-4.0	110.5D	1.568
4-6160	4-6315.6	.155	72.8	20.2	-.4	.869	94.1	.255	.803	192.1	440.4	.598	1.008D	103.6	1.239	-3.2	-12.8	315.6	.305
4-6315.6	4-6480	.305	349.6	-10.6	-2.3	1.387	80.4	.412	1.166	33.4	162.1	.685D	1.648A	101.8	.631	.8	-21.8	264.0	.246
4-6480	4-6800	.153	257.5	-16.6	1.6	.666	86.2	.302	1.230	171.1	422.9	.859	1.602	103.3	1.106	.6	25.3	118.7	.261
		12.72	7.33	4.10	5.39	8.77	3.22	13.53	2/1/2	38.6	13.2	33.4	.646	3.482	12.8	241.8	-3.8	110.1D	1.603
MARS ARRIVAL DATE = 2446490 (28 FEB 1986)																				
4-6130	4-6319.8	.170	105.3	18.6	-.8	.868	83.4	.278	.791	162.2	447.1	.571	1.010	105.3	1.232	-3.5	-12.4	319.0	.338
4-6319.8	4-6490	.338	348.1	-8.8	-2.2	1.379	78.1	.413	1.135	41.9	168.7	.666D	1.604A	97.7	.619	.5	-22.2	259.6	.222
4-6490	4-6770	.102	242.1	-13.0	1.2	.686	92.0	.259	1.259	185.8	402.3	.933	1.585D	98.3	1.112	.7	27.2	100.5	.190
		11.35	6.56	4.29	4.79	8.18	2.28	12.44	2/1/2	47.6	27.0	28.8	.526	4.018	13.1	242.2	-7.1	103.7D	1.589
4-6140	4-6316.2	.140	91.6	20.7	-.4	.868	87.6	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.4	.307
4-6316.2	4-6490	.307	349.4	-10.7	-2.4	1.381	80.0	.404	1.144	35.4	167.9	.682D	1.606A	97.9	.625	.8	-21.4	261.3	.220
4-6490	4-6780	.114	248.1	-13.9	1.4	.681	90.8	.268	1.248	182.1	408.7	.913	1.583D	99.7	1.110	.6	25.6	106.4	.208
		11.15	6.40	3.93	4.75	8.14	2.47	12.70	2/1/2	46.1	22.1	32.4	.636	3.581	13.2	241.0	-4.4	108.3D	1.642
4-6150	4-6315.4	.139	80.2	20.9	-.4	.868	91.1	.251	.798	183.2	441.1	.598	.998D	103.4	1.235	-3.3	-13.3	314.9	.301
4-6315.4	4-6490	.301	348.6	-11.2	-2.5	1.381	80.5	.402	1.146	33.9	167.7	.685D	1.607A	98.0	.626	.9	-21.2	261.6	.220
4-6490	4-6790	.128	253.7	-14.9	1.5	.676	89.3	.279	1.237	178.2	415.0	.892	1.583	101.2	1.108	.5	24.2	112.8	.228
		11.39	6.65	3.93	4.74	8.13	2.72	12.99	2/1/2	45.8	17.9	33.0	.664	3.518	13.3	241.0	-3.6	109.6D	1.672
4-6160	4-6316.0	.154	73.6	20.1	-.4	.868	93.9	.256	.802	191.7	440.7	.597	1.007D	103.6	1.238	-3.2	-12.7	316.1	.306
4-6316.0	4-6490	.306	348.5	-10.8	-2.4	1.381	80.1	.403	1.144	35.0	167.9	.683D	1.606A	98.0	.625	.8	-21.4	261.3	.220
4-6490	4-6800	.144	258.6	-16.0	1.6	.670	87.7	.293	1.227	174.3	421.3	.868	1.585	102.7	1.105	.5	22.7	119.6	.250
		11.88	7.14	4.10	4.75	8.13	3.04	13.34	2/1/2	46.0	14.1	31.7	.643	3.657	12.7	241.6	-3.5	109.2D	1.710
4-6170	4-6317.5	.179	71.4	19.3	-.6	.870	96.7	.267	.808	199.3	440.9	.592	1.024D	104.2	1.242	-3.0	-11.6	318.4	.318
4-6317.5	4-6490	.318	348.2	-10.0	-2.3	1.380	79.4	.407	1.141	37.7	168.2	.676D	1.605A	97.9	.623	.7	-21.7	260.7	.221
4-6490	4-6810	.164	265.0	-16.9	1.7	.665	85.7	.309	1.216	170.4	427.5	.840	1.592	104.3	1.101	.4	20.9	126.6	.274
		12.61	7.85	4.40	4.76	8.15	3.45	13.76	2/1/2	46.6	10.6	29.3	.596	3.950	11.6	242.7	-3.2	108.0D	1.758
MARS ARRIVAL DATE = 2446500 (10 MAR 1986)																				
4-6130	4-6320.9	.175	107.0	18.0	-.9	.867	82.9	.282	.790	161.2	447.9	.567	1.013	105.6	1.231	-3.5	-12.3	320.3	.344
4-6320.9	4-6500	.344	347.9	-8.7	-2.2	1.374	77.6	.409	1.118	44.2	174.1	.660D	1.576A	94.1	.616	.5	-21.9	255.6	.203
4-6500	4-6770	.099	240.6	-11.1	1.4	.692	93.3	.256	1.257	189.6	401.2	.936	1.578D	98.0	1.112	.5	26.0	101.4	.185
		10.90	6.57	4.35	4.33	7.72	2.22	12.37	2/1/2	56.1	27.7	27.3	.509	4.231	13.2	242.7	-7.6	102.4D	1.643
4-6140	4-6316.9	.141	93.1	20.4	-.5	.867	87.6	.256	.794	173.0	443.2	.591	.997	103.9	1.233	-3.4	-13.1	316.2	.310
4-6316.9	4-6500	.310	347.9	-10.8	-2.5	1.376	79.7	.398	1.128	36.9	173.3	.679D	1.578A	94.4	.623	.8	-20.9	257.8	.200
4-6500	4-6780	.109	247.3	-12.4	1.5	.686	92.0	.263	1.246	185.8	407.5	.918	1.573D	99.4	1.109	.4	24.7	107.2	.202
		10.60	6.33	3.95	4.27	7.66	2.38	12.60	2/1/2	54.3	22.9	31.1	.627	3.732	13.1	241.2	-4.2	107.4D	1.714
4-6150	4-6315.9	.139	81.4	20.6	-.4	.867	90.9	.251	.797	182.7	441.4	.597	.998D	103.5	1.235	-3.3	-13.2	315.6	.302
4-6315.9	4-6500	.302	346.0	-11.4	-2.5	1.377	80.2	.396	1.130	35.2	173.1	.683D	1.578A	94.5	.624	.9	-20.6	258.2	.200
4-6500	4-6790	.121	253.5	-13.8	1.6	.681	90.7	.273	1.234	181.8	413.7	.898	1.571D	100.7	1.107	.3	23.3	113.7	.220
		10.78	6.53	3.93	4.26	7.65	2.60	12.87	2/1/2	53.9	18.7	31.8	.658	3.655	13.2	241.1	-3.1	108.9D	1.748
4-6160	4-6316.5	.154	74.5	19.9	-.5	.868	93.8	.256	.802	191.2	441.0	.596	1.007D	103.7	1.238	-3.2	-12.6	316.7	.306
4-6316.5	4-6500	.306	348.0	-11.1	-2.5	1.376	79.9	.397	1.129	36.2	173.2	.680D	1.578A	94.4	.623	.9	-20.8	258.0	.200
4-6500	4-6800	.136	259.2	-15.1	1.7	.676	89.1	.285	1.223	177.7	419.8	.875	1.571	102.1	1.104	.3	21.9	120.4	.240
		11.23	6.97	4.09	4.27	7.66	2.88	13.18	2/1/2	54.1	14.9	30.6	.640	3.789	12.6	241.7	-2.9	108.6D	1.786
4-6170	4-6317.9	.178	72.1	19.1	-.7	.869	96.6	.267	.807	198.9	441.1	.591	1.023D	104.2	1.242	-3.0	-11.5	319.0	.318
4-6317.9	4-6500	.318	347.8	-10.2	-2.4	1.376	79.2	.401	1.126	38.8	173.5	.674D	1.577A	94.3	.621	.7	-21.2	257.2	.201
4-6500	4-6810	.154	264.2	-16.2	1.7	.670	87.3	.299	1.212	173.6	425.9	.850	1.575	103.7	1.100	.3	20.2	127.4	.262
		11.90	7.62	4.39	4.28	7.67	3.24	13.55	2/1/2	54.7	11.4	28.3	.595	4.086	11.5	242.9	-2.7	107.5D	1.835
MARS ARRIVAL DATE = 2446510 (20 MAR 1986)																				
4-6130	4-6322.3	.182	109.2	17.2	-1.1	.866	82.3	.288	.789	160.0	449.0	.561	1.016	106.0	1.230	-3.6	-12.1	322.1	.352
4-6322.3	4-6510	.352	346.3	-8.3	-2.2	1.371	77.0	.409	1.106	46.5	179.1	.654D	1.559A	90.6	.616	.4	-21.5	250.9	.190
4-6510	4-6770	.097	238.4	-8.6	1.6	.698	94.5	.253	1.256	193.6	400.2	.938	1.573D	97.8	1.111	.2	24.4	102.1	.161
		10.66	6.64	4.45	4.03	7.42	2.19	12.52	2/1/2	65.5	28.4	26.0	.485	4.439	13.5	243.7	-8.4	101.1D	1.667
4-6140	4-6317.7	.143	94.8	19.9	-.6	.866	87.3	.258	.793	172.2	443.7	.588	.998	104.0	1.233	-3.4	-13.0	317.3	.312
4-6317.7	4-6510	.312	347.9	-10.9	-2.5	1.373	79.4	.395	1.117	38.3	178.3	.676D	1.559A	91.1	.624	.8	-20.3	253.6	.186
4-6510	4-6780	.105	245.7	-10.6	1.7	.693	93.3	.259	1.244	189.6	406.4	.921	1.566D	99.0	1.109	.2	23.4	107.9	.196
		10.22	6.28	3.97	3.94	7.33	2.32	12.53	2/1/2	63.2	23.6	30.0	.616	3.858	13.0	241.6	-4.0	106.7D	1.760
4-6150	4-6316.6	.140	82.6	20.3	-.5	.866	90.7	.252	.797	182.0	441.8	.595	.998D	103.6	1.235	-3.3	-13.1	316.4	.304
4-6316.6	4-6510	.304	346.0	-11.7	-2.6	1.374	80.0	.392	1.120	36.3	178.1	.681D	1.559A	91.2	.625	1.0	-19.9	254.2	.185
4-6510	4-6790	.115	252.6	-12.4	1.8	.687	92.0	.267	1.232	185.5	412.5	.902	1.561D	100.3	1.106	.1	22.3	114.4	.213
		10.35	6.43	3.93	3.92	7.32	2.49	12.77	2/1/2	62.7	19.4	30.9	.652	3.758	13.1	241.6	-2.6	108.4D	1.798
4-6160	4-6317.0	.153	75.6	19.7	-.5	.867	93.6	.257	.801	190.6	441.3	.595	1.006D	103.7	1.237	-3.2	-12.5	317.4	.307
4-6317.0	4-6510	.307	347.9	-11.3	-2.6	1.374	79.6	.393	1.119	37.1	178.2	.679D	1.559A	91.2	.625	.9	-20.1	253.9	.185
4-6510	4-6800	.128	259.0	-14.1	1.8	.681	90.5	.277	1.220	181.3	416.4	.882	1.559D	101.7	1.103	.1	21.0	121.1	.231
		10.74	6.81	4.06	3.93	7.32	2.73	13.05	2/1/2	62.9	15.7	29.8	.637	3.883	12.6	242.2	-2.3	108.2D	1.836
4-6170	4-6318.4	.176	73.0	19.0	-.7	.868	96.4	.268	.806	198.3	441.4	.590	1.022D	104.3	1.241	-3.0	-11.4	319.7	.318
4-6318.4	4-6510	.318	347.9	-10.4	-2.4	1.373	79.0	.397	1.116	39.6	178.4	.673D	1.559A	91.1	.623	.8	-20.5	253.2	.186
4-6510	4-6810	.144	264.7	-15.4	1.8	.676	88.8	.290	1.209	177.0	424.4	.858	1.559	103.1	1.099	.1	19.3	128.1	.251
		11.36	7.41	4.37	3.95	7.35	3.04	13.37	2/1/2	63.5	12.2	27.7	.593	4.177	11.4	243.4	-2.1	107.1D	1.884
4-6180	4-6320.5	.206	73.6	18.4	-1.0	.872	99.3	.284	.814	205.3	441.9	.583	1.044D	105.1	1.246	-2.7	-9.9	322.6	.335
4-6320.5	4-6510	.335	348.0	-9.2	-2.3	1.372	78.0	.403	1.111	43.2	178.7	.664D	1.559A	90.9	.620	.6	-21.1	252.0	.188
4-6310	4-6820	.164	269.9	-16.5	1.8	.670	86.8	.306	1.198	172.7	430.3	.832	1.564	104.6	1.095	.1	17.4	135.2	.274
		12.22	8.23	4.79	3.99	7.36	3.45	13.75	2/1/2	64.5	9.0	24.9	.534	4.641	9.9	245.1	-1.5	105.6D	1.945
MARS ARRIVAL DATE = 2446520 (30 MAR 1986)																				
4-6130	4-6324.4	.194	112.0	16.2	-1.3	.864	81.3	.298	.787	158.3	450.6	.552	1.022	106.7	1.230	-3.7	-11.9	324.6	.365
4-6324.4	4-6520	.365	349.3	-7.7	-2.1	1.368	76.2	.411	1.097	49.4	183.7	.646D	1.548	87.4	.619	.2	-21.2	245.5	.183
4-6520	4-6770	.097	235.8	-5.2	2.0	.706	95.7	.251	1.256	197.8	399.4	.941	1.571D	97.6	1.111	-.2	21.9	102.7	.177
		10.68	6.80	4.01	3.88	7.28	2.19	12.28	2/1/2	75.5	29.1	24.7	.451	4.672	14.1	248.3	-9.8	99.3D	1.657
4-6140	4-6303.0	.133	61.7	26.9	.9	.882	91.9	.230	.810	186.2	434.1	.624	.998D	101.8	1.241	-3.6	-16.3	298.5	.273
4-6303.0	4-6520	.273	354.7	-42.4	-7.7	1.575	86.5	.367	1.131	13.0	181.7	.717D	1.546	89.0	.641	6.5	-.7	255.6	.165
4-6520	4-6780	.103	243.4	-8.1	1.9	.700	94.6	.256	1.243	193.7	405.4	.924	1.561D	98.6	1.109	-.1	21.7	108.5	.192
		10.06	6.15	3.66	3.92	7.31	2.28	12.47	2/1/2	70.1	24.3	54.3	.804	2.192	43.5	250.3	25.5	132.9D	.959

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2446520
30 MAR 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6140	4-6318.8	.145	97.1	19.3	-.7	.865	86.9	.261	.792	171.2	444.5	.585	.999	104.2	1.232	-3.4	-12.8	318.6	.316
4-6318.8	4-6520	.316	348.4	-10.8	-2.5	1.371	79.1	.394	1.110	39.6	182.9	.673D	1.547	88.1	.627	.8	-19.7	249.0	.177
4-6520	4-6780	.103	243.4	-8.1	1.9	.700	94.6	.256	1.243	193.7	405.4	.924	1.561D	98.8	1.109	-.1	21.7	108.5	.192
		10.01	6.28	3.99	3.74	7.14	2.28	12.47	2/1/2	72.6	24.3	29.2	.601	3.966	12.8	242.7	-3.9	105.9D	1.782
4-6150	4-6317.4	.140	84.6	19.9	-.5	.865	90.4	.254	.796	181.2	442.5	.594	.998D	103.7	1.234	-3.3	-12.9	317.4	.306
4-6317.4	4-6520	.306	348.4	-11.8	-2.7	1.372	79.8	.390	1.113	37.2	182.7	.679D	1.547	88.3	.629	1.0	-19.1	249.8	.176
4-6520	4-6790	.111	250.8	-10.7	1.9	.694	93.3	.263	1.230	189.4	411.4	.907	1.553D	100.0	1.105	-.1	21.0	114.9	.207
		10.07	6.35	3.93	3.71	7.11	2.42	12.69	2/1/2	71.9	20.1	30.2	.644	3.834	13.0	242.5	-2.0	107.9D	1.824
4-6160	4-6317.7	.152	77.0	19.4	-.6	.866	93.4	.258	.800	189.9	441.7	.594	1.006D	103.8	1.237	-3.2	-12.4	318.4	.306
4-6317.7	4-6520	.308	348.4	-11.6	-2.6	1.372	79.6	.391	1.112	37.8	182.8	.677D	1.547	88.2	.629	.9	-19.3	249.6	.176
4-6520	4-6800	.122	257.9	-12.7	1.9	.688	91.9	.271	1.218	185.1	417.2	.887	1.548D	101.2	1.102	-.1	19.9	121.7	.224
		10.41	6.69	4.07	3.72	7.12	2.62	12.93	2/1/2	72.1	16.4	29.4	.632	3.947	12.5	243.0	-1.6	107.9D	1.663
4-6170	4-6319.1	.175	74.1	18.8	-.8	.867	96.2	.268	.805	197.7	441.8	.589	1.020D	104.3	1.240	-3.0	-11.3	320.6	.319
4-6319.1	4-6520	.319	348.4	-10.6	-2.5	1.371	78.9	.395	1.109	40.2	183.0	.672D	1.547	88.1	.627	.8	-19.8	248.8	.177
4-6520	4-6810	.136	264.5	-14.4	1.9	.682	90.3	.282	1.206	180.6	423.0	.865	1.546D	102.6	1.098	-.1	18.4	128.8	.242
		10.97	7.23	4.35	3.74	7.14	2.88	13.21	2/1/2	72.7	13.0	27.3	.591	4.233	11.3	244.2	-1.5	106.9D	1.909
4-6180	4-6321.1	.204	74.7	18.2	-1.1	.870	99.1	.283	.812	204.7	442.3	.582	1.042D	105.1	1.245	-2.7	-9.7	323.6	.336
4-6321.1	4-6520	.336	348.6	-9.3	-2.3	1.370	77.9	.400	1.105	43.7	183.2	.663D	1.548	87.9	.624	.5	-20.4	247.6	.179
4-6520	4-6820	.153	270.4	-15.7	1.9	.676	88.4	.296	1.194	176.2	428.7	.841	1.547	104.0	1.094	-.1	16.5	135.9	.262
		11.77	7.98	4.76	3.79	7.19	3.22	13.55	2/1/2	73.7	9.9	24.6	.534	4.688	9.8	245.9	-1.0	105.4D	1.968

MARS ARRIVAL DATE = 2446530 (9 APR 1986)

4-6130	4-6305.8	.130	77.2	26.9	.6	.880	88.4	.235	.804	174.9	436.8	.615	.993	102.2	1.238	-3.4	-14.9	301.2	.281
4-6305.8	4-6530	.281	353.0	-41.8	-7.8	1.374	85.8	.366	1.126	16.5	186.2	.713D	1.538	86.5	.646	6.3	.6	251.8	.180
4-6530	4-6770	.101	233.1	-.4	2.6	.714	97.0	.250	1.257	202.2	398.7	.942	1.571D	97.4	1.111	-.8	16.0	102.9	.176
		9.89	6.08	3.83	3.81	7.21	2.25	12.26	2/1/2	78.8	30.0	51.8	.764	2.287	43.8	251.8	27.7	129.9D	.983
4-6130	4-6327.6	.215	116.1	14.6	-1.7	.862	79.7	.316	.784	155.8	453.3	.537	1.032	107.8	1.228	-3.8	-11.6	326.5	.368
4-6327.6	4-6530	.368	351.3	-6.6	-1.9	1.366	74.8	.419	1.088	53.8	188.0	.632D	1.544	84.3	.621	.0	-21.0	239.8	.185
4-6530	4-6770	.101	233.1	-.4	2.6	.714	97.0	.250	1.257	202.2	398.7	.942	1.571D	97.4	1.111	-.8	18.0	102.9	.176
		11.06	7.16	4.91	3.91	7.30	2.25	12.26	2/1/2	85.9	30.0	23.1	.400	5.001	15.6	247.9	-12.4	96.7D	1.599
4-6140	4-6305.7	.132	67.7	25.9	.6	.879	91.1	.234	.807	183.6	435.8	.618	.995D	102.1	1.239	-3.5	-15.5	301.9	.279
4-6305.7	4-6530	.279	352.9	-40.9	-7.7	1.374	85.5	.367	1.126	16.7	186.2	.713D	1.538	86.4	.646	6.2	.0	251.7	.179
4-6530	4-6780	.103	240.5	-5.0	2.3	.707	95.9	.254	1.243	197.9	404.6	.927	1.558D	98.6	1.109	-.5	19.4	108.9	.189
		9.93	6.14	3.85	3.79	7.19	2.29	12.43	2/1/2	78.7	25.1	30.7	.774	2.335	42.9	251.6	26.6	129.9D	1.033
4-6140	4-6320.1	.149	99.9	18.5	-.8	.864	86.4	.265	.791	169.9	445.4	.581	1.000	104.5	1.231	-3.4	-12.6	320.3	.322
4-6320.1	4-6530	.322	349.3	-10.5	-2.5	1.370	78.7	.394	1.105	41.0	187.2	.670D	1.541	85.4	.633	.7	-19.2	244.3	.173
4-6530	4-6780	.103	240.5	-5.0	2.3	.707	95.9	.254	1.243	197.9	404.6	.927	1.558D	98.6	1.109	-.5	19.4	108.9	.189
		9.98	6.32	4.03	3.66	7.06	2.29	12.43	2/1/2	82.1	25.1	28.5	.581	4.068	12.7	244.0	-4.2	105.0D	1.783
4-6150	4-6305.4	.148	59.3	24.6	.7	.880	94.0	.238	.812	193.2	434.9	.619	1.006D	102.2	1.242	-3.7	-15.9	301.8	.283
4-6305.4	4-6530	.283	353.1	-42.6	-8.0	1.374	85.7	.366	1.126	16.2	186.2	.714D	1.538	86.5	.646	6.6	1.3	251.9	.181
4-6530	4-6790	.109	248.3	-8.4	2.1	.701	94.6	.260	1.229	193.5	410.4	.910	1.548D	99.7	1.105	-.4	19.4	115.3	.203
		10.24	6.41	4.03	3.83	7.23	2.38	12.62	2/1/2	78.8	20.9	31.0	.750	2.322	44.8	253.0	27.9	130.9D	.992
4-6150	4-6318.4	.140	87.0	19.4	-.6	.864	90.1	.256	.794	180.2	443.0	.591	.997D	103.8	1.234	-3.3	-12.7	318.8	.308
4-6318.4	4-6530	.308	349.2	-11.9	-2.7	1.371	79.6	.389	1.109	38.0	187.1	.677D	1.540	85.5	.635	1.0	-18.4	245.3	.172
4-6530	4-6790	.109	248.3	-8.4	2.1	.701	94.6	.260	1.229	193.5	410.4	.910	1.548D	99.7	1.105	-.4	19.4	115.3	.203
		9.93	6.32	3.94	3.62	7.02	2.38	12.62	2/1/2	81.3	20.9	29.8	.633	3.894	12.9	243.7	-1.6	107.5D	1.831
4-6160	4-6318.6	.151	78.7	19.1	-.7	.865	93.1	.259	.798	189.0	442.2	.592	1.005D	103.9	1.236	-3.1	-12.2	319.5	.310
4-6318.6	4-6530	.310	349.2	-11.7	-2.7	1.371	79.5	.390	1.108	38.4	187.0	.676D	1.541	85.5	.635	.9	-18.5	245.2	.172
4-6530	4-6800	.117	256.0	-11.1	2.0	.695	93.5	.267	1.216	189.1	416.1	.892	1.540D	100.9	1.101	-.3	18.6	122.2	.216
		10.21	6.59	4.06	3.62	7.02	2.53	12.84	2/1/2	81.4	17.2	29.1	.626	3.986	12.4	244.2	-1.0	107.6D	1.869
4-6170	4-6319.9	.173	75.4	18.5	-.9	.866	96.0	.268	.803	196.8	442.3	.588	1.019D	104.4	1.240	-2.9	-11.1	321.6	.320
4-6319.9	4-6530	.320	349.3	-10.7	-2.5	1.370	78.8	.393	1.106	40.6	187.2	.671D	1.541	85.4	.633	.8	-19.1	244.4	.173
4-6530	4-6810	.129	263.3	-13.2	2.0	.689	91.7	.276	1.203	184.5	421.7	.872	1.535D	102.1	1.097	-.3	17.3	129.3	.234
		10.72	7.07	4.33	3.65	7.05	2.74	13.09	2/1/2	82.0	13.8	27.2	.588	4.257	11.3	245.3	-.9	106.7D	1.914
4-6180	4-6321.9	.202	75.8	18.0	-1.1	.869	98.8	.283	.810	203.9	442.7	.581	1.040D	105.2	1.244	-2.7	-9.6	324.7	.336
4-6321.9	4-6530	.336	349.6	-9.3	-2.3	1.369	77.8	.399	1.102	44.0	187.4	.662D	1.542	85.1	.630	.5	-19.8	243.3	.175
4-6530	4-6820	.144	270.0	-14.8	1.9	.682	90.0	.287	1.191	179.9	427.3	.850	1.533	103.4	1.093	-.2	15.6	136.4	.252
		11.46	7.75	4.72	3.70	7.10	3.03	13.37	2/1/2	82.9	10.7	24.6	.533	4.697	9.7	247.0	-.6	105.2D	1.969
4-6190	4-6324.3	.236	78.6	17.6	-1.5	.874	101.7	.303	.820	210.2	443.4	.571	1.068D	106.2	1.250	-2.3	-7.7	328.4	.357
4-6324.3	4-6530	.357	350.2	-8.0	-2.1	1.368	76.6	.407	1.096	48.3	187.7	.650D	1.542	84.8	.627	.3	-20.4	241.8	.179
4-6530	4-6830	.162	276.1	-16.0	1.9	.676	88.0	.301	1.180	175.3	432.9	.825	1.535	104.8	1.088	-.2	13.5	143.6	.272
		12.44	8.65	5.25	3.78	7.18	3.41	13.72	2/1/2	84.2	7.8	21.6	.470	5.342	8.0	249.4	-.7	103.6D	2.043

MARS ARRIVAL DATE = 2446540 (19 APR 1986)

4-6130	4-6308.1	.134	83.0	25.5	.5	.877	87.8	.241	.802	172.5	438.6	.609	.995	102.7	1.237	-3.4	-14.4	304.4	.289
4-6308.1	4-6540	.289	352.3	-40.8	-7.9	1.373	84.8	.368	1.122	19.6	190.4	.710D	1.535	84.1	.652	6.4	1.4	248.1	.180
4-6540	4-6770	.110	231.2	7.0	3.8	.723	98.3	.251	1.259	206.8	398.1	.943	1.575D	97.4	1.112	-2.0	10.3	102.6	.178
		10.07	6.27	3.87	3.80	7.20	2.40	12.29	2/1/2	87.3	32.2	49.2	.722	2.403	44.0	253.8	29.2	127.5D	1.013
4-6140	4-6308.4	.132	73.8	24.8	.3	.876	90.3	.238	.803	181.1	437.6	.612	.995D	102.5	1.238	-3.5	-14.6	305.3	.285
4-6308.4	4-6540	.285	352.3	-39.2	-7.8	1.373	84.6	.368	1.122	20.1	190.4	.709D	1.535	84.1	.652	6.0	.2	247.9	.178
4-6540	4-6780	.106	237.3	-1.0	2.8	.716	97.2	.253	1.244	202.4	403.9	.929	1.559D	98.4	1.109	-1.1	16.0	106.9	.188
		9.95	6.19	3.85	3.75	7.15	2.34	12.41	2/1/2	87.3	26.1	47.7	.741	2.474	42.2	253.0	27.7	127.2D	1.092
4-6140	4-6321.9	.154	103.4	17.4	-1.0	.862	85.7	.271	.789	168.3	446.6	.575	1.002	104.9	1.230	-3.4	-12.4	322.6	.329
4-6321.9	4-6540	.329	350.8	-9.9	-2.4	1.369	78.3	.396	1.102	42.7	191.2	.665D	1.539	82.8	.640	.6	-18.9	240.0	.175
4-6540	4-6780	.106	237.3	-1.0	2.8	.716	97.2	.253	1.244	202.4	403.9	.929	1.559D	98.4	1.109	-1.1	16.0	106.9	.188
		10.13	6.44	4.10	3.69	7.09	2.34	12.41	2/1/2	91.4	26.1	27.7	.556	4.174	12.6	245.7	-5.0	103.8D	1.763
4-6150	4-6308.2	.144	64.8	23.7	.4	.877	93.3	.241	.808	190.4	436.6	.613	1.003D	102.5	1.240	-3.5	-15.0	305.5	.287
4-6308.2	4-6540	.287	352.3	-40.2	-7.8	1.373	84.7	.368	1.122	19.8	190.4	.709D	1.535	84.1	.652	6.2	.9	248.0	.179
4-6540	4-6790	.109	245.1	-5.7	2.4	.709	96.0	.257	1.229	197.9	409.5	.913	1.546D	99.5	1.105	-.7	17.3	115.6	.200
		10.14	6.36	3.98	3.78	7.18	2.38	12.58	2/1/2	87.3	21.7	47.7	.729	2.472	43.4	254.0	28.5	127.9D	1.074
4-6150	4-6319.7	.141	89.8	18.8	-.8	.863	89.7	.258	.793	179.0	443.8	.588	.998	104.0	1.233	-3.2	-12.5	320.4	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.8	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6790	.109	245.1	-5.7	2.4	.709	96.0	.257	1.229	197.9	409.5	.913	1.546D	99.5	1.105	-.7	17.3	115.6	.200
		9.95	6.33	3.95	3.62	7.02	2.38	12.58	2/1/2	90.4	21.7	29.4	.619	3.942	12.7	245.1	-1.4	106.9D	1.821
4-6160	4-6307.6	.171	58.9	22.6	.5	.881	96.5	.250	.817	200.2	435.7	.612	1.021D	102.9	1.246	-3.6	-15.1	305.1	.296
4-6307.6	4-6540	.296	352.3	-43.7	-8.6	1.373	85.0	.367	1.123	18.9	190.4	.711D	1.535	84.1	.652	7.0	3.5	248.5	.184
4-6540	4-6800	.114	253.5	-9.1	2.2	.702	94.6	.263	1.215	193.3	415.1	.896	1.535D	100.6	1.101	-.6	17.1	122.5	.213
		10.66	6.77	4.29	3.88	7.26	2.48	12.77	2/1/2	87.3	18.0	49.1	.685	2.405	47.4	256.9	31.2	129.5D	.962
4-6160	4-6319.7	.150	80.9	18.7	-.8	.863	92.8	.260	.797	187.9	442.9	.590	1.004D	104.0	1.235	-3.1	-12.0	320.9	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.9	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6800	.114	253.3	-9.1	2.2	.702	94.6	.263	1.215	193.3	415.1	.896	1.535D	100.6	1.101	-.6	17.1	122.5	.213
		10.15	6.53	4.05	3.62	7.02	2.48	12.77	2/1/2	90.4	18.0	28.9	.618	4.006	12.3	245.6	-.5	107.3D	1.859
4-6170	4-6320.9	.171	77.1	18.1	-.9	.864	95.6	.269	.802	195.8	442.8	.586	1.017D	104.5	1.239	-2.9	-10.9	322.9	.321
4-6320.9	4-6540	.321	350.6	-10.7	-2.5	1.370	78.8	.393	1.104	40.9	191.1	.670D	1.539	83.0	.641	.7	-18.4	240.5	.173
4-6540	4-6810	.123	261.3	-11.7	2.1	.696	93.1	.270	1.202	188.6	420.6	.877	1.526D	101.7	1.097	-.5	16.1	129.6	.227
		10.60	6.94	4.30	3.66	7.06	2.64	12.98	2/1/2	90.9	14.6	27.2	.564	4.257	11.1	246.7	-.5	106.5D	1.902
4-6180	4-6322.8	.199	77.1	17.7	-1.2	.867	98.5	.283	.808	202.9	443.3	.579	1.037D	105.2	1.243	-2.6	-9.4	325.9	.336
4-6322.8	4-6540	.336	350.9	-9.3	-2.3	1.369	77.8	.399	1.100	44.2	191.3	.661D	1.540	82.7	.638	.5	-19.2	239.5	.176
4-6540	4-6820	.136	268.8	-13.7	2.0	.689	91.5	.280	1.189	183.8	426.0	.857	1.521D	102.9	1.092	-.4	14.5	136.8	.243
		11.27	7.85	4.68	3.72	7.12	2.87	13.23	2/1/2	91.8	11.5	24.7	.551	4.675	9.6	248.4	-.3	105.0D	1.955

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2446540
19 APR 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6190	4-6325.2	.233	79.6	17.4	-1.6	.872	101.4	.303	.817	209.3	443.9	.570	1.064D	106.3	1.249	-2.2	-7.6	329.6	.357
4-6325.2	4-6540	.357	351.6	-7.9	-2.1	1.368	76.5	.407	1.095	48.3	191.5	.649D	1.541	82.3	.635	.2	-19.9	238.1	.180
4-6540	4-6830	.151	275.7	-15.1	1.9	.683	89.6	.292	1.177	179.1	431.5	.834	1.520	104.2	1.087	-.4	12.5	144.1	.261
		12.18	8.36	5.19	3.80	7.20	3.19	13.53	2/1/2	92.8	8.7	21.8	.471	5.290	7.9	250.7	.8	103.4D	2.021
MARS ARRIVAL DATE = 2446550 (29 APR 1986)																			
4-6130	4-6310.6	.139	88.4	24.1	.1	.875	86.8	.247	.799	170.2	440.4	.602	.997	103.2	1.235	-3.4	-13.8	307.6	.297
4-6310.6	4-6550	.297	352.4	-40.1	-8.1	1.373	84.0	.370	1.120	22.4	194.3	.706D	1.535	81.9	.660	6.4	1.9	244.9	.183
4-6550	4-6770	.141	232.8	20.8	7.0	.732	99.6	.253	1.263	211.7	397.7	.944	1.583D	97.3	1.113	-5.3	-7.4	100.3	.200
		10.77	6.89	3.92	3.88	7.27	2.97	12.58	2/1/2	95.4	41.2	47.1	.680	2.503	44.4	256.1	30.4	125.6D	1.021
4-6140	4-6311.0	.133	79.9	23.5	.1	.873	89.5	.243	.800	178.5	439.3	.606	.995	102.9	1.236	-3.4	-14.2	308.7	.292
4-6311.0	4-6550	.292	352.5	-37.6	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.0	244.4	.180
4-6550	4-6780	.115	234.7	4.4	3.7	.725	98.5	.254	1.247	207.1	403.3	.930	1.564D	98.4	1.110	-2.0	10.7	108.6	.189
		10.16	6.35	3.86	3.81	7.21	2.49	12.43	2/1/2	95.6	28.1	45.2	.707	2.600	41.5	254.7	28.3	124.8D	1.131
4-6140	4-6324.2	.163	107.7	16.1	-1.2	.860	84.8	.279	.787	166.2	448.2	.567	1.006	105.4	1.229	-3.4	-12.1	325.5	.339
4-6324.2	4-6550	.339	352.7	-8.9	-2.3	1.369	77.6	.401	1.100	44.8	194.9	.660D	1.541	80.4	.647	.4	-19.0	236.3	.181
4-6550	4-6780	.115	234.7	4.4	3.7	.725	98.5	.254	1.247	207.1	403.3	.930	1.564D	98.4	1.110	-2.0	10.7	108.6	.189
		10.50	6.68	4.20	3.82	7.22	2.49	12.43	2/1/2	100.0	28.1	26.9	.522	4.296	12.7	247.9	-6.7	102.2D	1.721
4-6150	4-6311.0	.141	70.6	22.7	.1	.873	92.4	.244	.804	187.6	438.4	.608	1.000D	102.8	1.238	-3.4	-14.3	309.2	.292
4-6311.0	4-6550	.292	352.5	-37.7	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.1	244.5	.180
4-6550	4-6790	.112	241.6	-2.4	2.9	.718	97.3	.257	1.231	202.5	408.8	.915	1.547D	99.4	1.106	-1.2	14.4	115.5	.199
		10.20	6.39	3.95	3.81	7.21	2.44	12.56	2/1/2	95.6	22.8	44.9	.706	2.619	41.8	255.1	28.6	125.1D	1.142
4-6150	4-6321.2	.143	93.4	17.9	-.9	.861	89.1	.262	.791	177.4	444.8	.584	.998	104.3	1.232	-3.2	-12.3	322.4	.316
4-6321.2	4-6550	.316	352.1	-11.3	-2.6	1.370	79.1	.392	1.106	39.9	194.8	.672D	1.539	80.9	.651	.8	-17.6	237.8	.176
4-6550	4-6790	.112	241.6	-2.4	2.9	.718	97.3	.257	1.231	202.5	408.8	.915	1.547D	99.4	1.106	-1.2	14.4	115.5	.199
		10.12	6.40	3.97	3.72	7.12	2.44	12.56	2/1/2	98.9	22.8	29.0	.601	3.988	12.3	246.9	-1.9	106.1D	1.797
4-6160	4-6310.6	.164	63.7	21.9	.1	.876	95.6	.252	.811	197.2	437.5	.607	1.015D	103.1	1.243	-3.5	-14.1	306.9	.299
4-6310.6	4-6550	.299	352.4	-40.7	-8.2	1.373	84.0	.370	1.120	22.2	194.3	.706D	1.535	81.9	.660	6.5	2.3	245.0	.184
4-6550	4-6800	.114	249.8	-6.8	2.5	.711	96.0	.261	1.215	197.7	414.3	.699	1.532D	100.4	1.101	-.9	15.1	122.6	.210
		10.58	6.69	4.21	3.89	7.29	2.48	12.72	2/1/2	95.4	18.9	46.2	.673	2.551	45.5	257.7	31.4	126.6D	1.044
4-6160	4-6321.0	.149	83.7	18.1	-.9	.861	92.3	.262	.795	186.6	443.6	.587	1.003D	104.2	1.234	-3.1	-11.8	322.6	.314
4-6321.0	4-6550	.314	352.1	-11.6	-2.7	1.370	79.2	.391	1.106	39.4	194.6	.674D	1.539	80.9	.651	.9	-17.4	237.9	.176
4-6550	4-6800	.114	249.8	-6.8	2.5	.711	96.0	.261	1.215	197.7	414.3	.699	1.532D	100.4	1.101	-.9	15.1	122.6	.210
		10.23	6.52	4.04	3.71	7.11	2.48	12.72	2/1/2	98.8	18.9	28.8	.609	4.015	12.1	247.3	-.4	106.9D	1.835
4-6170	4-6322.0	.169	79.2	17.7	-1.0	.862	95.3	.270	.799	194.6	443.5	.584	1.015D	104.6	1.237	-2.9	-10.7	324.5	.322
4-6322.0	4-6550	.322	352.2	-10.6	-2.5	1.370	78.7	.394	1.104	41.2	194.8	.669D	1.540	80.8	.650	.7	-18.0	237.4	.177
4-6550	4-6810	.120	258.3	-10.0	2.3	.704	94.6	.266	1.201	192.9	419.6	.681	1.521D	101.4	1.097	-.8	14.6	129.9	.222
		10.60	6.86	4.27	3.74	7.14	2.58	12.91	2/1/2	99.2	15.4	27.3	.579	4.240	11.0	248.5	-.3	106.2D	1.876
4-6180	4-6323.9	.196	78.6	17.3	-1.3	.865	98.1	.284	.806	201.7	443.9	.577	1.034D	105.3	1.242	-2.6	-9.2	327.4	.337
4-6323.9	4-6550	.337	352.6	-9.1	-2.3	1.369	77.8	.400	1.101	44.3	194.9	.661D	1.541	80.5	.647	.4	-18.9	236.5	.180
4-6550	4-6820	.130	266.6	-12.4	2.1	.697	93.0	.274	1.188	188.0	424.9	.663	1.513D	102.5	1.091	-.7	13.3	137.2	.236
		11.20	7.39	4.64	3.81	7.21	2.75	13.12	2/1/2	99.9	12.4	24.9	.530	4.631	9.4	249.9	-.3	104.9D	1.923
4-6190	4-6326.3	.229	80.9	17.1	-1.6	.869	101.0	.302	.814	208.2	444.5	.568	1.060D	106.3	1.247	-2.2	-7.4	331.0	.357
4-6326.3	4-6550	.357	353.3	-7.6	-2.0	1.368	76.5	.407	1.096	48.3	195.0	.649D	1.543	80.1	.644	.1	-19.6	235.3	.184
4-6550	4-6830	.142	274.3	-14.2	2.0	.690	91.2	.283	1.175	183.1	430.2	.842	1.508D	103.7	1.086	-.6	11.5	144.4	.251
		12.04	8.14	5.13	3.91	7.30	3.01	13.37	2/1/2	100.8	9.5	22.1	.471	5.209	7.7	252.3	.6	103.3D	1.984
MARS ARRIVAL DATE = 2446560 (9 MAY 1986)																			
4-6140	4-6313.8	.136	85.9	22.2	-.2	.870	88.7	.248	.797	176.0	441.0	.599	.995	103.3	1.235	-3.4	-13.7	312.1	.299
4-6313.8	4-6560	.299	353.5	-36.4	-7.5	1.373	83.1	.374	1.119	25.5	198.0	.701D	1.538	79.8	.668	5.7	-.4	241.8	.186
4-6560	4-6780	.133	233.6	12.5	5.5	.735	99.9	.257	1.252	212.1	402.9	.930	1.573D	98.4	1.111	-3.8	.8	107.2	.199
		10.66	6.72	3.89	3.95	7.34	2.83	12.57	2/1/2	103.2	33.0	43.4	.672	2.704	41.1	256.7	28.8	122.8D	1.145
4-6140	4-6327.2	.176	115.0	14.4	-1.5	.858	83.5	.291	.784	163.5	450.4	.556	1.011	106.2	1.228	-3.5	-11.7	329.3	.355
4-6327.2	4-6560	.355	355.3	-7.4	-2.0	1.369	76.7	.408	1.099	47.7	198.3	.651D	1.546	78.2	.655	.0	-19.5	233.5	.191
4-6560	4-6780	.133	233.6	12.5	5.5	.735	99.9	.257	1.252	212.1	402.9	.930	1.573D	98.4	1.111	-3.8	.8	107.2	.199
		11.25	7.19	4.36	4.06	7.46	2.83	12.57	2/1/2	107.8	33.0	26.0	.478	4.452	13.7	250.7	-9.5	100.1D	1.650
4-6150	4-6313.8	.140	76.6	21.6	-.2	.870	91.6	.248	.800	184.8	440.1	.602	.999D	103.2	1.237	-3.3	-13.6	312.7	.297
4-6313.8	4-6560	.297	353.6	-35.5	-7.3	1.373	83.1	.374	1.119	25.7	198.0	.701D	1.538	79.8	.668	5.5	-1.0	241.6	.185
4-6560	4-6790	.120	238.4	1.7	3.6	.727	98.7	.258	1.234	207.3	408.3	.916	1.552D	99.3	1.107	-2.0	10.3	115.1	.200
		10.43	6.51	3.93	3.93	7.32	2.58	12.58	2/1/2	103.2	24.6	42.6	.660	2.750	40.2	256.5	28.3	122.7D	1.190
4-6150	4-6323.2	.146	97.8	16.8	-1.1	.859	88.4	.266	.789	175.5	446.0	.579	.999	104.6	1.230	-3.2	-12.0	325.0	.322
4-6323.2	4-6560	.322	354.2	-10.4	-2.5	1.371	78.7	.395	1.106	41.1	198.3	.669D	1.543	78.8	.660	.6	-17.9	235.2	.184
4-6560	4-6790	.120	238.4	1.7	3.6	.727	98.7	.258	1.234	207.3	408.3	.916	1.552D	99.3	1.107	-2.0	10.3	115.1	.200
		10.47	6.57	4.00	3.89	7.29	2.58	12.58	2/1/2	106.6	24.6	28.7	.578	4.040	12.0	249.0	-3.1	105.0D	1.759
4-6160	4-6313.4	.158	68.8	21.0	-.2	.872	94.7	.253	.806	194.3	439.2	.602	1.011D	103.4	1.240	-3.5	-13.3	312.7	.302
4-6313.4	4-6560	.302	353.4	-37.8	-7.8	1.373	83.2	.373	1.120	25.2	198.0	.702D	1.538	79.8	.668	6.1	.6	242.1	.188
4-6560	4-6800	.117	246.0	-4.0	2.9	.720	97.4	.260	1.217	202.4	413.6	.901	1.534D	100.5	1.102	-1.4	12.7	122.5	.209
		10.66	6.68	4.15	3.98	7.38	2.53	12.70	2/1/2	103.0	20.0	43.6	.659	2.694	43.3	256.7	30.9	123.8D	1.116
4-6160	4-6322.5	.149	87.0	17.4	-1.0	.859	91.8	.264	.793	185.0	444.6	.583	1.002D	104.4	1.233	-3.0	-11.5	324.7	.318
4-6322.5	4-6560	.318	354.1	-11.1	-2.6	1.371	79.0	.393	1.107	40.1	198.2	.672D	1.543	78.9	.660	.7	-17.4	235.5	.183
4-6560	4-6800	.117	246.0	-4.0	2.9	.720	97.4	.260	1.217	202.4	413.6	.901	1.534D	100.3	1.102	-1.4	12.7	122.5	.209
		10.44	6.57	4.03	3.87	7.27	2.53	12.70	2/1/2	106.4	20.0	28.8	.596	4.020	11.7	249.2	-.8	106.3D	1.801
4-6170	4-6323.4	.167	81.7	17.2	-1.2	.860	94.8	.271	.797	193.2	444.3	.581	1.013D	104.7	1.236	-2.8	-10.5	326.3	.324
4-6323.4	4-6560	.324	354.2	-10.2	-2.5	1.371	78.6	.396	1.106	41.5	198.3	.668D	1.543	78.8	.659	.6	-18.0	235.1	.184
4-6560	4-6810	.120	254.6	-8.1	2.5	.712	96.0	.264	1.202	197.4	418.8	.885	1.519D	101.2	1.097	-1.1	12.9	129.9	.219
		10.72	6.82	4.24	3.90	7.30	2.57	12.86	2/1/2	106.7	16.4	27.5	.573	4.212	10.7	250.2	-.6	105.8D	1.839
4-6180	4-6325.2	.193	80.5	16.9	-1.4	.862	97.7	.284	.803	200.4	444.6	.575	1.031D	105.4	1.240	-2.5	-9.0	329.1	.338
4-6325.2	4-6560	.338	354.6	-8.8	-2.2	1.370	77.7	.401	1.103	44.4	198.3	.660D	1.545	78.5	.657	.3	-18.8	234.4	.187
4-6560	4-6820	.126	263.4	-11.0	2.3	.705	94.5	.269	1.187	192.4	423.9	.867	1.507D	102.2	1.091	-.9	12.0	137.3	.231
		11.24	7.27	4.59	3.97	7.37	2.68	13.04	2/1/2	107.2	13.3	25.3	.527	4.570	9.1	251.8	-.6	104.6D	1.882
4-6190	4-6327.5	.225	82.4	16.7	-1.7	.867	100.6	.302	.811	206.9	445.2	.566	1.056D	106.3	1.245	-2.2	-7.2	332.6	.357
4-6327.5	4-6560	.357	355.4	-7.3	-1.9	1.369	76.5	.408	1.098	48.2	198.4	.650D	1.547	78.1	.655	.0	-19.6	233.4	.192
4-6560	4-6830	.136	271.9	-13.1	2.1	.698	92.8	.277	1.174	187.3	429.0	.848	1.499D	103.2	1.086	-.8	10.3	144.7	.244
		12.00	7.93	5.06	4.07	7.47	2.87	13.25	2/1/2	107.9	10.4	22.6	.471	5.107	7.4	254.0	.1	103.1D	1.936
MARS ARRIVAL DATE = 2446570 (19 MAY 1986)																			
4-6130	4-6315.7	.154	98.4	21.0	-.4	.871	85.0	.263	.794	165.7	444.0	.586	1.003	104.3	1.233	-3.4	-13.0	314.0	.310
4-6315.7	4-6570	.318	354.7	-39.9	-8.6	1.374	82.8	.377	1.121	26.8	201.4	.699D	1.543	78.0	.677	6.6	2.3	241.0	.201
4-6570	4-6770	.173	196.5	-51.1	-8.6	.755	102.3	.263	1.280	222.0	397.1	.944	1.617D	97.5	1.116	10.3	72.0	109.1	.262
		12.02	7.74	4.09	4.27	7.67	3.65	13.55	2/1/1	109.2	54.1	44.7	.594	2.631	46.1	262.1	33.2	122.7D	.969
4-6140	4-6316.2	.140	91.8	20.8	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.3	.307
4-6316.2	4-6570	.307	355.1	-35.7	-7.6	1.374	82.6	.377	1.120	27.5	201.4	.696D	1.543	78.0	.677	5.8	-.8	240.1	.195
4-6570	4-6780	.192	237.7	27.2	10.9	.746	101.3	.261	1.259	217.3	402.6	.930	1.588D	98.4	1.113	-9.4	-21.6	101.7	.256
		12.17	8.02	3.93	4.16	7.55	4.08	13.45	2/1/2	109.9	48.7	42.2	.637	2.778	41.1	259.2	29.5	121.3D	1.132
4-6190	4-6316.4	.140	82.5	20.4	-.5	.867	90.7	.252	.797	182.2	441.7	.596	.998D	103.5	1.235	-3.3	-13.1	316.2	.303
4-6316.4	4-6570	.303	355.3	-33.8	-7.1	1.374	82.4	.378	1.120	27.9	201.4	.697D	1.543	78.0	.677	5.3	-2.1	239.8	.194
4-6570	4-6790	.134	236.2	7.2	4.8	.738	100.1	.260	1.239	212.3	407.8	.917	1.562D	99.3	1.108	-3.3	3.8	114.1	.207
		10.89	6.78	3.93	4.11	7.51	2.85	12.67	2/1/2	110.1	26.1	41.0	.633	2.853	39.1	258.4	28.1	120.7D	1.211
4-6150	4-6325.7	.151	103.1	15.4	-1.3	.856	87.4	.273	.786	173.1	447.6	.571	1.000	105.1	1.229	-3.2	-11.7	328.2	.331
4-6325.7	4-6570	.331	356.7	-9.0	-2.2	1.371	78.1	.400	1.107	42.8	201.5	.664D	1.550	78.9	.669	.3	-18.7	233.6	.195
4-6570	4-6790	.134	236.2	7.2	4.8	.736	100.1	.260	1.239	212.3	407.8	.917	1.562D	99.3	1.108	-3.3	3.8	114.1	.207
		11.05	6.90	4.05	4.15	7.54	2.85	12.67	2/1/2	113.5	28.1	28.2	.549	4.102	12.0	251.5	-5.5	103.3D	1.704

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2446570
19 MAY 1986

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-6160	4-6316.3	.154	74.1	20.0	-.5	.868	93.9	.256	.802	191.4	440.8	.597	1.007D	103.6	1.238	-3.2	-12.7	316.4	.306
4-6316.3	4-6570	.306	355.2	-35.2	-7.4	1.374	82.5	.377	1.120	27.6	201.4	.697D	1.543	78.0	.677	5.6	-1.2	240.0	.195
4-6570	4-6800	.125	242.4	-.8	3.4	.729	98.8	.261	1.221	207.3	413.0	.902	1.539D	100.2	1.103	-2.0	9.4	122.1	.210
		10.91	6.76	4.09	4.14	7.54	2.67	12.72	2/1/2	109.9	21.6	41.5	.642	2.821	41.2	259.9	30.2	121.5D	1.169
4-6160	4-6324.4	.149	91.2	18.5	-1.2	.857	91.1	.267	.790	183.1	445.7	.579	1.001D	104.6	1.232	-3.0	-11.3	327.2	.322
4-6324.4	4-6570	.322	356.4	-10.2	-2.4	1.372	78.7	.396	1.109	40.9	201.5	.669D	1.549	77.1	.670	.5	-18.0	234.0	.193
4-6570	4-6800	.125	242.4	-.8	3.4	.729	98.8	.261	1.221	207.3	413.0	.902	1.539D	100.2	1.103	-2.0	9.4	122.1	.210
		10.79	6.70	4.03	4.09	7.49	2.67	12.72	2/1/2	113.2	21.6	28.8	.580	4.027	11.3	251.4	-2.2	105.4D	1.757
4-6170	4-6315.8	.183	68.8	19.8	-.5	.873	97.3	.267	.811	201.1	439.9	.595	1.028D	104.1	1.244	-3.1	-12.0	316.2	.316
4-6315.8	4-6570	.316	354.7	-39.3	-8.4	1.374	82.7	.377	1.121	26.9	201.4	.699D	1.543	78.0	.677	6.6	1.8	240.9	.200
4-6570	4-6810	.123	250.5	-5.8	2.8	.721	97.5	.263	1.204	202.2	418.1	.887	1.520D	101.1	1.097	-1.5	10.8	129.8	.218
		11.34	7.09	4.45	4.25	7.65	2.63	12.84	2/1/2	109.3	17.5	43.6	.601	2.693	46.8	263.9	34.8	123.2D	1.017
4-6170	4-6325.1	.164	84.7	16.5	-1.3	.858	94.2	.272	.794	191.5	445.3	.578	1.011D	104.9	1.234	-2.8	-10.3	328.5	.326
4-6325.1	4-6570	.326	356.6	-9.5	-2.3	1.371	78.4	.398	1.108	41.9	201.5	.667D	1.549	77.0	.670	.4	-18.4	233.8	.194
4-6570	4-6810	.123	250.5	-5.8	2.8	.721	97.5	.263	1.204	202.2	418.1	.887	1.520D	101.1	1.097	-1.5	10.8	129.8	.218
		10.96	6.84	4.21	4.12	7.51	2.63	12.84	2/1/2	113.3	17.5	27.7	.564	4.178	10.3	252.3	-1.5	105.3D	1.794
4-6180	4-6326.7	.189	82.8	16.4	-1.5	.860	97.1	.284	.800	198.8	445.4	.573	1.027D	105.5	1.238	-2.5	-8.8	331.0	.339
4-6326.7	4-6570	.339	357.0	-6.2	-2.1	1.371	77.6	.403	1.105	44.5	201.5	.660D	1.551	76.7	.668	.1	-19.2	233.2	.197
4-6570	4-6820	.125	259.4	-9.4	2.5	.713	96.0	.267	1.188	197.0	423.1	.871	1.505D	102.0	1.091	-1.2	10.4	137.4	.227
		11.40	7.21	4.54	4.19	7.58	2.67	12.99	2/1/2	113.7	14.2	25.7	.524	4.498	8.8	253.8	-1.5	104.3D	1.852
4-6190	4-6328.9	.220	84.1	16.3	-1.8	.864	100.1	.301	.807	205.4	445.9	.564	1.051D	106.4	1.243	-2.1	-7.0	334.5	.357
4-6328.9	4-6570	.357	357.7	-6.7	-1.8	1.370	76.5	.410	1.101	48.1	201.5	.650D	1.553	76.4	.665	-.2	-19.9	232.4	.201
4-6570	4-6830	.131	268.5	-12.0	2.2	.706	94.4	.273	1.173	191.8	428.0	.853	1.493D	102.9	1.085	-1.1	9.1	144.8	.239
		12.07	7.78	4.99	4.30	7.69	2.79	13.16	2/1/2	114.2	11.4	23.1	.471	4.989	7.1	256.0	-.8	102.9D	1.880

MARS ARRIVAL DATE = 2446580 (29 MAY 1986)

4-6150	4-6319.0	.141	88.4	19.1	-.7	.864	89.9	.257	.794	179.6	443.4	.590	.997	103.9	1.233	-3.2	-12.6	319.6	.310
4-6319.0	4-6580	.310	357.5	-32.8	-7.1	1.375	81.9	.382	1.122	29.7	204.6	.694D	1.551	76.3	.687	5.2	-3.1	236.9	.204
4-6580	4-6790	.164	236.5	15.8	7.4	.749	101.6	.265	1.247	217.5	407.5	.917	1.578D	99.4	1.111	-5.9	-8.2	111.3	.228
		11.77	7.40	3.94	4.36	7.76	3.46	13.00	2/1/2	116.1	36.1	40.1	.626	2.920	38.5	260.8	28.2	119.2D	1.202
4-6150	4-6328.6	.159	109.3	13.7	-1.6	.853	86.2	.282	.783	170.5	449.6	.562	1.003	105.7	1.227	-3.5	-11.5	332.0	.342
4-6328.6	4-6580	.343	359.8	-7.0	-1.8	1.372	77.4	.406	1.108	45.1	204.4	.658D	1.559	75.1	.678	-.2	-20.0	232.8	.209
4-6580	4-6790	.164	236.5	15.8	7.4	.749	101.6	.265	1.247	217.5	407.5	.917	1.578D	99.4	1.111	-5.9	-8.2	111.3	.228
		12.08	7.61	4.15	4.47	7.86	3.46	13.00	2/1/2	119.4	36.1	27.7	.513	4.174	13.1	254.5	-9.0	101.6D	1.627
4-6160	4-6319.0	.151	79.5	19.0	-.7	.864	93.0	.259	.798	188.6	442.4	.591	1.004D	103.9	1.236	-3.1	-12.1	320.0	.311
4-6319.0	4-6580	.311	357.4	-33.1	-7.2	1.375	81.9	.382	1.122	29.6	204.6	.694D	1.551	76.3	.687	5.3	-2.9	239.0	.205
4-6580	4-6800	.138	239.6	3.1	4.3	.740	100.3	.264	1.227	212.4	412.5	.903	1.550D	100.2	1.105	-3.0	4.7	121.2	.215
		11.35	6.98	4.06	4.37	7.76	2.92	12.80	2/1/2	116.1	24.4	40.1	.623	2.917	39.4	261.8	29.4	119.5D	1.195
4-6160	4-6326.7	.149	96.3	15.3	-1.4	.854	90.3	.271	.787	180.8	447.1	.573	1.000D	105.0	1.230	-3.0	-11.0	330.2	.328
4-6326.7	4-6580	.328	359.2	-8.6	-2.1	1.373	78.3	.401	1.111	42.0	204.5	.666D	1.557	75.4	.680	.2	-19.1	233.4	.205
4-6580	4-6800	.138	239.6	3.1	4.3	.740	100.3	.264	1.227	212.4	412.5	.903	1.550D	100.2	1.105	-3.0	4.7	121.2	.215
		11.34	6.96	4.04	4.38	7.77	2.92	12.80	2/1/2	119.0	24.4	28.7	.560	4.034	11.1	253.9	-4.7	104.2D	1.700
4-6170	4-6318.7	.176	73.3	18.9	-.7	.868	96.4	.268	.806	198.1	441.6	.590	1.021D	104.3	1.241	-3.0	-11.4	320.0	.319
4-6318.7	4-6580	.319	357.1	-36.5	-8.0	1.375	82.1	.381	1.123	29.1	204.6	.695D	1.550	76.4	.687	6.1	-.5	239.7	.208
4-6580	4-6810	.130	246.6	-3.4	3.3	.731	98.9	.264	1.208	207.1	417.5	.889	1.526D	101.0	1.099	-2.0	8.1	129.4	.219
		11.59	7.13	4.36	4.45	7.85	2.77	12.86	2/1/2	115.5	19.1	41.8	.592	2.806	44.5	265.0	33.9	121.0D	1.070
4-6170	4-6327.0	.162	88.5	15.7	-1.5	.855	93.5	.274	.791	189.5	446.4	.574	1.008D	105.1	1.233	-2.8	-10.0	331.0	.329
4-6327.0	4-6580	.329	359.3	-8.4	-2.0	1.372	78.2	.401	1.111	42.4	204.5	.665D	1.557	75.3	.680	.1	-19.3	233.5	.205
4-6580	4-6810	.130	246.6	-3.4	3.3	.731	98.9	.264	1.208	207.1	417.5	.889	1.526D	101.0	1.099	-2.0	8.1	129.4	.219
		11.34	6.95	4.18	4.39	7.78	2.77	12.86	2/1/2	119.1	19.1	28.0	.554	4.140	10.0	254.6	-3.3	104.5D	1.739
4-6180	4-6328.3	.185	85.6	15.8	-1.6	.857	96.5	.285	.797	197.0	446.4	.570	1.024D	105.6	1.236	-2.4	-8.6	333.3	.340
4-6328.3	4-6580	.340	359.7	-7.2	-1.8	1.372	77.5	.405	1.109	44.6	204.4	.659D	1.558	75.1	.679	-.1	-19.9	232.9	.208
4-6580	4-6820	.128	255.1	-7.7	2.7	.723	97.5	.266	1.190	201.8	422.4	.874	1.507D	101.8	1.092	-1.6	8.6	137.2	.226
		11.67	7.21	4.48	4.46	7.85	2.73	12.97	2/1/2	119.3	15.4	26.2	.519	4.417	8.7	256.1	-3.0	103.8D	1.775
4-6190	4-6330.4	.215	86.2	15.8	-1.9	.860	99.5	.301	.804	203.8	446.8	.562	1.045D	106.5	1.241	-2.1	-6.9	336.5	.357
4-6330.4	4-6580	.358	.4	-5.9	-1.8	1.371	76.5	.412	1.105	47.9	204.4	.650D	1.560	74.8	.676	-.4	-20.6	232.3	.213
4-6580	4-6830	.130	264.3	-10.8	2.4	.715	95.9	.270	1.174	196.5	427.2	.857	1.491D	102.7	1.086	-1.3	7.7	144.9	.235
		12.25	7.68	4.91	4.57	7.96	2.77	13.11	2/1/2	119.7	12.4	23.7	.470	4.861	6.9	258.2	-2.4	102.5D	1.816

MARS ARRIVAL DATE = 2446590 (8 JUN 1986)

4-6160	4-6321.6	.149	85.1	17.8	-1.0	.861	92.1	.263	.794	186.0	444.0	.585	1.002D	104.3	1.234	-3.1	-11.7	323.5	.316
4-6321.6	4-6590	.316	.1	-31.8	-7.0	1.376	81.5	.386	1.125	31.1	207.5	.691D	1.560	74.8	.697	5.1	-4.4	239.0	.216
4-6590	4-6800	.160	236.4	8.5	6.0	.751	101.8	.269	1.235	217.7	412.2	.903	1.568D	100.3	1.107	-4.7	-2.8	119.4	.228
		12.06	7.41	4.04	4.65	8.04	3.37	13.00	2/1/2	121.3	29.5	39.3	.604	2.976	36.3	263.9	28.9	118.0D	1.193
4-6160	4-6329.4	.152	102.3	13.6	-1.6	.851	89.3	.277	.783	178.1	448.8	.566	1.001	105.4	1.228	-3.0	-10.6	333.7	.335
4-6329.4	4-6590	.335	2.4	-6.4	-1.6	1.374	77.8	.406	1.114	43.5	207.3	.662D	1.567	73.8	.690	-.4	-20.8	235.7	.219
4-6590	4-6800	.160	236.4	8.5	6.0	.751	101.8	.269	1.235	217.7	412.2	.903	1.568D	100.3	1.107	-4.7	-2.8	119.4	.228
		12.17	7.44	4.07	4.72	8.11	3.37	13.00	2/1/2	124.1	29.5	28.7	.535	4.036	12.3	256.8	-8.5	102.7D	1.624
4-6170	4-6321.4	.170	78.1	17.9	-1.0	.863	95.5	.269	.801	195.2	443.2	.585	1.016D	104.5	1.238	-2.9	-10.8	323.7	.322
4-6321.4	4-6590	.321	359.8	-34.3	-7.6	1.376	81.6	.386	1.125	30.8	207.5	.691D	1.560	74.9	.697	5.7	-2.7	239.5	.219
4-6590	4-6810	.143	243.4	-.5	4.0	.742	100.5	.268	1.214	212.3	417.0	.889	1.539D	101.1	1.100	-2.8	4.5	128.7	.223
		12.01	7.30	4.29	4.71	8.10	3.02	12.93	2/1/2	120.9	21.3	40.4	.582	2.893	42.4	266.5	32.9	119.1D	1.101
4-6170	4-6329.2	.160	93.0	14.7	-1.6	.852	92.7	.277	.788	187.2	447.7	.569	1.006D	105.3	1.231	-2.7	-9.7	334.0	.334
4-6329.2	4-6590	.334	2.3	-6.6	-1.6	1.374	77.9	.405	1.115	43.1	207.2	.663D	1.566	73.8	.691	-.3	-20.7	233.7	.219
4-6590	4-6810	.143	243.4	-.5	4.0	.742	100.5	.268	1.214	212.3	417.0	.889	1.539D	101.1	1.100	-2.8	4.5	128.7	.223
		11.89	7.18	4.16	4.71	8.10	3.02	12.93	2/1/2	124.1	21.3	28.3	.540	4.094	10.6	257.3	-6.4	103.3D	1.672
4-6180	4-6330.3	.181	88.9	15.0	-1.8	.853	95.8	.286	.793	195.0	447.5	.566	1.020D	105.8	1.234	-2.4	-8.4	335.9	.342
4-6330.3	4-6590	.342	2.7	-5.7	-1.5	1.373	77.4	.409	1.113	44.8	207.2	.658D	1.568	73.6	.690	-.5	-21.2	233.4	.221
4-6590	4-6820	.136	250.9	-5.8	3.1	.733	99.0	.267	1.194	206.9	421.7	.875	1.514D	101.8	1.094	-2.1	6.3	136.9	.227
		12.07	7.30	4.42	4.77	8.16	2.86	12.99	2/1/2	124.2	16.8	26.7	.513	4.326	9.2	256.6	-5.6	103.1D	1.707
4-6190	4-6332.2	.209	88.7	15.2	-2.0	.856	98.9	.301	.799	201.9	447.6	.559	1.040D	106.5	1.236	-2.0	-6.7	338.9	.358
4-6332.2	4-6590	.358	3.4	-4.7	-1.3	1.373	76.5	.415	1.110	47.8	207.1	.649D	1.570	73.3	.686	-.7	-21.7	233.0	.226
4-6590	4-6830	.134	259.7	-9.5	2.6	.724	97.5	.269	1.177	201.5	426.5	.860	1.493D	102.6	1.087	-1.7	6.1	144.7	.234
		12.54	7.66	4.83	4.88	8.26	2.83	13.09	2/1/2	124.4	13.5	24.5	.469	4.721	7.9	260.7	-4.7	102.1D	1.745

MARS ARRIVAL DATE = 2446600 (18 JUN 1986)

4-6170	4-6324.1	.165	83.0	16.9	-1.2	.859	94.5	.271	.796	192.4	444.7	.580	1.012D	104.8	1.235	-2.8	-10.4	327.3	.325
4-6324.1	4-6600	.325	3.0	-32.7	-7.4	1.377	81.1	.390	1.129	32.1	210.2	.688D	1.570	73.5	.707	5.5	-4.5	240.2	.231
4-6600	4-6810	.162	241.4	3.1	5.1	.753	102.0	.274	1.223	217.6	416.6	.889	1.558D	101.2	1.103	-4.1	-.7	127.3	.233
		12.66	7.65	4.23	5.01	8.40	3.42	13.08	2/1/2	125.5	25.0	39.7	.569	2.945	40.8	268.7	32.0	117.7D	1.107
4-6170	4-6331.7	.159	98.4	13.4	-1.8	.848	91.8	.281	.784	184.6	449.1	.563	1.004D	105.6	1.228	-2.7	-9.4	337.3	.339
4-6331.7	4-6600	.339	5.8	-4.1	-1.0	1.375	77.6	.410	1.119	44.0	209.8	.660D	1.577	72.4	.701	-.9	-22.7	234.8	.234
4-6600	4-6810	.162	241.4	3.1	5.1	.753	102.0	.274	1.223	217.6	416.6	.889	1.558D	101.2	1.103	-4.1	-.7	127.3	.233
		12.64	7.56	4.15	5.08	8.46	3.42	13.08	2/1/2	128.3	25.0	28.7	.524	4.028	12.9	260.3	-10.7	102.3D	1.585
4-6180	4-6332.4	.176	92.8	14.1	-1.9	.849	95.0	.288	.789	192.7	448.7	.562	1.016D	106.0	1.232	-2.4	-8.1	338.8	.345
4-6332.4	4-6600	.345	6.0	-3.7	-1.0	1.375	77.2	.412	1.118	45.2	209.8	.657D	1.578	72.3	.700	-1.0	-22.9	234.7	.236
4-6600	4-6820	.148	247.4	-3.8	3.7	.743	100.6	.271	1.201	212.1	421.2	.875	1.527D	101.9	1.096	-2.7	3.5	136.2	.232
		12.62	7.50	4.37	5.12	8.50	3.13	13.05	2/1/2	128.4	18.8	27.4	.505	4.218	11.1	261.5	-9.3	102.3D	1.625

STOPOVER TIME = 0 DAYS

1986 OUTBOUND SWINGBY

MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2446490
28 FEB 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2446490 (28 FEB 1986)																			
4-6130	4-6319.8	.170	105.3	18.6	-.8	.868	83.4	.278	.791	162.2	447.1	.571	1.010	105.3	1.232	-3.5	-12.4	319.0	.338
4-6319.8	4-6490	.338	348.1	-8.8	-2.2	1.379	78.1	.413	1.135	41.9	168.7	.666D	1.604A	97.7	.619	.5	-22.2	259.6	.222
4-6490	4-6810	.164	263.0	-16.9	1.7	.665	85.7	.309	1.216	170.4	427.5	.840	1.592	104.3	1.101	.4	20.9	126.6	.274
		12.53	7.74	4.29	4.79	8.18	3.45	13.76	2/1/2	47.6	10.6	28.8	.526	4.018	13.1	242.2	-7.1	103.7D	1.589
4-6140	4-6316.2	.140	91.6	20.7	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.4	.307
4-6316.2	4-6490	.307	348.4	-10.7	-2.4	1.381	80.0	.404	1.144	35.4	167.9	.682D	1.606A	97.9	.625	.8	-21.4	261.3	.220
4-6490	4-6820	.187	266.9	-17.7	1.8	.660	83.5	.330	1.206	166.5	433.8	.808	1.604	106.2	1.097	.4	19.0	133.6	.302
		12.65	7.91	3.93	4.75	8.14	3.97	14.27	2/1/2	46.1	7.3	32.4	.636	3.581	13.2	241.0	-4.4	108.3D	1.642
MARS ARRIVAL DATE = 2446500 (10 MAR 1986)																			
4-6130	4-6320.9	.175	107.0	18.0	-.9	.867	82.9	.282	.790	161.2	447.9	.567	1.013	105.6	1.231	-3.5	-12.3	320.3	.344
4-6320.9	4-6500	.344	347.9	-8.7	-2.2	1.374	77.6	.409	1.118	44.2	174.1	.660D	1.576A	94.1	.616	.5	-21.9	255.6	.203
4-6500	4-6810	.154	264.2	-16.2	1.7	.670	87.3	.299	1.212	173.6	425.9	.850	1.575	103.7	1.100	.3	20.2	127.4	.262
		11.92	7.59	4.35	4.33	7.72	3.24	13.55	2/1/2	56.1	11.4	27.3	.509	4.231	13.2	242.7	-7.6	102.4D	1.643
4-6140	4-6316.9	.141	93.1	20.4	-.5	.867	87.6	.256	.794	173.0	443.2	.591	.997	103.9	1.233	-3.4	-13.1	316.2	.310
4-6316.9	4-6500	.310	347.9	-10.8	-2.5	1.376	79.7	.398	1.128	36.9	173.3	.679D	1.578A	94.4	.623	.8	-20.9	257.8	.200
4-6500	4-6820	.175	266.7	-17.2	1.8	.665	85.2	.317	1.202	169.5	432.0	.821	1.583	105.4	1.096	.3	18.2	134.4	.287
		11.91	7.64	3.95	4.27	7.66	3.70	13.99	2/1/2	54.3	8.2	31.1	.627	3.732	13.1	241.2	-4.2	107.4D	1.714
4-6150	4-6315.9	.139	81.4	20.6	-.4	.867	90.9	.251	.797	182.7	441.4	.597	.998D	103.5	1.235	-3.3	-13.2	315.6	.302
4-6315.9	4-6500	.302	348.0	-11.4	-2.5	1.377	80.2	.396	1.130	35.2	173.1	.683D	1.578A	94.5	.624	.9	-20.6	258.2	.200
4-6500	4-6830	.201	272.6	-17.9	1.8	.659	82.8	.339	1.192	165.5	438.1	.787	1.596	107.2	1.092	.3	16.0	141.4	.316
		12.47	8.21	3.93	4.26	7.65	4.28	14.54	2/1/2	53.9	5.0	31.8	.658	3.655	13.2	241.1	-3.1	108.9D	1.748
MARS ARRIVAL DATE = 2446510 (20 MAR 1986)																			
4-6130	4-6322.3	.182	109.2	17.2	-1.1	.866	82.3	.288	.789	160.0	449.0	.561	1.016	106.0	1.230	-3.6	-12.1	322.1	.352
4-6322.3	4-6510	.352	348.3	-8.3	-2.2	1.371	77.0	.409	1.106	46.5	179.1	.654D	1.559A	90.6	.616	.4	-21.5	250.9	.190
4-6510	4-6810	.144	264.7	-15.4	1.8	.676	86.8	.290	1.209	177.0	424.4	.858	1.559	103.1	1.099	.1	19.3	128.1	.251
		11.52	7.49	4.45	4.03	7.42	3.04	13.37	2/1/2	65.5	12.2	26.0	.485	4.439	13.5	243.7	-8.4	101.1D	1.667
4-6140	4-6317.7	.143	94.8	19.9	-.6	.866	87.3	.258	.793	172.2	443.7	.588	.998	104.0	1.233	-3.4	-13.0	317.3	.312
4-6317.7	4-6510	.312	347.9	-10.9	-2.5	1.373	79.4	.395	1.117	38.3	178.3	.676D	1.559A	91.1	.624	.8	-20.3	253.6	.186
4-6510	4-6820	.164	269.9	-16.5	1.8	.670	85.8	.306	1.198	172.7	430.3	.832	1.564	104.6	1.095	.1	17.4	135.2	.274
		11.35	7.41	3.97	3.94	7.33	3.45	13.75	2/1/2	63.2	9.0	30.0	.616	3.858	13.0	241.8	-4.0	106.7D	1.760
4-6150	4-6316.6	.140	82.8	20.3	-.5	.866	90.7	.252	.797	182.0	441.8	.595	.998D	103.6	1.235	-3.3	-13.1	316.4	.304
4-6316.6	4-6510	.304	348.0	-11.7	-2.6	1.374	80.0	.392	1.120	36.3	178.1	.681D	1.559A	91.2	.625	1.0	-19.9	254.2	.185
4-6510	4-6830	.187	274.4	-17.4	1.8	.665	84.6	.325	1.187	168.5	436.2	.801	1.573	106.3	1.090	.1	15.3	142.2	.299
		11.81	7.89	3.93	3.92	7.32	3.96	14.22	2/1/2	62.7	6.0	30.9	.652	3.758	13.1	241.6	-2.6	108.4D	1.798
4-6160	4-6317.0	.153	75.6	19.7	-.5	.867	93.6	.257	.801	190.6	441.3	.595	1.006D	103.7	1.237	-3.2	-12.5	317.4	.307
4-6317.0	4-6510	.307	347.9	-11.3	-2.6	1.374	79.8	.393	1.119	37.1	178.2	.679D	1.559A	91.2	.625	.9	-20.1	253.9	.185
4-6510	4-6840	.214	278.3	-18.1	1.9	.659	82.0	.349	1.178	164.5	442.3	.766	1.589	108.3	1.085	.1	12.9	149.2	.330
		12.61	8.69	4.08	3.93	7.32	4.60	14.81	2/1/2	62.9	5.0	29.8	.637	3.883	12.6	242.2	-2.3	108.2D	1.836
MARS ARRIVAL DATE = 2446520 (30 MAR 1986)																			
4-6130	4-6324.4	.194	112.0	16.2	-1.3	.864	81.3	.298	.787	158.3	450.6	.552	1.022	106.7	1.230	-3.7	-11.9	324.6	.365
4-6324.4	4-6520	.365	349.3	-7.7	-2.1	1.368	76.2	.411	1.097	49.4	183.7	.646D	1.548	87.4	.619	.2	-21.2	245.5	.183
4-6520	4-6810	.136	264.5	-14.4	1.9	.682	90.3	.282	1.206	180.6	423.0	.865	1.546D	102.6	1.098	-.1	16.4	128.8	.242
		11.36	7.48	4.61	3.88	7.28	2.88	13.21	2/1/2	75.5	13.0	24.7	.451	4.672	14.1	245.3	-9.8	99.3D	1.657
4-6140	4-6303.0	.133	61.7	26.9	.9	.882	91.9	.230	.810	186.2	434.1	.624	.996D	101.8	1.241	-3.6	-16.3	298.5	.273
4-6303.0	4-6520	.273	354.7	-42.4	-7.7	1.375	86.5	.367	1.131	13.0	181.7	.717D	1.546	89.0	.641	6.3	-.7	255.6	.185
4-6520	4-6820	.153	270.4	-15.7	1.9	.676	88.4	.296	1.194	176.2	428.7	.841	1.547	104.0	1.094	-.1	16.5	135.9	.262
		11.00	7.09	3.86	3.92	7.31	3.22	13.55	2/1/2	70.1	9.9	54.3	.604	2.192	43.5	250.3	25.5	132.9D	.959
4-6140	4-6318.8	.145	97.1	19.3	-.7	.865	86.9	.261	.792	171.2	444.5	.585	.999	104.2	1.232	-3.4	-12.8	318.6	.316
4-6318.8	4-6520	.316	348.4	-10.8	-2.5	1.371	79.1	.394	1.110	39.6	182.9	.673D	1.547	88.1	.627	.8	-19.7	249.0	.177
4-6520	4-6820	.153	270.4	-15.7	1.9	.676	88.4	.296	1.194	176.2	428.7	.841	1.547	104.0	1.094	-.1	16.5	135.9	.262
		10.95	7.22	3.99	3.74	7.14	3.22	13.55	2/1/2	72.6	9.9	29.2	.601	3.966	12.8	242.7	-3.9	105.9D	1.782
4-6150	4-6317.4	.140	84.6	19.9	-.5	.865	90.4	.254	.796	181.2	442.3	.594	.998D	103.7	1.234	-3.3	-12.9	317.4	.306
4-6317.4	4-6520	.306	348.4	-11.8	-2.7	1.372	79.8	.390	1.113	37.2	182.7	.679D	1.547	88.3	.629	1.0	-19.1	249.8	.176
4-6520	4-6830	.174	275.6	-16.7	1.9	.670	86.3	.312	1.183	171.8	434.5	.814	1.553	105.5	1.089	-.1	14.4	143.0	.285
		11.31	7.60	3.93	3.71	7.11	3.67	13.95	2/1/2	71.9	6.9	30.2	.644	3.834	13.0	242.5	-2.0	107.9D	1.824
4-6160	4-6317.7	.152	77.0	19.4	-.6	.866	93.4	.256	.800	189.9	441.7	.594	1.006D	103.8	1.237	-3.2	-12.4	318.4	.308
4-6317.7	4-6520	.308	348.4	-11.6	-2.6	1.372	79.6	.391	1.112	37.8	182.8	.677D	1.547	88.2	.629	.9	-19.3	249.6	.176
4-6520	4-6840	.199	280.1	-17.5	1.8	.665	83.9	.333	1.173	167.5	440.3	.782	1.564	107.5	1.084	-.1	12.0	150.0	.312
		12.02	8.30	4.07	3.72	7.12	4.23	14.45	2/1/2	72.1	4.0	29.4	.632	3.947	12.5	243.0	-1.6	107.9D	1.883
MARS ARRIVAL DATE = 2446530 (9 APR 1986)																			
4-6130	4-6305.8	.130	77.2	26.9	.6	.880	88.4	.235	.804	174.9	436.8	.615	.993	102.8	1.238	-3.4	-14.9	301.2	.281
4-6305.8	4-6530	.281	353.0	-41.6	-7.8	1.374	85.6	.366	1.126	16.5	186.2	.713D	1.538	86.5	.646	6.3	.6	251.6	.160
4-6530	4-6810	.129	263.3	-13.2	2.0	.689	91.7	.276	1.203	184.5	421.7	.872	1.535D	102.1	1.097	-.3	17.3	129.3	.234
		10.58	6.57	3.63	3.81	7.21	2.74	13.09	2/1/2	78.8	13.6	51.8	.764	2.287	43.6	251.8	27.7	129.9D	.983
4-6130	4-6327.6	.215	116.1	14.6	-1.7	.862	79.7	.316	.784	155.8	453.3	.537	1.032	107.8	1.228	-3.8	-11.6	328.5	.388
4-6327.6	4-6530	.388	351.3	-6.6	-1.9	1.366	74.8	.419	1.088	53.8	188.0	.632D	1.544	84.3	.621	.0	-21.0	239.8	.165
4-6530	4-6810	.129	263.3	-13.2	2.0	.689	91.7	.276	1.203	184.5	421.7	.872	1.535D	102.1	1.097	-.3	17.3	129.3	.234
		11.56	7.65	4.91	3.91	7.30	2.74	13.09	2/1/2	85.9	13.8	23.1	.400	5.001	15.6	247.9	-12.4	96.7D	1.599
4-6140	4-6305.7	.132	67.7	25.9	.6	.879	91.1	.234	.807	183.6	435.8	.618	.995D	102.1	1.239	-3.5	-15.5	301.9	.279
4-6305.7	4-6530	.279	352.9	-40.9	-7.7	1.374	85.5	.367	1.126	16.7	186.2	.713D	1.536	86.4	.646	6.2	.0	251.7	.179
4-6530	4-6820	.144	270.0	-14.8	1.9	.682	90.0	.287	1.191	179.9	427.3	.850	1.533	103.4	1.093	-.2	15.6	136.4	.252
		10.67	6.88	3.85	3.79	7.19	3.03	13.37	2/1/2	78.7	10.7	30.7	.774	2.335	42.9	251.6	26.8	129.9D	1.033
4-6140	4-6320.1	.149	99.9	18.5	-.8	.864	86.4	.265	.791	169.9	445.4	.581	1.000	104.5	1.231	-3.4	-12.6	320.3	.322
4-6320.1	4-6530	.322	349.3	-10.5	-2.5	1.370	78.7	.394	1.105	41.0	187.2	.670D	1.541	85.4	.633	.7	-19.2	244.3	.173
4-6530	4-6820	.144	270.0	-14.8	1.9	.682	90.0	.287	1.191	179.9	427.3	.850	1.533	103.4	1.093	-.2	15.6	136.4	.252
		10.72	7.07	4.03	3.66	7.06	3.03	13.37	2/1/2	82.1	10.7	28.5	.581	4.066	12.7	244.0	-4.2	105.0D	1.783
4-6150	4-6305.4	.148	59.3	24.6	.7	.880	94.0	.238	.812	193.2	434.9	.619	1.006D	102.2	1.242	-3.7	-15.9	301.8	.283
4-6305.4	4-6530	.283	353.1	-42.6	-8.0	1.374	85.7	.366	1.126	16.2	186.2	.714D	1.538	86.5	.646	6.6	1.3	251.9	.161
4-6530	4-6830	.162	276.1	-16.0	1.9	.676	88.0	.301	1.160	175.3	432.9	.825	1.535	104.8	1.088	-.2	13.5	143.6	.272
		11.27	7.43	4.05	3.85	7.23	3.41	13.72	2/1/2	78.8	7.8	31.0	.750	2.322	44.6	253.0	27.9	130.9D	.992
4-6150	4-6318.4	.140	87.0	19.4	-.6	.864	90.1	.256	.794	180.2	443.0	.591	.997D	103.8	1.234	-3.3	-12.7	318.8	.308
4-6318.4	4-6530	.308	349.2	-11.8	-2.7	1.371	79.6	.389	1.109	38.0	187.1	.677D	1.540	85.5	.635	1.0	-18.4	245.3	.172
4-6530	4-6830	.162	276.1	-16.0	1.9	.676	88.0	.301	1.160	175.3	432.9	.825	1.535	104.8	1.088	-.2	13.5	143.6	.272
		10.96	7.35	3.94	3.82	7.02	3.41	13.72	2/1/2	81.3	7.8	29.8	.633	3.894	12.9	243.7	-1.6	107.5D	1.831
4-6160	4-6318.6	.151	78.7	19.1	-.7	.865	93.1	.259	.798	189.0	442.2	.592	1.005D	103.9	1.236	-3.1	-12.2	319.5	.310
4-6318.6	4-6530	.310	349.2	-11.7	-2.7	1.371	79.5	.390	1.108	38.4	187.0	.676D	1.541	85.5	.635	.9	-18.5	245.2	.172
4-6530	4-6840	.184	281.5	-18.0	1.8	.671	85.7	.319	1.169	170.8	438.5	.796	1.542	106.4	1.083	-.2	11.2	150.6	.295
		11.58	7.96	4.06	3.82	7.02	3.90	14.14	2/1/2	81.4	5.0	29.1	.626	3.986	12.4	244.2	-1.0	107.8D	1.869
4-6170	4-6319.9	.173	75.4	18.5	-.9	.866	96.0	.266	.803	196.8	442.3	.588	1.019D	104.4	1.240	-2.9	-11.1	321.6	.320
4-6319.9	4-6530	.320	349.3	-10.7	-2.5	1.370	78.8	.393	1.106	40.6	187.2	.671D	1.541	85.4	.633	.8	-19.1	244.4	.173
4-6530	4-6850	.211	285.9	-17.5	1.8	.665	83.1	.342	1.159	166.4	444.2	.763	1.555	108.2	1.077	-.2	8.6	157.6	.323
		12.50	8.85	4.33	3.85	7.05	4.52	14.68	2/1/2	82.0	2.3	27.2	.588	4.257	11.3	245.3	-.9	106.7D	1.914
MARS ARRIVAL DATE = 2446540 (19 APR 1986)																			
4-6130	4-6308.1	.134	83.0	25.5	.5	.877	87.6	.241	.802	172.5	438.6	.609	.995	102.7	1.237	-3.4	-14.4	304.4	.289
4-6308.1	4-6540	.289	352.3	-40.8	-7.9	1.373	84.8	.368	1.122	19.6	190.4	.710D	1.535	84.1	.652	6.4	1.4	248.1	.180
4-6540	4-6810	.123	261.5	-11.7	2.1	.696	93.1	.270	1.202	188.6	420.6	.877	1.526D	101.7	1.097	-.8	18.1	129.8	.227
		10.31	6.81	3.87	3.80	7.20	2.64	12.98	2/1/2	87.3	14.6	49.2	.722	2.403	44.0	253.8	29.2	127.9D	1.013

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2446540
19 APR 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-6140	4-6308.4	.132	73.8	24.8	.5	.876	90.3	.238	.803	181.1	437.6	.612	.995D	102.5	1.238	-3.5	-14.8	305.3	.285
4-6308.4	4-6540	.285	352.3	-39.2	-7.6	1.373	84.6	.368	1.122	20.1	190.4	.709D	1.535	84.1	.652	6.0	.2	247.9	.178
4-6540	4-6820	.136	268.8	-13.7	2.0	.689	91.5	.280	1.189	183.8	426.0	.857	1.521D	102.9	1.092	-.4	14.5	136.8	.243
		10.48	6.72	3.85	3.75	7.15	2.87	13.23	2/1/2	87.3	11.5	47.7	.741	2.474	42.2	253.0	27.7	127.2D	1.092
4-6140	4-6321.9	.154	103.4	17.4	-1.0	.862	85.7	.271	.789	168.3	446.6	.575	1.002	104.9	1.230	-3.4	-12.4	322.6	.329
4-6321.9	4-6540	.329	350.8	-9.9	-2.4	1.369	78.3	.396	1.102	42.7	191.2	.665D	1.539	82.8	.640	.6	-16.9	240.0	.175
4-6540	4-6820	.136	268.8	-13.7	2.0	.689	91.5	.280	1.189	183.8	426.0	.857	1.521D	102.9	1.092	-.4	14.5	136.8	.243 *
		10.66	6.97	4.10	3.69	7.09	2.87	13.23	2/1/2	91.4	11.5	27.7	.556	4.174	12.6	245.7	-5.0	103.8D	1.763
4-6150	4-6308.2	.144	64.8	23.7	.4	.877	93.3	.241	.808	190.4	436.6	.613	1.003D	102.5	1.240	-3.5	-15.0	305.5	.287
4-6308.2	4-6540	.287	352.3	-40.2	-7.8	1.373	84.7	.368	1.122	19.8	190.4	.709D	1.535	84.1	.652	6.2	.9	248.0	.179
4-6540	4-6830	.151	275.7	-15.1	1.9	.683	89.6	.292	1.177	179.1	431.5	.834	1.520	104.2	1.087	-.4	12.5	144.1	.261
		10.95	7.17	3.98	3.78	7.18	3.19	13.53	2/1/2	87.3	8.7	47.7	.729	2.472	43.4	254.0	28.5	127.9D	1.074
4-6150	4-6319.7	.141	89.8	18.8	-.8	.863	89.7	.258	.793	179.0	443.8	.588	.998	104.0	1.233	-3.2	-12.5	320.4	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.8	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6830	.151	275.7	-15.1	1.9	.683	89.6	.292	1.177	179.1	431.5	.834	1.520	104.2	1.087	-.4	12.5	144.1	.261
		10.76	7.14	3.95	3.62	7.02	3.19	13.53	2/1/2	90.4	8.7	29.4	.619	3.942	12.7	245.1	-1.4	106.9D	1.821
4-6160	4-6307.6	.171	58.9	22.8	.5	.881	96.5	.250	.817	200.2	435.7	.612	1.021D	102.9	1.246	-3.6	-15.1	305.1	.296
4-6307.6	4-6540	.296	352.3	-43.7	-8.6	1.373	85.0	.367	1.123	18.9	190.4	.711D	1.535	84.1	.652	7.0	3.5	246.5	.184
4-6540	4-6840	.171	281.8	-16.1	1.9	.677	87.5	.307	1.166	174.4	436.9	.808	1.523	105.6	1.081	-.4	10.2	151.2	.281
		11.78	7.89	4.29	3.66	7.28	3.60	13.89	2/1/2	87.3	5.9	49.1	.685	2.405	47.4	256.9	31.2	129.5D	.962
4-6160	4-6319.7	.150	80.9	18.7	-.8	.863	92.8	.260	.797	187.9	442.9	.590	1.004D	104.0	1.235	-3.1	-12.0	320.9	.312
4-6319.7	4-6540	.312	350.5	-11.8	-2.7	1.370	79.4	.390	1.107	38.9	191.0	.675D	1.538	83.1	.642	.9	-17.8	241.2	.172
4-6540	4-6840	.171	281.8	-16.1	1.9	.677	87.5	.307	1.166	174.4	436.9	.808	1.523	105.6	1.081	-.4	10.2	151.2	.281
		11.27	7.65	4.05	3.62	7.02	3.60	13.89	2/1/2	90.4	5.9	28.9	.618	4.006	12.3	245.6	-.5	107.3D	1.859
4-6170	4-6320.9	.171	77.1	18.1	-.9	.864	95.6	.269	.802	195.8	442.8	.586	1.017D	104.5	1.239	-2.9	-10.9	322.9	.321
4-6320.9	4-6540	.321	350.6	-10.7	-2.5	1.370	78.8	.393	1.104	40.9	191.1	.670D	1.539	83.0	.641	.7	-18.4	240.5	.173
4-6540	4-6850	.195	287.2	-16.8	1.8	.671	85.1	.326	1.155	169.8	442.3	.779	1.532	107.2	1.076	-.4	7.7	158.3	.306
		12.09	8.44	4.30	3.66	7.06	4.13	14.34	2/1/2	90.9	3.3	27.2	.584	4.257	11.1	246.7	-.5	106.5D	1.902

MARS ARRIVAL DATE = 2446550 (29 APR 1986)

4-6130	4-6310.6	.139	88.4	24.1	.1	.875	86.8	.247	.799	170.2	440.4	.602	.997	103.2	1.235	-3.4	-13.8	307.6	.297
4-6310.6	4-6550	.297	352.4	-40.1	-8.1	1.373	84.0	.370	1.120	22.4	194.3	.706D	1.535	84.9	.660	6.4	1.9	244.9	.183
4-6550	4-6810	.120	258.3	-10.0	2.3	.704	94.6	.266	1.201	192.9	419.6	.861	1.521D	101.4	1.097	-.8	14.6	129.9	.222
		10.38	6.51	3.92	3.86	7.27	2.58	12.91	2/1/2	95.4	15.4	47.1	.680	2.503	44.4	256.1	30.4	125.6D	1.021
4-6140	4-6311.0	.133	79.9	23.5	.1	.873	89.5	.243	.800	178.5	439.3	.606	.995	102.9	1.236	-3.4	-14.2	308.7	.292
4-6311.0	4-6550	.292	352.5	-37.6	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.0	244.4	.180
4-6550	4-6820	.130	266.6	-12.4	2.1	.697	93.0	.274	1.188	188.0	424.9	.863	1.513D	102.5	1.091	-.7	13.3	137.2	.236
		10.43	6.62	3.86	3.81	7.21	2.75	13.12	2/1/2	95.6	12.4	45.2	.707	2.600	41.5	254.7	28.3	124.8D	1.151
4-6140	4-6324.2	.163	107.7	16.1	-1.2	.860	84.8	.279	.787	166.2	448.2	.567	1.006	105.4	1.229	-3.4	-12.1	325.5	.339
4-6324.2	4-6550	.339	352.7	-8.9	-2.5	1.369	77.6	.401	1.100	44.8	194.9	.660D	1.541	80.4	.647	.4	-19.0	236.3	.181
4-6550	4-6820	.130	266.6	-12.4	2.1	.697	93.0	.274	1.188	188.0	424.9	.863	1.513D	102.5	1.091	-.7	13.3	137.2	.236
		10.77	6.95	4.20	3.82	7.22	2.75	13.12	2/1/2	100.0	12.4	26.9	.522	4.296	12.7	247.9	-8.7	102.2D	1.721
4-6150	4-6311.0	.141	70.6	22.7	.1	.873	92.4	.244	.804	187.6	438.4	.608	1.000D	102.8	1.238	-3.4	-14.3	309.2	.292
4-6311.0	4-6550	.292	352.5	-37.7	-7.5	1.373	83.8	.370	1.120	23.0	194.4	.705D	1.535	81.8	.659	5.8	.1	244.5	.180
4-6550	4-6830	.142	274.3	-14.2	2.0	.690	91.2	.283	1.175	183.1	430.2	.842	1.508D	103.7	1.086	-.6	11.5	144.4	.251
		10.77	6.96	3.95	3.81	7.21	3.01	13.37	2/1/2	95.6	9.5	44.9	.706	2.619	41.8	255.1	28.6	125.1D	1.142
4-6150	4-6321.2	.143	93.4	17.9	-.9	.861	89.1	.262	.791	177.4	444.8	.584	.998	104.3	1.232	-3.2	-12.3	322.4	.316
4-6321.2	4-6550	.316	352.1	-11.3	-2.6	1.370	79.1	.392	1.106	39.9	194.8	.672D	1.539	80.9	.651	.8	-17.6	237.8	.176
4-6550	4-6830	.142	274.3	-14.2	2.0	.690	91.2	.283	1.175	183.1	430.2	.842	1.508D	103.7	1.086	-.6	11.5	144.4	.251
		10.69	6.97	3.97	3.72	7.12	3.01	13.37	2/1/2	98.9	9.5	29.0	.601	3.988	12.3	246.9	-1.9	106.1D	1.797
4-6160	4-6310.6	.164	83.7	21.9	.1	.876	95.6	.252	.811	197.2	437.5	.607	1.015D	103.1	1.243	-3.5	-14.1	308.9	.299
4-6310.6	4-6550	.299	352.4	-40.7	-8.2	1.373	84.0	.370	1.120	22.2	194.3	.706D	1.535	81.9	.660	6.5	2.3	245.0	.184
4-6550	4-6840	.159	281.4	-15.4	1.9	.684	89.2	.296	1.163	178.2	435.4	.819	1.507	104.9	1.080	-.6	9.3	151.7	.269
		11.45	7.56	4.21	3.89	7.29	3.35	13.68	2/1/2	95.4	6.9	46.2	.675	2.551	45.5	257.7	31.4	126.6D	1.044
4-6160	4-6321.0	.149	83.7	18.1	-.9	.861	92.3	.262	.795	186.6	443.6	.587	1.003D	104.2	1.234	-3.1	-11.8	322.6	.314
4-6321.0	4-6550	.314	352.1	-11.6	-2.7	1.370	79.2	.391	1.106	39.4	194.8	.674D	1.539	80.9	.651	.9	-17.4	237.9	.176
4-6550	4-6840	.159	281.4	-15.4	1.9	.684	89.2	.296	1.163	178.2	435.4	.819	1.507	104.9	1.080	-.6	9.3	151.7	.269
		11.10	7.39	4.04	3.71	7.11	3.35	13.68	2/1/2	98.8	6.9	28.8	.609	4.015	12.1	247.3	-.4	106.9D	1.835
4-6170	4-6322.0	.169	79.2	17.7	-1.0	.862	95.3	.270	.799	194.6	443.5	.584	1.015D	104.6	1.237	-2.9	-10.7	324.5	.322
4-6322.0	4-6550	.322	352.2	-10.6	-2.5	1.370	78.7	.394	1.104	41.2	194.8	.669D	1.540	80.8	.650	.7	-18.0	237.4	.177
4-6550	4-6850	.180	287.6	-16.2	1.8	.678	87.0	.312	1.152	173.4	440.7	.792	1.512	106.3	1.075	-.6	6.8	158.8	.290
		11.81	8.07	4.27	3.74	7.14	3.80	14.05	2/1/2	99.2	4.4	27.3	.579	4.240	11.0	248.3	-.5	106.2D	1.876

MARS ARRIVAL DATE = 2446560 (9 MAY 1986)

4-6130	4-6313.2	.146	93.5	22.5	-.1	.873	86.0	.254	.797	167.9	442.2	.594	.999	103.7	1.234	-3.4	-13.4	310.8	.307
4-6313.2	4-6560	.307	353.3	-39.8	-8.3	1.373	83.5	.373	1.120	24.8	198.0	.702D	1.538	79.9	.668	6.5	2.1	242.5	.190
4-6560	4-6810	.120	254.6	-8.1	2.5	.712	96.0	.264	1.202	197.4	418.8	.885	1.519D	101.2	1.097	-1.1	12.9	129.9	.219
		10.61	6.57	4.00	4.04	7.43	2.57	12.86	2/1/2	102.8	16.4	45.6	.637	2.579	45.0	258.8	31.8	123.9D	1.006
4-6140	4-6313.6	.136	85.9	22.2	-.2	.870	88.7	.248	.797	176.0	441.0	.599	.995	103.3	1.235	-3.4	-13.7	312.1	.299
4-6313.6	4-6560	.299	353.5	-36.4	-7.5	1.373	83.1	.374	1.119	25.5	198.0	.701D	1.538	79.8	.668	5.7	-.4	241.8	.186
4-6560	4-6820	.126	263.4	-11.0	2.3	.705	94.5	.269	1.187	192.4	423.9	.867	1.507D	102.2	1.091	-.9	12.0	137.3	.231
		10.52	6.58	3.89	3.95	7.34	2.68	13.04	2/1/2	103.2	13.3	43.4	.672	2.704	41.1	256.7	28.8	122.8D	1.145
4-6140	4-6327.2	.176	113.0	14.4	-1.5	.858	83.5	.291	.784	163.5	450.4	.556	1.011	106.2	1.228	-3.5	-11.7	329.3	.355
4-6327.2	4-6560	.355	355.5	-7.4	-2.0	1.369	76.7	.408	1.099	47.7	198.3	.651D	1.546	78.2	.655	.0	-19.5	233.5	.191
4-6560	4-6820	.126	263.4	-11.0	2.3	.705	94.5	.269	1.187	192.4	423.9	.867	1.507D	102.2	1.091	-.9	12.0	137.3	.231
		11.10	7.04	4.36	4.06	7.46	2.68	13.04	2/1/2	107.8	13.3	26.0	.478	4.452	13.7	250.7	-9.5	100.1D	1.650
4-6150	4-6313.8	.140	76.6	21.6	-.2	.870	91.6	.248	.800	184.8	440.1	.602	.999D	103.2	1.237	-3.3	-13.6	312.7	.297
4-6313.8	4-6560	.297	353.6	-35.5	-7.3	1.373	83.1	.374	1.119	25.7	198.0	.701D	1.538	79.8	.668	5.5	-1.0	241.6	.185
4-6560	4-6830	.136	271.9	-13.1	2.1	.698	92.8	.277	1.174	187.3	429.0	.848	1.499D	103.2	1.086	-.8	10.3	144.7	.244
		10.73	6.80	3.93	3.93	7.32	2.87	13.25	2/1/2	103.2	10.4	42.6	.680	2.750	40.2	256.5	28.3	122.7D	1.190
4-6150	4-6323.2	.146	97.8	16.8	-1.1	.859	88.4	.266	.789	175.5	446.0	.579	.999	104.6	1.230	-3.2	-12.0	325.0	.322
4-6323.2	4-6560	.322	354.2	-10.4	-2.5	1.371	78.7	.395	1.106	41.1	198.3	.669D	1.543	78.8	.660	.6	-17.9	235.2	.184
4-6560	4-6830	.136	271.9	-13.1	2.1	.698	92.8	.277	1.174	187.3	429.0	.848	1.499D	103.2	1.086	-.8	10.3	144.7	.244
		10.76	6.87	4.00	3.89	7.29	2.87	13.25	2/1/2	106.6	10.4	28.7	.578	4.040	12.0	249.0	-3.1	105.0D	1.759
4-6160	4-6313.4	.156	66.6	21.0	-.2	.872	94.7	.253	.806	194.3	439.2	.602	1.011D	103.4	1.240	-3.3	-13.3	312.7	.302
4-6313.4	4-6560	.302	353.4	-37.8	-7.8	1.373	83.2	.373	1.120	25.2	198.0	.702D	1.538	79.8	.668	6.1	.6	242.1	.186
4-6560	4-6840	.149	279.9	-14.6	1.9	.691	90.9	.287	1.161	182.3	434.1	.827	1.495D	104.4	1.080	-.8	8.2	152.0	.259
		11.26	7.28	4.15	3.98	7.38	3.14	13.51	2/1/2	103.0	7.8	43.6	.659	2.694	43.3	258.7	30.9	123.8D	1.116
4-6160	4-6322.5	.149	87.0	17.4	-1.0	.859	91.8	.264	.793	185.0	444.6	.583	1.002D	104.4	1.233	-3.0	-11.5	324.7	.318
4-6322.5	4-6560	.318	354.1	-11.1	-2.6	1.371	79.0	.393	1.107	40.1	198.2	.672D	1.543	78.9	.660	.7	-17.4	235.5	.183
4-6560	4-6840	.149	279.9	-14.6	1.9	.691	90.9	.287	1.161	182.3	434.1	.827	1.495D	104.4	1.080	-.8	8.2	152.0	.259
		11.04	7.17	4.03	3.87	7.27	3.14	13.51	2/1/2	106.4	7.8	28.8	.596	4.020	11.7	249.2	-.8	106.3D	1.801
4-6170	4-6323.4	.167	81.7	17.2	-1.2	.860	94.8	.271	.797	193.2	444.3	.581	1.013D	104.7	1.236	-2.8	-10.5	326.3	.324
4-6323.4	4-6560	.324	354.2	-10.2	-2.5	1.371	78.6	.396	1.106	41.5	198.3	.668D	1.543	78.8	.659	.6	-18.0	235.1	.184
4-6560	4-6850	.166	287.1	-15.5	1.8	.685	86.8	.301	1.149	177.3	439.2	.804	1.495	105.6	1.074	-.7	5.8	159.3	.277
		11.65	7.75	4.24	3.90	7.30	3.51	13.82	2/1/2	106.7	5.4	27.5	.573	4.212	10.7	250.2	-.6	105.8D	1.839
4-6180	4-6325.2	.193	80.5	16.9	-1.4	.862	97.7	.284	.803	200.4	444.6	.575	1.031D	105.4	1.240	-2.5	-9.0	329.1	.336
4-6325.2	4-6560	.338	354.6	-8.8	-2.2	1.370	77.7	.401	1.103	44.4	198.3	.660D	1.545	78.5	.657	.3	-18.8	234.4	.187
4-6560	4-6860	.188	295.4	-16.1	1.7	.679	86.5	.316	1.156	172.5	444.3	.776	1.500	107.1	1.067	-.7	3.2	166.4	.299
		12.55	8.56	4.59	3.97	7.37	3.99	14.21	2/1/2	107.2	3.3	25.3	.527	4.570	9.1	251.8	-.6	104.6D	1.882

STOPOVER TIME = 0 DAYS | 1986 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2446570
19 MAY 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2446570 (19 MAY 1986)																			
4-6130	4-6315.7	.154	98.4	21.0	-.4	.871	85.0	.263	.794	165.7	444.0	.586	1.003	104.3	1.233	-3.4	-13.0	314.0	.316
4-6315.7	4-6570	.318	354.7	-39.9	-8.6	1.374	82.8	.377	1.121	26.8	201.4	.699D	1.543	78.0	.677	6.8	2.3	241.0	.201
4-6570	4-6810	.123	230.5	-5.8	2.8	.721	97.5	.263	1.204	202.2	418.1	.687	1.520D	101.1	1.097	-1.5	10.8	129.8	.218
		10.99	6.72	4.09	4.27	7.67	2.63	12.84	2/1/2	109.2	17.5	44.7	.594	2.631	46.1	262.1	33.2	122.7D	.969
4-6140	4-6316.2	.140	91.6	20.8	-.4	.868	87.8	.254	.795	173.6	442.7	.592	.997	103.7	1.233	-3.4	-13.2	315.3	.307
4-6316.2	4-6570	.307	355.1	-35.7	-7.6	1.374	82.6	.377	1.120	27.5	201.4	.698D	1.543	78.0	.677	5.8	-.8	240.1	.195
4-6570	4-6820	.125	259.4	-9.4	2.5	.713	96.0	.267	1.188	197.0	423.1	.871	1.505D	102.0	1.091	-1.2	10.4	137.4	.227
		10.76	6.61	3.93	4.16	7.55	2.67	12.99	2/1/2	109.9	14.2	42.2	.637	2.778	41.1	259.2	29.5	121.3D	1.132
4-6140	4-6331.6	.200	119.7	12.0	-2.0	.854	81.3	.311	.780	159.7	453.7	.537	1.023	107.6	1.226	-3.7	-11.3	334.8	.361
4-6331.6	4-6570	.361	356.9	-5.4	-1.6	1.368	75.1	.420	1.096	52.5	201.5	.636D	1.555	75.8	.662	-.4	-20.6	231.5	.208
4-6570	4-6820	.125	259.4	-9.4	2.5	.713	96.0	.267	1.188	197.0	423.1	.871	1.505D	102.0	1.091	-1.2	10.4	137.4	.227
		11.81	7.36	4.69	4.45	7.84	2.67	12.99	2/1/2	114.9	14.2	24.6	.413	4.703	16.4	254.8	-13.9	97.0D	1.530
4-6150	4-6316.4	.140	82.5	20.4	-.5	.867	90.7	.252	.797	182.2	441.7	.596	.998D	103.5	1.235	-3.3	-13.1	316.2	.303
4-6316.4	4-6570	.303	355.3	-33.8	-7.1	1.374	82.4	.378	1.120	27.9	201.4	.697D	1.543	78.0	.677	5.3	-2.1	239.8	.194
4-6570	4-6830	.131	268.5	-12.0	2.2	.706	94.4	.273	1.173	191.8	428.0	.853	1.493D	102.9	1.085	-1.1	9.1	144.8	.239
		10.83	6.72	3.93	4.11	7.51	2.79	13.16	2/1/2	110.1	11.4	41.0	.653	2.853	39.1	258.4	28.1	120.7D	1.211
4-6150	4-6325.7	.151	103.1	15.4	-1.3	.856	87.4	.273	.786	173.1	447.6	.571	1.000	105.1	1.229	-3.2	-11.7	328.2	.331
4-6325.7	4-6570	.331	356.7	-9.0	-2.2	1.371	78.1	.400	1.107	42.8	201.5	.664D	1.550	76.9	.669	.3	-18.7	233.6	.195
4-6570	4-6830	.131	268.5	-12.0	2.2	.706	94.4	.273	1.173	191.8	428.0	.853	1.493D	102.9	1.085	-1.1	9.1	144.8	.239
		10.99	6.84	4.05	4.15	7.54	2.79	13.16	2/1/2	113.5	11.4	28.2	.549	4.102	12.0	251.5	-5.5	103.5D	1.704
4-6160	4-6316.3	.154	74.1	20.0	-.5	.868	93.9	.256	.802	191.4	440.8	.597	1.007D	103.6	1.238	-3.2	-12.7	316.4	.306
4-6316.3	4-6570	.306	355.2	-35.2	-7.4	1.374	82.5	.377	1.120	27.6	201.4	.697D	1.543	78.0	.677	5.6	-1.2	240.0	.195
4-6570	4-6840	.141	277.3	-13.8	2.0	.699	92.6	.281	1.160	186.6	433.0	.834	1.485D	103.9	1.079	-1.0	7.1	152.3	.251
		11.22	7.08	4.09	4.14	7.54	2.98	13.37	2/1/2	109.9	8.8	41.5	.642	2.821	41.2	259.9	30.2	121.5D	1.169
4-6160	4-6324.4	.149	91.2	16.5	-1.2	.857	91.1	.267	.790	183.1	445.7	.579	1.001D	104.6	1.232	-3.0	-11.3	327.2	.322
4-6324.4	4-6570	.322	356.4	-10.2	-2.4	1.372	78.7	.396	1.109	40.9	201.5	.669D	1.549	77.1	.670	.5	-18.0	234.0	.195
4-6570	4-6840	.141	277.3	-13.8	2.0	.699	92.6	.281	1.160	186.6	433.0	.834	1.485D	103.9	1.079	-1.0	7.1	152.3	.251
		11.11	7.01	4.03	4.09	7.49	2.98	13.37	2/1/2	113.2	8.8	28.8	.580	4.027	11.3	251.4	-2.2	105.4D	1.757
4-6170	4-6315.8	.183	68.8	19.8	-.5	.873	97.3	.267	.811	201.1	439.9	.595	1.028D	104.1	1.244	-3.1	-12.0	316.2	.316
4-6315.8	4-6570	.316	354.7	-39.3	-8.4	1.374	82.7	.377	1.121	26.9	201.4	.699D	1.543	78.0	.677	6.6	1.8	240.9	.200
4-6570	4-6850	.155	285.5	-14.9	1.8	.692	90.6	.291	1.147	181.4	437.9	.813	1.481D	105.0	1.073	-.9	4.8	159.6	.267
		11.98	7.73	4.45	4.25	7.65	3.27	13.63	2/1/2	109.3	6.4	43.6	.601	2.693	46.8	263.9	34.8	123.2D	1.017
4-6170	4-6325.1	.164	84.7	16.5	-1.3	.858	94.2	.272	.794	191.5	445.3	.578	1.011D	104.9	1.234	-2.8	-10.3	328.5	.326
4-6325.1	4-6570	.326	356.6	-9.5	-2.3	1.371	78.4	.398	1.108	41.9	201.5	.667D	1.549	77.0	.670	.4	-18.4	233.8	.194
4-6570	4-6850	.155	285.5	-14.9	1.8	.692	90.6	.291	1.147	181.4	437.9	.813	1.481D	105.0	1.073	-.9	4.8	159.6	.267
		11.60	7.48	4.21	4.12	7.51	3.27	13.63	2/1/2	113.3	6.4	27.7	.564	4.178	10.3	252.3	-1.5	105.3D	1.794
4-6180	4-6326.7	.169	62.6	16.4	-1.5	.860	97.1	.284	.800	198.8	445.4	.573	1.027D	105.5	1.238	-2.5	-8.8	331.0	.339
4-6326.7	4-6570	.339	357.0	-8.2	-2.1	1.371	77.6	.403	1.105	44.5	201.5	.660D	1.551	76.7	.668	.1	-19.2	233.2	.197
4-6570	4-6860	.174	292.8	-15.6	1.7	.686	88.4	.305	1.136	176.3	442.8	.789	1.482	106.3	1.066	-.9	2.2	166.8	.285
		12.39	8.20	4.54	4.19	7.58	3.67	13.95	2/1/2	113.7	4.4	25.7	.524	4.498	8.8	253.8	-1.5	104.3D	1.832
MARS ARRIVAL DATE = 2446580 (29 MAY 1986)																			
4-6140	4-6318.7	.145	97.0	19.3	-.7	.865	86.9	.261	.792	171.2	444.4	.585	.999	104.2	1.232	-3.4	-12.8	318.6	.316
4-6318.7	4-6580	.316	357.2	-35.6	-7.8	1.375	82.0	.381	1.122	29.2	204.6	.694D	1.551	76.4	.687	5.9	-1.2	239.5	.207
4-6580	4-6820	.128	255.1	-7.7	2.7	.723	97.5	.266	1.190	201.8	422.4	.874	1.507D	101.8	1.092	-1.6	8.6	137.2	.226
		11.16	6.73	3.99	4.43	7.82	2.73	12.97	2/1/2	115.6	15.4	41.5	.601	2.821	41.7	262.4	30.6	120.1D	1.094
4-6150	4-6319.0	.141	88.4	19.1	-.7	.864	89.9	.257	.794	179.6	443.4	.590	.997	103.9	1.233	-3.2	-12.6	319.6	.310
4-6319.0	4-6580	.310	357.5	-32.8	-7.1	1.375	81.9	.382	1.122	29.7	204.6	.694D	1.551	76.3	.687	5.2	-3.1	238.9	.204
4-6580	4-6830	.130	264.3	-10.8	2.4	.715	95.9	.270	1.174	196.5	427.2	.857	1.491D	102.7	1.086	-1.3	7.7	144.9	.235
		11.08	6.72	3.94	4.36	7.76	2.77	13.11	2/1/2	116.1	12.4	40.1	.626	2.920	38.5	260.8	28.2	119.2D	1.202
4-6150	4-6328.6	.159	109.3	13.7	-1.6	.853	86.2	.282	.783	170.3	449.6	.562	1.003	105.7	1.227	-3.5	-11.3	332.0	.342
4-6328.6	4-6580	.343	359.6	-7.0	-1.8	1.372	77.4	.406	1.108	45.1	204.4	.658D	1.559	75.1	.678	-.2	-20.0	232.8	.209
4-6580	4-6830	.130	264.3	-10.8	2.4	.715	95.9	.270	1.174	196.5	427.2	.857	1.491D	102.7	1.086	-1.3	7.7	144.9	.235
		11.39	6.92	4.15	4.47	7.86	2.77	13.11	2/1/2	119.4	12.4	27.7	.513	4.174	13.1	254.5	-9.0	101.6D	1.627
4-6160	4-6319.0	.151	79.5	19.0	-.7	.864	93.0	.259	.798	188.6	442.4	.591	1.004D	103.9	1.236	-3.1	-12.1	320.0	.311
4-6319.0	4-6580	.311	357.4	-33.1	-7.2	1.375	81.9	.382	1.122	29.6	204.6	.694D	1.551	76.3	.687	5.3	-2.9	239.0	.205
4-6580	4-6840	.137	273.7	-13.0	2.1	.707	94.2	.276	1.160	191.2	432.0	.840	1.479D	103.6	1.079	-1.2	8.0	152.4	.246
		11.32	6.95	4.06	4.37	7.76	2.89	13.28	2/1/2	116.1	9.7	40.1	.623	2.917	39.4	261.6	29.4	119.5D	1.195
4-6160	4-6326.7	.149	96.3	15.3	-1.4	.854	90.3	.271	.787	180.8	447.1	.573	1.000D	105.0	1.230	-3.0	-11.0	330.2	.328
4-6326.7	4-6580	.328	359.2	-8.6	-2.1	1.373	78.3	.401	1.111	42.0	204.5	.666D	1.557	75.4	.680	.2	-19.1	233.4	.205
4-6580	4-6840	.137	273.7	-13.0	2.1	.707	94.2	.276	1.160	191.2	432.0	.840	1.479D	103.6	1.079	-1.2	8.0	152.4	.246
		11.31	6.93	4.04	4.38	7.77	2.89	13.28	2/1/2	119.0	9.7	28.7	.560	4.034	11.1	253.9	-4.7	104.2D	1.700
4-6170	4-6318.7	.176	73.3	18.9	-.7	.868	96.4	.268	.808	198.1	441.6	.590	1.021D	104.3	1.241	-3.0	-11.4	320.0	.319
4-6318.7	4-6580	.319	357.1	-36.5	-8.0	1.375	82.1	.381	1.123	29.1	204.6	.695D	1.550	76.4	.687	6.1	-.5	239.7	.208
4-6580	4-6850	.147	282.7	-14.4	1.9	.700	92.3	.284	1.146	185.9	436.8	.821	1.472D	104.5	1.073	-1.1	3.8	159.8	.258
		11.91	7.46	4.36	4.45	7.85	3.10	13.49	2/1/2	115.5	7.4	41.8	.592	2.806	44.5	265.0	33.9	121.0D	1.070
4-6170	4-6327.0	.162	88.5	15.7	-1.5	.855	93.5	.274	.791	189.5	446.4	.574	1.008D	105.1	1.233	-2.8	-10.0	331.0	.329
4-6327.0	4-6580	.329	359.3	-8.4	-2.0	1.372	78.2	.401	1.111	42.4	204.5	.665D	1.557	75.3	.680	.1	-19.3	233.3	.205
4-6580	4-6850	.147	282.7	-14.4	1.9	.700	92.3	.284	1.146	185.9	436.8	.821	1.472D	104.5	1.073	-1.1	3.8	159.8	.258
		11.67	7.28	4.18	4.39	7.78	3.10	13.49	2/1/2	119.1	7.4	28.0	.554	4.140	10.0	254.6	-3.3	104.5D	1.739
4-6180	4-6328.3	.185	85.6	15.8	-1.6	.857	96.5	.285	.797	197.0	446.4	.570	1.024D	105.6	1.236	-2.4	-8.6	333.3	.340
4-6328.3	4-6580	.340	359.7	-7.2	-1.8	1.372	77.5	.405	1.109	44.6	204.4	.659D	1.558	75.1	.679	-.1	-19.9	232.9	.208
4-6580	4-6860	.162	291.1	-15.2	1.7	.693	90.2	.295	1.134	180.6	441.5	.799	1.469D	105.6	1.066	-1.0	1.3	167.2	.274
		12.34	7.88	4.48	4.46	7.85	3.40	13.75	2/1/2	119.3	5.4	26.2	.519	4.417	8.7	256.1	-3.0	103.8D	1.775
MARS ARRIVAL DATE = 2446590 (8 JUN 1986)																			
4-6140	4-6321.5	.153	102.5	17.8	-.9	.863	86.0	.269	.789	168.8	446.2	.577	1.002	104.8	1.231	-3.4	-12.4	321.9	.326
4-6321.5	4-6590	.326	359.6	-36.1	-8.1	1.376	81.6	.386	1.126	30.6	207.5	.692D	1.560	74.9	.697	6.2	-1.4	239.9	.221
4-6590	4-6820	.136	250.9	-5.8	3.1	.733	99.0	.267	1.194	206.9	421.7	.875	1.514D	101.8	1.094	-2.1	6.3	136.9	.227
		11.71	6.95	4.08	4.76	8.15	2.88	12.99	2/1/2	120.5	16.8	41.3	.564	2.834	43.0	266.1	31.9	119.3D	1.034
4-6150	4-6321.6	.143	94.1	17.8	-.9	.861	89.0	.262	.790	177.1	445.0	.583	.998	104.3	1.232	-3.2	-12.2	322.9	.317
4-6321.6	4-6590	.317	.1	-32.5	-7.2	1.376	81.5	.386	1.125	31.0	207.5	.691D	1.560	74.8	.697	5.5	-3.9	239.1	.217
4-6590	4-6830	.134	259.7	-9.5	2.6	.724	97.5	.269	1.177	201.5	426.5	.860	1.493D	102.6	1.087	-1.7	6.1	144.7	.234
		11.47	6.80	3.97	4.67	8.06	2.83	13.09	2/1/2	121.2	13.5	39.6	.597	2.951	38.7	263.8	28.8	118.1D	1.166
4-6150	4-6332.4	.172	116.5	11.5	-1.9	.850	84.6	.295	.779	166.8	452.1	.549	1.009	106.6	1.225	-3.3	-11.0	336.8	.360
4-6332.4	4-6590	.360	3.5	-4.6	-1.2	1.372	76.4	.415	1.109	48.1	207.1	.649D	1.570	73.3	.687	-.7	-21.8	233.0	.226
4-6590	4-6830	.134	259.7	-9.5	2.6	.724	97.5	.269	1.177	201.5	426.5	.860	1.493D	102.6	1.087	-1.7	6.1	144.7	.234
		12.04	7.15	4.32	4.89	8.27	2.83	13.09	2/1/2	124.5	13.5	27.1	.465	4.264	15.9	258.3	-13.6	99.2D	1.517
4-6160	4-6321.6	.149	85.1	17.8	-1.0	.861	92.1	.263	.794	186.0	444.0	.585	1.002D	104.3	1.234	-3.1	-11.7	323.5	.316
4-6321.6	4-6590	.316	.1	-31.8	-7.0	1.376	81.5	.386	1.125	31.1	207.5	.691D	1.560	74.8	.697	5.1	-4.4	239.0	.216
4-6590	4-6840	.136	269.2	-12.1	2.2	.716	95.8	.273	1.161	196.0	431.1	.844	1.477D	103.3	1.080	-1.4	4.7	152.4	.242
		11.96	6.91	4.04	4.65	8.04	2.87	13.22	2/1/2	121.3	10.8	39.3	.604	2.976	38.3	263.9	28.9	116.0D	1.193
4-6160	4-6329.4	.152	102.3	13.8	-1.6	.851	89.3	.277	.783	178.1	448.8	.566	1.001	105.4	1.228	-3.0	-10.6	333.7	.335
4-6329.4	4-6590	.335	2.4	-8.4	-1.6	1.374	77.8	.406	1.114	43.5	207.3	.662D	1.567	73.8	.690	-.4	-20.8	233.7	.219
4-6590	4-6840	.136	269.2	-12.1	2.2	.716	95.8	.273	1.161	196.0	431.1	.844	1.477D	103.3	1.080	-1.4	4.7	152.4	.242
		11.87	6.94	4.07	4.72	8.11	2.87	13.22	2/1/2	124.1	10.8	28.7	.535	4.036	12.3	256.8	-8.5	102.7D	1.624
4-6170	4-6321.4	.170	78.1	17.9	-1.0	.863	95.5	.269	.801	195.2	443.2	.585	1.016D	104.5	1.238	-2.9	-10.8	325.7	.322
4-6321.4	4-6590	.321	359.8	-34.5	-7.6	1.376	81.6	.386	1.125	30.8	207.5	.691D	1.560	74.9	.697	5.7	-2.7	239.5	.219
4-6590	4-6850	.142	278.8	-13.9	2.0	.708	94.0	.279	1.146	190.6	435.8	.827	1.466D	104.2	1.073	-1.3	2.7	159.9	.252
		11.99	7.28	4.29	4.71	8.10	3.00	13.39	2/1/2	120.9	8.4	40.4	.582	2.893	42.4	260.5	32.9	119.1D	1.101

STOPOVER TIME = 0 DAYS

1986 OUTBOUND SWINGBY

MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2446590
8 JUN 1986

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-6170	4-6329.2	.160	93.0	14.7	-1.6	.852	92.7	.277	.788	187.2	447.7	.569	1.006D	105.3	1.231	-2.7	-9.7	334.0	.334
4-6329.2	4-6590	.334	2.3	-6.6	-1.6	1.374	77.9	.405	1.115	43.1	207.2	.663D	1.566	73.8	.691	-.3	-20.7	233.7	.219
4-6590	4-6850	.142	278.8	-13.9	2.0	.708	94.0	.279	1.146	190.6	435.8	.827	1.466D	104.2	1.073	-1.3	2.7	159.9	.252
		11.87	7.15	4.16	4.71	8.10	3.00	13.39	2/1/2	124.1	8.4	28.3	.540	4.094	10.6	257.3	-6.4	103.5D	1.672
4-6160	4-6330.3	.161	88.9	15.0	-1.8	.853	95.8	.286	.793	195.0	447.5	.566	1.020D	105.8	1.234	-2.4	-8.4	335.9	.342
4-6330.3	4-6590	.342	2.7	-5.7	-1.5	1.373	77.4	.409	1.113	44.8	207.2	.658D	1.568	73.6	.690	-.5	-21.2	233.4	.221
4-6590	4-6860	.152	288.1	-14.8	1.7	.701	92.1	.287	1.133	185.1	440.4	.808	1.459D	105.1	1.066	-1.2	.3	167.4	.265
		12.40	7.63	4.42	4.77	8.16	3.21	13.60	2/1/2	124.2	6.4	26.7	.513	4.326	9.2	258.6	-5.6	103.1D	1.707
MARS ARRIVAL DATE = 2446600 (18 JUN 1986)																			
4-6140	4-6324.0	.162	107.3	16.2	-1.2	.861	84.9	.278	.787	166.4	446.1	.568	1.005	105.4	1.229	-3.4	-12.1	325.2	.338
4-6324.0	4-6600	.338	2.3	-37.1	-8.6	1.377	81.2	.390	1.129	31.9	210.2	.689D	1.570	73.5	.707	6.7	-1.4	241.1	.237
4-6600	4-6820	.148	247.4	-3.8	3.7	.743	100.6	.271	1.201	212.1	421.2	.875	1.527D	101.9	1.096	-2.7	3.5	136.2	.232
		12.46	7.31	4.18	5.14	8.53	3.13	13.05	2/1/2	124.6	16.8	41.5	.525	2.821	44.8	270.6	33.7	116.8D	.957
4-6150	4-6324.1	.147	99.8	16.3	-1.2	.858	88.0	.269	.787	174.6	446.6	.576	.999	104.8	1.230	-3.2	-11.9	326.2	.326
4-6324.1	4-6600	.325	3.0	-32.9	-7.5	1.377	81.1	.390	1.129	32.1	210.2	.688D	1.570	73.5	.707	5.5	-4.4	240.3	.232
4-6600	4-6830	.142	255.4	-8.1	2.9	.754	99.1	.271	1.181	206.6	425.8	.862	1.501D	102.5	1.088	-2.1	4.2	144.4	.235
		12.02	7.01	4.02	5.02	8.41	2.99	13.11	2/1/2	125.5	14.9	39.6	.567	2.951	39.6	267.5	29.8	117.4D	1.107
4-6160	4-6324.2	.149	90.7	16.6	-1.2	.857	91.2	.267	.790	183.3	445.6	.580	1.001D	104.6	1.232	-3.0	-11.3	326.9	.321
4-6324.2	4-6600	.321	3.2	-31.3	-7.0	1.377	81.1	.391	1.129	32.2	210.2	.688D	1.570	73.5	.707	5.1	-5.5	239.9	.230
4-6600	4-6840	.139	264.4	-11.2	2.4	.725	97.5	.272	1.164	201.0	430.4	.847	1.481D	103.2	1.081	-1.7	3.3	152.3	.241
		11.95	6.97	4.03	4.98	8.37	2.94	13.21	2/1/2	125.8	11.9	39.0	.582	2.997	38.0	266.9	29.0	117.0D	1.163
4-6160	4-6332.5	.157	109.1	11.9	-1.9	.847	88.0	.285	.780	175.0	450.7	.557	1.002	106.0	1.226	-3.0	-10.3	337.6	.346
4-6332.5	4-6600	.346	6.1	-3.7	-.9	1.375	77.2	.412	1.117	45.3	209.8	.657D	1.578	72.3	.700	-1.0	-22.9	234.7	.236
4-6600	4-6840	.139	264.4	-11.2	2.4	.725	97.5	.272	1.164	201.0	430.4	.847	1.481D	103.2	1.081	-1.7	3.3	152.3	.241
		12.19	7.07	4.13	5.12	8.51	2.94	13.21	2/1/2	126.4	11.9	28.8	.503	4.023	15.3	260.3	-13.4	100.9D	1.522
4-6170	4-6324.1	.165	83.0	16.9	-1.2	.859	94.5	.271	.796	192.4	444.7	.580	1.012D	104.8	1.235	-2.8	-10.4	327.3	.325
4-6324.1	4-6600	.325	3.0	-32.7	-7.4	1.377	81.1	.390	1.129	32.1	210.2	.688D	1.570	73.5	.707	5.5	-4.5	240.2	.231
4-6600	4-6850	.141	274.2	-13.4	2.1	.717	95.7	.276	1.148	195.5	434.9	.831	1.465D	104.0	1.073	-1.5	1.6	160.0	.249
		12.22	7.20	4.23	5.01	8.40	2.98	13.33	2/1/2	125.5	9.4	39.7	.569	2.945	40.8	268.7	32.0	117.7D	1.107
4-6170	4-6331.7	.159	98.4	13.4	-1.8	.848	91.8	.281	.784	184.6	449.1	.563	1.004D	105.6	1.228	-2.7	-9.4	337.3	.339
4-6331.7	4-6600	.339	5.8	-4.1	-1.0	1.375	77.6	.410	1.119	44.0	209.8	.660D	1.577	72.4	.701	-.9	-22.7	234.8	.234
4-6600	4-6850	.141	274.2	-13.4	2.1	.717	95.7	.276	1.148	195.5	434.9	.831	1.465D	104.0	1.073	-1.5	1.6	160.0	.249
		12.20	7.12	4.15	5.08	8.46	2.98	13.33	2/1/2	126.3	9.4	28.7	.524	4.028	12.9	260.3	-10.7	102.3D	1.585
4-6180	4-6332.4	.176	92.8	14.1	-1.9	.849	95.0	.288	.789	192.7	448.7	.562	1.016D	106.0	1.232	-2.4	-8.1	338.8	.345
4-6332.4	4-6600	.345	6.0	-3.7	-1.0	1.375	77.2	.412	1.118	45.2	209.8	.657D	1.578	72.3	.700	-1.0	-22.9	234.7	.236
4-6600	4-6860	.147	284.0	-14.6	1.8	.709	93.8	.282	1.133	189.9	439.4	.814	1.453D	104.8	1.066	-1.4	-.7	167.5	.259
		12.59	7.47	4.37	5.12	8.50	3.10	13.50	2/1/2	126.4	7.4	27.4	.505	4.218	11.1	261.5	-9.3	102.3D	1.625
MARS ARRIVAL DATE = 2446610 (28 JUN 1986)																			
4-6150	4-6326.8	.153	105.6	14.7	-1.4	.855	87.0	.276	.785	172.0	448.4	.566	1.001	105.3	1.228	-3.2	-11.5	329.7	.335
4-6326.8	4-6610	.335	6.1	-33.8	-7.9	1.379	80.8	.395	1.134	33.1	212.7	.686D	1.582	72.3	.717	5.9	-4.6	242.2	.247
4-6610	4-6830	.155	251.7	-6.7	3.3	.745	100.7	.275	1.189	211.9	425.3	.862	1.516D	102.6	1.091	-2.6	2.0	143.9	.240
		12.75	7.34	4.09	5.41	8.80	3.25	13.18	2/1/2	129.1	16.6	40.0	.535	2.926	41.1	271.9	31.3	117.0D	1.031
4-6160	4-6326.8	.149	96.5	15.2	-1.4	.854	90.3	.272	.787	180.7	447.2	.573	1.000D	105.0	1.230	-3.0	-10.9	330.3	.328
4-6326.8	4-6610	.328	6.5	-31.3	-7.2	1.379	80.8	.395	1.134	33.1	212.7	.686D	1.582	72.3	.717	5.3	-6.3	241.7	.245
4-6610	4-6840	.148	259.9	-10.3	2.7	.735	99.1	.274	1.169	206.2	429.8	.848	1.489D	103.2	1.082	-2.1	1.8	152.0	.243
		12.49	7.15	4.04	5.34	8.75	3.11	13.23	2/1/2	129.6	13.2	39.1	.559	2.989	38.3	270.4	29.5	116.3D	1.112
4-6170	4-6326.8	.162	88.2	15.8	-1.4	.855	93.6	.274	.791	189.6	446.3	.574	1.009D	105.1	1.233	-2.8	-10.0	330.8	.329
4-6326.8	4-6610	.329	6.4	-31.8	-7.3	1.379	80.8	.395	1.134	33.1	212.7	.686D	1.582	72.3	.717	5.4	-6.0	241.8	.245
4-6610	4-6850	.145	269.2	-12.9	2.2	.726	97.4	.275	1.151	200.6	434.2	.834	1.468D	103.8	1.074	-1.8	.4	156.9	.246
		12.39	7.24	4.18	5.36	8.74	3.05	13.32	2/1/2	129.5	10.5	39.4	.555	2.964	39.9	271.5	31.5	116.6D	1.090
4-6170	4-6334.5	.159	104.5	11.8	-2.0	.844	90.7	.287	.780	181.7	450.8	.556	1.003D	106.0	1.226	-2.7	-9.2	341.0	.346
4-6334.5	4-6610	.346	9.5	-1.0	-.2	1.377	77.2	.415	1.123	45.0	212.2	.657D	1.590	71.2	.711	-1.7	-25.1	236.6	.250
4-6610	4-6850	.145	269.2	-12.9	2.2	.726	97.4	.275	1.151	200.6	434.2	.834	1.468D	103.8	1.074	-1.8	.4	156.9	.246
		12.69	7.20	4.15	5.49	8.87	3.05	13.32	2/1/2	131.9	10.5	29.5	.505	3.926	17.1	263.8	-16.3	101.1D	1.471

1988

INBOUND SWINGBY

4.9

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 480 DAYS | MARS ARRIVAL DATE = 2447500 | 4 DEC 1988

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2447500 (4 DEC 1988)																				
4-7350	4-7500	.126	11.5	3.4	-.2	1.110	89.7	.251	1.357	1.7	121.4	1.017D	1.697A	103.8	.794	-1.8	13.2	106.4	.140
4-7500	4-7721.0	.244	70.4	29.0	2.4	.649	74.1	.461	1.056	159.4	289.8	.569A	1.543	69.4	1.354	-2.1	-5.5	214.4	.491
4-7721.0	4-7830	.491	224.7	-7.9	-3.3	1.276	112.1	.408	.867	270.5	491.8	.513	1.221A	112.7	.928	5.1	15.4	8.8	.411
		12.06	9.11	3.79	2.95	6.36	5.32	16.51	1/1/2	31.8	24.7	10.5	.249	10.919	14.8	131.1	13.1	93.2D	2.472
4-7360	4-7500	.134	5.7	1.1	-.1	1.112	87.9	.257	1.363	10.1	120.4	1.013D	1.713A	104.3	.796	-1.8	13.3	107.9	.145
4-7500	4-7725.1	.231	69.0	30.4	2.8	.657	75.1	.440	1.068	159.2	296.3	.598A	1.538	71.7	1.357	-2.4	-6.9	217.3	.446
4-7725.1	4-7840	.448	231.0	-6.3	-2.4	1.262	110.4	.374	.843	271.1	495.7	.528	1.158A	109.6	.914	4.7	16.6	15.2	.362
		11.93	8.87	3.87	3.06	6.47	5.00	15.45	1/1/2	30.4	27.6	13.7	.299	8.412	7.1	133.9	-2.4	97.2D	2.220
4-7370	4-7500	.151	.2	-1.1	-.1	1.112	85.9	.264	1.362	19.7	120.4	1.003D	1.721A	104.7	.796	-1.8	13.5	108.4	.151
4-7500	4-7729.0	.221	67.6	32.0	3.2	.665	76.0	.423	1.077	159.1	302.5	.621A	1.533	73.8	1.360	-2.7	-8.7	219.7	.410
4-7729.0	4-7850	.410	236.9	-4.4	-1.5	1.251	108.8	.343	.825	271.7	500.1	.542	1.109A	106.7	.902	4.2	21.4	21.2	.316
		11.98	8.81	4.05	3.18	6.58	4.75	14.54	1/1/2	29.8	31.2	17.7	.357	6.516	15.6	136.7	-14.1	100.4D	1.968
MARS ARRIVAL DATE = 2447510 (14 DEC 1988)																				
4-7330	4-7510	.125	17.7	8.2	.1	1.100	92.3	.232	1.317	347.5	492.0	1.012	1.623A	101.5	.773	-1.9	11.0	98.8	.115
4-7510	4-7713.0	.269	73.3	27.1	1.8	.613	73.2	.516	1.020	162.7	274.6	.494A	1.547	63.7	1.345	-1.6	-3.3	209.6	.600
4-7713.0	4-7810	.600	212.3	-10.2	-5.2	1.317	116.4	.497	.954	269.9	484.3	.480	1.429A	119.7	.978	6.0	8.5	355.5	.333
		12.22	9.74	3.78	2.48	5.90	5.96	19.34	1/1/2	44.9	19.8	7.5	.167	15.362	68.7	137.6	67.5	83.9L	2.396
4-7340	4-7510	.120	14.7	6.9	.1	1.103	91.0	.235	1.328	354.5	489.4	1.016	1.641A	102.1	.777	-1.9	11.2	102.3	.118
4-7510	4-7717.7	.249	72.0	28.0	2.1	.626	74.6	.487	1.037	162.4	281.8	.532A	1.541	66.6	1.348	-1.7	-4.0	213.[illegible]	.545
4-7717.7	4-7820	.545	219.4	-9.4	-4.3	1.297	114.3	.453	.909	270.5	487.3	.497	1.320A	116.4	.954	5.7	12.3	2.6	.474
		11.76	9.21	3.74	2.55	5.97	5.47	17.94	1/1/2	41.4	21.8	8.1	.202	14.106	42.6	132.4	41.8	87.5L	2.652
4-7350	4-7510	.121	9.8	4.7	.1	1.105	89.6	.239	1.336	2.2	127.6	1.017D	1.656A	102.5	.780	-1.9	11.4	105.0	.123
4-7510	4-7722.1	.234	70.4	29.0	2.3	.636	75.9	.462	1.051	162.2	288.7	.566A	1.536	69.2	1.352	-1.9	-4.8	216.7	.495
4-7722.1	4-7830	.495	226.2	-8.2	-3.4	1.279	112.3	.413	.875	271.1	490.7	.514	1.236A	113.2	.934	5.2	15.8	9.4	.419
		11.44	8.81	3.74	2.63	6.04	5.07	16.69	1/1/2	38.8	24.2	10.0	.245	11.509	20.6	133.7	19.5	92.3D	2.575
4-7360	4-7510	.129	3.9	2.1	.0	1.106	87.9	.244	1.340	10.9	126.7	1.013D	1.667A	102.9	.781	-1.9	11.7	106.5	.127
4-7510	4-7726.3	.221	68.8	30.1	2.6	.644	76.9	.441	1.063	162.2	295.4	.595A	1.531	71.5	1.356	-2.1	-5.9	219.6	.451
4-7726.3	4-7840	.451	232.5	-6.5	-2.5	1.265	110.4	.377	.849	271.7	494.5	.529	1.169A	110.1	.918	4.8	18.9	16.0	.369
		11.28	8.57	3.82	2.70	6.12	4.76	15.60	1/1/2	37.3	26.9	12.9	.295	8.929	6.7	136.3	2.5	96.6D	2.343
4-7370	4-7510	.145	358.4	-.3	.0	1.106	85.9	.250	1.337	20.7	127.0	1.002D	1.672A	103.2	.780	-1.9	12.1	107.0	.131
4-7510	4-7730.1	.211	67.1	31.5	3.0	.651	77.8	.423	1.073	162.2	301.7	.619A	1.527	73.6	1.358	-2.3	-7.4	221.9	.412
4-7730.1	4-7850	.412	238.4	-4.5	-1.6	1.254	108.8	.346	.830	272.3	498.9	.543	1.117A	107.1	.906	4.3	21.7	22.1	.322
		11.30	8.51	4.00	2.79	6.20	4.52	14.65	1/1/2	36.8	30.3	16.6	.353	6.915	11.7	139.1	-10.0	99.9D	2.090
4-7380	4-7510	.172	354.4	-2.1	.0	1.104	83.6	.259	1.326	31.8	128.5	.983D	1.670A	103.6	.776	-1.9	12.8	106.3	.137
4-7510	4-7733.7	.203	65.4	33.0	3.4	.657	78.4	.409	1.082	162.2	307.5	.639A	1.524	75.4	1.360	-2.7	-9.3	223.7	.380
4-7733.7	4-7860	.380	243.8	-2.3	-.7	1.244	107.4	.319	.815	272.8	503.8	.556	1.075A	104.2	.896	5.8	24.0	27.4	.279
		11.55	8.65	4.31	2.90	6.31	4.34	13.83	1/1/2	37.4	34.7	21.1	.417	5.453	20.3	141.7	-19.4	102.4D	1.857
4-7390	4-7510	.209	352.2	-3.1	.0	1.101	81.0	.272	1.306	44.3	131.5	.951D	1.662A	104.0	.769	-1.8	13.7	104.3	.144
4-7510	4-7736.9	.198	65.7	34.8	3.9	.661	79.0	.398	1.088	162.3	312.7	.656A	1.521	77.0	1.362	-3.1	-11.6	225.0	.353
4-7736.9	4-7870	.353	248.6	.2	.0	1.237	106.2	.296	.805	273.4	509.3	.567	1.043A	101.5	.888	3.4	25.9	31.6	.241
		12.08	9.04	4.82	3.05	6.45	4.22	13.19	1/1/2	39.2	40.3	26.2	.484	4.407	27.5	144.0	-26.8	104.3D	1.647
MARS ARRIVAL DATE = 2447520 (24 DEC 1988)																				
4-7330	4-7520	.122	16.4	11.3	.4	1.098	92.3	.226	1.307	347.6	497.5	1.012	1.602A	100.4	.761	-2.2	7.7	96.0	.104
4-7520	4-7714.0	.260	73.2	27.1	1.8	.599	75.3	.519	1.014	165.4	273.4	.488A	1.540	63.3	1.341	-1.5	-2.9	211.8	.607
4-7714.0	4-7810	.607	213.7	-10.6	-5.4	1.323	116.6	.503	.968	270.5	483.3	.481	1.455A	120.2	.985	6.3	9.0	355.9	.543
		11.79	9.49	3.76	2.30	5.72	5.74	19.60	1/1/2	53.4	19.5	7.9	.163	14.467	76.4	148.4	74.7	83.5L	2.196
4-7340	4-7520	.117	13.4	9.3	.3	1.100	91.0	.228	1.316	354.7	495.1	1.016	1.616A	100.9	.765	-2.1	8.6	99.9	.106
4-7520	4-7718.7	.241	71.5	27.9	2.0	.612	76.7	.489	1.031	165.2	280.7	.527A	1.535	66.3	1.346	-1.5	-3.5	215.5	.550
4-7718.7	4-7820	.550	220.8	-9.7	-4.5	1.301	114.4	.458	.918	271.1	486.3	.498	1.339A	116.8	.960	5.9	12.7	3.0	.483
		11.31	8.96	3.71	2.34	5.76	5.26	18.15	1/1/2	49.4	21.4	8.2	.198	14.058	50.5	136.0	49.7	86.6L	2.591
4-7350	4-7520	.118	8.3	6.8	.3	1.101	89.5	.231	1.322	2.6	133.5	1.017D	1.628A	101.3	.767	-2.0	9.3	102.7	.109
4-7520	4-7723.1	.225	69.6	28.8	2.2	.624	77.9	.463	1.046	165.2	287.9	.562A	1.531	68.9	1.351	-1.7	-4.2	218.8	.499
4-7723.1	4-7830	.499	227.5	-8.4	-3.5	1.283	112.4	.417	.882	271.7	489.6	.515	1.250A	113.6	.939	5.4	16.2	9.9	.427
		10.97	8.58	3.71	2.39	5.81	4.87	16.87	1/1/2	46.5	23.6	9.6	.241	11.917	26.8	136.2	25.9	91.4D	2.632
4-7360	4-7520	.125	2.4	3.5	.3	1.102	87.8	.235	1.324	11.3	132.7	1.013D	1.635A	101.6	.768	-2.0	9.9	104.4	.112
4-7520	4-7727.5	.213	67.5	29.7	2.5	.633	79.0	.441	1.059	165.3	294.7	.592A	1.527	71.3	1.354	-1.8	-5.1	221.6	.454
4-7727.5	4-7840	.454	233.8	-6.7	-2.6	1.268	110.5	.380	.855	272.3	493.5	.530	1.180A	110.5	.922	4.9	19.3	16.6	.375
		10.79	8.35	3.76	2.44	5.86	4.56	15.74	1/1/2	44.8	26.3	12.3	.292	9.366	9.5	138.5	7.4	96.0D	2.440
4-7370	4-7520	.142	357.1	.7	.2	1.102	85.9	.241	1.320	21.2	133.0	1.002D	1.638A	101.9	.766	-1.9	10.7	104.8	.116
4-7520	4-7731.1	.203	65.5	30.8	2.8	.640	79.8	.423	1.070	165.4	301.1	.617A	1.525	73.4	1.357	-2.0	-6.3	223.9	.414
4-7731.1	4-7850	.414	239.7	-4.6	-1.6	1.256	108.9	.348	.834	272.8	497.8	.544	1.125A	107.5	.909	4.3	22.0	22.9	.328
		10.79	8.29	3.95	2.51	5.92	4.33	14.76	1/1/2	44.3	29.6	15.8	.350	7.264	8.1	141.2	-6.0	99.5D	2.193
4-7380	4-7520	.168	353.3	-1.3	.2	1.100	83.7	.249	1.309	32.4	134.6	.983D	1.635A	102.1	.762	-1.9	11.6	103.9	.121
4-7520	4-7734.6	.196	63.5	32.0	3.1	.646	80.4	.409	1.079	165.6	306.9	.638A	1.520	75.3	1.359	-2.2	-7.7	225.6	.381
4-7734.6	4-7860	.381	245.0	-2.3	-.7	1.246	107.4	.320	.819	273.4	502.8	.557	1.081A	104.6	.899	5.8	24.3	28.4	.284
		11.01	8.42	4.26	2.59	6.00	4.16	13.93	1/1/2	45.1	33.8	20.1	.415	5.733	16.5	143.9	-15.7	102.0D	1.963
4-7390	4-7520	.203	351.5	-2.4	.2	1.096	81.1	.262	1.289	44.8	137.5	.951D	1.627A	102.4	.754	-1.8	12.7	101.8	.127
4-7520	4-7737.8	.191	61.7	33.3	3.4	.651	81.0	.398	1.086	165.8	312.1	.654A	1.518	76.9	1.361	-2.5	-9.5	226.8	.353
4-7737.8	4-7870	.353	249.8	.2	.0	1.239	106.2	.297	.807	273.8	508.3	.568	1.047A	101.8	.890	3.4	26.0	32.7	.244
		11.49	8.78	4.74	2.71	6.12	4.04	13.25	1/1/2	47.0	39.3	24.8	.483	4.654	23.5	146.4	-22.9	103.9D	1.763
MARS ARRIVAL DATE = 2447530 (3 JAN 1989)																				
4-7320	4-7530	.132	14.6	19.9	1.5	1.094	93.5	.221	1.290	340.7	505.7	1.005	1.575A	98.7	.747	-3.3	-1.1	87.6	.099
4-7530	4-7710.1	.276	74.2	26.4	1.6	.567	76.1	.557	.989	168.4	264.6	.438A	1.540	59.7	1.331	-1.3	-2.1	209.8	.678
4-7710.1	4-7800	.678	207.5	-11.4	-6.5	1.355	119.2	.561	1.055	270.5	479.7	.463	1.646A	124.0	1.025	6.9	5.8	349.0	.619
		12.23	10.00	3.85	2.23	5.65	6.15	21.50	1/1/2	68.3	17.5	9.5	.131	12.029	103.4	131.2	-76.4	83.8L	1.444
4-7330	4-7530	.121	14.9	15.6	.9	1.096	92.3	.222	1.300	347.4	502.8	1.012	1.588A	99.3	.751	-2.7	3.2	92.6	.097
4-7530	4-7715.0	.254	72.3	27.0	1.8	.585	77.7	.522	1.009	168.2	272.3	.483A	1.536	63.0	1.339	-1.3	-2.5	213.8	.614
4-7715.0	4-7810	.614	215.0	-11.0	-5.6	1.328	116.8	.509	.981	271.1	482.3	.481	1.480A	120.6	.992	6.6	9.5	356.2	.553
		11.51	9.32	3.75	2.19	5.62	5.57	19.84	1/1/2	62.5	19.2	8.5	.160	13.477	82.4	165.6	79.8	83.4L	1.992
4-7340	4-7530	.116	12.1	12.4	.7	1.097	91.0	.223	1.308	354.6	500.5	1.016	1.600A	99.7	.754	-2.4	5.3	96.8	.098
4-7530	4-7719.6	.235	70.1	27.7	2.0	.600	79.1	.491	1.027	168.2	279.9	.523A	1.531	66.0	1.345	-1.4	-3.0	217.5	.556
4-7719.6	4-7820	.556	222.0	-10.0	-4.7	1.305	114.5	.463	.928	271.7	485.3	.499	1.357A	117.3	.966	6.1	13.1	3.4	.491
		10.99	8.79	3.69	2.20	5.62	5.10	18.35	1/1/2	58.1	21.1	8.4	.195	13.707	57.4	139.7	56.6	85.6L	2.475
4-7350	4-7530	.115	7.2	9.0	.6	1.099	89.5	.226	1.313	2.6	138.9	1.017D	1.609A	100.1	.756	-2.2	6.7	99.8	.099
4-7530	4-7724.0	.219	67.7	28.4	2.2	.612	80.3	.464	1.043	168.4	287.1	.559A	1.528	68.7	1.350	-1.4	-3.6	220.7	.503
4-7724.0	4-7830	.503	228.8	-8.6	-3.6	1.286	112.5	.420	.889	272.2	488.7	.515	1.263A	114.0	.944	5.6	16.5	10.4	.454
		10.64	8.42	3.69	2.22	5.65	4.73	17.03	1/1/2	54.9	23.2	9.5	.237	12.108	32.8	138.6	32.1	90.6D	2.637
4-7360	4-7530	.123	1.3	5.4	.5	1.099	87.9	.229	1.313	11.5	138.3	1.013D	1.614A	100.4	.756	-2.1	7.9	101.5	.101
4-7530	4-7728.2	.207	65.2	29.1	2.4	.622	81.3	.442	1.057	168.7	294.1	.590A	1.524	71.1	1.353	-1.5	-4.3	223.4	.457
4-7728.2	4-7840	.457	235.1	-6.9	-2.6	1.271	110.6	.383	.860	272.8	492.5	.531	1.190A	110.9	.926	5.0	19.6	17.2	.381
		10.45	8.20	3.76	2.26	5.68	4.44	15.87	1/1/2	53.0	25.8	11.9	.288	9.686	13.5	140.4	12.3	95.4D	2.503
4-7370	4-7530	.139	356.1	2.1	.4	1.099	86.0	.234	1.309	21.4	138.7	1.002D	1.616A	100.6	.754	-2.0	9.0	102.0	.104
4-7530	4-7732.0	.198	62.8	29.9	2.6	.630	82.1	.424	1.069	168.9	300.6	.616A	1.522	73.3	1.357	-1.7	-5.3	225.6	.416
4-7732.0	4-7850	.416	240.9	-4.7	-1.7	1.258	108.9	.350	.838	273.3	496.9	.545	1.132A	107.8	.912	4.4	22.2	23.6	.333
		10.45	8.14	3.92	2.30	5.72	4.22	14.86	1/1/2	52.5	28.9	15.2	.347	7.543	5.4	143.1	-2.0	99.1D	2.270
4-7380	4-7530	.164	352.7	-.2	.4	1.097	83.6	.242	1.298	32.5	140.2	.983D	1.612A	100.8	.750	-1.9	10.3	101.0	.108
4-7530	4-7735.5	.191	60.6	30.6	2.8	.637	82.7	.410	1.078	169.2	306.5	.637A	1.519	75.2	1.359	-1.9	-6.4	227.2	.382
4-7735.5	4-7860	.382	246.2	-2.3	-.8	1.248	107.4	.321	.822	273.8	501.8	.558	1.086A	104.9	.901	5.9	24.5	29.2	.286
		10.64	8.27	4.21	2.57	5.79	4.06	14.00	1/1/2	53.2	33.0	19.3	.412	5.958	15.0	145.8	-12.1	101.8D	2.045

STOPOVER TIME = 0 DAYS — 1988 INBOUND SWINGBY — MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2447530
3 JAN 1989

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7390	4-7530	.199	351.1	-1.5	.4	1.093	81.3	.255	1.279	44.8	142.9	.953D	1.605A	100.9	.742	-1.9	11.7	98.8	.114
4-7530	4-7736.6	.186	58.7	31.7	3.1	.642	83.2	.398	1.085	169.5	311.8	.653A	1.518	76.8	1.361	-2.1	-7.7	228.3	.353
4-7736.6	4-7870	.353	250.9	.2	.0	1.240	106.2	.297	.810	274.3	507.5	.569	1.050A	102.1	.892	3.4	26.2	33.6	.247
		11.09	8.62	4.67	2.47	5.89	3.95	13.30	1/1/2	55.3	38.4	23.8	.481	4.645	19.9	148.3	-19.5	103.7D	1.851
4-7400	4-7530	.242	351.1	-2.0	.4	1.087	78.5	.275	1.251	58.2	146.7	.907D	1.595A	101.1	.731	-1.8	13.4	95.4	.123
4-7530	4-7741.2	.183	57.0	32.7	3.4	.645	83.6	.390	1.091	169.7	316.2	.666A	1.516	78.1	1.362	-2.3	-9.2	229.0	.331
4-7741.2	4-7880	.331	254.9	2.7	.7	1.234	105.2	.278	.800	274.6	513.8	.576	1.023A	99.3	.886	3.0	27.4	36.2	.211
		11.86	9.22	5.35	2.64	6.06	3.87	12.74	1/1/2	58.4	45.7	28.4	.548	4.077	25.2	150.5	-24.9	104.9D	1.687
MARS ARRIVAL DATE = 2447540 (13 JAN 1989)																			
4-7330	4-7540	.123	12.8	22.0	1.7	1.095	92.3	.219	1.296	347.0	507.7	1.011	1.580A	98.2	.741	-3.4	-2.9	89.0	.095
4-7540	4-7715.8	.250	70.4	26.8	1.8	.572	80.6	.525	1.006	171.3	271.4	.478A	1.534	62.6	1.337	-1.1	-2.2	215.7	.620
4-7715.8	4-7810	.620	216.1	-11.3	-5.9	1.333	116.9	.515	.994	271.6	481.5	.482	1.505A	121.0	.999	6.8	9.9	356.5	.562
		11.40	9.23	3.77	2.16	5.58	5.47	20.07	1/1/2	71.9	19.0	9.2	.156	12.503	87.0	191.9	82.6	83.3L	1.799
4-7340	4-7540	.116	10.8	16.7	1.2	1.096	91.0	.220	1.302	354.4	505.6	1.016	1.589A	98.6	.744	-2.8	1.2	93.2	.092
4-7540	4-7720.5	.231	67.7	27.3	1.9	.588	81.9	.493	1.025	171.5	279.1	.520A	1.530	65.7	1.344	-1.2	-2.6	219.2	.560
4-7720.5	4-7820	.560	223.2	-10.3	-4.8	1.309	114.6	.467	.937	272.2	484.4	.499	1.375A	117.6	.971	6.3	13.5	3.7	.499
		10.83	8.71	3.69	2.12	5.54	5.01	18.54	1/1/2	67.1	20.8	8.7	.191	13.149	63.3	143.7	62.4	85.3L	2.326
4-7350	4-7540	.114	6.1	12.1	.9	1.097	89.6	.222	1.306	2.4	144.1	1.017D	1.596A	99.0	.746	-2.5	3.7	96.5	.092
4-7540	4-7724.8	.217	64.9	27.8	2.1	.601	83.0	.466	1.042	171.8	286.6	.557A	1.528	68.5	1.349	-1.2	-3.0	222.3	.507
4-7724.8	4-7830	.507	229.9	-8.9	-3.8	1.289	112.5	.424	.896	272.7	487.8	.516	1.276A	114.4	.948	5.7	16.9	10.8	.441
		10.46	8.34	3.68	2.12	5.54	4.66	17.18	1/1/2	63.7	22.8	9.5	.234	12.073	38.4	140.7	37.7	89.9L	2.592
4-7360	4-7540	.121	.5	7.7	.8	1.097	87.9	.225	1.307	11.4	143.5	1.013D	1.600A	99.3	.746	-2.3	5.5	98.1	.093
4-7540	4-7729.0	.205	62.0	28.3	2.3	.612	83.9	.443	1.057	172.2	293.7	.588A	1.525	71.0	1.353	-1.5	-3.6	224.9	.459
4-7729.0	4-7840	.459	236.1	-7.0	-2.7	1.273	110.6	.386	.865	273.5	491.7	.531	1.199A	111.2	.930	5.1	19.9	17.7	.367
		10.27	8.14	3.74	2.13	5.56	4.39	15.98	1/1/2	61.6	25.3	11.6	.285	9.863	17.7	142.2	16.8	94.9D	2.526
4-7370	4-7540	.137	355.5	3.9	.7	1.097	86.1	.230	1.302	21.3	143.8	1.003D	1.601A	99.5	.744	-2.1	7.2	98.6	.095
4-7540	4-7732.8	.197	59.3	28.8	2.4	.621	84.7	.425	1.069	172.7	300.3	.615A	1.523	73.2	1.357	-1.4	-4.4	227.0	.418
4-7732.8	4-7850	.418	241.9	-4.8	-1.7	1.260	108.9	.352	.842	273.8	496.0	.546	1.138A	106.1	.915	4.4	22.5	24.2	.337
		10.26	8.09	3.90	2.17	5.59	4.19	14.95	1/1/2	61.0	28.4	14.9	.344	7.731	5.0	144.6	1.7	98.9D	2.317
4-7380	4-7540	.161	352.3	1.1	.6	1.095	84.0	.238	1.291	32.3	145.3	.984D	1.598A	99.6	.740	-2.0	8.8	97.7	.099
4-7540	4-7736.5	.191	56.9	29.5	2.6	.628	85.3	.411	1.079	173.1	306.3	.636A	1.522	75.1	1.359	-1.5	-5.3	228.6	.383
4-7736.5	4-7860	.383	247.2	-2.4	-.8	1.250	107.5	.323	.825	274.2	501.0	.559	1.091A	105.2	.904	3.9	24.6	29.9	.291
		10.44	8.22	4.18	2.22	5.64	4.05	14.07	1/1/2	61.7	32.4	18.8	.410	6.117	9.6	147.3	-8.6	101.6D	2.100
4-7390	4-7540	.195	350.9	-.4	.6	1.092	81.5	.250	1.273	44.4	147.8	.955D	1.592A	99.6	.732	-1.9	10.7	95.4	.104
4-7540	4-7739.3	.186	54.8	29.9	2.8	.633	85.7	.399	1.087	173.5	311.6	.653A	1.521	76.7	1.361	-1.7	-6.3	229.6	.354
4-7739.3	4-7870	.354	251.9	.2	.0	1.241	106.2	.298	.812	274.7	506.7	.570	1.054A	102.3	.894	3.4	26.3	34.5	.250
		10.87	8.56	4.62	2.31	5.73	3.94	13.35	1/1/2	63.8	37.6	23.2	.480	4.982	16.6	149.9	-16.3	103.6D	1.913
4-7400	4-7540	.237	351.2	-1.0	.6	1.086	78.8	.269	1.247	57.5	151.3	.911D	1.583A	99.6	.721	-1.8	12.6	92.1	.113
4-7540	4-7741.9	.183	53.1	30.5	3.0	.637	86.0	.391	1.093	173.6	316.1	.665A	1.520	78.0	1.362	-1.8	-7.4	230.2	.331
4-7741.9	4-7880	.331	255.8	2.7	.8	1.234	105.1	.278	.802	275.0	513.0	.579	1.025A	99.5	.887	2.9	27.5	37.2	.213
		11.59	9.13	5.25	2.46	5.88	3.88	12.77	1/1/2	66.9	44.8	27.5	.549	4.203	21.8	152.1	-21.7	104.9D	1.757
MARS ARRIVAL DATE = 2447550 (23 JAN 1989)																			
4-7330	4-7550	.131	8.9	31.8	3.0	1.094	92.4	.218	1.293	346.5	512.4	1.011	1.576A	97.1	.733	-4.6	-11.4	85.6	.100
4-7550	4-7716.6	.249	67.7	26.4	1.8	.561	83.9	.528	1.005	174.5	270.7	.474A	1.535	62.3	1.337	-1.0	-1.8	217.3	.628
4-7716.6	4-7810	.628	217.2	-11.7	-6.1	1.337	117.0	.521	1.006	272.1	480.7	.482	1.530A	121.4	1.005	7.1	10.3	356.8	.571
		11.54	9.30	3.84	2.24	5.66	5.45	20.28	1/1/2	61.1	18.8	9.9	.153	11.619	90.3	211.7	-86.9	83.2L	1.629
4-7340	4-7550	.118	9.0	22.4	1.8	1.095	91.1	.218	1.299	353.9	510.3	1.016	1.583A	97.6	.735	-3.3	-3.8	89.5	.091
4-7550	4-7721.2	.232	64.6	26.7	1.9	.576	85.1	.496	1.025	174.9	278.8	.517A	1.533	65.5	1.344	-1.0	-2.2	220.7	.365
4-7721.2	4-7820	.565	224.2	-10.7	-5.0	1.313	114.7	.471	.946	272.6	483.7	.500	1.392A	118.0	.976	6.5	13.9	4.0	.506
		10.84	8.74	3.71	2.10	5.53	5.02	18.71	1/1/2	76.2	20.6	9.2	.188	12.492	67.8	147.7	66.8	85.0L	2.165
4-7350	4-7550	.115	5.1	16.0	1.3	1.096	89.6	.220	1.303	2.0	148.9	1.017D	1.589A	98.0	.737	-2.8	.2	92.6	.089
4-7550	4-7725.6	.218	61.3	27.0	2.0	.593	86.1	.468	1.043	175.5	286.2	.555A	1.531	68.3	1.349	-1.0	-2.5	223.7	.310
4-7725.6	4-7830	.510	230.9	-9.1	-3.9	1.292	112.6	.427	.902	273.2	487.0	.516	1.288A	114.7	.952	5.8	17.2	11.2	.447
		10.44	8.38	3.69	2.06	5.49	4.69	17.31	1/1/2	72.6	22.5	9.7	.231	11.835	43.1	142.7	42.5	89.4L	2.303
4-7360	4-7550	.120	359.9	10.5	1.1	1.096	88.0	.222	1.303	11.0	148.3	1.013D	1.592A	98.2	.737	-2.5	2.9	94.5	.088
4-7550	4-7729.7	.208	58.2	27.2	2.2	.604	86.9	.445	1.059	176.1	293.5	.587A	1.530	70.9	1.354	-1.1	-3.0	226.2	.482
4-7729.7	4-7840	.462	237.1	-7.2	-2.8	1.276	110.7	.388	.870	273.7	490.9	.532	1.207A	111.5	.933	5.2	20.1	18.1	.392
		10.24	8.18	3.74	2.06	5.48	4.45	16.09	1/1/2	70.4	24.9	11.6	.282	9.879	21.6	143.6	21.0	94.6D	2.305
4-7370	4-7550	.135	355.2	6.0	.9	1.096	86.2	.227	1.298	20.8	148.6	1.003D	1.593A	98.3	.735	-2.3	5.2	95.0	.089
4-7550	4-7733.5	.200	55.2	27.4	2.3	.614	87.6	.427	1.072	176.7	300.2	.614A	1.529	73.1	1.357	-1.2	-3.6	228.2	.419
4-7733.5	4-7850	.419	242.9	-4.9	-1.7	1.262	109.0	.354	.845	274.2	495.3	.546	1.145A	108.4	.916	4.5	22.7	24.7	.341 *
		10.23	8.15	3.68	2.06	5.50	4.27	15.03	1/1/2	69.7	27.9	14.7	.342	7.808	6.7	145.9	5.2	98.7D	2.328
4-7380	4-7550	.159	352.2	2.7	.8	1.094	84.1	.235	1.288	31.7	150.0	.985D	1.590A	98.4	.731	-2.1	7.4	94.1	.092
4-7550	4-7737.0	.195	52.7	27.6	2.5	.621	88.1	.412	1.082	177.3	306.4	.636A	1.526	75.1	1.360	-1.2	-4.3	229.6	.384
4-7737.0	4-7860	.384	248.1	-2.4	-.8	1.251	107.5	.324	.827	274.6	500.3	.559	1.095A	105.4	.906	3.9	24.8	30.5	.295
		10.41	8.29	4.15	2.12	5.55	4.14	14.13	1/1/2	70.4	31.8	18.6	.408	6.196	6.7	148.5	-5.7	101.6D	2.122
4-7390	4-7550	.191	351.0	.8	.8	1.091	81.6	.247	1.271	43.7	152.3	.957D	1.585A	98.4	.723	-1.9	9.6	92.0	.098
4-7550	4-7740.0	.191	50.6	27.9	2.6	.627	88.5	.401	1.090	177.8	311.7	.653A	1.528	76.7	1.362	-1.3	-5.0	230.5	.354
4-7740.0	4-7870	.354	252.7	.2	.1	1.242	106.2	.299	.814	275.0	506.0	.570	1.057A	102.5	.896	3.4	26.5	35.2	.252
		10.82	8.62	4.57	2.20	5.62	4.05	13.39	1/1/2	72.3	37.0	22.8	.479	5.056	13.5	151.1	-13.3	103.6D	1.944
4-7400	4-7550	.232	351.5	-.0	.7	1.086	79.1	.265	1.246	56.4	155.4	.916D	1.577A	98.3	.713	-1.8	11.8	88.9	.106
4-7550	4-7742.5	.186	48.9	28.2	2.8	.631	88.8	.393	1.097	178.2	316.2	.666A	1.528	78.0	1.364	-1.5	-5.9	231.0	.331
4-7742.5	4-7880	.331	256.7	2.7	.8	1.235	105.1	.279	.803	275.3	512.3	.580	1.027A	99.7	.888	2.9	27.6	38.1	.215
		11.51	9.17	5.17	2.34	5.76	3.99	12.80	1/1/2	75.2	44.0	27.1	.549	4.274	18.7	153.3	-18.7	105.0D	1.797
MARS ARRIVAL DATE = 2447560 (2 FEB 1989)																			
4-7340	4-7560	.124	6.3	30.2	2.7	1.095	91.2	.218	1.298	353.3	514.8	1.015	1.581A	96.6	.727	-4.2	-10.3	86.3	.095
4-7560	4-7721.9	.237	60.8	25.9	1.9	.571	88.7	.499	1.028	178.7	278.4	.515A	1.540	65.3	1.344	-.6	-1.8	222.0	.569
4-7721.9	4-7820	.569	225.2	-11.0	-5.2	1.316	114.9	.476	.954	273.1	482.9	.500	1.408A	118.3	.981	6.7	14.2	4.3	.513
		11.08	8.92	3.77	2.16	5.58	5.15	18.87	1/1/2	84.5	20.4	9.7	.186	11.799	71.0	151.3	69.9	84.8L	2.003
4-7350	4-7560	.116	4.0	21.0	1.8	1.095	89.7	.219	1.301	1.4	153.4	1.017D	1.586A	96.9	.729	-3.3	-4.0	89.1	.088
4-7560	4-7726.3	.224	57.2	25.9	2.0	.587	89.6	.471	1.047	179.5	286.2	.554A	1.540	66.2	1.350	-.8	-2.1	224.8	.513
4-7726.3	4-7830	.513	231.8	-9.4	-4.0	1.295	112.7	.430	.908	273.6	486.3	.517	1.299A	115.0	.956	6.0	17.5	11.5	.452
		10.60	8.55	3.70	2.05	5.48	4.85	17.44	1/1/2	81.1	22.3	10.0	.228	11.432	46.8	144.3	46.2	89.1L	2.361
4-7360	4-7560	.120	359.4	14.0	1.4	1.096	88.1	.221	1.301	10.3	152.8	1.013D	1.588A	97.2	.728	-2.8	.0	90.9	.086
4-7560	4-7730.3	.215	53.9	25.8	2.1	.599	90.3	.448	1.064	180.3	293.6	.587A	1.540D	70.8	1.355	-.9	-2.4	227.2	.464
4-7730.3	4-7840	.464	238.0	-7.3	-2.8	1.278	110.8	.390	.874	274.0	490.2	.533	1.215A	111.7	.936	5.2	20.3	18.5	.396
		10.39	8.37	3.74	2.02	5.45	4.63	16.19	1/1/2	79.0	24.6	11.8	.280	9.723	25.0	144.8	24.5	94.3D	2.436
4-7370	4-7560	.134	355.1	8.5	1.2	1.095	86.3	.225	1.296	20.2	153.1	1.004D	1.589A	97.3	.727	-2.4	3.1	91.5	.086
4-7560	4-7734.1	.209	51.0	25.8	2.2	.609	90.9	.430	1.077	181.1	300.5	.614A	1.540D	73.1	1.359	-.9	-2.9	229.0	.421
4-7734.1	4-7850	.421	243.7	-5.0	-1.8	1.263	109.0	.355	.848	274.5	494.7	.547	1.150A	108.6	.920	4.5	22.8	25.1	.345
		10.37	8.34	3.87	2.03	5.45	4.47	15.10	1/1/2	78.2	27.5	14.8	.339	7.758	9.2	146.9	8.3	98.6D	2.294
4-7380	4-7560	.157	352.5	4.6	1.0	1.094	84.3	.233	1.287	30.9	154.3	.987D	1.586A	97.3	.723	-2.2	5.8	90.7	.089
4-7560	4-7737.5	.204	48.5	25.8	2.3	.617	91.3	.415	1.068	181.6	306.7	.636A	1.541D	75.1	1.362	-1.0	-3.4	230.3	.384
4-7737.5	4-7860	.384	248.9	-2.5	-.8	1.252	107.5	.325	.829	274.9	499.7	.560	1.099A	105.6	.907	3.9	24.9	31.0	.297
		10.54	8.48	4.12	2.06	5.49	4.36	14.18	1/1/2	78.8	31.3	18.6	.407	6.183	4.1	149.4	-2.9	101.7D	2.108
4-7390	4-7560	.188	351.3	2.2	.9	1.091	82.0	.245	1.271	42.6	156.4	.960D	1.582A	97.2	.716	-2.0	8.5	88.7	.093
4-7560	4-7740.5	.201	46.5	25.8	2.4	.623	91.7	.404	1.097	182.4	312.2	.654A	1.541D	76.7	1.364	-1.1	-4.0	231.0	.354
4-7740.5	4-7870	.354	253.5	.2	.1	1.243	106.2	.300	.815	275.3	505.4	.571	1.059A	102.7	.897	3.4	26.5	35.9	.255
		10.94	8.81	4.52	2.14	5.56	4.29	13.43	1/1/2	80.6	36.4	22.8	.478	5.058	10.7	151.9	-10.5	103.8D	1.941

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 460 DAYS | MARS ARRIVAL DATE = 2447560 | 2 FEB 1989

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7400	4-7560	.227	351.9	1.1	.9	1.086	79.4	.262	1.248	55.1	159.2	.921D	1.576A	97.0	.706	-1.9	11.1	85.9	.102
4-7560	4-7743.1	.199	44.9	25.8	2.5	.627	91.9	.396	1.104	183.0	316.7	.667A	1.541D	78.1	1.366	-1.1	-4.6	231.4	.331
4-7743.1	4-7680	.331	257.4	2.6	.6	1.236	105.1	.279	.805	275.6	511.7	.580	1.029A	99.9	.890	2.9	27.7	38.8	.217
		11.60	9.34	5.10	2.27	5.69	4.24	12.82	1/1/2	83.2	43.3	27.0	.549	4.285	15.9	154.1	-15.9	105.3D	1.603
MARS ARRIVAL DATE = 2447570 (12 FEB 1989)																			
4-7340	4-7570	.138	1.1	41.3	4.4	1.095	91.4	.218	1.298	352.4	519.0	1.015	1.581A	95.6	.720	-5.8	-18.6	83.9	.107
4-7570	4-7722.6	.248	56.7	24.8	1.9	.567	92.8	.503	1.034	182.8	278.4	.514A	1.555D	65.1	1.347	-.7	-1.4	223.0	.573
4-7722.6	4-7820	.573	226.1	-11.3	-5.4	1.319	114.9	.479	.962	273.4	482.3	.501	1.423A	118.6	.985	6.9	14.5	4.5	.319
		11.70	9.34	3.92	2.36	5.77	5.42	19.02	1/1/2	91.3	20.2	10.3	.183	11.116	72.9	154.1	71.7	84.7L	1.850
4-7350	4-7570	.121	2.3	27.5	2.6	1.095	89.9	.219	1.301	.6	157.7	1.017D	1.585A	95.9	.721	-3.9	-8.9	86.1	.091
4-7570	4-7726.9	.237	53.1	24.6	2.0	.584	93.4	.475	1.055	183.8	286.4	.554A	1.556D	68.1	1.353	-.7	-1.6	225.6	.516
4-7726.9	4-7830	.516	232.6	-9.6	-4.1	1.297	112.8	.433	.913	273.9	485.7	.517	1.309A	115.2	.959	6.1	17.7	11.8	.457
		10.99	8.89	3.74	2.10	5.52	5.15	17.56	1/1/2	88.8	22.0	10.5	.226	10.910	49.3	145.5	48.7	88.9L	2.237
4-7360	4-7570	.121	358.8	18.3	1.9	1.096	88.3	.221	1.301	9.5	157.0	1.014D	1.587A	96.2	.721	-3.1	-3.2	87.7	.086
4-7570	4-7730.9	.229	49.8	24.3	2.1	.597	94.0	.452	1.073	184.9	294.0	.588A	1.557D	70.8	1.358	-.7	-1.9	227.8	.466
4-7730.9	4-7840	.466	238.7	-7.5	-2.9	1.279	110.8	.393	.878	274.3	489.6	.533	1.222A	112.0	.939	5.3	20.5	18.8	.400
		10.73	8.70	3.75	2.02	5.45	4.95	16.27	1/1/2	86.9	24.3	12.2	.277	9.405	27.6	145.7	27.1	94.2D	2.330
4-7370	4-7570	.133	355.1	11.5	1.5	1.095	86.5	.225	1.296	19.2	157.2	1.005D	1.588A	96.5	.719	-2.7	.8	88.3	.085
4-7570	4-7734.6	.223	47.0	24.1	2.1	.607	94.5	.434	1.087	185.9	301.0	.616A	1.559D	73.1	1.362	-.7	-2.2	229.4	.422
4-7734.6	4-7850	.422	244.4	-5.1	-1.8	1.265	109.0	.357	.851	274.8	494.1	.547	1.155A	108.8	.922	4.6	23.0	25.5	.348
		10.69	8.68	3.66	2.01	5.44	4.82	15.16	1/1/2	86.2	27.2	15.2	.338	7.574	11.5	147.6	10.8	98.7D	2.219
4-7380	4-7570	.155	352.5	6.7	1.3	1.094	84.5	.232	1.287	29.9	158.3	.989D	1.586A	96.2	.715	-2.4	4.3	87.8	.087
4-7570	4-7738.0	.220	44.6	23.8	2.2	.616	94.9	.420	1.099	186.8	307.4	.638A	1.561D	75.1	1.365	-.8	-2.8	230.5	.385
4-7738.0	4-7860	.385	249.5	-2.5	-.8	1.253	107.5	.326	.831	275.2	499.1	.560	1.102A	105.8	.909	3.9	25.0	31.5	.300
		10.87	8.83	4.10	2.03	5.46	4.73	14.23	1/1/2	86.7	30.9	19.0	.405	6.067	2.6	150.0	-.3	101.9D	2.054
4-7390	4-7570	.185	351.8	3.8	1.2	1.091	82.3	.243	1.273	41.3	160.2	.963D	1.582A	96.1	.709	-2.1	7.4	85.9	.091
4-7570	4-7741.0	.217	42.7	23.6	2.3	.622	95.2	.409	1.109	187.6	312.9	.655A	1.562D	76.8	1.367	-.8	-3.0	231.1	.355
4-7741.0	4-7870	.355	254.1	.2	.1	1.244	106.2	.300	.817	275.6	504.8	.572	1.062A	102.9	.899	3.4	26.6	36.4	.256
		11.25	9.15	4.48	2.10	5.53	4.67	13.46	1/1/2	88.3	35.9	23.2	.478	4.980	8.1	152.4	-7.9	104.1D	1.901
4-7400	4-7570	.222	352.5	2.4	1.1	1.087	79.7	.260	1.252	53.5	162.7	.926D	1.577A	95.9	.700	-1.9	10.3	83.4	.099
4-7570	4-7743.5	.216	41.3	23.6	2.4	.626	95.4	.401	1.116	188.1	317.5	.668A	1.563D	78.2	1.369	-.8	-3.4	231.4	.331
4-7743.5	4-7880	.331	258.0	2.8	.8	1.237	105.1	.279	.806	275.9	511.3	.581	1.031A	100.1	.890	2.9	27.7	39.5	.216
		11.88	9.66	5.03	2.22	5.64	4.63	12.84	1/1/2	90.8	42.8	27.3	.549	4.232	15.3	154.6	-13.3	105.7D	1.774
MARS ARRIVAL DATE = 2447580 (22 FEB 1989)																			
4-7350	4-7580	.130	359.2	35.9	3.7	1.096	90.1	.219	1.302	359.6	521.7	1.017	1.587A	95.0	.715	-5.0	-14.9	84.0	.099
4-7580	4-7727.4	.256	49.2	23.2	1.9	.585	97.8	.480	1.069	188.7	287.1	.556A	1.562D	66.1	1.357	-.5	-1.2	226.1	.519
4-7727.4	4-7830	.519	233.5	-9.8	-4.2	1.300	112.8	.436	.918	274.2	485.2	.518	1.318A	115.5	.963	6.2	18.0	12.0	.462
		11.68	9.46	3.83	2.22	5.64	5.63	17.66	1/1/2	95.0	21.8	11.2	.223	10.282	50.4	146.3	49.9	89.1L	2.074
4-7360	4-7580	.124	358.0	23.6	2.5	1.096	88.5	.221	1.302	8.5	161.0	1.014D	1.589A	95.2	.714	-3.6	-6.9	85.2	.088
4-7580	4-7731.4	.249	46.2	22.8	2.0	.599	98.1	.458	1.087	189.9	294.9	.590A	1.585D	70.8	1.363	-.5	-1.4	228.1	.467
4-7731.4	4-7840	.467	239.4	-7.6	-3.0	1.281	110.9	.394	.881	274.6	489.1	.534	1.228A	112.2	.941	5.4	20.7	19.1	.404
		11.29	9.23	3.78	2.06	5.49	5.45	16.35	1/1/2	93.9	24.0	12.9	.275	8.935	29.2	146.2	28.6	94.4D	2.184
4-7370	4-7580	.133	355.0	15.0	1.9	1.096	86.7	.225	1.298	18.2	161.1	1.006D	1.589A	95.3	.713	-3.0	-1.6	85.7	.085
4-7580	4-7735.1	.245	43.5	22.4	2.1	.610	98.5	.440	1.103	191.1	302.0	.618A	1.586D	73.2	1.367	-.5	-1.8	229.5	.423
4-7735.1	4-7850	.423	245.0	-5.2	-1.8	1.266	109.1	.358	.853	275.0	493.6	.548	1.159A	109.0	.924	4.6	23.1	25.8	.350
		11.23	9.21	3.87	2.02	5.44	5.34	15.22	1/1/2	93.4	26.9	15.9	.336	7.247	13.3	148.0	12.9	98.9D	2.097
4-7380	4-7580	.153	352.9	9.2	1.6	1.095	84.7	.232	1.289	28.6	162.0	.991D	1.588A	95.2	.709	-2.5	2.7	85.1	.086
4-7580	4-7738.5	.241	41.4	22.0	2.1	.618	98.8	.426	1.116	192.2	308.5	.640A	1.591D	75.2	1.370	-.8	-1.9	230.4	.386
4-7738.5	4-7860	.386	250.1	-2.5	-.8	1.254	107.5	.327	.833	275.4	498.7	.561	1.105A	106.0	.910	3.9	25.1	31.9	.302
		11.38	9.35	4.08	2.03	5.46	5.27	14.27	1/1/2	93.9	30.6	19.7	.404	5.844	2.9	150.3	1.9	102.3D	1.957
4-7390	4-7580	.182	352.3	5.6	1.4	1.092	82.5	.242	1.276	39.9	163.7	.967D	1.585A	95.1	.703	-2.2	6.3	83.6	.090
4-7580	4-7741.4	.240	39.7	21.8	2.2	.625	99.0	.416	1.126	193.1	314.1	.658A	1.594D	77.0	1.372	-.8	-2.2	230.8	.355
4-7741.4	4-7870	.355	254.6	.2	.1	1.244	106.2	.301	.818	275.6	504.4	.572	1.064A	103.0	.900	3.4	26.7	36.8	.258
		11.75	9.66	4.44	2.09	5.51	5.22	13.48	1/1/2	95.3	35.5	24.0	.477	4.819	5.7	152.6	-5.6	104.7D	1.821
MARS ARRIVAL DATE = 2447590 (4 MAR 1989)																			
4-7360	4-7590	.130	356.4	30.2	3.3	1.097	88.7	.222	1.304	7.4	164.8	1.015D	1.593A	94.2	.708	-4.4	-11.3	83.5	.094
4-7590	4-7731.9	.276	43.1	21.3	2.0	.607	102.7	.465	1.110	195.5	296.3	.593A	1.627D	70.9	1.369	-.3	-.9	227.9	.469
4-7731.9	4-7840	.469	240.0	-7.7	-3.0	1.283	110.9	.396	.864	274.9	488.6	.534	1.234A	112.3	.943	5.5	20.9	19.4	.407
		12.13	9.99	3.83	2.15	5.57	6.16	16.42	1/1/2	99.5	23.8	13.8	.273	8.321	29.9	146.4	29.5	94.8D	2.001
4-7370	4-7590	.135	354.8	19.3	2.4	1.096	86.9	.225	1.300	16.9	164.8	1.007D	1.593A	94.3	.707	-3.4	-4.3	83.8	.086
4-7590	4-7735.5	.273	40.8	20.9	2.0	.618	102.9	.448	1.127	196.9	303.6	.622A	1.632D	73.3	1.374	-.3	-1.1	229.1	.424
4-7735.5	4-7850	.424	245.5	-5.2	-1.9	1.267	109.1	.359	.856	275.3	493.2	.548	1.163A	109.2	.925	4.7	23.2	26.1	.353
		11.99	9.93	3.88	2.05	5.48	6.06	15.27	1/1/2	99.6	26.6	16.9	.334	6.793	14.6	148.1	14.2	99.4D	1.936
4-7380	4-7590	.152	355.2	12.0	1.9	1.095	85.0	.232	1.292	27.2	165.6	.993D	1.592A	94.3	.704	-2.8	.9	83.3	.087
4-7590	4-7738.8	.271	38.9	20.5	2.0	.628	103.0	.436	1.141	198.2	310.1	.644A	1.636D	75.4	1.377	-.4	-1.2	229.7	.386
4-7738.8	4-7860	.386	250.6	-2.6	-.8	1.255	107.5	.326	.835	275.6	498.3	.561	1.108A	106.1	.911	4.0	25.2	32.2	.304
		12.12	10.07	4.07	2.04	5.47	6.00	14.30	1/1/2	100.3	30.3	20.9	.403	5.510	4.1	150.3	3.7	102.9D	1.817

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 520 DAYS | MARS ARRIVAL DATE = 2447490 | 24 NOV 1988

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2447490 (24 NOV 1988)																			
4-7320	4-7490	.142	20.7	4.3	-.5	1.106	93.8	.247	1.334	340.9	483.6	1.004	1.664A	103.4	.793	-1.4	16.0	97.9	.140
4-7490	4-7723.9	.242	68.3	30.5	3.0	.669	73.6	.440	1.073	156.4	297.3	.601A	1.546	72.0	1.359	-2.7	-8.0	214.8	.445
4-7723.9	4-7840	.445	229.4	-6.2	-2.3	1.259	110.3	.370	.837	270.4	497.0	.527	1.147A	109.1	.909	4.5	18.2	14.4	.354
		12.20	9.24	3.96	2.96	6.37	5.28	15.30	1/1/2	34.0	28.4	14.6	.304	7.847	10.1	131.2	-7.1	97.9D	2.080
4-7330	4-7490	.136	20.1	4.6	-.4	1.110	92.6	.253	1.354	346.9	480.1	1.011	1.696A	104.1	.800	-1.5	15.4	101.7	.147
4-7490	4-7727.9	.232	67.1	32.4	3.6	.675	74.4	.423	1.083	156.2	303.4	.624A	1.541	74.0	1.362	-3.2	-10.3	217.2	.408
4-7727.9	4-7850	.408	235.4	-4.3	-1.5	1.249	108.7	.341	.821	271.1	501.3	.541	1.100A	106.2	.898	4.1	21.0	20.2	.310
		12.02	8.92	3.89	3.10	6.50	5.03	14.42	1/1/2	30.5	32.1	18.9	.360	6.081	19.8	133.9	-18.3	101.0D	1.831
4-7340	4-7490	.132	17.7	4.0	-.4	1.113	91.3	.260	1.371	353.5	477.1	1.015	1.728A	104.7	.806	-1.6	15.0	104.8	.154
4-7490	4-7731.6	.225	65.7	34.9	4.3	.680	75.2	.409	1.091	156.1	309.3	.644A	1.537	75.9	1.364	-3.8	-13.5	219.3	.377
4-7731.6	4-7860	.378	241.0	-2.2	-.7	1.241	107.4	.316	.808	271.7	506.1	.553	1.064A	103.4	.890	3.7	23.5	25.3	.270
		11.95	8.71	3.85	3.24	6.64	4.86	13.69	1/1/2	27.7	36.6	24.3	.422	4.754	29.0	136.0	-27.7	103.7D	1.584
4-7350	4-7490	.133	13.4	2.5	-.4	1.117	89.8	.267	1.386	.9	114.9	1.017D	1.756A	105.2	.811	-1.7	14.8	107.1	.161
4-7490	4-7735.3	.221	63.8	38.5	5.4	.684	75.8	.397	1.098	156.0	315.2	.662A	1.533	77.7	1.365	-4.9	-18.7	220.9	.352
4-7735.3	4-7870	.352	246.5	.2	.0	1.235	106.2	.295	.801	272.6	511.0	.565	1.036A	100.9	.885	3.4	25.5	29.7	.235
		12.01	8.63	3.86	3.38	6.78	4.77	13.10	1/1/2	25.5	42.0	31.4	.485	3.694	38.3	136.9	-36.7	106.4D	1.306
MARS ARRIVAL DATE = 2447500 (4 DEC 1988)																			
4-7310	4-7500	.145	18.9	5.0	-.4	1.098	94.6	.233	1.299	335.3	493.3	.996	1.603A	101.4	.774	-1.5	14.3	91.4	.118
4-7500	4-7721.0	.244	70.4	29.0	2.4	.649	74.1	.461	1.056	159.4	289.8	.569A	1.543	69.4	1.354	-2.1	-5.5	214.4	.491
4-7721.0	4-7830	.491	224.7	-7.9	-3.3	1.276	112.1	.408	.867	270.5	491.8	.513	1.221A	112.7	.928	5.1	15.4	8.8	.411
		11.86	9.31	3.99	2.55	5.96	5.32	16.51	1/1/2	46.0	24.7	10.5	.249	10.919	14.8	131.1	13.1	93.2D	2.472
4-7320	4-7500	.136	19.7	6.0	-.3	1.101	93.6	.237	1.316	341.1	489.5	1.005	1.628A	102.1	.780	-1.6	13.8	96.5	.123
4-7500	4-7725.1	.231	69.0	30.4	2.8	.657	75.1	.440	1.068	159.2	296.3	.598A	1.538	71.7	1.357	-2.4	-6.9	217.3	.448
4-7725.1	4-7840	.448	231.0	-6.3	-2.4	1.262	110.4	.374	.843	271.1	495.7	.528	1.158A	109.6	.914	4.7	18.6	15.2	.362
		11.54	8.90	3.90	2.64	6.06	5.00	15.45	1/1/2	41.3	27.6	13.7	.299	8.412	7.1	133.9	-2.4	97.2D	2.220
4-7330	4-7500	.129	18.9	6.1	-.2	1.104	92.5	.241	1.332	347.3	486.2	1.011	1.653A	102.8	.786	-1.7	13.5	100.7	.129
4-7500	4-7729.0	.221	67.6	32.0	3.2	.663	76.0	.423	1.077	159.1	302.5	.621A	1.533	73.8	1.360	-2.7	-8.7	219.7	.410
4-7729.0	4-7850	.410	236.9	-4.4	-1.5	1.251	108.8	.343	.825	271.7	500.1	.542	1.109A	106.7	.902	4.2	21.4	21.2	.316
		11.32	8.58	3.83	2.74	6.15	4.75	14.54	1/1/2	37.3	31.2	17.7	.357	6.516	15.6	136.7	-14.1	100.4D	1.988
4-7340	4-7500	.125	16.1	5.2	-.2	1.107	91.2	.246	1.346	354.1	483.4	1.016	1.677A	103.3	.791	-1.7	13.3	104.0	.134
4-7500	4-7732.7	.213	66.1	33.9	3.8	.668	76.7	.409	1.086	159.1	308.3	.641A	1.530	75.6	1.362	-3.2	-11.1	221.6	.379
4-7732.7	4-7860	.379	242.4	-2.2	-.7	1.243	107.4	.317	.812	272.3	504.9	.554	1.070A	103.8	.893	3.8	23.6	26.4	.275
		11.20	8.36	3.79	2.84	6.26	4.57	13.77	1/1/2	34.2	35.6	22.5	.420	5.128	24.4	139.1	-23.4	102.9D	1.732
4-7350	4-7500	.126	11.5	3.4	-.2	1.110	89.7	.251	1.357	1.7	121.4	1.017D	1.697A	103.8	.794	-1.8	13.2	106.4	.140
4-7500	4-7736.0	.208	64.5	36.3	4.5	.672	77.3	.398	1.092	159.1	313.7	.658A	1.526	77.3	1.363	-3.8	-14.5	223.0	.352
4-7736.0	4-7870	.352	247.4	.2	.0	1.236	106.2	.295	.802	272.9	510.3	.565	1.039A	101.1	.886	3.4	25.7	30.5	.237
		11.20	8.25	3.79	2.95	6.36	4.46	13.14	1/1/2	31.8	41.3	28.2	.485	4.098	32.2	141.0	-31.2	105.1D	1.501
4-7360	4-7500	.134	5.7	1.1	-.1	1.112	87.9	.257	1.363	10.1	120.4	1.013D	1.713A	104.3	.796	-1.8	13.3	107.9	.145
4-7500	4-7739.3	.207	62.5	39.8	5.5	.676	77.8	.388	1.098	159.1	319.0	.672A	1.524	78.9	1.365	-4.7	-19.5	224.1	.332
4-7739.3	4-7880	.332	252.4	2.6	.7	1.231	105.2	.278	.796	273.6	515.8	.575	1.017A	98.7	.882	3.0	27.0	33.4	.206
		11.35	8.29	3.87	3.06	6.47	4.42	12.66	1/1/2	30.4	48.2	35.5	.547	3.261	39.8	141.6	-38.5	107.3D	1.247
MARS ARRIVAL DATE = 2447510 (14 DEC 1988)																			
4-7300	4-7510	.152	14.6	9.0	.4	1.093	95.5	.226	1.274	329.7	502.9	.986	1.563A	99.4	.756	-2.2	8.0	82.3	.106
4-7510	4-7717.7	.249	72.0	28.0	2.1	.626	74.6	.487	1.037	162.4	281.8	.532A	1.541	66.6	1.348	-1.7	-4.0	213.4	.545
4-7717.7	4-7820	.545	219.4	-9.4	-4.3	1.297	114.3	.453	.909	270.5	487.3	.497	1.320A	116.4	.954	5.7	12.3	2.6	.474
		11.87	9.54	4.07	2.33	5.75	5.47	17.94	1/1/2	61.4	21.8	8.1	.202	14.106	42.6	132.4	41.8	87.5L	2.652
4-7310	4-7510	.142	17.5	8.7	.2	1.095	94.5	.227	1.289	335.2	498.8	.996	1.583A	100.2	.762	-2.0	9.9	88.7	.108
4-7510	4-7722.1	.234	70.4	29.0	2.3	.636	75.9	.462	1.051	162.2	288.7	.566A	1.536	69.2	1.352	-1.9	-4.8	216.7	.495
4-7722.1	4-7830	.495	226.2	-8.2	-3.4	1.279	112.3	.413	.875	271.1	490.7	.514	1.236A	113.2	.934	5.2	15.8	9.4	.419
		11.39	9.03	3.96	2.36	5.78	5.07	16.69	1/1/2	54.9	24.2	10.0	.245	11.509	20.6	133.7	19.5	92.3D	2.575
4-7320	4-7510	.133	18.6	8.7	.1	1.098	93.5	.229	1.304	341.1	495.2	1.005	1.603A	100.9	.768	-1.9	10.6	94.2	.111
4-7510	4-7726.3	.221	68.8	30.1	2.6	.644	76.9	.441	1.063	162.2	295.4	.595A	1.531	71.5	1.356	-2.1	-5.9	219.6	.451
4-7726.3	4-7840	.451	232.5	-6.5	-2.5	1.265	110.4	.377	.849	271.7	494.5	.529	1.169A	110.1	.916	4.8	18.9	16.0	.369
		11.03	8.61	3.86	2.42	5.83	4.76	15.60	1/1/2	49.4	26.9	12.9	.295	8.929	8.7	136.3	2.5	96.6D	2.343
4-7330	4-7510	.125	17.7	8.2	.1	1.100	92.3	.232	1.317	347.5	492.0	1.012	1.623A	101.5	.773	-1.9	11.0	98.8	.115
4-7510	4-7730.1	.211	67.1	31.5	3.0	.651	77.8	.423	1.073	162.2	301.7	.619A	1.527	73.6	1.358	-2.3	-7.4	221.9	.412
4-7730.1	4-7850	.412	238.4	-4.5	-1.6	1.254	108.8	.346	.830	272.3	498.9	.543	1.117A	107.1	.906	4.3	21.7	22.1	.322
		10.78	8.30	3.78	2.48	5.90	4.52	14.65	1/1/2	44.9	30.3	16.6	.353	6.915	11.7	139.1	-10.0	99.9D	2.090
4-7340	4-7510	.120	14.7	6.9	.1	1.103	91.0	.235	1.328	354.5	489.4	1.016	1.641A	102.1	.777	-1.9	11.2	102.3	.118
4-7510	4-7733.7	.203	65.4	33.0	3.4	.657	78.4	.409	1.082	162.2	307.5	.639A	1.524	75.4	1.360	-2.7	-9.3	223.7	.380
4-7733.7	4-7860	.380	243.8	-2.5	-.7	1.244	107.4	.319	.815	272.6	503.8	.556	1.075A	104.2	.896	3.8	24.0	27.4	.279
		10.63	8.08	3.74	2.55	5.97	4.34	13.85	1/1/2	41.4	34.7	21.1	.417	5.453	20.3	141.7	-19.4	102.4D	1.857
4-7350	4-7510	.121	9.8	4.7	.1	1.105	89.6	.239	1.336	2.2	127.6	1.017D	1.656A	102.5	.780	-1.9	11.4	105.0	.123
4-7510	4-7736.9	.198	63.7	34.8	3.9	.661	79.0	.398	1.088	162.3	312.7	.656A	1.521	77.0	1.362	-3.1	-11.6	225.0	.353
4-7736.9	4-7870	.353	248.6	.2	.0	1.237	106.2	.296	.805	273.4	509.3	.567	1.043A	101.5	.888	3.4	25.9	31.6	.241
		10.59	7.96	3.74	2.63	6.04	4.22	13.19	1/1/2	38.8	40.3	26.2	.484	4.407	27.3	144.0	-26.8	104.3D	1.647
4-7360	4-7510	.129	3.9	2.1	.0	1.106	87.9	.244	1.340	10.9	126.7	1.013D	1.667A	102.9	.781	-1.9	11.7	106.5	.127
4-7510	4-7739.7	.195	62.1	36.8	4.5	.665	79.4	.389	1.094	162.4	317.4	.669A	1.519	78.4	1.363	-3.6	-14.6	225.9	.331
4-7739.7	4-7880	.331	252.9	2.6	.7	1.232	105.2	.278	.797	273.6	515.4	.576	1.018A	98.8	.883	3.0	27.1	34.0	.207
		10.67	7.97	3.82	2.70	6.12	4.15	12.68	1/1/2	37.3	47.7	31.8	.547	3.647	33.6	145.6	-32.8	105.9D	1.449
4-7370	4-7510	.145	358.4	-.3	.0	1.106	85.9	.250	1.337	20.7	127.0	1.002D	1.672A	103.2	.780	-1.9	12.1	107.0	.131
4-7510	4-7742.1	.194	60.6	39.2	5.1	.668	79.7	.382	1.098	162.4	321.3	.679A	1.516	79.6	1.364	-4.2	-16.2	226.3	.316
4-7742.1	4-7890	.316	256.8	4.9	1.3	1.228	104.5	.264	.791	274.2	522.1	.582	1.000A	96.2	.878	2.7	27.5	33.9	.179
		10.91	8.12	4.00	2.79	6.20	4.13	12.30	1/1/2	36.6	57.4	37.7	.601	3.092	38.8	146.4	-38.0	107.2D	1.257
4-7380	4-7510	.172	354.4	-2.1	.0	1.104	83.6	.259	1.326	31.8	128.5	.983D	1.670A	103.6	.776	-1.9	12.8	106.3	.137
4-7510	4-7743.9	.195	59.2	41.3	5.8	.669	80.0	.378	1.101	162.6	324.2	.685A	1.516	80.4	1.365	-4.8	-21.6	226.6	.308
4-7743.9	4-7900	.308	259.5	7.0	1.8	1.225	104.0	.256	.788	274.3	529.4	.586	.989A	93.6	.875	2.4	26.8	30.5	.159
		11.35	8.45	4.51	2.90	6.31	4.14	12.05	1/1/2	37.4	70.4	43.1	.635	2.722	42.9	146.8	-41.9	108.1D	1.094
4-7390	4-7510	.209	352.2	-3.1	.0	1.101	81.0	.272	1.306	44.3	131.5	.951D	1.662A	104.0	.769	-1.8	13.7	104.3	.144
4-7510	4-7743.0	.194	59.9	40.3	5.5	.668	79.9	.380	1.100	162.5	322.8	.682A	1.517	80.0	1.364	-4.5	-19.8	226.5	.312
4-7743.0	4-7910	.312	258.9	8.6	2.2	1.222	104.2	.257	.783	272.7	539.4	.592	.984A	90.2	.870	2.4	23.4	19.8	.152
		12.00	8.95	4.82	3.05	6.45	4.13	11.98	1/1/2	39.2	90.6	42.7	.620	2.745	42.7	147.8	-42.1	106.2D	1.081
MARS ARRIVAL DATE = 2447520 (24 DEC 1988)																			
4-7290	4-7520	.165	16.5	-3.8	-1.5	1.089	96.4	.224	1.256	323.9	512.3	.974	1.538A	97.4	.741	-.3	19.9	69.2	.094
4-7520	4-7714.0	.260	73.2	27.1	1.8	.599	75.3	.519	1.014	165.4	273.4	.488A	1.540	63.3	1.341	-1.5	-2.9	211.8	.607
4-7714.0	4-7810	.607	213.7	-10.6	-5.4	1.323	116.6	.503	.968	270.5	483.3	.481	1.455A	120.2	.985	6.3	9.0	355.9	.543
		12.11	9.96	4.23	2.15	5.58	5.74	19.60	2/1/2	77.4	19.5	7.9	.163	14.467	76.4	148.4	74.7	83.5L	2.196
4-7310	4-7520	.142	14.8	16.1	1.2	1.093	94.5	.223	1.263	335.0	504.1	.996	1.570A	99.1	.752	-3.0	1.9	85.4	.103
4-7520	4-7723.1	.225	69.6	28.8	2.2	.624	77.9	.463	1.046	165.2	287.9	.562A	1.531	68.9	1.351	-1.7	-4.2	216.8	.499
4-7723.1	4-7830	.499	227.5	-8.4	-3.5	1.263	112.4	.417	.882	271.7	489.6	.515	1.250A	113.6	.939	5.4	16.2	9.9	.427
		11.11	8.82	3.95	2.29	5.71	4.87	16.87	1/1/2	64.9	23.6	9.6	.241	11.917	26.8	136.2	25.9	91.4D	2.632
4-7320	4-7520	.131	17.1	13.0	.6	1.095	93.4	.224	1.296	341.0	500.6	1.005	1.586A	99.8	.757	-2.4	6.0	91.1	.102
4-7520	4-7727.3	.213	67.5	29.7	2.5	.633	79.0	.441	1.059	165.3	294.7	.592A	1.527	71.3	1.354	-1.8	-5.1	221.6	.454
4-7727.3	4-7840	.454	235.8	-6.7	-2.6	1.268	110.5	.380	.855	272.3	493.5	.530	1.180A	110.5	.922	4.9	19.3	16.6	.375
		10.68	8.40	3.84	2.27	5.70	4.56	15.74	1/1/2	58.4	26.3	12.3	.292	9.366	9.5	138.5	7.4	96.0D	2.440
4-7330	4-7520	.122	16.4	11.3	.4	1.098	92.3	.226	1.307	347.6	497.5	1.012	1.602A	100.4	.761	-2.2	7.7	96.0	.104
4-7520	4-7731.1	.203	65.5	30.8	2.8	.640	79.8	.423	1.070	165.4	301.1	.617A	1.523	73.4	1.357	-2.0	-6.3	223.9	.414
4-7731.1	4-7850	.414	239.7	-4.6	-1.6	1.256	108.9	.348	.834	272.6	497.8	.544	1.125A	107.5	.909	4.3	22.0	22.9	.328
		10.39	8.09	3.76	2.30	5.72	4.33	14.76	1/1/2	53.4	29.6	15.8	.350	7.264	8.1	141.2	-6.0	99.5D	2.193

STOPOVER TIME = 0 DAYS — 1988 INBOUND SWINGBY — MISSION DURATION = 920 DAYS
MARS ARRIVAL DATE = 2447520
24 DEC 1988

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7340	4-7520	.117	13.4	9.3	.3	1.100	91.0	.228	1.316	354.7	495.1	1.016	1.616A	100.9	.765	-2.1	8.6	99.9	.106
4-7520	4-7734.6	.196	63.5	32.0	3.1	.646	80.4	.409	1.079	165.6	306.9	.638A	1.520	75.3	1.359	-2.2	-7.7	225.6	.381
4-7734.6	4-7860	.381	245.0	-2.3	-.7	1.246	107.4	.320	.819	273.4	502.6	.557	1.081A	104.6	.899	3.8	24.3	28.4	.284
		10.21	7.87	3.71	2.34	5.76	4.16	13.93	1/1/2	49.4	33.6	20.1	.415	5.733	16.5	143.9	-15.7	102.0D	1.963
4-7350	4-7520	.118	8.3	6.6	.3	1.101	89.5	.251	1.322	2.6	133.5	1.017D	1.628A	101.3	.767	-2.0	9.3	102.7	.109
4-7520	4-7737.8	.191	61.7	33.3	3.4	.651	81.0	.398	1.086	165.8	312.1	.654A	1.518	76.9	1.361	-2.5	-9.5	226.6	.353
4-7737.8	4-7870	.353	249.8	.2	.0	1.239	106.2	.297	.807	273.8	508.3	.568	1.047A	101.8	.890	3.4	26.0	32.7	.244
		10.14	7.75	3.71	2.39	5.81	4.04	13.25	1/1/2	46.5	39.3	24.8	.483	4.654	23.5	146.4	-22.9	103.9D	1.763
4-7360	4-7520	.125	2.4	3.5	.3	1.102	87.8	.235	1.324	11.3	132.7	1.013D	1.635A	101.6	.768	-2.0	9.9	104.4	.112
4-7520	4-7740.4	.187	60.1	34.7	3.6	.655	81.3	.389	1.092	165.9	316.6	.667A	1.517	76.2	1.362	-2.8	-11.5	227.5	.331
4-7740.4	4-7860	.331	253.9	2.6	.7	1.233	105.2	.278	.799	274.2	514.6	.577	1.020A	99.0	.884	3.0	27.2	35.1	.209
		10.20	7.75	3.78	2.44	5.86	3.97	12.71	1/1/2	44.8	46.7	29.8	.548	3.894	29.0	148.3	-28.6	105.2D	1.585
4-7370	4-7520	.142	357.1	.7	.2	1.102	85.9	.241	1.320	21.2	133.0	1.002D	1.638A	101.9	.766	-1.9	10.7	104.8	.116
4-7520	4-7742.5	.185	58.8	36.1	4.2	.657	81.7	.383	1.095	166.1	320.0	.676A	1.515	79.2	1.363	-3.2	-13.6	227.9	.316
4-7742.5	4-7890	.318	257.1	5.0	1.3	1.228	104.5	.264	.792	274.4	521.6	.583	1.001A	96.5	.879	2.7	27.6	34.6	.180
		10.39	7.88	3.95	2.51	5.92	3.93	12.31	1/1/2	44.3	56.8	34.4	.602	3.381	33.3	149.8	-32.9	106.1D	1.434
4-7380	4-7520	.168	353.3	-1.3	.2	1.100	83.7	.249	1.309	32.4	134.6	.983D	1.635A	102.1	.762	-1.9	11.6	103.9	.121
4-7520	4-7743.7	.185	58.0	37.0	4.5	.658	81.6	.380	1.098	166.2	322.0	.680A	1.515	79.8	1.364	-3.4	-15.0	228.1	.308
4-7743.7	4-7900	.308	259.2	7.0	1.8	1.225	104.1	.256	.787	274.1	529.6	.586	.989A	93.5	.875	2.4	26.7	30.0	.159
		10.76	8.17	4.26	2.59	6.00	3.91	12.05	1/1/2	45.1	70.8	37.9	.634	3.078	36.2	150.9	-35.9	106.2D	1.317
4-7390	4-7520	.203	351.5	-2.4	.2	1.096	81.1	.262	1.289	44.8	137.5	.951D	1.627A	102.4	.754	-1.8	12.7	101.8	.127
4-7520	4-7743.3	.185	58.3	36.6	4.3	.658	81.7	.381	1.097	166.1	321.2	.679A	1.515	79.6	1.363	-3.3	-14.4	228.0	.311
4-7743.3	4-7910	.311	259.2	8.6	2.2	1.222	104.2	.256	.783	272.8	539.2	.582	.984A	90.3	.870	2.4	25.5	20.2	.152
		11.37	8.66	4.74	2.71	6.12	3.92	11.97	1/1/2	47.0	90.2	38.5	.622	3.031	37.3	151.5	-37.1	104.9D	1.263
MARS ARRIVAL DATE = 2447530 (3 JAN 1989)																			
4-7290	4-7530	.167	17.4	-4.2	-1.6	1.089	96.5	.224	1.254	323.2	517.0	.973	1.536A	96.3	.732	-.2	20.2	64.4	.092
4-7530	4-7715.0	.254	72.3	27.0	1.8	.585	77.7	.522	1.009	168.2	272.3	.483A	1.536	63.0	1.339	-1.3	-2.5	213.8	.614
4-7715.0	4-7810	.614	215.0	-11.0	-5.6	1.328	116.8	.509	.981	271.1	482.3	.481	1.480A	120.6	.992	6.6	9.5	356.2	.555
		11.93	9.82	4.25	2.11	5.54	5.57	19.84	2/1/2	87.1	19.2	8.5	.160	13.477	82.4	165.6	79.8	83.4L	1.992
4-7300	4-7530	.181	31.5	-24.3	-5.4	1.090	95.5	.222	1.267	328.7	512.9	.985	1.548A	97.2	.737	3.8	49.5	67.4	.102
4-7530	4-7719.6	.235	70.1	27.7	2.0	.600	79.1	.491	1.027	168.2	279.9	.523A	1.531	66.0	1.345	-1.4	-3.0	217.5	.556
4-7719.6	4-7820	.556	222.0	-10.0	-4.7	1.305	114.5	.463	.928	271.7	485.3	.499	1.357A	117.5	.966	6.1	13.1	3.4	.491
		11.79	9.52	4.42	2.27	5.69	5.10	18.35	2/1/2	80.6	21.1	8.4	.195	13.707	57.4	139.7	56.6	85.6L	2.475
4-7310	4-7530	.156	6.4	35.3	4.1	1.092	94.5	.221	1.279	334.6	509.1	.996	1.562A	98.0	.742	-5.9	-15.6	82.3	.119
4-7530	4-7724.0	.219	67.7	28.4	2.2	.612	80.3	.464	1.043	168.4	287.1	.559A	1.528	68.7	1.350	-1.4	-3.6	220.7	.503
4-7724.0	4-7830	.503	228.8	-8.6	-3.6	1.286	112.5	.420	.869	272.2	488.7	.515	1.263A	114.0	.944	5.6	16.5	10.4	.434
		11.43	8.87	4.14	2.56	5.98	4.73	17.03	1/1/2	76.7	23.2	9.5	.237	12.108	32.8	138.6	32.1	90.6D	2.637
4-7320	4-7530	.132	14.6	19.9	1.5	1.094	93.5	.221	1.290	340.7	505.7	1.005	1.575A	98.7	.747	-3.3	-1.1	87.6	.099
4-7530	4-7728.2	.207	65.2	29.1	2.4	.622	81.3	.442	1.057	168.7	294.1	.590A	1.524	71.1	1.353	-1.5	-4.3	223.4	.457
4-7728.2	4-7840	.457	235.1	-6.9	-2.6	1.271	110.6	.383	.860	272.8	492.5	.531	1.190A	110.9	.926	5.0	19.6	17.2	.381
		10.51	8.29	3.85	2.23	5.65	4.44	15.87	1/1/2	68.3	25.8	11.9	.288	9.686	13.5	140.4	12.3	95.4D	2.503
4-7330	4-7530	.121	14.9	15.6	.9	1.096	92.3	.222	1.300	347.4	502.8	1.012	1.588A	99.3	.751	-2.7	3.2	92.6	.097
4-7530	4-7732.0	.198	62.8	29.9	2.6	.630	82.1	.424	1.069	168.9	300.6	.616A	1.522	73.3	1.357	-1.7	-5.3	225.6	.416
4-7732.0	4-7850	.416	240.9	-4.7	-1.7	1.258	108.9	.350	.838	273.3	496.9	.545	1.132A	107.8	.912	4.4	22.2	23.6	.333
		10.16	7.97	3.75	2.19	5.62	4.22	14.86	1/1/2	62.5	28.9	15.2	.347	7.543	5.4	143.1	-2.0	99.1D	2.270
4-7340	4-7530	.116	12.1	12.4	.7	1.097	91.0	.223	1.308	354.6	500.5	1.016	1.600A	99.7	.754	-2.4	5.3	96.8	.098
4-7530	4-7735.5	.191	60.6	30.8	2.8	.637	82.7	.410	1.078	169.2	306.5	.637A	1.519	75.2	1.359	-1.9	-8.4	227.2	.382
4-7735.5	4-7860	.382	246.2	-2.3	-.8	1.248	107.4	.321	.822	273.8	501.8	.558	1.086A	104.9	.901	3.9	24.5	29.2	.288
		9.95	7.75	3.69	2.20	5.62	4.06	14.00	1/1/2	58.1	33.0	19.3	.412	5.958	13.0	145.8	-12.1	101.6D	2.045
4-7350	4-7530	.115	7.2	9.0	.6	1.099	89.5	.226	1.313	2.6	138.9	1.017D	1.609A	100.1	.756	-2.2	6.7	99.8	.099
4-7530	4-7738.6	.186	58.7	31.7	3.1	.642	83.2	.398	1.085	169.5	311.8	.653A	1.518	76.8	1.361	-2.1	-7.7	228.3	.353
4-7738.6	4-7870	.353	250.9	.2	.0	1.240	106.2	.297	.810	274.3	507.5	.569	1.050A	102.1	.892	3.4	26.2	33.6	.247
		9.86	7.64	3.69	2.22	5.65	3.95	13.30	1/1/2	54.9	38.4	23.8	.481	4.845	19.9	148.3	-19.5	103.7D	1.851
4-7360	4-7530	.123	1.3	5.4	.5	1.099	87.9	.229	1.313	11.5	138.3	1.013D	1.614A	100.4	.756	-2.1	7.9	101.5	.101
4-7530	4-7741.2	.183	57.0	32.7	3.4	.645	83.6	.390	1.091	169.7	316.2	.666A	1.516	78.1	1.362	-2.3	-9.2	229.0	.331
4-7741.2	4-7860	.331	254.9	2.7	.7	1.234	105.2	.278	.800	274.6	513.6	.576	1.023A	99.3	.888	3.0	27.4	36.2	.211
		9.89	7.63	3.76	2.26	5.68	3.87	12.74	1/1/2	53.0	45.7	28.4	.548	4.077	25.2	150.5	-24.9	104.9D	1.687
4-7370	4-7530	.139	356.1	2.1	.4	1.099	86.0	.234	1.309	21.4	136.7	1.002D	1.616A	100.6	.754	-2.0	9.0	102.0	.104
4-7530	4-7743.2	.181	55.7	33.5	3.6	.648	83.8	.384	1.095	169.9	319.5	.674A	1.516	79.1	1.363	-2.5	-10.6	229.3	.315
4-7743.2	4-7890	.315	258.0	5.0	1.3	1.229	104.4	.264	.793	274.8	520.9	.584	1.003A	96.6	.880	2.6	27.8	35.8	.181
		10.06	7.75	3.92	2.30	5.72	3.85	12.32	1/1/2	52.5	55.7	32.6	.605	3.564	29.2	152.2	-29.0	105.7D	1.550
4-7380	4-7530	.164	352.7	-.2	.4	1.097	83.8	.242	1.298	32.5	140.2	.983D	1.612A	100.8	.750	-1.9	10.3	101.0	.108
4-7530	4-7744.3	.180	55.0	34.1	3.8	.649	84.0	.381	1.097	170.0	321.4	.679A	1.515	79.6	1.363	-2.6	-11.6	229.4	.307
4-7744.3	4-7900	.307	260.0	7.1	1.8	1.225	104.0	.255	.788	274.5	529.0	.587	.990A	93.7	.875	2.4	26.9	31.3	.159
		10.40	8.03	4.21	2.37	5.79	3.81	12.05	1/1/2	53.2	69.7	35.7	.636	3.262	32.0	153.3	-31.9	105.7D	1.443
4-7390	4-7530	.199	351.1	-1.5	.4	1.093	81.3	.255	1.279	44.8	142.9	.953D	1.605A	100.9	.742	-1.9	11.7	98.8	.114
4-7530	4-7744.0	.181	55.2	33.9	3.7	.649	83.9	.382	1.097	170.0	321.0	.678A	1.515	79.5	1.363	-2.6	-11.3	229.4	.309
4-7744.0	4-7910	.309	260.2	8.7	2.3	1.222	104.1	.255	.784	273.3	538.4	.584	.984A	90.5	.871	2.4	24.0	21.9	.151
		10.96	8.49	4.67	2.47	5.89	3.82	11.96	1/1/2	55.3	88.5	36.8	.630	3.183	33.6	154.0	-33.6	104.6D	1.379
4-7400	4-7530	.242	351.1	-2.0	.4	1.087	78.5	.275	1.251	58.2	146.7	.907D	1.595A	101.1	.731	-1.8	13.4	95.4	.125
4-7530	4-7741.3	.183	56.9	32.7	3.4	.645	83.6	.389	1.091	169.8	316.4	.666A	1.516	78.2	1.362	-2.3	-9.3	229.0	.330
4-7741.3	4-7920	.330	257.5	9.7	2.7	1.220	105.1	.270	.780	270.3	549.9	.560	.990	86.4	.866	2.6	18.4	9.4	.169
		11.86	9.22	5.35	2.64	6.06	3.87	12.17	1/1/2	58.4	111.4	34.1	.552	3.413	34.2	153.4	-34.2	101.4D	1.332
MARS ARRIVAL DATE = 2447540 (13 JAN 1989)																			
4-7290	4-7540	.170	18.1	-4.2	-1.7	1.089	96.7	.226	1.254	322.3	521.5	.971	1.537A	95.2	.724	-.2	19.9	60.3	.092
4-7540	4-7715.8	.250	70.4	26.8	1.8	.572	80.6	.525	1.006	171.3	271.4	.478A	1.534	62.6	1.337	-1.1	-2.2	215.7	.620
4-7715.8	4-7810	.620	216.1	-11.3	-5.9	1.333	116.9	.515	.994	271.6	481.5	.482	1.505A	121.0	.999	6.8	9.9	356.5	.562
		11.86	9.75	4.28	2.11	5.54	5.47	20.07	2/1/2	96.3	19.0	9.2	.156	12.503	87.0	191.9	82.6	83.3L	1.799
4-7300	4-7540	.185	26.5	-13.7	-3.4	1.090	95.7	.223	1.265	328.0	517.5	.984	1.547A	96.1	.729	1.8	35.1	65.6	.090
4-7540	4-7720.8	.231	67.7	27.3	1.9	.588	81.9	.493	1.025	171.5	279.1	.520A	1.530	65.7	1.344	-1.2	-2.6	219.2	.560
4-7720.8	4-7820	.560	223.2	-10.3	-4.8	1.309	114.8	.467	.937	272.2	484.4	.499	1.375A	117.6	.971	6.3	13.3	3.7	.499
		11.32	9.24	4.22	2.08	5.51	5.01	18.54	2/1/2	88.8	20.8	8.7	.191	13.149	83.3	143.7	82.4	85.3L	2.326
4-7320	4-7540	.142	9.2	32.8	3.3	1.093	93.5	.220	1.267	340.3	510.5	1.004	1.569A	97.6	.738	-5.0	-12.7	84.3	.108
4-7540	4-7729.0	.205	62.0	26.3	2.3	.612	83.9	.443	1.057	172.2	293.7	.588A	1.525	71.0	1.353	-1.3	-3.6	224.9	.459
4-7729.0	4-7840	.459	236.1	-7.0	-2.7	1.273	110.6	.386	.865	273.5	491.7	.531	1.199A	111.2	.930	5.1	19.9	17.7	.387
		10.71	8.35	3.96	2.36	5.78	4.39	15.98	1/1/2	78.4	25.3	11.6	.285	9.863	17.7	142.2	16.8	94.9D	2.526
4-7330	4-7540	.123	12.6	22.0	1.7	1.095	92.3	.219	1.296	347.0	507.7	1.011	1.580A	98.2	.741	-3.4	-2.9	89.0	.095
4-7540	4-7732.6	.197	59.3	28.8	2.4	.621	84.7	.425	1.069	172.7	300.3	.615A	1.523	73.2	1.357	-1.4	-4.4	227.0	.418
4-7732.6	4-7850	.418	241.9	-4.6	-1.7	1.260	108.9	.352	.842	273.8	496.0	.546	1.138A	108.1	.915	4.4	22.5	24.2	.337
		10.12	7.96	3.77	2.16	5.58	4.19	14.95	1/1/2	71.9	28.4	14.9	.344	7.731	5.0	144.6	1.7	98.9D	2.317
4-7340	4-7540	.116	10.8	18.7	1.2	1.096	91.0	.220	1.302	354.4	505.6	1.016	1.569A	98.6	.744	-2.8	1.2	95.2	.092
4-7540	4-7736.3	.191	56.9	29.3	2.6	.628	83.3	.411	1.079	173.1	306.3	.636A	1.522	75.1	1.359	-1.5	-5.3	228.6	.363
4-7736.3	4-7860	.363	247.2	-2.4	-.8	1.250	107.5	.323	.825	274.2	501.0	.559	1.091A	105.2	.904	3.9	24.6	29.9	.291
		9.86	7.74	3.69	2.12	5.54	4.05	14.07	1/1/2	67.1	32.4	18.6	.410	6.117	9.6	147.3	-8.8	101.6D	2.100
4-7350	4-7540	.114	6.1	12.1	.9	1.097	89.6	.222	1.306	2.4	144.1	1.017D	1.596A	99.0	.746	-2.5	3.7	96.3	.092
4-7540	4-7739.5	.186	54.6	29.9	2.8	.633	83.7	.399	1.087	173.5	311.6	.653A	1.521	76.7	1.361	-1.7	-6.3	229.6	.354
4-7739.5	4-7870	.354	251.9	.2	.0	1.241	106.2	.298	.812	274.7	506.7	.570	1.054A	102.3	.894	3.4	26.3	34.5	.250
		9.75	7.63	3.68	2.12	5.54	3.94	13.35	1/1/2	63.7	37.6	23.2	.480	4.982	18.6	149.9	-16.3	103.6D	1.913

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2447540
13 JAN 1989

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7360	4-7540	.121	.5	7.7	.8	1.097	87.9	.225	1.307	11.4	143.5	1.013D	1.600A	99.3	.746	-2.3	5.5	98.1	.093
4-7540	4-7741.9	.183	53.1	30.5	3.0	.637	86.0	.391	1.093	173.8	316.1	.665A	1.520	78.0	1.362	-1.8	-7.4	230.2	.331
4-7741.9	4-7880	.331	255.8	2.7	.8	1.234	105.1	.278	.802	275.0	513.0	.579	1.025A	99.5	.887	2.9	27.5	37.2	.213
		9.75	7.62	3.74	2.13	5.56	3.88	12.77	1/1/2	61.6	44.8	27.5	.549	4.203	21.8	152.1	-21.7	104.9D	1.757
4-7370	4-7540	.137	355.5	3.9	.7	1.097	86.1	.230	1.302	21.3	143.8	1.003D	1.601A	99.5	.744	-2.1	7.2	98.6	.095
4-7540	4-7743.9	.181	51.9	31.0	3.2	.640	86.3	.385	1.097	174.0	319.4	.674A	1.519	79.0	1.363	-2.0	-8.4	230.4	.315
4-7743.9	4-7890	.315	258.9	5.1	1.3	1.229	104.4	.264	.795	275.1	520.2	.585	1.004A	96.8	.861	2.6	27.9	37.0	.182
		9.90	7.74	3.90	2.17	5.59	3.84	12.34	1/1/2	61.0	54.6	31.5	.607	3.686	25.7	153.9	-25.6	105.6D	1.629
4-7380	4-7540	.161	352.3	1.1	.6	1.095	84.0	.238	1.291	32.3	145.3	.984D	1.598A	99.6	.740	-2.0	8.8	97.7	.099
4-7540	4-7745.0	.181	51.1	31.4	3.3	.641	86.4	.382	1.099	174.2	321.4	.679A	1.519	79.6	1.364	-2.1	-9.1	230.4	.306
4-7745.0	4-7900	.306	260.9	7.1	1.8	1.226	103.9	.255	.789	274.8	528.3	.588	.990A	93.9	.876	2.4	27.2	32.7	.160
		10.22	8.00	4.18	2.22	5.64	3.82	12.06	1/1/2	61.7	68.4	34.4	.642	3.381	28.5	155.2	-28.5	105.7D	1.529
4-7390	4-7540	.195	350.9	-.4	.6	1.092	81.5	.250	1.273	44.4	147.8	.955D	1.592A	99.6	.732	-1.9	10.7	95.4	.104
4-7540	4-7744.9	.181	51.2	31.3	3.3	.641	86.4	.383	1.099	174.2	321.1	.678A	1.519	79.5	1.364	-2.1	-9.0	230.4	.307
4-7744.9	4-7910	.307	261.3	6.8	2.3	1.223	104.0	.253	.785	273.8	537.6	.586	.984A	90.8	.872	2.3	24.4	23.7	.150
		10.75	8.44	4.62	2.31	5.73	3.82	11.95	1/1/2	63.8	86.9	35.5	.638	3.281	30.4	155.8	-30.4	104.7D	1.456
4-7400	4-7540	.237	351.2	-1.0	.6	1.086	78.8	.269	1.247	57.5	151.3	.911D	1.583A	99.6	.721	-1.8	12.6	92.1	.113
4-7540	4-7742.7	.183	52.6	30.7	3.1	.638	86.1	.389	1.094	173.9	317.3	.669A	1.520	78.4	1.363	-1.9	-7.7	230.3	.325
4-7742.7	4-7920	.325	259.2	9.8	2.7	1.221	104.8	.266	.781	271.1	548.6	.574	.989	86.9	.867	2.5	19.2	11.6	.165
		11.58	9.12	5.25	2.46	5.88	3.86	12.12	1/1/2	66.9	109.1	33.7	.570	3.450	31.7	155.3	-31.7	101.9D	1.397

MARS ARRIVAL DATE = 2447550 (23 JAN 1989)

4-7290	4-7550	.173	18.9	-3.8	-1.7	1.089	96.9	.228	1.255	321.3	525.7	.968	1.541A	94.1	.716	-.1	19.5	56.9	.094
4-7550	4-7716.6	.249	67.7	26.4	1.8	.561	83.9	.528	1.005	174.5	270.7	.474A	1.535	62.3	1.337	-1.0	-1.8	217.3	.626
4-7716.6	4-7810	.626	217.2	-11.7	-6.1	1.337	117.0	.521	1.006	272.1	480.7	.482	1.530A	121.4	1.005	7.1	10.3	356.8	.571
		11.92	9.78	4.33	2.14	5.56	5.45	20.28	2/1/2	104.7	18.8	9.9	.153	11.619	90.3	211.7	-86.9	83.2L	1.629
4-7300	4-7550	.164	25.6	-9.9	-2.8	1.090	95.8	.224	1.266	327.1	521.8	.982	1.549A	95.1	.721	1.0	30.0	62.4	.089
4-7550	4-7721.2	.232	64.6	26.7	1.9	.578	85.1	.496	1.025	174.9	278.6	.517A	1.533	65.5	1.344	-1.0	-2.2	220.7	.565
4-7721.2	4-7820	.565	224.2	-10.7	-5.0	1.313	114.7	.471	.946	272.6	483.7	.500	1.392A	118.0	.976	6.5	13.9	4.0	.506
		11.30	9.23	4.21	2.07	5.49	5.02	18.71	2/1/2	97.6	20.6	9.2	.188	12.492	67.8	147.7	66.8	85.0L	2.165
4-7310	4-7550	.203	42.8	-35.0	-8.0	1.091	94.8	.221	1.276	333.1	518.2	.994	1.558A	95.9	.726	6.3	64.2	60.2	.118
4-7550	4-7725.6	.216	61.3	27.0	2.0	.593	86.1	.468	1.043	175.5	286.2	.555A	1.531	68.3	1.349	-1.0	-2.5	223.7	.510
4-7725.6	4-7830	.510	230.9	-9.1	-3.9	1.292	112.6	.427	.902	273.2	487.0	.516	1.288A	114.7	.952	5.8	17.2	11.2	.447
		11.98	9.43	4.74	2.55	5.96	4.69	17.31	2/1/2	90.5	22.5	9.7	.231	11.835	43.1	142.7	42.5	89.4L	2.503
4-7330	4-7550	.131	8.9	31.8	3.0	1.094	92.4	.218	1.293	346.5	512.4	1.011	1.576A	97.1	.733	-4.6	-11.4	85.6	.100
4-7550	4-7733.5	.200	55.2	27.4	2.3	.614	87.6	.427	1.072	176.7	300.2	.614A	1.529	73.1	1.357	-1.2	-3.6	226.2	.419
4-7733.5	4-7850	.419	242.9	-4.9	-1.7	1.262	109.0	.354	.845	274.2	495.3	.546	1.145A	108.4	.918	4.5	22.7	24.7	.341
		10.35	8.11	3.84	2.24	5.66	4.27	15.03	1/1/2	81.1	27.9	14.7	.342	7.808	6.7	145.9	5.2	98.7D	2.326
4-7340	4-7550	.118	9.0	22.4	1.8	1.095	91.1	.218	1.299	353.9	510.3	1.016	1.583A	97.6	.735	-3.3	-3.8	89.5	.091
4-7550	4-7737.0	.195	52.7	27.6	2.5	.621	88.1	.412	1.082	177.3	306.4	.636A	1.528	75.1	1.360	-1.2	-4.3	229.6	.384
4-7737.0	4-7860	.384	248.1	-2.4	-.8	1.251	107.5	.324	.827	274.6	500.3	.559	1.095A	105.4	.906	3.9	24.8	30.5	.295
		9.96	7.85	3.71	2.10	5.53	4.14	14.13	1/1/2	76.2	31.8	18.6	.408	6.196	6.7	148.5	-5.7	101.6D	2.122
4-7350	4-7550	.115	5.1	16.0	1.3	1.096	89.6	.220	1.303	2.0	148.9	1.017D	1.589A	98.0	.737	-2.8	.2	92.6	.089
4-7550	4-7740.0	.191	50.6	27.9	2.6	.627	88.5	.401	1.090	177.8	311.7	.653A	1.528	76.7	1.362	-1.3	-5.0	230.5	.354
4-7740.0	4-7870	.354	252.7	.2	.1	1.242	106.2	.299	.814	275.0	506.0	.570	1.057A	102.5	.898	3.4	26.5	35.2	.252
		9.80	7.74	3.69	2.06	5.49	4.05	13.39	1/1/2	72.6	37.0	22.8	.479	5.056	13.5	151.1	-13.5	103.6D	1.944
4-7360	4-7550	.120	359.9	10.5	1.1	1.096	88.0	.222	1.303	11.0	148.3	1.013D	1.592A	98.2	.737	-2.5	2.9	94.5	.088
4-7550	4-7742.5	.188	48.9	28.2	2.8	.631	88.8	.393	1.097	178.2	316.2	.666A	1.528	78.0	1.364	-1.5	-5.9	231.0	.331
4-7742.5	4-7880	.331	256.7	2.7	.8	1.235	105.1	.279	.803	275.3	512.3	.580	1.027A	99.7	.888	2.9	27.6	38.1	.215
		9.79	7.73	3.74	2.06	5.48	3.99	12.80	1/1/2	70.4	44.0	27.1	.549	4.274	18.7	153.3	-18.7	105.0D	1.797
4-7370	4-7550	.135	355.2	6.0	.9	1.096	86.2	.227	1.298	20.8	148.6	1.003D	1.593A	98.3	.735	-2.3	5.2	95.0	.089
4-7550	4-7744.5	.187	47.7	28.4	2.9	.634	89.0	.387	1.101	178.5	319.6	.675A	1.527	79.0	1.364	-1.5	-6.6	231.1	.314
4-7744.5	4-7890	.314	259.7	5.1	1.4	1.230	104.3	.263	.796	275.4	519.5	.586	1.006A	97.0	.882	2.6	28.0	38.1	.184
		9.92	7.84	3.88	2.08	5.50	3.96	12.36	1/1/2	69.7	53.7	30.9	.608	3.756	22.6	155.1	-22.6	105.8D	1.677
4-7380	4-7550	.159	352.2	2.7	.8	1.094	84.1	.235	1.288	31.7	150.0	.985D	1.590A	98.4	.731	-2.1	7.4	94.1	.092
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7900	.305	261.7	7.2	1.8	1.226	103.9	.254	.790	275.2	527.6	.590	.991A	94.2	.877	2.3	27.4	34.0	.160
		10.21	8.09	4.15	2.12	5.55	3.94	12.06	1/1/2	70.4	67.2	33.7	.646	3.448	25.4	156.5	-25.4	105.9D	1.581
4-7390	4-7550	.191	351.0	.8	.8	1.091	81.8	.247	1.271	43.7	152.3	.957D	1.585A	98.4	.723	-1.9	9.6	92.0	.098
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7910	.305	262.3	6.8	2.3	1.223	103.9	.252	.786	274.2	536.8	.588	.984A	91.1	.873	2.3	24.8	25.3	.149
		10.71	8.51	4.57	2.20	5.62	3.94	11.94	1/1/2	72.3	85.4	34.9	.646	3.335	27.5	157.1	-27.5	105.0D	1.508
4-7400	4-7550	.232	351.5	-.0	.7	1.086	79.1	.265	1.246	56.4	155.4	.916D	1.577A	98.3	.713	-1.8	11.8	88.9	.106
4-7550	4-7743.7	.187	48.2	28.3	2.8	.633	89.0	.389	1.099	178.4	318.3	.671A	1.528	78.7	1.364	-1.5	-6.3	231.1	.321
4-7743.7	4-7920	.321	260.6	9.9	2.7	1.221	104.6	.263	.782	271.7	547.5	.577	.988	87.3	.868	2.4	19.8	13.6	.161
		11.48	9.14	5.17	2.34	5.76	3.97	12.07	1/1/2	75.2	107.2	33.5	.585	3.468	29.3	156.8	-29.2	102.4D	1.443

MARS ARRIVAL DATE = 2447560 (2 FEB 1989)

4-7290	4-7560	.177	19.7	-3.3	-1.8	1.089	97.2	.232	1.257	320.2	529.7	.966	1.547A	93.1	.710	-.1	19.2	54.6	.097
4-7560	4-7717.4	.253	64.3	25.8	1.8	.552	87.7	.532	1.006	177.9	270.3	.471A	1.541	62.1	1.337	-.8	-1.5	216.7	.632
4-7717.4	4-7810	.632	216.3	-12.1	-6.4	1.342	117.2	.526	1.018	272.6	479.9	.483	1.554A	121.7	1.011	7.4	10.7	357.0	.579
		12.13	9.94	4.36	2.19	5.62	5.55	20.49	2/1/2	112.1	18.7	10.6	.151	10.834	92.4	186.1	-85.5	83.2L	1.481
4-7300	4-7560	.165	25.6	-7.6	-2.6	1.090	96.1	.226	1.267	326.1	526.0	.980	1.554A	94.0	.714	.6	27.2	59.7	.090
4-7560	4-7721.9	.237	60.8	25.9	1.9	.571	88.7	.499	1.028	178.7	278.4	.515A	1.540	65.3	1.344	-.8	-1.8	222.0	.569
4-7721.9	4-7820	.569	225.2	-11.0	-5.2	1.316	114.9	.476	.954	273.1	482.9	.500	1.408A	118.3	.981	6.7	14.2	4.3	.513
		11.47	9.36	4.23	2.09	5.51	5.15	18.87	2/1/2	105.6	20.4	9.7	.186	11.799	71.0	151.3	69.9	84.8L	2.003
4-7310	4-7560	.169	34.8	-21.4	-4.9	1.091	95.0	.223	1.276	332.2	522.5	.992	1.560A	94.9	.718	3.2	46.9	62.6	.094
4-7560	4-7726.3	.224	57.2	25.9	2.0	.587	89.6	.471	1.047	179.5	286.2	.554A	1.540	68.2	1.350	-.8	-2.1	224.8	.513
4-7726.3	4-7830	.513	231.8	-9.4	-4.0	1.295	112.7	.430	.908	273.6	486.3	.517	1.299A	115.0	.956	6.0	17.5	11.5	.452
		11.26	9.12	4.28	2.14	5.56	4.85	17.44	2/1/2	98.3	22.3	10.0	.228	11.432	46.8	144.3	46.2	89.1L	2.381
4-7330	4-7560	.157	359.8	47.5	5.6	1.094	92.5	.218	1.293	345.8	516.9	1.010	1.575A	96.1	.725	-7.2	-23.4	83.3	.123
4-7560	4-7734.1	.209	51.0	25.8	2.2	.609	90.9	.430	1.077	181.1	300.5	.614A	1.540D	73.1	1.359	-.9	-2.9	229.0	.421
4-7734.1	4-7850	.421	243.7	-5.0	-1.8	1.263	109.0	.355	.848	274.5	494.7	.547	1.130A	108.8	.920	4.5	22.8	25.1	.345
		11.23	8.60	4.13	2.63	6.04	4.47	15.10	1/1/2	88.6	27.5	14.8	.339	7.758	9.2	146.9	8.3	98.6D	2.294
4-7340	4-7560	.124	8.3	30.2	2.7	1.095	91.2	.218	1.298	353.3	514.8	1.015	1.581A	96.8	.727	-4.2	-10.3	86.3	.095
4-7560	4-7737.5	.204	48.5	25.8	2.3	.617	91.3	.415	1.088	181.8	306.7	.636A	1.541D	75.1	1.362	-1.0	-3.4	230.3	.384
4-7737.5	4-7860	.384	248.9	-2.5	-.8	1.252	107.5	.325	.829	274.9	499.7	.560	1.099A	105.6	.907	3.9	24.9	31.0	.297
		10.29	8.13	3.77	2.16	5.58	4.36	14.18	1/1/2	84.5	31.3	18.6	.407	6.183	4.1	149.4	-2.9	101.7D	2.106
4-7350	4-7560	.116	4.0	21.0	1.8	1.095	89.7	.219	1.301	1.4	153.4	1.017D	1.586A	96.9	.729	-3.3	-4.0	89.1	.088
4-7560	4-7740.5	.201	46.5	25.8	2.4	.623	91.7	.404	1.097	182.4	312.2	.654A	1.541D	76.7	1.364	-1.1	-4.0	231.0	.354
4-7740.5	4-7870	.354	253.5	.2	.1	1.243	106.2	.300	.815	275.3	505.4	.571	1.059A	102.7	.897	3.4	26.5	35.9	.255
		10.04	7.99	3.70	2.05	5.48	4.29	13.43	1/1/2	81.1	36.4	22.8	.476	5.058	10.7	151.9	-10.5	103.8D	1.941
4-7360	4-7560	.120	359.4	14.0	1.4	1.096	88.1	.221	1.301	10.3	152.8	1.013D	1.588A	97.2	.728	-2.8	.0	90.9	.088
4-7560	4-7743.1	.199	44.9	25.8	2.5	.627	91.9	.396	1.104	183.0	316.7	.667A	1.541D	78.1	1.366	-1.1	-4.6	231.4	.331
4-7743.1	4-7880	.331	257.4	2.8	.8	1.236	105.1	.279	.805	275.6	511.7	.580	1.029A	99.9	.890	2.9	27.7	38.8	.217
		10.00	7.98	3.74	2.02	5.45	4.24	12.82	1/1/2	79.0	43.3	27.0	.549	4.285	15.9	154.1	-15.9	103.3D	1.803
4-7370	4-7560	.134	355.1	8.5	1.2	1.095	86.3	.225	1.296	20.2	153.1	1.004D	1.589A	97.3	.727	-2.4	3.1	91.5	.086
4-7560	4-7745.0	.198	45.7	25.9	2.6	.630	92.1	.391	1.109	183.3	320.2	.676A	1.542D	79.1	1.367	-1.2	-5.1	231.4	.314
4-7745.0	4-7890	.314	260.4	5.2	1.4	1.231	104.3	.263	.797	275.7	518.9	.587	1.007A	97.2	.883	2.6	28.1	39.0	.185
		10.11	8.08	3.87	2.03	5.45	4.21	12.57	1/1/2	78.2	52.9	30.7	.610	3.775	19.8	156.0	-19.8	106.1D	1.691

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2447560
2 FEB 1989

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-7380	4-7560	.157	352.3	4.6	1.0	1.094	84.3	.233	1.287	30.9	154.3	.987D	1.586A	97.3	.723	-2.2	5.8	90.7	.089
4-7560	4-7746.2	.197	43.1	26.0	2.7	.632	92.2	.588	1.111	183.5	322.3	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.2	4-7900	.304	262.5	7.3	1.9	1.227	103.8	.254	.791	275.5	527.0	.591	.992A	94.3	.878	2.3	27.5	35.2	.161
		10.38	8.32	4.12	2.06	5.49	4.19	12.07	1/1/2	78.8	66.2	33.5	.649	3.466	22.6	157.3	-22.6	106.3D	1.601
4-7390	4-7560	.188	351.3	2.2	.9	1.091	82.0	.245	1.271	42.6	156.4	.960D	1.582A	97.2	.716	-2.0	6.5	88.7	.093
4-7560	4-7746.3	.197	43.1	26.0	2.7	.632	92.2	.587	1.111	183.5	322.4	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.3	4-7910	.304	263.1	8.9	2.3	1.224	103.8	.251	.787	274.5	536.1	.589	.985A	91.3	.874	2.2	25.1	26.7	.149
		10.85	8.71	4.52	2.14	5.56	4.19	11.94	1/1/2	80.6	64.1	34.8	.652	3.347	24.9	156.0	-24.8	105.5D	1.530
4-7400	4-7560	.227	351.9	1.1	.9	1.086	79.4	.262	1.248	55.1	159.2	.921D	1.576A	97.0	.706	-1.9	11.1	85.9	.102
4-7560	4-7744.6	.198	44.0	25.9	2.6	.630	92.1	.592	1.108	183.2	319.5	.674A	1.542D	78.9	1.366	-1.2	-5.0	231.4	.317
4-7744.6	4-7920	.317	261.7	10.0	2.7	1.222	104.4	.260	.783	272.3	546.6	.579	.987	87.7	.869	2.3	20.4	15.2	.158
		11.58	9.31	5.10	2.27	5.69	4.21	12.04	1/1/2	83.2	105.6	33.6	.596	3.457	26.9	157.8	-26.7	103.1D	1.466
MARS ARRIVAL DATE = 2447570 (12 FEB 1989)																			
4-7300	4-7570	.169	25.9	-6.0	-2.4	1.091	96.3	.230	1.269	325.0	529.9	.977	1.560A	93.0	.707	.6	25.5	57.9	.093
4-7570	4-7722.6	.248	56.7	24.8	1.9	.567	92.8	.503	1.034	182.8	278.4	.514A	1.555D	65.1	1.347	-.7	-1.4	225.0	.573
4-7722.6	4-7820	.573	226.1	-11.3	-5.4	1.319	114.9	.479	.962	273.4	482.3	.501	1.423A	118.6	.985	6.9	14.5	4.5	.519
		11.82	9.69	4.27	2.13	5.55	5.42	19.02	2/1/2	112.7	20.2	10.3	.183	11.116	72.9	154.1	71.7	84.7L	1.850
4-7310	4-7570	.163	32.7	-15.0	-3.8	1.092	95.2	.225	1.278	331.2	526.5	.991	1.565A	93.8	.711	2.1	38.7	61.5	.090
4-7570	4-7726.9	.237	53.1	24.6	2.0	.584	93.4	.475	1.055	183.8	286.4	.554A	1.556D	68.1	1.353	-.7	-1.6	225.6	.516
4-7726.9	4-7830	.516	232.6	-9.6	-4.1	1.297	112.8	.433	.913	273.9	485.7	.517	1.309A	115.2	.959	6.1	17.7	11.8	.457
		11.44	9.35	4.20	2.09	5.51	5.15	17.56	2/1/2	106.1	22.0	10.5	.226	10.910	49.3	145.5	48.7	88.9L	2.237
4-7340	4-7570	.138	1.1	41.3	4.4	1.095	91.4	.218	1.298	352.4	519.0	1.015	1.581A	95.6	.720	-5.8	-18.6	83.9	.107
4-7570	4-7738.0	.220	44.6	23.8	2.2	.616	94.9	.420	1.099	186.8	307.4	.638A	1.561D	75.1	1.365	-.8	-2.6	230.5	.585
4-7738.0	4-7860	.385	249.5	-2.5	-.8	1.253	107.5	.326	.831	275.2	499.1	.560	1.102A	105.8	.909	3.9	25.0	31.5	.300
		11.01	8.65	3.92	2.36	5.77	4.73	14.23	1/1/2	91.3	30.9	19.0	.405	6.067	2.6	150.0	-.3	101.9D	2.054
4-7350	4-7570	.121	2.3	27.5	2.6	1.095	89.9	.219	1.301	.6	157.7	1.017D	1.585A	95.9	.721	-3.9	-8.9	86.1	.091
4-7570	4-7741.0	.217	42.7	23.6	2.3	.622	95.2	.409	1.109	187.6	312.9	.655A	1.562D	76.8	1.367	-.8	-3.0	231.1	.355
4-7741.0	4-7870	.355	254.1	.2	.1	1.244	106.2	.300	.817	275.6	504.8	.572	1.062A	102.9	.899	3.4	26.6	36.4	.256
		10.52	8.42	3.74	2.10	5.52	4.67	13.46	1/1/2	88.8	35.9	23.2	.476	4.980	8.1	152.4	-7.9	104.1D	1.901
4-7360	4-7570	.121	358.8	18.3	1.9	1.096	88.3	.221	1.301	9.5	157.0	1.014D	1.587A	96.2	.721	-3.1	-3.2	87.7	.086
4-7570	4-7743.5	.216	41.3	23.6	2.4	.626	95.4	.401	1.116	188.1	317.5	.668A	1.563D	78.2	1.369	-.8	-3.4	231.4	.331
4-7743.5	4-7880	.331	258.0	2.8	.8	1.257	105.1	.279	.806	275.9	511.3	.581	1.031A	100.1	.890	2.9	27.7	39.5	.218
		10.41	8.38	3.75	2.02	5.45	4.63	12.84	1/1/2	86.9	42.8	27.3	.549	4.232	13.3	154.6	-15.3	105.7D	1.774
4-7370	4-7570	.133	355.1	11.5	1.5	1.095	86.5	.225	1.296	19.2	157.2	1.005D	1.588A	96.3	.719	-2.7	.8	88.3	.085
4-7570	4-7745.5	.214	40.4	23.5	2.4	.629	95.5	.396	1.121	188.5	321.1	.677A	1.564D	79.2	1.370	-.9	-3.8	231.3	.314
4-7745.5	4-7890	.314	261.0	5.2	1.4	1.231	104.3	.263	.798	276.0	518.4	.588	1.008A	97.3	.884	2.5	28.2	39.8	.186
		10.48	8.47	3.86	2.01	5.44	4.60	12.38	1/1/2	86.2	52.2	31.1	.611	3.734	17.1	156.4	-17.1	106.7D	1.671
4-7380	4-7570	.155	352.5	6.7	1.3	1.094	84.5	.232	1.287	29.9	158.3	.989D	1.586A	96.2	.715	-2.4	4.3	87.6	.087
4-7570	4-7746.7	.214	39.8	23.5	2.5	.631	95.6	.393	1.123	188.8	323.2	.682A	1.565D	79.9	1.371	-.9	-4.1	231.2	.304
4-7746.7	4-7900	.304	263.1	7.3	1.9	1.227	103.8	.253	.792	275.7	526.5	.591	.993A	94.5	.879	2.3	27.6	36.2	.161
		10.73	8.69	4.10	2.03	5.46	4.59	12.07	1/1/2	86.7	65.3	33.9	.652	3.433	20.0	157.7	-19.9	106.9D	1.587
4-7390	4-7570	.165	351.8	3.8	1.2	1.091	82.3	.243	1.273	41.3	160.2	.963D	1.582A	96.1	.709	-2.1	7.4	85.9	.091
4-7570	4-7746.8	.214	39.7	23.5	2.5	.631	95.6	.392	1.124	188.8	323.5	.683A	1.564D	79.9	1.371	-.9	-4.1	231.1	.302
4-7746.8	4-7910	.302	263.8	9.0	2.3	1.224	103.7	.250	.788	274.9	535.5	.590	.985A	91.5	.874	2.2	25.3	27.9	.149
		11.17	9.07	4.48	2.10	5.53	4.59	11.93	1/1/2	88.3	83.0	35.1	.657	3.314	22.3	158.4	-22.2	106.2D	1.521
4-7400	4-7570	.222	352.5	2.4	1.1	1.087	79.7	.260	1.252	53.5	162.7	.926D	1.577A	95.9	.700	-1.9	10.3	83.4	.099
4-7570	4-7745.3	.215	40.4	23.5	2.4	.629	95.5	.396	1.120	188.5	320.8	.677A	1.564D	79.2	1.370	-.9	-3.8	231.3	.315
4-7745.3	4-7920.	.315	262.6	10.1	2.7	1.222	104.3	.259	.784	272.7	545.9	.581	.987	87.9	.870	2.3	20.8	16.5	.156
		11.86	9.64	5.03	2.22	5.64	4.61	12.02	1/1/2	90.6	104.3	34.1	.606	3.410	24.5	158.3	-24.2	103.9D	1.461
MARS ARRIVAL DATE = 2447580 (22 FEB 1989)																			
4-7310	4-7580	.162	32.1	-11.0	-3.3	1.092	95.4	.228	1.280	330.0	530.3	.988	1.572A	92.8	.705	1.6	34.0	60.5	.091
4-7580	4-7727.4	.256	49.2	23.2	1.9	.585	97.8	.480	1.069	188.7	287.1	.556A	1.582D	68.1	1.357	-.5	-1.2	226.1	.519
4-7727.4	4-7830	.519	233.3	-9.8	-4.2	1.300	112.8	.436	.918	274.2	485.2	.518	1.318A	115.5	.963	6.2	18.0	12.0	.462
		11.93	9.82	4.19	2.11	5.53	5.63	17.66	2/1/2	113.1	21.8	11.2	.223	10.282	50.4	146.3	49.9	89.1L	2.074
4-7320	4-7580	.176	41.6	-27.7	-6.1	1.093	94.2	.224	1.288	336.6	527.4	1.000	1.576A	93.8	.709	4.5	55.4	61.2	.102
4-7580	4-7731.4	.249	46.2	22.8	2.0	.599	98.1	.458	1.087	189.9	294.9	.590A	1.585D	70.8	1.363	-.5	-1.4	228.1	.467
4-7731.4	4-7840	.467	239.4	-7.6	-3.0	1.281	110.9	.394	.881	274.6	489.1	.534	1.228A	112.2	.941	5.4	20.7	19.1	.404
		12.08	9.81	4.36	2.27	5.69	5.45	16.35	2/1/2	105.0	24.0	12.9	.275	8.935	29.2	146.2	28.8	94.4D	2.184
4-7350	4-7580	.130	359.2	35.9	3.7	1.096	90.1	.219	1.302	359.6	521.7	1.017	1.587A	93.0	.715	-5.0	-14.9	84.0	.099
4-7580	4-7741.4	.240	39.7	21.8	2.2	.625	99.0	.416	1.126	193.1	314.1	.658A	1.594D	77.0	1.372	-.6	-2.2	230.8	.355
4-7741.4	4-7870	.355	254.6	.2	.1	1.244	106.2	.301	.818	275.8	504.4	.572	1.064A	103.0	.900	3.4	26.7	36.8	.258
		11.28	9.06	3.83	2.22	5.64	5.22	13.48	1/1/2	95.0	35.5	24.0	.477	4.819	5.7	152.6	-5.6	104.7D	1.821
4-7360	4-7580	.124	358.0	23.6	2.5	1.096	88.5	.221	1.302	6.5	161.0	1.014D	1.589A	95.2	.714	-3.6	-6.9	85.2	.088
4-7580	4-7743.9	.238	38.5	21.6	2.2	.629	99.1	.408	1.133	193.7	318.6	.671A	1.596D	78.4	1.374	-.6	-2.5	230.6	.331
4-7743.9	4-7880	.331	258.5	2.8	.8	1.237	105.1	.279	.807	276.1	510.8	.581	1.032A	100.2	.891	2.9	27.8	40.0	.219
		11.02	8.96	3.78	2.06	5.49	5.19	12.86	1/1/2	93.9	42.3	28.2	.549	4.110	10.9	154.7	-10.9	106.4D	1.707
4-7370	4-7580	.133	355.0	15.0	1.9	1.096	86.7	.225	1.298	18.2	161.1	1.006D	1.589A	95.3	.713	-3.0	-1.6	85.7	.085
4-7580	4-7743.9	.238	37.7	21.5	2.3	.633	99.2	.403	1.139	194.2	322.4	.680A	1.598D	79.4	1.375	-.6	-2.7	230.6	.313
4-7743.9	4-7890	.313	261.6	5.3	1.4	1.232	104.3	.263	.799	276.2	518.0	.588	1.009A	97.4	.885	2.5	28.2	40.4	.186
		11.05	9.04	3.87	2.02	5.44	5.17	12.39	1/1/2	93.4	51.6	31.9	.612	3.635	14.7	156.4	-14.6	107.5D	1.613
4-7380	4-7580	.153	352.9	9.2	1.6	1.093	84.7	.232	1.289	28.6	162.0	.991D	1.588A	95.2	.709	-2.5	2.7	85.1	.086
4-7580	4-7747.1	.237	37.2	21.5	2.3	.634	99.3	.400	1.142	194.5	324.6	.685A	1.598D	80.1	1.376	-.6	-2.9	230.4	.303
4-7747.1	4-7900	.303	263.7	7.4	1.9	1.227	103.8	.253	.793	276.0	526.0	.592	.993A	94.6	.879	2.3	27.7	37.0	.161
		11.27	9.24	4.08	2.03	5.46	5.16	12.08	1/1/2	93.9	64.6	34.8	.655	3.347	17.6	157.7	-17.4	107.8D	1.537
4-7390	4-7580	.182	352.3	9.6	1.4	1.092	82.5	.242	1.276	39.9	163.7	.967D	1.585A	95.1	.703	-2.2	6.3	83.6	.090
4-7580	4-7747.3	.237	37.1	21.4	2.3	.635	99.3	.400	1.142	194.6	325.0	.686A	1.599D	80.2	1.376	-.6	-2.9	230.3	.301
4-7747.3	4-7910	.301	264.5	9.0	2.3	1.225	103.7	.250	.788	275.1	535.1	.591	.985A	91.6	.875	2.1	25.5	28.9	.148
		11.68	9.59	4.44	2.09	5.51	5.16	11.93	1/1/2	95.3	82.0	36.0	.662	3.232	19.9	158.4	-19.6	107.2D	1.477
MARS ARRIVAL DATE = 2447590 (4 MAR 1989)																			
4-7360	4-7590	.130	356.4	30.2	3.3	1.097	88.7	.222	1.304	7.4	164.8	1.015D	1.593A	94.2	.708	-4.4	-11.3	83.5	.094
4-7590	4-7744.3	.266	36.5	20.0	2.1	.637	103.2	.419	1.159	199.9	320.6	.674A	1.645D	78.6	1.381	-.4	-1.6	229.7	.331
4-7744.3	4-7880	.331	259.0	2.8	.8	1.238	105.1	.279	.808	276.3	510.5	.582	1.033A	100.3	.892	2.9	27.8	40.4	.220
		11.91	9.76	3.83	2.15	5.57	5.93	12.88	1/1/2	99.5	41.9	29.6	.549	3.916	8.7	154.4	-8.7	107.3D	1.601
4-7370	4-7590	.135	354.8	19.3	2.4	1.096	86.9	.225	1.300	16.9	164.8	1.007D	1.593A	94.3	.707	-3.4	-4.3	83.8	.088
4-7590	4-7746.2	.267	35.8	19.9	2.1	.641	103.3	.414	1.165	200.4	324.3	.683A	1.647D	79.7	1.382	-.4	-1.7	229.3	.313
4-7746.2	4-7890	.313	262.1	5.3	1.4	1.232	104.3	.263	.799	276.4	517.6	.589	1.010A	97.5	.885	2.5	28.3	41.1	.187
		11.84	9.79	3.86	2.05	5.46	5.91	12.41	1/1/2	99.6	51.1	33.5	.613	3.474	12.4	156.1	-12.3	108.6D	1.517
4-7380	4-7590	.152	353.2	12.0	1.9	1.095	85.0	.232	1.292	27.2	165.6	.993D	1.592A	94.3	.704	-2.6	.9	83.5	.087
4-7590	4-7747.5	.266	35.4	19.6	2.2	.642	103.2	.411	1.168	200.6	326.5	.686A	1.647D	80.4	1.383	-.4	-1.9	229.0	.303
4-7747.5	4-7900	.303	264.2	7.4	1.9	1.228	103.7	.253	.793	276.2	525.6	.593	.994A	94.8	.880	2.2	27.8	37.8	.162
		12.00	9.96	4.07	2.04	5.47	5.89	12.08	1/1/2	100.3	83.8	36.3	.657	3.207	15.3	157.3	-15.0	109.1D	1.480

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2447490
24 NOV 1988

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / PSI 2 / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2447490 (24 NOV 1988)																				
4-7290	4-7490	.171	17.1	-7.9	-2.2	1.094	96.4	.234	1.274	325.1	496.6	.975	1.572A	101.0	.771	.3	25.8	80.8	.120
4-7490	4-7727.9	.232	67.1	32.4	3.6	.675	74.4	.423	1.083	156.2	303.4	.624A	1.541	74.0	1.362	-3.2	-10.3	217.2	.408
4-7727.9	4-7850	.408	235.4	-4.3	-1.5	1.249	108.7	.341	.821	271.1	501.3	.541	1.100A	106.2	.898	4.1	21.0	20.2	.310
		11.92	9.34	4.30	2.58	6.00	5.03	14.42	1/1/2	49.2	32.1	18.9	.360	6.081	19.8	133.9	-18.3	101.0D	1.631
4-7300	4-7490	.159	17.9	-.1	-1.0	1.098	95.6	.238	1.293	330.1	491.9	.986	1.601A	101.9	.779	-.8	18.9	87.8	.126
4-7490	4-7731.6	.225	65.7	34.9	4.3	.680	75.2	.409	1.091	156.1	309.3	.644A	1.537	75.9	1.364	-3.8	-13.5	219.3	.377
4-7731.6	4-7860	.378	241.0	-2.2	-.7	1.241	107.4	.316	.808	271.7	506.1	.553	1.064A	103.4	.890	3.7	23.5	25.3	.270
		11.70	9.01	4.15	2.69	6.11	4.86	13.69	1/1/2	43.3	36.6	24.3	.422	4.754	29.0	136.0	-27.7	105.7D	1.564
4-7310	4-7490	.150	19.7	2.9	-.7	1.102	94.7	.242	1.314	335.3	487.6	.995	1.632A	102.7	.786	-1.2	17.0	93.3	.133
4-7490	4-7735.3	.221	63.8	38.5	5.4	.684	75.8	.397	1.098	156.0	315.2	.662A	1.533	77.7	1.365	-4.9	-16.7	220.9	.352
4-7735.3	4-7870	.352	246.5	.2	.0	1.235	106.2	.295	.801	272.6	511.0	.565	1.036A	100.9	.885	3.4	25.5	29.7	.235
		11.64	8.82	4.05	2.82	6.23	4.77	13.10	1/1/2	38.3	42.0	31.4	.485	3.694	38.3	136.9	-36.7	106.4D	1.306
MARS ARRIVAL DATE = 2447500 (4 DEC 1988)																				
4-7270	4-7500	.184	1.1	3.5	.5	1.087	97.9	.229	1.232	315.2	511.8	.950	1.514A	97.7	.746	-2.3	5.8	63.5	.110
4-7500	4-7721.0	.244	70.4	29.0	2.4	.649	74.1	.461	1.056	159.4	289.8	.569A	1.543	69.4	1.354	-2.1	-5.5	214.4	.491
4-7721.0	4-7830	.491	224.7	-7.9	-3.3	1.276	112.1	.408	.867	270.5	491.8	.513	1.221A	112.7	.928	5.1	15.4	8.8	.411
		12.20	9.79	4.47	2.41	5.83	5.32	16.51	2/1/2	74.9	24.7	10.5	.249	10.919	14.8	131.1	13.1	93.2D	2.472
4-7280	4-7500	.175	4.5	9.7	1.1	1.089	97.1	.228	1.248	319.9	506.9	.963	1.533A	98.8	.753	-3.0	2.9	71.9	.114
4-7500	4-7725.1	.231	69.0	30.4	2.8	.657	75.1	.440	1.068	159.2	296.3	.598A	1.538	71.7	1.357	-2.4	-6.9	217.3	.448
4-7725.1	4-7840	.448	231.0	-6.3	-2.4	1.262	110.4	.374	.843	271.1	495.7	.528	1.158A	109.6	.914	4.7	18.6	15.2	.362
		11.82	9.35	4.35	2.47	5.89	5.00	15.45	2/1/2	67.4	27.6	13.7	.299	8.412	7.1	133.9	-2.4	97.2D	2.220
4-7290	4-7500	.172	19.3	-11.8	-2.9	1.092	96.3	.229	1.265	324.8	502.1	.975	1.555A	99.8	.760	1.0	30.5	76.9	.109
4-7500	4-7729.0	.221	67.6	32.0	3.2	.663	76.0	.423	1.077	159.1	302.5	.621A	1.533	73.8	1.360	-2.7	-8.7	219.7	.410
4-7729.0	4-7850	.410	236.9	-4.4	-1.5	1.251	108.8	.343	.825	271.7	500.1	.542	1.109A	106.7	.902	4.2	21.4	21.2	.316
		11.45	9.06	4.31	2.39	5.81	4.75	14.54	1/1/2	58.3	31.2	17.7	.357	6.516	15.6	136.7	-14.1	100.4D	1.968
4-7300	4-7500	.155	17.0	2.3	-.6	1.095	95.5	.231	1.282	329.9	497.5	.986	1.576A	100.6	.767	-1.2	15.8	85.4	.113
4-7500	4-7732.7	.213	66.1	35.9	3.8	.668	76.7	.409	1.086	159.1	308.3	.641A	1.530	75.6	1.362	-3.2	-11.1	221.6	.379
4-7732.7	4-7860	.379	242.4	-2.2	-.7	1.243	107.4	.317	.812	272.3	504.9	.554	1.070A	103.8	.893	3.8	23.8	26.4	.273
		11.13	8.67	4.10	2.46	5.87	4.57	13.77	1/1/2	51.6	35.6	22.5	.420	5.128	24.4	139.1	-23.4	102.9D	1.732
4-7310	4-7500	.145	18.9	5.0	-.4	1.098	94.6	.233	1.299	335.3	493.3	.996	1.603A	101.4	.774	-1.5	14.3	91.4	.118
4-7500	4-7736.0	.208	64.5	36.3	4.3	.672	77.3	.398	1.092	159.1	313.7	.658A	1.526	77.3	1.363	-3.8	-14.5	223.0	.352
4-7736.0	4-7870	.352	247.4	.2	.0	1.236	106.2	.295	.802	272.9	510.3	.565	1.039A	101.1	.886	3.4	25.7	30.5	.237
		11.00	8.45	3.99	2.55	5.96	4.46	13.14	1/1/2	46.0	41.3	28.2	.485	4.098	32.2	141.0	-31.2	105.1D	1.901
4-7320	4-7500	.136	19.7	6.0	-.3	1.101	93.6	.237	1.316	341.1	489.5	1.005	1.628A	102.1	.760	-1.6	15.8	96.5	.123
4-7500	4-7739.3	.207	62.5	39.8	5.5	.676	77.8	.388	1.098	159.1	319.0	.672A	1.524	78.9	1.365	-4.7	-19.5	224.1	.332
4-7739.3	4-7880	.332	252.4	2.6	.7	1.231	105.2	.278	.796	273.6	515.8	.575	1.017A	98.7	.882	3.0	27.0	33.4	.206
		10.96	8.32	3.90	2.64	6.06	4.42	12.66	1/1/2	41.3	48.2	35.5	.547	5.261	39.8	141.6	-38.5	107.3D	1.247
4-7360	4-7500	.134	5.7	1.1	-.1	1.112	87.9	.257	1.363	10.1	120.4	1.013D	1.713A	104.3	.796	-1.8	13.3	107.9	.145
4-7500	4-7734.7	.210	65.2	35.3	4.2	.671	77.1	.402	1.090	159.1	311.5	.652A	1.528	76.6	1.363	-3.5	-13.0	222.5	.362
4-7734.7	4-7920	.362	248.9	9.2	2.8	1.217	106.7	.295	.773	265.9	556.3	.545	1.001	83.4	.859	3.1	14.2	359.2	.200
		11.43	8.37	3.87	3.06	6.47	4.50	12.58	1/1/2	30.4	121.9	34.4	.458	3.385	40.6	144.1	-40.5	99.4D	1.092
MARS ARRIVAL DATE = 2447510 (14 DEC 1988)																				
4-7270	4-7510	.185	2.9	.6	-.1	1.086	98.0	.229	1.230	314.5	516.8	.948	1.511A	96.5	.737	-1.7	8.1	58.4	.105
4-7510	4-7722.1	.234	70.4	29.0	2.3	.636	75.9	.462	1.051	162.2	288.7	.566A	1.536	69.2	1.352	-1.9	-4.8	216.7	.495
4-7722.1	4-7830	.495	226.2	-8.2	-3.4	1.279	112.3	.413	.875	271.1	490.7	.514	1.236A	113.2	.934	5.2	15.8	9.4	.419
		11.87	9.56	4.49	2.31	5.73	5.07	16.69	2/1/2	84.5	24.2	10.0	.245	11.509	20.6	133.7	19.5	92.3D	2.575
4-7280	4-7510	.174	8.1	2.2	-.2	1.088	97.2	.227	1.244	319.4	511.9	.962	1.526A	97.6	.743	-1.7	10.0	66.7	.102
4-7510	4-7726.3	.221	68.8	30.1	2.6	.644	76.9	.441	1.063	162.2	295.4	.595A	1.531	71.5	1.356	-2.1	-5.9	219.6	.451
4-7726.3	4-7840	.451	232.5	-6.5	-2.5	1.265	110.4	.377	.849	271.7	494.5	.529	1.169A	110.1	.918	4.8	18.9	16.0	.369
		11.37	9.09	4.33	2.28	5.70	4.76	15.60	2/1/2	76.0	26.9	12.9	.295	8.929	6.7	136.3	2.5	96.6D	2.343
4-7290	4-7510	.163	14.3	-.0	-.9	1.090	96.3	.226	1.259	324.4	507.3	.975	1.544A	98.6	.750	-1.0	15.8	74.3	.101
4-7510	4-7730.1	.211	67.1	31.5	3.0	.651	77.8	.423	1.073	162.2	301.7	.619A	1.527	73.6	1.358	-2.3	-7.4	221.9	.412
4-7730.1	4-7850	.412	238.4	-4.5	-1.6	1.254	108.8	.346	.830	272.3	498.9	.543	1.117A	107.1	.906	4.3	21.7	22.1	.322
		10.97	8.72	4.20	2.25	5.67	4.52	14.65	2/1/2	67.7	30.3	16.6	.353	6.915	11.7	139.1	-10.0	99.9D	2.090
4-7300	4-7510	.152	14.6	9.0	.4	1.093	95.5	.226	1.274	329.7	502.9	.986	1.563A	99.4	.756	-2.2	8.0	82.3	.106
4-7510	4-7733.7	.203	65.4	33.0	3.4	.657	78.4	.409	1.062	162.2	307.5	.639A	1.524	75.4	1.360	-2.7	-9.3	223.7	.380
4-7733.7	4-7860	.380	243.8	-2.3	-.7	1.244	107.4	.319	.815	272.8	503.8	.556	1.075A	104.2	.896	3.8	24.0	27.4	.279
		10.74	8.41	4.07	2.33	5.75	4.34	13.85	1/1/2	61.4	34.7	21.1	.417	5.453	20.3	141.7	-19.4	102.4D	1.857
4-7310	4-7510	.142	17.5	8.7	.2	1.095	94.5	.227	1.289	335.2	498.8	.996	1.583A	100.2	.762	-2.0	9.9	86.7	.108
4-7510	4-7736.9	.198	63.7	34.8	3.9	.661	79.0	.398	1.088	162.3	312.7	.656A	1.521	77.0	1.362	-3.1	-11.6	225.0	.353
4-7736.9	4-7870	.353	248.6	.2	.0	1.237	106.2	.296	.805	273.4	509.3	.567	1.043A	101.5	.888	3.4	25.9	31.6	.241
		10.53	8.17	3.96	2.36	5.78	4.22	13.19	1/1/2	54.9	40.3	26.2	.484	4.407	27.5	144.0	-26.8	104.3D	1.647
4-7320	4-7510	.133	18.6	8.7	.1	1.098	93.5	.229	1.304	341.1	495.2	1.005	1.603A	100.9	.768	-1.9	10.6	94.2	.111
4-7510	4-7739.7	.195	62.1	36.8	4.5	.665	79.4	.389	1.094	162.4	317.4	.669A	1.519	78.4	1.363	-3.6	-14.6	225.9	.331
4-7739.7	4-7880	.331	252.9	2.6	.7	1.232	105.2	.278	.797	273.6	515.4	.576	1.016A	98.8	.883	3.0	27.1	34.0	.207
		10.42	8.01	3.86	2.42	5.83	4.15	12.68	1/1/2	49.4	47.7	31.8	.547	3.647	33.6	145.6	-32.8	105.9D	1.449
4-7330	4-7510	.125	17.7	8.2	.1	1.100	92.3	.232	1.317	347.5	492.0	1.012	1.623A	101.5	.773	-1.9	11.0	98.8	.115
4-7510	4-7742.1	.194	60.6	39.2	5.1	.668	79.7	.382	1.098	162.4	321.3	.679A	1.516	79.6	1.364	-4.2	-18.2	226.3	.316
4-7742.1	4-7890	.316	256.6	4.9	1.3	1.228	104.5	.264	.791	274.2	522.1	.582	1.000A	96.2	.878	2.7	27.5	33.9	.179
		10.39	7.91	3.78	2.48	5.90	4.13	12.30	1/1/2	44.9	57.4	37.7	.601	3.092	38.8	146.4	-38.0	107.2D	1.257
4-7340	4-7510	.120	14.7	6.9	.1	1.103	91.0	.235	1.328	354.5	489.4	1.016	1.641A	102.1	.777	-1.9	11.2	102.3	.118
4-7510	4-7743.9	.195	59.2	41.3	5.8	.669	80.0	.378	1.101	162.6	324.2	.685A	1.516	80.4	1.365	-4.8	-21.6	226.6	.308
4-7743.9	4-7900	.308	259.5	7.0	1.8	1.225	104.0	.256	.788	274.3	529.4	.586	.989A	93.6	.875	2.4	26.8	30.5	.159
		10.43	7.88	3.74	2.55	5.97	4.14	12.05	1/1/2	41.4	70.4	43.1	.635	2.722	42.9	146.8	-41.9	108.1D	1.094
4-7350	4-7510	.121	9.8	4.7	.1	1.105	89.6	.239	1.336	2.2	127.6	1.017D	1.656A	102.5	.780	-1.9	11.4	105.0	.123
4-7510	4-7743.0	.194	59.9	40.3	5.5	.668	79.9	.380	1.100	162.5	322.8	.682A	1.517	80.0	1.364	-4.5	-19.8	226.5	.312
4-7743.0	4-7910	.312	258.9	8.6	2.2	1.222	104.2	.257	.783	272.7	539.4	.582	.984A	90.2	.870	2.4	23.4	19.8	.152
		10.50	7.88	3.74	2.63	6.04	4.13	11.98	1/1/2	38.8	90.6	42.7	.620	2.745	42.7	147.8	-42.1	106.2D	1.081
4-7360	4-7510	.129	3.9	2.1	.0	1.106	87.9	.244	1.340	10.9	126.7	1.013D	1.667A	102.9	.781	-1.9	11.7	106.5	.127
4-7510	4-7737.7	.197	63.3	35.3	4.0	.662	79.1	.395	1.090	162.4	314.0	.659A	1.521	77.4	1.362	-3.2	-12.3	225.3	.347
4-7737.7	4-7920	.347	252.8	9.4	2.8	1.218	105.9	.282	.776	267.9	553.4	.557	.995	84.8	.862	2.9	16.1	3.4	.165
		10.72	8.01	3.82	2.70	6.12	4.19	12.37	1/1/2	37.3	117.4	34.9	.501	3.337	36.9	147.8	-36.9	100.4D	1.170
MARS ARRIVAL DATE = 2447520 (24 DEC 1988)																				
4-7270	4-7520	.188	4.3	-1.1	-.5	1.086	98.2	.230	1.229	313.7	521.5	.946	1.511A	95.3	.729	-1.4	9.4	53.7	.103
4-7520	4-7723.1	.225	69.6	28.8	2.2	.624	77.9	.463	1.046	165.2	287.9	.562A	1.531	68.9	1.351	-1.7	-4.2	216.8	.499
4-7723.1	4-7830	.499	227.5	-8.4	-3.5	1.283	112.4	.417	.882	271.7	489.6	.515	1.250A	113.6	.939	5.4	16.2	9.9	.427
		11.68	9.39	4.52	2.29	5.71	4.87	16.87	2/1/2	94.1	23.6	9.6	.241	11.917	26.8	136.2	25.9	91.4D	2.632
4-7280	4-7520	.175	9.9	-.5	-.7	1.087	97.3	.226	1.242	318.7	516.8	.961	1.523A	96.4	.735	-1.2	12.5	61.7	.098
4-7520	4-7727.3	.213	67.5	29.7	2.5	.633	79.0	.441	1.059	165.3	294.7	.592A	1.527	71.3	1.354	-1.8	-5.1	221.6	.474
4-7727.3	4-7840	.454	233.8	-6.7	-2.6	1.268	110.5	.380	.855	272.3	493.5	.530	1.180A	110.5	.922	4.9	19.3	16.6	.375
		11.13	8.92	4.36	2.21	5.63	4.56	15.74	2/1/2	85.7	26.3	12.3	.292	9.366	9.5	136.5	7.4	96.0D	2.440
4-7290	4-7520	.165	16.5	-3.8	-1.5	1.089	96.4	.224	1.256	323.9	512.3	.974	1.538A	97.4	.741	-.3	19.9	69.2	.094
4-7520	4-7731.1	.203	65.5	30.8	2.8	.640	79.8	.423	1.070	165.4	301.1	.617A	1.523	73.4	1.357	-2.0	-6.3	223.9	.414
4-7731.1	4-7850	.414	239.7	-4.6	-1.6	1.256	108.9	.348	.834	272.8	497.8	.544	1.125A	107.5	.909	4.3	22.0	22.9	.328
		10.71	8.56	4.23	2.15	5.58	4.33	14.76	2/1/2	77.4	29.6	15.8	.350	7.264	8.1	141.2	-6.0	99.5D	2.193
4-7310	4-7520	.142	14.8	16.1	1.2	1.093	94.5	.223	1.263	335.0	504.1	.996	1.570A	99.1	.752	-3.0	1.9	85.4	.103
4-7520	4-7737.8	.191	61.7	33.3	3.4	.651	81.0	.398	1.086	165.8	312.1	.654A	1.518	76.9	1.361	-2.5	-9.5	226.8	.353
4-7737.8	4-7870	.353	249.8	.2	.0	1.239	106.2	.297	.807	273.8	508.3	.568	1.047A	101.8	.890	3.4	26.0	32.7	.244
		10.29	8.00	3.95	2.29	5.71	4.04	13.25	1/1/2	64.9	39.3	24.8	.483	4.654	23.5	146.4	-22.9	103.9D	1.763

STOPOVER TIME = 0 DAYS — 1988 INBOUND SWINGBY — MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2447520
24 DEC 1988

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 $PEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-7320	4-7520	.131	17.1	13.0	.6	1.095	93.4	.224	1.296	341.0	500.6	1.005	1.586A	99.8	.757	-2.4	6.0	91.1	.102
4-7520	4-7740.4	.187	60.1	34.7	3.8	.655	81.3	.389	1.092	165.9	316.6	.667A	1.517	78.2	1.362	-2.8	-11.5	227.5	.331
4-7740.4	4-7860	.331	253.9	2.6	.7	1.233	105.2	.278	.799	274.2	514.6	.577	1.020A	99.0	.884	3.0	27.2	35.1	.209
		10.08	7.81	3.84	2.27	5.70	3.97	12.71	1/1/2	58.4	46.7	29.8	.548	3.894	29.0	148.3	-28.8	105.2D	1.585
4-7330	4-7520	.122	16.4	11.3	.4	1.098	92.3	.226	1.307	347.6	497.5	1.012	1.602A	100.4	.761	-2.2	7.7	96.0	.104
4-7520	4-7742.5	.185	58.8	36.1	4.2	.657	81.7	.383	1.095	166.1	320.0	.676A	1.515	79.2	1.363	-3.2	-13.6	227.9	.316
4-7742.5	4-7890	.316	257.1	5.0	1.3	1.228	104.5	.264	.792	274.4	521.6	.583	1.001A	96.3	.879	2.7	27.6	34.6	.180
		9.98	7.68	3.76	2.30	5.72	3.93	12.31	1/1/2	53.4	56.8	34.4	.602	3.381	33.3	149.8	-32.9	106.1D	1.434
4-7340	4-7520	.117	13.4	9.3	.3	1.100	91.0	.228	1.316	354.7	495.1	1.016	1.616A	100.9	.765	-2.1	8.6	99.9	.106
4-7520	4-7743.7	.185	58.0	37.0	4.5	.658	81.8	.380	1.098	166.2	322.0	.680A	1.515	79.8	1.364	-3.4	-15.0	228.1	.308
4-7743.7	4-7900	.308	259.2	7.0	1.8	1.225	104.1	.256	.787	274.1	529.6	.586	.989A	93.5	.875	2.4	26.7	30.0	.159
		9.96	7.62	3.71	2.34	5.76	3.91	12.05	1/1/2	49.4	70.8	37.9	.634	3.078	36.2	150.9	-35.9	106.2D	1.317
4-7350	4-7520	.118	8.3	6.6	.3	1.101	89.5	.231	1.322	2.6	133.5	1.017D	1.628A	101.3	.767	-2.0	9.3	102.7	.109
4-7520	4-7743.3	.185	58.3	36.6	4.3	.658	81.7	.381	1.097	166.1	321.2	.679A	1.515	79.6	1.363	-3.3	-14.4	228.0	.311
4-7743.3	4-7910	.311	259.2	8.6	2.2	1.222	104.2	.256	.783	272.8	539.2	.582	.984A	90.3	.870	2.4	23.5	20.2	.152
		10.02	7.63	3.71	2.39	5.81	3.92	11.97	1/1/2	46.5	90.2	38.5	.622	3.031	37.3	151.5	-37.1	104.9D	1.263
4-7360	4-7520	.125	2.4	3.5	.3	1.102	87.8	.235	1.324	11.3	132.7	1.013D	1.635A	101.6	.768	-2.0	9.9	104.4	.112
4-7520	4-7739.7	.188	60.6	34.3	3.7	.654	81.3	.391	1.090	165.9	315.4	.663A	1.517	77.9	1.362	-2.7	-10.9	227.4	.337
4-7739.7	4-7920	.337	255.4	9.5	2.7	1.219	105.4	.275	.778	269.2	551.5	.564	.992	85.7	.864	2.7	17.4	[illegible]	.176
		10.21	7.77	3.78	2.44	5.86	3.99	12.25	1/1/2	44.8	114.1	34.6	.530	3.367	36.7	150.9	-36.7	101.0D	1.254

MARS ARRIVAL DATE = 2447530 (3 JAN 1989)

4-7270	4-7530	.192	5.4	-2.0	-.7	1.086	98.4	.232	1.229	312.7	525.9	.943	1.515A	94.2	.721	-1.2	10.1	49.8	.104
4-7530	4-7724.0	.219	67.7	28.4	2.2	.612	80.3	.464	1.043	168.4	287.1	.559A	1.528	68.7	1.350	-1.4	-3.6	220.7	.503
4-7724.0	4-7830	.503	228.8	-6.6	-3.6	1.286	112.5	.420	.689	272.2	488.7	.515	1.263A	114.0	.944	5.6	16.5	10.4	.434
		11.61	9.30	4.58	2.31	5.73	4.73	17.03	2/1/2	103.0	23.2	9.5	.237	12.108	32.8	156.6	32.1	90.6D	2.637
4-7280	4-7530	.178	11.2	-1.7	-1.0	1.087	97.4	.228	1.242	317.9	521.4	.959	1.524A	95.3	.726	-.9	13.6	57.2	.097
4-7530	4-7728.2	.207	65.2	29.1	2.4	.622	81.3	.442	1.057	168.7	294.1	.590A	1.524	71.1	1.353	-1.5	-4.3	223.4	.457
4-7728.2	4-7840	.457	235.1	-6.9	-2.6	1.271	110.6	.383	.860	272.8	492.5	.531	1.190A	110.9	.926	5.0	19.6	17.2	.381
		11.02	8.83	4.39	2.19	5.62	4.44	15.87	2/1/2	95.1	25.8	11.9	.288	9.686	13.5	140.4	12.3	95.4D	2.503
4-7290	4-7530	.167	17.4	-4.2	-1.6	1.089	96.5	.224	1.254	323.2	517.0	.973	1.536A	96.3	.732	-.2	20.2	64.4	.092
4-7530	4-7732.0	.198	62.8	29.9	2.6	.630	82.1	.424	1.069	168.9	300.6	.616A	1.522	73.3	1.357	-1.7	-5.3	225.6	.416
4-7732.0	4-7850	.416	240.9	-4.7	-1.7	1.238	108.9	.350	.838	273.3	496.9	.545	1.132A	107.8	.912	4.4	22.2	23.6	.333
		10.58	8.47	4.25	2.11	5.54	4.22	14.86	2/1/2	87.1	28.9	15.2	.347	7.543	5.4	143.1	-2.0	99.1D	2.270
4-7300	4-7530	.181	31.5	-24.3	-5.4	1.090	95.5	.222	1.267	328.7	512.9	.985	1.548A	97.2	.737	3.6	49.5	67.4	.102
4-7530	4-7735.5	.191	60.6	30.8	2.8	.637	82.7	.410	1.078	169.2	306.5	.637A	1.519	75.2	1.359	-1.9	-6.4	227.2	.362
4-7735.5	4-7860	.382	246.2	-2.3	-.8	1.248	107.4	.321	.822	273.8	501.8	.558	1.086A	104.9	.901	3.9	24.5	29.2	.288
		10.75	8.48	4.42	2.27	5.69	4.06	14.00	2/1/2	80.6	33.0	19.3	.412	5.958	13.0	145.8	-12.1	101.8D	2.045
4-7310	4-7530	.158	6.4	35.3	4.1	1.092	94.5	.221	1.279	334.6	509.1	.996	1.562A	98.0	.742	-5.9	-15.6	82.3	.119
4-7530	4-7736.6	.186	58.7	31.7	3.1	.642	83.2	.398	1.085	169.5	311.8	.653A	1.518	76.8	1.361	-2.1	-7.7	226.3	.353
4-7736.6	4-7870	.353	250.9	.2	.0	1.240	106.2	.297	.810	274.3	507.5	.569	1.050A	102.1	.892	3.4	26.2	33.6	.247
		10.66	8.09	4.14	2.56	5.98	3.95	13.30	1/1/2	76.7	38.4	23.8	.481	4.845	19.9	148.3	-19.5	103.7D	1.851
4-7320	4-7530	.132	14.6	19.9	1.5	1.094	93.5	.221	1.290	340.7	505.7	1.005	1.575A	98.7	.747	-3.3	-1.1	87.6	.099
4-7530	4-7741.2	.183	57.0	32.7	3.4	.645	83.6	.390	1.091	169.7	316.2	.666A	1.516	78.1	1.362	-2.3	-9.2	229.0	.331
4-7741.2	4-7880	.331	254.9	2.7	.7	1.234	105.2	.278	.800	274.6	513.6	.578	1.023A	99.3	.886	3.0	27.4	36.2	.211
		9.95	7.73	3.85	2.23	5.65	3.87	12.74	1/1/2	68.3	45.7	28.4	.548	4.077	25.2	150.5	-24.9	104.9D	1.687
4-7330	4-7530	.121	14.9	15.6	.9	1.096	92.3	.222	1.300	347.4	502.8	1.012	1.588A	99.3	.751	-2.7	3.2	92.6	.097
4-7530	4-7743.2	.181	55.7	33.5	3.6	.648	83.8	.384	1.095	169.9	319.5	.674A	1.516	79.1	1.363	-2.5	-10.6	229.3	.315
4-7743.2	4-7890	.315	258.0	5.0	1.3	1.229	104.4	.264	.793	274.8	520.9	.584	1.003A	96.6	.880	2.6	27.8	35.8	.181
		9.77	7.58	3.75	2.19	5.62	3.83	12.32	1/1/2	62.5	55.7	32.6	.605	3.564	29.2	152.2	-29.0	105.7D	1.550
4-7340	4-7530	.116	12.1	12.4	.7	1.097	91.0	.223	1.308	354.6	500.5	1.016	1.600A	99.7	.754	-2.4	5.3	96.6	.098
4-7530	4-7744.3	.180	55.0	34.1	3.8	.649	84.0	.381	1.097	170.0	321.4	.679A	1.515	79.6	1.363	-2.6	-11.6	229.4	.307
4-7744.3	4-7900	.307	260.0	7.1	1.8	1.225	104.0	.255	.788	274.5	529.0	.587	.990A	93.7	.875	2.4	26.9	31.3	.159
		9.71	7.51	3.69	2.20	5.62	3.81	12.05	1/1/2	58.1	69.7	35.7	.638	3.262	32.0	153.3	-31.9	105.7D	1.443
4-7350	4-7530	.115	7.2	9.0	.6	1.099	89.5	.226	1.313	2.6	138.9	1.017D	1.609A	100.1	.756	-2.2	6.7	99.8	.099
4-7530	4-7744.0	.181	55.2	33.9	3.7	.649	83.9	.382	1.097	170.0	321.0	.678A	1.515	79.5	1.363	-2.6	-11.3	229.4	.309
4-7744.0	4-7910	.309	260.2	8.7	2.3	1.222	104.1	.255	.784	273.3	538.4	.584	.984A	90.5	.871	2.4	24.0	21.9	.151
		9.73	7.51	3.69	2.22	5.65	3.82	11.96	1/1/2	54.9	88.5	36.6	.630	3.183	33.6	154.0	-33.6	104.6D	1.375
4-7360	4-7530	.123	1.3	5.4	.5	1.099	87.9	.229	1.313	11.5	138.3	1.013D	1.614A	100.4	.756	-2.1	7.9	101.5	.101
4-7530	4-7741.3	.183	56.9	32.7	3.4	.645	83.6	.389	1.091	169.8	316.4	.666A	1.516	78.2	1.362	-2.3	-9.3	229.0	.330
4-7741.3	4-7920	.330	257.5	9.7	2.7	1.220	105.1	.270	.780	270.3	549.9	.569	.990	86.4	.866	2.6	18.4	9.4	.169
		9.89	7.65	3.76	2.26	5.68	3.87	12.17	1/1/2	53.0	111.4	34.1	.552	3.413	34.2	153.4	-34.2	101.4D	1.332

MARS ARRIVAL DATE = 2447540 (13 JAN 1989)

4-7270	4-7540	.197	6.5	-2.5	-.9	1.086	98.7	.236	1.230	311.6	530.1	.940	1.521A	93.0	.713	-1.1	10.7	46.9	.108
4-7540	4-7724.8	.217	64.9	27.8	2.1	.601	83.0	.466	1.042	171.8	286.6	.557A	1.528	68.5	1.349	-1.2	-3.0	222.3	.507
4-7724.8	4-7830	.507	229.9	-8.9	-3.8	1.289	112.5	.424	.896	272.7	487.8	.516	1.276A	114.4	.948	5.7	16.9	10.8	.441
		11.68	9.51	4.65	2.37	5.79	4.66	17.18	2/1/2	110.9	22.8	9.5	.234	12.073	38.4	140.7	37.7	89.9L	2.592
4-7280	4-7540	.162	12.2	-2.2	-1.2	1.087	97.7	.230	1.242	316.9	525.7	.956	1.528A	94.2	.719	-.7	14.1	53.6	.099
4-7540	4-7729.0	.205	62.0	28.3	2.3	.612	83.9	.443	1.057	172.2	293.7	.588A	1.525	71.0	1.353	-1.3	-3.6	224.9	.459
4-7729.0	4-7840	.459	236.1	-7.0	-2.7	1.273	110.6	.386	.865	273.3	491.7	.531	1.199A	111.2	.930	5.1	19.9	17.7	.387
		11.06	8.84	4.45	2.22	5.64	4.39	15.98	2/1/2	103.8	25.3	11.6	.285	9.863	17.7	142.2	16.8	94.9D	2.526
4-7290	4-7540	.170	18.1	-4.2	-1.7	1.089	96.7	.226	1.254	322.3	521.5	.971	1.537A	95.2	.724	-.2	19.9	60.3	.092
4-7540	4-7732.8	.197	59.3	28.8	2.4	.621	84.7	.425	1.069	172.7	300.3	.615A	1.523	73.2	1.357	-1.4	-4.4	227.0	.416
4-7732.8	4-7850	.418	241.9	-4.8	-1.7	1.260	108.9	.352	.842	273.8	496.0	.546	1.138A	108.1	.915	4.4	22.5	24.2	.337
		10.58	8.47	4.28	2.11	5.54	4.19	14.95	2/1/2	96.3	28.4	14.9	.344	7.731	5.0	144.6	1.7	98.9D	2.317
4-7300	4-7540	.165	26.5	-13.7	-3.4	1.090	95.7	.223	1.265	328.0	517.5	.984	1.547A	96.1	.729	1.6	35.1	65.6	.090
4-7540	4-7736.3	.191	56.9	29.3	2.6	.628	85.3	.411	1.079	173.1	306.3	.636A	1.522	75.1	1.359	-1.5	-5.3	228.6	.383
4-7736.3	4-7860	.383	247.2	-2.4	-.8	1.250	107.5	.323	.825	274.2	501.0	.559	1.091A	105.2	.904	3.9	24.6	29.9	.291
		10.35	8.27	4.22	2.08	5.51	4.05	14.07	2/1/2	88.6	32.4	18.8	.410	6.117	9.6	147.3	-8.8	101.6D	2.100
4-7320	4-7540	.142	9.2	32.8	3.3	1.093	93.5	.220	1.287	340.3	510.5	1.004	1.569A	97.6	.738	-5.0	-12.7	84.3	.108
4-7540	4-7741.9	.183	53.1	30.5	3.0	.637	86.0	.391	1.093	173.8	316.1	.665A	1.520	78.0	1.362	-1.8	-7.4	230.2	.331
4-7741.9	4-7880	.331	255.8	2.7	.8	1.234	105.1	.278	.802	275.0	513.0	.579	1.025A	99.5	.887	2.9	27.5	37.2	.213
		10.20	7.84	3.96	2.36	5.78	3.88	12.77	1/1/2	78.4	44.8	27.5	.549	4.203	21.8	152.1	-21.7	104.9D	1.757
4-7330	4-7540	.123	12.8	22.0	1.7	1.095	92.3	.219	1.296	347.0	507.7	1.011	1.560A	98.2	.741	-3.4	-2.9	89.0	.095
4-7540	4-7743.9	.181	51.9	31.0	3.2	.640	86.3	.385	1.097	174.0	319.4	.674A	1.519	79.0	1.363	-2.0	-8.4	230.4	.315
4-7743.9	4-7890	.315	256.9	5.1	1.3	1.229	104.4	.264	.795	275.1	520.2	.585	1.004A	96.8	.881	2.6	27.9	37.0	.182
		9.77	7.60	3.77	2.16	5.58	3.84	12.34	1/1/2	71.9	54.6	31.5	.607	3.686	25.7	153.9	-25.6	105.6D	1.629
4-7340	4-7540	.116	10.8	16.7	1.2	1.096	91.0	.220	1.302	354.4	505.6	1.016	1.589A	98.6	.744	-2.8	1.2	93.2	.092
4-7540	4-7745.0	.181	51.1	31.4	3.3	.641	86.4	.382	1.099	174.2	321.4	.679A	1.519	79.6	1.364	-2.1	-9.1	230.4	.306
4-7745.0	4-7900	.306	260.9	7.1	1.8	1.226	103.9	.255	.789	274.6	528.3	.588	.990A	93.9	.876	2.4	27.2	32.7	.160
		9.63	7.51	3.69	2.12	5.54	3.82	12.06	1/1/2	67.1	68.4	34.4	.642	3.361	28.5	155.2	-28.5	105.7D	1.529
4-7350	4-7540	.114	8.1	12.1	.9	1.097	89.6	.222	1.306	2.4	144.1	1.017D	1.596A	99.0	.746	-2.5	3.7	96.3	.092
4-7540	4-7744.9	.181	51.2	31.3	3.3	.641	86.4	.383	1.099	174.2	321.1	.678A	1.519	79.5	1.364	-2.1	-9.0	230.4	.307 *
4-7744.9	4-7910	.307	261.3	8.8	2.3	1.223	104.0	.253	.785	273.8	537.6	.586	.984A	90.8	.872	2.3	24.4	23.7	.150 ○
		9.62	7.50	3.68	2.12	5.54	3.82	11.95	1/1/2	63.7	86.9	35.5	.638	3.281	30.4	155.8	-30.4	104.7D	1.456
4-7360	4-7540	.121	.5	7.7	.8	1.097	87.9	.225	1.307	11.4	143.5	1.013D	1.600A	99.3	.746	-2.3	5.5	98.1	.093
4-7540	4-7742.7	.183	52.6	30.7	3.1	.638	86.1	.389	1.094	173.9	317.3	.669A	1.520	78.4	1.363	-1.9	-7.7	230.3	.325
4-7742.7	4-7920	.325	259.2	9.8	2.7	1.221	104.8	.266	.781	271.1	546.8	.574	.989	86.9	.867	2.5	19.2	11.8	.165
		9.74	7.60	3.74	2.13	5.56	3.86	12.12	1/1/2	61.6	109.1	35.7	.570	3.450	31.7	155.3	-31.7	101.9D	1.397

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2447540
13 JAN 1989

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-7370	4-7540	.137	355.5	3.9	.7	1.097	86.1	.230	1.302	21.3	143.8	1.003D	1.601A	99.5	.744	-2.1	7.2	98.6	.095
4-7540	4-7725.5	.215	64.6	27.9	2.1	.603	83.1	.463	1.044	171.9	287.3	.560A	1.527	68.8	1.349	-1.2	-3.1	222.6	.502
4-7725.5	4-7930	.502	239.4	9.5	4.3	1.215	113.4	.402	.768	254.7	570.3	.459	1.077	72.7	.893	4.7	8.8	351.6	.339
		10.69	8.53	3.90	2.17	5.59	4.63	14.98	1/1/2	61.0	140.9	21.0	.239	5.492	37.3	143.4	-37.1	66.3L	1.073
4-7370	4-7540	.137	355.5	3.9	.7	1.097	86.1	.230	1.302	21.3	143.8	1.003D	1.601A	99.5	.744	-2.1	7.2	98.6	.095
4-7540	4-7733.5	.196	58.9	28.9	2.5	.623	84.8	.422	1.071	172.8	301.5	.619A	1.523	73.6	1.357	-1.4	-4.6	227.4	.411
4-7733.5	4-7930	.411	248.9	10.0	3.5	1.218	109.0	.332	.774	262.3	564.6	.517	1.051	78.8	.858	3.5	11.8	357.7	.253
		10.22	8.06	3.90	2.17	5.59	4.16	13.39	1/1/2	61.0	134.1	25.9	.357	4.456	34.4	150.0	-34.2	93.6D	1.232
MARS ARRIVAL DATE = 2447550 (23 JAN 1989)																			
4-7270	4-7550	.203	7.5	-2.7	-1.0	1.087	99.0	.241	1.233	310.3	534.1	.936	1.530A	91.9	.706	-1.0	11.2	45.1	.113
4-7550	4-7725.6	.218	61.3	27.0	2.0	.593	86.1	.468	1.043	175.5	286.2	.555A	1.531	68.3	1.349	-1.0	-2.5	223.7	.510
4-7725.6	4-7830	.510	230.9	-9.1	-3.9	1.292	112.6	.427	.902	273.2	487.0	.516	1.268A	114.7	.952	5.8	17.2	11.2	.447
		11.88	9.43	4.73	2.46	5.87	4.69	17.31	2/1/2	117.7	22.5	9.7	.231	11.835	43.1	142.7	42.5	89.4L	2.503
4-7280	4-7550	.187	13.2	-2.4	-1.3	1.086	98.0	.234	1.244	315.8	529.8	.953	1.534A	93.1	.711	-.6	14.4	50.9	.102
4-7550	4-7729.7	.208	58.2	27.2	2.2	.604	86.9	.445	1.059	176.1	293.5	.587A	1.530	70.9	1.354	-1.1	-3.0	226.2	.462
4-7729.7	4-7840	.462	237.1	-7.2	-2.8	1.276	110.7	.388	.870	273.7	490.9	.532	1.207A	111.5	.953	5.2	20.1	18.1	.392
		11.23	8.96	4.51	2.27	5.70	4.45	16.09	2/1/2	111.5	24.9	11.6	.282	9.879	21.6	143.6	21.0	94.6D	2.505
4-7290	4-7550	.173	18.9	-3.8	-1.7	1.089	96.9	.228	1.255	321.5	525.7	.968	1.541A	94.1	.716	-.1	19.5	56.9	.094
4-7550	4-7733.5	.200	55.2	27.4	2.3	.614	87.6	.427	1.072	176.7	300.2	.614A	1.529	73.1	1.357	-1.2	-3.8	228.2	.419
4-7733.5	4-7850	.419	242.9	-4.9	-1.7	1.262	109.0	.354	.845	274.2	495.3	.546	1.145A	108.4	.918	4.5	22.7	24.7	.341
		10.73	8.59	4.33	2.14	5.56	4.27	15.03	2/1/2	104.7	27.9	14.7	.342	7.808	6.7	145.9	5.2	98.7D	2.326
4-7300	4-7550	.164	25.6	-9.9	-2.8	1.090	95.8	.224	1.266	327.1	521.8	.982	1.549A	95.1	.721	1.0	30.0	62.4	.089
4-7550	4-7737.0	.195	52.7	27.6	2.5	.621	88.1	.412	1.082	177.3	306.4	.636A	1.528	75.1	1.360	-1.2	-4.3	229.6	.384
4-7737.0	4-7860	.384	248.1	-2.4	-.8	1.251	107.5	.324	.827	274.6	500.3	.559	1.095A	105.4	.906	3.9	24.8	30.5	.295
		10.42	8.35	4.21	2.07	5.49	4.14	14.13	2/1/2	97.6	31.8	18.6	.408	6.196	6.7	148.5	-5.7	101.6D	2.122
4-7310	4-7550	.203	42.8	-35.0	-8.0	1.091	94.8	.221	1.276	333.1	518.2	.994	1.558A	95.9	.726	6.3	64.2	60.2	.118
4-7550	4-7740.0	.191	50.6	27.9	2.6	.627	88.5	.401	1.090	177.8	311.7	.653A	1.528	76.7	1.362	-1.3	-5.0	230.5	.354
4-7740.0	4-7870	.354	252.7	.2	.1	1.242	106.2	.299	.814	275.0	506.0	.570	1.057A	102.5	.896	3.4	26.5	35.2	.252
		11.34	8.79	4.74	2.55	5.96	4.05	13.39	2/1/2	90.5	37.0	22.8	.479	5.056	13.5	151.1	-13.3	103.6D	1.944
4-7330	4-7550	.131	8.9	31.8	3.0	1.094	92.4	.218	1.293	346.5	512.4	1.011	1.576A	97.1	.733	-4.6	-11.4	65.6	.100
4-7550	4-7744.5	.187	47.7	28.4	2.9	.634	89.0	.387	1.101	178.5	319.6	.675A	1.527	79.0	1.364	-1.5	-6.6	231.1	.314
4-7744.5	4-7890	.314	259.7	5.1	1.4	1.230	104.5	.263	.796	275.4	519.5	.586	1.006A	97.0	.882	2.6	28.0	36.1	.184
		10.04	7.80	3.84	2.24	5.66	3.96	12.36	1/1/2	81.1	53.7	30.9	.608	3.756	22.6	155.1	-22.6	105.8D	1.677
4-7340	4-7550	.118	9.0	22.4	1.8	1.095	91.1	.218	1.299	353.9	510.3	1.016	1.583A	97.6	.735	-3.3	-3.8	69.5	.091
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7900	.305	261.7	7.2	1.8	1.226	103.9	.254	.790	275.2	527.6	.590	.991A	94.2	.877	2.3	27.4	34.0	.160
		9.75	7.65	3.71	2.10	5.53	3.94	12.06	1/1/2	76.2	67.2	33.7	.646	3.448	25.4	156.5	-25.4	105.9D	1.561
4-7350	4-7550	.115	5.1	16.0	1.3	1.096	89.6	.220	1.303	2.0	148.9	1.017D	1.589A	98.0	.737	-2.8	.2	92.6	.089
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7910	.305	262.3	6.8	2.3	1.223	103.9	.252	.786	274.2	536.8	.588	.984A	91.1	.873	2.3	24.8	25.3	.149
		9.69	7.62	3.69	2.06	5.49	3.94	11.94	1/1/2	72.6	85.4	34.9	.646	3.335	27.5	157.1	-27.5	105.0D	1.508
4-7360	4-7550	.120	359.9	10.5	1.1	1.096	88.0	.222	1.303	11.0	148.3	1.013D	1.592A	98.2	.737	-2.5	2.9	94.5	.088
4-7550	4-7743.7	.187	48.2	28.3	2.8	.633	89.0	.389	1.099	178.4	318.3	.671A	1.528	78.7	1.364	-1.5	-6.3	231.1	.321
4-7743.7	4-7920	.321	260.6	9.9	2.7	1.221	104.6	.263	.782	271.7	547.5	.577	.988	87.3	.868	2.4	19.8	13.6	.161
		9.76	7.71	3.74	2.06	5.48	3.97	12.07	1/1/2	70.4	107.2	33.5	.585	3.468	29.3	156.8	-29.2	102.4D	1.443
4-7370	4-7550	.135	355.2	6.0	.9	1.096	86.2	.227	1.298	20.8	148.6	1.003D	1.593A	98.3	.735	-2.3	5.2	95.0	.089
4-7550	4-7721.6	.230	64.3	26.8	1.9	.580	85.2	.493	1.027	175.0	279.3	.521A	1.533	65.8	1.344	-1.0	-2.2	221.0	.560
4-7721.6	4-7930	.560	235.6	9.4	4.8	1.214	116.3	.446	.766	250.7	572.1	.424	1.108	69.1	.850	5.4	7.5	349.7	.391
		10.95	8.87	3.88	2.08	5.50	4.99	16.08	1/1/2	69.7	143.0	18.6	.192	6.201	38.8	141.1	-38.5	85.6L	.998
4-7370	4-7550	.135	355.2	6.0	.9	1.096	86.2	.227	1.298	20.8	148.6	1.003D	1.593A	98.3	.735	-2.3	5.2	95.0	.089
4-7550	4-7737.1	.195	52.6	27.6	2.5	.621	88.1	.412	1.082	177.3	306.5	.636A	1.528	75.1	1.360	-1.2	-4.3	229.6	.383
4-7737.1	4-7930	.383	253.3	10.2	3.3	1.219	107.6	.310	.777	265.0	561.7	.536	1.018	80.9	.861	3.1	13.4	1.2	.226
		10.10	8.02	3.88	2.08	5.50	4.14	12.96	1/1/2	69.7	130.4	27.6	.410	4.187	32.0	153.2	-31.8	96.0D	1.308
MARS ARRIVAL DATE = 2447560 (2 FEB 1989)																			
4-7280	4-7560	.193	14.1	-2.3	-1.4	1.089	98.3	.238	1.246	314.5	533.7	.949	1.543A	92.0	.705	-.6	14.7	49.3	.107
4-7560	4-7730.3	.215	53.9	25.8	2.1	.599	90.3	.448	1.064	180.3	293.6	.587A	1.540D	70.8	1.355	-.9	-2.4	227.2	.464
4-7730.3	4-7840	.464	236.0	-7.3	-2.8	1.278	110.8	.390	.874	274.0	490.2	.533	1.215A	111.7	.936	5.2	20.3	18.5	.396
		11.57	9.22	4.59	2.35	5.77	4.63	16.19	2/1/2	118.1	24.6	11.8	.280	9.723	25.0	144.8	24.5	94.3D	2.438
4-7290	4-7560	.177	19.7	-3.5	-1.8	1.089	97.2	.232	1.257	320.2	529.7	.966	1.547A	93.1	.710	-.1	19.2	54.6	.097
4-7560	4-7734.1	.209	51.0	25.8	2.2	.609	90.9	.430	1.077	181.1	300.5	.614A	1.540D	73.1	1.359	-.9	-2.9	229.0	.421
4-7734.1	4-7850	.421	243.7	-5.0	-1.8	1.263	109.0	.355	.848	274.5	494.7	.547	1.150A	108.6	.920	4.5	22.8	25.1	.345
		11.05	8.85	4.36	2.19	5.62	4.47	15.10	2/1/2	112.1	27.5	14.8	.339	7.758	9.2	146.9	8.3	98.6D	2.294
4-7300	4-7560	.165	25.6	-7.6	-2.6	1.090	96.1	.226	1.267	326.1	526.0	.980	1.554A	94.0	.714	.8	27.2	59.7	.090
4-7560	4-7737.5	.204	48.5	25.8	2.3	.617	91.3	.415	1.088	181.8	306.7	.636A	1.541D	75.1	1.362	-1.0	-3.4	230.3	.384
4-7737.5	4-7860	.384	248.9	-2.5	-.8	1.252	107.5	.325	.829	274.9	499.7	.560	1.099A	105.6	.907	3.9	24.9	31.0	.297
		10.68	8.59	4.23	2.09	5.51	4.36	14.18	2/1/2	105.6	31.3	18.6	.407	6.183	4.1	149.4	-2.9	101.7D	2.108
4-7310	4-7560	.169	34.8	-21.4	-4.9	1.091	95.0	.223	1.276	332.2	522.5	.992	1.560A	94.9	.718	3.2	46.9	62.6	.094
4-7560	4-7740.5	.201	46.5	25.8	2.4	.623	91.7	.404	1.097	182.4	312.2	.654A	1.541D	76.7	1.364	-1.1	-4.0	231.0	.354
4-7740.5	4-7870	.354	253.5	.2	.1	1.243	106.2	.300	.815	275.3	505.4	.571	1.059A	102.7	.897	3.4	26.5	35.9	.255
		10.70	8.56	4.28	2.14	5.56	4.29	13.43	2/1/2	98.3	36.4	22.8	.478	5.058	10.7	151.9	-10.5	103.8D	1.941
4-7330	4-7560	.157	359.8	47.5	5.6	1.094	92.5	.218	1.293	345.8	516.9	1.010	1.575A	96.1	.725	-7.2	-23.4	83.3	.123
4-7560	4-7745.0	.198	43.7	25.9	2.6	.630	92.1	.391	1.109	183.3	320.2	.676A	1.542D	79.1	1.367	-1.2	-5.1	231.4	.314
4-7745.0	4-7890	.314	260.4	5.2	1.4	1.231	104.3	.263	.797	275.7	516.9	.587	1.007A	97.2	.883	2.6	28.1	39.0	.185
		10.96	8.34	4.13	2.63	6.04	4.21	12.37	1/1/2	88.6	52.9	30.7	.610	3.773	19.8	156.0	-19.8	106.1D	1.691
4-7340	4-7560	.124	6.3	30.2	2.7	1.095	91.2	.218	1.298	353.3	514.8	1.015	1.581A	96.6	.727	-4.2	-10.3	86.3	.095
4-7560	4-7746.2	.197	43.1	26.0	2.7	.632	92.2	.388	1.111	183.5	322.3	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.2	4-7900	.304	262.5	7.3	1.9	1.227	103.8	.254	.791	275.5	527.0	.591	.992A	94.3	.878	2.3	27.5	35.2	.161
		10.12	7.96	3.77	2.16	5.58	4.19	12.07	1/1/2	84.5	66.2	33.5	.649	3.466	22.6	157.3	-22.6	106.3D	1.601
4-7350	4-7560	.116	4.0	21.0	1.8	1.095	89.7	.219	1.301	1.4	153.4	1.017D	1.586A	96.9	.729	-3.3	-4.0	89.1	.088
4-7560	4-7746.3	.197	43.1	26.0	2.7	.632	92.2	.387	1.111	183.5	322.4	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.3	4-7910	.304	263.1	8.9	2.3	1.224	103.8	.251	.787	274.5	536.1	.589	.985A	91.3	.874	2.2	25.1	26.7	.149
		9.95	7.89	3.70	2.05	5.48	4.19	11.94	1/1/2	81.1	64.1	34.8	.652	3.347	24.9	158.0	-24.8	105.5D	1.530
4-7360	4-7560	.120	359.4	14.0	1.4	1.096	88.1	.221	1.301	10.3	152.8	1.013D	1.588A	97.2	.728	-2.8	.0	90.9	.086
4-7560	4-7744.6	.198	44.0	25.9	2.6	.630	92.1	.392	1.108	183.2	319.5	.674A	1.542D	78.9	1.366	-1.2	-5.0	231.4	.317
4-7744.6	4-7920	.317	261.7	10.0	2.7	1.222	104.4	.260	.783	272.3	546.6	.579	.987	87.7	.869	2.3	20.4	15.2	.158
		9.97	7.95	3.74	2.02	5.45	4.21	12.04	1/1/2	79.0	105.6	33.6	.596	3.457	26.9	157.8	-26.7	103.1D	1.466
4-7370	4-7560	.134	355.1	6.5	1.2	1.095	86.3	.225	1.296	20.2	153.1	1.004D	1.589A	97.3	.727	-2.4	3.1	91.5	.086
4-7560	4-7739.1	.202	47.5	25.8	2.4	.620	91.5	.410	1.093	182.1	309.5	.645A	1.541D	75.9	1.363	-1.0	-3.7	230.7	.369
4-7739.1	4-7930	.369	255.7	10.3	3.3	1.220	106.9	.299	.779	266.5	559.9	.545	1.012	81.9	.863	2.9	14.3	3.5	.212
		10.22	8.19	3.87	2.03	5.45	4.32	12.76	1/1/2	78.2	128.1	28.6	.441	4.049	29.8	155.1	-29.6	97.4D	1.346
MARS ARRIVAL DATE = 2447570 (12 FEB 1989)																			
4-7280	4-7570	.199	15.1	-2.0	-1.4	1.089	98.7	.244	1.249	313.2	537.4	.945	1.553A	90.8	.699	-.5	15.1	46.5	.113
4-7570	4-7730.9	.229	49.8	24.3	2.1	.597	94.0	.452	1.073	184.9	294.0	.588A	1.557D	70.8	1.358	-.7	-1.9	227.8	.486
4-7730.9	4-7840	.466	238.7	-7.5	-2.9	1.279	110.8	.393	.878	274.3	489.6	.533	1.222A	112.0	.939	5.3	20.5	18.8	.400
		12.09	9.64	4.68	2.45	5.87	4.95	16.27	2/1/2	123.8	24.3	12.2	.277	9.405	27.6	145.7	27.1	94.2D	2.330
4-7290	4-7570	.183	20.5	-2.8	-1.8	1.090	97.5	.236	1.259	319.0	533.6	.962	1.556A	92.0	.703	-.1	19.0	53.2	.102
4-7570	4-7734.6	.223	47.0	24.1	2.1	.607	94.5	.434	1.087	185.9	301.0	.616A	1.559D	75.1	1.362	-.7	-2.2	229.4	.422
4-7734.6	4-7850	.422	244.4	-5.1	-1.8	1.265	109.0	.357	.851	274.8	494.1	.547	1.155A	108.8	.922	4.6	23.0	23.8	.348
		11.53	9.27	4.45	2.26	5.68	4.82	15.16	2/1/2	118.5	27.2	15.2	.356	7.574	11.5	147.8	10.8	98.7D	2.219

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2447570
12 FEB 1989

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-7300	4-7570	.169	25.9	-6.0	-2.4	1.091	96.3	.230	1.269	325.0	529.9	.977	1.560A	93.0	.707	.6	25.5	57.9	.093
4-7570	4-7738.0	.220	44.6	23.6	2.2	.616	94.9	.420	1.099	186.8	307.4	.638A	1.561D	75.1	1.365	-.8	-2.6	230.5	.385
4-7738.0	4-7860	.385	249.5	-2.5	-.8	1.253	107.5	.326	.831	275.2	499.1	.560	1.102A	105.8	.909	3.9	25.0	31.5	.300
		11.13	9.00	4.27	2.13	5.55	4.73	14.23	2/1/2	112.7	30.9	19.0	.405	6.067	2.6	150.0	-.3	101.9D	2.054
4-7310	4-7570	.163	32.7	-15.0	-3.8	1.092	95.2	.225	1.278	331.2	526.5	.991	1.565A	93.8	.711	2.1	38.7	61.5	.090
4-7570	4-7741.0	.217	42.7	23.6	2.3	.622	95.2	.409	1.109	187.6	312.9	.655A	1.562D	76.8	1.367	-.8	-3.0	231.1	.355
4-7741.0	4-7870	.355	254.1	.2	.1	1.244	106.2	.300	.817	275.6	504.8	.572	1.062A	102.9	.899	3.4	26.6	36.4	.256
		10.96	8.87	4.20	2.09	5.51	4.67	13.46	2/1/2	106.1	35.9	23.2	.478	4.980	8.1	152.4	-7.9	104.1D	1.901
4-7340	4-7570	.138	1.1	41.3	4.4	1.095	91.4	.218	1.298	352.4	519.0	1.015	1.581A	95.6	.720	-5.8	-18.6	83.9	.107
4-7570	4-7746.7	.214	39.8	23.5	2.5	.631	95.6	.393	1.123	188.8	323.2	.682A	1.565D	79.9	1.371	-.9	-4.1	231.2	.304
4-7746.7	4-7900	.304	263.1	7.3	1.9	1.227	103.8	.253	.792	275.7	526.5	.591	.993A	94.5	.879	2.3	27.6	36.2	.161
		10.87	8.51	3.92	2.36	5.77	4.59	12.07	1/1/2	91.3	65.3	33.9	.652	3.433	20.0	157.7	-19.9	106.9D	1.587
4-7350	4-7570	.121	2.3	27.5	2.6	1.095	89.9	.219	1.301	.6	157.7	1.017D	1.585A	95.9	.721	-3.9	-8.9	86.1	.091
4-7570	4-7746.8	.214	39.7	23.5	2.5	.631	95.6	.392	1.124	188.8	323.5	.683A	1.564D	79.9	1.371	-.9	-4.1	231.1	.302
4-7746.8	4-7910	.302	263.8	9.0	2.3	1.224	103.7	.250	.788	274.9	535.5	.590	.985A	91.5	.874	2.2	25.3	27.9	.149
		10.43	8.33	3.74	2.10	5.52	4.59	11.93	1/1/2	88.8	63.0	35.1	.657	3.314	22.3	158.4	-22.2	106.2D	1.521
4-7360	4-7570	.121	358.8	18.3	1.9	1.096	88.3	.221	1.301	9.5	157.0	1.014D	1.587A	96.2	.721	-3.1	-3.2	87.7	.086
4-7570	4-7745.3	.215	40.4	23.5	2.4	.629	95.5	.396	1.120	188.5	320.8	.677A	1.564D	79.2	1.370	-.9	-3.8	231.3	.315
4-7745.3	4-7920	.315	262.6	10.1	2.7	1.222	104.3	.259	.784	272.7	545.9	.581	.987	87.9	.870	2.3	20.8	16.5	.156
		10.38	8.36	3.75	2.02	5.45	4.61	12.02	1/1/2	86.9	104.3	34.1	.606	3.410	24.5	158.3	-24.2	103.9D	1.461
4-7370	4-7570	.133	355.1	11.5	1.5	1.095	86.5	.225	1.296	19.2	157.2	1.005D	1.588A	96.5	.719	-2.7	.8	88.3	.085
4-7570	4-7740.5	.218	43.1	23.7	2.3	.621	95.1	.411	1.107	187.4	311.9	.652A	1.562D	76.5	1.367	-.8	-2.9	231.1	.360
4-7740.5	4-7930	.360	257.5	10.5	3.2	1.220	106.5	.293	.780	267.5	558.7	.552	1.008	82.6	.864	2.8	15.0	5.2	.204
		10.56	8.55	3.86	2.01	5.44	4.68	12.63	1/1/2	86.2	126.4	29.5	.463	3.926	27.5	156.2	-27.2	98.6D	1.356
MARS ARRIVAL DATE = 2447580 (22 FEB 1989)																			
4-7290	4-7580	.186	21.4	-2.1	-1.8	1.091	97.8	.241	1.262	317.6	537.2	.958	1.566A	90.9	.697	-.1	19.0	52.7	.107
4-7580	4-7735.1	.245	43.5	22.4	2.1	.610	98.5	.440	1.103	191.1	302.0	.618A	1.568D	73.2	1.367	-.5	-1.6	229.5	.423
4-7735.1	4-7850	.423	245.0	-5.2	-1.8	1.266	109.1	.358	.853	275.0	493.6	.548	1.159A	109.0	.924	4.6	23.1	25.8	.350
		12.22	9.87	4.53	2.35	5.77	5.34	15.22	2/1/2	123.9	26.9	15.9	.336	7.247	13.3	148.0	12.9	98.9D	2.097
4-7300	4-7580	.173	26.5	-4.6	-2.3	1.092	96.6	.233	1.271	323.7	533.6	.975	1.568A	91.9	.701	.5	24.3	56.9	.097
4-7580	4-7738.5	.241	41.4	22.0	2.1	.618	98.8	.426	1.116	192.2	308.5	.640A	1.591D	75.2	1.370	-.6	-1.9	230.4	.386
4-7738.5	4-7860	.386	250.1	-2.5	-.8	1.234	107.5	.327	.833	275.4	498.7	.561	1.105A	106.0	.910	3.9	25.1	31.9	.302
		11.78	9.59	4.32	2.19	5.61	5.27	14.27	2/1/2	118.8	30.6	19.7	.404	5.844	2.9	150.3	1.9	102.3D	1.957
4-7310	4-7580	.162	32.1	-11.0	-3.3	1.092	95.4	.228	1.280	330.0	530.3	.988	1.572A	92.8	.705	1.6	34.0	60.5	.091
4-7580	4-7741.4	.240	39.7	21.8	2.2	.625	99.0	.416	1.126	193.1	314.1	.658A	1.594D	77.0	1.372	-.6	-2.2	230.8	.355
4-7741.4	4-7870	.355	254.6	.2	.1	1.244	106.2	.301	.818	275.8	504.4	.572	1.064A	103.0	.900	3.4	26.7	36.8	.256
		11.52	9.42	4.19	2.11	5.53	5.22	13.48	2/1/2	113.1	35.5	24.0	.477	4.819	5.7	152.6	-5.6	104.7D	1.621
4-7320	4-7580	.176	41.6	-27.7	-8.1	1.093	94.2	.224	1.288	336.6	527.4	1.000	1.576A	93.6	.709	4.5	55.4	61.2	.102
4-7580	4-7743.9	.238	38.5	21.6	2.2	.629	99.1	.408	1.133	193.7	318.8	.671A	1.596D	78.4	1.374	-.6	-2.5	230.8	.331
4-7743.9	4-7880	.331	258.5	2.8	.8	1.237	105.1	.279	.807	276.1	510.8	.581	1.032A	100.2	.891	2.9	27.8	40.0	.219
		11.61	9.55	4.36	2.27	5.69	5.19	12.86	2/1/2	105.0	42.3	28.2	.549	4.110	10.9	154.7	-10.9	106.4D	1.707
4-7350	4-7580	.130	359.2	35.9	3.7	1.096	90.1	.219	1.302	359.6	521.7	1.017	1.587A	95.0	.715	-5.0	-14.9	84.0	.099
4-7580	4-7747.3	.237	37.1	21.4	2.3	.635	99.3	.400	1.142	194.6	325.0	.686A	1.599D	80.2	1.376	-.6	-2.9	230.3	.301
4-7747.3	4-7910	.301	264.5	9.0	2.3	1.225	103.7	.250	.788	275.1	535.1	.591	.985A	91.6	.875	2.1	25.5	26.9	.148
		11.21	8.99	3.83	2.22	5.64	5.16	11.93	1/1/2	95.0	82.0	36.0	.662	3.232	19.9	158.4	-19.6	107.2D	1.477
4-7360	4-7580	.124	358.0	23.6	2.5	1.096	88.5	.221	1.302	8.5	161.0	1.014D	1.589A	95.2	.714	-3.6	-6.9	85.2	.088
4-7580	4-7745.9	.237	37.7	21.5	2.3	.633	99.2	.403	1.139	194.2	322.5	.680A	1.597D	79.5	1.375	-.6	-2.7	230.6	.313
4-7745.9	4-7920	.313	263.4	10.1	2.7	1.222	104.2	.257	.785	273.1	545.3	.583	.986	88.2	.870	2.2	21.1	17.7	.155
		11.00	8.94	3.78	2.06	5.49	5.16	12.00	1/1/2	93.9	103.2	35.0	.614	3.321	22.1	158.4	-21.8	105.0D	1.425
4-7370	4-7580	.133	355.0	15.0	1.9	1.096	86.7	.225	1.298	18.2	161.1	1.006D	1.589A	95.3	.713	-3.0	-1.6	85.7	.085
4-7580	4-7741.5	.239	39.7	21.8	2.2	.625	99.0	.415	1.126	193.1	314.3	.658A	1.594D	77.0	1.372	-.6	-2.2	230.8	.354
4-7741.5	4-7930	.354	256.6	10.6	3.2	1.221	106.2	.288	.781	268.3	557.7	.556	1.005	83.1	.865	2.7	15.5	6.5	.196
		11.10	9.08	3.87	2.02	5.44	5.21	12.55	1/1/2	93.4	125.0	30.6	.480	3.787	25.2	156.7	-24.8	99.8D	1.337
MARS ARRIVAL DATE = 2447590 (4 MAR 1989)																			
4-7360	4-7590	.130	356.4	30.2	3.5	1.097	88.7	.222	1.304	7.4	164.8	1.015D	1.593A	94.2	.708	-4.4	-11.3	83.5	.094
4-7590	4-7746.5	.267	35.7	19.9	2.1	.641	103.2	.413	1.165	200.4	324.7	.684A	1.647D	79.9	1.382	-.4	-1.8	229.3	.311
4-7746.5	4-7920	.311	264.1	10.2	2.7	1.223	104.1	.256	.785	273.4	544.8	.584	.986	88.4	.871	2.2	21.4	16.7	.153
		11.86	9.73	3.83	2.15	5.57	5.90	11.98	1/1/2	99.5	102.2	36.7	.621	3.181	19.8	158.1	-19.3	106.4D	1.354
4-7370	4-7590	.135	354.8	19.5	2.4	1.096	86.9	.225	1.300	16.9	164.8	1.007D	1.593A	94.3	.707	-3.4	-4.3	83.8	.086
4-7590	4-7742.4	.266	37.3	20.1	2.1	.634	103.2	.424	1.153	199.3	317.0	.665A	1.642D	77.6	1.380	-.4	-1.4	229.9	.349
4-7742.4	4-7930	.349	259.9	10.6	3.1	1.221	105.9	.264	.781	268.9	557.0	.559	1.003	83.5	.865	2.6	15.9	7.6	.193
		11.86	9.83	3.86	2.05	5.48	5.95	12.48	1/1/2	99.6	123.9	32.2	.493	3.607	22.8	156.7	-22.2	101.3D	1.286

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2447490
24 NOV 1988

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / APHEL / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2447490 (24 NOV 1988)																			
4-7260	4-7490	.195	354.3	3.0	.9	1.086	96.6	.232	1.220	311.2	512.0	.937	1.502A	97.8	.748	-2.7	3.5	59.6	.118
4-7490	4-7731.6	.225	65.7	34.9	4.3	.680	75.2	.409	1.091	156.1	309.3	.644A	1.537	75.9	1.364	-3.8	-13.5	219.3	.377
4-7731.6	4-7860	.378	241.0	-2.2	-.7	1.241	107.4	.316	.808	271.7	506.1	.553	1.064A	103.4	.890	3.7	23.5	25.3	.270
		12.01	9.47	4.62	2.54	5.95	4.86	13.69	2/1/2	73.6	36.6	24.3	.422	4.754	29.0	136.0	-27.7	103.7D	1.584
4-7270	4-7490	.187	358.0	9.8	1.7	1.088	97.9	.231	1.237	315.7	506.7	.951	1.523A	99.0	.755	-3.5	.5	68.5	.123
4-7490	4-7735.5	.221	63.8	38.5	5.4	.684	75.8	.397	1.098	156.0	315.2	.662A	1.535	77.7	1.365	-4.9	-18.7	220.9	.352
4-7735.5	4-7870	.352	246.5	.2	.0	1.235	106.2	.295	.801	272.6	511.0	.565	1.036A	100.9	.885	3.4	25.5	29.7	.235
		11.91	9.28	4.51	2.63	6.04	4.77	13.10	2/1/2	66.3	42.0	31.4	.485	3.694	38.3	136.9	-36.7	106.4D	1.306
4-7320	4-7490	.142	20.7	4.3	-.5	1.106	93.8	.247	1.334	340.9	483.6	1.004	1.664A	103.4	.793	-1.4	16.0	97.9	.140
4-7490	4-7727.8	.232	67.1	32.4	3.6	.675	74.4	.424	1.083	156.2	303.4	.624A	1.541	74.0	1.362	-3.2	-10.2	217.2	.409
4-7727.8	4-7920	.409	240.4	8.8	3.1	1.214	109.0	.331	.767	261.0	562.4	.513	1.022	79.7	.854	3.7	10.2	351.1	.245
		11.95	9.00	3.96	2.96	6.37	5.04	13.27	1/1/2	34.0	130.7	29.9	.360	3.880	39.8	138.2	-39.8	99.5D	1.036
MARS ARRIVAL DATE = 2447500 (4 DEC 1988)																			
4-7250	4-7500	.206	350.2	-2.9	.2	1.083	99.5	.235	1.202	305.9	522.2	.920	1.484A	95.3	.732	-2.0	4.2	45.9	.115
4-7500	4-7729.0	.221	67.6	32.0	3.2	.663	76.0	.423	1.077	159.1	302.5	.621A	1.533	73.8	1.360	-2.7	-8.7	219.7	.410
4-7729.0	4-7850	.410	236.9	-4.4	-1.5	1.251	108.8	.343	.825	271.7	500.1	.542	1.109A	106.7	.902	4.2	21.4	21.2	.316
		12.02	9.53	4.78	2.49	5.91	4.75	14.54	2/1/2	92.1	31.2	17.7	.357	6.516	15.6	136.7	-14.1	100.4D	1.968
4-7260	4-7500	.195	356.0	.1	.3	1.085	98.7	.231	1.217	310.5	517.0	.936	1.498A	96.5	.739	-2.1	5.4	54.6	.111
4-7500	4-7732.7	.213	66.1	33.9	3.8	.668	76.7	.409	1.086	159.1	308.3	.641A	1.530	75.6	1.362	-3.2	-11.1	221.6	.379
4-7732.7	4-7860	.379	242.4	-2.2	-.7	1.243	107.4	.317	.812	272.3	504.9	.554	1.070A	103.8	.893	3.6	23.8	26.4	.275
		11.61	9.19	4.62	2.42	5.84	4.57	13.77	2/1/2	83.3	35.6	22.5	.420	5.128	24.4	139.1	-23.4	102.9D	1.732
4-7270	4-7500	.184	1.1	3.5	.5	1.087	97.9	.229	1.232	315.2	511.8	.950	1.514A	97.7	.746	-2.3	5.8	63.3	.110
4-7500	4-7736.0	.208	64.5	36.3	4.5	.672	77.3	.398	1.092	159.1	313.7	.658A	1.526	77.3	1.363	-3.8	-14.5	223.0	.352
4-7736.0	4-7870	.352	247.4	.2	.0	1.236	106.2	.295	.802	272.9	510.3	.565	1.039A	101.1	.886	3.4	25.7	30.5	.237
		11.54	8.93	4.47	2.41	5.83	4.46	13.14	2/1/2	74.9	41.3	28.2	.485	4.098	32.2	141.0	-31.2	105.1D	1.501
4-7280	4-7500	.175	4.5	9.7	1.1	1.089	97.1	.228	1.248	319.9	506.9	.963	1.533A	98.8	.753	-3.0	2.9	71.9	.114
4-7500	4-7739.3	.207	62.5	39.8	5.5	.676	77.8	.388	1.098	159.1	319.0	.672A	1.524	78.9	1.365	-4.7	-19.5	224.1	.332
4-7739.3	4-7880	.352	252.4	2.6	.7	1.231	105.2	.278	.796	273.6	515.8	.575	1.017A	98.7	.882	3.0	27.0	33.4	.206
		11.24	8.77	4.35	2.47	5.89	4.42	12.66	2/1/2	67.4	48.2	35.5	.547	3.281	39.8	141.6	-38.5	107.3D	1.247
4-7320	4-7500	.136	19.7	6.0	-.3	1.101	93.6	.237	1.316	341.1	489.5	1.005	1.628A	102.1	.780	-1.6	13.8	96.5	.123
4-7500	4-7734.7	.210	65.2	35.3	4.2	.671	77.1	.402	1.090	159.1	311.5	.652A	1.528	76.6	1.363	-3.5	-13.0	222.5	.362
4-7734.7	4-7920	.362	248.9	9.2	2.8	1.217	106.7	.295	.773	265.9	556.3	.545	1.001	83.4	.859	3.1	14.2	359.2	.200
		11.04	8.40	3.90	2.64	6.06	4.50	12.58	1/1/2	41.3	121.9	34.4	.458	3.385	40.6	144.1	-40.5	99.4D	1.092
MARS ARRIVAL DATE = 2447510 (14 DEC 1988)																			
4-7250	4-7510	.210	351.4	-4.1	-.1	1.083	99.7	.237	1.202	305.0	526.9	.917	1.487A	94.0	.724	-1.8	4.6	41.7	.116
4-7510	4-7730.1	.211	67.1	31.5	3.0	.651	77.8	.423	1.073	162.2	301.7	.619A	1.527	73.6	1.358	-2.3	-7.4	221.9	.412
4-7730.1	4-7850	.412	238.4	-4.5	-1.6	1.254	108.8	.346	.830	272.3	498.9	.543	1.117A	107.1	.906	4.3	21.7	22.1	.322
		11.86	9.35	4.84	2.51	5.93	4.52	14.65	2/1/2	101.4	30.3	16.6	.353	6.915	11.7	139.1	-10.0	99.9D	2.090
4-7260	4-7510	.197	357.3	-1.6	-.1	1.084	98.8	.232	1.216	309.7	521.8	.933	1.498A	95.3	.730	-1.8	6.4	49.9	.109
4-7510	4-7733.7	.203	65.4	33.0	3.4	.657	78.4	.409	1.082	162.2	307.5	.639A	1.524	75.4	1.360	-2.7	-9.3	223.7	.380
4-7733.7	4-7860	.380	243.8	-2.3	-.7	1.244	107.4	.319	.815	272.8	503.8	.556	1.075A	104.2	.896	3.8	24.0	27.4	.279
		11.38	8.99	4.65	2.39	5.81	4.34	13.85	2/1/2	93.1	34.7	21.1	.417	5.453	20.3	141.7	-19.4	102.4D	1.657
4-7270	4-7510	.185	2.9	.6	-.1	1.086	98.0	.229	1.230	314.5	516.8	.948	1.511A	96.5	.737	-1.7	8.1	58.4	.105
4-7510	4-7736.9	.198	63.7	34.8	3.9	.661	79.0	.398	1.088	162.3	312.7	.656A	1.521	77.0	1.362	-3.1	-11.6	225.0	.353
4-7736.9	4-7870	.353	248.6	.2	.0	1.237	106.2	.296	.805	273.4	509.3	.567	1.043A	101.5	.888	3.4	25.9	31.6	.241
		11.01	8.70	4.49	2.31	5.73	4.22	13.19	2/1/2	84.5	40.3	26.2	.484	4.407	27.5	144.0	-26.8	104.3D	1.647
4-7280	4-7510	.174	8.1	2.2	-.2	1.088	97.2	.227	1.244	319.4	511.9	.962	1.526A	97.6	.743	-1.7	10.0	66.7	.102
4-7510	4-7739.7	.195	62.1	36.8	4.5	.665	79.4	.389	1.094	162.4	317.4	.669A	1.519	78.4	1.363	-3.6	-14.6	225.9	.331
4-7739.7	4-7880	.331	252.9	2.6	.7	1.232	105.2	.278	.797	273.8	515.4	.576	1.018A	98.8	.883	3.0	27.1	34.0	.207
		10.76	8.48	4.33	2.28	5.70	4.15	12.68	2/1/2	76.0	47.7	31.8	.547	3.647	33.6	145.6	-32.8	105.9D	1.449
4-7290	4-7510	.163	14.3	-.0	-.9	1.090	96.3	.226	1.259	324.4	507.3	.975	1.544A	98.6	.750	-1.0	15.8	74.3	.101
4-7510	4-7742.1	.194	60.6	39.2	5.1	.668	79.7	.382	1.098	162.4	321.3	.679A	1.518	79.6	1.364	-4.2	-18.2	226.3	.316
4-7742.1	4-7890	.316	256.6	4.9	1.3	1.228	104.5	.264	.791	274.2	522.1	.582	1.000A	96.2	.678	2.7	27.5	33.9	.179
		10.58	8.33	4.20	2.25	5.67	4.13	12.30	2/1/2	67.7	57.4	37.7	.601	3.092	38.8	146.4	-38.0	107.2D	1.257
4-7300	4-7510	.152	14.6	9.0	.4	1.093	95.5	.226	1.274	329.7	502.9	.986	1.563A	99.4	.756	-2.2	8.0	82.3	.106
4-7510	4-7743.9	.195	59.2	41.3	5.8	.669	80.0	.378	1.101	162.6	324.2	.685A	1.516	80.4	1.365	-4.8	-21.6	226.6	.308
4-7743.9	4-7900	.308	259.5	7.0	1.6	1.225	104.0	.256	.788	274.3	529.4	.586	.989A	93.6	.875	2.4	26.8	30.5	.159
		10.54	8.21	4.07	2.33	5.75	4.14	12.05	1/1/2	61.4	70.4	43.1	.635	2.722	42.9	146.8	-41.9	108.1D	1.094
4-7310	4-7510	.142	17.5	8.7	.2	1.095	94.5	.227	1.289	335.2	498.8	.996	1.583A	100.2	.762	-2.0	9.9	88.7	.108
4-7510	4-7743.0	.194	59.9	40.3	5.5	.668	79.9	.380	1.100	162.5	322.8	.682A	1.517	80.0	1.364	-4.5	-19.8	226.5	.312
4-7743.0	4-7910	.312	258.9	8.6	2.2	1.222	104.2	.257	.783	272.7	539.4	.582	.984A	90.2	.870	2.4	23.4	19.8	.152
		10.45	8.09	3.96	2.36	5.78	4.15	11.98	1/1/2	54.9	90.6	42.7	.620	2.745	42.7	147.8	-42.1	106.2D	1.081
4-7320	4-7510	.133	18.6	8.7	.1	1.098	93.5	.229	1.304	341.1	495.2	1.005	1.603A	100.9	.768	-1.9	10.6	94.2	.111
4-7510	4-7737.7	.197	63.3	35.3	4.0	.662	79.1	.395	1.090	162.4	314.0	.659A	1.521	77.4	1.362	-3.2	-12.3	225.3	.347
4-7737.7	4-7920	.347	252.8	9.4	2.8	1.218	105.9	.282	.776	267.9	553.4	.557	.995	84.8	.862	2.9	18.1	3.4	.185
		10.47	8.05	3.86	2.42	5.83	4.19	12.37	1/1/2	49.4	117.4	34.9	.501	3.337	38.9	147.8	-38.9	100.4D	1.170
MARS ARRIVAL DATE = 2447520 (24 DEC 1988)																			
4-7250	4-7520	.215	352.4	-4.9	-.3	1.083	100.0	.241	1.203	303.8	531.5	.913	1.494A	92.7	.717	-1.6	5.1	36.4	.120
4-7520	4-7731.1	.203	65.5	30.8	2.8	.640	79.8	.423	1.070	165.4	301.1	.617A	1.523	73.4	1.357	-2.0	-6.3	223.9	.414
4-7731.1	4-7850	.414	239.7	-4.6	-1.6	1.256	108.9	.348	.834	272.8	497.6	.544	1.125A	107.5	.909	4.3	22.0	22.9	.328
		11.83	9.25	4.92	2.58	5.99	4.33	14.76	2/1/2	109.8	29.6	15.8	.350	7.264	8.1	141.2	-6.0	99.5D	2.193
4-7260	4-7520	.201	356.5	-2.7	-.4	1.084	99.1	.235	1.216	308.7	526.3	.930	1.501A	94.1	.723	-1.8	7.1	45.9	.110
4-7520	4-7734.6	.196	63.5	32.0	3.1	.646	80.4	.409	1.079	165.6	306.9	.638A	1.520	75.3	1.359	-2.2	-7.7	225.6	.361
4-7734.6	4-7860	.381	245.0	-2.3	-.7	1.246	107.4	.320	.819	273.4	502.8	.557	1.081A	104.6	.899	3.8	24.3	26.4	.264
		11.28	8.87	4.71	2.41	5.83	4.16	13.93	2/1/2	102.2	33.8	20.1	.415	5.733	16.5	143.9	-15.7	102.0D	1.963
4-7270	4-7520	.188	4.3	-1.1	-.5	1.086	98.2	.230	1.229	313.7	521.5	.946	1.511A	95.3	.729	-1.4	9.4	53.7	.103
4-7520	4-7737.8	.191	61.7	33.3	3.4	.651	81.0	.398	1.086	165.8	312.1	.654A	1.518	76.9	1.361	-2.5	-9.5	226.8	.353
4-7737.8	4-7870	.353	249.8	.2	.0	1.239	106.2	.297	.807	273.8	508.3	.568	1.047A	101.8	.890	3.4	26.0	32.7	.244
		10.85	8.56	4.52	2.29	5.71	4.04	13.25	2/1/2	94.1	39.3	24.8	.483	4.654	23.5	146.4	-22.9	105.9D	1.765
4-7280	4-7520	.175	9.9	-.5	-.7	1.087	97.3	.226	1.242	318.7	516.8	.961	1.523A	96.4	.735	-1.2	12.5	61.7	.098
4-7520	4-7740.4	.187	60.1	34.7	3.8	.655	81.3	.389	1.092	165.9	316.6	.667A	1.517	78.2	1.362	-2.8	-11.5	227.5	.331
4-7740.4	4-7880	.331	253.9	2.6	.7	1.233	105.2	.278	.799	274.2	514.6	.577	1.020A	99.0	.884	3.0	27.2	35.1	.209
		10.53	8.53	4.36	2.21	5.63	3.97	12.71	2/1/2	85.7	46.7	29.8	.548	3.894	29.0	148.3	-28.6	105.2D	1.585
4-7290	4-7520	.165	16.5	-3.8	-1.5	1.089	96.4	.224	1.256	323.9	512.3	.974	1.538A	97.4	.741	-.3	19.9	69.2	.094
4-7520	4-7742.8	.185	58.8	36.1	4.2	.657	81.7	.383	1.095	166.1	320.0	.676A	1.515	79.2	1.363	-3.2	-13.6	227.9	.316
4-7742.8	4-7890	.316	257.1	5.0	1.3	1.228	104.5	.264	.792	274.4	521.6	.583	1.001A	96.3	.879	2.7	27.6	34.6	.180
		10.31	8.15	4.23	2.15	5.58	3.93	12.31	2/1/2	77.4	56.8	34.4	.602	3.381	33.3	149.8	-32.9	106.1D	1.434
4-7310	4-7520	.142	14.8	16.1	1.2	1.093	94.5	.223	1.283	335.0	504.1	.996	1.570A	99.1	.752	-3.0	1.9	85.4	.103
4-7520	4-7743.3	.185	58.3	36.6	4.3	.658	81.7	.381	1.097	166.1	321.2	.679A	1.515	79.6	1.363	-3.3	-14.4	228.0	.311
4-7743.3	4-7910	.311	259.2	8.8	2.2	1.222	104.2	.256	.783	272.8	539.2	.582	.984A	90.3	.870	2.4	23.5	20.2	.152
		10.16	7.87	3.95	2.29	5.71	3.92	11.97	1/1/2	64.9	90.2	38.5	.622	3.031	37.3	151.5	-37.1	104.9D	1.263
4-7320	4-7520	.131	17.1	13.0	.6	1.095	93.4	.224	1.296	341.0	500.6	1.009	1.586A	99.8	.757	-2.4	6.0	91.1	.102
4-7520	4-7739.7	.186	60.6	34.3	3.7	.654	81.3	.391	1.090	165.9	315.4	.663A	1.517	77.9	1.362	-2.7	-10.8	227.4	.337
4-7739.7	4-7920	.337	255.4	9.5	2.7	1.219	105.4	.275	.778	269.2	551.5	.564	.992	85.7	.864	2.7	17.4	6.7	.176
		10.10	7.82	3.84	2.27	5.70	3.99	12.25	1/1/2	58.4	114.1	34.6	.530	3.367	36.7	150.9	-36.7	101.0D	1.254
MARS ARRIVAL DATE = 2447530 (3 JAN 1989)																			
4-7250	4-7530	.222	353.5	-5.4	-.5	1.084	100.4	.247	1.205	302.8	535.5	.907	1.503A	91.5	.709	-1.5	5.7	36.2	.126
4-7530	4-7732.0	.198	62.8	29.9	2.6	.630	82.1	.424	1.069	166.9	300.6	.616A	1.522	73.3	1.357	-1.7	-5.5	225.6	.416
4-7732.0	4-7850	.416	240.9	-4.7	-1.7	1.258	108.9	.350	.838	273.5	496.9	.545	1.132A	107.8	.912	4.4	22.2	23.6	.333
		11.93	9.24	5.02	2.69	6.10	4.22	14.86	2/1/2	117.2	28.9	15.2	.347	7.543	5.4	143.1	-2.0	99.1D	2.270

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 600 DAYS | MARS ARRIVAL DATE = 2447530 | 3 JAN 1989

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7260	4-7530	.206	359.6	-3.4	-.6	1.085	99.4	.239	1.217	307.6	530.6	.926	1.507A	92.9	.715	-1.4	7.7	42.8	.114
4-7530	4-7735.5	.191	60.6	30.8	2.8	.657	82.7	.410	1.078	169.2	306.5	.637A	1.519	75.2	1.359	-1.9	-6.4	227.2	.382
4-7735.5	4-7860	.382	246.2	-2.3	-.8	1.248	107.4	.321	.822	273.8	501.8	.558	1.086A	104.9	.901	3.9	24.5	29.2	.266
		11.31	8.84	4.78	2.47	5.89	4.06	14.00	2/1/2	110.4	33.0	19.3	.412	5.958	13.0	145.8	-12.1	101.6D	2.045
4-7270	4-7530	.192	5.4	-2.0	-.7	1.086	98.4	.232	1.229	312.7	525.9	.943	1.515A	94.2	.721	-1.2	10.1	49.8	.104
4-7530	4-7738.6	.186	58.7	31.7	3.1	.642	83.2	.398	1.085	169.5	311.8	.653A	1.518	76.8	1.361	-2.1	-7.7	228.3	.353
4-7738.6	4-7870	.353	250.9	.2	.0	1.240	106.2	.297	.810	274.3	507.5	.569	1.050A	102.1	.892	3.4	26.2	33.6	.247
		10.83	8.52	4.58	2.31	5.73	3.95	13.30	2/1/2	103.0	38.4	23.8	.481	4.845	19.9	148.3	-19.5	103.7D	1.651
4-7280	4-7530	.178	11.2	-1.7	-1.0	1.087	97.4	.228	1.242	317.9	521.4	.959	1.524A	95.3	.726	-.9	13.6	57.2	.097
4-7530	4-7741.2	.183	57.0	32.7	3.4	.645	83.6	.390	1.091	169.7	316.2	.666A	1.516	78.1	1.362	-2.3	-9.2	229.0	.331
4-7741.2	4-7880	.331	254.9	2.7	.7	1.234	105.2	.278	.800	274.6	513.8	.578	1.023A	99.3	.886	3.0	27.4	36.2	.211
		10.46	8.27	4.39	2.19	5.62	3.87	12.74	2/1/2	95.1	45.7	28.4	.548	4.077	25.2	150.5	-24.9	104.9D	1.687
4-7290	4-7530	.167	17.4	-4.2	-1.6	1.089	96.5	.224	1.254	323.2	517.0	.973	1.536A	96.3	.732	-.2	20.2	64.4	.092
4-7530	4-7743.2	.181	55.7	33.5	3.6	.648	83.8	.384	1.095	169.9	319.5	.674A	1.516	79.1	1.363	-2.5	-10.6	229.3	.315
4-7743.2	4-7890	.315	256.0	5.0	1.3	1.229	104.4	.264	.793	274.8	520.9	.584	1.003A	96.6	.880	2.6	27.8	35.8	.181
		10.19	8.08	4.25	2.11	5.54	3.83	12.32	2/1/2	87.1	55.7	32.6	.605	3.564	29.2	152.2	-29.0	105.7D	1.550
4-7300	4-7530	.181	31.5	-24.3	-5.4	1.090	95.5	.222	1.267	328.7	512.9	.985	1.548A	97.2	.737	3.6	49.5	67.4	.102
4-7530	4-7744.5	.180	55.0	34.1	3.8	.649	84.0	.381	1.097	170.0	321.4	.679A	1.515	79.6	1.363	-2.6	-11.6	229.4	.307
4-7744.5	4-7900	.307	260.0	7.1	1.8	1.225	104.0	.255	.788	274.5	529.0	.587	.990A	93.7	.875	2.4	26.9	31.3	.159
		10.50	8.24	4.42	2.27	5.69	3.81	12.05	2/1/2	80.6	69.7	35.7	.638	3.262	32.0	153.3	-31.9	107.7D	1.443
4-7310	4-7530	.158	6.4	35.3	4.1	1.092	94.5	.221	1.279	334.6	509.1	.996	1.562A	98.0	.742	-5.9	-15.6	82.3	.119
4-7530	4-7744.0	.181	55.2	33.9	3.7	.649	83.9	.382	1.097	170.0	321.0	.678A	1.515	79.5	1.363	-2.6	-11.3	229.4	.309
4-7744.0	4-7910	.309	260.2	8.7	2.3	1.222	104.1	.255	.784	273.3	538.4	.584	.984A	90.5	.871	2.4	24.0	21.9	.151
		10.52	7.96	4.14	2.56	5.98	3.82	11.96	1/1/2	76.7	88.5	36.6	.630	3.183	33.6	154.0	-33.6	104.6D	1.375
4-7320	4-7530	.132	14.6	19.9	1.5	1.094	93.5	.221	1.290	340.7	505.7	1.005	1.575A	98.7	.747	-3.3	-1.1	87.6	.099
4-7530	4-7741.3	.183	56.9	32.7	3.4	.645	83.6	.389	1.091	169.8	316.4	.666A	1.516	78.2	1.362	-2.3	-9.3	229.0	.330
4-7741.3	4-7920	.330	257.5	9.7	2.7	1.220	105.1	.270	.780	270.3	549.9	.569	.990	86.4	.866	2.6	18.4	9.4	.169
		9.95	7.72	5.85	2.23	5.65	3.87	12.17	1/1/2	68.3	111.4	34.1	.552	3.413	34.2	155.4	-34.2	101.4D	1.332

MARS ARRIVAL DATE = 2447540 (13 JAN 1989)

4-7250	4-7540	.230	354.5	-5.7	-.7	1.084	100.9	.254	1.208	301.2	539.4	.901	1.514A	90.2	.702	-1.4	6.4	35.0	.133
4-7540	4-7732.8	.197	59.3	28.8	2.4	.621	84.7	.425	1.069	172.7	300.3	.615A	1.523	73.2	1.357	-1.4	-4.4	227.0	.418
4-7732.8	4-7850	.418	241.9	-4.8	-1.7	1.260	108.9	.352	.842	273.8	496.0	.546	1.138A	108.1	.915	4.4	22.5	24.2	.337
		12.17	9.34	5.15	2.83	6.24	4.19	14.95	2/1/2	123.4	28.4	14.9	.344	7.731	5.0	144.6	1.7	98.9D	2.317
4-7260	4-7540	.213	.6	-3.8	-.7	1.085	99.7	.244	1.219	306.4	534.7	.922	1.516A	91.7	.708	-1.3	8.3	40.7	.119
4-7540	4-7736.3	.191	58.9	29.3	2.6	.628	85.3	.411	1.079	173.1	306.3	.636A	1.522	75.1	1.359	-1.5	-5.3	228.6	.383
4-7736.3	4-7860	.383	247.2	-2.4	-.8	1.250	107.5	.323	.825	274.2	501.0	.559	1.091A	105.2	.904	3.9	24.6	29.9	.291
		11.49	8.93	4.88	2.57	5.98	4.05	14.07	2/1/2	117.4	32.4	18.8	.410	6.117	9.6	147.3	-8.8	101.6D	2.100
4-7270	4-7540	.197	6.5	-2.5	-.9	1.086	98.7	.236	1.230	311.6	530.1	.940	1.521A	93.0	.713	-1.1	10.7	46.9	.108
4-7540	4-7739.3	.186	54.8	29.9	2.8	.633	85.7	.399	1.087	173.5	311.6	.653A	1.521	76.7	1.361	-1.7	-6.3	229.6	.354
4-7739.3	4-7870	.354	251.9	.2	.0	1.241	106.2	.298	.812	274.7	506.7	.570	1.054A	102.3	.894	3.4	26.3	34.5	.250
		10.96	8.59	4.65	2.37	5.79	3.94	13.35	2/1/2	110.9	37.6	23.2	.480	4.982	16.6	149.9	-16.3	103.6D	1.913
4-7280	4-7540	.182	12.2	-2.2	-1.2	1.087	97.7	.230	1.242	316.9	525.7	.956	1.528A	94.2	.719	-.7	14.1	53.6	.099
4-7540	4-7741.9	.183	53.1	30.5	3.0	.637	86.0	.391	1.093	173.8	316.1	.665A	1.520	78.0	1.362	-1.8	-7.4	230.2	.331
4-7741.9	4-7880	.331	255.8	2.7	.8	1.234	105.1	.278	.802	275.0	513.0	.579	1.025A	99.5	.887	2.9	27.5	37.2	.213
		10.54	8.32	4.45	2.22	5.64	3.88	12.77	2/1/2	103.8	44.8	27.5	.549	4.203	21.8	152.1	-21.7	104.9D	1.757
4-7290	4-7540	.170	18.1	-4.2	-1.7	1.089	96.7	.226	1.254	322.3	521.5	.971	1.537A	95.2	.724	-.2	19.9	60.3	.092
4-7540	4-7743.9	.181	51.9	31.0	3.2	.640	86.3	.385	1.097	174.0	319.4	.674A	1.519	79.0	1.363	-2.0	-8.4	230.4	.315
4-7743.9	4-7890	.315	256.9	5.1	1.3	1.229	104.4	.264	.795	275.1	520.2	.585	1.004A	96.8	.881	2.6	27.9	37.0	.182
		10.23	8.12	4.28	2.11	5.54	3.84	12.34	2/1/2	96.3	54.6	31.5	.607	3.686	25.7	153.9	-25.6	105.6D	1.629
4-7300	4-7540	.165	26.5	-13.7	-3.4	1.090	95.7	.223	1.265	328.0	517.5	.984	1.547A	96.1	.729	1.8	35.1	65.6	.090
4-7540	4-7745.0	.181	51.1	31.4	3.3	.641	86.4	.382	1.099	174.2	321.4	.679A	1.519	79.6	1.364	-2.1	-9.1	230.4	.306
4-7745.0	4-7900	.306	260.9	7.1	1.8	1.226	103.9	.255	.789	274.8	528.3	.588	.990A	93.9	.876	2.4	27.2	32.7	.160
		10.13	8.04	4.22	2.08	5.51	3.82	12.06	2/1/2	88.8	68.4	34.4	.642	3.381	28.5	155.2	-28.5	105.7D	1.529
4-7320	4-7540	.142	9.2	32.8	3.3	1.093	93.5	.220	1.287	340.3	510.5	1.004	1.569A	97.6	.738	-5.0	-12.7	84.3	.108
4-7540	4-7742.7	.185	52.6	30.7	3.1	.638	86.1	.389	1.094	173.9	317.3	.669A	1.520	78.4	1.363	-1.9	-7.7	230.3	.325
4-7742.7	4-7920	.325	259.2	9.8	2.7	1.221	104.8	.266	.781	271.1	548.6	.574	.989	86.9	.867	2.5	19.2	11.8	.165
		10.18	7.82	5.96	2.56	5.78	3.86	12.12	1/1/2	78.4	109.1	33.7	.570	3.450	31.7	155.3	-31.7	101.9D	1.397
4-7330	4-7540	.123	12.8	22.0	1.7	1.095	92.3	.219	1.296	347.0	507.7	1.011	1.580A	98.2	.741	-3.4	-2.9	89.0	.095
4-7540	4-7725.5	.215	64.6	27.9	2.1	.603	83.1	.463	1.044	171.9	287.3	.560A	1.527	68.6	1.349	-1.2	-3.1	222.6	.502
4-7725.5	4-7930	.502	239.4	9.5	4.3	1.215	113.4	.402	.768	254.7	570.3	.459	1.077	72.7	.653	4.7	8.6	351.6	.339
		10.56	8.40	3.77	2.16	5.58	4.63	14.98	1/1/2	71.9	140.9	21.0	.239	5.492	37.3	143.4	-37.1	88.3L	1.073
4-7330	4-7540	.123	12.8	22.0	1.7	1.095	92.3	.219	1.296	347.0	507.7	1.011	1.580A	98.2	.741	-3.4	-2.9	89.0	.095
4-7540	4-7733.5	.196	58.9	28.9	2.5	.623	84.8	.422	1.071	172.8	301.5	.619A	1.523	73.6	1.357	-1.4	-4.6	227.4	.411
4-7733.5	4-7930	.411	248.9	10.0	3.5	1.218	109.0	.332	.774	262.3	564.6	.517	1.031	78.8	.858	3.5	11.8	357.7	.253
		10.09	7.93	5.77	2.16	5.58	4.16	13.39	1/1/2	71.9	134.1	25.9	.357	4.456	34.4	150.0	-34.2	93.8D	1.232

MARS ARRIVAL DATE = 2447550 (23 JAN 1989)

4-7260	4-7550	.220	1.6	-4.0	-.9	1.086	100.2	.250	1.222	305.0	538.6	.916	1.527A	90.5	.701	-1.2	8.9	39.6	.126
4-7550	4-7737.0	.195	52.7	27.6	2.5	.621	88.1	.412	1.082	177.3	306.4	.636A	1.526	75.1	1.360	-1.2	-4.3	229.6	.384
4-7737.0	4-7860	.384	248.1	-2.4	-.8	1.251	107.5	.324	.827	274.6	500.3	.559	1.095A	105.4	.906	3.9	24.8	30.5	.295
		11.83	9.14	5.00	2.69	6.11	4.14	14.13	2/1/2	123.5	31.8	18.6	.408	6.196	6.7	148.5	-5.7	101.6D	2.122
4-7270	4-7550	.203	7.5	-2.7	-1.0	1.087	99.0	.241	1.233	310.3	534.1	.936	1.530A	91.9	.706	-1.0	11.2	45.1	.113
4-7550	4-7740.0	.191	50.6	27.9	2.6	.627	88.5	.401	1.090	177.8	311.7	.653A	1.528	76.7	1.362	-1.3	-5.0	230.5	.354
4-7740.0	4-7870	.354	252.7	.2	.1	1.242	106.2	.299	.814	275.0	506.0	.570	1.057A	102.5	.896	3.4	26.5	35.2	.252
		11.24	8.79	4.73	2.46	5.87	4.05	13.59	2/1/2	117.7	37.0	22.8	.479	5.058	13.5	151.1	-13.3	103.6D	1.944
4-7280	4-7550	.187	13.2	-2.4	-1.3	1.088	98.0	.234	1.244	315.8	529.8	.953	1.534A	93.1	.711	-.6	14.4	50.9	.102
4-7550	4-7742.5	.188	48.9	28.2	2.8	.631	88.8	.393	1.097	178.2	316.2	.666A	1.528	78.0	1.364	-1.5	-5.9	231.0	.331
4-7742.5	4-7880	.331	256.7	2.7	.8	1.235	105.1	.279	.803	275.3	512.3	.580	1.027A	99.7	.888	2.9	27.6	38.1	.215
		10.78	8.50	4.51	2.27	5.70	3.99	12.80	2/1/2	111.5	44.0	27.1	.549	4.274	18.7	153.3	-18.7	105.0D	1.797
4-7290	4-7550	.173	18.9	-3.8	-1.7	1.089	96.9	.228	1.255	321.3	525.7	.968	1.541A	94.1	.716	-.1	19.5	56.9	.094
4-7550	4-7744.5	.187	47.7	28.4	2.9	.634	89.0	.387	1.101	178.5	319.6	.675A	1.527	79.0	1.364	-1.5	-6.6	231.1	.314
4-7744.5	4-7890	.314	259.7	5.1	1.4	1.230	104.3	.263	.796	275.4	519.5	.586	1.006A	97.0	.882	2.6	28.0	38.1	.184
		10.42	8.28	4.33	2.14	5.56	3.96	12.36	2/1/2	104.7	53.7	30.9	.608	3.756	22.6	155.1	-22.6	105.6D	1.677
4-7300	4-7550	.164	25.6	-9.9	-2.8	1.090	95.8	.224	1.266	327.1	521.8	.982	1.549A	95.1	.721	1.0	30.0	62.4	.089
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7900	.305	261.7	7.2	1.8	1.226	103.9	.254	.790	275.2	527.6	.590	.991A	94.2	.877	2.3	27.4	34.0	.160
		10.21	8.15	4.21	2.07	5.49	3.94	12.06	2/1/2	97.6	67.2	33.7	.646	3.448	25.4	156.5	-25.4	105.9D	1.581
4-7310	4-7550	.203	42.8	-35.0	-8.0	1.091	94.8	.221	1.276	333.1	518.2	.994	1.558A	95.9	.726	6.3	64.2	60.2	.118
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7910	.305	262.3	8.8	2.3	1.223	103.9	.252	.786	274.2	536.8	.588	.984A	91.1	.873	2.3	24.8	29.3	.149
		11.22	8.68	4.74	2.95	5.96	3.94	11.94	2/1/2	90.5	65.4	34.9	.646	3.335	27.5	157.1	-27.5	105.0D	1.508
4-7330	4-7550	.131	8.9	31.8	3.0	1.094	92.4	.218	1.293	346.5	512.4	1.011	1.576A	97.1	.733	-4.6	-11.4	85.6	.100
4-7550	4-7721.6	.230	64.3	26.8	1.9	.580	85.2	.493	1.027	175.0	279.3	.521A	1.533	65.8	1.344	-1.0	-2.2	221.0	.560
4-7721.6	4-7930	.560	235.6	9.4	4.8	1.214	116.3	.446	.766	250.7	572.1	.424	1.108	69.1	.850	5.4	7.5	349.7	.391
		11.07	8.83	3.84	2.24	5.66	4.99	16.08	1/1/2	81.1	143.0	16.6	.192	6.201	38.8	141.1	-38.5	85.6L	.998
4-7330	4-7550	.131	8.9	31.8	3.0	1.094	92.4	.218	1.293	346.5	512.4	1.011	1.576A	97.1	.733	-4.6	-11.4	85.6	.100
4-7550	4-7737.1	.195	52.6	27.6	2.5	.621	88.1	.412	1.082	177.5	306.5	.636A	1.528	75.1	1.360	-1.2	-4.3	229.6	.383
4-7737.1	4-7930	.383	253.3	10.2	3.3	1.219	107.6	.310	.777	265.0	561.7	.536	1.018	80.9	.861	3.1	13.4	1.2	.226
		10.22	7.98	5.84	2.24	5.66	4.14	12.96	1/1/2	81.1	130.4	27.6	.410	4.187	32.0	153.2	-31.8	98.0D	1.306

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2447560
2 FEB 1989

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2447560 (2 FEB 1989)																			
4-7270	4-7560	.210	8.5	-2.7	-1.2	1.088	99.4	.247	1.235	309.0	537.9	.931	1.540A	90.7	.700	-.9	11.8	44.1	.119
4-7560	4-7740.5	.201	46.5	25.8	2.4	.623	91.7	.404	1.097	182.4	312.2	.654A	1.541D	76.7	1.364	-1.1	-4.0	231.0	.354
4-7740.5	4-7870	.354	253.5	.2	.1	1.243	106.2	.300	.815	275.3	505.4	.571	1.059A	102.7	.897	3.4	26.5	35.9	.255
		11.69	9.13	4.84	2.57	5.98	4.29	13.43	2/1/2	123.6	36.4	22.8	.478	5.058	10.7	151.9	-10.5	103.8D	1.941
4-7280	4-7560	.193	14.1	-2.3	-1.4	1.089	98.3	.238	1.246	314.5	533.7	.949	1.543A	92.0	.705	-.6	14.7	49.3	.107
4-7560	4-7743.1	.199	44.9	25.8	2.5	.627	91.9	.396	1.104	183.0	316.7	.667A	1.541D	78.1	1.366	-1.1	-4.6	231.4	.331
4-7743.1	4-7880	.331	257.4	2.8	.8	1.236	105.1	.279	.805	275.6	511.7	.580	1.029A	99.9	.890	2.9	27.7	38.8	.217
		11.18	8.83	4.59	2.35	5.77	4.24	12.82	2/1/2	118.1	43.3	27.0	.549	4.285	15.9	154.1	-15.9	105.3D	1.803
4-7290	4-7560	.177	19.7	-3.3	-1.8	1.089	97.2	.232	1.257	320.2	529.7	.966	1.547A	93.1	.710	-.1	19.2	54.6	.097
4-7560	4-7745.0	.198	43.7	25.9	2.6	.630	92.1	.391	1.109	183.3	320.2	.676A	1.542D	79.1	1.367	-1.2	-5.1	231.4	.314
4-7745.0	4-7890	.314	260.4	5.2	1.4	1.231	104.3	.263	.797	275.7	518.9	.587	1.007A	97.2	.883	2.6	28.1	39.0	.185
		10.78	8.59	4.38	2.19	5.62	4.21	12.37	2/1/2	112.1	52.9	30.7	.610	3.773	19.8	156.0	-19.8	106.1D	1.691
4-7300	4-7560	.165	25.6	-7.6	-2.6	1.090	96.1	.226	1.267	326.1	526.0	.980	1.554A	94.0	.714	.6	27.2	59.7	.090
4-7560	4-7746.2	.197	43.1	26.0	2.7	.632	92.2	.388	1.111	183.5	322.3	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.2	4-7900	.304	262.5	7.3	1.9	1.227	103.8	.254	.791	275.5	527.0	.591	.992A	94.3	.878	2.3	27.5	35.2	.161
		10.51	8.42	4.23	2.09	5.51	4.19	12.07	2/1/2	105.6	66.2	33.5	.649	3.466	22.6	157.3	-22.6	106.3D	1.601
4-7310	4-7560	.169	34.8	-21.4	-4.9	1.091	95.0	.223	1.276	332.2	522.5	.992	1.560A	94.9	.718	3.2	46.9	62.6	.094
4-7560	4-7746.3	.197	43.1	26.0	2.7	.632	92.2	.387	1.111	183.5	322.4	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.3	4-7910	.304	263.1	8.9	2.3	1.224	103.8	.251	.787	274.5	536.1	.589	.985A	91.3	.874	2.2	25.1	26.7	.149
		10.61	8.47	4.28	2.14	5.56	4.19	11.94	2/1/2	98.3	84.1	34.8	.652	3.347	24.9	158.0	-24.8	105.5D	1.530
4-7330	4-7560	.157	359.8	47.5	5.6	1.094	92.5	.218	1.293	345.8	516.9	1.010	1.575A	96.1	.725	-7.2	-23.4	83.3	.123
4-7560	4-7739.1	.202	47.5	25.8	2.4	.620	91.5	.410	1.093	182.1	309.5	.645A	1.541D	75.9	1.363	-1.0	-3.7	230.7	.369
4-7739.1	4-7930	.369	255.7	10.3	3.3	1.220	106.9	.299	.779	266.5	559.9	.545	1.012	81.9	.863	2.9	14.3	3.5	.212
		11.08	8.45	4.13	2.63	6.04	4.32	12.76	1/1/2	88.6	126.1	28.6	.441	4.049	29.8	155.1	-29.8	97.4D	1.346
MARS ARRIVAL DATE = 2447570 (12 FEB 1989)																			
4-7280	4-7570	.199	15.1	-2.0	-1.4	1.089	98.7	.244	1.249	313.2	537.4	.945	1.553A	90.8	.699	-.5	15.1	48.5	.113
4-7570	4-7743.5	.216	41.3	23.6	2.4	.626	95.4	.401	1.116	188.1	317.5	.668A	1.563D	78.2	1.369	-.8	-3.4	231.4	.331
4-7743.5	4-7880	.331	258.0	2.8	.8	1.237	105.1	.279	.806	275.9	511.3	.581	1.031A	100.1	.890	2.9	27.7	39.5	.218
		11.77	9.32	4.68	2.45	5.87	4.63	12.84	2/1/2	123.8	42.8	27.3	.549	4.232	15.3	154.6	-15.3	105.7D	1.774
4-7290	4-7570	.183	20.5	-2.8	-1.8	1.090	97.5	.236	1.259	319.0	533.6	.962	1.556A	92.0	.703	-.1	19.0	53.2	.102
4-7570	4-7745.5	.214	40.4	23.5	2.4	.629	95.5	.396	1.121	188.5	321.1	.677A	1.564D	79.2	1.370	-.9	-3.8	231.3	.314
4-7745.5	4-7890	.314	261.0	5.2	1.4	1.231	104.3	.263	.798	276.0	518.4	.588	1.008A	97.3	.884	2.5	28.2	39.8	.186
		11.32	9.05	4.45	2.26	5.68	4.60	12.38	2/1/2	118.5	52.2	31.1	.611	3.734	17.1	156.4	-17.1	106.7D	1.671
4-7300	4-7570	.169	25.9	-6.0	-2.4	1.091	96.3	.230	1.269	325.0	529.9	.977	1.560A	93.0	.707	.6	25.5	57.9	.093
4-7570	4-7746.7	.214	39.6	23.5	2.5	.631	95.6	.393	1.123	188.8	323.2	.682A	1.565D	79.9	1.371	-.9	-4.1	231.2	.304
4-7746.7	4-7900	.304	263.1	7.3	1.9	1.227	103.8	.253	.792	275.7	526.5	.591	.993A	94.5	.879	2.3	27.6	36.2	.161
		10.99	8.86	4.27	2.13	5.55	4.59	12.07	2/1/2	112.7	65.3	33.9	.652	3.433	20.0	157.7	-19.9	106.9D	1.587
4-7310	4-7570	.163	32.7	-15.0	-3.8	1.092	95.2	.225	1.278	331.2	526.5	.991	1.565A	93.8	.711	2.1	38.7	61.5	.090
4-7570	4-7746.8	.214	39.7	23.5	2.5	.631	95.6	.392	1.124	188.8	323.5	.683A	1.564D	79.9	1.371	-.9	-4.1	231.1	.302
4-7746.8	4-7910	.302	263.8	9.0	2.3	1.224	103.7	.250	.788	274.9	535.5	.590	.985A	91.5	.874	2.2	25.3	27.9	.149
		10.88	8.79	4.20	2.09	5.51	4.59	11.93	2/1/2	106.1	83.0	35.1	.657	3.314	22.3	158.4	-22.2	106.2D	1.521
MARS ARRIVAL DATE = 2447580 (22 FEB 1989)																			
4-7290	4-7580	.188	21.4	-2.1	-1.8	1.091	97.8	.241	1.262	317.6	537.2	.958	1.566A	90.9	.697	-.1	19.0	52.7	.107
4-7580	4-7745.9	.238	37.7	21.5	2.3	.633	99.2	.403	1.139	194.2	322.4	.680A	1.598D	79.4	1.375	-.6	-2.7	230.6	.313
4-7745.9	4-7890	.313	261.6	5.3	1.4	1.232	104.3	.263	.799	276.2	518.0	.588	1.009A	97.4	.885	2.5	28.2	40.4	.186
		12.05	9.70	4.53	2.35	5.77	5.17	12.39	2/1/2	123.9	51.6	31.9	.612	3.635	14.7	156.4	-14.6	107.5D	1.613
4-7300	4-7580	.173	26.5	-4.6	-2.3	1.092	96.6	.233	1.271	323.7	533.6	.975	1.568A	91.9	.701	.5	24.3	56.9	.097
4-7580	4-7747.1	.237	37.2	21.5	2.3	.634	99.3	.400	1.142	194.5	324.6	.685A	1.598D	80.1	1.376	-.6	-2.9	230.4	.303
4-7747.1	4-7900	.303	263.7	7.4	1.9	1.227	103.8	.253	.793	276.0	526.0	.592	.993A	94.6	.879	2.3	27.7	37.0	.161
		11.67	9.48	4.32	2.19	5.61	5.16	12.08	2/1/2	118.8	64.6	34.8	.655	3.347	17.6	157.7	-17.4	107.6D	1.537
4-7310	4-7580	.162	32.1	-11.0	-3.5	1.092	95.4	.226	1.280	330.0	530.3	.988	1.572A	92.8	.705	1.6	34.0	60.5	.091
4-7580	4-7747.3	.237	37.1	21.4	2.3	.635	99.5	.400	1.142	194.6	325.0	.686A	1.599D	80.2	1.376	-.6	-2.9	230.3	.301
4-7747.3	4-7910	.301	264.5	9.0	2.3	1.225	103.7	.250	.788	275.1	535.1	.591	.985A	91.6	.875	2.1	25.5	28.9	.148
		11.46	9.35	4.19	2.11	5.53	5.16	11.93	2/1/2	113.1	82.0	36.0	.662	3.232	19.9	158.4	-19.8	107.2D	1.477
4-7320	4-7580	.176	41.6	-27.7	-8.1	1.093	94.2	.224	1.288	336.6	527.4	1.000	1.578A	93.6	.709	4.5	55.4	61.2	.102
4-7580	4-7745.9	.237	37.7	21.5	2.3	.633	99.2	.403	1.139	194.2	322.5	.680A	1.597D	79.5	1.375	-.8	-2.7	230.6	.313
4-7745.9	4-7920	.313	263.4	10.1	2.7	1.222	104.2	.257	.785	273.1	545.3	.583	.986	86.2	.870	2.2	21.1	17.7	.155
		11.79	9.52	4.36	2.27	5.69	5.16	12.00	2/1/2	105.0	103.2	35.0	.614	3.321	22.1	158.4	-21.8	108.0D	1.425

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2447500 (4 DEC 1988)																			
4-7240	4-7500	.218	344.1	-5.8	.2	1.081	100.3	.240	1.189	301.3	527.6	.903	1.474A	93.9	.726	-2.0	2.6	37.4	.122
4-7500	4-7739.3	.207	62.5	39.8	5.5	.676	77.8	.388	1.098	159.1	319.0	.672A	1.524	78.9	1.365	-4.7	-19.5	224.1	.332
4-7739.3	4-7880	.332	252.4	2.6	.7	1.231	105.2	.278	.796	273.6	515.8	.575	1.017A	98.7	.882	3.0	27.0	33.4	.206
		11.99	9.36	4.96	2.61	6.03	4.42	12.66	2/1/2	100.6	48.2	35.5	.547	3.281	39.8	141.6	-38.5	107.3D	1.247
4-7280	4-7500	.175	4.5	9.7	1.1	1.089	97.1	.228	1.248	319.9	506.9	.963	1.533A	98.8	.753	-3.0	2.9	71.9	.114
4-7500	4-7734.7	.210	65.2	35.3	4.2	.671	77.1	.402	1.090	159.1	311.5	.652A	1.528	76.6	1.363	-3.5	-13.0	222.5	.362
4-7734.7	4-7920	.362	248.9	9.2	2.8	1.217	106.7	.295	.773	265.9	556.3	.545	1.001	83.4	.859	3.1	14.2	359.2	.200
		11.32	8.85	4.35	2.47	5.89	4.50	12.58	2/1/2	67.4	121.9	34.4	.458	3.385	40.6	144.1	-40.5	99.4D	1.092
MARS ARRIVAL DATE = 2447510 (14 DEC 1988)																			
4-7240	4-7510	.224	345.1	-6.6	-.1	1.081	100.6	.244	1.189	300.2	532.1	.899	1.480A	92.5	.718	-1.8	2.9	34.0	.126
4-7510	4-7739.7	.195	62.1	36.8	4.5	.665	79.4	.389	1.094	162.4	317.4	.669A	1.519	78.4	1.363	-3.6	-14.6	225.9	.331
4-7739.7	4-7880	.331	252.9	2.6	.7	1.232	105.2	.278	.797	273.8	515.4	.576	1.018A	98.8	.883	3.0	27.1	34.0	.207
		11.88	9.20	5.05	2.69	6.10	4.15	12.68	2/1/2	109.3	47.7	31.8	.547	3.647	33.6	145.6	-32.8	105.9D	1.449
4-7250	4-7510	.210	351.4	-4.1	-.1	1.083	99.7	.237	1.202	305.0	526.9	.917	1.487A	94.0	.724	-1.8	4.6	41.7	.116
4-7510	4-7742.1	.194	60.6	39.2	5.1	.668	79.7	.382	1.098	162.4	321.3	.679A	1.518	79.6	1.364	-4.2	-18.2	226.3	.316
4-7742.1	4-7890	.316	256.6	4.9	1.3	1.228	104.3	.264	.791	274.2	522.1	.582	1.000A	96.2	.878	2.7	27.5	33.9	.179
		11.48	8.97	4.84	2.51	5.93	4.13	12.30	2/1/2	101.4	57.4	37.7	.601	3.092	36.8	146.4	-36.0	107.2D	1.257
4-7260	4-7510	.197	357.3	-1.6	-.1	1.084	98.8	.232	1.216	309.7	521.8	.933	1.498A	95.3	.730	-1.8	6.4	49.9	.109
4-7510	4-7743.9	.195	59.2	41.3	5.8	.669	80.0	.378	1.101	162.6	324.2	.685A	1.516	80.4	1.365	-4.8	-21.6	226.6	.308
4-7743.9	4-7900	.308	259.5	7.0	1.8	1.225	104.0	.256	.786	274.3	529.4	.586	.989A	93.6	.875	2.4	26.8	30.5	.159
		11.18	8.79	4.65	2.39	5.81	4.14	12.05	2/1/2	93.1	70.4	43.1	.635	2.722	42.9	146.8	-41.9	108.1D	1.094
4-7270	4-7510	.185	2.9	.6	-.1	1.086	98.0	.229	1.230	314.5	516.8	.948	1.511A	96.5	.737	-1.7	8.1	58.4	.105
4-7510	4-7743.0	.194	59.9	40.3	5.5	.668	79.9	.380	1.100	162.5	322.8	.682A	1.517	80.0	1.364	-4.5	-19.8	226.5	.312
4-7743.0	4-7910	.312	258.9	8.6	2.2	1.222	104.2	.257	.783	272.7	539.4	.582	.984A	90.2	.870	2.4	23.4	19.8	.152
		10.93	8.62	4.49	2.31	5.73	4.13	11.98	2/1/2	84.5	90.6	42.7	.620	2.745	42.7	147.8	-42.1	106.2D	1.081
4-7280	4-7510	.174	8.1	2.2	-.2	1.088	97.2	.227	1.244	319.4	511.9	.962	1.526A	97.6	.743	-1.7	10.0	66.7	.102
4-7510	4-7737.7	.197	63.3	35.3	4.0	.662	79.1	.395	1.090	162.4	314.0	.659A	1.521	77.4	1.362	-3.2	-12.5	225.3	.347
4-7737.7	4-7920	.347	252.8	9.4	2.8	1.218	105.9	.282	.776	267.9	553.4	.557	.995	84.8	.862	2.9	16.1	3.4	.185
		10.80	8.53	4.33	2.28	5.70	4.19	12.37	2/1/2	76.0	117.4	34.9	.501	3.337	38.9	147.8	-38.9	100.4D	1.170
MARS ARRIVAL DATE = 2447520 (24 DEC 1988)																			
4-7240	4-7520	.231	346.1	-7.2	-.3	1.082	101.1	.250	1.191	299.0	536.3	.893	1.489A	91.2	.711	-1.7	3.4	31.6	.132
4-7520	4-7740.4	.187	60.1	34.7	3.8	.655	81.3	.389	1.092	165.9	316.6	.667A	1.517	78.2	1.362	-2.8	-11.5	227.5	.331
4-7740.4	4-7880	.331	253.9	2.6	.7	1.233	105.2	.278	.799	274.2	514.6	.577	1.020A	99.0	.884	3.0	27.2	35.1	.209
		11.94	9.13	5.16	2.81	6.22	3.97	12.71	2/1/2	116.9	46.7	29.8	.548	3.894	29.0	148.3	-28.6	105.2D	1.565
4-7250	4-7520	.215	352.4	-4.9	-.3	1.083	100.0	.241	1.203	303.8	531.3	.913	1.494A	92.7	.717	-1.6	5.1	38.4	.120
4-7520	4-7742.5	.185	58.8	36.1	4.2	.657	81.7	.383	1.095	166.1	320.0	.676A	1.515	79.2	1.363	-3.2	-13.6	227.9	.316
4-7742.5	4-7890	.316	257.1	5.0	1.3	1.228	104.5	.264	.792	274.4	521.6	.583	1.001A	96.3	.879	2.7	27.6	34.6	.180
		11.42	8.85	4.92	2.58	5.99	3.93	12.31	2/1/2	109.8	56.8	34.4	.602	3.381	33.3	149.8	-32.9	106.1D	1.434
4-7260	4-7520	.201	358.5	-2.7	-.4	1.084	99.1	.235	1.216	308.7	526.3	.930	1.501A	94.1	.723	-1.6	7.1	45.9	.110
4-7520	4-7743.7	.185	58.0	37.0	4.5	.658	81.8	.380	1.098	166.2	322.0	.680A	1.515	79.8	1.364	-3.4	-15.0	228.1	.308
4-7743.7	4-7900	.308	259.2	7.0	1.8	1.225	104.1	.256	.787	274.1	529.6	.586	.989A	93.5	.875	2.4	26.7	30.0	.159
		11.03	8.62	4.71	2.41	5.83	3.91	12.05	2/1/2	102.2	70.8	37.9	.634	3.078	36.2	150.9	-35.9	106.2D	1.317
4-7270	4-7520	.188	4.3	-1.1	-.5	1.086	98.2	.230	1.229	313.7	521.5	.946	1.511A	95.3	.729	-1.4	9.4	55.7	.103
4-7520	4-7743.3	.185	58.3	36.6	4.3	.658	81.7	.381	1.097	166.1	321.2	.679A	1.515	79.6	1.363	-3.3	-14.4	228.0	.311
4-7743.3	4-7910	.311	259.2	8.6	2.2	1.222	104.2	.256	.783	272.8	539.2	.582	.984A	90.3	.870	2.4	23.5	20.2	.152
		10.73	8.44	4.52	2.29	5.71	3.92	11.97	2/1/2	94.1	90.2	38.5	.622	3.031	37.3	151.5	-37.1	104.9D	1.263
4-7280	4-7520	.175	9.9	-.5	-.7	1.087	97.3	.226	1.242	318.7	516.8	.961	1.523A	96.4	.735	-1.2	12.5	61.7	.098
4-7520	4-7739.7	.188	60.6	34.3	3.7	.654	81.3	.391	1.090	165.9	315.4	.663A	1.517	77.9	1.362	-2.7	-10.9	227.4	.337
4-7739.7	4-7920	.337	255.4	9.5	2.7	1.219	105.4	.275	.778	269.2	551.5	.564	.992	85.7	.864	2.7	17.4	6.7	.176
		10.55	8.34	4.36	2.21	5.63	3.99	12.25	2/1/2	85.7	114.1	34.6	.530	3.367	36.7	150.9	-36.7	101.0D	1.254
MARS ARRIVAL DATE = 2447530 (3 JAN 1989)																			
4-7240	4-7530	.240	347.1	-7.6	-.4	1.083	101.5	.258	1.194	297.5	540.3	.886	1.501	89.9	.704	-1.6	4.0	30.3	.141
4-7530	4-7741.2	.183	57.0	32.7	3.4	.645	83.6	.390	1.091	169.7	316.2	.666A	1.516	78.1	1.362	-2.3	-9.2	229.0	.331
4-7741.2	4-7880	.331	254.9	2.7	.7	1.234	105.2	.278	.800	274.6	513.8	.578	1.023A	99.3	.886	3.0	27.4	36.2	.211
		12.15	9.18	5.30	2.97	6.38	3.87	12.74	2/1/2	123.3	45.7	28.4	.548	4.077	25.2	150.5	-24.9	104.9D	1.687
4-7250	4-7530	.222	353.5	-5.4	-.5	1.084	100.4	.247	1.205	302.6	535.5	.907	1.503A	91.5	.709	-1.5	5.7	36.2	.126
4-7530	4-7743.2	.181	55.7	33.5	3.6	.648	83.8	.384	1.095	169.9	319.5	.674A	1.516	79.1	1.363	-2.5	-10.6	229.3	.315
4-7743.2	4-7890	.315	258.0	5.0	1.3	1.229	104.4	.264	.793	274.8	520.9	.584	1.003A	96.6	.880	2.6	27.8	35.8	.181
		11.54	8.85	5.02	2.69	6.10	3.83	12.32	2/1/2	117.2	55.7	32.6	.605	5.564	29.2	152.2	-29.0	105.7D	1.550
4-7260	4-7530	.206	359.6	-3.4	-.6	1.085	99.4	.239	1.217	307.6	530.6	.926	1.507A	92.9	.715	-1.4	7.7	42.8	.114
4-7530	4-7744.3	.180	55.0	34.1	3.8	.649	84.0	.381	1.097	170.0	321.4	.679A	1.515	79.6	1.363	-2.6	-11.6	229.4	.307
4-7744.3	4-7900	.307	260.0	7.1	1.8	1.225	104.0	.255	.788	274.5	529.0	.587	.990A	93.7	.875	2.4	26.9	31.3	.159
		11.07	8.60	4.78	2.47	5.89	3.81	12.05	2/1/2	110.4	69.7	35.7	.638	3.262	32.0	153.3	-31.9	105.7D	1.443
4-7270	4-7530	.192	5.4	-2.0	-.7	1.086	98.4	.232	1.229	312.7	525.9	.943	1.515A	94.2	.721	-1.2	10.1	49.8	.104
4-7530	4-7744.0	.181	55.2	33.9	3.7	.649	83.9	.382	1.097	170.0	321.0	.678A	1.515	79.5	1.363	-2.6	-11.3	229.4	.309
4-7744.0	4-7910	.309	260.2	8.7	2.3	1.222	104.1	.255	.784	273.3	538.4	.584	.984A	90.5	.871	2.4	24.0	21.9	.151
		10.70	8.39	4.58	2.31	5.73	3.82	11.96	2/1/2	103.0	88.5	36.6	.630	3.183	33.6	154.0	-33.6	104.6D	1.375
4-7280	4-7530	.178	11.2	-1.7	-1.0	1.087	97.4	.228	1.242	317.9	521.4	.959	1.524A	95.3	.726	-.9	13.6	57.2	.097
4-7530	4-7741.3	.183	56.9	32.7	3.4	.645	83.6	.389	1.091	169.8	316.4	.666A	1.516	78.2	1.362	-2.3	-9.3	229.0	.330 *
4-7741.3	4-7920	.330	257.5	9.7	2.7	1.220	105.1	.270	.780	270.3	549.9	.569	.990	86.4	.866	2.6	18.4	9.4	.169 O
		10.46	8.26	4.39	2.19	5.62	3.87	12.17	2/1/2	95.1	111.4	34.1	.552	3.413	34.2	153.4	-34.2	101.4D	1.332
MARS ARRIVAL DATE = 2447540 (13 JAN 1989)																			
4-7250	4-7540	.230	354.5	-5.7	-.7	1.084	100.9	.254	1.208	301.2	539.4	.901	1.514A	90.2	.702	-1.4	6.4	35.0	.133
4-7540	4-7743.9	.181	51.9	31.0	3.2	.640	86.3	.385	1.097	174.0	319.4	.674A	1.519	79.0	1.363	-2.0	-8.4	230.4	.315
4-7743.9	4-7890	.315	258.9	5.1	1.3	1.229	104.4	.264	.795	275.1	520.2	.585	1.004A	96.8	.881	2.6	27.9	37.0	.182
		11.62	8.99	5.15	2.83	6.24	3.84	12.34	2/1/2	123.4	54.6	31.5	.607	3.666	25.7	153.9	-25.6	105.6D	1.629
4-7260	4-7540	.213	.6	-3.8	-.7	1.085	99.7	.244	1.219	306.4	534.7	.922	1.516A	91.7	.708	-1.3	8.3	40.7	.119
4-7540	4-7745.0	.181	51.1	31.4	3.3	.641	86.4	.382	1.099	174.2	321.4	.679A	1.519	79.6	1.364	-2.1	-9.1	230.4	.306
4-7745.0	4-7900	.306	260.9	7.1	1.8	1.226	103.9	.255	.789	274.8	528.3	.588	.990A	93.9	.876	2.4	27.2	32.7	.160
		11.27	8.70	4.86	2.57	5.98	3.82	12.06	2/1/2	117.4	68.4	34.4	.642	3.381	28.5	155.2	-28.5	105.7D	1.529
4-7270	4-7540	.197	6.5	-2.5	-.9	1.086	98.7	.236	1.230	311.6	530.1	.940	1.521A	93.0	.713	-1.1	10.7	46.9	.108
4-7540	4-7744.9	.181	51.2	31.3	3.3	.641	86.4	.383	1.099	174.2	321.1	.678A	1.519	79.5	1.364	-2.1	-9.0	230.4	.307
4-7744.9	4-7910	.307	261.3	8.8	2.5	1.223	104.0	.253	.785	273.8	537.6	.586	.984A	90.8	.872	2.3	24.4	23.7	.150
		10.83	8.47	4.65	2.37	5.79	3.82	11.95	2/1/2	110.9	86.9	35.5	.638	3.281	30.4	155.8	-30.4	104.7D	1.456
4-7280	4-7540	.182	12.2	-2.2	-1.2	1.087	97.7	.230	1.242	316.9	525.7	.938	1.528A	94.2	.719	-.7	14.1	53.6	.099
4-7540	4-7742.7	.183	52.6	30.7	3.1	.638	86.1	.389	1.094	173.9	317.3	.669A	1.520	78.4	1.363	-1.9	-7.7	230.3	.325
4-7742.7	4-7920	.325	259.2	9.8	2.7	1.221	104.8	.266	.781	271.1	548.6	.574	.989	86.9	.867	2.5	19.2	11.6	.165
		10.53	8.31	4.45	2.22	5.64	3.86	12.12	2/1/2	103.8	109.1	33.7	.570	3.450	31.7	155.3	-31.7	101.9D	1.397
4-7290	4-7540	.170	18.1	-4.2	-1.7	1.089	96.7	.226	1.254	322.3	521.5	.971	1.537A	95.2	.724	-.2	19.9	60.3	.092
4-7540	4-7725.3	.215	64.6	27.9	2.1	.603	85.1	.463	1.044	171.9	287.3	.560A	1.527	88.8	1.349	-1.2	-3.1	222.6	.502
4-7725.3	4-7930	.502	239.4	9.5	4.3	1.215	113.4	.402	.768	254.7	570.3	.459	1.077	72.7	.853	4.7	8.8	351.6	.339
		11.02	8.91	4.28	2.11	5.54	4.63	14.98	2/1/2	96.3	140.9	21.0	.239	5.492	37.3	143.4	-37.1	88.5L	1.073
4-7290	4-7540	.170	18.1	-4.2	-1.7	1.089	96.7	.226	1.254	322.3	521.5	.971	1.537A	95.2	.724	-.2	19.9	60.3	.092
4-7540	4-7733.5	.196	58.9	28.9	2.5	.623	84.8	.422	1.071	172.8	301.5	.619A	1.523	75.8	1.357	-1.4	-4.6	227.4	.411
4-7733.5	4-7930	.411	248.9	10.0	3.5	1.218	109.0	.332	.774	262.3	564.6	.517	1.031	78.8	.858	3.5	11.8	357.7	.253
		10.59	8.44	4.28	2.11	5.54	4.16	13.39	2/1/2	96.3	134.1	25.9	.357	4.456	34.4	150.0	-34.2	93.8D	1.232

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2447550
23 JAN 1989

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2447550 (23 JAN 1989)																			
4-7260	4-7550	.220	1.6	-4.0	-.9	1.086	100.2	.250	1.222	305.0	538.6	.916	1.527A	90.5	.701	-1.2	8.9	39.6	.126
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7900	.305	261.7	7.2	1.8	1.226	103.9	.254	.790	275.2	527.6	.590	.991A	94.2	.877	2.3	27.4	34.0	.160
		11.63	8.94	5.00	2.69	6.11	3.94	12.06	2/1/2	123.5	67.2	33.7	.646	3.448	25.4	156.5	-25.4	105.9D	1.581
4-7270	4-7550	.203	7.5	-2.7	-1.0	1.087	99.0	.241	1.233	310.3	534.1	.936	1.530A	91.9	.706	-1.0	11.2	45.1	.113
4-7550	4-7745.6	.186	47.0	28.6	3.0	.636	89.2	.384	1.103	178.7	321.6	.679A	1.527	79.6	1.365	-1.6	-7.1	231.1	.305
4-7745.6	4-7910	.305	262.3	8.8	2.3	1.223	103.9	.252	.786	274.2	536.8	.588	.984A	91.1	.873	2.3	24.8	25.3	.149
		11.13	8.67	4.73	2.46	5.87	3.94	11.94	2/1/2	117.7	85.4	34.9	.646	3.335	27.5	157.1	-27.5	105.0D	1.508
4-7280	4-7550	.187	13.2	-2.4	-1.3	1.088	98.0	.234	1.244	315.8	529.8	.953	1.534A	93.1	.711	-.6	14.4	50.9	.102
4-7550	4-7743.7	.187	48.2	28.3	2.8	.633	89.0	.389	1.099	178.4	318.3	.671A	1.528	78.7	1.364	-1.5	-6.3	231.1	.321
4-7743.7	4-7920	.321	260.6	9.9	2.7	1.221	104.6	.263	.782	271.7	547.5	.577	.988	87.3	.868	2.4	19.8	13.6	.161
		10.76	8.48	4.51	2.27	5.70	3.97	12.07	2/1/2	111.5	107.2	33.5	.585	3.468	29.3	156.8	-29.2	102.4D	1.443
4-7290	4-7550	.173	18.9	-3.8	-1.7	1.089	96.9	.228	1.255	321.3	525.7	.968	1.541A	94.1	.716	-.1	19.5	56.9	.094
4-7550	4-7721.6	.230	64.3	26.8	1.9	.580	85.2	.493	1.027	175.0	279.3	.521A	1.533	65.8	1.344	-1.0	-2.2	221.0	.560
4-7721.6	4-7930	.560	235.6	9.4	4.8	1.214	116.3	.446	.766	250.7	572.1	.424	1.108	69.1	.850	5.4	7.5	349.7	.391
		11.45	9.31	4.33	2.14	5.56	4.99	16.08	2/1/2	104.7	143.0	18.6	.192	6.201	38.8	141.1	-38.5	85.6L	.998
4-7290	4-7550	.173	18.9	-3.8	-1.7	1.089	96.9	.228	1.255	321.3	525.7	.968	1.541A	94.1	.716	-.1	19.5	56.9	.094
4-7550	4-7737.1	.195	52.6	27.6	2.5	.621	88.1	.412	1.082	177.3	306.5	.636A	1.528	75.1	1.360	-1.2	-4.3	229.6	.383
4-7737.1	4-7930	.383	253.3	10.2	3.3	1.219	107.6	.310	.777	265.0	561.7	.536	1.018	80.9	.861	3.1	13.4	1.2	.226
		10.60	8.46	4.33	2.14	5.56	4.14	12.96	2/1/2	104.7	130.4	27.6	.410	4.187	32.0	153.2	-31.8	96.0D	1.308
MARS ARRIVAL DATE = 2447560 (2 FEB 1989)																			
4-7260	4-7560	.229	2.6	-4.0	-1.0	1.087	100.7	.258	1.225	303.5	542.2	.910	1.540	89.2	.695	-1.1	9.7	39.4	.134
4-7560	4-7746.2	.197	43.1	26.0	2.7	.632	92.2	.388	1.111	183.5	322.3	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.2	4-7900	.304	262.5	7.3	1.9	1.227	103.8	.254	.791	275.5	527.0	.591	.992A	94.3	.878	2.3	27.5	35.2	.161
		12.17	9.33	5.14	2.84	6.25	4.19	12.07	2/1/2	128.6	66.2	33.5	.649	3.466	22.6	157.3	-22.6	106.3D	1.601
4-7270	4-7560	.210	8.5	-2.7	-1.2	1.088	99.4	.247	1.235	309.0	537.9	.931	1.540A	90.7	.700	-.9	11.8	44.1	.119
4-7560	4-7746.3	.197	43.1	26.0	2.7	.632	92.2	.387	1.111	183.5	322.4	.681A	1.542D	79.7	1.367	-1.2	-5.5	231.4	.304
4-7746.3	4-7910	.304	263.1	8.9	2.3	1.224	103.8	.251	.787	274.5	536.1	.589	.985A	91.3	.874	2.2	25.1	26.7	.149
		11.60	9.03	4.84	2.57	5.98	4.19	11.94	2/1/2	123.6	84.1	34.8	.652	3.347	24.9	158.0	-24.8	105.5D	1.530
4-7280	4-7560	.193	14.1	-2.3	-1.4	1.089	98.3	.236	1.246	314.5	533.7	.949	1.543A	92.0	.705	-.6	14.7	49.3	.107
4-7560	4-7744.6	.198	44.0	25.9	2.6	.630	92.1	.392	1.108	183.2	319.5	.674A	1.542D	78.9	1.366	-1.2	-5.0	231.4	.317
4-7744.6	4-7920	.317	261.7	10.0	2.7	1.222	104.4	.260	.783	272.3	546.6	.579	.987	87.7	.869	2.3	20.4	15.2	.158
		11.16	8.80	4.59	2.35	5.77	4.21	12.04	2/1/2	116.1	105.6	33.6	.596	3.457	26.9	157.8	-26.7	103.1D	1.466
4-7290	4-7560	.177	19.7	-3.3	-1.8	1.089	97.2	.232	1.257	320.2	529.7	.966	1.547A	93.1	.710	-.1	19.2	54.6	.097
4-7560	4-7739.1	.202	47.5	25.8	2.4	.620	91.5	.410	1.093	182.1	309.5	.645A	1.541D	75.9	1.363	-1.0	-3.7	230.7	.369
4-7739.1	4-7930	.369	255.7	10.3	3.3	1.220	106.9	.299	.779	266.5	559.9	.545	1.012	81.9	.863	2.9	14.3	3.5	.212
		10.89	8.70	4.38	2.19	5.62	4.32	12.76	2/1/2	112.1	128.1	28.6	.441	4.049	29.8	155.1	-29.6	97.4D	1.346
MARS ARRIVAL DATE = 2447570 (12 FEB 1989)																			
4-7280	4-7570	.199	15.1	-2.0	-1.4	1.089	98.7	.244	1.249	313.2	537.4	.945	1.553A	90.8	.699	-.5	15.1	48.5	.113
4-7570	4-7745.3	.215	40.4	23.5	2.4	.629	95.5	.396	1.120	188.5	320.8	.677A	1.564D	79.2	1.370	-.9	-3.8	231.3	.315
4-7745.3	4-7920	.315	262.6	10.1	2.7	1.222	104.3	.259	.784	272.7	545.9	.581	.987	87.9	.870	2.3	20.8	16.5	.156
		11.74	9.29	4.68	2.45	5.87	4.61	12.02	2/1/2	123.8	104.3	34.1	.606	3.410	24.5	158.3	-24.2	103.9D	1.461
4-7290	4-7570	.183	20.5	-2.8	-1.8	1.090	97.5	.236	1.259	319.0	533.6	.962	1.556A	92.0	.703	-.1	19.0	53.2	.102
4-7570	4-7740.5	.218	43.1	23.7	2.3	.621	95.1	.411	1.107	187.4	311.9	.652A	1.562D	76.5	1.367	-.8	-2.9	231.1	.360
4-7740.5	4-7930	.360	257.5	10.5	3.2	1.220	106.5	.293	.760	267.5	556.7	.552	1.008	82.6	.864	2.8	15.0	5.2	.204
		11.40	9.13	4.45	2.26	5.68	4.68	12.63	2/1/2	118.5	126.4	29.5	.463	3.926	27.5	156.2	-27.2	98.6D	1.356
MARS ARRIVAL DATE = 2447580 (22 FEB 1989)																			
4-7290	4-7580	.188	21.4	-2.1	-1.8	1.091	97.8	.241	1.262	317.6	537.2	.958	1.566A	90.9	.697	-.1	19.0	52.7	.107
4-7580	4-7741.5	.239	39.7	21.8	2.2	.625	99.0	.415	1.126	193.1	314.3	.658A	1.594D	77.0	1.372	-.8	-2.2	230.8	.354
4-7741.5	4-7930	.354	258.8	10.6	3.2	1.221	106.2	.288	.781	268.3	557.7	.556	1.005	83.1	.865	2.7	15.5	6.5	.198
		12.09	9.74	4.83	2.35	5.77	5.21	12.55	2/1/2	125.9	129.0	30.6	.460	3.787	25.2	156.7	-24.8	99.6D	1.337

STOPOVER TIME = 0 DAYS | 1988 INBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2447500
4 DEC 1988

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2447500 (4 DEC 1988)																			
4-7240	4-7500	.218	344.1	-5.8	.2	1.081	100.3	.240	1.189	301.3	527.6	.903	1.474A	93.9	.726	-2.0	2.6	37.4	.122
4-7500	4-7734.7	.210	65.2	35.3	4.2	.671	77.1	.402	1.090	159.1	311.5	.652A	1.528	76.6	1.363	-3.5	-13.0	222.5	.362
4-7734.7	4-7920	.362	248.9	9.2	2.8	1.217	106.7	.295	.773	265.9	556.3	.545	1.001	83.4	.859	3.1	14.2	359.2	.200
		12.07	9.46	4.96	2.61	6.03	4.50	12.58	2/1/2	100.6	121.9	34.4	.458	3.385	40.6	144.1	-40.5	99.4D	1.092
MARS ARRIVAL DATE = 2447510 (14 DEC 1988)																			
4-7240	4-7510	.224	345.1	-6.6	-.1	1.081	100.6	.244	1.189	300.2	532.1	.899	1.480A	92.5	.718	-1.8	2.9	34.0	.126
4-7510	4-7737.7	.197	63.3	35.3	4.0	.662	79.1	.395	1.090	162.4	314.0	.659A	1.521	77.4	1.362	-3.2	-12.3	225.3	.347
4-7737.7	4-7920	.347	252.8	9.4	2.8	1.218	105.9	.282	.776	267.9	553.4	.557	.995	84.8	.862	2.9	16.1	3.4	.185 *
		11.93	9.24	5.05	2.69	6.10	4.19	12.37	2/1/2	109.3	117.4	34.9	.501	3.337	38.9	147.6	-38.9	100.4D	1.170
MARS ARRIVAL DATE = 2447520 (24 DEC 1988)																			
4-7240	4-7520	.231	346.1	-7.2	-.3	1.082	101.1	.250	1.191	299.0	536.3	.893	1.489A	91.2	.711	-1.7	3.4	31.6	.132
4-7520	4-7739.7	.188	60.6	34.3	3.7	.654	81.3	.391	1.090	165.9	315.4	.663A	1.517	77.9	1.362	-2.7	-10.9	227.4	.337
4-7739.7	4-7920	.337	255.4	9.5	2.7	1.219	105.4	.275	.778	269.2	551.5	.564	.992	85.7	.864	2.7	17.4	6.7	.178 ○
		11.96	9.15	5.16	2.81	6.22	3.99	12.25	2/1/2	116.9	114.1	34.6	.550	3.367	36.7	150.9	-36.7	101.0D	1.254
MARS ARRIVAL DATE = 2447530 (3 JAN 1989).																			
4-7240	4-7530	.240	347.1	-7.6	-.4	1.083	101.5	.258	1.194	297.5	540.3	.886	1.501	89.9	.704	-1.6	4.0	30.3	.141
4-7530	4-7741.3	.183	56.9	32.7	3.4	.645	83.6	.389	1.091	169.8	316.4	.666A	1.516	78.2	1.362	-2.3	-9.3	229.0	.330
4-7741.3	4-7920	.330	257.5	9.7	2.7	1.220	105.1	.270	.780	270.3	549.9	.569	.990	86.4	.866	2.6	18.4	9.4	.169
		12.14	9.17	5.30	2.97	6.38	3.87	12.17	2/1/2	123.3	111.4	34.1	.552	3.413	34.2	153.4	-34.2	101.4D	1.332
MARS ARRIVAL DATE = 2447540 (13 JAN 1989)																			
4-7250	4-7540	.230	354.5	-5.7	-.7	1.084	100.9	.254	1.208	301.2	539.4	.901	1.514A	90.2	.702	-1.4	6.4	35.0	.133
4-7540	4-7733.5	.196	58.9	28.9	2.5	.623	84.8	.422	1.071	172.8	301.5	.619A	1.523	75.6	1.357	-1.4	-4.6	227.4	.411
4-7733.5	4-7930	.411	248.9	10.0	3.5	1.218	109.0	.332	.774	262.3	564.6	.517	1.031	78.8	.858	3.5	11.8	357.7	.293
		12.14	9.51	5.15	2.93	6.24	4.16	13.39	2/1/2	123.4	134.1	28.9	.357	4.456	34.4	150.0	-34.2	93.8D	1.832

1990

OUTBOUND SWINGBY

4.10

STOPOVER TIME = 0 DAYS 1990 OUTBOUND SWINGBY MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2448100
27 JUL 1990

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / PSI 2 / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448100 (27 JUL 1990)																				
4-7810	4-7970.7	.146	337.3	-61.7	-6.7	.918	88.6	.162	.860	172.6	371.8	.721	1.000	91.6	1.268	8.9	68.0	153.9		.212
4-7970.7	4-8100	.212	174.0	17.7	2.7	1.381	89.6	.377	1.161	1.6	138.4	.723D	1.599A	109.2	.762	-2.6	11.3	47.3		.285
4-8100	4-8250	.159	350.7	-10.5	-1.3	.730	89.7	.263	1.098	179.3	278.7	.810A	1.387	76.0	1.060	1.6	-17.1	269.5		.256
		13.75	7.36	4.01	6.39	9.76	3.55	13.45	2/1/1	36.8	173.2	52.0	1.333	2.283	81.0	6.1	45.4	98.0D	1.710	
4-7820	4-7975.3	.141	336.5	-62.6	-6.5	.919	89.8	.161	.858	178.7	375.3	.720	.996	92.1	1.265	9.1	67.7	154.0		.216
4-7975.3	4-8100	.216	168.9	15.3	2.4	1.381	87.7	.380	1.164	8.4	137.8	.721D	1.607A	109.6	.764	-2.2	12.6	47.6		.289
4-8100	4-8260	.147	347.9	-14.0	-1.6	.745	90.4	.232	1.125	181.3	290.9	.864A	1.387D	78.7	1.071	1.6	-15.4	273.6		.215
		13.50	7.03	3.94	6.47	9.85	3.09	12.80	2/1/1	36.0	168.2	53.3	1.290	2.230	83.3	358.2	47.3	87.3L	1.587	
4-7830	4-7979.4	.143	333.6	-64.8	-6.7	.921	91.1	.161	.856	185.5	378.7	.719	.994D	92.6	1.264	9.6	68.1	153.7		.226
4-7979.4	4-8100	.226	164.4	13.4	2.2	1.381	85.9	.384	1.165	14.8	137.7	.717D	1.612A	109.8	.764	-1.8	13.5	47.6		.292
4-8100	4-8270	.158	345.2	-17.8	-1.9	.756	90.9	.210	1.147	183.5	303.3	.907A	1.387D	81.1	1.079	1.8	-12.7	276.8		.180
		13.44	6.89	3.96	6.55	9.92	2.93	12.31	2/1/1	35.6	161.2	55.1	1.174	2.161	85.3	350.9	48.8	78.4L	1.363	
4-7840	4-7983.3	.153	329.0	-66.9	-7.3	.923	92.5	.162	.856	192.9	382.3	.717	.995D	93.1	1.263	10.3	68.5	152.7		.243
4-7983.3	4-8100	.243	160.5	11.6	2.0	1.379	84.1	.388	1.162	21.3	138.0	.711D	1.613A	110.1	.763	-1.6	14.2	47.4		.295
4-8100	4-8280	.134	343.2	-21.8	-2.3	.764	91.4	.193	1.164	185.7	315.7	.939A	1.388D	83.2	1.084	2.0	-8.6	278.5		.151
		13.54	6.91	4.08	6.63	10.00	2.84	11.95	2/1/1	35.6	152.3	57.2	1.017	2.091	86.7	345.1	49.7	71.2L	1.109	
MARS ARRIVAL DATE = 2448110 (6 AUG 1990)																				
4-7800	4-7965.4	.158	336.0	-62.2	-7.3	.917	87.5	.165	.864	167.1	367.7	.721	1.006	91.1	1.270	9.1	68.8	154.1		.215
4-7965.4	4-8110	.215	177.9	26.2	4.0	1.371	91.3	.356	1.120	355.0	506.6	.721	1.518A	105.6	.738	-3.9	5.7	45.3		.247
4-8110	4-8240	.186	350.6	-8.3	-1.0	.703	90.8	.313	1.060	181.7	264.7	.728A	1.392D	72.2	1.044	1.4	-18.9	265.8		.315
		13.47	8.07	4.14	5.40	8.78	3.93	14.52	2/1/1	47.2	173.8	44.9	1.305	2.619	79.3	12.3	40.0	109.7D	2.113	
4-7810	4-7971.2	.142	336.1	-60.3	-6.4	.918	88.5	.162	.860	172.5	372.5	.721	1.000	91.7	1.267	8.6	66.7	153.6		.206
4-7971.2	4-8110	.206	171.8	21.0	3.1	1.371	89.2	.358	1.125	3.2	145.5	.723D	1.528A	106.0	.741	-2.9	9.0	45.7		.248
4-8110	4-8250	.167	347.3	-11.5	-1.3	.725	91.4	.271	1.096	183.7	276.9	.799A	1.392D	75.4	1.059	1.4	-17.9	270.4		.265
		12.90	7.48	3.96	5.42	8.81	3.52	13.61	2/1/1	45.3	174.2	47.2	1.418	2.498	80.9	4.3	44.4	96.3D	2.123	
4-7820	4-7975.8	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0		.209
4-7975.8	4-8110	.209	166.6	17.7	2.7	1.371	87.3	.360	1.126	10.1	145.1	.721D	1.532A	106.3	.742	-2.3	10.7	45.8		.250
4-8110	4-8260	.155	343.9	-14.9	-1.5	.741	91.9	.238	1.126	186.2	289.5	.857A	1.394D	78.2	1.071	1.5	-16.5	274.3		.222
		12.62	7.15	3.89	5.47	8.85	3.26	12.90	2/1/1	44.5	169.4	49.4	1.371	2.392	83.7	355.4	47.1	84.9L	1.908	
4-7830	4-7979.7	.138	332.2	-63.5	-6.4	.921	91.0	.161	.856	185.4	379.1	.719	.994D	92.6	1.263	9.2	66.9	154.0		.220
4-7979.7	4-8110	.220	162.2	15.2	2.4	1.370	85.6	.363	1.125	16.4	145.1	.716D	1.534A	106.5	.741	-2.0	11.9	45.7		.251
4-8110	4-8270	.147	340.8	-18.4	-1.8	.754	92.4	.214	1.149	188.9	302.4	.903A	1.396D	80.8	1.079	1.6	-14.3	277.5		.185
		12.53	7.01	3.91	5.52	8.90	3.10	12.37	2/1/1	44.2	162.4	52.0	1.244	2.281	86.1	347.8	48.6	76.0L	1.594	
4-7840	4-7983.6	.148	327.4	-65.7	-6.9	.923	92.4	.163	.856	192.8	382.5	.717	.995D	93.1	1.263	10.0	67.5	153.2		.236
4-7983.6	4-8110	.236	158.6	13.0	2.2	1.368	83.9	.368	1.122	22.9	145.4	.709D	1.534A	106.7	.739	-1.6	12.7	45.3		.254
4-8110	4-8280	.143	338.3	-21.7	-2.1	.763	92.8	.197	1.168	191.5	315.1	.937A	1.398D	83.0	1.085	1.7	-11.1	279.0		.153
		12.60	7.03	4.02	5.57	8.95	3.01	11.98	2/1/1	44.3	153.7	54.6	1.077	2.180	87.6	342.0	49.6	69.2L	1.271	
4-7850	4-7987.5	.166	323.1	-67.0	-7.7	.927	94.0	.167	.857	200.5	386.5	.714	1.001D	93.7	1.263	11.0	67.9	152.0		.259
4-7987.5	4-8110	.260	155.8	11.0	2.1	1.365	82.0	.373	1.115	29.9	146.1	.699D	1.532A	106.8	.736	-1.4	13.4	44.5		.256
4-8110	4-8290	.141	336.8	-25.1	-2.5	.769	93.1	.186	1.181	193.6	327.4	.961A	1.400D	85.1	1.088	2.0	-6.3	278.7		.129
		12.85	7.21	4.24	5.64	9.02	2.98	11.72	2/1/1	44.7	142.8	57.0	.893	2.097	88.3	338.1	50.5	64.0L	.979	
MARS ARRIVAL DATE = 2448120 (16 AUG 1990)																				
4-7800	4-7964.7	.165	337.6	-63.9	-7.8	.917	87.5	.165	.864	167.2	366.7	.721	1.006	90.9	1.271	9.6	70.4	155.0		.224
4-7964.7	4-8120	.224	178.4	34.6	5.4	1.365	91.5	.344	1.098	354.3	513.2	.721	1.476A	102.6	.722	-5.2	-.5	43.4		.224
4-8120	4-8240	.199	347.4	-9.4	-1.0	.697	93.0	.325	1.057	186.3	263.0	.713A	1.401D	71.4	1.043	1.3	-19.4	266.6		.329
		13.30	8.46	4.22	4.84	8.23	4.24	14.78	2/1/1	57.7	173.6	38.0	1.197	3.074	79.7	13.0	35.1	112.5D	2.483	
4-7810	4-7971.3	.141	335.8	-59.9	-6.3	.918	88.5	.163	.860	172.4	372.6	.720	1.000	91.8	1.267	8.5	66.5	153.5		.205
4-7971.3	4-8120	.205	171.2	25.3	3.7	1.365	89.1	.345	1.103	3.7	152.0	.723D	1.483A	103.1	.725	-3.4	5.6	43.4		.220
4-8120	4-8250	.160	343.7	-12.6	-1.3	.721	93.4	.280	1.097	188.8	275.7	.790A	1.404D	74.8	1.060	1.3	-18.6	270.9		.275
		12.49	7.75	3.94	4.74	8.13	3.80	13.78	2/1/1	54.9	175.1	42.7	1.437	2.749	80.7	4.2	42.4	96.3D	2.514	
4-7820	4-7976.0	.134	334.5	-60.5	-6.0	.919	89.7	.161	.858	178.6	376.2	.720	.996	92.2	1.265	8.6	65.8	154.0		.206
4-7976.0	4-8120	.206	165.6	20.6	3.1	1.364	87.2	.347	1.103	10.8	151.7	.720D	1.486A	103.3	.725	-2.6	8.2	43.2		.220
4-8120	4-8260	.168	339.9	-15.8	-1.5	.740	93.8	.245	1.130	191.8	288.9	.852A	1.407D	77.9	1.072	1.3	-17.4	274.6		.229
		12.15	7.41	3.87	4.75	8.14	3.54	13.01	2/1/1	54.0	170.2	45.9	1.414	2.567	83.8	354.4	46.0	83.9L	2.215	
4-7830	4-7979.9	.135	331.3	-62.7	-6.1	.921	91.0	.161	.856	185.3	379.3	.718	.994D	92.6	1.263	9.0	66.1	154.2		.216
4-7979.9	4-8120	.216	161.3	17.3	2.7	1.362	85.6	.350	1.101	17.2	151.7	.716D	1.487A	103.5	.724	-2.1	9.7	42.9		.221
4-8120	4-8270	.161	336.5	-18.8	-1.7	.753	94.2	.221	1.156	195.0	302.3	.901A	1.411D	80.5	1.082	1.3	-15.6	277.3		.189
		12.04	7.26	3.88	4.77	8.16	3.38	12.43	2/1/1	53.7	163.0	49.1	1.292	2.406	86.4	346.5	48.0	74.8L	1.816	
4-7840	4-7983.7	.144	326.3	-64.9	-6.8	.923	92.4	.163	.856	192.7	382.7	.717	.995D	93.1	1.262	9.7	66.7	153.8		.231
4-7983.7	4-8120	.231	157.9	14.5	2.5	1.361	83.9	.354	1.098	23.6	152.1	.709D	1.486A	103.8	.722	-1.8	10.8	42.3		.223
4-8120	4-8280	.157	333.9	-21.5	-2.0	.763	94.5	.203	1.176	198.0	315.4	.936A	1.415D	82.9	1.088	1.5	-13.1	278.7		.156
		12.10	7.28	3.98	4.81	8.20	3.30	12.02	2/1/1	55.6	154.1	52.2	1.123	2.272	88.0	340.8	49.3	68.2L	1.428	
4-7850	4-7987.6	.162	321.7	-66.1	-7.4	.927	94.0	.167	.857	200.5	386.6	.714	1.001D	93.7	1.262	10.7	67.1	152.6		.253
4-7987.6	4-8120	.253	155.2	12.2	2.3	1.358	82.1	.360	1.092	30.5	152.7	.699D	1.484A	103.6	.718	-1.5	11.7	41.4		.225
4-8120	4-8290	.155	332.2	-24.1	-2.3	.769	94.7	.192	1.190	200.4	328.0	.961A	1.418D	85.0	1.091	1.8	-9.4	278.1		.129
		12.32	7.45	4.18	4.87	8.26	3.26	11.73	2/1/1	54.3	143.2	55.0	.936	2.166	88.8	337.0	50.3	63.3L	1.091	
MARS ARRIVAL DATE = 2448130 (26 AUG 1990)																				
4-7810	4-7970.9	.145	336.8	-61.2	-6.6	.918	88.6	.162	.860	172.5	372.0	.721	1.000	91.7	1.267	8.8	67.6	153.8		.210
4-7970.9	4-8130	.210	172.3	31.5	4.6	1.361	89.3	.337	1.089	2.8	158.0	.723D	1.456A	100.4	.712	-4.2	.6	40.6		.203
4-8130	4-8250	.199	340.2	-13.5	-1.3	.720	95.8	.290	1.103	194.6	275.4	.783A	1.423D	74.3	1.062	1.2	-19.3	271.0		.285
		12.56	8.23	3.99	4.33	7.72	4.24	13.96	2/1/1	65.6	175.7	37.6	1.364	3.100	80.3	6.1	38.5	98.7D	2.865	
4-7820	4-7976.0	.133	334.4	-60.4	-5.9	.919	89.7	.161	.858	178.5	376.2	.720	.996	92.2	1.265	8.5	65.7	154.0		.206
4-7976.0	4-8130	.206	166.0	24.2	3.6	1.360	87.3	.339	1.089	10.6	157.6	.720D	1.459A	100.6	.712	-3.0	4.6	40.0		.201
4-8130	4-8260	.167	338.3	-16.4	-1.5	.740	96.0	.254	1.139	198.3	289.2	.850A	1.428D	77.5	1.076	1.1	-18.3	274.4		.236
		12.10	7.83	3.87	4.27	7.67	3.96	13.12	2/1/1	64.3	170.5	42.2	1.419	2.776	83.3	355.6	44.1	84.5L	2.520	
4-7830	4-7980.1	.133	330.8	-62.2	-6.0	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.9	65.7	154.3		.213
4-7980.1	4-8130	.213	161.6	19.7	3.1	1.358	85.7	.342	1.088	17.1	157.6	.716D	1.459A	100.8	.711	-2.4	7.0	39.5		.201
4-8130	4-8270	.180	332.9	-19.0	-1.7	.754	96.2	.229	1.168	202.0	303.1	.901A	1.435D	80.3	1.086	1.2	-16.9	276.7		.194 *
		11.95	7.67	3.86	4.28	7.67	3.81	12.49	2/1/1	64.0	162.9	46.2	1.320	2.548	86.1	347.2	47.0	74.8L	2.043	
4-7840	4-7983.9	.141	325.5	-64.2	-6.4	.923	92.4	.163	.856	192.7	382.9	.717	.995D	93.1	1.262	9.5	66.1	153.9		.228
4-7983.9	4-8130	.228	158.1	16.3	2.7	1.356	84.0	.346	1.084	23.5	157.9	.709D	1.459A	100.8	.709	-1.9	8.5	38.8		.202
4-8130	4-8280	.176	330.3	-21.2	-1.9	.764	96.4	.212	1.189	205.4	316.7	.937A	1.441D	82.8	1.092	1.2	-14.9	277.6		.159
		11.98	7.67	3.95	4.31	7.70	3.72	12.05	2/1/1	64.1	153.6	49.8	1.159	2.373	87.8	341.2	48.7	68.0L	1.592	
4-7850	4-7987.7	.158	320.6	-65.3	-7.1	.927	94.0	.167	.857	200.4	386.7	.714	1.001D	93.7	1.262	10.4	66.4	153.1		.248
4-7987.7	4-8130	.248	155.6	13.5	2.5	1.354	82.3	.351	1.078	30.3	158.5	.699D	1.457A	100.8	.705	-1.6	9.7	37.8		.204
4-8130	4-8290	.174	328.7	-23.2	-2.2	.771	96.5	.200	1.204	208.0	329.4	.963A	1.445D	85.0	1.096	1.3	-12.1	276.5		.131
		12.18	7.82	4.14	4.36	7.75	3.68	11.75	2/1/1	64.5	142.3	52.9	.975	2.243	88.8	337.4	50.0	63.2L	1.212	
MARS ARRIVAL DATE = 2448140 (5 SEP 1990)																				
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1		.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0		.203
4-8140	4-8250	.225	337.1	-14.3	-1.5	.722	98.7	.303	1.117	201.3	276.0	.779A	1.454D	73.7	1.067	1.0	-19.9	270.6		.297
		13.45	9.12	4.25	4.34	7.73	4.86	14.17	2/1/1	77.1	176.2	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041	
4-7820	4-7975.7	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0		.209
4-7975.7	4-8140	.209	167.8	29.3	4.3	1.357	87.7	.334	1.082	9.3	162.9	.721D	1.444A	98.2	.702	-3.7	.5	36.9		.189
4-8140	4-8260	.213	333.3	-16.8	-1.5	.743	98.6	.285	1.156	205.7	290.5	.849A	1.463D	77.2	1.082	1.0	-19.2	273.5		.243
		12.47	8.46	3.89	4.02	7.41	4.56	13.24	2/1/1	74.9	170.2	38.1	1.372	3.066	82.3	358.9	40.9	87.0L	2.834	

STOPOVER TIME = 0 DAYS

1990 OUTBOUND SWINGBY

MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2448140
5 SEP 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7830	4-7980.1	.133	330.6	-62.0	-5.9	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.8	65.6	154.3	.213
4-7980.1	4-8140	.213	162.9	22.9	3.5	1.356	85.9	.337	1.081	16.3	162.9	.717D	1.444A	98.3	.701	-2.7	3.9	36.0	.180
4-8140	4-8270	.206	330.1	-19.0	-1.7	.758	98.6	.240	1.187	210.0	305.0	.902A	1.472D	80.2	1.092	1.0	-16.0	275.3	.199
		12.24	8.26	3.86	3.99	7.38	4.40	12.56	2/1/1	74.4	161.9	43.1	1.328	2.725	85.2	349.7	45.3	76.0L	2.291
4-7840	4-7984.0	.139	324.9	-63.6	-6.2	.923	92.4	.163	.856	192.6	383.0	.717	.995D	93.2	1.262	9.3	65.6	154.1	.225
4-7984.0	4-8140	.225	159.3	18.5	3.0	1.354	84.3	.340	1.077	22.7	163.1	.710D	1.444A	98.3	.699	-2.2	5.9	35.1	.189
4-8140	4-8280	.202	327.8	-20.7	-1.8	.768	98.6	.223	1.210	213.7	318.8	.940A	1.481D	82.8	1.099	1.0	-16.5	275.6	.162
		12.23	8.23	3.93	4.00	7.39	4.30	12.09	2/1/1	74.5	152.0	47.2	1.189	2.496	87.2	343.3	47.0	68.8L	1.778
4-7850	4-7987.8	.155	319.6	-64.5	-6.9	.927	93.9	.167	.857	200.4	386.8	.714	1.001D	93.8	1.262	10.2	65.7	153.5	.244
4-7987.8	4-8140	.244	156.8	15.0	2.7	1.352	82.6	.346	1.072	29.4	163.6	.701D	1.443A	98.3	.695	-1.7	7.4	34.0	.190
4-8140	4-8290	.199	326.4	-22.2	-2.0	.775	98.6	.213	1.226	216.3	331.6	.965A	1.487D	85.1	1.102	1.1	-14.4	273.7	.133
		12.39	8.35	4.10	4.04	7.44	4.25	11.77	2/1/1	74.9	140.1	50.7	1.012	2.334	88.3	339.2	49.6	63.8L	1.351
4-7860	4-7992.0	.179	317.3	-64.4	-7.9	.931	95.6	.175	.861	208.2	391.1	.710	1.011D	94.5	1.263	11.3	65.6	152.9	.270
4-7992.0	4-8140	.270	155.1	12.1	2.4	1.349	80.6	.354	1.064	36.7	164.4	.688D	1.441A	98.2	.691	-1.3	8.6	32.6	.194
4-8140	4-8300	.198	325.8	-23.5	-2.3	.779	98.6	.206	1.235	217.8	343.3	.980A	1.489D	87.2	1.103	1.2	-11.6	269.4	.112
		12.73	8.61	4.40	4.12	7.51	4.21	11.58	2/1/1	75.8	125.7	53.5	.826	2.220	88.9	336.8	51.1	60.4L	1.008
MARS ARRIVAL DATE = 2448150 (15 SEP 1990)																			
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	36.1	5.8	1.357	86.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.6	.169
4-8150	4-8260	.246	331.0	-17.0	-1.5	.751	101.6	.281	1.185	214.2	293.0	.852A	1.518D	76.9	1.092	.8	-20.0	271.9	.252
		13.38	9.38	4.00	4.00	7.40	5.38	13.39	2/1/1	85.2	169.0	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
4-7830	4-7980.0	.134	331.0	-62.4	-6.1	.920	91.0	.161	.856	185.3	379.4	.718	.994D	92.7	1.263	8.9	65.9	154.2	.215
4-7980.0	4-8150	.215	165.1	27.2	4.2	1.355	86.3	.334	1.078	14.8	167.5	.716D	1.439A	96.1	.693	-3.3	.2	32.9	.182
4-8150	4-8270	.238	328.2	-18.8	-1.7	.766	101.4	.256	1.219	219.0	307.9	.906A	1.531D	80.1	1.102	.8	-19.1	273.0	.205
		12.92	9.05	3.87	3.86	7.26	5.18	12.65	2/1/1	84.6	160.0	39.3	1.306	2.971	83.8	354.1	42.7	78.7L	2.574
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8150	.223	161.3	21.2	3.4	1.354	84.6	.338	1.075	21.4	167.7	.712D	1.438A	96.1	.691	-2.5	3.2	31.7	.182
4-8150	4-8280	.233	326.2	-20.1	-1.8	.776	101.2	.241	1.243	222.8	321.9	.944A	1.541D	82.9	1.108	.8	-18.0	272.4	.166
		12.83	8.98	3.92	3.85	7.25	5.06	12.14	2/1/1	84.6	149.3	44.3	1.209	2.652	86.1	347.0	46.5	70.4L	1.996
4-7850	4-7987.9	.152	318.7	-63.7	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	9.9	65.0	153.9	.239
4-7987.9	4-8150	.240	158.6	16.8	3.0	1.351	83.0	.343	1.071	26.0	166.1	.704D	1.438A	96.1	.686	-1.9	5.2	30.5	.183
4-8150	4-8290	.230	325.1	-21.2	-1.9	.783	101.1	.231	1.258	225.3	334.6	.968A	1.548D	85.3	1.112	.9	-16.5	269.7	.137
		12.93	9.05	4.07	3.88	7.28	4.99	11.81	2/1/1	84.9	136.5	48.3	1.048	2.445	87.4	342.3	48.9	65.1L	1.514
4-7860	4-7992.0	.175	313.0	-63.4	-7.5	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.9	64.8	153.5	.263
4-7992.0	4-8150	.263	156.9	13.4	2.6	1.349	81.1	.350	1.064	35.1	166.7	.691D	1.436A	95.9	.684	-1.4	6.7	29.2	.186
4-8150	4-8300	.227	324.7	-22.1	-2.1	.786	100.9	.224	1.266	226.5	345.9	.982A	1.550D	87.4	1.112	.9	-14.5	264.6	.116
		13.22	9.26	4.35	3.95	7.35	4.92	11.61	2/1/1	85.6	121.4	51.4	.867	2.305	88.2	339.5	50.8	61.4L	1.132
MARS ARRIVAL DATE = 2448160 (25 SEP 1990)																			
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8160	.223	164.0	24.8	4.0	1.354	85.1	.337	1.077	19.5	171.8	.714D	1.439A	94.1	.685	-2.9	.3	29.2	.181
4-8160	4-8280	.272	325.5	-19.3	-1.8	.789	104.1	.266	1.292	232.5	325.7	.948A	1.635D	83.0	1.122	.6	-19.4	266.1	.173
		13.77	9.95	3.92	3.82	7.22	6.04	12.22	2/1/1	93.8	145.5	40.9	1.209	2.862	84.4	352.2	44.3	73.2L	2.252
4-7850	4-7988.0	.149	317.9	-63.0	-6.5	.927	93.9	.167	.857	200.3	387.0	.714	1.000D	93.8	1.262	9.7	64.4	154.2	.236
4-7988.0	4-8160	.236	161.1	19.2	3.3	1.352	83.4	.342	1.073	26.1	172.1	.706D	1.439A	94.1	.682	-2.2	3.0	27.6	.181
4-8160	4-8290	.267	324.6	-20.2	-1.9	.795	103.8	.256	1.306	234.7	336.1	.971A	1.640D	85.6	1.125	.6	-18.3	264.3	.143
		13.79	9.95	4.04	3.84	7.23	5.91	11.87	2/1/1	94.1	151.7	45.5	1.080	2.584	86.1	348.8	47.9	67.0L	1.710

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448100
27 JUL 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC

MARS ARRIVAL DATE = 2448100 (27 JUL 1990)

4-7790	4-7958.0	.190	336.0	-67.2	-9.4	.917	86.5	.169	.867	162.3	360.8	.721	1.014	90.1	1.274	10.5	72.7	156.0	.244
4-7958.0	4-8100	.244	183.5	27.6	4.7	1.377	94.1	.372	1.138	344.8	502.0	.714	1.561A	107.9	.751	-5.0	4.2	45.6	.280
4-8100	4-8270	.138	345.2	-17.8	-1.9	.756	90.9	.210	1.147	183.5	303.3	.907A	1.387D	81.1	1.079	1.8	-12.7	276.8	.180
		13.72	7.48	4.56	6.24	9.61	2.93	12.31	2/1/1	41.7	161.2	47.2	1.009	2.497	81.1	15.2	37.9	121.0D	1.511
4-7800	4-7965.1	.161	336.7	-63.0	-7.5	.917	87.5	.165	.864	167.1	367.2	.721	1.006	91.0	1.270	9.3	69.5	154.5	.219
4-7965.1	4-8100	.219	179.3	21.0	3.3	1.380	91.7	.374	1.153	353.9	499.7	.721	1.584A	108.7	.758	-3.3	9.0	46.7	.268
4-8100	4-8280	.134	343.2	-21.8	-2.3	.764	91.4	.193	1.164	185.7	315.7	.939A	1.386D	83.2	1.084	2.0	-8.6	278.5	.151
		13.31	7.01	4.18	6.29	9.67	2.84	11.95	2/1/1	38.3	152.3	50.6	1.256	2.330	79.8	12.7	42.4	109.5D	1.670
4-7810	4-7970.7	.146	337.3	-61.7	-6.7	.918	88.6	.162	.860	172.6	371.8	.721	1.000	91.8	1.268	8.9	68.0	153.9	.212
4-7970.7	4-8100	.212	174.0	17.7	2.7	1.381	89.6	.377	1.161	1.6	138.4	.723D	1.599A	109.2	.762	-2.6	11.3	47.3	.265
4-8100	4-8290	.132	342.3	-26.1	-2.9	.770	91.7	.182	1.176	187.6	327.7	.962A	1.389D	85.2	1.086	2.4	-2.4	278.4	.126
		13.20	6.81	4.01	6.39	9.76	2.81	11.72	2/1/1	36.8	141.1	52.0	1.333	2.263	81.0	6.1	45.4	98.0D	1.710
4-7820	4-7975.3	.141	336.5	-62.6	-6.5	.919	89.8	.161	.858	178.7	375.3	.720	.996	92.1	1.265	9.1	67.7	154.0	.216
4-7975.3	4-8100	.216	168.9	15.3	2.4	1.381	87.7	.380	1.164	8.4	137.8	.721D	1.607A	109.6	.764	-2.2	12.6	47.6	.269
4-8100	4-8300	.134	343.1	-31.3	-3.7	.774	91.9	.174	1.184	188.9	339.1	.978A	1.390D	86.9	1.088	3.1	7.5	276.1	.115
		13.26	6.79	3.94	6.47	9.85	2.85	11.60	2/1/1	36.0	126.8	53.3	1.290	2.230	83.3	358.2	47.5	87.3L	1.587
4-7830	4-7979.4	.143	333.6	-64.8	-6.7	.921	91.1	.161	.856	185.5	378.7	.719	.994D	92.6	1.264	9.6	68.1	153.7	.226
4-7979.4	4-8100	.226	164.4	13.4	2.2	1.381	85.9	.384	1.165	14.8	137.7	.717D	1.612A	109.8	.764	-1.8	13.5	47.6	.292
4-8100	4-8310	.144	346.9	-38.8	-5.3	.776	91.9	.170	1.189	189.5	349.8	.987A	1.391D	88.5	1.087	4.6	22.9	271.9	.120
		13.55	7.00	3.96	6.55	9.92	3.04	11.64	2/1/1	35.6	109.9	55.1	1.174	2.161	85.3	350.9	48.8	78.4L	1.363

MARS ARRIVAL DATE = 2448110 (6 AUG 1990)

4-7790	4-7938.1	.257	290.9	35.8	13.7	.910	86.0	.183	.859	161.4	327.0	.701A	1.016	85.1	1.272	-13.5	-67.2	188.7	.321
4-7938.1	4-8110	.321	180.6	-30.1	-6.9	1.358	99.9	.362	1.064	322.0	517.9	.679	1.450A	101.6	.706	6.2	26.7	20.6	.258
4-8110	4-8270	.147	340.8	-18.4	-1.8	.754	92.4	.214	1.149	188.9	302.4	.903A	1.396D	80.8	1.079	1.6	-14.3	277.3	.185
		13.87	8.69	5.59	5.18	8.56	3.10	12.37	1/2/1	62.0	162.4	37.5	.585	3.113	94.5	177.7	3.6	126.6D	1.236
4-7790	4-7956.5	.212	340.0	-70.5	-11.0	.916	86.5	.169	.867	162.4	358.5	.721A	1.014	89.8	1.274	12.1	76.0	162.0	.274
4-7956.5	4-8110	.274	184.5	42.1	7.8	1.368	94.3	.355	1.106	343.5	509.5	.713	1.498A	104.6	.751	-8.0	-5.8	45.0	.259
4-8110	4-8270	.147	340.8	-18.4	-1.8	.754	92.4	.214	1.149	188.9	302.4	.903A	1.396D	80.8	1.079	1.6	-14.3	277.3	.185
		13.68	7.97	4.88	5.71	9.09	3.10	12.37	2/1/1	53.5	162.4	35.3	.798	3.302	83.2	14.6	29.7	126.2D	1.837
4-7800	4-7965.4	.158	336.0	-62.2	-7.3	.917	87.5	.165	.864	167.1	367.7	.721	1.006	91.1	1.270	9.1	68.8	154.1	.215
4-7965.4	4-8110	.215	177.9	26.2	4.0	1.371	91.3	.356	1.120	355.0	506.6	.721	1.518A	105.6	.738	-3.9	5.7	45.3	.247
4-8110	4-8280	.143	338.3	-21.7	-2.1	.763	92.8	.197	1.168	191.5	315.1	.937A	1.398D	83.0	1.085	1.7	-11.1	279.0	.153
		12.55	7.15	4.14	5.40	8.78	3.01	11.98	2/1/1	47.2	153.7	44.9	1.305	2.619	79.3	12.3	40.0	109.7D	2.113
4-7810	4-7971.2	.142	336.1	-60.3	-6.4	.918	88.5	.162	.860	172.5	372.5	.721	1.000	91.7	1.267	8.6	66.7	153.6	.206
4-7971.2	4-8110	.206	171.8	21.0	3.1	1.371	89.2	.358	1.125	3.2	145.5	.723D	1.528A	106.0	.741	-2.9	9.0	45.7	.248
4-8110	4-8290	.141	336.8	-25.1	-2.5	.769	93.1	.186	1.181	193.6	327.4	.961A	1.400D	85.1	1.086	2.0	-6.3	278.7	.159
		12.36	6.93	3.96	5.42	8.81	2.98	11.72	2/1/1	45.3	142.8	47.2	1.418	2.498	80.9	4.3	44.4	96.3D	2.123
4-7820	4-7975.8	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.8	4-8110	.209	166.6	17.7	2.7	1.371	87.3	.360	1.126	10.1	145.1	.721D	1.532A	106.3	.742	-2.3	10.7	45.8	.250
4-8110	4-8300	.142	336.7	-28.8	-3.1	.773	93.2	.178	1.189	195.1	339.0	.977A	1.402D	86.9	1.089	2.4	1.0	276.1	.112
		12.35	6.88	3.89	5.47	8.85	2.99	11.57	2/1/1	44.5	129.1	49.4	1.371	2.392	83.7	355.4	47.1	84.9L	1.908
4-7830	4-7979.7	.138	332.2	-63.5	-6.4	.921	91.0	.161	.856	185.4	379.1	.719	.994D	92.6	1.263	9.2	66.9	154.0	.220
4-7979.7	4-8110	.220	162.2	15.2	2.4	1.370	85.6	.363	1.125	16.4	145.1	.716D	1.534A	106.5	.741	-2.0	11.9	45.7	.251
4-8110	4-8310	.145	338.5	-33.6	-4.1	.775	93.2	.174	1.195	195.8	349.8	.987A	1.402D	88.5	1.089	3.3	12.2	271.4	.108
		12.49	6.97	3.91	5.52	8.90	3.06	11.52	2/1/1	44.2	113.0	52.0	1.244	2.281	86.1	347.6	48.6	76.0L	1.594
4-7840	4-7983.6	.148	327.4	-65.7	-6.9	.923	92.4	.163	.856	192.8	382.5	.717	.995D	93.1	1.263	10.0	67.5	153.2	.236
4-7983.6	4-8110	.236	158.6	13.0	2.2	1.368	83.9	.368	1.122	22.9	145.4	.709D	1.534A	106.7	.739	-1.6	12.7	45.5	.254
4-8110	4-8320	.159	344.2	-41.7	-6.2	.776	93.2	.171	1.197	195.7	359.7	.992A	1.402D	90.0	1.088	5.2	29.1	266.3	.124
		12.93	7.36	4.02	5.57	8.95	3.34	11.68	2/1/1	44.3	97.1	54.6	1.077	2.180	87.6	342.0	49.6	69.2L	1.271

MARS ARRIVAL DATE = 2448120 (16 AUG 1990)

4-7790	4-7937.3	.242	292.1	34.4	12.7	.909	85.9	.184	.858	161.4	325.8	.700A	1.016	84.9	1.272	-12.5	-64.7	186.5	.303
4-7937.3	4-8120	.303	179.9	-21.9	-4.9	1.354	100.1	.357	1.052	320.6	523.9	.676	1.428A	98.6	.694	4.2	22.7	17.8	.213
4-8120	4-8270	.161	336.5	-18.6	-1.7	.753	94.2	.221	1.156	195.0	302.3	.901A	1.411D	80.5	1.082	1.3	-15.6	277.3	.189
		13.29	8.73	5.34	4.57	7.96	3.38	12.43	1/2/1	72.0	163.0	43.0	.655	2.729	93.9	178.1	3.5	123.6D	1.133
4-7800	4-7964.7	.165	337.6	-63.9	-7.8	.917	87.5	.165	.864	167.2	366.7	.721	1.006	90.9	1.271	9.6	70.4	155.0	.224
4-7964.7	4-8120	.224	178.4	34.6	5.4	1.365	91.5	.344	1.098	354.3	513.2	.721	1.476A	102.6	.722	-5.2	-.5	43.4	.224
4-8120	4-8280	.157	333.9	-21.5	-2.0	.763	94.5	.203	1.176	198.0	315.4	.936A	1.415D	82.9	1.088	1.5	-13.1	276.7	.156
		12.36	7.52	4.22	4.84	8.23	3.30	12.02	2/1/1	57.7	154.1	38.0	1.197	3.074	79.7	13.0	35.1	112.5D	2.483
4-7810	4-7971.3	.141	335.8	-59.9	-6.3	.918	88.5	.163	.860	172.4	372.6	.720	1.000	91.8	1.267	8.5	66.5	153.5	.205
4-7971.3	4-8120	.205	171.2	25.3	3.7	1.365	89.1	.345	1.103	3.7	152.0	.723D	1.483A	103.1	.725	-3.4	5.6	43.4	.220
4-8120	4-8290	.155	332.2	-24.1	-2.3	.769	94.7	.192	1.190	200.4	328.0	.961A	1.418D	85.0	1.091	1.6	-9.4	276.1	.129
		11.95	7.21	3.94	4.74	8.15	3.26	11.73	2/1/1	54.9	143.2	42.7	1.437	2.749	80.7	4.2	42.4	96.3D	2.514
4-7820	4-7976.0	.134	334.5	-60.5	-6.0	.919	89.7	.161	.858	178.6	376.2	.720	.996	92.2	1.265	8.6	65.8	154.0	.206
4-7976.0	4-8120	.206	165.6	20.6	3.1	1.364	87.2	.347	1.103	10.8	151.7	.720D	1.486A	103.3	.725	-2.6	8.2	43.2	.220
4-8120	4-8300	.155	331.7	-26.7	-2.7	.773	94.6	.185	1.199	202.0	339.7	.978A	1.420D	86.9	1.092	1.9	-4.0	275.1	.110
		11.87	7.13	3.87	4.75	8.14	3.26	11.56	2/1/1	54.0	129.7	45.9	1.414	2.567	83.8	354.4	46.0	83.9L	2.215
4-7830	4-7979.9	.135	331.3	-62.7	-6.1	.921	91.0	.161	.856	185.3	379.3	.718	.994D	92.6	1.263	9.0	66.1	154.2	.216
4-7979.9	4-8120	.216	161.3	17.3	2.7	1.362	85.6	.350	1.101	17.2	151.7	.716D	1.487A	103.5	.724	-2.1	9.7	42.9	.221
4-8120	4-8310	.156	332.5	-29.9	-3.4	.776	94.8	.180	1.204	202.7	350.5	.987A	1.421D	88.6	1.092	2.4	3.9	270.0	.100
		11.94	7.16	3.86	4.77	8.16	3.28	11.48	2/1/1	53.7	113.8	49.1	1.292	2.406	86.4	346.5	46.0	74.6L	1.816
4-7840	4-7983.7	.144	326.3	-64.9	-6.8	.923	92.4	.163	.856	192.7	382.7	.717	.995D	93.1	1.262	9.7	66.7	153.6	.231
4-7983.7	4-8120	.231	157.9	14.5	2.5	1.361	83.9	.354	1.098	23.6	152.1	.709D	1.486A	103.6	.722	-1.8	10.8	42.3	.223
4-8120	4-8320	.160	335.3	-34.6	-4.5	.777	94.7	.178	1.206	202.5	360.4	.992	1.420D	90.1	1.090	3.4	15.6	264.0	.104
		12.16	7.35	3.98	4.81	8.20	3.37	11.50	2/1/1	53.8	97.5	52.2	1.123	2.272	88.0	340.8	49.3	68.2L	1.428
4-7850	4-7987.6	.162	321.7	-66.1	-7.4	.927	94.0	.167	.857	200.5	386.6	.714	1.001D	93.7	1.262	10.7	67.1	152.6	.253
4-7987.6	4-8120	.253	155.2	12.2	2.3	1.358	82.1	.360	1.092	30.5	152.7	.699D	1.484A	103.6	.718	-1.5	11.7	41.4	.225
4-8120	4-8330	.179	343.5	-43.9	-7.3	.776	94.4	.177	1.205	201.6	369.4	.992	1.418D	91.4	1.088	6.1	33.9	260.0	.138
		12.83	7.96	4.18	4.87	8.26	3.78	11.82	2/1/1	54.3	85.5	55.0	.936	2.166	88.8	337.0	50.3	63.3L	1.091

MARS ARRIVAL DATE = 2448130 (26 AUG 1990)

4-7790	4-7937.1	.239	292.3	34.1	12.4	.909	85.9	.185	.858	161.4	325.5	.699A	1.016	84.8	1.272	-12.3	-64.1	186.1	.299
4-7937.1	4-8130	.299	180.4	-17.6	-3.9	1.352	100.3	.356	1.046	319.4	529.2	.674	1.418A	95.9	.685	3.4	18.6	14.0	.202
4-8130	4-8270	.180	332.9	-19.0	-1.7	.754	96.2	.229	1.168	202.0	303.1	.901A	1.435D	80.3	1.086	1.2	-16.9	276.7	.194
		13.39	9.10	5.29	4.30	7.69	3.81	12.49	1/2/1	82.8	162.9	46.6	.672	2.528	93.5	179.2	2.4	122.6D	1.026
4-7800	4-7943.5	.239	292.6	37.3	12.8	.912	87.3	.175	.857	166.9	331.6	.707A	1.007	85.9	1.270	-12.1	-67.1	190.6	.288
4-7943.5	4-8130	.288	184.4	-28.2	-5.8	1.355	98.4	.348	1.058	326.7	526.2	.689	1.426A	97.2	.692	5.5	26.9	15.7	.207
4-8130	4-8280	.176	330.3	-21.2	-1.9	.764	96.4	.212	1.189	205.4	316.7	.937A	1.441D	82.6	1.092	1.2	-14.9	277.6	.159
		13.44	9.01	5.29	4.43	7.82	3.72	12.05	1/2/1	78.4	153.6	39.1	.726	2.991	93.4	182.4	3.2	123.8D	1.446
4-7810	4-7970.9	.145	336.8	-61.2	-6.6	.918	88.6	.162	.860	172.5	372.0	.721	1.000	91.7	1.267	8.8	67.6	153.8	.210
4-7970.9	4-8130	.210	172.3	31.5	4.6	1.361	89.3	.337	1.089	2.8	158.0	.723D	1.456A	100.4	.712	-4.2	.6	40.6	.203
4-8130	4-8290	.174	328.7	-23.2	-2.2	.771	96.5	.200	1.204	208.0	329.4	.963A	1.445D	85.0	1.096	1.3	-12.1	276.5	.131
		12.00	7.67	3.99	4.33	7.72	3.68	11.75	2/1/1	65.6	142.3	37.6	1.364	3.100	80.3	6.1	38.5	98.7D	2.865
4-7820	4-7976.0	.133	334.4	-60.4	-5.9	.919	89.7	.161	.858	178.5	376.2	.720	.996	92.2	1.265	8.5	65.7	154.0	.206
4-7976.0	4-8130	.206	166.0	24.2	3.6	1.360	87.3	.339	1.089	10.6	157.6	.720D	1.459A	100.6	.712	-3.0	4.8	40.0	.201
4-8130	4-8300	.174	326.1	-25.0	-2.5	.775	96.5	.193	1.213	209.6	341.1	.979A	1.448D	87.0	1.097	1.5	-8.2	272.9	.111
		11.80	7.53	3.87	4.27	7.67	3.66	11.56	2/1/1	64.3	128.5	42.2	1.419	2.776	83.3	355.6	44.1	84.5L	2.520
4-7830	4-7980.1	.133	330.8	-62.2	-6.0	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.9	65.7	154.3	.213
4-7980.1	4-8130	.213	161.6	19.7	3.1	1.358	85.7	.342	1.088	17.1	157.6	.716D	1.459A	100.8	.711	-2.4	7.0	39.5	.201
4-8130	4-8310	.173	328.5	-27.0	-2.9	.777	96.5	.189	1.218	210.2	351.8	.988A	1.449D	88.7	1.097	1.8	-8.6	267.3	.099
		11.80	7.52	3.86	4.28	7.67	3.65	11.47	2/1/1	64.0	112.5	46.2	1.320	2.548	86.1	347.2	47.0	74.8L	2.043

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7840	4-7983.9	.141	325.5	-64.2	-6.4	.923	92.4	.163	.856	192.7	382.9	.717	.995D	93.1	1.262	9.5	66.1	153.9	.226
4-7983.9	4-8130	.228	158.1	16.3	2.7	1.356	84.0	.346	1.084	23.5	157.9	.709D	1.459A	100.8	.709	-1.9	8.5	38.8	.202
4-8130	4-8320	.174	330.1	-29.7	-3.6	.778	96.3	.187	1.219	209.9	361.6	.992	1.447D	90.2	1.095	2.4	5.1	260.9	.097
		11.92	7.62	3.95	4.31	7.70	3.67	11.45	2/1/1	64.1	95.9	49.8	1.159	2.373	87.8	341.2	48.7	68.0L	1.592
4-7850	4-7987.7	.158	320.6	-65.3	-7.1	.927	94.0	.167	.857	200.4	386.7	.714	1.001D	93.7	1.262	10.4	66.4	153.1	.240
4-7987.7	4-8130	.248	155.6	13.5	2.5	1.354	82.3	.351	1.078	30.3	158.5	.699D	1.457A	100.8	.705	-1.6	9.7	37.8	.204
4-8130	4-8330	.178	333.9	-34.5	-4.9	.777	96.1	.186	1.218	208.7	370.4	.992	1.444D	91.6	1.092	3.6	16.7	256.1	.109
		12.26	7.90	4.14	4.36	7.75	3.76	11.55	2/1/1	64.5	82.1	52.9	.975	2.243	88.8	337.4	50.0	63.2L	1.212
MARS ARRIVAL DATE = 2448140 (5 SEP 1990)																			
4-7800	4-7943.2	.232	293.1	36.7	12.4	.912	87.3	.176	.856	166.9	331.0	.706A	1.007	85.8	1.270	-11.7	-65.9	189.8	.280
4-7943.2	4-8140	.280	184.9	-21.4	-4.4	1.354	98.8	.349	1.054	325.1	531.2	.686	1.421A	94.6	.684	4.1	21.3	12.8	.197
4-8140	4-8280	.202	327.8	-20.7	-1.8	.768	98.6	.223	1.210	213.7	318.8	.940A	1.481D	82.8	1.099	1.0	-16.5	275.6	.162
		13.69	9.49	5.19	4.20	7.59	4.30	12.09	1/2/1	88.7	152.0	44.6	.765	2.635	92.6	183.8	1.7	122.4D	1.251
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1	.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0	.203
4-8140	4-8290	.199	326.4	-22.2	-2.0	.775	98.6	.213	1.226	216.3	331.6	.965A	1.487D	85.1	1.102	1.1	-14.4	273.7	.133
		12.84	8.50	4.25	4.34	7.73	4.25	11.77	2/1/1	77.1	140.1	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041
4-7820	4-7975.7	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.7	4-8140	.209	167.8	29.3	4.3	1.357	87.7	.334	1.082	9.3	162.9	.721D	1.444A	98.2	.702	-3.7	.5	36.9	.169
4-8140	4-8300	.198	325.8	-23.5	-2.3	.779	98.6	.206	1.235	217.8	343.3	.980A	1.469D	87.2	1.103	1.2	-11.6	269.4	.112
		12.12	8.10	3.89	4.02	7.41	4.21	11.58	2/1/1	74.9	125.7	38.1	1.372	3.066	82.3	358.9	40.9	87.0L	2.834
4-7830	4-7980.1	.133	330.6	-62.0	-5.9	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.8	65.6	154.3	.215
4-7980.1	4-8140	.213	162.9	22.9	3.5	1.356	85.9	.337	1.081	16.3	162.9	.717D	1.444A	98.3	.701	-2.7	3.9	36.0	.188
4-8140	4-8310	.196	326.1	-24.7	-2.6	.761	98.5	.202	1.239	218.2	353.7	.986A	1.489D	88.9	1.103	1.4	-7.8	263.2	.100
		12.02	8.03	3.86	3.99	7.38	4.17	11.48	2/1/1	74.4	109.3	43.1	1.328	2.725	85.2	349.7	45.3	76.0L	2.291
4-7840	4-7984.0	.139	324.9	-63.6	-6.2	.923	92.4	.163	.856	192.6	383.0	.717	.995D	93.2	1.262	9.3	65.6	154.1	.225
4-7984.0	4-8140	.225	159.3	18.5	3.0	1.354	84.3	.340	1.077	22.7	163.1	.710D	1.444A	98.3	.699	-2.2	5.9	35.1	.189
4-8140	4-8320	.195	327.2	-26.3	-3.0	.781	98.2	.200	1.238	217.6	343.2	.991	1.486D	90.5	1.100	1.7	-2.8	256.6	.097
		12.07	8.07	3.93	4.00	7.39	4.14	11.45	2/1/1	74.5	92.6	47.2	1.189	2.496	87.2	343.3	47.8	68.8L	1.778
4-7850	4-7987.8	.155	319.6	-64.5	-6.9	.927	93.9	.167	.857	200.4	386.8	.714	1.001D	93.8	1.262	10.2	65.7	153.5	.244
4-7987.8	4-8140	.244	156.8	15.0	2.7	1.352	82.6	.346	1.072	29.4	165.6	.701D	1.443A	98.3	.695	-1.7	7.4	34.0	.190
4-8140	4-8330	.194	329.5	-28.7	-3.7	.779	97.9	.198	1.235	216.2	371.8	.991	1.480D	91.9	1.097	2.4	4.1	251.7	.102
		12.27	8.22	4.10	4.04	7.44	4.12	11.49	2/1/1	74.9	76.0	50.7	1.012	2.334	88.3	339.2	49.6	63.8L	1.351
4-7860	4-7992.0	.179	317.3	-64.4	-7.9	.931	95.6	.175	.861	208.2	391.1	.710	1.011D	94.5	1.263	11.3	65.6	152.9	.270
4-7992.0	4-8140	.270	155.1	12.1	2.4	1.349	80.6	.354	1.064	36.7	164.4	.688D	1.441A	98.2	.691	-1.3	8.6	32.6	.194
4-8140	4-8340	.198	334.2	-33.9	-5.4	.777	97.5	.197	1.230	214.0	379.6	.988	1.472D	93.2	1.093	3.9	16.0	250.1	.121
		12.73	8.62	4.40	4.12	7.51	4.21	11.66	2/1/1	75.8	68.7	53.5	.826	2.220	88.9	336.8	51.1	60.4L	1.008
MARS ARRIVAL DATE = 2448150 (15 SEP 1990)																			
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	38.1	5.8	1.357	88.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.8	.189
4-8150	4-8300	.227	324.7	-22.1	-2.1	.786	100.9	.224	1.266	226.5	345.9	.982A	1.550D	87.4	1.112	.9	-14.5	264.6	.116
		12.92	8.92	4.00	4.00	7.40	4.92	11.61	2/1/1	85.2	121.4	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
4-7830	4-7980.0	.134	331.0	-62.4	-6.1	.920	91.0	.161	.856	185.3	379.4	.718	.994D	92.7	1.263	8.9	65.9	154.2	.215
4-7980.0	4-8150	.215	165.1	27.2	4.2	1.355	86.3	.334	1.078	14.8	167.5	.718D	1.439A	96.1	.693	-3.3	.2	32.9	.182
4-8150	4-8310	.225	325.0	-22.9	-2.3	.787	100.7	.220	1.268	226.6	356.1	.989A	1.547D	89.3	1.111	1.0	-11.8	257.9	.105
		12.58	8.72	3.87	3.86	7.26	4.85	11.51	2/1/1	84.6	104.7	39.3	1.306	2.971	83.8	354.1	42.7	78.7L	2.574
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8150	.223	161.3	21.2	3.4	1.354	84.6	.338	1.075	21.4	167.7	.712D	1.438A	96.1	.691	-2.5	3.2	31.7	.182
4-8150	4-8320	.221	326.0	-23.7	-2.6	.786	100.4	.217	1.266	225.6	365.2	.991	1.540D	90.9	1.108	1.2	-8.6	251.4	.102
		12.54	8.69	3.92	3.85	7.25	4.77	11.49	2/1/1	84.6	88.2	44.3	1.209	2.652	86.1	347.0	46.5	70.4L	1.996
4-7850	4-7987.9	.152	318.7	-63.7	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	9.9	65.0	153.9	.239
4-7987.9	4-8150	.240	156.6	16.8	3.0	1.351	83.0	.343	1.071	28.0	168.1	.704D	1.438A	96.1	.686	-1.9	5.2	30.5	.183
4-8150	4-8330	.218	327.6	-24.9	-3.0	.783	100.0	.215	1.260	223.9	373.4	.989	1.530D	92.4	1.104	1.6	-4.7	246.9	.106
		12.64	8.76	4.07	3.88	7.28	4.69	11.52	2/1/1	84.9	73.7	48.3	1.048	2.445	87.4	342.3	48.9	65.1L	1.514
4-7860	4-7992.0	.175	316.0	-63.4	-7.5	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.9	64.8	153.5	.263
4-7992.0	4-8150	.263	156.9	13.4	2.6	1.349	81.1	.350	1.064	35.1	168.7	.691D	1.438A	95.9	.684	-1.4	6.7	29.2	.186
4-8150	4-8340	.213	330.4	-27.1	-3.8	.780	99.5	.213	1.252	221.4	360.9	.985	1.516D	93.6	1.099	2.3	1.2	245.4	.116
		12.93	8.98	4.35	3.95	7.35	4.63	11.60	2/1/1	85.6	62.7	51.4	.867	2.305	86.2	339.5	50.6	61.4L	1.132
MARS ARRIVAL DATE = 2448160 (25 SEP 1990)																			
4-7830	4-7979.6	.140	332.7	-64.0	-6.5	.921	91.0	.161	.856	185.5	378.9	.719	.994D	92.6	1.263	9.4	67.4	153.9	.222
4-7979.6	4-8160	.222	168.4	33.9	5.3	1.356	86.9	.333	1.080	12.3	171.7	.720D	1.439A	94.1	.686	-4.3	-4.6	31.0	.184
4-8160	4-8310	.258	324.9	-21.2	-2.2	.796	103.1	.245	1.310	235.1	358.7	.989A	1.631D	89.7	1.122	.8	-14.8	251.7	.113
		13.52	9.62	3.93	3.90	7.29	5.69	11.58	2/1/1	93.8	99.1	34.5	1.217	3.369	81.9	.4	38.0	83.3L	2.883
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8160	.223	164.0	24.8	4.0	1.354	85.1	.337	1.077	19.5	171.8	.714D	1.439A	94.1	.685	-2.9	.3	29.2	.181
4-8160	4-8320	.253	325.8	-21.6	-2.3	.794	102.7	.241	1.304	233.7	367.4	.990	1.617D	91.4	1.119	.9	-12.7	245.7	.111
		13.30	9.48	3.92	3.82	7.22	5.57	11.57	2/1/1	93.8	83.2	40.9	1.209	2.862	84.4	352.2	44.3	73.2L	2.252
4-7850	4-7988.0	.149	317.9	-63.0	-6.5	.927	93.9	.167	.857	200.3	387.0	.714	1.000D	93.8	1.262	9.7	64.4	154.2	.238
4-7988.0	4-8160	.236	161.1	19.2	3.3	1.352	83.4	.342	1.073	26.1	172.1	.706D	1.439A	94.1	.682	-2.2	3.0	27.8	.180
4-8160	4-8330	.246	327.2	-22.2	-2.6	.790	102.3	.237	1.294	231.8	375.2	.988	1.600D	92.9	1.114	1.1	-10.5	242.0	.111
		13.31	9.47	4.04	3.84	7.23	5.43	11.60	2/1/1	94.1	69.4	45.5	1.060	2.584	86.1	346.8	47.9	67.0L	1.710
4-7860	4-7992.1	.170	314.7	-62.4	-7.2	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.6	63.9	154.1	.257
4-7992.1	4-8160	.257	159.1	15.0	2.9	1.349	81.6	.348	1.067	33.1	172.6	.695D	1.438A	93.9	.678	-1.6	4.9	26.5	.184
4-8160	4-8340	.242	329.2	-25.1	-3.0	.786	101.7	.233	1.282	228.8	362.4	.983	1.581D	94.2	1.108	1.4	-7.7	241.0	.123
		13.48	9.58	4.29	3.90	7.29	5.29	11.67	2/1/1	94.7	58.5	49.1	.909	2.406	87.2	343.3	50.4	62.9L	1.260

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448100
27 JUL 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC

MARS ARRIVAL DATE = 2448100 (27 JUL 1990)

4-7790	4-7958.0	.190	336.0	-67.2	-9.4	.917	86.5	.169	.867	162.5	360.8	.721	1.014	90.1	1.274	10.5	72.7	158.0	.244
4-7958.0	4-8100	.244	183.5	27.6	4.7	1.377	94.1	.372	1.138	344.8	502.0	.714	1.561A	107.9	.751	-5.0	4.2	45.6	.200
4-8100	4-8310	.144	346.9	-38.8	-5.3	.776	91.9	.170	1.189	169.5	349.8	.987A	1.391D	88.5	1.087	4.6	22.9	271.9	.120
		13.83	7.59	4.56	6.24	9.61	3.04	11.64	2/1/1	41.7	109.9	47.2	1.009	2.497	81.1	15.2	37.9	121.0D	1.511
4-7820	4-7975.3	.141	336.5	-62.6	-6.5	.919	89.8	.161	.858	178.7	375.3	.720	.996	92.1	1.265	9.1	67.7	154.0	.216
4-7975.3	4-8100	.216	168.9	15.3	2.4	1.381	87.7	.380	1.164	8.4	137.8	.721D	1.607A	109.6	.764	-2.2	12.6	47.6	.289
4-8100	4-8340	.160	321.2	25.6	7.4	.776	91.5	.168	1.190	187.5	377.9	.990	1.389D	92.6	1.080	-8.6	-80.6	171.8	.176
		13.78	7.31	3.94	6.47	9.85	3.37	12.25	2/1/2	36.0	79.6	53.3	1.290	2.230	83.3	356.2	47.5	87.3L	1.587
4-7830	4-7979.4	.143	333.6	-64.8	-6.7	.921	91.1	.161	.856	185.5	378.7	.719	.994D	92.6	1.264	9.6	68.1	153.7	.226
4-7979.4	4-8100	.226	164.4	13.4	2.2	1.381	85.9	.384	1.165	14.8	137.7	.717D	1.612A	109.8	.764	-1.8	13.5	47.6	.292
4-8100	4-8350	.127	330.4	8.8	3.2	.775	91.1	.170	1.187	185.5	385.8	.985	1.388D	93.7	1.077	-4.5	-63.8	229.0	.121
		13.22	6.67	3.96	6.55	9.92	2.70	11.65	2/1/2	35.6	64.6	55.1	1.174	2.161	85.3	350.9	48.8	78.4L	1.363
4-7840	4-7983.3	.153	329.0	-66.9	-7.3	.923	92.5	.162	.856	192.9	382.3	.717	.995D	93.1	1.263	10.3	68.5	152.7	.243
4-7983.3	4-8100	.243	160.5	11.6	2.0	1.379	84.1	.388	1.162	21.3	136.0	.711D	1.613A	110.1	.763	-1.6	14.2	47.4	.295
4-8100	4-8360	.120	336.6	1.5	1.7	.773	90.6	.173	1.183	183.0	393.1	.979	1.387D	94.7	1.073	-3.1	-50.8	237.4	.115
		13.29	6.66	4.08	6.63	10.00	2.58	11.60	2/1/2	35.6	51.6	57.2	1.017	2.091	86.7	345.1	49.7	71.2L	1.109

MARS ARRIVAL DATE = 2448110 (6 AUG 1990)

4-7790	4-7938.1	.257	290.9	35.8	13.7	.910	86.0	.183	.859	161.4	327.0	.701A	1.016	85.1	1.272	-13.5	-67.2	168.7	.321
4-7938.1	4-8110	.321	180.6	-30.1	-6.9	1.358	99.9	.362	1.064	322.0	517.9	.679	1.450A	101.6	.706	6.2	28.7	20.6	.238
4-8110	4-8310	.145	338.5	-33.6	-4.1	.775	93.2	.174	1.195	195.8	349.8	.987A	1.402D	88.5	1.089	3.3	12.2	271.4	.106
		13.83	8.65	5.59	5.18	8.56	3.06	11.52	1/2/1	62.0	113.0	37.5	.585	3.113	94.5	177.7	3.6	126.6D	1.236
4-7790	4-7956.5	.212	340.0	-70.5	-11.0	.916	86.6	.169	.867	162.4	358.5	.721A	1.014	89.8	1.274	12.1	76.0	162.0	.274
4-7956.5	4-8110	.274	164.5	42.1	7.8	1.368	94.3	.355	1.106	343.5	509.3	.713	1.498A	104.6	.731	-8.0	-5.8	45.0	.259
4-8110	4-8310	.145	338.5	-33.6	-4.1	.775	93.2	.174	1.195	195.8	349.8	.987A	1.402D	88.5	1.089	3.3	12.2	271.4	.106
		13.64	7.94	4.88	5.71	9.09	3.06	11.52	2/1/1	53.5	113.0	35.3	.796	3.302	83.2	14.6	29.7	126.2D	1.837
4-7800	4-7965.4	.158	336.0	-62.2	-7.3	.917	87.5	.165	.864	167.1	367.7	.721	1.006	91.1	1.270	9.1	68.8	154.1	.215
4-7965.4	4-8110	.215	177.9	26.2	4.0	1.371	91.3	.356	1.120	355.0	506.6	.721	1.518A	105.6	.738	-3.9	5.7	45.3	.247
4-8110	4-8320	.159	344.2	-41.7	-6.2	.776	93.2	.171	1.197	195.7	359.7	.992A	1.402D	90.0	1.088	5.2	29.1	266.5	.124
		12.88	7.48	4.14	5.40	8.78	3.34	11.68	2/1/1	47.2	97.1	44.9	1.305	2.619	79.3	12.3	40.0	109.7D	2.113
4-7830	4-7979.7	.138	332.2	-63.5	-6.4	.921	91.0	.161	.856	185.4	379.1	.719	.994D	92.6	1.263	9.2	66.9	154.0	.220
4-7979.7	4-8110	.220	162.2	15.2	2.4	1.370	85.6	.363	1.125	16.4	145.1	.716D	1.534A	106.5	.741	-2.0	11.9	45.7	.251
4-8110	4-8350	.143	324.6	12.6	4.5	.774	92.4	.173	1.191	191.5	385.5	.986	1.397D	93.7	1.078	-5.9	-71.0	219.0	.141
		12.44	6.93	3.91	5.52	8.90	3.02	11.85	2/1/2	44.2	68.1	52.0	1.244	2.281	86.1	347.8	48.6	76.0L	1.594
4-7840	4-7983.6	.148	327.4	-65.7	-6.9	.923	92.4	.163	.856	192.8	382.5	.717	.995D	93.1	1.263	10.0	67.5	153.2	.236
4-7983.6	4-8110	.236	156.6	13.0	2.2	1.368	83.9	.368	1.122	22.9	143.4	.709D	1.534A	106.7	.739	-1.6	12.7	45.3	.254
4-8110	4-8360	.129	331.7	1.4	2.1	.772	91.9	.175	1.187	188.9	392.7	.979	1.395D	94.7	1.074	-3.5	-54.1	236.4	.120
		12.33	6.76	4.02	5.57	8.95	2.74	11.65	2/1/2	44.3	53.4	54.6	1.077	2.180	87.6	342.0	49.6	69.2L	1.271
4-7850	4-7987.5	.166	323.1	-67.0	-7.7	.927	94.0	.167	.857	200.5	386.5	.714	1.001D	93.7	1.263	11.0	67.9	152.0	.259
4-7987.5	4-8110	.260	155.8	11.0	2.1	1.365	82.0	.373	1.115	29.9	146.1	.699D	1.532A	106.8	.736	-1.4	13.4	44.5	.256
4-8110	4-8370	.125	337.6	-3.2	1.0	.770	91.3	.179	1.182	185.8	399.4	.971	1.393D	95.7	1.070	-2.6	-44.5	243.2	.123
		12.54	6.90	4.24	5.64	9.02	2.67	11.67	2/1/2	44.7	42.8	57.0	.893	2.097	88.5	338.1	50.5	64.0L	.979

MARS ARRIVAL DATE = 2448120 (16 AUG 1990)

4-7790	4-7937.3	.242	292.1	34.4	12.7	.909	85.9	.184	.858	161.4	325.8	.700A	1.016	84.9	1.272	-12.5	-64.7	166.5	.303
4-7937.3	4-8120	.303	179.9	-21.9	-4.9	1.354	100.1	.357	1.052	320.6	523.9	.676	1.428A	98.6	.694	4.2	22.7	17.8	.213
4-8120	4-8310	.156	332.5	-29.9	-3.4	.776	94.8	.180	1.204	202.7	350.5	.987A	1.421D	88.6	1.092	2.4	3.9	270.0	.100
		13.19	8.62	5.34	4.57	7.96	3.28	11.48	1/2/1	72.0	113.8	43.0	.655	2.729	93.9	178.1	3.5	123.6D	1.133
4-7800	4-7964.7	.165	337.8	-63.9	-7.8	.917	87.5	.165	.864	167.2	366.7	.721	1.006	90.9	1.271	9.8	70.4	155.0	.224
4-7964.7	4-8120	.224	178.4	34.6	5.4	1.365	91.5	.344	1.098	354.3	513.2	.721	1.476A	102.6	.722	-5.2	-.5	43.4	.224
4-8120	4-8320	.160	335.3	-34.6	-4.5	.777	94.7	.178	1.206	202.5	360.4	.992	1.420D	90.1	1.090	3.4	15.6	264.0	.104
		12.43	7.59	4.22	4.84	8.23	3.37	11.50	2/1/1	57.7	97.5	38.0	1.197	3.074	79.7	13.0	35.1	112.5D	2.483
4-7810	4-7971.3	.141	335.8	-59.9	-6.3	.918	88.5	.163	.860	172.4	372.6	.720	1.000	91.8	1.267	8.5	66.5	153.5	.205
4-7971.3	4-8120	.205	171.2	25.3	3.7	1.365	89.1	.345	1.103	3.7	152.0	.723D	1.483A	103.1	.725	-3.4	5.8	43.4	.220
4-8120	4-8330	.179	343.5	-43.9	-7.5	.776	94.4	.177	1.205	201.6	369.4	.992	1.418D	91.4	1.088	6.1	33.9	260.0	.138
		12.46	7.72	3.94	4.74	8.13	3.78	11.82	2/1/1	54.9	85.5	42.7	1.437	2.749	80.7	4.2	42.4	96.3D	2.514
4-7830	4-7979.9	.135	331.3	-62.7	-6.1	.921	91.0	.161	.856	185.3	379.3	.718	.994D	92.6	1.263	9.0	66.1	154.2	.216
4-7979.9	4-8120	.216	161.3	17.3	2.7	1.362	85.6	.350	1.101	17.2	151.7	.716D	1.487A	105.5	.724	-2.1	9.7	42.9	.221
4-8120	4-8350	.182	318.4	22.4	8.1	.773	93.8	.178	1.198	197.8	385.7	.985	1.412D	93.8	1.080	-9.5	-78.3	174.4	.197
		12.51	7.74	3.88	4.77	8.16	3.85	12.54	2/1/2	53.7	73.8	49.1	1.292	2.406	86.4	346.5	48.0	74.8L	1.816
4-7840	4-7983.7	.144	326.3	-64.9	-8.8	.923	92.4	.163	.856	192.7	382.7	.717	.995D	93.1	1.262	9.7	66.7	153.6	.231
4-7983.7	4-8120	.231	157.9	14.5	2.5	1.361	83.9	.354	1.098	23.6	152.1	.709D	1.486A	103.6	.722	-1.8	10.8	42.3	.223
4-8120	4-8360	.143	327.5	2.5	2.7	.771	93.2	.180	1.193	195.0	392.6	.979	1.408D	94.8	1.076	-4.3	-58.4	233.5	.130
		11.81	6.99	3.98	4.81	8.20	3.01	11.74	2/1/2	53.8	55.4	52.2	1.123	2.272	88.0	340.8	49.3	68.2L	1.428
4-7850	4-7987.6	.162	321.7	-66.1	-7.4	.927	94.0	.167	.857	200.5	386.6	.714	1.001D	93.7	1.262	10.7	67.1	152.8	.253
4-7987.6	4-8120	.253	155.2	12.2	2.3	1.358	82.1	.360	1.092	30.5	152.7	.699D	1.484A	103.6	.718	-1.5	11.7	41.4	.228
4-8120	4-8370	.135	333.5	-4.1	1.2	.768	92.6	.182	1.187	191.9	399.2	.971	1.404D	95.8	1.072	-2.8	-45.9	242.9	.127
		11.92	7.05	4.18	4.87	8.26	2.87	11.71	2/1/2	54.3	43.5	55.0	.936	2.166	88.8	337.0	50.3	63.3L	1.091

MARS ARRIVAL DATE = 2448130 (26 AUG 1990)

4-7790	4-7937.1	.239	292.3	34.1	12.4	.909	85.9	.185	.858	161.4	325.5	.699A	1.016	84.8	1.272	-12.3	-64.1	166.1	.299
4-7937.1	4-8130	.299	180.4	-17.6	-3.9	1.352	100.3	.356	1.046	319.4	529.2	.674	1.418A	95.9	.685	3.4	18.6	14.0	.202
4-8130	4-8310	.173	328.5	-27.0	-2.9	.777	96.5	.189	1.218	210.2	351.8	.988A	1.449D	88.7	1.097	1.8	-2.6	267.3	.099
		13.24	8.94	5.29	4.30	7.69	3.65	11.47	1/2/1	82.8	112.5	46.6	.672	2.528	93.3	179.2	2.4	122.6D	1.026
4-7800	4-7943.5	.239	292.6	37.3	12.8	.912	87.3	.175	.857	166.9	331.6	.707A	1.007	85.9	1.270	-12.1	-67.1	160.6	.268
4-7943.5	4-8130	.288	184.4	-26.2	-5.6	1.355	98.4	.348	1.058	326.7	526.2	.689	1.426A	97.2	.692	5.5	26.9	15.7	.207
4-8130	4-8320	.174	330.1	-29.7	-3.6	.778	96.3	.187	1.219	209.9	361.6	.992	1.447D	90.2	1.095	2.4	5.1	260.9	.097
		13.58	8.95	5.29	4.43	7.82	3.67	11.45	1/2/1	78.4	95.9	39.1	.726	2.991	93.4	182.4	3.2	123.6D	1.446
4-7810	4-7970.9	.145	336.8	-61.2	-6.6	.918	88.6	.162	.860	172.5	372.0	.721	1.000	91.7	1.267	8.8	67.6	153.8	.210
4-7970.9	4-8130	.210	172.3	31.5	4.6	1.361	89.3	.337	1.089	2.8	158.0	.723D	1.456A	100.4	.712	-4.2	.6	40.6	.203
4-8130	4-8330	.178	333.9	-34.5	-4.9	.777	96.1	.186	1.218	208.7	370.4	.992	1.444D	91.6	1.092	3.6	16.7	256.1	.109
		12.08	7.75	3.99	4.33	7.72	3.76	11.55	2/1/1	65.6	82.1	37.6	1.364	3.100	80.3	6.1	38.5	98.7D	2.865
4-7820	4-7976.0	.133	334.4	-60.4	-5.9	.919	89.7	.161	.858	178.5	376.2	.720	.996	92.2	1.265	8.5	65.7	154.0	.206
4-7976.0	4-8130	.206	166.0	24.2	3.6	1.360	87.3	.339	1.089	10.6	157.6	.720D	1.459A	100.6	.712	-3.0	4.8	40.0	.201
4-8130	4-8340	.207	345.7	-46.4	-9.2	.775	95.7	.185	1.214	206.8	378.4	.989	1.439D	92.8	1.088	7.8	38.7	255.2	.169
		12.57	8.30	5.87	4.27	7.67	4.43	12.17	2/1/1	64.3	77.2	42.2	1.419	2.776	85.3	355.6	44.1	84.5L	2.520
4-7840	4-7983.9	.141	325.5	-64.2	-6.4	.923	92.4	.163	.856	192.7	382.9	.717	.995D	93.1	1.262	9.5	66.1	153.9	.228
4-7983.9	4-8130	.228	158.1	16.3	2.7	1.356	84.0	.346	1.084	23.5	157.9	.709D	1.459A	100.8	.709	-1.9	8.5	38.8	.202
4-8130	4-8360	.164	323.7	6.4	4.2	.770	94.7	.187	1.202	201.5	393.0	.977	1.427D	95.0	1.079	-5.8	-65.2	225.5	.151
		11.72	7.42	3.93	4.31	7.70	3.46	11.96	2/1/2	64.1	58.9	49.8	1.159	2.373	87.8	341.2	48.7	68.0L	1.592
4-7850	4-7987.7	.158	320.6	-65.3	-7.1	.927	94.0	.167	.857	200.4	386.7	.714	1.001D	93.7	1.262	10.4	66.4	153.1	.248
4-7987.7	4-8130	.248	155.6	13.9	2.5	1.354	82.3	.351	1.078	30.3	158.5	.699D	1.457A	100.8	.705	-1.6	9.7	37.8	.204
4-8130	4-8370	.150	330.5	-4.3	1.5	.767	94.1	.189	1.195	198.2	399.3	.969	1.421D	96.0	1.074	-3.2	-47.6	241.8	.133
		11.66	7.31	4.14	4.36	7.75	3.17	11.77	2/1/2	64.5	44.1	52.9	.975	2.243	88.8	337.4	50.0	63.2L	1.212

MARS ARRIVAL DATE = 2448140 (5 SEP 1990)

4-7800	4-7943.2	.232	293.1	36.7	12.4	.912	87.3	.176	.856	166.9	331.0	.706A	1.007	85.8	1.270	-11.7	-65.9	159.8	.260
4-7943.2	4-8140	.260	184.9	-21.4	-4.4	1.354	98.8	.349	1.054	325.1	531.2	.686	1.421A	94.6	.684	4.1	21.3	12.8	.197
4-8140	4-8320	.195	327.2	-26.3	-3.0	.781	98.2	.200	1.238	217.6	363.2	.991	1.486D	90.5	1.100	1.7	-2.8	256.6	.097
		13.52	9.33	5.19	4.20	7.59	4.14	11.45	1/2/1	88.7	92.6	44.6	.765	2.635	92.6	183.6	1.7	122.4D	1.281

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448140
5 SEP 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RAP	SPEED2
SWNGDY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1	.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0	.203
4-8140	4-8330	.194	329.5	-28.7	-3.7	.779	97.9	.198	1.235	216.2	371.8	.991	1.480D	91.9	1.097	2.4	4.1	251.7	.102
		12.71	8.37	4.25	4.34	7.73	4.12	11.49	2/1/1	77.1	78.0	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041
4-7820	4-7975.7	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.7	4-8140	.209	167.6	29.3	4.3	1.357	87.7	.334	1.082	9.3	162.9	.721D	1.444A	98.2	.702	-3.7	.5	36.9	.189
4-8140	4-8340	.198	334.2	-33.9	-5.4	.777	97.5	.197	1.230	214.0	379.6	.988	1.472D	93.2	1.093	3.9	16.0	250.1	.121
		12.12	8.11	3.89	4.02	7.41	4.21	11.66	2/1/1	74.9	68.7	38.1	1.372	3.066	82.3	356.9	40.9	87.0L	2.834
4-7830	4-7980.1	.133	330.6	-62.0	-5.9	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.8	65.6	154.3	.213
4-7980.1	4-8140	.213	162.9	22.9	3.5	1.356	85.9	.337	1.081	16.3	162.9	.717D	1.444A	98.3	.701	-2.7	3.9	36.0	.188
4-8140	4-8350	.263	354.9	-51.0	-13.6	.774	97.0	.196	1.223	211.3	386.6	.982	1.463D	94.3	1.088	12.1	47.3	252.5	.244
		13.65	9.67	3.86	3.99	7.38	5.81	13.24	2/1/1	74.4	74.6	43.1	1.328	2.725	85.2	349.7	45.3	76.0L	2.291
4-7840	4-7984.0	.139	324.9	-63.6	-6.2	.923	92.4	.163	.856	192.6	383.0	.717	.995D	93.2	1.262	9.3	65.6	154.1	.225
4-7984.0	4-8140	.225	159.3	18.5	3.0	1.354	84.3	.340	1.077	22.7	163.1	.710D	1.444A	98.3	.699	-2.2	5.9	35.1	.189
4-8140	4-8360	.215	319.1	19.3	8.9	.770	96.4	.197	1.214	208.3	393.6	.975	1.454D	95.4	1.083	-10.5	-76.0	184.2	.223
		12.54	8.54	3.93	4.00	7.39	4.61	12.93	2/1/2	74.5	67.8	47.2	1.189	2.496	87.2	343.3	47.8	68.8L	1.778
4-7850	4-7987.8	.155	319.6	-64.5	-6.9	.927	93.9	.167	.857	200.4	386.8	.714	1.001D	93.8	1.262	10.2	65.7	153.5	.244
4-7987.8	4-8140	.244	156.8	15.0	2.7	1.352	82.6	.346	1.072	29.4	163.6	.701D	1.443A	98.5	.695	-1.7	7.4	34.0	.190
4-8140	4-8370	.170	328.4	-3.2	2.1	.766	95.7	.198	1.206	204.6	399.7	.967	1.444D	96.3	1.078	-3.8	-50.4	239.7	.144
		11.72	7.68	4.10	4.04	7.44	3.58	11.88	2/1/2	74.9	45.1	50.7	1.012	2.334	88.3	339.2	49.6	63.8L	1.351
4-7860	4-7992.0	.179	317.3	-64.4	-7.9	.931	95.6	.175	.861	208.2	391.1	.710	1.011D	94.5	1.263	11.3	65.6	152.9	.270
4-7992.0	4-8140	.270	155.1	12.1	2.4	1.349	80.6	.354	1.064	36.7	164.4	.688D	1.441A	98.2	.691	-1.3	8.6	32.6	.194
4-8140	4-8380	.161	333.8	-8.4	.5	.762	95.0	.199	1.197	200.7	405.5	.958	1.435D	97.1	1.072	-2.3	-39.7	248.7	.144
		11.92	7.80	4.40	4.12	7.51	3.40	11.89	2/1/2	75.8	35.0	53.5	.826	2.220	88.9	336.8	51.1	60.4L	1.008
MARS ARRIVAL DATE = 2448150 (15 SEP 1990)																			
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	36.1	5.8	1.357	88.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.8	.189
4-8150	4-8340	.215	330.4	-27.1	-3.8	.780	99.5	.213	1.252	221.4	380.9	.985	1.518D	93.6	1.099	2.3	1.2	245.4	.116
		12.63	8.63	4.00	4.00	7.40	4.63	11.60	2/1/1	85.2	62.7	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
4-7830	4-7980.0	.134	331.0	-62.4	-6.1	.920	91.0	.161	.856	185.3	379.4	.718	.994D	92.7	1.263	8.9	65.9	154.2	.215
4-7980.0	4-8150	.215	165.1	27.2	4.2	1.355	86.3	.334	1.078	14.8	167.5	.718D	1.439A	96.1	.693	-3.3	.2	32.9	.182
4-8150	4-8350	.220	336.1	-33.2	-6.0	.776	98.9	.211	1.242	218.4	387.8	.980	1.504D	94.7	1.094	4.4	14.9	247.2	.141
		12.46	8.60	3.87	3.86	7.26	4.73	11.85	2/1/1	84.6	58.4	39.3	1.306	2.971	83.8	354.1	42.7	78.7L	2.574
4-7850	4-7987.9	.152	318.7	-63.7	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	9.9	65.0	153.9	.239
4-7987.9	4-8150	.240	158.6	16.8	3.0	1.351	83.0	.343	1.071	28.0	168.1	.704D	1.438A	96.1	.688	-1.9	5.2	30.5	.185
4-8150	4-8370	.195	326.6	.5	3.4	.767	97.6	.210	1.220	211.3	400.3	.964	1.477D	96.7	1.082	-5.1	-56.5	234.8	.165
		12.10	8.22	4.07	3.88	7.28	4.15	12.12	2/1/2	84.9	48.0	48.3	1.048	2.445	87.4	342.3	48.9	65.1L	1.514
4-7860	4-7992.0	.175	316.0	-63.4	-7.5	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.9	64.8	153.5	.263
4-7992.0	4-8150	.263	156.9	13.4	2.6	1.349	81.1	.350	1.064	35.1	168.7	.691D	1.436A	95.9	.684	-1.4	6.7	29.2	.186
4-8150	4-8380	.182	332.7	-8.3	.7	.762	96.7	.210	1.209	207.1	405.9	.955	1.463D	97.5	1.076	-2.5	-39.9	248.0	.155
		12.14	8.19	4.35	3.95	7.35	3.85	11.98	2/1/2	85.6	34.7	51.4	.867	2.305	88.2	339.5	50.8	61.4L	1.132
MARS ARRIVAL DATE = 2448160 (25 SEP 1990)																			
4-7830	4-7979.6	.140	332.7	-64.0	-6.5	.921	91.0	.161	.856	185.5	378.9	.719	.994D	92.6	1.263	9.4	67.4	153.9	.222
4-7979.6	4-8160	.222	168.4	33.9	5.3	1.356	86.9	.333	1.080	12.3	171.7	.720D	1.439A	94.1	.686	-4.3	-4.6	31.0	.184
4-8160	4-8350	.237	332.3	-25.2	-3.9	.780	101.1	.230	1.268	225.6	389.0	.976	1.560D	95.3	1.102	2.2	-2.4	242.6	.135
		12.99	9.10	3.93	3.90	7.29	5.17	11.78	2/1/1	93.8	50.8	34.5	1.217	3.369	81.9	.4	38.0	83.3L	2.883
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8160	.223	164.0	24.8	4.0	1.354	85.1	.337	1.077	19.5	171.8	.714D	1.439A	94.1	.685	-2.9	.3	29.2	.181
4-8160	4-8360	.244	339.7	-33.3	-7.1	.775	100.4	.227	1.254	221.9	395.1	.969	1.540D	96.3	1.095	5.4	15.8	247.3	.169
		13.07	9.25	3.92	3.82	7.22	5.33	12.17	2/1/1	93.8	52.1	40.9	1.209	2.862	84.4	352.2	44.3	73.2L	2.252
4-7850	4-7988.0	.149	317.9	-63.0	-6.5	.927	93.9	.167	.857	200.3	387.0	.714	1.000D	93.8	1.262	9.7	64.4	154.2	.236
4-7988.0	4-8160	.236	161.1	19.2	3.3	1.352	83.4	.342	1.073	26.1	172.1	.706D	1.439A	94.1	.682	-2.2	3.0	27.8	.181
4-8160	4-8370	.256	322.5	17.5	9.9	.769	99.6	.226	1.240	217.9	401.0	.960	1.520D	97.2	1.088	-11.7	-73.8	196.8	.257
		13.50	9.67	4.04	3.84	7.23	5.63	13.47	2/1/2	94.1	62.0	45.5	1.080	2.584	86.1	346.8	47.9	67.0L	1.710
4-7860	4-7992.1	.170	314.7	-62.4	-7.2	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.6	63.9	154.1	.257
4-7992.1	4-8160	.257	159.1	15.0	2.9	1.349	81.6	.348	1.067	33.1	172.6	.695D	1.438A	93.9	.678	-1.6	4.9	28.3	.184
4-8160	4-8380	.206	332.5	-7.8	1.0	.763	98.7	.224	1.226	213.8	406.4	.951	1.501D	98.0	1.082	-2.8	-40.8	246.9	.165
		12.59	8.69	4.29	3.90	7.29	4.40	12.12	2/1/2	94.7	54.6	49.1	.909	2.408	87.2	345.3	50.4	62.9L	1.280
MARS ARRIVAL DATE = 2448170 (5 OCT 1990)																			
4-7840	4-7983.9	.141	325.3	-64.0	-6.4	.923	92.4	.163	.856	192.6	382.9	.717	.995D	93.2	1.262	9.5	65.9	154.0	.227
4-7983.9	4-8170	.227	167.4	30.2	4.8	1.355	85.7	.337	1.081	17.0	175.4	.717D	1.445A	92.3	.679	-3.7	-3.1	27.9	.184
4-8170	4-8360	.259	334.8	-22.8	-3.8	.780	102.7	.250	1.285	226.7	396.1	.964	1.606D	97.0	1.104	2.1	-6.4	242.9	.157
		13.56	9.65	3.94	3.90	7.30	5.71	12.03	2/1/1	101.9	41.7	36.7	1.169	3.178	82.1	358.9	40.7	77.3L	2.547
4-7860	4-7992.1	.167	313.6	-61.3	-6.9	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.5	63.1	154.7	.251
4-7992.1	4-8170	.251	161.9	16.9	3.1	1.351	82.2	.348	1.072	30.7	176.0	.699D	1.445A	92.1	.674	-1.8	3.4	24.7	.185
4-8170	4-8380	.234	332.4	-5.1	1.9	.765	100.8	.242	1.248	220.0	406.9	.946	1.551D	98.6	1.088	-3.7	-44.2	244.8	.163
		13.24	9.32	4.25	3.92	7.32	5.06	12.35	2/1/2	102.7	35.7	46.4	.951	2.537	85.7	348.3	49.6	65.1L	1.461
4-7870	4-7996.4	.195	314.2	-60.0	-7.9	.937	97.3	.186	.866	215.9	395.7	.705	1.028D	95.4	1.266	11.3	62.2	155.3	.276
4-7996.4	4-8170	.276	160.7	12.9	2.7	1.348	80.2	.356	1.065	38.2	176.6	.685D	1.444A	91.9	.669	-1.2	5.2	23.3	.190
4-8170	4-8390	.221	337.6	-10.7	-.3	.758	99.8	.240	1.231	215.3	411.9	.936	1.527D	99.3	1.081	-1.6	-32.0	254.7	.162
		13.41	9.38	4.62	4.02	7.42	4.77	12.33	1/1/2	103.4	26.7	49.4	.779	2.391	86.8	345.6	52.2	61.9L	1.083

STOPOVER TIME = 0 DAYS — 1990 OUTBOUND SWINGBY — MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2446100
27 JUL 1990

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2446100 (27 JUL 1990)																				
4-7790	4-7956.0	.190	336.0	-67.2	-9.4	.917	86.5	.169	.867	162.3	360.8	.721	1.014	90.1	1.274	10.5	72.7	158.0	.244	
4-7956.0	4-8100	.244	183.5	27.6	4.7	1.377	94.1	.372	1.138	344.8	502.0	.714	1.561A	107.9	.751	-3.0	4.2	45.6	.280	
4-8100	4-8350	.127	330.4	8.8	3.2	.775	91.1	.170	1.187	185.5	365.8	.985	1.388D	93.7	1.077	-4.5	-63.8	229.0	.121	
		13.50	7.26	4.56	6.24	9.61	2.70	11.65	2/1/2	41.7	64.6	47.2	1.009	2.497	61.1	15.2	37.9	121.0D	1.311	
4-7800	4-7965.1	.161	336.7	-63.0	-7.5	.917	87.5	.165	.864	167.1	367.2	.721	1.006	91.0	1.270	9.3	69.5	154.5	.219	
4-7965.1	4-8100	.219	179.3	21.0	3.3	1.380	91.7	.374	1.153	353.9	499.7	.721	1.584A	108.7	.758	-3.3	9.0	46.7	.282	
4-8100	4-8360	.120	336.6	1.5	1.7	.773	90.6	.173	1.183	183.0	393.1	.979	1.387D	94.7	1.073	-3.1	-50.8	237.4	.115	
		13.06	6.76	4.18	6.29	9.67	2.58	11.60	2/1/2	38.3	51.6	50.8	1.256	2.330	79.8	12.7	42.4	109.5D	1.670	
4-7810	4-7970.7	.146	337.3	-61.7	-6.7	.918	88.6	.162	.860	172.6	371.8	.721	1.000	91.6	1.268	8.9	68.0	153.9	.212	
4-7970.7	4-8100	.212	174.0	17.7	2.7	1.381	89.6	.377	1.161	1.6	138.4	.723D	1.599A	109.2	.762	-2.6	11.3	47.3	.265	
4-8100	4-8370	.119	342.3	-1.8	.8	.771	90.0	.177	1.178	180.1	400.0	.970	1.387D	95.7	1.069	-2.4	-43.1	242.9	.121	
		12.95	6.56	4.01	6.39	9.76	2.56	11.66	2/1/2	36.8	41.7	52.0	1.333	2.283	81.0	6.1	45.4	98.0D	1.710	
4-7820	4-7975.3	.141	336.5	-62.6	-6.5	.919	89.8	.161	.858	178.7	375.3	.720	.996	92.1	1.265	9.1	67.7	154.0	.216	
4-7975.3	4-8100	.216	168.9	15.3	2.4	1.381	87.7	.380	1.164	8.4	137.8	.721D	1.607A	109.6	.764	-2.2	12.6	47.6	.289	
4-8100	4-8380	.119	348.1	-3.1	.3	.769	89.3	.182	1.173	176.9	406.5	.960	1.387	96.7	1.065	-2.0	-59.6	248.3	.132	
		12.97	6.50	3.94	6.47	9.85	2.56	11.76	2/1/2	36.0	34.2	53.3	1.290	2.230	83.3	358.2	47.5	87.3L	1.587	
4-7830	4-7979.4	.143	333.6	-64.8	-6.7	.921	91.1	.161	.856	185.5	378.7	.719	.994D	92.6	1.264	9.6	68.1	153.7	.226	
4-7979.4	4-8100	.226	164.4	13.4	2.2	1.381	85.9	.384	1.165	14.8	137.7	.717D	1.612A	109.8	.764	-1.8	13.5	47.6	.292	
4-8100	4-8390	.121	354.2	-3.3	-.1	.766	88.5	.189	1.168	173.4	412.6	.947	1.389	97.7	1.060	-1.8	-35.8	254.3	.146	
		13.11	6.56	3.96	6.55	9.92	2.60	11.90	2/1/2	35.6	28.2	55.1	1.174	2.161	85.3	350.9	48.8	78.1L	1.363	
4-7840	4-7983.3	.153	329.0	-66.9	-7.3	.923	92.5	.162	.856	192.9	382.3	.717	.995D	93.1	1.263	10.3	68.5	152.7	.243	
4-7983.3	4-8100	.243	160.5	11.6	2.0	1.379	84.1	.388	1.162	21.3	136.0	.711D	1.613A	110.1	.763	-1.6	14.2	47.4	.295	
4-8100	4-8400	.125	.6	-2.5	-.4	.763	87.5	.198	1.163	169.6	418.4	.933	1.392	98.7	1.057	-1.7	-34.0	260.7	.161	
		13.37	6.74	4.08	6.63	10.00	2.67	12.08	2/1/2	35.6	23.2	57.2	1.017	2.091	86.7	345.1	49.7	71.2L	1.109	
MARS ARRIVAL DATE = 2446110 (6 AUG 1990)																				
4-7790	4-7938.1	.257	290.9	35.8	13.7	.910	86.0	.183	.859	161.4	327.0	.701A	1.016	85.1	1.272	-13.5	-67.2	188.7	.321	
4-7938.1	4-8110	.321	180.6	-30.1	-6.9	1.358	99.9	.362	1.064	322.0	517.9	.679	1.450A	101.6	.706	6.2	28.7	20.6	.238	
4-8110	4-8350	.143	324.6	12.6	4.5	.774	92.4	.173	1.191	191.5	365.5	.986	1.397D	93.7	1.078	-5.9	-71.0	219.0	.141	
		13.78	8.61	5.59	5.18	8.56	3.02	11.85	1/2/2	62.0	68.1	37.5	.585	3.113	94.5	177.7	3.8	126.6D	1.236	
4-7790	4-7956.5	.212	340.0	-70.5	-11.0	.916	86.5	.169	.867	162.4	358.5	.721A	1.014	89.8	1.274	12.1	76.0	162.0	.274	
4-7956.5	4-8110	.274	184.5	42.1	7.8	1.368	94.3	.355	1.106	343.5	509.3	.713	1.498A	104.6	.731	-8.0	-5.8	45.0	.259	
4-8110	4-8350	.143	324.6	12.6	4.5	.774	92.4	.173	1.191	191.5	365.5	.986	1.397D	93.7	1.078	-5.9	-71.0	219.0	.141	
		13.60	7.89	4.88	5.71	9.09	3.02	11.85	2/1/2	53.5	68.1	35.3	.798	3.302	83.2	14.6	29.7	126.2D	1.837	
4-7800	4-7965.4	.158	336.0	-62.2	-7.3	.917	87.5	.165	.864	167.1	367.7	.721	1.006	91.1	1.270	9.1	68.8	154.1	.215	
4-7965.4	4-8110	.215	177.9	26.2	4.0	1.371	91.3	.356	1.120	355.0	506.6	.721	1.518A	105.6	.738	-3.9	5.7	45.3	.247	
4-8110	4-8360	.129	331.7	1.4	2.1	.772	91.9	.175	1.187	188.9	392.7	.979	1.395D	94.7	1.074	-3.5	-54.1	236.4	.120	
		12.28	6.88	4.14	5.40	8.78	2.74	11.65	2/1/2	47.2	53.4	44.9	1.305	2.619	79.3	12.3	40.0	109.7D	2.113	
4-7810	4-7971.2	.142	336.1	-60.3	-6.4	.918	88.5	.162	.860	172.5	372.5	.721	1.000	91.7	1.267	8.6	66.7	153.6	.206	
4-7971.2	4-8110	.206	171.8	21.0	3.1	1.371	89.2	.358	1.125	3.2	145.5	.723D	1.528A	106.0	.741	-2.9	9.0	45.7	.248	
4-8110	4-8370	.125	337.6	-3.2	1.0	.770	91.3	.179	1.182	185.8	399.4	.971	1.393D	95.7	1.070	-2.6	-44.5	243.2	.123	
		12.04	6.62	3.96	5.42	8.81	2.67	11.67	2/1/2	45.3	42.8	47.2	1.418	2.498	80.9	4.3	44.4	96.3D	2.123	
4-7820	4-7975.8	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209	
4-7975.8	4-8110	.209	166.6	17.7	2.7	1.371	87.3	.360	1.126	10.1	145.1	.721D	1.532A	106.3	.742	-2.3	10.7	45.8	.250	
4-8110	4-8380	.123	343.3	-5.0	.3	.767	90.5	.183	1.176	182.5	405.7	.961	1.392D	96.6	1.065	-2.1	-39.1	249.0	.132	
		11.99	6.53	3.89	5.47	8.85	2.63	11.76	2/1/2	44.5	34.9	49.4	1.371	2.392	83.7	355.4	47.1	84.9L	1.908	
4-7830	4-7979.7	.138	332.2	-63.5	-6.4	.921	91.0	.161	.856	185.4	379.1	.719	.994D	92.6	1.263	9.2	66.9	154.0	.220	
4-7979.7	4-8110	.220	162.2	15.2	2.4	1.370	85.6	.363	1.125	16.4	145.1	.716D	1.534A	106.5	.741	-2.0	11.9	45.7	.251	
4-8110	4-8390	.123	349.3	-5.4	-.1	.764	89.7	.189	1.170	178.8	411.7	.949	1.391	97.6	1.061	-1.8	-35.9	255.1	.145	
		12.06	6.54	3.91	5.52	8.90	2.63	11.89	2/1/2	44.2	28.8	52.0	1.244	2.281	86.1	347.8	48.6	76.0L	1.594	
4-7840	4-7983.6	.148	327.4	-65.7	-6.9	.923	92.4	.163	.856	192.8	382.5	.717	.995D	93.1	1.263	10.0	67.5	153.2	.236	
4-7983.6	4-8110	.236	158.6	13.0	2.2	1.368	83.9	.368	1.122	22.9	145.4	.709D	1.534A	106.7	.739	-1.6	12.7	45.3	.254	
4-8110	4-8400	.124	355.8	-4.8	-.4	.761	86.7	.196	1.164	174.8	417.4	.936	1.393	98.5	1.057	-1.6	-33.9	261.6	.159	
		12.24	6.67	4.02	5.57	8.95	2.65	12.05	2/1/2	44.3	23.8	54.6	1.077	2.180	87.6	342.0	49.6	69.2L	1.271	
4-7850	4-7987.5	.166	323.1	-67.0	-7.7	.927	94.0	.167	.857	200.5	386.5	.714	1.001D	93.7	1.263	11.0	67.9	152.0	.259	
4-7987.5	4-8110	.260	155.8	11.0	2.1	1.365	82.0	.373	1.115	29.9	146.1	.699D	1.532A	106.8	.736	-1.4	13.4	44.5	.256	
4-8110	4-8410	.127	2.8	-3.5	-.7	.758	87.6	.205	1.158	170.7	422.8	.920	1.396	99.5	1.054	-1.5	-32.4	268.4	.175	
		12.58	6.94	4.24	5.64	9.02	2.70	12.25	2/1/2	44.7	19.7	57.0	.893	2.097	88.3	338.1	50.5	64.0L	.979	
MARS ARRIVAL DATE = 2446120 (16 AUG 1990)																				
4-7790	4-7937.3	.242	292.1	34.4	12.7	.909	85.9	.184	.858	161.4	325.8	.700A	1.016	84.9	1.272	-12.5	-64.7	186.5	.303	
4-7937.3	4-8120	.303	179.9	-21.9	-4.9	1.354	100.1	.357	1.052	320.6	523.9	.676	1.428A	98.6	.694	4.2	22.7	17.8	.213	
4-8120	4-8350	.182	318.4	22.4	8.1	.773	93.8	.178	1.198	197.8	385.7	.985	1.412D	93.8	1.080	-9.5	-78.3	174.4	.197	
		13.76	9.20	5.54	4.57	7.96	3.85	12.54	1/2/2	72.0	75.6	43.0	.655	2.729	93.9	178.1	3.5	123.6D	1.133	
4-7800	4-7964.7	.165	337.6	-63.9	-7.8	.917	87.5	.165	.864	167.2	366.7	.721	1.006	90.9	1.271	9.6	70.4	155.0	.224	
4-7964.7	4-8120	.224	178.4	34.6	5.4	1.365	91.5	.344	1.098	354.3	513.2	.721	1.476A	102.6	.722	-5.2	-.5	43.4	.224	
4-8120	4-8360	.143	327.5	2.5	2.7	.771	93.2	.180	1.193	195.0	392.6	.979	1.408D	94.8	1.076	-4.3	-58.4	233.5	.130	
		12.08	7.24	4.22	4.84	8.23	3.01	11.74	2/1/2	57.7	55.4	38.0	1.197	3.074	79.7	13.0	35.1	112.5D	2.483	
4-7810	4-7971.3	.141	335.8	-59.9	-6.3	.918	88.5	.163	.860	172.4	372.6	.720	1.000	91.8	1.267	8.5	66.5	153.5	.205	
4-7971.3	4-8120	.205	171.2	25.3	3.7	1.365	89.1	.345	1.103	3.7	152.0	.723D	1.483A	103.1	.725	-3.4	5.6	43.4	.220	
4-8120	4-8370	.135	333.5	-4.1	1.2	.768	92.6	.182	1.187	191.9	399.2	.971	1.404D	95.8	1.072	-2.8	-45.9	242.9	.127	
		11.55	6.81	3.94	4.74	8.13	2.87	11.71	2/1/2	54.9	43.5	42.7	1.437	2.749	80.7	4.2	42.4	96.3D	2.514	
4-7820	4-7976.0	.134	334.5	-60.5	-6.0	.919	89.7	.161	.858	178.6	376.2	.720	.996	92.2	1.265	8.6	65.6	154.0	.206	
4-7976.0	4-8120	.206	165.6	20.6	3.1	1.364	87.2	.347	1.103	10.8	151.7	.720D	1.486A	103.3	.725	-2.6	8.2	43.2	.220	
4-8120	4-8380	.132	339.1	-6.6	.4	.765	91.9	.186	1.181	188.3	405.4	.961	1.401D	96.7	1.067	-2.1	-39.4	249.3	.134	
		11.41	6.66	3.87	4.75	8.14	2.80	11.78	2/1/2	54.0	35.2	45.9	1.414	2.567	83.8	354.4	46.0	83.9L	2.215	
4-7830	4-7979.9	.135	331.5	-62.7	-6.1	.921	91.0	.161	.856	185.3	379.3	.718	.994D	92.6	1.263	9.0	66.1	154.2	.216	
4-7979.9	4-8120	.216	161.3	17.3	2.7	1.362	85.6	.350	1.101	17.2	151.7	.716D	1.487A	103.5	.724	-2.1	9.7	42.9	.221	
4-8120	4-8390	.129	344.8	-7.4	-.1	.762	91.1	.191	1.174	184.5	411.2	.950	1.398D	97.6	1.063	-1.8	-35.8	255.6	.145	
		11.41	6.63	3.88	4.77	8.16	2.75	11.90	2/1/2	53.7	29.1	49.1	1.292	2.406	86.4	346.5	48.0	74.0L	1.816	
4-7840	4-7983.7	.144	326.3	-64.9	-6.6	.923	92.4	.163	.856	192.7	382.7	.717	.995D	93.1	1.262	9.7	66.7	153.6	.231	
4-7983.7	4-8120	.231	157.9	14.5	2.5	1.361	83.9	.354	1.098	23.6	152.1	.709D	1.486A	103.6	.722	-1.8	10.8	42.3	.223	
4-8120	4-8400	.128	351.1	-7.0	-.5	.759	90.1	.197	1.167	180.4	416.7	.937	1.397D	98.4	1.058	-1.5	-33.6	262.2	.158	
		11.52	6.70	3.98	4.81	8.20	2.72	12.04	2/1/2	53.8	24.1	52.2	1.123	2.272	88.0	340.8	49.3	68.2L	1.428	
4-7850	4-7987.6	.162	321.7	-66.1	-7.4	.927	94.0	.167	.857	200.5	386.6	.714	1.001D	93.7	1.262	10.7	67.1	152.6	.253	
4-7987.6	4-8120	.253	155.2	12.2	2.3	1.358	82.1	.360	1.092	30.5	152.7	.699D	1.484A	103.6	.718	-1.5	11.7	41.4	.225	
4-8120	4-8410	.128	357.9	-5.8	-.8	.755	89.0	.205	1.160	176.0	422.0	.923	1.398	99.4	1.054	-1.4	-32.0	269.1	.173	
		11.78	6.91	4.18	4.87	8.26	2.72	12.22	2/1/2	54.3	20.0	55.0	.936	2.166	88.8	337.0	50.3	63.3L	1.091	
MARS ARRIVAL DATE = 2446130 (26 AUG 1990)																				
4-7800	4-7943.5	.239	292.6	37.3	12.8	.912	87.3	.175	.857	166.9	331.6	.707A	1.007	85.9	1.270	-12.1	-67.1	190.6	.288	
4-7943.5	4-8130	.288	184.4	-28.2	-5.8	1.355	98.4	.348	1.058	326.7	526.2	.689	1.426A	97.2	.692	5.5	26.9	15.7	.207	
4-8130	4-8360	.164	323.7	6.4	4.2	.770	94.7	.187	1.202	201.5	393.0	.977	1.427D	95.0	1.079	-5.8	-65.2	225.5	.151	
		13.18	8.75	5.29	4.43	7.82	3.46	11.96	1/2/2	78.4	58.9	39.1	.726	2.991	93.4	182.4	3.2	125.6D	1.446	
4-7810	4-7970.9	.145	336.8	-61.2	-6.6	.918	88.6	.162	.860	172.5	372.0	.721	1.000	91.7	1.267	8.8	67.6	153.8	.210	
4-7970.9	4-8130	.210	172.3	31.5	4.6	1.361	89.3	.337	1.089	2.8	158.0	.723D	1.456A	100.4	.712	-4.2	.6	40.8	.203	
4-8130	4-8370	.150	350.5	-4.3	1.5	.767	94.1	.189	1.195	198.2	399.3	.969	1.421D	96.0	1.074	-3.2	-47.8	241.8	.153	
		11.48	7.15	3.99	4.33	7.72	3.17	11.77	2/1/2	65.6	44.1	57.6	1.364	3.100	80.3	6.1	38.5	98.7D	2.865	
4-7820	4-7976.0	.133	334.4	-60.4	-5.9	.919	89.7	.161	.858	178.5	376.2	.720	.996	92.2	1.265	8.5	65.7	154.0	.206	
4-7976.0	4-8130	.206	166.0	24.2	3.6	1.360	87.3	.339	1.089	10.6	157.6	.720D	1.459A	100.6	.712	-3.0	4.8	40.0	.201	
4-8130	4-8380	.145	335.9	-7.8	.4	.763	93.4	.191	1.187	194.4	405.3	.960	1.415D	98.8	1.069	-2.2	-39.6	249.2	.158	
		11.19	6.92	3.87	4.27	7.67	3.05	11.82	2/1/2	64.3	35.3	42.2	1.419	2.778	83.3	355.6	44.1	84.5L	2.520	

STOPOVER TIME = 0 DAYS 1990 OUTBOUND SWINGBY MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2448130
26 AUG 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7030	4-7980.1	.133	330.8	-62.2	-6.0	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.9	65.7	154.3	.213
4-7980.1	4-8130	.213	161.6	19.7	3.1	1.358	85.7	.342	1.088	17.1	157.6	.716D	1.459A	100.8	.711	-2.4	7.0	39.5	.201
4-8130	4-8390	.140	341.2	-8.9	-.1	.760	92.5	.195	1.180	190.4	411.0	.949	1.410D	97.7	1.064	-1.8	-35.4	255.8	.148
		11.10	6.83	3.86	4.28	7.67	2.96	11.93	2/1/2	64.0	29.0	46.2	1.320	2.548	86.1	347.2	47.0	74.8L	2.043
4-7840	4-7983.9	.141	325.5	-64.2	-6.4	.923	92.4	.163	.856	192.7	382.9	.717	.995D	93.1	1.262	9.5	66.1	153.9	.228
4-7983.9	4-8130	.228	158.1	16.3	2.7	1.356	84.0	.346	1.084	23.5	157.9	.709D	1.459A	100.8	.709	-1.9	8.5	38.8	.202
4-8130	4-8400	.137	347.0	-8.8	-.5	.756	91.5	.200	1.172	186.1	416.3	.937	1.406D	96.5	1.060	-1.5	-33.0	262.5	.160
		11.15	6.84	3.95	4.31	7.70	2.89	12.06	2/1/2	64.1	24.2	49.8	1.159	2.373	87.8	341.2	48.7	66.0L	1.592
4-7850	4-7987.7	.158	320.6	-65.3	-7.1	.927	94.0	.167	.857	200.4	386.7	.714	1.001D	93.7	1.262	10.4	66.4	153.1	.248
4-7987.7	4-8130	.248	155.6	13.5	2.5	1.354	82.3	.351	1.078	30.3	158.5	.699D	1.457A	100.8	.705	-1.6	9.7	37.8	.204
4-8130	4-8410	.134	353.4	-7.8	-.8	.752	90.4	.206	1.164	181.6	421.4	.924	1.404D	99.4	1.056	-1.3	-31.4	269.5	.174
		11.33	6.98	4.14	4.36	7.75	2.84	12.23	2/1/2	64.5	20.1	52.9	.975	2.243	88.8	337.4	50.0	63.2L	1.212

MARS ARRIVAL DATE = 2448140 (5 SEP 1990)

4-7810	4-7950.8	.252	291.2	40.5	14.0	.915	88.7	.167	.857	173.4	339.9	.714A	1.000	87.2	1.269	-12.6	-72.2	193.7	.291
4-7950.8	4-8140	.291	188.7	-40.7	-8.1	1.356	96.4	.341	1.065	334.3	528.2	.702	1.428A	96.0	.691	8.0	34.5	11.7	.214
4-8140	4-8370	.170	328.4	-3.2	2.1	.766	95.7	.198	1.206	204.6	399.7	.967	1.444D	96.3	1.078	-3.6	-50.4	239.7	.144
		13.68	9.09	5.51	4.59	7.98	3.58	11.88	1/2/2	84.4	45.1	31.6	.711	3.676	92.2	186.7	1.9	124.4D	1.903
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1	.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0	.203
4-8140	4-8370	.170	328.4	-3.2	2.1	.766	95.7	.198	1.206	204.6	399.7	.967	1.444D	96.3	1.078	-3.6	-50.4	239.7	.144
		12.17	7.83	4.25	4.34	7.73	3.58	11.88	2/1/2	77.1	45.1	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041
4-7820	4-7975.7	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.7	4-8140	.209	167.8	29.3	4.3	1.357	87.7	.334	1.082	9.3	162.9	.721D	1.444A	98.2	.702	-3.7	.5	36.9	.189
4-8140	4-8380	.161	333.8	-8.4	.5	.762	95.0	.199	1.197	200.7	405.5	.958	1.435D	97.1	1.072	-2.3	-39.7	248.7	.144
		11.51	7.29	3.89	4.02	7.41	3.40	11.89	2/1/2	74.9	35.0	36.1	1.372	3.066	82.3	356.9	40.9	67.0L	2.034
4-7830	4-7980.1	.133	330.6	-62.0	-5.9	.920	91.0	.161	.856	185.3	379.5	.716	.994D	92.7	1.263	8.8	65.6	154.3	.213
4-7980.1	4-8140	.213	162.9	22.9	3.5	1.356	85.9	.337	1.081	16.3	162.9	.717D	1.444A	98.3	.701	-2.7	3.9	36.0	.186
4-8140	4-8390	.155	336.7	-9.9	-.1	.758	94.1	.202	1.187	196.5	411.0	.948	1.427D	97.9	1.067	-1.7	-34.9	255.7	.153
		11.11	7.13	3.86	3.99	7.38	3.27	11.98	2/1/2	74.4	28.7	43.1	1.328	2.725	85.2	349.7	45.3	76.0L	2.291
4-7840	4-7984.0	.139	324.9	-63.6	-6.2	.923	92.4	.163	.856	192.6	383.0	.717	.995D	93.2	1.262	9.3	65.8	154.1	.225
4-7984.0	4-8140	.225	159.3	18.5	3.0	1.354	84.3	.340	1.077	22.7	163.1	.710D	1.444A	98.3	.699	-2.2	5.9	35.1	.189
4-8140	4-8400	.150	343.9	-10.1	-.6	.754	93.1	.206	1.178	192.1	416.2	.936	1.421D	96.7	1.062	-1.4	-32.3	262.6	.164 *
		11.08	7.08	3.93	4.00	7.39	3.15	12.11	2/1/2	74.5	23.9	47.2	1.189	2.496	87.2	343.3	47.8	68.8L	1.778
4-7850	4-7987.8	.155	319.6	-64.5	-6.9	.927	93.9	.167	.857	200.4	386.6	.714	1.001D	93.8	1.262	10.2	65.7	153.5	.244
4-7987.8	4-8140	.244	156.8	15.0	2.7	1.352	82.6	.346	1.072	29.4	163.6	.701D	1.443A	98.3	.695	-1.7	7.4	34.0	.190
4-8140	4-8410	.144	349.7	-9.4	-.9	.749	92.0	.211	1.169	187.4	421.1	.923	1.416D	99.5	1.057	-1.2	-30.6	269.7	.177
		11.19	7.15	4.10	4.04	7.44	3.05	12.26	2/1/2	74.9	20.0	50.7	1.012	2.334	88.3	339.2	49.6	63.8L	1.351
4-7860	4-7992.0	.179	317.3	-64.4	-7.9	.931	95.6	.175	.861	208.2	391.1	.710	1.011D	94.5	1.263	11.3	65.6	152.9	.270
4-7992.0	4-8140	.270	155.1	12.1	2.4	1.349	80.6	.354	1.064	36.7	164.4	.688D	1.441A	98.2	.691	-1.3	8.6	32.6	.194
4-8140	4-8420	.140	356.3	-7.9	-1.1	.745	90.7	.217	1.161	182.6	425.8	.908	1.413D	100.3	1.053	-1.1	-29.3	277.0	.190
		11.48	7.37	4.40	4.12	7.51	2.96	12.45	2/1/2	75.8	16.6	53.5	.826	2.220	88.9	336.8	51.1	60.4L	1.008

MARS ARRIVAL DATE = 2448150 (15 SEP 1990)

4-7810	4-7949.7	.230	292.4	39.0	12.6	.915	88.7	.168	.856	173.3	338.1	.713A	1.000	86.9	1.269	-11.2	-68.6	191.4	.265
4-7949.7	4-8150	.265	188.8	-27.2	-5.2	1.356	97.2	.343	1.062	331.6	533.2	.698	1.427A	93.5	.683	5.2	25.0	11.4	.197
4-8150	4-8370	.195	326.6	.5	3.4	.767	97.6	.210	1.220	211.3	400.3	.964	1.477D	98.7	1.082	-5.1	-56.9	234.8	.165
		13.49	9.31	5.15	4.19	7.58	4.15	12.12	1/2/2	94.2	46.0	41.4	.855	2.827	91.3	188.1	.7	122.3D	1.562
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	38.1	5.8	1.357	88.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.8	.189
4-8150	4-8380	.182	332.7	-8.3	.7	.762	96.7	.210	1.209	207.1	405.9	.955	1.463D	97.5	1.076	-2.5	-39.9	248.0	.153
		11.85	7.85	4.00	4.00	7.40	3.85	11.98	2/1/2	85.2	34.7	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
4-7830	4-7980.0	.134	331.0	-62.4	-6.1	.920	91.0	.161	.856	185.3	379.4	.718	.994D	92.7	1.263	8.9	65.9	154.2	.215
4-7980.0	4-8150	.215	165.1	27.2	4.2	1.355	86.3	.334	1.078	14.8	167.5	.718D	1.439A	96.1	.693	-3.3	.2	32.9	.182
4-8150	4-8390	.174	337.4	-10.5	-.2	.757	95.8	.211	1.198	202.8	411.2	.945	1.451D	98.3	1.071	-1.7	-34.1	255.5	.160
		11.40	7.54	3.87	3.86	7.26	3.67	12.06	2/1/2	84.6	28.2	39.3	1.306	2.971	83.8	354.1	42.7	78.7L	2.574
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8150	.223	161.3	21.2	3.4	1.354	84.6	.338	1.075	21.4	167.7	.712D	1.438A	96.1	.691	-2.5	3.2	31.7	.182
4-8150	4-8400	.166	342.0	-10.9	-.6	.752	94.8	.214	1.187	198.2	416.2	.933	1.441D	99.0	1.065	-1.3	-31.4	262.6	.170
		11.27	7.42	3.92	3.85	7.25	3.51	12.18	2/1/2	84.6	23.5	44.3	1.209	2.652	86.1	347.0	46.5	70.4L	1.996
4-7850	4-7987.9	.152	318.7	-63.7	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	9.9	65.0	153.9	.239
4-7987.9	4-8150	.240	158.6	16.8	3.0	1.351	83.0	.343	1.071	28.0	168.1	.704D	1.438A	96.1	.688	-1.9	5.2	30.5	.183
4-8150	4-8410	.159	347.2	-10.4	-.9	.747	93.6	.217	1.177	193.4	421.0	.921	1.432D	99.8	1.060	-1.1	-29.7	269.7	.182
		11.30	7.42	4.07	3.88	7.28	3.35	12.33	2/1/2	84.9	19.7	48.3	1.048	2.445	87.4	342.3	48.9	65.1L	1.514
4-7860	4-7992.0	.175	316.0	-63.4	-7.5	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.9	64.8	153.5	.263
4-7992.0	4-8150	.263	156.9	13.4	2.6	1.349	81.1	.350	1.064	35.1	168.7	.691D	1.436A	95.9	.684	-1.4	6.7	29.2	.186
4-8150	4-8420	.152	353.0	-9.2	-1.1	.742	92.4	.222	1.167	188.4	425.6	.907	1.426D	100.5	1.055	-1.0	-28.4	277.1	.194
		11.51	7.55	4.35	3.95	7.35	3.21	12.50	2/1/2	85.6	16.5	51.4	.867	2.305	88.2	339.5	50.8	61.4L	1.132

MARS ARRIVAL DATE = 2448160 (25 SEP 1990)

4-7830	4-7979.6	.140	332.7	-64.0	-6.5	.921	91.0	.161	.856	185.5	378.9	.719	.994D	92.6	1.263	9.4	67.4	153.9	.222
4-7979.6	4-8160	.222	168.4	33.9	5.3	1.356	86.9	.333	1.080	12.3	171.7	.720D	1.439A	94.1	.686	-4.3	-4.6	31.0	.184
4-8160	4-8390	.196	337.1	-10.7	-.2	.757	97.7	.224	1.212	209.0	411.5	.941	1.464D	98.7	1.075	-1.6	-33.2	255.1	.170
		12.00	8.10	3.93	3.90	7.29	4.17	12.18	2/1/2	93.8	27.5	34.5	1.217	3.369	81.9	.4	38.0	63.3L	2.883
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8160	.223	164.0	24.8	4.0	1.354	85.1	.337	1.077	19.5	171.8	.714D	1.439A	94.1	.685	-2.9	.5	29.2	.181
4-8160	4-8400	.187	341.3	-11.3	-.7	.751	96.6	.225	1.199	204.3	416.4	.930	1.469D	99.4	1.069	-1.2	-30.3	262.3	.179
		11.69	7.87	3.92	3.82	7.22	3.96	12.29	2/1/2	93.6	23.0	40.9	1.209	2.662	84.4	352.2	44.3	73.2L	2.252
4-7850	4-7988.0	.149	317.9	-63.0	-6.5	.927	93.9	.167	.857	200.3	387.0	.714	1.000D	93.8	1.262	9.7	64.4	154.2	.236
4-7988.0	4-8160	.236	161.1	19.2	3.3	1.352	83.4	.342	1.073	26.1	172.1	.706D	1.439A	94.1	.682	-2.2	3.0	27.8	.181
4-8160	4-8410	.177	345.8	-10.9	-1.0	.745	95.5	.227	1.187	199.3	421.0	.918	1.456D	100.1	1.063	-.9	-28.7	269.6	.189
		11.62	7.79	4.04	3.84	7.23	3.75	12.43	2/1/2	94.1	19.3	45.5	1.080	2.584	86.1	346.8	47.9	67.0L	1.710
4-7860	4-7992.1	.170	314.7	-62.4	-7.2	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.6	63.9	154.1	.257
4-7992.1	4-8160	.257	159.1	15.0	2.9	1.349	81.6	.348	1.067	33.1	172.6	.695D	1.438A	93.9	.678	-1.6	4.9	26.5	.184
4-8160	4-8420	.168	350.9	-9.9	-1.2	.739	94.2	.230	1.175	194.2	425.5	.904	1.445D	100.8	1.058	-.8	-27.5	277.1	.200
		11.74	7.84	4.29	3.90	7.29	3.55	12.59	2/1/2	94.7	16.2	49.1	.909	2.408	87.2	343.3	50.4	62.9L	1.280

MARS ARRIVAL DATE = 2448170 (5 OCT 1990)

4-7830	4-7978.1	.168	341.4	-69.6	-8.6	.921	91.1	.160	.857	186.0	377.0	.719	.994D	92.3	1.264	11.4	73.0	151.7	.261
4-7978.1	4-8170	.261	173.6	49.0	8.3	1.357	88.0	.334	1.084	7.8	175.4	.722D	1.445A	92.3	.681	-7.4	-14.1	32.4	.202
4-8170	4-8390	.221	337.6	-10.7	-.3	.758	99.6	.240	1.231	215.3	411.9	.936	1.527D	99.3	1.081	-1.6	-32.0	254.7	.182
		13.33	9.03	4.26	4.30	7.69	4.77	12.33	2/1/2	101.1	26.7	25.9	.885	4.465	80.6	9.3	26.7	92.5D	3.066
4-7840	4-7983.9	.141	325.3	-64.0	-6.4	.923	92.4	.163	.856	192.6	382.9	.717	.995D	93.2	1.262	9.5	65.9	154.0	.227
4-7983.9	4-8170	.227	167.4	30.2	4.8	1.355	85.7	.337	1.081	17.0	175.4	.717D	1.445A	92.3	.679	-3.7	-3.1	27.9	.184
4-8170	4-8400	.210	341.5	-11.4	-.9	.751	98.6	.239	1.215	210.4	416.6	.925	1.505D	100.0	1.074	-1.0	-28.9	262.1	.190
		12.55	8.45	3.94	3.90	7.30	4.50	12.44	2/1/2	101.9	22.3	36.7	1.169	3.178	82.1	358.9	40.7	77.3L	2.547
4-7850	4-7988.1	.148	317.5	-62.6	-6.3	.926	93.9	.167	.857	200.2	387.1	.714	1.000D	93.8	1.262	9.6	64.1	154.4	.234
4-7988.1	4-8170	.234	164.1	22.2	3.8	1.353	84.0	.341	1.077	23.9	175.6	.709D	1.445A	92.3	.677	-2.5	.9	26.1	.183
4-8170	4-8410	.199	345.4	-11.1	-1.2	.744	97.4	.239	1.200	205.3	421.1	.913	1.486D	100.6	1.068	-.8	-27.5	269.4	.199
		12.14	8.26	4.02	3.86	7.27	4.24	12.56	2/1/2	102.2	18.9	42.4	1.100	2.767	84.2	352.5	46.2	69.8L	1.944
4-7860	4-7992.1	.187	313.6	-61.3	-6.9	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.3	63.1	154.7	.251
4-7992.1	4-8170	.251	161.9	16.9	3.1	1.351	82.2	.348	1.072	30.7	176.0	.699D	1.445A	92.1	.674	-1.8	3.4	24.7	.185
4-8170	4-8420	.188	349.9	-10.2	-1.4	.737	96.1	.241	1.185	200.1	425.5	.900	1.471D	101.3	1.062	-.6	-26.4	276.9	.209
		12.15	8.23	4.25	3.92	7.32	3.98	12.71	2/1/2	102.7	15.9	46.4	.951	2.537	85.7	348.3	49.6	65.1L	1.461

STOPOVER TIME = 0 DAYS

1990 OUTBOUND SWINGBY

MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2446170
5 OCT 1990

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / PSI 2 / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7870	4-7996.4	.195	314.2	-60.0	-7.9	.937	97.3	.186	.866	215.9	395.7	.705	1.028D	95.4	1.266	11.3	62.2	155.3	.276
4-7996.4	4-8170	.278	160.7	12.9	2.7	1.348	80.2	.356	1.065	38.2	176.6	.685D	1.444A	91.9	.669	-1.2	5.2	23.3	.190
4-8170	4-8430	.177	355.0	-8.9	-1.5	.731	94.6	.244	1.172	194.7	429.7	.886	1.458D	101.9	1.056	-.5	-25.4	284.5	.220
		12.38	8.36	4.62	4.02	7.42	3.74	12.88	1/1/2	103.4	13.2	49.4	.779	2.391	86.8	345.6	52.2	61.9L	1.083
MARS ARRIVAL DATE = 2446180 (15 OCT 1990)																			
4-7840	4-7983.4	.152	328.9	-66.8	-7.2	.923	92.5	.162	.856	192.9	382.3	.717	.995D	93.1	1.263	10.3	68.4	152.7	.242
4-7983.4	4-8180	.242	171.7	39.6	6.5	1.357	86.6	.338	1.087	13.7	178.6	.719D	1.455A	90.7	.675	-5.4	-8.4	28.6	.195
4-8180	4-8400	.237	342.5	-11.4	-1.1	.753	100.9	.256	1.236	216.4	416.9	.919	1.552D	100.7	1.080	-.8	-27.2	261.8	.203
		13.56	9.22	4.07	4.14	7.53	5.15	12.63	2/1/2	108.3	21.6	30.6	1.023	3.786	79.6	7.4	33.7	83.7L	2.849
4-7850	4-7988.1	.148	317.5	-62.6	-6.4	.926	93.9	.167	.857	200.2	387.1	.714	1.000D	93.8	1.262	9.6	64.1	154.4	.234
4-7988.1	4-8180	.234	167.6	26.5	4.4	1.356	84.6	.342	1.084	21.3	178.8	.713D	1.455A	90.6	.673	-3.2	-1.4	25.6	.188
4-8180	4-8410	.224	345.9	-11.1	-1.4	.744	99.6	.254	1.217	211.2	421.3	.907	1.526D	101.2	1.073	-.5	-26.1	269.2	.211
		12.84	8.85	4.02	3.98	7.38	4.83	12.74	2/1/2	109.1	18.4	36.6	1.098	3.024	81.8	359.6	43.4	73.6L	2.222
4-7860	4-7992.2	.164	312.7	-60.4	-6.6	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.0	62.3	155.1	.247
4-7992.2	4-8180	.247	165.1	19.4	3.5	1.353	82.9	.348	1.079	28.1	179.1	.704D	1.455A	90.5	.670	-2.1	2.1	23.9	.189
4-8180	4-8420	.211	349.8	-10.2	-1.5	.736	98.2	.254	1.200	205.9	425.5	.895	1.504D	101.8	1.066	-.4	-25.3	276.7	.220
		12.72	8.72	4.21	4.00	7.40	4.51	12.87	2/1/2	109.6	15.6	43.5	.988	2.700	83.7	354.5	48.4	67.9L	1.680
MARS ARRIVAL DATE = 2446190 (25 OCT 1990)																			
4-7850	4-7987.9	.153	319.0	-63.9	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	10.0	65.2	153.8	.241
4-7987.9	4-8190	.241	171.7	33.2	5.6	1.358	85.4	.344	1.091	18.2	181.6	.716D	1.467	89.1	.669	-4.3	-4.6	26.5	.196
4-8190	4-8410	.251	347.2	-10.9	-1.7	.747	101.9	.273	1.239	217.1	421.4	.901	1.576D	102.0	1.080	-.2	-24.4	268.9	.227
		13.77	9.60	4.08	4.17	7.57	5.52	12.98	2/1/2	114.7	18.0	33.6	1.037	3.440	78.8	8.1	36.3	79.0L	2.530
4-7860	4-7992.2	.162	312.1	-59.8	-6.5	.931	95.6	.175	.860	208.1	391.4	.710	1.011D	94.5	1.263	9.8	61.8	155.4	.244
4-7992.2	4-8190	.244	168.7	22.8	4.0	1.356	83.5	.349	1.087	25.3	181.8	.708D	1.467	89.0	.667	-2.6	.7	24.2	.194
4-8190	4-8420	.236	350.5	-10.0	-1.7	.737	100.5	.270	1.218	211.7	425.6	.889	1.548D	102.5	1.072	-.1	-24.0	276.4	.234
		13.44	9.52	4.18	4.12	7.52	5.13	13.09	2/1/2	115.5	15.3	40.1	1.012	2.915	81.0	2.0	46.1	71.6L	1.937

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448100
27 JUL 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448100 (27 JUL 1990)																			
4-7790	4-7938.0	.190	336.0	-67.2	-9.4	.917	86.5	.169	.867	162.3	360.8	.721	1.014	90.1	1.274	10.5	72.7	158.0	.244
4-7938.0	4-8100	.244	183.5	27.6	4.7	1.377	94.1	.372	1.138	344.8	502.0	.714	1.561A	107.9	.751	-5.0	4.2	45.6	.200
4-8100	4-8390	.121	354.2	-3.3	-.1	.766	88.5	.189	1.168	173.4	412.6	.947	1.389	97.7	1.060	-1.8	-35.8	254.3	.146
		13.39	7.15	4.56	6.24	9.61	2.60	11.90	2/1/2	41.7	28.2	47.2	1.009	2,497	81.1	15.2	57.9	121.0D	1.511
4-7800	4-7965.1	.161	336.7	-63.0	-7.5	.917	87.5	.165	.864	167.1	367.2	.721	1.006	91.0	1.270	9.3	69.5	154.5	.219
4-7965.1	4-8100	.219	179.3	21.0	3.3	1.380	91.7	.374	1.153	353.9	499.7	.721	1.584A	108.7	.758	-3.3	9.0	46.7	.282
4-8100	4-8400	.125	.6	-2.5	-.4	.763	87.5	.198	1.163	169.6	418.4	.933	1.392	98.7	1.057	-1.7	-34.0	260.7	.161
		13.14	6.84	4.18	6.29	9.67	2.67	12.08	2/1/2	38.3	23.2	50.8	1.256	2.330	79.8	12.7	42.4	109.5D	1.670
4-7810	4-7970.7	.146	337.3	-61.7	-6.7	.918	88.6	.162	.860	172.6	371.8	.721	1.000	91.6	1.268	8.9	68.0	153.9	.212
4-7970.7	4-8100	.212	174.0	17.7	2.7	1.381	89.6	.377	1.161	1.6	138.4	.723D	1.599A	109.2	.762	-2.6	11.3	47.3	.285
4-8100	4-8410	.131	7.3	-1.2	-.7	.761	86.3	.208	1.157	165.6	424.0	.916	1.398	99.7	1.053	-1.6	-32.6	267.4	.179
		13.17	6.79	4.01	6.39	9.76	2.78	12.30	2/1/2	36.8	19.1	52.0	1.333	2.283	81.0	6.1	45.4	98.0D	1.710
4-7820	4-7975.3	.141	336.5	-62.6	-6.5	.919	89.8	.161	.858	178.7	375.3	.720	.996	92.1	1.265	9.1	67.7	154.0	.216
4-7975.3	4-8100	.216	168.9	15.3	2.4	1.381	87.7	.380	1.164	8.4	137.8	.721D	1.607A	109.6	.764	-2.2	12.6	47.6	.289
4-8100	4-8420	.140	14.1	.5	-1.0	.758	84.9	.222	1.151	161.5	429.5	.896	1.407	100.9	1.050	-1.5	-31.4	274.4	.200
		13.37	6.90	3.94	6.47	9.85	2.96	12.58	2/1/2	36.0	15.4	53.3	1.290	2.230	83.3	356.2	47.5	87.3L	1.587
4-7830	4-7979.4	.143	333.6	-64.8	-6.7	.921	91.1	.161	.856	185.5	378.7	.719	.994D	92.6	1.264	9.6	68.1	153.7	.226
4-7979.4	4-8100	.226	164.4	13.4	2.2	1.381	85.9	.384	1.165	14.8	137.7	.717D	1.612A	109.8	.764	-1.8	13.5	47.6	.292
4-8100	4-8430	.153	20.9	2.5	-1.2	.755	83.2	.240	1.146	157.3	434.8	.871	1.421	102.3	1.047	-1.6	-30.2	281.6	.224
		13.74	7.19	3.96	6.55	9.92	3.23	12.94	2/1/2	35.6	12.2	55.1	1.174	2.161	85.3	350.9	48.6	78.4L	1.363
MARS ARRIVAL DATE = 2448110 (6 AUG 1990)																			
4-7790	4-7938.1	.257	290.9	35.8	13.7	.910	86.0	.183	.859	161.4	327.0	.701A	1.016	85.1	1.272	-13.5	-67.2	168.7	.321
4-7938.1	4-8110	.321	180.6	-30.1	-6.9	1.358	99.9	.362	1.064	322.0	517.9	.679	1.450A	101.6	.706	6.2	28.7	20.6	.238
4-8110	4-8390	.123	349.3	-5.4	-.1	.764	89.7	.189	1.170	178.8	411.7	.949	1.391	97.6	1.061	-1.8	-35.9	255.1	.145
		13.40	8.22	5.59	5.18	8.56	2.63	11.89	1/2/2	62.0	28.8	37.5	.585	3.113	94.5	177.7	3.6	126.6D	1.236
4-7790	4-7956.5	.212	340.0	-70.5	-11.0	.916	86.5	.169	.867	162.4	358.5	.721A	1.014	89.8	1.274	12.1	76.0	162.0	.274
4-7956.5	4-8110	.274	184.5	42.1	7.8	1.368	94.3	.355	1.106	343.5	509.3	.713	1.498A	104.6	.731	-8.0	-5.8	45.0	.259
4-8110	4-8390	.123	349.3	-5.4	-.1	.764	89.7	.189	1.170	178.8	411.7	.949	1.391	97.6	1.061	-1.8	-35.9	255.1	.145
		13.21	7.50	4.88	5.71	9.09	2.63	11.89	2/1/2	53.5	28.8	35.3	.798	3.302	83.2	14.6	29.7	126.2D	1.837
4-7800	4-7965.4	.158	336.0	-62.2	-7.3	.917	87.5	.165	.864	167.1	367.7	.721	1.006	91.1	1.270	9.1	68.8	154.1	.215
4-7965.4	4-8110	.215	177.9	26.2	4.0	1.371	91.3	.356	1.120	355.0	506.6	.721	1.518A	105.6	.738	-3.9	5.7	45.3	.247
4-8110	4-8400	.124	355.8	-4.8	-.4	.761	88.7	.196	1.164	174.8	417.4	.936	1.393	98.5	1.057	-1.6	-33.9	261.6	.159
		12.19	6.79	4.14	5.40	8.78	2.65	12.05	2/1/2	47.2	23.8	44.9	1.305	2.619	79.3	12.5	40.0	109.7D	2.115
4-7810	4-7971.2	.142	336.1	-60.3	-6.4	.918	88.5	.162	.860	172.5	372.5	.721	1.000	91.7	1.267	8.6	66.7	153.6	.206
4-7971.2	4-8110	.206	171.8	21.0	3.1	1.371	89.2	.358	1.125	3.2	145.5	.723D	1.528A	106.0	.741	-2.9	9.0	45.7	.248
4-8110	4-8410	.127	2.8	-3.5	-.7	.758	87.6	.205	1.158	170.7	422.8	.920	1.396	99.5	1.054	-1.5	-32.4	268.4	.175
		12.08	6.66	3.96	5.42	8.81	2.70	12.25	2/1/2	45.3	19.7	47.2	1.418	2.498	80.9	4.3	44.4	96.3D	2.123
4-7820	4-7975.8	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.8	4-8110	.209	166.6	17.7	2.7	1.371	87.3	.360	1.126	10.1	145.1	.721D	1.532A	106.3	.742	-2.5	10.7	45.8	.250
4-8110	4-8420	.132	10.1	-1.6	-1.0	.755	86.3	.217	1.152	166.4	428.1	.902	1.402	100.6	1.050	-1.4	-31.1	275.5	.194
		12.17	6.70	3.89	5.47	8.85	2.81	12.49	2/1/2	44.5	16.1	49.4	1.371	2.392	83.7	355.4	47.1	84.9L	1.908
4-7830	4-7979.7	.138	332.2	-63.5	-6.4	.921	91.0	.161	.856	185.4	379.1	.719	.994D	92.6	1.263	9.2	66.9	154.0	.220
4-7979.7	4-8110	.220	162.2	15.2	2.4	1.370	85.6	.363	1.125	16.4	145.1	.716D	1.534A	106.5	.741	-2.0	11.9	45.7	.251
4-8110	4-8430	.141	17.7	.7	-1.2	.752	84.7	.232	1.146	162.0	433.2	.880	1.412	101.6	1.047	-1.4	-29.8	282.7	.215
		12.42	6.90	3.91	5.52	8.90	2.99	12.80	2/1/2	44.2	12.8	52.0	1.244	2.281	86.1	347.8	48.6	78.0L	1.594
4-7840	4-7983.6	.148	327.4	-65.7	-6.9	.923	92.4	.163	.856	192.8	382.5	.717	.995D	93.1	1.263	10.0	67.5	153.2	.236
4-7983.6	4-8110	.236	158.6	13.0	2.2	1.368	83.9	.368	1.122	22.9	145.4	.709D	1.534A	106.7	.739	-1.6	12.7	45.5	.254
4-8110	4-8440	.155	25.2	3.2	-1.5	.749	82.9	.251	1.140	157.6	438.4	.854	1.427	103.2	1.045	-1.5	-28.4	289.9	.241
		12.86	7.29	4.02	5.57	8.95	3.27	13.20	2/1/2	44.3	10.0	54.6	1.077	2.180	87.6	342.0	49.6	69.2L	1.271
4-7850	4-7987.5	.166	325.1	-67.0	-7.7	.927	94.0	.167	.857	200.5	386.5	.714	1.001D	93.7	1.263	11.0	67.9	152.0	.259
4-7987.5	4-8110	.260	155.8	11.0	2.1	1.365	82.0	.373	1.115	29.9	146.1	.699D	1.532A	106.8	.736	-1.4	13.4	44.5	.256
4-8110	4-8450	.175	32.4	3.7	-1.7	.746	80.6	.276	1.134	153.3	443.6	.821	1.448	104.9	1.043	-1.5	-26.8	297.1	.273
		13.57	7.93	4.24	5.64	9.02	3.70	13.74	2/1/2	44.7	7.4	57.0	.893	2.097	88.3	330.1	50.5	64.0L	.979
MARS ARRIVAL DATE = 2448120 (16 AUG 1990)																			
4-7790	4-7937.3	.242	292.1	34.4	12.7	.909	85.9	.184	.858	161.4	325.8	.700A	1.016	84.9	1.272	-12.5	-64.7	166.5	.303
4-7937.3	4-8120	.303	179.9	-21.9	-4.9	1.354	100.1	.357	1.052	320.6	523.9	.676	1.428A	98.6	.694	4.2	22.7	17.8	.213
4-8120	4-8390	.129	344.8	-7.4	-.1	.762	91.1	.191	1.174	184.5	411.2	.950	1.398D	97.6	1.063	-1.8	-35.8	255.6	.145
		12.66	8.09	5.34	4.57	7.96	2.75	11.90	1/2/2	72.0	29.1	43.0	.655	2.729	93.9	178.1	3.5	123.6D	1.133
4-7800	4-7964.7	.165	337.6	-63.9	-7.8	.917	87.5	.165	.864	167.2	366.7	.721	1.006	90.9	1.271	9.6	70.4	155.0	.224
4-7964.7	4-8120	.224	178.4	34.6	5.4	1.365	91.5	.344	1.098	354.3	513.2	.721	1.476A	102.6	.722	-5.2	-.5	43.4	.224
4-8120	4-8400	.128	351.1	-7.0	-.5	.759	90.1	.197	1.167	180.4	416.7	.937	1.397D	98.4	1.058	-1.5	-33.6	262.2	.158
		11.79	6.95	4.22	4.84	8.23	2.72	12.04	2/1/2	57.7	24.1	38.0	1.197	3.074	79.7	13.0	35.1	112.5D	2.483
4-7810	4-7971.5	.141	335.8	-59.9	-6.3	.918	88.5	.163	.860	172.4	372.6	.720	1.000	91.8	1.267	8.5	66.5	153.5	.205
4-7971.5	4-8120	.205	171.2	25.3	3.7	1.365	89.1	.345	1.103	3.7	152.0	.723D	1.483A	103.1	.725	-3.4	5.6	43.4	.220
4-8120	4-8410	.128	357.9	-5.8	-.8	.755	89.0	.205	1.160	176.0	422.0	.923	1.398	99.4	1.054	-1.4	-32.0	269.1	.173
		11.41	6.87	3.94	4.74	8.13	2.72	12.22	2/1/2	54.9	20.0	42.7	1.437	2.749	80.7	4.2	42.4	96.3D	2.514
4-7820	4-7976.0	.134	334.5	-60.5	-6.0	.919	89.7	.161	.858	178.6	376.2	.720	.996	92.2	1.265	8.6	65.8	154.0	.206
4-7976.0	4-8120	.206	165.6	20.6	3.1	1.364	87.2	.347	1.103	10.8	151.7	.720D	1.486A	103.3	.725	-2.6	8.2	43.2	.220
4-8120	4-8420	.130	5.4	-3.9	-1.0	.752	87.7	.215	1.154	171.6	427.1	.906	1.401	100.3	1.051	-1.3	-30.6	276.2	.190
		11.36	6.83	3.87	4.75	8.14	2.76	12.44	2/1/2	54.0	16.4	45.9	1.414	2.567	83.8	354.4	46.0	83.9L	2.215
4-7830	4-7979.9	.135	331.3	-62.7	-6.1	.921	91.0	.161	.856	185.3	379.3	.718	.994D	92.6	1.263	9.0	66.1	154.2	.216
4-7979.9	4-8120	.216	161.3	17.3	2.7	1.362	85.6	.350	1.101	17.2	151.7	.716D	1.487A	103.5	.724	-2.1	9.7	42.9	.221
4-8120	4-8430	.135	13.4	-1.5	-1.2	.749	86.2	.227	1.147	167.0	432.0	.886	1.408	101.4	1.048	-1.3	-29.3	283.5	.210
		11.51	6.74	3.88	4.77	8.16	2.86	12.72	2/1/2	53.7	13.3	49.1	1.292	2.406	86.4	346.5	48.0	74.8L	1.816
4-7840	4-7983.7	.144	326.3	-64.9	-6.6	.923	92.4	.163	.856	192.7	382.7	.717	.995D	93.1	1.262	9.7	66.7	153.8	.231
4-7983.7	4-8120	.231	157.9	14.5	2.5	1.361	83.9	.354	1.098	23.6	152.1	.709D	1.486A	103.6	.722	-1.8	10.8	42.3	.223
4-8120	4-8440	.144	21.6	1.3	-1.4	.745	84.5	.244	1.141	162.3	436.9	.863	1.418	102.7	1.045	-1.3	-27.8	290.8	.232
		11.83	7.01	3.98	4.81	8.20	3.03	13.06	2/1/2	53.8	10.4	52.2	1.123	2.272	88.0	340.8	49.3	66.2L	1.428
4-7850	4-7987.6	.162	321.7	-66.1	-7.4	.927	94.0	.167	.857	200.5	386.6	.714	1.001D	93.7	1.262	10.7	67.1	152.6	.253
4-7987.6	4-8120	.253	155.2	12.2	2.3	1.356	82.1	.360	1.092	30.5	152.7	.699D	1.484A	103.6	.718	-1.5	11.7	41.4	.225
4-8120	4-8450	.158	29.9	4.3	-1.7	.742	82.4	.265	1.134	157.7	441.9	.834	1.435	104.2	1.043	-1.3	-26.2	298.1	.260
		12.39	7.52	4.18	4.87	8.26	3.33	13.51	2/1/2	54.3	7.8	55.0	.936	2.166	88.8	337.0	50.3	63.3L	1.091
MARS ARRIVAL DATE = 2448130 (26 AUG 1990)																			
4-7790	4-7937.1	.239	292.3	34.1	12.4	.909	85.9	.185	.858	161.4	325.5	.699A	1.016	84.8	1.272	-12.3	-64.1	166.1	.299
4-7937.1	4-8130	.299	180.4	-17.6	-3.9	1.352	100.3	.356	1.046	319.4	529.2	.674	1.418A	95.9	.685	3.4	18.6	14.0	.202
4-8130	4-8390	.140	341.2	-6.9	-.1	.760	92.5	.195	1.180	190.4	411.0	.949	1.410D	97.7	1.064	-1.8	-35.4	255.8	.146
		12.55	8.25	5.29	4.30	7.69	2.96	11.93	1/2/2	62.8	29.0	46.6	.672	2.528	95.3	179.2	2.4	122.8D	1.026
4-7800	4-7943.5	.239	292.6	37.3	12.8	.912	87.3	.175	.857	166.9	331.6	.707A	1.007	85.9	1.270	-12.1	-67.1	169.6	.288
4-7943.5	4-8130	.288	184.4	-28.2	-5.6	1.355	98.4	.348	1.058	326.7	526.2	.689	1.426A	97.2	.692	5.5	26.9	15.7	.207
4-8130	4-8400	.137	347.0	-8.8	-.5	.758	91.5	.200	1.172	186.1	416.3	.937	1.406D	98.5	1.060	-1.5	-33.0	262.5	.160
		12.61	8.18	5.29	4.43	7.82	2.89	12.06	1/2/2	78.4	24.2	39.1	.726	2.991	93.4	182.4	3.2	123.8D	1.446
4-7810	4-7970.9	.145	336.8	-61.2	-6.6	.918	88.6	.162	.860	172.5	372.0	.721	1.000	91.7	1.267	8.8	67.6	153.8	.210
4-7970.9	4-8130	.210	172.3	31.5	4.6	1.361	89.3	.337	1.089	2.8	158.0	.723D	1.456A	100.4	.712	-4.2	.6	40.6	.203
4-8130	4-8410	.134	353.4	-7.8	-.8	.752	90.4	.206	1.164	181.6	421.4	.924	1.404D	99.4	1.056	-1.5	-31.4	269.5	.174
		11.15	8.82	5.99	4.33	7.72	2.84	12.23	2/1/2	65.6	20.1	37.6	1.364	3.100	80.3	6.1	38.5	98.7D	2.665
4-7820	4-7976.0	.133	334.4	-60.4	-5.9	.919	89.7	.161	.858	178.5	376.2	.720	.996	92.2	1.265	8.5	65.7	154.0	.206
4-7976.0	4-8130	.206	166.0	24.2	3.6	1.360	87.3	.339	1.089	10.6	157.6	.720D	1.459A	100.6	.712	-3.0	4.8	40.0	.201
4-8130	4-8420	.133	.6	-6.1	-1.0	.748	89.2	.215	1.156	177.0	426.3	.908	1.405	100.3	1.052	-1.2	-30.0	276.7	.169
		10.95	8.68	5.87	4.27	7.67	2.81	12.43	2/1/2	84.3	16.6	42.2	1.419	2.776	85.3	355.6	44.1	84.5L	2.520

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448130
26 AUG 1990

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIh / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7830	4-7980.1	.133	330.8	-62.2	-6.0	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.9	65.7	154.3	.213
4-7980.1	4-8130	.213	161.6	19.7	3.1	1.358	85.7	.342	1.088	17.1	157.6	.716D	1.459A	100.8	.711	-2.4	7.0	39.5	.201
4-8130	4-8430	.134	8.5	-3.7	-1.2	.745	87.7	.225	1.149	172.2	431.1	.890	1.408	101.2	1.048	-1.2	-28.6	284.1	.207
		10.98	6.70	3.86	4.28	7.67	2.83	12.67	2/1/2	64.0	13.5	46.2	1.320	2.548	86.1	347.2	47.0	74.8L	2.043
4-7840	4-7983.9	.141	325.5	-64.2	-6.4	.923	92.4	.163	.856	192.7	382.9	.717	.995D	93.1	1.262	9.5	66.1	153.9	.228
4-7983.9	4-8130	.228	158.1	16.3	2.7	1.356	84.0	.346	1.084	23.5	157.9	.709D	1.459A	100.8	.709	-1.9	8.5	38.8	.202
4-8130	4-8440	.138	17.1	-.9	-1.4	.741	86.1	.239	1.142	167.4	435.8	.869	1.415	102.4	1.045	-1.1	-27.2	291.5	.227
		11.18	6.87	3.95	4.31	7.70	2.92	12.98	2/1/2	64.1	10.7	49.8	1.159	2.373	87.8	341.2	48.7	68.0L	1.592
4-7850	4-7987.7	.138	320.6	-65.3	-7.1	.927	94.0	.167	.857	200.4	386.7	.714	1.001D	93.7	1.262	10.4	66.4	153.1	.248
4-7987.7	4-8130	.248	155.6	13.5	2.5	1.354	82.3	.351	1.078	30.3	158.5	.699D	1.457A	100.8	.705	-1.8	9.7	37.8	.204
4-8130	4-8450	.147	26.1	2.4	-1.6	.737	84.2	.257	1.135	162.5	440.5	.843	1.427	103.7	1.043	-1.1	-25.5	298.8	.251
		11.60	7.24	4.14	4.36	7.75	3.10	13.37	2/1/2	64.5	8.1	52.9	.975	2.243	88.8	337.4	50.0	63.2L	1.212
MARS ARRIVAL DATE = 2448140 (5 SEP 1990)																			
4-7800	4-7943.2	.232	293.1	36.7	12.4	.912	87.3	.176	.856	166.9	331.0	.706A	1.007	85.8	1.270	-11.7	-65.9	189.8	.280
4-7943.2	4-8140	.280	184.9	-21.4	-4.4	1.354	98.8	.349	1.054	325.1	531.2	.686	1.421A	94.6	.684	4.1	21.3	12.8	.197
4-8140	4-8400	.150	343.9	-10.1	-.6	.754	93.1	.206	1.178	192.1	416.2	.936	1.421D	98.7	1.062	-1.4	-32.3	262.6	.164
		12.53	8.34	5.19	4.20	7.59	3.15	12.11	1/2/2	88.7	23.9	44.6	.765	2.635	92.6	183.8	1.7	122.4D	1.251
4-7810	4-7950.8	.252	291.2	40.5	14.0	.915	88.7	.167	.857	173.4	339.9	.714A	1.000	87.2	1.269	-12.6	-72.2	193.7	.291
4-7950.8	4-8140	.291	188.7	-40.7	-8.1	1.356	96.4	.341	1.065	334.3	528.2	.702	1.428A	96.0	.691	8.0	34.5	11.7	.214
4-8140	4-8410	.144	349.7	-9.4	-.9	.749	92.0	.211	1.169	187.4	421.1	.923	1.416D	99.5	1.057	-1.2	-30.6	280.[illegible]	.177
		13.15	8.55	5.51	4.59	7.98	3.05	12.26	1/2/2	84.4	20.0	31.6	.711	3.676	92.2	186.7	1.9	124.4D	1.903
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1	.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0	.203
4-8140	4-8410	.144	349.7	-9.4	-.9	.749	92.0	.211	1.169	187.4	421.1	.923	1.416D	99.5	1.057	-1.2	-30.6	269.7	.177
		11.65	7.30	4.25	4.34	7.73	3.05	12.26	2/1/2	77.1	20.0	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041
4-7820	4-7975.7	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.7	4-8140	.209	167.8	29.3	4.3	1.357	87.7	.334	1.082	9.3	162.9	.721D	1.444A	98.2	.702	-3.7	.5	36.9	.189
4-8140	4-8420	.140	356.3	-7.9	-1.1	.745	90.7	.217	1.161	182.6	425.8	.908	1.413D	100.3	1.053	-1.1	-29.3	277.0	.190
		10.87	6.85	3.89	4.02	7.41	2.96	12.45	2/1/2	74.9	16.6	38.1	1.372	3.066	82.3	358.9	40.9	87.0L	2.834
4-7830	4-7980.1	.133	330.6	-62.0	-5.9	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.8	65.6	154.3	.213
4-7980.1	4-8140	.213	162.9	22.9	3.5	1.356	85.9	.337	1.081	16.3	162.9	.717D	1.444A	98.3	.701	-2.7	3.9	36.0	.188
4-8140	4-8430	.138	3.8	-5.8	-1.3	.741	89.3	.226	1.152	177.7	430.4	.892	1.413	101.2	1.049	-1.0	-27.9	284.4	.206 *
		10.76	6.77	3.86	3.99	7.38	2.91	12.67	2/1/2	74.4	13.6	43.1	1.328	2.725	85.2	349.7	45.3	76.0L	2.291
4-7840	4-7984.0	.139	324.9	-63.6	-6.2	.923	92.4	.163	.856	192.6	383.0	.717	.995D	93.2	1.262	9.3	65.8	154.1	.225
4-7984.0	4-8140	.225	159.3	18.5	3.0	1.354	84.3	.340	1.077	22.7	163.1	.710D	1.444A	98.3	.699	-2.2	5.9	35.1	.189
4-8140	4-8440	.138	12.2	-3.0	-1.4	.737	87.7	.238	1.144	172.6	434.9	.872	1.416	102.2	1.046	-1.0	-26.5	291.9	.224
		10.84	6.84	3.93	4.00	7.39	2.91	12.94	2/1/2	74.5	10.8	47.2	1.189	2.496	87.2	345.3	47.8	68.8L	1.778
4-7850	4-7987.8	.155	319.6	-64.5	-6.9	.927	93.9	.167	.857	200.4	386.8	.714	1.001D	93.8	1.262	10.2	65.7	153.5	.244
4-7987.8	4-8140	.244	156.8	15.0	2.7	1.352	82.6	.346	1.072	29.4	163.6	.701D	1.443A	98.3	.695	-1.7	7.4	34.0	.190
4-8140	4-8450	.142	21.4	.3	-1.6	.733	85.9	.253	1.136	167.6	439.4	.849	1.424	103.4	1.043	-1.0	-24.8	299.3	.246
		11.14	7.09	4.10	4.04	7.44	2.99	13.28	2/1/2	74.9	8.3	50.7	1.012	2.334	88.3	339.2	49.6	63.8L	1.351
4-7860	4-7992.0	.179	317.3	-64.4	-7.9	.931	95.6	.175	.861	208.2	391.1	.710	1.011D	94.5	1.263	11.3	65.6	152.9	.270
4-7992.0	4-8140	.270	155.1	12.1	2.4	1.349	80.6	.354	1.064	36.7	164.4	.688D	1.441A	98.2	.691	-1.3	8.6	32.6	.194
4-8140	4-8460	.151	31.0	3.9	-1.8	.729	83.7	.273	1.129	162.6	444.0	.821	1.437	104.8	1.041	-1.0	-23.0	306.6	.271
		11.70	7.59	4.40	4.12	7.51	3.18	13.72	2/1/2	75.8	5.9	53.5	.826	2.220	88.9	336.8	51.1	60.4L	1.008
MARS ARRIVAL DATE = 2448150 (15 SEP 1990)																			
4-7800	4-7943.2	.233	293.0	36.8	12.5	.912	87.3	.176	.856	166.9	331.1	.706A	1.007	85.8	1.270	-11.7	-66.1	189.9	.281
4-7943.2	4-8150	.281	186.3	-17.3	-3.6	1.354	99.2	.352	1.053	323.6	535.7	.683	1.424A	92.3	.677	3.4	17.5	10.2	.196
4-8150	4-8400	.166	342.0	-10.9	-.6	.752	94.8	.214	1.187	198.2	416.2	.933	1.441D	99.0	1.065	-1.3	-31.4	262.6	.170
		12.88	8.71	5.20	4.18	7.57	3.51	12.18	1/2/2	98.5	23.5	48.9	.759	2.417	91.9	185.7	-.6	122.2D	1.075
4-7810	4-7949.7	.230	292.4	39.0	12.6	.915	88.7	.168	.856	173.3	338.1	.713A	1.000	86.9	1.269	-11.2	-68.6	191.4	.265
4-7949.7	4-8150	.265	188.8	-27.2	-5.2	1.356	97.2	.343	1.062	331.6	533.2	.698	1.427A	93.5	.683	5.2	25.0	11.4	.197
4-8150	4-8410	.159	347.2	-10.4	-.9	.747	93.6	.217	1.177	193.4	421.0	.921	1.432D	99.8	1.060	-1.1	-29.7	269.7	.182
		12.69	8.50	5.15	4.19	7.56	3.35	12.33	1/2/2	94.2	19.7	41.4	.855	2.827	91.3	188.1	.7	122.3D	1.562
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	38.1	5.8	1.357	88.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.8	.189
4-8150	4-8420	.152	353.0	-9.2	-1.1	.742	92.4	.222	1.167	188.4	425.6	.907	1.426D	100.5	1.055	-1.0	-28.4	277.1	.194
		11.21	7.21	4.00	4.00	7.40	3.21	12.50	2/1/2	85.2	16.5	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
4-7830	4-7980.0	.134	331.0	-62.4	-6.1	.920	91.0	.161	.856	185.3	379.4	.718	.994D	92.7	1.263	8.9	65.9	154.2	.215
4-7980.0	4-8150	.215	165.1	27.2	4.2	1.355	86.3	.334	1.078	14.8	167.5	.718D	1.439A	96.1	.693	-3.3	.2	32.9	.182
4-8150	4-8430	.147	359.8	-7.4	-1.3	.737	91.0	.229	1.157	183.5	430.0	.891	1.422D	101.3	1.051	-.9	-27.1	284.6	.208
		10.83	6.97	3.87	3.86	7.26	3.09	12.70	2/1/2	84.6	13.5	39.3	1.306	2.971	85.8	354.1	42.7	78.7L	2.574
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8150	.223	161.3	21.2	3.4	1.354	84.6	.338	1.075	21.4	167.7	.712D	1.438A	96.1	.691	-2.5	3.2	31.7	.182
4-8150	4-8440	.143	7.5	-4.9	-1.5	.732	89.4	.239	1.148	178.1	434.4	.873	1.422	102.2	1.047	-.8	-25.7	292.1	.225
		10.78	6.93	3.92	3.85	7.25	3.02	12.94	2/1/2	84.6	10.9	44.3	1.209	2.652	86.1	347.0	46.5	70.4L	1.996
4-7850	4-7987.9	.152	318.7	-63.7	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	9.9	65.0	153.9	.239
4-7987.9	4-8150	.240	158.6	16.8	3.0	1.351	83.0	.343	1.071	28.0	168.1	.704D	1.438A	96.1	.688	-1.9	5.2	30.5	.183
4-8150	4-8450	.142	16.4	-1.8	-1.6	.728	87.6	.251	1.139	172.8	438.6	.853	1.425	103.2	1.044	-.8	-24.1	299.6	.243
		10.95	7.07	4.07	3.88	7.28	3.00	13.24	2/1/2	84.9	8.4	48.3	1.048	2.445	87.4	342.3	48.9	65.1L	1.514
4-7860	4-7992.0	.175	316.0	-63.4	-7.5	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.9	64.8	153.5	.263
4-7992.0	4-8150	.263	156.9	13.4	2.6	1.349	81.1	.350	1.064	35.1	168.7	.691D	1.436A	95.9	.684	-1.4	6.7	29.2	.186
4-8150	4-8460	.146	26.2	1.9	-1.7	.723	85.5	.268	1.131	167.6	443.0	.828	1.434	104.4	1.042	-.8	-22.3	307.1	.266
		11.37	7.42	4.35	3.95	7.35	3.08	13.62	2/1/2	85.6	6.0	51.4	.867	2.305	88.2	339.5	50.8	61.4L	1.132
MARS ARRIVAL DATE = 2448160 (25 SEP 1990)																			
4-7810	4-7949.6	.229	292.5	38.9	12.4	.914	88.7	.168	.856	173.5	337.9	.713A	1.000	86.9	1.269	-11.1	-68.2	191.2	.263
4-7949.6	4-8160	.263	190.4	-20.8	-4.0	1.356	97.7	.347	1.064	329.6	537.4	.695	1.433A	91.4	.676	4.1	20.1	10.0	.196
4-8160	4-8410	.177	345.8	-10.9	-1.0	.745	95.5	.227	1.187	199.3	421.0	.918	1.456D	100.1	1.063	-.9	-28.7	269.6	.189
		13.04	8.87	5.13	4.17	7.56	3.75	12.43	1/2/2	103.2	19.3	47.5	.868	2.484	90.4	190.3	-2.0	122.0D	1.289
4-7820	4-7957.1	.240	290.4	41.0	13.4	.918	90.1	.162	.857	180.5	347.4	.719A	.996D	88.3	1.268	-11.4	-72.9	189.1	.263
4-7957.1	4-8160	.263	191.5	-37.9	-6.9	1.358	95.2	.338	1.072	339.3	535.0	.709	1.435A	92.6	.682	7.2	31.0	9.0	.205
4-8160	4-8420	.168	350.9	-9.9	-1.2	.739	94.2	.230	1.175	194.2	425.5	.904	1.445D	100.8	1.058	-.8	-27.5	277.1	.200
		13.23	8.86	5.31	4.37	7.76	3.55	12.59	1/2/2	98.7	16.2	35.0	.867	3.325	89.0	12.9	-34.6	122.1D	2.016
4-7830	4-7979.6	.140	332.7	-64.0	-6.5	.921	91.0	.161	.856	185.5	378.9	.719	.994D	92.6	1.263	9.4	67.4	153.9	.222
4-7979.6	4-8160	.222	168.4	33.9	5.3	1.356	86.9	.333	1.080	12.3	171.7	.720D	1.439A	94.1	.686	-4.3	-4.6	31.0	.184
4-8160	4-8430	.160	356.8	-8.4	-1.4	.733	92.7	.235	1.163	189.0	429.8	.890	1.437D	101.5	1.053	-.7	-26.5	284.6	.213
		11.20	7.30	3.93	3.90	7.29	3.37	12.77	2/1/2	93.8	13.4	34.5	1.217	3.369	81.9	.4	38.0	83.3L	2.883
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8160	.223	164.0	24.8	4.0	1.354	85.1	.337	1.077	19.5	171.8	.714D	1.439A	94.1	.685	-2.9	.5	29.2	.181
4-8160	4-8440	.153	3.7	-6.3	-1.5	.728	91.2	.243	1.153	183.6	434.0	.873	1.433D	102.3	1.049	-.7	-24.9	292.2	.227
		10.96	7.14	3.92	3.82	7.22	3.22	12.99	2/1/2	93.8	10.8	40.9	1.209	2.862	84.4	352.2	44.3	73.2L	2.252
4-7850	4-7988.0	.149	317.9	-63.0	-6.5	.927	93.9	.167	.857	200.3	387.0	.714	1.000D	93.8	1.262	9.7	64.4	154.2	.236
4-7988.0	4-8160	.236	161.1	19.2	3.3	1.352	83.4	.342	1.073	26.1	172.1	.706D	1.439A	94.1	.682	-2.2	3.0	27.8	.181
4-8160	4-8450	.148	11.8	-3.5	-1.6	.723	89.4	.253	1.143	178.2	436.1	.854	1.432	103.2	1.046	-.6	-23.3	299.8	.244
		11.00	7.16	4.04	3.84	7.23	3.12	13.25	2/1/2	94.1	8.4	45.5	1.080	2.584	86.1	346.8	47.9	67.0L	1.710
4-7860	4-7992.1	.170	314.7	-62.4	-7.2	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.6	63.9	154.1	.257
4-7992.1	4-8160	.257	159.1	15.0	2.9	1.349	81.6	.348	1.067	33.1	172.6	.695D	1.438A	93.9	.678	-1.6	4.9	26.5	.184
4-8160	4-8460	.147	21.2	-.0	-1.7	.718	87.4	.267	1.134	178.8	442.2	.831	1.436	104.3	1.043	-.6	-21.9	307.3	.264
		11.28	7.38	4.29	3.90	7.29	3.09	13.59	2/1/2	94.7	6.1	49.1	.909	2.408	87.2	343.3	50.4	62.9L	1.280

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448170
5 OCT 1990

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448170 (5 OCT 1990)																			
4-7810	4-7949.8	.232	292.3	39.2	12.7	.915	88.7	.168	.856	173.3	338.3	.713A	1.000	86.9	1.269	-11.3	-68.9	191.6	.267
4-7949.8	4-8170	.267	192.5	-16.6	-3.3	1.357	98.2	.352	1.067	327.8	541.0	.691	1.443	89.4	.671	3.5	16.9	9.3	.201
4-8170	4-8410	.199	345.4	-11.1	-1.2	.744	97.4	.239	1.200	205.3	421.1	.913	1.466D	100.6	1.068	-.8	-27.5	269.4	.199
		13.71	9.42	5.18	4.29	7.68	4.24	12.56	1/2/2	111.1	18.9	52.4	.841	2.267	89.6	13.1	-47.3	122.4D	1.066
4-7820	4-7956.5	.227	290.8	40.2	12.5	.918	90.1	.162	.857	180.5	346.4	.718A	.996D	88.1	1.268	-10.6	-70.8	188.4	.248
4-7956.5	4-8170	.248	193.4	-26.3	-4.7	1.358	95.9	.343	1.074	336.5	539.0	.706	1.443A	90.5	.675	5.1	23.5	9.8	.199
4-8170	4-8420	.188	349.9	-10.2	-1.4	.737	96.1	.241	1.185	200.1	425.5	.900	1.471D	101.3	1.062	-.6	-26.4	276.9	.209
		13.32	9.09	5.11	4.23	7.62	3.98	12.71	1/2/2	107.4	15.9	44.6	.976	2.636	87.9	16.3	-41.4	121.7D	1.597
4-7830	4-7978.1	.168	341.4	-69.6	-8.6	.921	91.1	.160	.857	186.0	377.0	.719	.994D	92.3	1.264	11.4	73.0	151.7	.261
4-7978.1	4-8170	.261	173.6	49.0	8.3	1.357	88.0	.334	1.084	7.8	175.4	.722D	1.445A	92.3	.681	-7.4	-14.1	32.4	.202
4-8170	4-8430	.177	355.0	-8.9	-1.5	.731	94.6	.244	1.172	194.7	429.7	.686	1.458D	101.9	1.056	-.5	-25.4	284.5	.220
		12.30	8.01	4.26	4.30	7.69	3.74	12.88	2/1/2	101.1	13.2	25.9	.885	4.465	80.6	9.3	26.7	92.5D	3.066
4-7840	4-7983.9	.141	325.3	-64.0	-6.4	.923	92.4	.163	.856	192.6	382.9	.717	.995D	93.2	1.262	9.5	65.9	154.0	.227
4-7983.9	4-8170	.227	167.4	30.2	4.8	1.355	85.7	.337	1.081	17.0	175.4	.717D	1.445A	92.3	.679	-3.7	-3.1	27.9	.184
4-8170	4-8440	.167	1.0	-7.1	-1.6	.724	93.0	.249	1.160	189.3	433.7	.871	1.449D	102.6	1.052	-.5	-24.1	292.2	.233
		11.37	7.47	3.94	3.90	7.30	3.52	13.07	2/1/2	101.9	10.7	36.7	1.169	3.178	82.1	358.9	40.7	77.3L	2.547
4-7850	4-7988.1	.148	317.5	-62.6	-6.3	.926	93.9	.167	.857	200.2	387.1	.714	1.000D	93.8	1.262	9.6	64.1	154.4	.234
4-7988.1	4-8170	.234	164.1	22.2	3.8	1.353	84.0	.341	1.077	23.9	175.6	.709D	1.445A	92.3	.677	-2.5	.9	26.1	.183
4-8170	4-8450	.159	8.2	-4.6	-1.7	.718	91.3	.257	1.148	183.7	437.7	.853	1.444D	103.4	1.048	-.5	-22.6	299.8	.248
		11.24	7.37	4.02	3.88	7.27	3.34	13.31	2/1/2	102.2	8.4	42.4	1.100	2.767	84.2	352.5	46.2	69.8L	1.944
4-7860	4-7992.1	.167	313.6	-61.3	-6.9	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.3	63.1	154.7	.251
4-7992.1	4-8170	.251	161.9	16.9	3.1	1.351	82.2	.348	1.072	30.7	176.0	.699D	1.445A	92.1	.674	-1.8	3.4	24.7	.185
4-8170	4-8460	.153	16.7	-1.6	-1.7	.713	89.3	.269	1.138	178.1	441.7	.832	1.443	104.3	1.044	-.5	-20.8	307.4	.265
		11.38	7.46	4.25	3.92	7.32	3.22	13.60	2/1/2	102.7	6.1	46.4	.951	2.537	85.7	348.3	49.6	65.1L	1.461
4-7870	4-7996.4	.195	314.2	-60.0	-7.9	.937	97.3	.186	.866	215.9	395.7	.705	1.028D	95.4	1.266	11.3	62.2	155.3	.278
4-7996.4	4-8170	.278	160.7	12.9	2.7	1.348	80.2	.356	1.065	38.2	176.6	.685D	1.444A	91.9	.669	-1.2	5.2	23.3	.190
4-8170	4-8470	.151	26.7	2.1	-1.8	.707	87.1	.384	1.128	172.6	445.6	.808	1.448	105.5	1.042	-.4	-18.7	314.9	.286
		11.82	7.80	4.62	4.02	7.42	3.18	13.98	1/1/2	103.4	4.0	49.4	.779	2.391	86.8	345.6	52.2	61.9L	1.083
MARS ARRIVAL DATE = 2448180 (15 OCT 1990)																			
4-7820	4-7956.5	.228	290.8	40.2	12.6	.918	90.1	.162	.857	180.5	346.4	.718A	.996D	88.1	1.268	-10.7	-70.9	188.5	.249
4-7956.5	4-8180	.249	196.0	-19.9	-3.6	1.360	96.6	.349	1.079	334.2	542.4	.702	1.455	88.7	.670	4.1	19.5	10.2	.202
4-8180	4-8420	.211	349.8	-10.2	-1.5	.736	96.2	.254	1.200	205.9	425.5	.895	1.504D	101.8	1.066	-.4	-25.3	276.7	.220
		13.95	9.63	5.12	4.32	7.71	4.51	12.87	1/2/2	114.7	15.6	51.2	.971	2.315	87.0	20.0	-44.4	122.1D	1.277
4-7830	4-7964.1	.237	288.8	40.8	13.1	.922	91.6	.159	.858	188.3	356.6	.722A	.995D	89.5	1.268	-10.7	-73.7	179.2	.246
4-7964.1	4-8180	.246	194.5	-36.5	-6.2	1.360	93.9	.341	1.085	344.7	540.6	.715	1.454	89.7	.674	6.9	29.1	8.7	.207
4-8180	4-8430	.198	354.2	-9.0	-1.6	.729	96.7	.255	1.184	200.5	429.6	.882	1.486D	102.4	1.060	-.4	-24.4	284.3	.230
		13.90	9.46	5.26	4.44	7.83	4.21	13.02	1/2/2	110.5	13.0	37.9	.994	3.080	84.4	22.4	-34.1	120.8D	2.067
4-7840	4-7983.4	.152	328.9	-66.8	-7.2	.923	92.5	.162	.856	192.9	382.3	.717	.995D	93.1	1.263	10.3	68.4	152.7	.242
4-7983.4	4-8180	.242	171.7	39.6	6.5	1.357	86.6	.338	1.087	13.7	178.6	.719D	1.455A	90.7	.675	-5.4	-8.4	28.6	.195
4-8180	4-8440	.185	359.4	-7.4	-1.7	.721	95.1	.259	1.169	194.9	433.6	.867	1.471D	103.0	1.055	-.3	-23.2	292.1	.241
		12.13	7.99	4.07	4.14	7.53	3.92	13.20	2/1/2	108.3	10.6	30.6	1.023	3.786	79.6	7.4	33.7	83.7L	2.849
4-7850	4-7988.1	.148	317.5	-62.6	-6.4	.926	93.9	.167	.857	200.2	387.1	.714	1.000D	93.8	1.262	9.6	64.1	154.4	.234
4-7988.1	4-8180	.234	167.6	26.5	4.4	1.356	84.6	.342	1.084	21.3	176.8	.713D	1.455A	90.6	.673	-3.2	-1.4	25.6	.188
4-8180	4-8450	.174	5.6	-5.3	-1.7	.714	93.3	.264	1.156	189.2	437.4	.850	1.461D	103.7	1.050	-.3	-21.8	299.6	.254
		11.67	7.69	4.02	3.98	7.38	3.66	13.41	2/1/2	109.1	8.3	38.6	1.098	3.024	81.8	359.6	43.4	73.6L	2.222
4-7860	4-7992.2	.164	312.7	-60.4	-6.6	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.0	62.3	155.1	.247
4-7992.2	4-8180	.247	165.1	19.4	3.5	1.353	82.9	.348	1.079	28.1	179.1	.704D	1.455A	90.5	.670	-2.1	2.1	23.9	.189
4-8180	4-8460	.164	13.1	-2.6	-1.8	.708	91.3	.273	1.143	183.5	441.3	.851	1.455D	104.5	1.047	-.3	-20.1	307.4	.269
		11.66	7.66	4.21	4.00	7.40	3.45	13.67	2/1/2	109.6	6.1	43.5	.988	2.700	83.7	354.5	48.4	67.9L	1.680
MARS ARRIVAL DATE = 2448190 (25 OCT 1990)																			
4-7850	4-7987.9	.153	319.0	-63.9	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	10.0	65.2	153.8	.241
4-7987.9	4-8190	.241	171.7	33.2	5.6	1.358	85.4	.344	1.091	18.2	181.6	.716D	1.467	89.1	.669	-4.3	-4.6	26.5	.196
4-8190	4-8450	.192	4.1	-5.5	-1.8	.712	95.4	.274	1.165	194.7	437.3	.846	1.485D	104.1	1.054	-.1	-21.0	299.6	.262
		12.33	8.16	4.08	4.17	7.57	4.08	13.56	2/1/2	114.7	8.3	33.8	1.037	3.440	78.8	8.1	38.3	79.0L	2.530
4-7860	4-7992.2	.162	312.1	-59.8	-6.5	.931	95.6	.175	.860	208.1	391.4	.710	1.011D	94.5	1.263	9.8	61.8	155.4	.244
4-7992.2	4-8190	.244	168.7	22.8	4.0	1.356	83.5	.349	1.087	25.3	181.8	.708D	1.467	89.0	.667	-2.6	.7	24.2	.194
4-8190	4-8460	.179	10.5	-3.2	-1.8	.704	93.4	.280	1.151	188.9	441.0	.828	1.473D	104.9	1.049	-.1	-19.4	307.3	.275
		12.09	7.97	4.18	4.12	7.52	3.79	13.78	2/1/2	115.5	6.2	40.1	1.012	2.915	81.0	2.0	46.1	71.6L	1.937
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-7850	4-7987.3	.177	326.7	-68.9	-8.6	.927	94.0	.167	.858	200.7	386.2	.714	1.001D	93.7	1.263	11.8	69.9	150.3	.275
4-7987.3	4-8200	.275	176.1	47.1	8.5	1.361	86.3	.346	1.100	14.3	184.2	.719D	1.481	87.8	.666	-7.2	-11.7	30.3	.215
4-8200	4-8450	.214	3.6	-5.3	-1.9	.710	97.7	.287	1.178	200.2	437.2	.841	1.516D	104.7	1.058	.1	-20.3	299.5	.274
		13.57	8.96	4.38	4.61	8.00	4.58	13.75	2/1/2	117.8	8.3	26.0	.795	4.452	76.5	18.1	27.3	87.3L	2.745
4-7860	4-7992.2	.162	312.3	-60.0	-6.5	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	9.9	62.0	155.3	.245
4-7992.2	4-8200	.245	172.8	27.8	4.8	1.359	84.3	.351	1.097	22.2	184.3	.712D	1.481	87.7	.664	-3.4	-1.2	25.4	.201
4-8200	4-8460	.198	9.1	-3.3	-1.9	.701	95.7	.290	1.161	194.3	440.8	.824	1.498D	105.3	1.053	.1	-18.7	307.2	.264
		12.69	8.40	4.19	4.28	7.66	4.21	13.95	2/1/2	120.2	6.2	36.1	1.004	3.225	77.8	10.6	42.2	76.5L	2.233
4-7870	4-7996.4	.181	310.3	-56.1	-6.6	.937	97.3	.186	.866	215.9	395.7	.705	1.028D	95.4	1.266	10.0	59.0	157.2	.258
4-7996.4	4-8200	.258	170.6	19.1	3.6	1.357	82.5	.357	1.092	29.1	184.6	.702D	1.482	87.5	.661	-2.0	3.0	23.5	.202
4-8200	4-8470	.184	15.9	-.7	-1.9	.693	93.5	.297	1.145	188.3	444.4	.805	1.486D	106.0	1.048	.1	-16.7	314.9	.298
		12.62	8.32	4.43	4.30	7.69	3.89	14.19	1/1/2	120.8	4.2	41.0	.918	2.853	80.1	8.6	49.1	70.6L	1.701

STOPOVER TIME = 0 DAYS 1990 OUTBOUND SWINGBY MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2448110
6 AUG 1990

LAUNCH	SWNGBY	$PEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	$PEED2
SWNGBY	ARRIVE	$PEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	$PEED4
DEPART	RETURN	$PEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	$PEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC

MARS ARRIVAL DATE = 2448110 (6 AUG 1990)

4-7790	4-7938.1	.257	290.9	35.8	13.7	.910	86.0	.183	.859	161.4	327.0	.701A	1.016	85.1	1.272	-13.5	-67.2	108.7	.321
4-7938.1	4-8110	.321	180.6	-30.1	-6.9	1.358	99.9	.362	1.064	322.0	517.9	.679	1.450A	101.6	.706	6.2	26.7	20.6	.238
4-8110	4-8430	.141	17.7	.7	-1.2	.752	84.7	.232	1.146	162.0	433.2	.880	1.412	101.8	1.047	-1.4	-29.8	282.7	.215
		13.76	8.58	5.59	5.18	8.56	2.99	12.80	1/2/2	62.0	12.8	37.5	.585	3.113	94.5	177.7	3.6	126.6D	1.236
4-7790	4-7956.5	.212	340.0	-70.5	-11.0	.916	86.5	.169	.867	162.4	358.5	.721A	1.014	89.8	1.274	12.1	76.0	162.0	.274
4-7956.5	4-8110	.274	184.5	42.1	7.8	1.368	94.3	.355	1.106	343.5	509.3	.713	1.498A	104.6	.731	-8.0	-3.8	45.0	.259
4-8110	4-8450	.141	17.7	.7	-1.2	.752	84.7	.232	1.146	162.0	433.2	.880	1.412	101.8	1.047	-1.4	-29.8	282.7	.215
		13.57	7.86	4.88	5.71	9.09	2.99	12.80	2/1/2	53.5	12.8	35.3	.798	3.502	85.2	14.6	29.7	126.2D	1.837
4-7800	4-7965.4	.158	336.0	-62.2	-7.3	.917	87.5	.165	.864	167.1	367.7	.721	1.006	91.1	1.270	9.1	68.8	154.1	.215
4-7965.4	4-8110	.215	177.9	26.2	4.0	1.371	91.3	.356	1.120	355.0	506.6	.721	1.518A	105.6	.738	-3.9	5.7	45.3	.247
4-8110	4-8440	.155	25.2	3.2	-1.5	.749	82.9	.251	1.140	157.6	438.4	.854	1.427	103.2	1.045	-1.5	-28.4	289.9	.241
		12.81	7.41	4.14	5.40	8.78	3.27	13.20	2/1/2	47.2	10.0	44.9	1.305	2.619	79.3	12.3	40.0	109.7D	2.113
4-7810	4-7971.2	.142	336.1	-60.3	-6.4	.918	88.5	.162	.860	172.5	372.5	.721	1.000	91.7	1.267	8.6	66.7	153.6	.206
4-7971.2	4-8110	.206	171.8	21.0	3.1	1.371	89.2	.358	1.125	3.2	145.5	.723D	1.528A	106.0	.741	-2.9	9.0	45.7	.248
4-8110	4-8450	.175	32.4	5.7	-1.7	.746	80.6	.276	1.134	153.5	443.6	.821	1.448	104.9	1.043	-1.5	-26.8	297.1	.273
		13.08	7.65	3.96	5.42	8.81	3.70	13.74	2/1/2	45.3	7.4	47.2	1.418	2.498	80.9	4.3	44.4	96.3D	2.123
4-7820	4-7975.8	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.8	4-8110	.209	166.6	17.7	2.7	1.371	87.3	.360	1.126	10.1	145.1	.721D	1.532A	106.3	.742	-2.3	10.7	45.8	.250
4-8110	4-8460	.204	39.1	8.1	-2.0	.743	77.8	.310	1.129	149.3	449.2	.779	1.479	107.1	1.041	-1.6	-25.1	304.0	.313
		13.71	8.24	3.89	5.47	8.85	4.35	14.48	2/1/2	44.5	5.5	49.4	1.371	2.392	83.7	355.4	47.1	84.9L	1.908

MARS ARRIVAL DATE = 2448120 (16 AUG 1990)

4-7790	4-7937.3	.242	292.1	34.4	12.7	.909	85.9	.184	.858	161.4	325.8	.700A	1.016	84.9	1.271	-12.3	-64.7	186.5	.303
4-7937.3	4-8120	.303	179.9	-21.9	-4.9	1.354	100.1	.357	1.052	320.6	523.9	.676	1.428A	98.6	.694	4.2	22.7	17.8	.213
4-8120	4-8430	.135	13.4	-1.5	-1.2	.749	86.2	.227	1.147	167.0	432.0	.886	1.408	101.4	1.048	-1.3	-29.3	283.5	.210
		12.77	8.20	5.34	4.57	7.96	2.86	12.72	1/2/2	72.0	13.3	43.0	.655	2.729	93.9	178.1	3.5	123.6D	1.133
4-7800	4-7964.7	.165	337.6	-63.9	-7.8	.917	87.5	.165	.864	167.2	366.7	.721	1.006	90.9	1.271	9.6	70.4	155.0	.224
4-7964.7	4-8120	.224	178.4	34.6	5.4	1.365	91.5	.344	1.098	354.3	513.2	.721	1.476A	102.6	.722	-5.2	-.5	45.4	.224
4-8120	4-8440	.144	21.6	1.3	-1.4	.745	84.5	.244	1.141	162.5	436.9	.863	1.418	102.7	1.049	-1.3	-27.8	290.8	.232
		12.10	7.26	4.22	4.84	8.23	3.03	13.06	2/1/2	57.7	10.4	38.0	1.197	3.074	79.7	13.0	35.1	112.5D	2.483
4-7810	4-7971.3	.141	335.8	-59.9	-6.3	.918	88.5	.163	.860	172.4	372.6	.720	1.000	91.8	1.267	8.5	66.5	153.5	.205
4-7971.3	4-8120	.205	171.2	25.3	3.7	1.365	89.1	.345	1.103	3.7	152.0	.723D	1.483A	103.1	.725	-3.4	5.6	45.4	.220
4-8120	4-8450	.158	29.9	4.3	-1.7	.742	82.4	.265	1.134	157.7	441.9	.834	1.435	104.2	1.043	-1.3	-26.2	298.1	.260
		12.02	7.28	3.94	4.74	8.13	3.33	13.51	2/1/2	54.9	7.8	42.7	1.437	2.749	80.7	4.2	42.4	96.3D	2.514
4-7820	4-7976.0	.134	334.5	-60.5	-6.0	.919	89.7	.161	.858	178.6	376.2	.720	.996	92.2	1.265	8.6	65.8	154.0	.206
4-7976.0	4-8120	.206	165.6	20.6	3.1	1.364	87.2	.347	1.103	10.8	151.7	.720D	1.486A	103.3	.725	-2.6	8.2	43.2	.220
4-8120	4-8460	.160	37.7	7.1	-1.9	.739	79.9	.293	1.128	153.3	447.0	.798	1.459	106.1	1.041	-1.4	-24.4	305.2	.294
		12.42	7.68	3.87	4.75	8.14	3.81	14.12	2/1/2	54.0	5.6	45.9	1.414	2.567	83.8	354.4	46.0	83.9L	2.215
4-7830	4-7979.9	.135	331.3	-62.7	-6.1	.921	91.0	.161	.856	185.3	379.3	.718	.994D	92.6	1.263	9.0	66.1	154.2	.216
4-7979.9	4-8120	.216	161.3	17.3	2.7	1.362	85.6	.350	1.101	17.2	151.7	.716D	1.487A	103.5	.724	-2.1	9.7	42.9	.221
4-8120	4-8470	.212	44.9	9.8	-2.2	.736	76.8	.330	1.123	149.3	452.5	.752	1.494	108.5	1.040	-1.5	-22.5	312.0	.339
		13.20	8.43	3.88	4.77	8.16	4.54	14.98	2/1/2	53.7	4.5	49.1	1.292	2.406	86.4	346.5	48.0	74.8L	1.816

MARS ARRIVAL DATE = 2448130 (26 AUG 1990)

4-7790	4-7937.1	.239	292.3	34.1	12.4	.909	85.9	.185	.858	161.4	325.5	.699A	1.016	84.8	1.272	-12.3	-64.1	186.1	.299
4-7937.1	4-8130	.299	180.4	-17.6	-3.9	1.352	100.3	.356	1.046	319.4	529.2	.674	1.418A	95.9	.685	3.4	18.6	14.0	.202
4-8130	4-8430	.134	8.5	-3.7	-1.2	.745	87.7	.225	1.149	172.2	431.1	.890	1.408	101.2	1.048	-1.2	-28.6	284.1	.207
		12.42	8.12	5.29	4.30	7.69	2.83	12.67	1/2/2	82.8	13.5	46.6	.672	2.528	93.3	179.2	2.4	122.6D	1.026
4-7800	4-7943.5	.239	292.6	37.3	12.8	.912	87.3	.175	.857	166.9	331.6	.707A	1.007	85.9	1.270	-12.1	-67.1	190.6	.288
4-7943.5	4-8130	.288	184.4	-28.2	-5.8	1.355	98.4	.348	1.058	326.7	526.2	.689	1.426A	97.2	.692	5.5	26.9	15.7	.207
4-8130	4-8440	.138	17.1	-.9	-1.4	.741	86.1	.239	1.142	167.4	435.8	.869	1.415	102.4	1.045	-1.1	-27.2	291.5	.227
		12.64	8.21	5.29	4.43	7.82	2.92	12.98	1/2/2	78.4	10.7	39.1	.726	2.991	93.4	182.4	3.2	123.8D	1.446
4-7810	4-7970.9	.145	336.8	-61.2	-6.6	.918	88.6	.162	.860	172.5	372.0	.721	1.000	91.7	1.267	8.8	67.6	153.8	.210
4-7970.9	4-8130	.210	172.3	31.5	4.6	1.361	89.3	.337	1.089	2.8	158.0	.723D	1.456A	100.4	.712	-4.2	.6	40.6	.203
4-8130	4-8450	.147	26.1	2.4	-1.6	.737	84.2	.257	1.135	162.5	440.5	.843	1.427	103.7	1.043	-1.1	-25.5	298.8	.251
		11.42	7.09	5.99	4.33	7.72	3.10	13.37	2/1/2	65.6	8.1	37.6	1.364	3.100	80.3	6.1	38.5	98.7D	2.865
4-7820	4-7976.0	.133	334.4	-60.4	-5.9	.919	89.7	.161	.858	178.5	376.2	.720	.996	92.2	1.265	8.5	65.7	154.0	.206
4-7976.0	4-8130	.206	166.0	24.2	3.6	1.360	87.3	.339	1.089	10.6	157.6	.720D	1.459A	100.6	.712	-3.0	4.8	40.0	.201
4-8130	4-8460	.163	35.0	5.7	-1.8	.734	81.9	.281	1.128	157.8	445.3	.812	1.445	105.3	1.041	-1.2	-23.7	306.0	.281
		11.56	7.29	3.87	4.27	7.67	3.42	13.88	2/1/2	64.3	5.8	42.2	1.419	2.776	83.3	355.6	44.1	84.5L	2.520
4-7830	4-7980.1	.133	330.8	-62.2	-6.0	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.9	65.7	154.3	.213
4-7980.1	4-8130	.213	161.6	19.7	3.1	1.358	85.7	.342	1.088	17.1	157.6	.716D	1.459A	100.8	.711	-2.4	7.0	39.5	.201
4-8130	4-8470	.187	43.5	8.6	-2.0	.731	79.0	.312	1.122	153.3	450.4	.772	1.472	107.4	1.040	-1.3	-21.7	313.0	.318
		12.10	7.82	3.86	4.28	7.67	3.96	14.58	2/1/2	64.0	4.1	46.2	1.320	2.548	86.1	347.2	47.0	74.8L	2.043
4-7840	4-7983.9	.141	325.5	-64.2	-6.4	.923	92.4	.163	.856	192.7	382.9	.717	.995D	93.1	1.262	9.5	66.1	153.9	.228
4-7983.9	4-8130	.228	158.1	16.3	2.7	1.356	84.0	.346	1.084	23.5	157.9	.709D	1.459A	100.8	.709	-1.9	8.5	38.8	.202
4-8130	4-8480	.223	51.1	11.5	-2.3	.727	75.4	.354	1.116	149.4	456.0	.721	1.512	110.1	1.039	-1.4	-19.6	319.7	.368
		13.06	8.76	3.95	4.31	7.70	4.80	15.58	2/1/2	64.1	4.2	49.8	1.139	2.373	87.8	341.2	48.7	68.0L	1.592

MARS ARRIVAL DATE = 2448140 (5 SEP 1990)

4-7800	4-7943.2	.232	293.1	36.7	12.4	.912	87.3	.176	.856	166.9	331.0	.706A	1.007	85.8	1.270	-11.7	-65.9	189.8	.280
4-7943.2	4-8140	.280	184.9	-21.4	-4.4	1.354	98.8	.349	1.054	325.1	531.2	.686	1.421A	94.6	.684	4.1	21.3	12.8	.197
4-8140	4-8440	.138	12.2	-3.0	-1.4	.737	87.7	.238	1.144	172.6	434.9	.872	1.416	102.2	1.046	-1.0	-26.5	291.9	.224
		12.30	8.10	5.19	4.20	7.59	2.91	12.94	1/2/2	88.7	10.8	44.6	.765	2.635	92.6	183.8	1.7	122.4D	1.251
4-7810	4-7950.8	.252	291.2	40.5	14.0	.915	88.7	.167	.857	173.4	339.9	.714A	1.000	87.2	1.269	-12.6	-72.2	193.7	.291
4-7950.8	4-8140	.291	188.7	-40.7	-8.1	1.356	96.4	.341	1.065	334.3	528.2	.702	1.428A	96.0	.691	8.0	34.5	11.7	.214
4-8140	4-8450	.142	21.4	.3	-1.6	.733	85.9	.253	1.136	167.6	439.4	.849	1.424	103.4	1.043	-1.0	-24.8	299.3	.246
		13.09	8.50	5.51	4.59	7.98	2.99	13.28	1/2/2	84.4	8.3	31.6	.711	3.676	92.2	186.7	1.9	124.4D	1.903
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1	.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0	.203
4-8140	4-8450	.142	21.4	.3	-1.6	.733	85.9	.253	1.136	167.6	439.4	.849	1.424	103.4	1.043	-1.0	-24.8	299.3	.246
		11.58	7.24	4.25	4.34	7.73	2.99	13.28	2/1/2	77.1	8.3	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041
4-7820	4-7975.7	.136	335.2	-61.2	-6.1	.919	89.7	.161	.858	178.6	375.9	.720	.996	92.2	1.265	8.7	66.5	154.0	.209
4-7975.7	4-8140	.209	167.8	29.3	4.3	1.357	87.7	.334	1.082	9.3	162.9	.721D	1.444A	98.2	.702	-3.7	.5	36.9	.189
4-8140	4-8460	.151	31.0	3.9	-1.8	.729	83.7	.273	1.129	162.8	444.0	.821	1.437	104.8	1.041	-1.0	-23.0	306.6	.271
		11.09	7.08	3.89	4.02	7.41	3.18	13.72	2/1/2	74.9	5.9	38.1	1.372	3.066	82.3	358.9	40.9	87.0L	2.834
4-7830	4-7980.1	.133	330.6	-62.0	-5.9	.920	91.0	.161	.856	185.3	379.5	.718	.994D	92.7	1.263	8.8	65.6	154.3	.213
4-7980.1	4-8140	.213	162.9	22.9	3.5	1.356	85.9	.337	1.081	16.3	162.9	.717D	1.444A	98.3	.701	-2.7	3.9	36.0	.188
4-8140	4-8470	.166	40.7	7.4	-1.9	.725	81.1	.299	1.122	157.8	448.7	.787	1.457	106.5	1.040	-1.0	-21.0	313.8	.304
		11.39	7.40	3.86	3.99	7.38	3.55	14.30	2/1/2	74.4	4.0	43.1	1.328	2.725	85.2	349.7	45.3	76.0L	2.291
4-7840	4-7984.0	.139	324.9	-63.6	-6.2	.923	92.4	.163	.856	192.6	383.0	.717	.995D	93.2	1.262	9.3	65.6	154.1	.225
4-7984.0	4-8140	.225	159.3	18.5	3.0	1.354	84.3	.340	1.077	22.7	163.1	.710D	1.444A	98.3	.699	-2.2	5.9	35.1	.189
4-8140	4-8480	.195	49.7	10.7	-2.1	.721	77.9	.334	1.116	153.3	453.8	.743	1.488	108.8	1.038	-1.1	-18.8	320.6	.345
		12.09	8.09	3.93	4.00	7.39	4.16	15.11	2/1/2	74.5	5.5	47.2	1.189	2.496	87.2	343.3	47.8	68.8L	1.778
4-7850	4-7987.8	.155	319.6	-64.5	-6.9	.927	93.9	.167	.857	200.4	386.8	.714	1.001D	93.8	1.262	10.2	65.7	153.5	.244
4-7987.8	4-8140	.244	156.8	15.0	2.7	1.352	82.6	.346	1.072	29.4	165.6	.701D	1.443A	98.3	.695	-1.7	7.4	34.0	.190
4-8140	4-8490	.237	57.7	13.4	-2.4	.718	73.8	.382	1.110	149.4	459.6	.685	1.534	111.9	1.038	-1.3	-16.5	327.1	.401
		13.29	9.25	4.10	4.04	7.44	5.15	16.29	2/1/2	74.9	4.9	50.7	1.012	2.334	88.3	339.2	49.6	65.8L	1.351

MARS ARRIVAL DATE = 2448150 (15 SEP 1990)

4-7800	4-7943.2	.233	293.0	36.8	12.5	.912	87.3	.176	.856	166.9	331.1	.706A	1.007	85.8	1.270	-11.7	-66.1	189.9	.281
4-7943.2	4-8150	.281	186.3	-17.3	-3.6	1.354	99.2	.352	1.053	323.6	535.7	.683	1.424A	92.3	.677	3.4	17.5	10.2	.196
4-8150	4-8440	.143	7.8	-4.9	-1.5	.732	89.4	.239	1.148	178.1	434.4	.873	1.422	102.2	1.047	-.8	-29.7	292.1	.225
		12.40	8.22	5.20	4.18	7.57	3.02	12.94	1/2/2	98.5	10.9	48.9	.759	2.417	91.9	189.7	-.6	122.2D	1.075

STOPOVER TIME = 0 DAYS — 1990 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS

MARS ARRIVAL DATE = 2448150

15 SEP 1990

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7810	4-7949.7	.230	292.4	39.0	12.6	.915	88.7	.168	.856	173.3	338.1	.713A	1.000	86.9	1.269	-11.2	-68.6	191.4	.265
4-7949.7	4-8150	.265	186.8	-27.2	-5.2	1.356	97.2	.343	1.062	331.6	533.2	.698	1.427A	93.5	.683	5.2	25.0	11.4	.197
4-8150	4-8450	.142	16.4	-1.8	-1.6	.728	87.6	.251	1.139	172.8	438.6	.653	1.425	103.2	1.044	-.8	-24.1	299.6	.243
		12.34	8.16	5.15	4.19	7.58	3.00	13.24	1/2/2	94.2	8.4	41.4	.855	2.827	91.3	186.1	.7	122.3D	1.562
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	38.1	5.8	1.357	88.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.6	.189
4-8150	4-8460	.146	26.2	1.9	-1.7	.723	85.5	.268	1.131	167.6	443.0	.628	1.434	104.4	1.042	-.8	-22.3	307.1	.266
		11.08	7.08	4.00	4.00	7.40	3.08	13.62	2/1/2	85.2	6.0	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
4-7830	4-7980.0	.134	331.0	-62.4	-6.1	.920	91.0	.161	.856	185.3	379.4	.718	.994D	92.7	1.263	8.9	65.9	154.2	.215
4-7980.0	4-8150	.215	165.1	27.2	4.2	1.355	86.3	.334	1.078	14.8	167.5	.718D	1.439A	96.1	.693	-3.3	.2	32.9	.182
4-8150	4-8470	.156	36.6	5.7	-1.9	.719	83.1	.290	1.123	162.5	447.4	.797	1.449	106.0	1.040	-.8	-20.2	314.5	.294
		11.02	7.16	3.87	3.86	7.26	3.29	14.12	2/1/2	84.6	3.9	39.3	1.306	2.971	83.8	354.1	42.7	78.7L	2.574
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8150	.223	161.3	21.2	3.4	1.354	84.6	.338	1.075	21.4	167.7	.712D	1.438A	96.1	.691	-2.5	3.2	31.7	.182
4-8150	4-8480	.175	46.9	9.5	-2.0	.715	80.2	.319	1.116	157.6	452.1	.759	1.472	107.9	1.038	-.9	-18.0	321.3	.329
		11.47	7.62	3.92	3.85	7.25	3.70	14.80	2/1/2	84.6	2.7	44.3	1.209	2.652	86.1	347.0	46.5	70.4L	1.996
4-7850	4-7987.9	.152	318.7	-63.7	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	9.9	65.0	153.9	.239
4-7987.9	4-8150	.240	158.6	16.8	3.0	1.351	83.0	.343	1.071	28.0	168.1	.704D	1.438A	96.1	.688	-1.9	5.2	30.5	.183
4-8150	4-8490	.207	56.4	12.7	-2.2	.711	76.6	.359	1.109	153.2	457.3	.710	1.508	110.5	1.036	-1.0	-15.6	328.0	.376
		12.37	8.49	4.07	3.88	7.28	4.42	15.75	2/1/2	84.9	3.6	48.3	1.048	2.445	87.4	342.3	48.9	65.1L	1.514
4-7860	4-7992.0	.175	316.0	-63.4	-7.5	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.9	64.8	153.5	.263
4-7992.0	4-8150	.263	156.9	13.4	2.6	1.349	81.1	.350	1.064	35.1	168.7	.691D	1.436A	95.9	.684	-1.4	6.7	29.2	.186
4-8150	4-8500	.255	64.5	15.3	-2.4	.708	71.9	.415	1.103	149.6	463.3	.645	1.561	114.1	1.037	-1.1	-13.2	334.3	.439
		13.89	9.94	4.35	3.95	7.35	5.60	17.14	2/1/2	85.6	6.3	51.4	.867	2.305	88.2	339.5	50.8	61.4L	1.132

MARS ARRIVAL DATE = 2448160 (25 SEP 1990)

4-7810	4-7949.6	.229	292.5	38.9	12.4	.914	88.7	.168	.856	173.3	337.9	.713A	1.000	86.9	1.269	-11.1	-68.2	191.2	.263
4-7949.6	4-8160	.263	190.4	-20.8	-4.0	1.356	97.7	.347	1.064	329.6	537.4	.695	1.433A	91.4	.676	4.1	20.1	10.0	.196
4-8160	4-8450	.148	11.8	-3.5	-1.6	.723	89.4	.253	1.143	176.2	438.1	.654	1.432	103.2	1.046	-.6	-23.3	299.8	.244
		12.42	8.25	5.13	4.17	7.56	3.12	13.25	1/2/2	103.2	8.4	47.5	.868	2.484	90.4	190.3	-2.0	122.0D	1.269
4-7820	4-7957.1	.240	290.4	41.0	13.4	.918	90.1	.162	.857	180.5	347.4	.719A	.996D	88.3	1.268	-11.4	-72.9	189.1	.263
4-7957.1	4-8160	.263	191.5	-37.9	-6.9	1.358	95.2	.338	1.072	339.3	535.0	.709	1.435A	92.6	.682	7.2	31.0	9.0	.205
4-8160	4-8460	.147	21.2	-.0	-1.7	.718	87.4	.267	1.134	172.8	442.2	.831	1.436	104.3	1.043	-.6	-21.5	307.3	.264
		12.77	8.40	5.31	4.37	7.76	3.09	13.59	1/2/2	98.7	6.1	35.0	.867	3.325	89.0	12.9	-34.6	122.1D	2.016
4-7830	4-7979.6	.140	332.7	-64.0	-6.5	.921	91.0	.161	.856	185.5	378.9	.719	.994D	92.6	1.263	9.4	67.4	153.9	.222
4-7979.6	4-8160	.222	168.4	33.9	5.3	1.356	86.9	.333	1.080	12.3	171.7	.720D	1.439A	94.1	.686	-4.3	-4.6	31.0	.184
4-8160	4-8470	.151	31.7	5.9	-1.8	.713	85.1	.285	1.125	167.4	446.4	.804	1.446	105.6	1.041	-.6	-19.5	314.7	.288
		11.00	7.10	3.93	3.90	7.29	3.17	14.02	2/1/2	93.8	3.9	34.5	1.217	3.369	81.9	.4	38.0	83.3L	2.883
4-7840	4-7984.1	.138	324.5	-63.2	-6.1	.923	92.4	.163	.856	192.6	383.1	.717	.995D	93.2	1.262	9.2	65.2	154.3	.223
4-7984.1	4-8160	.223	164.0	24.8	4.0	1.354	85.1	.337	1.077	19.5	171.8	.714D	1.439A	94.1	.685	-2.9	.5	29.2	.181
4-8160	4-8480	.162	42.8	8.0	-2.0	.708	82.4	.310	1.117	162.2	450.8	.771	1.463	107.3	1.039	-.7	-17.2	321.8	.319
		11.15	7.33	3.92	3.82	7.22	3.42	14.59	2/1/2	93.8	2.2	40.9	1.209	2.862	84.4	352.2	44.3	73.2L	2.252
4-7850	4-7988.0	.149	317.9	-63.0	-6.5	.927	93.9	.167	.857	200.3	387.0	.714	1.000D	93.8	1.262	9.7	64.4	154.2	.236
4-7988.0	4-8160	.236	161.1	19.2	3.3	1.352	83.4	.342	1.073	26.1	172.1	.706D	1.439A	94.1	.682	-2.2	3.0	27.8	.181
4-8160	4-8490	.185	53.8	11.7	-2.1	.704	79.1	.343	1.109	157.4	455.5	.728	1.489	109.5	1.036	-.7	-14.8	326.7	.358
		11.78	7.95	4.04	3.84	7.23	3.91	15.37	2/1/2	94.1	2.6	45.5	1.080	2.584	86.1	346.8	47.9	67.0L	1.710
4-7860	4-7992.1	.170	314.7	-62.4	-7.2	.931	95.6	.175	.861	208.2	391.2	.710	1.011D	94.5	1.263	10.6	63.9	154.1	.257
4-7992.1	4-8160	.257	159.1	15.0	2.9	1.349	81.6	.348	1.067	33.1	172.6	.695D	1.436A	93.9	.678	-1.6	4.9	26.5	.184
4-8160	4-8500	.221	63.6	14.8	-2.2	.700	74.9	.389	1.102	153.1	460.9	.673	1.531	112.4	1.037	-.8	-12.3	335.3	.410
		12.96	9.06	4.29	3.90	7.29	4.77	16.49	2/1/2	94.7	4.9	49.1	.909	2.408	87.2	343.3	50.4	62.9L	1.280

MARS ARRIVAL DATE = 2448170 (5 OCT 1990)

4-7810	4-7949.8	.232	292.3	39.2	12.7	.915	88.7	.168	.856	173.3	338.3	.713A	1.000	86.9	1.269	-11.3	-68.9	191.6	.267
4-7949.8	4-8170	.267	192.5	-16.6	-5.3	1.357	98.2	.352	1.067	327.8	541.0	.691	1.443	89.4	.671	3.5	16.9	9.3	.201
4-8170	4-8450	.159	8.2	-4.6	-1.7	.718	91.3	.257	1.148	183.7	437.7	.853	1.444D	103.4	1.046	-.5	-22.6	299.8	.248
		12.81	8.53	5.18	4.29	7.68	3.34	13.31	1/2/2	111.1	8.4	52.4	.841	2.267	89.6	13.1	-47.3	122.4D	1.066
4-7820	4-7956.5	.227	290.8	40.2	12.5	.918	90.1	.162	.857	180.5	346.4	.718A	.996D	88.1	1.268	-10.6	-70.8	188.4	.248
4-7956.5	4-8170	.248	193.4	-26.3	-4.7	1.358	95.9	.343	1.074	336.5	539.0	.706	1.443A	90.5	.675	5.1	23.5	9.8	.199
4-8170	4-8460	.153	16.7	-1.6	-1.7	.713	89.3	.269	1.138	178.1	441.7	.832	1.443	104.3	1.044	-.5	-20.8	307.4	.265
		12.55	8.33	5.11	4.23	7.62	3.22	13.60	1/2/2	107.4	6.1	44.6	.976	2.636	87.9	16.3	-41.4	121.7D	1.597
4-7830	4-7978.1	.168	341.4	-69.6	-8.6	.921	91.1	.160	.857	186.0	377.0	.719	.994D	92.3	1.264	11.4	73.0	151.7	.261
4-7978.1	4-8170	.261	173.6	49.0	8.3	1.357	86.0	.334	1.084	7.8	175.4	.722D	1.445A	92.3	.681	-7.4	-14.1	32.4	.202
4-8170	4-8470	.151	26.7	2.1	-1.8	.707	87.1	.284	1.128	172.6	445.6	.808	1.448	105.5	1.042	-.4	-18.7	314.9	.286
		11.74	7.45	4.26	4.30	7.69	3.18	13.98	2/1/2	101.1	4.0	25.9	.885	4.465	80.6	9.3	26.7	92.5D	3.066
4-7840	4-7983.9	.141	325.3	-64.0	-6.4	.923	92.4	.163	.856	192.6	382.9	.717	.995D	93.2	1.262	9.5	65.9	154.0	.227
4-7983.9	4-8170	.227	167.4	30.2	4.8	1.355	85.7	.337	1.081	17.0	175.4	.717D	1.445A	92.3	.679	-3.7	-3.1	27.9	.184
4-8170	4-8480	.156	37.9	6.3	-1.9	.702	84.5	.304	1.118	167.1	449.8	.778	1.459	106.9	1.040	-.5	-16.5	322.1	.312
		11.13	7.22	3.94	3.90	7.30	3.28	14.46	2/1/2	101.9	2.0	36.7	1.169	3.178	82.1	358.9	40.7	77.3L	2.547
4-7850	4-7988.1	.148	317.5	-62.6	-6.3	.926	93.9	.167	.857	200.2	387.1	.714	1.000D	93.8	1.262	9.6	64.1	154.4	.234
4-7988.1	4-8170	.234	164.1	22.2	3.8	1.353	84.0	.341	1.077	23.9	175.6	.709D	1.445A	92.3	.677	-2.5	.9	26.1	.183
4-8170	4-8490	.170	49.8	10.4	-2.0	.697	81.4	.332	1.110	161.9	454.2	.741	1.478	108.8	1.038	-.5	-14.0	329.2	.346
		11.48	7.60	4.02	3.88	7.27	3.58	15.12	2/1/2	102.2	1.7	42.4	1.100	2.767	84.2	352.5	46.2	69.8L	1.944
4-7860	4-7992.1	.167	313.6	-61.3	-6.9	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.3	63.1	154.7	.251
4-7992.1	4-8170	.251	161.9	16.9	3.1	1.351	82.2	.348	1.072	30.7	176.0	.699D	1.445A	92.1	.674	-1.8	3.4	24.7	.185
4-8170	4-8500	.196	61.2	14.0	-2.1	.692	77.7	.370	1.102	157.1	459.0	.694	1.510	111.2	1.037	-.5	-11.4	335.9	.390
		12.34	8.42	4.25	3.92	7.32	4.17	16.04	2/1/2	102.7	3.8	46.4	.951	2.537	85.7	348.3	49.6	65.1L	1.461

MARS ARRIVAL DATE = 2448180 (15 OCT 1990)

4-7820	4-7956.5	.228	290.8	40.2	12.6	.918	90.1	.162	.857	180.5	346.4	.718A	.996D	88.1	1.268	-10.7	-70.9	188.5	.249
4-7956.5	4-8180	.249	196.0	-19.9	-3.6	1.360	96.6	.349	1.079	334.2	542.4	.702	1.455	88.7	.670	4.1	19.5	10.2	.202
4-8180	4-8460	.164	13.1	-2.6	-1.8	.708	91.3	.273	1.143	183.5	441.3	.831	1.455D	104.5	1.047	-.3	-20.1	307.4	.269
		12.89	8.57	5.12	4.32	7.71	3.45	13.67	1/2/2	114.7	6.1	51.2	.971	2.315	87.0	20.0	-44.4	122.1D	1.277
4-7830	4-7964.1	.237	288.8	40.8	13.1	.922	91.6	.159	.858	188.3	356.6	.722A	.995D	89.5	1.268	-10.7	-73.7	179.2	.246
4-7964.1	4-8180	.246	194.5	-36.5	-6.2	1.360	95.9	.341	1.085	344.7	540.6	.715	1.454	89.7	.674	6.9	29.1	8.7	.207
4-8180	4-8470	.157	22.1	.7	-1.8	.702	89.1	.285	1.132	177.8	445.1	.809	1.455	105.5	1.043	-.5	-18.0	314.9	.287
		13.01	8.57	5.26	4.44	7.83	3.31	13.99	1/2/2	110.5	4.0	37.9	.994	3.080	84.4	22.4	-34.1	120.8D	2.067
4-7840	4-7983.4	.152	328.9	-66.8	-7.2	.923	92.5	.162	.856	192.9	382.3	.717	.995D	93.1	1.263	10.3	68.4	152.7	.242
4-7983.4	4-8180	.242	171.7	39.6	6.5	1.357	86.6	.338	1.087	13.7	178.6	.719D	1.455A	90.7	.675	-5.4	-8.4	28.6	.195
4-8180	4-8480	.156	32.8	4.7	-1.9	.696	86.6	.302	1.121	172.1	449.0	.782	1.460	106.7	1.041	-.3	-15.8	322.3	.310
		11.48	7.55	4.07	4.14	7.53	3.28	14.42	2/1/2	108.3	1.9	30.6	1.023	3.786	79.6	7.4	33.7	83.7L	2.849
4-7850	4-7988.1	.148	317.5	-62.6	-6.4	.926	93.9	.167	.857	200.2	387.1	.714	1.000D	93.8	1.262	9.6	64.1	154.4	.234
4-7988.1	4-8180	.234	167.6	26.5	4.4	1.356	84.6	.342	1.084	21.3	178.8	.713D	1.455A	90.6	.673	-3.2	-1.4	25.6	.188
4-8180	4-8490	.162	44.8	8.9	-1.9	.690	83.7	.326	1.112	166.6	453.1	.750	1.474	108.3	1.039	-.3	-13.3	329.5	.338
		11.42	7.43	4.02	3.98	7.38	3.41	14.97	2/1/2	109.1	1.0	38.6	1.098	3.024	81.8	359.6	43.4	75.8L	2.222
4-7860	4-7992.2	.164	312.7	-60.4	-6.6	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	10.0	62.3	155.1	.247
4-7992.2	4-8160	.247	165.1	19.4	3.5	1.353	82.9	.348	1.079	28.1	179.1	.704D	1.455A	90.5	.670	-2.1	2.1	23.9	.189
4-8160	4-8500	.179	57.4	12.9	-2.0	.685	80.2	.357	1.103	161.4	457.6	.709	1.497	110.4	1.037	-.5	-10.7	336.4	.376
		11.99	7.99	4.21	4.00	7.40	3.78	15.74	2/1/2	109.6	3.0	43.5	.988	2.700	83.7	354.5	48.4	67.9L	1.680

MARS ARRIVAL DATE = 2448190 (25 OCT 1990)

4-7820	4-7956.8	.233	290.8	40.6	12.9	.918	90.1	.162	.857	180.5	346.8	.718A	.996D	88.2	1.268	-11.0	-71.8	188.7	.255
4-7956.8	4-8190	.255	198.8	-15.5	-2.9	1.362	97.2	.356	1.085	332.1	545.5	.699	1.470	87.0	.665	3.5	17.1	11.0	.210
4-8190	4-8480	.179	10.5	-3.2	-1.8	.704	93.4	.280	1.151	186.9	441.0	.828	1.473D	104.9	1.049	-.1	-19.4	307.3	.275
		13.48	8.98	5.20	4.49	7.88	3.79	13.78	1/2/2	120.7	6.2	56.6	.929	2.111	86.4	23.6	-46.0	122.8D	1.028

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2448190
25 OCT 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-7830	4-7963.7	.227	288.9	40.1	12.5	.922	91.6	.159	.858	188.4	356.0	.722A	.995D	89.4	1.268	-10.1	-72.1	179.5	.234
4-7963.7	4-8190	.234	197.8	-25.2	-4.2	1.362	94.7	.347	1.090	341.6	543.6	.712	1.468	88.0	.669	5.0	22.8	11.0	.206
4-8190	4-8470	.168	18.5	-.2	-1.8	.697	91.2	.290	1.138	183.1	444.7	.808	1.467D	105.7	1.045	-.1	-17.4	314.9	.291
		13.06	8.65	5.10	4.40	7.79	3.55	14.07	1/2/2	117.7	4.1	48.1	1.095	2.456	83.3	26.7	-40.3	121.5D	1.594
4-7850	4-7987.9	.153	319.0	-63.9	-6.7	.927	93.9	.167	.857	200.3	386.9	.714	1.000D	93.8	1.262	10.0	65.2	153.8	.241
4-7987.9	4-8190	.241	171.7	33.2	5.8	1.358	85.4	.344	1.091	18.2	181.6	.716D	1.467	89.1	.669	-4.3	-4.6	26.5	.196
4-8190	4-8490	.161	39.6	7.5	-1.9	.683	86.0	.323	1.114	171.5	452.3	.755	1.474	108.1	1.040	-.1	-12.6	329.7	.335
		11.63	7.46	4.08	4.17	7.57	3.38	14.91	2/1/2	114.7	.3	33.8	1.037	3.440	78.8	8.1	38.3	79.0L	2.530
4-7860	4-7992.2	.162	312.1	-59.8	-6.5	.931	95.6	.175	.860	208.1	391.4	.710	1.011D	94.5	1.263	9.8	61.8	155.4	.244
4-7992.2	4-8190	.244	168.7	22.8	4.0	1.356	83.5	.349	1.087	25.3	181.8	.708D	1.467	89.0	.667	-2.6	.7	24.2	.194
4-8190	4-8500	.169	52.5	11.7	-1.9	.677	82.7	.349	1.104	166.0	456.5	.719	1.490	109.9	1.038	-.1	-10.0	336.7	.367
		11.87	7.75	4.18	4.12	7.52	3.56	15.55	2/1/2	115.5	2.4	40.1	1.012	2.915	81.0	2.0	46.1	71.6L	1.937
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-7830	4-7963.8	.229	288.9	40.2	12.6	.922	91.6	.159	.858	188.4	356.1	.722A	.995D	89.5	1.268	-10.2	-72.4	179.5	.236
4-7963.8	4-8200	.236	201.3	-18.6	-3.2	1.364	95.4	.353	1.097	339.0	546.7	.709	1.485	86.4	.664	4.1	19.6	12.8	.211
4-8200	4-8470	.184	15.9	-.7	-1.9	.693	93.5	.297	1.145	188.3	444.4	.805	1.486D	106.0	1.048	.1	-16.7	314.9	.298
		13.55	9.02	5.15	4.53	7.92	3.89	14.19	1/2/2	123.4	4.2	55.2	1.076	2.157	82.5	30.9	-43.2	122.4D	1.245
4-7840	4-7971.7	.237	287.4	39.4	13.0	.926	93.0	.160	.860	196.3	366.7	.722	.996D	90.9	1.267	-10.1	-72.3	166.1	.234
4-7971.7	4-8200	.234	197.0	-35.3	-5.7	1.364	92.5	.348	1.101	330.2	545.3	.720	1.483	87.2	.667	6.8	28.3	11.0	.215
4-8200	4-8480	.172	24.4	2.4	-1.9	.685	91.1	.308	1.131	182.4	448.0	.783	1.480D	106.9	1.044	.1	-14.5	3?? 4	.314
		13.52	8.89	5.26	4.63	8.02	3.65	14.50	1/2/2	119.7	2.2	40.3	1.095	2.905	78.8	32.7	-33.0	119.8D	2.085
4-7850	4-7987.3	.177	326.7	-68.9	-8.6	.927	94.0	.167	.858	200.7	386.2	.714	1.001D	93.7	1.263	11.8	69.9	150.3	.275
4-7987.3	4-8200	.275	176.1	47.1	8.5	1.361	86.3	.346	1.100	14.3	184.2	.719D	1.481	87.8	.666	-7.2	-11.7	30.3	.215
4-8200	4-8490	.165	34.8	6.2	-1.8	.677	86.3	.323	1.119	176.5	451.7	.797	1.480	108.1	1.041	.1	-12.0	329.7	.335
		12.47	7.86	4.38	4.61	8.00	3.48	14.91	2/1/2	117.8	.3	26.0	.795	4.452	76.5	18.1	27.3	87.3L	2.745
4-7860	4-7992.2	.162	312.5	-60.0	-6.5	.931	95.6	.175	.860	208.1	391.3	.710	1.011D	94.5	1.263	9.9	62.0	155.3	.245
4-7992.2	4-8200	.245	172.6	27.8	4.8	1.359	84.3	.351	1.097	22.2	184.3	.712D	1.481	87.7	.664	-3.4	-1.2	25.4	.201
4-8200	4-8500	.166	47.3	10.5	-1.8	.670	85.2	.345	1.107	170.7	455.6	.725	1.489	109.6	1.039	.1	-9.4	336.9	.362
		11.97	7.69	4.19	4.26	7.68	3.50	15.46	2/1/2	120.2	2.0	36.1	1.004	3.225	77.8	10.6	42.2	76.5L	2.233

STOPOVER TIME = 0 DAYS | 1990 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2448130
26 AUG 1990

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448130 (26 AUG 1990)																			
4-7790	4-7937.1	.239	292.3	34.1	12.4	.909	85.9	.185	.858	161.4	325.5	.699A	1.016	84.8	1.272	-12.3	-64.1	186.1	.299
4-7937.1	4-8130	.299	180.4	-17.6	-3.9	1.352	100.3	.356	1.046	319.4	529.2	.674	1.418A	95.9	.685	3.4	18.6	14.0	.202
4-8130	4-8470	.187	43.5	8.8	-2.0	.731	79.0	.312	1.122	153.3	450.4	.772	1.472	107.4	1.040	-1.3	-21.7	313.0	.318
		13.54	9.25	5.29	4.30	7.69	3.96	14.58	1/2/2	82.8	4.1	46.6	.672	2.528	93.3	179.2	2.4	122.6D	1.026
MARS ARRIVAL DATE = 2448140 (5 SEP 1990)																			
4-7800	4-7943.2	.232	293.1	36.7	12.4	.912	87.3	.176	.856	166.9	331.0	.706A	1.007	85.8	1.270	-11.7	-65.9	189.8	.280
4-7943.2	4-8140	.280	184.9	-21.4	-4.4	1.354	98.8	.349	1.054	325.1	531.2	.686	1.421A	94.6	.684	4.1	21.3	12.8	.197
4-8140	4-8480	.195	49.7	10.7	-2.1	.721	77.9	.334	1.116	153.3	453.8	.743	1.488	108.8	1.038	-1.1	-18.8	320.6	.345
		13.54	9.34	5.19	4.20	7.59	4.16	15.11	1/2/2	88.7	3.3	44.6	.765	2.635	92.6	183.8	1.7	122.4D	1.251
4-7810	4-7968.9	.167	342.7	-66.4	-8.3	.918	88.7	.162	.861	173.0	369.3	.721	1.000	91.3	1.268	10.4	72.6	155.1	.241
4-7968.9	4-8140	.241	176.3	44.9	7.2	1.359	90.2	.332	1.082	359.1	523.5	.723	1.441A	97.9	.702	-6.8	-9.4	39.0	.203
4-8140	4-8490	.237	57.7	13.4	-2.4	.718	73.8	.382	1.110	149.4	459.6	.685	1.534	111.9	1.038	-1.3	-16.5	327.1	.401
		13.74	9.40	4.25	4.34	7.73	5.15	16.29	2/1/2	77.1	4.9	29.4	1.036	3.936	81.0	10.4	29.3	106.1D	3.041
MARS ARRIVAL DATE = 2448150 (15 SEP 1990)																			
4-7800	4-7943.2	.233	293.0	36.8	12.5	.912	87.3	.176	.856	166.9	331.1	.706A	1.007	85.8	1.270	-11.7	-66.1	189.9	.281
4-7943.2	4-8150	.281	186.3	-17.3	-3.6	1.354	99.2	.352	1.053	323.6	535.7	.683	1.424A	92.3	.677	3.4	17.5	10.2	.196
4-8150	4-8480	.175	46.9	9.5	-2.0	.715	80.2	.319	1.116	157.6	452.1	.759	1.472	107.9	1.038	-.9	-18.0	321.5	.329
		13.08	8.91	5.20	4.18	7.57	3.70	14.80	1/2/2	98.5	2.7	48.9	.759	2.417	91.9	185.7	-.6	122.2D	1.075
4-7810	4-7949.7	.230	292.4	39.0	12.6	.915	88.7	.168	.856	173.3	338.1	.713A	1.000	86.9	1.269	-11.2	-68.6	191.4	.265
4-7949.7	4-8150	.265	188.8	-27.2	-5.2	1.356	97.2	.343	1.062	331.6	533.2	.698	1.427A	93.5	.683	5.2	25.0	11.4	.197
4-8150	4-8490	.207	56.4	12.7	-2.2	.711	76.6	.359	1.109	153.2	457.3	.710	1.508	110.5	1.038	-1.0	-15.6	328.0	.376
		13.76	9.58	5.15	4.19	7.58	4.42	15.75	1/2/2	94.2	3.6	41.4	.855	2.827	91.3	188.1	.7	122.3D	1.562
4-7820	4-7974.9	.146	338.1	-64.1	-6.9	.919	89.8	.161	.858	178.9	374.8	.720	.996	92.0	1.265	9.5	69.1	153.9	.223
4-7974.9	4-8150	.223	171.1	38.1	5.8	1.357	88.3	.331	1.080	6.7	167.6	.722D	1.438A	96.0	.694	-5.1	-6.1	34.8	.189
4-8150	4-8500	.255	64.5	15.3	-2.4	.708	71.9	.415	1.103	149.6	463.3	.645	1.561	114.1	1.037	-1.1	-13.2	334.3	.439
		13.60	9.60	4.00	4.00	7.40	5.60	17.14	2/1/2	85.2	6.3	32.3	1.206	3.593	81.1	4.4	34.7	92.5D	3.127
MARS ARRIVAL DATE = 2448160 (25 SEP 1990)																			
4-7810	4-7949.6	.229	292.5	38.9	12.4	.914	88.7	.168	.856	173.3	337.9	.713A	1.000	86.9	1.269	-11.1	-68.2	191.2	.263
4-7949.6	4-8160	.263	190.4	-20.8	-4.0	1.356	97.7	.347	1.064	329.6	537.4	.695	1.433A	91.4	.676	4.1	20.1	10.0	.196
4-8160	4-8490	.185	53.8	11.7	-2.1	.704	79.1	.343	1.109	157.4	455.5	.728	1.489	109.5	1.038	-.7	-14.8	328.7	.358
		13.20	9.03	5.13	4.17	7.56	3.91	15.37	1/2/2	103.2	2.6	47.5	.868	2.484	90.4	190.3	-2.0	122.0D	1.289
MARS ARRIVAL DATE = 2448170 (5 OCT 1990)																			
4-7810	4-7949.8	.232	292.3	39.2	12.7	.915	88.7	.168	.856	173.3	338.3	.713A	1.000	86.9	1.269	-11.3	-68.9	191.6	.267
4-7949.8	4-8170	.267	192.5	-16.6	-3.3	1.357	98.2	.352	1.067	327.8	541.0	.691	1.443	89.4	.671	3.5	16.9	9.3	.201
4-8170	4-8490	.170	49.8	10.4	-2.0	.697	81.4	.332	1.110	161.9	454.2	.741	1.478	108.8	1.038	-.5	-14.0	329.2	.346
		13.05	8.76	5.18	4.29	7.68	3.58	15.12	1/2/2	111.1	1.7	52.4	.841	2.267	89.6	13.1	-47.3	122.4D	1.066
4-7820	4-7956.5	.227	290.8	40.2	12.5	.918	90.1	.162	.857	180.5	346.4	.718A	.996D	88.1	1.268	-10.6	-70.8	188.4	.248
4-7956.5	4-8170	.248	193.4	-26.3	-4.7	1.358	95.9	.343	1.074	336.5	539.0	.706	1.443A	90.5	.675	5.1	23.5	9.8	.199
4-8170	4-8500	.196	61.2	14.0	-2.1	.692	77.7	.370	1.102	157.1	459.0	.694	1.510	111.2	1.037	-.5	-11.4	335.9	.390
		13.51	9.26	5.11	4.23	7.62	4.17	16.04	1/2/2	107.4	3.8	44.6	.976	2.636	87.9	16.3	-41.4	121.7D	1.597
MARS ARRIVAL DATE = 2448180 (15 OCT 1990)																			
4-7820	4-7956.5	.228	290.8	40.2	12.6	.918	90.1	.162	.857	180.5	346.4	.718A	.996D	88.1	1.268	-10.7	-70.9	188.5	.249
4-7956.5	4-8180	.249	196.0	-19.9	-3.6	1.360	96.6	.349	1.079	334.2	542.4	.702	1.455	88.7	.670	4.1	19.5	10.2	.202
4-8180	4-8500	.179	57.4	12.9	-2.0	.685	80.2	.357	1.103	161.4	457.6	.709	1.497	110.4	1.037	-.5	-10.7	336.4	.376
		13.22	8.90	5.12	4.32	7.71	3.78	15.74	1/2/2	114.7	3.0	51.2	.971	2.315	87.0	20.0	-44.4	122.1D	1.277
MARS ARRIVAL DATE = 2448190 (25 OCT 1990)																			
4-7820	4-7956.6	.233	290.8	40.6	12.9	.918	90.1	.162	.857	180.5	346.8	.718A	.996D	88.2	1.268	-11.0	-71.8	188.7	.255
4-7956.6	4-8190	.255	198.8	-15.5	-2.9	1.362	97.2	.356	1.085	332.1	545.5	.699	1.470	87.0	.665	3.5	17.1	11.0	.210
4-8190	4-8500	.169	52.5	11.7	-1.9	.677	82.7	.349	1.104	166.0	456.5	.719	1.490	109.9	1.038	-.1	-10.0	336.7	.367
		13.25	8.76	5.20	4.49	7.88	3.56	15.55	1/2/2	120.7	2.4	56.6	.925	2.111	86.4	23.6	-46.0	122.8D	1.028
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-7770	4-7997.9	.213	312.3	-17.1	-.2	.909	78.9	.253	.865	141.4	422.8	.647	1.084	101.4	1.265	3.4	16.4	143.3	.263
4-7997.9	4-8200	.263	170.1	17.0	3.3	1.356	81.8	.360	1.090	31.5	184.7	.698D	1.482	87.4	.660	-1.7	4.0	23.1	.203
4-8200	4-8450	.214	5.6	-5.3	-1.9	.710	97.7	.287	1.178	200.2	457.2	.841	1.516D	104.7	1.058	.1	-20.3	299.5	.274
		13.80	9.47	4.89	4.32	7.72	4.58	13.75	2/1/2	121.0	8.3	25.7	.870	4.304	17.2	87.1	-1.4	119.0D	3.048

1990

INBOUND SWINGBY

4.11

STOPOVER TIME = 0 DAYS — 1990 INBOUND SWINGBY — MISSION DURATION = 440 DAYS — MARS ARRIVAL DATE = 2448220 — 24 NOV 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448220 (24 NOV 1990)																				
4-8030	4-8220	.313	42.1	1.4	-4.1	1.115	104.5	.352	1.358	300.2	486.5	.881	1.836A	109.7	.770	2.2	26.2	133.0	.207
4-8220	4-8401.1	.205	49.0	25.7	2.3	.619	86.7	.428	1.056	175.6	297.5	.604A	1.508	72.4	1.353	-1.4	-4.3	219.5	.430
4-8401.1	4-8470	.430	199.1	10.6	5.2	1.466	103.4	.580	1.590	323.1	446.1	.667	2.513A	119.1	1.159	-3.8	-24.0	315.2	.576
		15.45	11.02	6.63	4.43	7.82	4.39	20.42	2/1/1	27.8	7.2	25.2	.325	4.582	143.5	147.9	34.2	66.5L	1.163
4-8050	4-8220	.308	48.7	25.4	2.0	1.139	103.9	.389	1.482	308.0	475.0	.906	2.058A	112.9	.809	-3.7	5.4	136.9	.254
4-8220	4-8416.2	.187	38.8	27.8	3.3	.645	88.7	.375	1.095	177.8	324.1	.685A	1.506	80.4	1.363	-2.2	-10.2	223.3	.291
4-8416.2	4-8490	.291	212.0	17.5	3.6	1.394	97.5	.420	1.209	334.2	452.2	.701	1.717A	113.1	1.073	-2.8	-18.5	331.6	.436
		16.07	10.49	6.52	5.58	8.96	3.97	17.06	1/1/1	20.2	6.4	29.9	.710	3.878	111.7	182.0	56.7	73.3L	2.042
MARS ARRIVAL DATE = 2448230 (4 DEC 1990)																				
4-8030	4-8230	.297	41.1	4.3	-3.0	1.108	104.0	.335	1.330	300.0	491.5	.885	1.776A	107.9	.753	1.2	23.1	132.8	.182
4-8230	4-8401.8	.213	44.8	24.0	2.2	.613	89.9	.431	1.061	179.9	297.7	.604A	1.518	72.4	1.355	-1.2	-3.6	220.5	.432
4-8401.8	4-8470	.432	199.6	10.5	3.2	1.470	103.3	.587	1.620	323.6	445.6	.668	2.572A	119.3	1.164	-3.6	-23.8	315.5	.581
		14.73	10.88	6.32	3.85	7.24	4.56	20.54	2/1/1	31.6	7.1	25.1	.322	4.602	145.4	147.8	32.5	67.6L	1.161
4-8050	4-8230	.300	46.2	35.0	4.6	1.128	103.2	.363	1.430	307.8	480.2	.910	1.949A	111.0	.787	-6.3	-3.4	135.2	.235
4-8230	4-8416.6	.198	35.2	24.6	3.0	.641	91.7	.378	1.102	182.7	324.4	.685A	1.519D	80.4	1.365	-1.7	-8.0	223.6	.291
4-8416.6	4-8490	.291	212.2	17.5	3.6	1.396	97.5	.422	1.214	334.6	451.9	.702	1.727A	113.2	1.075	-2.8	-18.3	331.7	.437
		15.69	10.58	6.37	5.11	8.50	4.21	17.09	1/1/1	28.8	6.2	27.9	.710	4.155	113.6	176.4	57.8	71.3L	2.239
4-8060	4-8230	.289	55.2	27.7	2.1	1.140	102.8	.382	1.494	311.9	474.7	.923	2.065A	112.5	.805	-3.7	3.2	142.6	.246
4-8230	4-8427.1	.197	30.4	28.1	4.3	.650	92.2	.360	1.117	183.9	342.2	.715A	1.520D	85.3	1.368	-2.9	-17.4	218.6	.231
4-8427.1	4-8500	.231	214.9	21.6	3.6	1.370	94.0	.362	1.125	344.8	455.1	.717	1.532A	110.5	1.046	-1.8	-13.8	339.0	.381
		15.74	10.36	6.17	5.38	8.76	4.19	15.85	1/1/1	19.6	4.9	39.2	1.123	2.982	95.3	210.0	52.6	64.4L	2.226
4-8060	4-8230	.289	55.2	27.7	2.1	1.140	102.8	.382	1.494	311.9	474.7	.923	2.065A	112.5	.805	-3.7	3.2	142.6	.246
4-8230	4-8433.2	.206	27.1	34.9	6.7	.653	92.2	.355	1.121	184.0	352.1	.723A	1.520D	87.9	1.368	-5.2	-32.5	212.6	.231
4-8433.2	4-8500	.231	214.5	20.8	3.4	1.383	92.6	.386	1.177	350.7	451.2	.722	1.631A	111.3	1.064	-1.2	-11.5	340.0	.401
		15.95	10.57	6.17	5.38	8.76	4.40	16.28	1/1/1	19.6	2.9	53.3	1.122	2.230	88.1	51.6	-83.9	93.6D	1.360
4-8060	4-8230	.289	55.2	27.7	2.1	1.140	102.8	.382	1.494	311.9	474.7	.923	2.065A	112.5	.805	-3.7	3.2	142.6	.246
4-8230	4-8446.2	.195	42.8	-1.6	-5.2	.652	91.6	.356	1.121	182.9	371.9	.722	1.519D	93.1	1.365	6.9	40.1	196.0	.253
4-8446.2	4-8500	.253	208.3	19.3	3.4	1.412	88.4	.446	1.309	5.3	85.0	.725D	1.892A	113.1	1.104	.1	-7.6	341.7	.448
		15.70	10.32	6.17	5.38	8.76	4.15	17.35	1/2/1	19.6	3.1	23.3	.937	4.954	67.0	68.2	50.8	109.5D	3.705
4-8070	4-8230	.287	61.9	26.4	1.4	1.154	102.2	.405	1.571	316.2	469.4	.935	2.207A	113.8	.826	-3.0	4.6	147.2	.266
4-8230	4-8456.4	.181	42.8	15.4	-.4	.646	90.1	.366	1.111	180.2	388.4	.704	1.518D	97.5	1.361	2.3	12.1	191.5	.254
4-8456.4	4-8510	.254	191.8	19.5	3.6	1.356	82.8	.356	1.095	27.9	98.1	.705D	1.485A	110.4	1.037	1.3	-3.5	343.5	.377
		15.84	9.95	6.13	5.89	9.27	3.82	15.78	1/2/1	14.8	4.7	7.3	.931	15.645	87.9	183.8	-74.1	102.5D	13.631
MARS ARRIVAL DATE = 2448240 (14 DEC 1990)																				
4-8060	4-8240	.278	53.6	34.4	3.7	1.130	102.1	.357	1.442	311.9	479.9	.927	1.957A	110.6	.783	-5.3	-3.1	141.8	.224
4-8240	4-8448.6	.210	40.1	-1.1	-5.2	.649	94.4	.363	1.129	187.8	375.4	.720	1.539D	94.1	1.367	7.0	39.1	193.7	.265
4-8448.6	4-8500	.263	206.6	18.9	3.5	1.417	87.4	.459	1.338	8.3	84.2	.724D	1.951A	113.6	1.111	.3	-7.0	341.8	.459
		15.31	10.47	5.97	4.84	8.23	4.50	17.59	1/2/1	26.4	3.5	23.1	.871	5.005	65.2	69.2	50.0	108.1D	3.488
4-8070	4-8240	.269	61.3	29.7	2.1	1.142	101.5	.374	1.502	316.2	474.7	.940	2.065A	112.0	.801	-3.6	1.1	148.0	.237
4-8240	4-8459.2	.195	39.4	14.6	-.3	.642	92.9	.372	1.118	185.0	389.4	.702	1.534D	97.8	1.363	2.2	11.6	191.7	.261
4-8459.2	4-8510	.261	191.2	19.1	3.6	1.356	82.3	.359	1.096	29.5	98.3	.703D	1.489A	110.5	1.037	1.3	-3.4	343.4	.380
		15.11	9.95	5.81	5.17	8.55	4.14	15.84	1/2/1	19.1	4.9	7.5	.885	15.313	93.5	34.9	81.4	98.5D	12.674
4-8080	4-8240	.265	67.3	28.2	1.5	1.155	100.8	.395	1.573	320.7	469.7	.952	2.193A	113.2	.819	-3.0	2.3	152.4	.256
4-8240	4-8469.8	.190	45.9	20.0	.7	.633	90.8	.388	1.103	181.2	402.4	.675	1.531D	101.5	1.358	1.4	5.9	194.8	.315
4-8469.8	4-8520	.315	180.6	15.3	3.8	1.293	76.9	.309	.928	60.3	122.1	.642D	1.215A	107.4	.957	2.4	-1.0	339.9	.316
		15.39	9.77	5.73	5.63	9.01	4.04	14.53	1/2/1	14.5	17.0	16.8	.607	6.859	144.3	110.8	35.7	76.1L	3.556
4-8090	4-8240	.261	72.4	27.7	1.2	1.169	100.0	.418	1.656	325.5	464.9	.964	2.349A	114.4	.839	-2.6	2.5	156.0	.276
4-8240	4-8476.3	.190	51.8	22.6	1.0	.626	89.1	.402	1.092	178.6	410.0	.654	1.531	103.8	1.354	1.2	4.4	198.6	.354
4-8476.3	4-8530	.354	177.9	12.3	3.6	1.243	73.8	.303	.831	83.0	144.4	.580D	1.083A	103.2	.892	2.9	-.5	333.6	.260
		15.82	9.66	5.66	6.14	9.52	4.02	13.52	1/2/1	11.0	32.3	21.9	.480	5.259	157.1	118.6	22.9	79.8L	2.044
MARS ARRIVAL DATE = 2448250 (24 DEC 1990)																				
4-8030	4-8250	.278	40.8	5.9	-2.4	1.098	103.2	.312	1.293	299.6	501.5	.690	1.696A	104.4	.723	.7	21.7	131.6	.143
4-8250	4-8402.9	.247	37.2	20.4	2.0	.611	97.6	.440	1.085	189.9	299.0	.607A	1.562D	72.4	1.362	-.8	-2.4	221.3	.435
4-8402.9	4-8470	.435	200.5	10.3	3.1	1.477	103.2	.599	1.673	324.4	444.6	.670	2.675A	119.5	1.172	-3.7	-25.4	315.9	.589
		14.39	11.36	5.97	3.02	6.43	5.39	20.73	2/1/1	42.4	7.1	24.3	.318	4.750	148.1	146.9	30.4	66.0L	1.192
4-8040	4-8250	.279	49.5	.9	-4.3	1.105	102.7	.318	1.326	303.6	495.9	.904	1.747A	106.0	.736	2.6	27.4	142.1	.160
4-8250	4-8409.9	.240	32.9	19.7	2.2	.629	98.2	.412	1.110	192.0	312.4	.653A	1.568D	76.6	1.369	-.9	-3.3	223.1	.359
4-8409.9	4-8480	.359	207.2	13.5	3.4	1.434	100.3	.506	1.391	329.1	447.6	.687	2.094A	116.3	1.121	-3.2	-21.0	324.2	.511
		14.60	11.22	5.99	3.37	6.78	5.24	18.81	2/1/1	36.5	6.6	23.0	.467	5.014	132.7	152.9	44.9	64.8L	1.876
4-8060	4-8250	.291	49.9	49.4	7.6	1.122	101.5	.337	1.404	312.0	485.1	.931	1.877A	108.9	.764	-9.1	-15.6	136.8	.224
4-8250	4-8426.8	.235	26.8	20.2	3.0	.650	98.8	.376	1.146	195.2	342.8	.715A	1.576D	85.3	1.376	-1.4	-8.5	217.0	.232
4-8426.8	4-8500	.232	214.8	21.6	3.6	1.369	94.1	.362	1.123	344.5	455.2	.717	1.529A	110.4	1.045	-1.8	-13.9	338.9	.380
		16.13	11.30	6.20	4.83	8.21	5.10	15.84	1/1/1	39.2	5.0	30.2	1.120	3.839	94.0	207.3	66.1	83.2L	3.181
4-8060	4-8250	.291	49.9	49.4	7.6	1.122	101.5	.337	1.404	312.0	485.1	.931	1.877A	108.9	.764	-9.1	-15.6	136.8	.224
4-8250	4-8451.0	.229	38.0	-.2	-5.2	.648	97.4	.373	1.141	192.8	379.0	.716	1.567D	95.1	1.370	7.0	37.4	191.6	.274
4-8451.0	4-8500	.274	204.9	18.5	3.5	1.422	86.3	.471	1.366	11.5	83.6	.722D	2.010A	114.0	1.118	.5	-6.4	341.9	.470
		15.99	11.18	6.20	4.83	8.21	4.96	17.84	1/2/1	39.2	3.9	22.2	.799	5.197	62.7	71.1	48.8	107.4D	3.356
4-8070	4-8250	.257	60.1	34.9	3.2	1.131	100.9	.350	1.452	316.4	479.9	.944	1.960A	110.2	.779	-4.7	-3.9	147.7	.215
4-8250	4-8460.7	.213	37.0	14.5	-.2	.640	95.9	.381	1.128	189.8	391.3	.698	1.558D	98.5	1.366	2.1	10.4	191.7	.272
4-8460.7	4-8510	.272	190.3	18.6	3.7	1.356	81.6	.364	1.096	32.1	98.7	.698D	1.495A	110.8	1.037	1.5	-3.1	343.0	.385
		14.77	10.16	5.60	4.61	8.00	4.56	15.95	1/2/1	24.8	5.3	8.2	.814	13.906	98.6	66.2	79.3	94.7D	10.505
4-8080	4-8250	.248	66.6	31.3	2.1	1.142	100.2	.365	1.506	321.0	475.0	.956	2.057A	111.4	.795	-3.5	-.9	153.2	.226
4-8250	4-8470.4	.205	42.5	19.2	.8	.629	93.9	.394	1.111	186.0	402.9	.673	1.549D	101.8	1.360	1.3	5.3	195.2	.321
4-8470.4	4-8520	.321	180.6	15.1	3.8	1.292	76.6	.311	.926	61.5	122.5	.638D	1.214A	107.5	.955	2.5	-1.0	339.6	.318
		14.76	9.83	5.44	4.93	8.32	4.38	14.57	1/2/1	18.7	17.3	17.4	.585	6.618	144.1	112.1	35.9	76.5L	3.265
4-8090	4-8250	.241	71.7	29.9	1.6	1.154	99.3	.383	1.569	325.8	470.3	.968	2.170A	112.5	.812	-2.9	.1	157.3	.245
4-8250	4-8476.5	.201	47.7	21.6	1.1	.622	92.2	.406	1.100	183.3	409.9	.653	1.546D	103.8	1.356	1.1	3.9	199.0	.356
4-8476.5	4-8530	.356	176.0	12.3	3.6	1.242	73.7	.304	.830	83.5	144.6	.578D	1.083A	103.2	.891	2.9	-.5	333.5	.261
		14.97	9.63	5.33	5.34	8.73	4.30	13.53	1/2/1	14.4	32.3	22.4	.473	5.138	156.3	119.6	23.5	79.9L	1.958
4-8100	4-8250	.235	75.6	29.2	1.3	1.167	98.2	.403	1.640	330.9	465.9	.979	2.301A	113.6	.829	-2.5	.4	160.7	.262
4-8250	4-8481.8	.200	53.2	23.6	1.2	.615	90.6	.418	1.089	180.9	415.9	.634	1.544D	105.7	1.353	.9	3.1	202.9	.390
4-8481.8	4-8540	.390	179.1	9.8	3.3	1.208	71.5	.322	.775	98.1	160.7	.526D	1.025A	98.7	.845	3.2	-1.2	325.2	.227
		15.27	9.48	5.23	5.78	9.16	4.25	12.97	1/2/1	11.1	50.3	24.6	.396	4.689	162.9	124.9	17.1	83.8L	1.460
4-8110	4-8250	.230	78.0	28.7	1.1	1.180	97.0	.425	1.721	336.4	461.8	.989	2.453A	114.5	.846	-2.3	.4	163.6	.280
4-8250	4-8487.4	.200	60.0	25.4	1.4	.607	88.6	.433	1.078	178.2	422.0	.611	1.544	107.6	1.350	.9	2.6	207.6	.427
4-8487.4	4-8550	.427	182.9	7.6	2.9	1.182	69.3	.353	.740	108.2	171.9	.479D	1.001A	94.4	.811	3.5	-3.1	316.3	.218
		15.65	9.40	5.14	6.25	9.62	4.26	12.84	1/2/1	8.4	68.9	25.1	.330	4.608	167.4	129.8	12.6	87.4L	1.169
MARS ARRIVAL DATE = 2448260 (3 JAN 1991)																				
4-8030	4-8260	.272	40.8	6.3	-2.3	1.095	103.0	.304	1.281	299.4	506.3	.892	1.670A	102.7	.711	.5	21.9	129.8	.129
4-8260	4-8403.3	.274	34.3	18.8	2.0	.616	102.0	.448	1.107	195.6	300.5	.611A	1.603D	72.5	1.369	-.6	-1.9	221.0	.436
4-8403.3	4-8470	.436	200.8	10.2	3.1	1.479	103.1	.604	1.696	324.7	444.3	.671	2.721A	119.6	1.176	-3.6	-23.3	316.1	.592
		14.70	11.97	5.87	2.74	6.15	6.10	20.82	2/1/1	49.1	7.1	23.5	.316	4.918	148.6	145.8	30.2	65.3L	1.239
4-8040	4-8260	.268	48.8	3.3	-3.5	1.101	102.4	.308	1.309	303.5	500.8	.907	1.712A	104.3	.722	1.8	25.3	140.7	.142
4-8260	4-8410.2	.269	30.5	18.0	2.1	.636	102.3	.421	1.134	198.1	314.1	.656A	1.613D	76.8	1.376	-.7	-2.5	222.3	.359
4-8410.2	4-8480	.359	207.5	13.4	3.4	1.435	100.2	.509	1.400	329.3	447.3	.668	2.112A	116.4	1.123	-3.2	-20.9	324.3	.513
		14.75	11.76	5.79	2.99	6.40	5.97	18.86	2/1/1	41.2	6.6	21.7	.466	5.317	132.3	150.7	45.8	64.2L	2.012

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 440 DAYS | MARS ARRIVAL DATE = 2448260 | 3 JAN 1991

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-8050	4-8260	.289	60.0	-10.5	-7.8	1.107	101.8	.313	1.341	307.6	495.4	.921	1.761A	105.8	.735	6.2	39.1	154.4	.172
4-8260	4-8417.7	.266	27.7	17.6	2.3	.648	102.5	.402	1.156	200.2	328.1	.691A	1.621D	81.0	1.380	-.8	-3.6	221.1	.291
4-8417.7	4-8490	.291	212.7	17.2	3.6	1.399	97.3	.428	1.229	335.4	451.1	.703	1.754A	113.3	1.079	-2.6	-17.9	332.0	.442
		15.70	12.06	6.17	5.64	7.04	5.89	17.19	2/1/1	42.1	5.9	22.4	.709	5.139	111.5	166.0	63.9	70.4L	2.954
4-8070	4-8260	.256	58.0	44.3	5.3	1.123	100.4	.330	1.415	316.6	485.2	.948	1.882A	108.4	.761	-6.7	-12.0	145.1	.202
4-8260	4-8462.4	.234	35.5	14.8	.1	.639	99.0	.393	1.141	194.6	393.9	.693	1.589D	99.4	1.369	1.8	8.7	191.6	.287
4-8462.4	4-8510	.287	189.4	17.9	3.8	1.356	80.6	.370	1.097	35.6	99.3	.691D	1.502A	111.2	1.037	1.7	-2.8	342.6	.393
		14.99	10.68	5.59	4.32	7.71	5.09	16.10	1/2/1	33.6	5.8	9.5	.728	12.075	102.8	85.5	76.6	92.0D	8.067
4-8080	4-8260	.236	65.5	35.8	2.9	1.133	99.6	.342	1.458	321.3	480.3	.960	1.956A	109.6	.775	-4.3	-5.1	153.1	.205
4-8260	4-8471.4	.224	40.3	18.7	.9	.628	97.1	.404	1.122	190.7	404.1	.669	1.575D	102.3	1.363	1.1	4.4	195.7	.332
4-8471.4	4-8520	.332	180.6	14.8	3.9	1.290	76.0	.317	.921	64.1	123.5	.630D	1.213A	107.7	.953	2.6	-1.0	339.0	.322
		14.49	10.10	5.25	4.39	7.78	4.85	14.65	1/2/1	23.8	17.9	18.1	.545	6.354	143.8	113.7	36.1	77.4L	2.919
4-8090	4-8260	.226	70.8	32.8	2.1	1.143	98.7	.355	1.506	326.2	475.8	.971	2.041A	110.7	.789	-3.3	-2.8	158.1	.218
4-8260	4-8477.2	.218	44.8	20.9	1.2	.619	95.5	.413	1.109	187.9	410.6	.650	1.567D	104.2	1.359	.9	3.2	199.6	.365
4-8477.2	4-8530	.365	178.2	12.1	3.7	1.240	73.3	.309	.826	85.2	145.2	.571D	1.082A	103.3	.886	3.0	-.6	333.0	.264
		14.47	9.78	5.08	4.69	8.08	4.70	13.59	1/2/1	18.3	33.0	23.0	.452	5.020	156.0	120.7	24.0	80.6L	1.815
4-8100	4-8260	.217	74.5	31.4	1.6	1.153	97.6	.370	1.559	331.5	471.5	.982	2.136A	111.7	.803	-2.8	-1.8	161.9	.232
4-8260	4-8482.3	.214	49.6	22.7	1.3	.611	93.9	.423	1.097	185.4	416.1	.633	1.562D	105.9	1.355	.8	2.6	203.5	.395
4-8482.3	4-8540	.395	179.3	9.7	3.3	1.206	71.2	.326	.773	99.1	160.9	.521D	1.025A	98.8	.843	3.3	-1.3	324.8	.229
		14.58	9.54	4.95	5.04	8.42	4.59	13.01	1/2/1	14.4	50.7	25.1	.385	4.603	162.3	125.9	17.6	64.1L	1.366
4-8110	4-8260	.210	76.7	30.5	1.4	1.164	96.3	.386	1.617	337.1	467.5	.992	2.242A	112.6	.817	-2.4	-1.5	165.0	.247
4-8260	4-8487.5	.210	55.4	24.5	1.5	.603	92.1	.436	1.085	182.7	421.6	.612	1.558D	107.6	1.352	.7	2.1	207.9	.428
4-8487.5	4-8550	.428	182.9	7.5	2.9	1.182	69.3	.354	.739	108.4	171.9	.478D	1.001A	94.4	.811	3.5	-3.2	316.6	.219
		14.76	9.35	4.84	5.41	8.79	4.51	12.85	1/2/1	11.4	69.0	25.5	.328	4.531	166.7	130.5	13.3	87.4L	1.158
4-8120	4-8260	.204	77.0	30.0	1.2	1.175	94.8	.404	1.678	343.2	464.0	1.000	2.357A	113.5	.831	-2.2	-1.3	167.6	.262
4-8260	4-8493.4	.209	65.2	26.3	1.6	.593	89.7	.453	1.072	179.7	427.9	.587	1.556	109.7	1.348	.7	1.8	213.3	.468
4-8493.4	4-8560	.468	188.6	5.6	2.4	1.162	67.1	.390	.715	115.4	179.6	.436D	.993A	90.2	.785	3.7	-3.5	309.9	.231
		15.03	9.24	4.76	5.79	9.17	4.48	13.04	1/2/1	8.9	85.4	24.9	.274	4.635	170.4	135.7	9.6	90.6D	.997

MARS ARRIVAL DATE = 2448270 (13 JAN 1991)

4-8030	4-8270	.268	40.8	6.5	-2.2	1.092	102.8	.299	1.272	299.2	511.1	.892	1.652A	101.1	.700	.5	22.3	127.2	.117
4-8270	4-8403.7	.310	32.1	17.4	2.0	.632	106.8	.460	1.141	202.1	302.7	.616A	1.667D	72.8	1.379	-.5	-1.4	220.2	.437
4-8403.7	4-8470	.437	201.1	10.1	3.1	1.482	103.1	.609	1.719	325.1	443.9	.672	2.766A	119.6	1.179	-3.6	-23.1	316.2	.595
		15.36	12.83	5.79	2.52	5.94	7.04	20.89	2/1/1	56.5	7.1	22.2	.314	5.192	148.4	144.0	30.6	64.4L	1.318
4-8040	4-8270	.261	48.4	4.6	-3.1	1.097	102.1	.300	1.297	303.3	505.7	.908	1.686A	102.7	.710	1.4	24.6	139.0	.127
4-8270	4-8410.6	.305	28.9	16.6	2.1	.649	106.8	.435	1.171	204.8	316.4	.661A	1.680D	77.1	1.386	-.5	-1.8	220.9	.359
4-8410.6	4-8480	.359	207.7	13.3	3.4	1.437	100.2	.512	1.409	329.6	447.1	.688	2.130A	116.5	1.125	-3.2	-20.7	324.4	.515
		15.28	12.38	5.67	2.70	6.11	6.92	18.90	2/1/1	47.2	6.5	20.0	.465	5.764	130.3	148.0	48.1	64.1L	2.216
4-8050	4-8270	.264	57.2	-3.0	-5.3	1.103	101.4	.303	1.324	307.6	500.4	.923	1.725A	104.1	.721	3.8	32.1	151.2	.144
4-8270	4-8418.1	.302	26.6	16.2	2.2	.661	106.8	.417	1.193	207.0	330.6	.695A	1.691D	81.5	1.390	-.5	-2.5	218.6	.291
4-8418.1	4-8490	.291	212.9	17.2	3.5	1.400	97.2	.430	1.234	335.7	450.8	.703	1.765A	113.4	1.081	-2.6	-17.7	332.1	.443
		15.60	12.55	5.71	3.05	6.45	6.84	17.23	2/1/1	42.5	5.8	20.5	.709	5.609	106.4	167.1	69.2	73.2L	3.267
4-8080	4-8270	.231	63.9	42.6	4.3	1.125	99.1	.323	1.422	321.6	485.6	.963	1.881A	107.9	.757	-5.5	-11.2	151.5	.189
4-8270	4-8472.7	.248	39.1	18.7	1.1	.628	100.4	.416	1.136	195.3	405.9	.663	1.609D	103.1	1.367	.9	3.3	196.3	.348
4-8472.7	4-8520	.348	180.7	14.3	4.0	1.287	75.1	.325	.915	67.4	124.6	.618D	1.212A	108.1	.949	2.8	-1.0	338.2	.329
		14.61	10.59	5.17	4.02	7.41	5.42	14.78	1/2/1	30.7	18.7	18.9	.496	6.068	143.4	115.6	36.5	78.7L	2.522
4-8090	4-8270	.215	69.6	36.7	2.7	1.133	98.1	.332	1.460	326.7	481.2	.975	1.946A	109.0	.769	-3.9	-6.4	158.1	.196
4-8270	4-8478.5	.239	43.1	20.5	1.3	.619	98.9	.424	1.120	192.4	411.9	.645	1.596D	104.8	1.362	.7	2.4	200.4	.379
4-8478.5	4-8530	.379	178.5	11.8	3.8	1.236	72.5	.319	.820	87.9	146.1	.559D	1.081A	103.6	.882	3.1	-.7	332.1	.270
		14.28	10.12	4.91	4.16	7.56	5.21	13.66	1/2/1	23.1	35.9	23.6	.419	4.899	155.5	122.2	24.4	81.6L	1.634
4-8100	4-8270	.203	73.3	34.1	2.1	1.142	97.0	.344	1.501	332.1	477.0	.985	2.016A	109.9	.781	-3.1	-4.5	162.7	.207
4-8270	4-8483.2	.232	47.3	22.1	1.5	.610	97.3	.433	1.107	189.8	417.0	.628	1.586D	106.4	1.358	.6	1.9	204.3	.407
4-8483.2	4-8540	.407	179.8	9.5	3.4	1.202	70.6	.335	.768	101.1	161.4	.510D	1.025A	98.9	.837	3.4	-1.6	324.1	.234
		14.21	9.79	4.74	4.42	7.81	5.04	13.09	1/2/1	18.3	51.4	25.6	.364	4.519	161.8	127.2	18.1	84.9L	1.279
4-8110	4-8270	.194	75.1	32.7	1.7	1.151	95.8	.356	1.544	337.9	473.3	.995	2.093A	110.8	.792	-2.6	-3.6	166.1	.219
4-8270	4-8488.1	.226	52.4	23.7	1.6	.601	95.6	.443	1.094	187.1	422.1	.609	1.578D	108.0	1.355	.5	1.6	208.7	.436
4-8488.1	4-8550	.436	183.3	7.4	2.9	1.179	68.9	.361	.736	109.6	172.1	.470D	1.001A	94.4	.806	3.5	-3.4	315.9	.223
		14.22	9.51	4.61	4.71	8.10	4.90	12.91	1/2/1	14.7	69.4	25.9	.316	4.457	166.1	131.7	13.8	87.8L	1.092
4-8120	4-8270	.187	74.8	31.8	1.5	1.161	94.3	.369	1.587	344.1	469.9	1.002	2.172A	111.6	.804	-2.3	-3.1	168.8	.231
4-8270	4-8493.6	.222	59.0	25.4	1.7	.591	93.4	.457	1.079	184.0	427.6	.587	1.572D	109.8	1.350	.5	1.3	213.6	.471
4-8493.6	4-8560	.471	188.8	5.5	2.4	1.161	66.9	.392	.713	115.8	179.6	.434D	.993A	90.2	.783	3.7	-3.5	309.9	.233
		14.30	9.29	4.51	5.01	8.40	4.78	13.07	1/2/1	11.9	85.4	25.3	.271	4.563	169.8	136.4	10.2	90.6D	.965

MARS ARRIVAL DATE = 2448280 (23 JAN 1991)

4-8080	4-8280	.241	61.5	54.0	6.7	1.119	98.7	.307	1.395	322.0	490.8	.966	1.823A	106.2	.741	-7.9	-20.5	147.1	.186
4-8280	4-8474.4	.274	38.8	18.9	1.4	.632	103.9	.432	1.153	199.9	408.2	.655	1.652D	104.0	1.372	.6	2.1	197.1	.369
4-8474.4	4-8520	.369	180.8	13.8	4.1	1.283	73.9	.335	.906	71.7	126.4	.603D	1.210A	108.6	.943	3.0	-1.0	337.2	.337
		15.37	11.43	5.32	3.94	7.34	6.10	14.94	1/2/1	41.2	19.7	19.9	.440	5.798	143.2	117.8	36.5	80.1L	2.113
4-8090	4-8280	.208	68.1	42.2	3.7	1.126	97.7	.314	1.426	327.2	486.5	.978	1.874A	107.3	.751	-4.8	-11.3	157.1	.179
4-8280	4-8479.8	.264	42.4	20.4	1.5	.621	102.3	.438	1.135	196.8	413.7	.636	1.633D	105.7	1.367	.5	1.8	201.3	.398
4-8479.8	4-8530	.398	179.0	11.4	3.8	1.231	71.5	.331	.811	91.5	147.4	.542D	1.080A	103.9	.875	3.3	-1.0	331.0	.277
		14.42	10.65	4.62	3.77	7.17	5.83	13.82	1/2/1	29.1	35.1	24.2	.360	4.772	155.1	123.9	24.6	82.9L	1.434
4-8100	4-8280	.193	71.8	37.7	2.6	1.134	96.6	.322	1.458	332.7	482.6	.988	1.928A	108.2	.762	-3.6	-7.7	162.7	.185
4-8280	4-8484.5	.255	46.1	21.8	1.6	.611	100.8	.445	1.120	194.1	418.4	.621	1.619D	107.1	1.362	.4	1.2	205.4	.423
4-8484.5	4-8540	.423	180.4	9.2	3.5	1.197	69.8	.348	.760	103.8	162.1	.495D	1.024A	99.1	.829	3.5	-1.9	323.2	.242
		14.13	10.20	4.60	3.92	7.32	5.61	13.21	1/2/1	22.7	52.4	26.1	.335	4.432	161.3	128.7	18.4	86.0L	1.151
4-8110	4-8280	.182	73.2	35.4	2.0	1.141	95.3	.331	1.490	338.7	479.0	.997	1.984A	109.0	.772	-2.9	-6.0	166.8	.195
4-8280	4-8489.2	.247	50.6	23.2	1.7	.601	99.1	.454	1.105	191.3	423.1	.604	1.606D	106.6	1.358	.4	1.0	209.8	.450
4-8489.2	4-8550	.450	184.0	7.2	3.0	1.174	68.1	.373	.729	111.6	172.4	.458D	1.001A	94.5	.799	3.6	-3.7	315.4	.230
		13.98	9.84	4.44	4.14	7.53	5.40	13.02	1/2/1	18.5	70.0	26.4	.297	4.382	165.6	133.1	14.2	88.6L	1.003

MARS ARRIVAL DATE = 2448290 (2 FEB 1991)

4-8090	4-8290	.210	66.0	50.3	5.1	1.120	97.3	.300	1.399	327.6	491.8	.980	1.819A	105.6	.737	-6.2	-18.1	154.2	.168
4-8290	4-8481.5	.292	42.5	20.5	1.8	.625	106.0	.456	1.155	201.1	415.9	.628	1.681D	106.7	1.378	.2	.7	202.4	.421
4-8481.5	4-8530	.421	179.6	11.0	4.0	1.224	70.3	.348	.800	95.6	148.8	.522D	1.079A	104.4	.865	3.6	-1.3	329.7	.288
		14.95	11.40	4.84	3.55	6.95	6.56	14.00	1/2/1	37.1	36.4	24.9	.339	4.642	154.7	125.9	24.8	84.4L	1.234
4-8100	4-8290	.187	70.0	42.4	3.3	1.127	98.1	.305	1.425	333.3	488.0	.990	1.861A	106.5	.745	-4.2	-11.7	161.9	.168
4-8290	4-8486.1	.281	45.9	21.7	1.8	.614	104.4	.461	1.136	198.2	420.3	.612	1.660D	108.1	1.387	.2	.5	206.7	.445
4-8486.1	4-8540	.445	181.3	8.9	3.6	1.189	68.6	.366	.750	107.2	165.0	.476D	1.024A	99.4	.819	3.7	-2.4	322.0	.252
		14.32	10.78	4.51	3.54	6.94	6.27	13.36	1/2/1	28.1	53.6	26.6	.304	4.340	160.9	130.6	18.6	87.3L	1.015

STOPOVER TIME = 0 DAYS

1990 INBOUND SWINGBY

MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448200
4 NOV 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-8010	4-8200	.329	23.4	8.5	-.4	1.109	106.0	.358	1.320	293.6	488.3	.848	1.793A	109.9	.772	-1.5	16.8	115.6	.217
4-8200	4-8435.5	.206	56.5	-13.4	-9.8	.671	84.6	.346	1.108	169.6	357.5	.725A	1.492	89.3	1.363	10.9	57.3	206.9	.308
4-8435.5	4-8490	.308	215.8	15.4	3.2	1.462	93.1	.550	1.603	351.5	438.9	.722	2.484A	116.0	1.164	-1.0	-11.9	336.4	.526
		16.00	11.34	6.95	4.66	8.05	4.40	19.17	2/2/1	29.8	6.6	42.4	.635	2.767	83.2	46.8	52.7	106.4D	1.123
4-8020	4-8200	.334	31.2	8.9	-1.1	1.121	105.9	.376	1.378	297.2	482.2	.859	1.896A	111.7	.792	-.7	18.3	122.1	.239
4-8200	4-8438.8	.176	53.1	-.2	-4.9	.671	84.5	.346	1.109	169.4	362.9	.725	1.492	90.7	1.365	6.4	59.8	201.4	.236
4-8438.8	4-8500	.238	212.6	20.2	3.4	1.395	91.0	.411	1.231	356.7	448.1	.725	1.737A	112.1	1.082	-.6	-9.7	340.9	.420
		15.95	10.74	7.04	5.21	8.59	3.71	16.71	2/2/1	23.7	2.1	21.9	1.077	5.272	67.8	71.6	51.1	117.3D	4.599
MARS ARRIVAL DATE = 2448210 (14 NOV 1990)																			
4-8010	4-8210	.317	24.2	7.2	-.8	1.102	105.5	.341	1.293	293.2	493.4	.852	1.734A	108.0	.753	-1.1	17.6	116.2	.191
4-8210	4-8438.1	.209	53.7	-14.5	-9.9	.664	86.8	.347	1.111	174.0	360.8	.725	1.496	90.2	1.364	11.4	58.8	204.3	.315
4-8438.1	4-8490	.315	215.2	15.3	3.2	1.474	92.1	.576	1.706	354.2	437.2	.724	2.687A	116.5	1.180	-.7	-11.1	337.0	.542
		15.23	11.19	6.70	4.05	7.44	4.49	19.58	2/2/1	34.7	7.3	44.2	.605	2.657	82.2	47.4	51.8	104.5D	1.003
4-8020	4-8210	.319	32.0	7.6	-1.5	1.112	105.3	.355	1.340	296.8	487.3	.864	1.816A	109.8	.771	-.4	19.1	123.5	.210
4-8210	4-8441.3	.178	49.7	-1.1	-5.0	.664	86.7	.348	1.111	173.7	365.6	.725	1.497	91.4	1.363	6.6	40.4	200.0	.241
4-8441.3	4-8500	.241	211.4	19.9	3.4	1.401	90.2	.423	1.257	359.4	446.9	.726	1.787A	112.4	1.089	-.4	-9.0	341.2	.430
		15.00	10.49	6.74	4.51	7.90	3.76	16.92	2/2/1	28.0	2.3	22.7	1.039	5.081	68.5	69.2	51.4	113.9D	4.242
MARS ARRIVAL DATE = 2448220 (24 NOV 1990)																			
4-7990	4-8220	.314	10.1	2.1	-.6	1.083	105.8	.318	1.210	285.6	510.8	.825	1.594A	102.1	.709	-1.4	17.4	95.5	.145
4-8220	4-8401.1	.205	49.0	25.7	2.3	.619	86.7	.428	1.056	175.6	297.5	.604A	1.508	72.4	1.353	-1.4	-4.3	219.5	.430
4-8401.1	4-8470	.430	199.1	10.6	3.2	1.466	103.4	.580	1.590	323.1	446.1	.667	2.513A	119.1	1.159	-3.8	-24.0	315.2	.576
		14.08	11.03	6.64	5.05	6.46	4.39	20.42	2/1/1	59.7	7.2	25.2	.325	4.582	143.3	147.9	34.2	68.5L	1.163
4-8000	4-8220	.310	17.4	4.6	-.8	1.089	105.4	.322	1.239	289.2	504.6	.840	1.637A	104.2	.723	-1.2	17.8	106.5	.155
4-8220	4-8408.4	.194	43.8	26.3	2.7	.634	87.8	.398	1.078	176.7	310.4	.649A	1.507	76.5	1.359	-1.7	-6.2	222.4	.357
4-8408.4	4-8480	.357	206.2	13.8	3.5	1.427	100.5	.494	1.354	327.9	448.9	.685	2.024A	116.1	1.112	-3.4	-21.6	323.7	.502
		13.94	10.68	6.56	3.26	6.67	4.12	18.61	2/1/1	49.3	6.9	25.7	.472	4.494	128.4	159.0	47.1	68.3L	1.649
4-8010	4-8220	.307	24.7	6.5	-1.0	1.096	105.0	.328	1.272	292.8	498.4	.855	1.690A	106.1	.737	-.9	18.1	115.9	.169
4-8220	4-8416.2	.187	38.8	27.8	3.3	.645	88.7	.375	1.095	177.8	324.1	.685A	1.506	80.4	1.363	-2.2	-10.2	223.3	.291
4-8416.2	4-8490	.291	212.0	17.5	3.6	1.394	97.5	.420	1.209	334.2	452.2	.701	1.717A	113.1	1.073	-2.8	-18.5	331.6	.436
		14.04	10.48	6.51	3.56	6.96	3.97	17.06	2/1/1	40.4	6.4	29.9	.710	3.878	111.7	182.0	56.7	73.3L	2.042
4-8020	4-8220	.306	32.4	7.1	-1.6	1.105	104.7	.338	1.312	296.5	492.4	.868	1.756A	107.9	.753	-.2	19.3	124.2	.186
4-8220	4-8443.8	.184	46.2	-1.6	-5.1	.657	89.0	.351	1.115	178.2	368.6	.724	1.505	92.2	1.364	6.7	40.6	198.2	.246
4-8443.8	4-8500	.246	210.0	19.6	3.4	1.406	89.3	.434	1.283	2.3	85.9	.726D	1.640A	112.6	1.097	-.2	-8.3	341.5	.439
		14.33	10.40	6.50	3.93	7.33	3.90	17.13	2/2/1	32.8	2.6	23.2	.992	4.965	68.2	68.1	51.3	111.3D	3.954
4-8030	4-8220	.313	42.1	1.4	-4.1	1.115	104.5	.352	1.358	300.2	486.5	.881	1.836A	109.7	.770	2.2	26.2	133.0	.207
4-8220	4-8458.2	.172	47.1	16.7	-.3	.652	87.4	.364	1.106	175.4	388.7	.704	1.508	97.5	1.359	2.2	11.9	190.9	.253
4-8458.2	4-8510	.253	191.8	19.3	3.6	1.356	82.8	.356	1.095	27.7	98.1	.703D	1.485A	110.3	1.037	1.2	-3.5	343.6	.377
		14.69	10.26	6.63	4.43	7.82	3.63	15.77	2/2/1	27.8	4.6	7.7	.938	14.922	83.4	167.2	-72.9	105.9D	13.053
4-8050	4-8220	.308	48.7	25.4	2.0	1.139	103.9	.389	1.482	308.0	475.0	.906	2.058A	112.9	.809	-3.7	5.4	136.9	.254
4-8220	4-8477.7	.185	63.1	24.8	.9	.637	82.9	.406	1.083	169.3	413.4	.643	1.523	104.7	1.351	1.4	4.8	198.1	.371
4-8477.7	4-8530	.370	178.3	11.9	3.7	1.239	75.0	.313	.824	86.3	145.6	.566D	1.081A	103.4	.885	3.1	-.6	332.6	.266
		16.02	10.44	6.52	5.58	8.96	3.92	13.62	1/2/1	20.2	33.4	20.9	.438	5.521	158.2	117.5	21.8	81.6L	1.980
MARS ARRIVAL DATE = 2448230 (4 DEC 1990)																			
4-7990	4-8230	.311	10.6	1.7	-.8	1.080	105.7	.314	1.202	285.2	515.6	.825	1.580A	100.3	.697	-1.2	17.6	91.7	.134
4-8230	4-8401.8	.213	44.8	24.0	2.2	.613	89.9	.431	1.061	179.9	297.7	.604A	1.518	72.4	1.355	-1.2	-3.6	220.5	.432
4-8401.8	4-8470	.432	199.6	10.5	3.2	1.470	103.3	.587	1.620	323.6	445.6	.668	2.572A	119.3	1.164	-3.8	-23.8	315.5	.581
		14.00	11.15	6.59	5.04	6.25	4.56	20.54	2/1/1	66.7	7.1	25.1	.322	4.602	145.4	147.8	32.5	67.6L	1.161
4-8000	4-8230	.305	17.8	4.1	-.9	1.086	105.1	.315	1.228	288.8	509.5	.841	1.615A	102.4	.710	-1.0	18.2	103.9	.140
4-8230	4-8409.0	.203	39.7	24.0	2.5	.629	90.9	.401	1.064	181.4	310.7	.650A	1.518D	76.5	1.361	-1.4	-5.1	223.1	.358
4-8409.0	4-8480	.357	206.6	13.7	3.4	1.430	100.4	.499	1.368	328.4	448.4	.686	2.050A	116.2	1.115	-3.3	-21.3	323.9	.508
		13.76	10.60	6.46	2.96	6.37	4.33	18.68	2/1/1	57.0	6.8	24.9	.470	4.633	130.6	156.9	45.8	66.9L	1.708
4-8010	4-8230	.300	25.1	6.0	-1.2	1.092	104.7	.319	1.257	292.5	503.4	.857	1.658A	104.3	.723	-.7	18.6	114.6	.151
4-8230	4-8416.6	.188	35.2	24.6	3.0	.641	91.7	.378	1.102	182.7	324.4	.685A	1.519D	80.4	1.365	-1.7	-8.0	223.6	.291
4-8416.6	4-8490	.291	212.2	17.5	3.6	1.396	97.5	.422	1.214	334.6	451.9	.702	1.727A	113.2	1.075	-2.8	-18.3	331.7	.437
		13.75	10.58	6.37	3.17	6.58	4.21	17.09	2/1/1	46.9	6.2	27.9	.710	4.155	113.6	176.4	57.8	71.3L	2.239
4-8020	4-8230	.297	32.7	6.6	-1.7	1.099	104.3	.325	1.291	296.2	497.4	.871	1.711A	106.1	.737	-.2	19.4	124.0	.164
4-8230	4-8427.1	.197	30.4	26.1	4.3	.650	92.2	.360	1.117	183.9	342.2	.715A	1.520D	85.3	1.368	-2.9	-17.4	218.6	.231
4-8427.1	4-8500	.231	214.9	21.6	3.6	1.370	94.0	.362	1.125	344.8	455.1	.717	1.532A	110.5	1.046	-1.8	-13.8	339.0	.361
		13.96	10.50	6.31	3.46	6.87	4.19	15.85	2/1/1	36.3	4.9	39.2	1.123	2.982	95.3	210.0	52.6	84.4L	2.226
4-8020	4-8230	.297	32.7	6.6	-1.7	1.099	104.3	.325	1.291	296.2	497.4	.871	1.711A	106.1	.737	-.2	19.4	124.0	.164
4-8230	4-8433.2	.206	27.1	34.9	6.7	.653	92.2	.355	1.121	184.0	352.1	.723A	1.520D	87.9	1.368	-5.2	-32.5	212.6	.231
4-8433.2	4-8500	.231	214.5	20.8	3.4	1.383	92.6	.386	1.177	350.7	451.2	.722	1.631A	111.3	1.064	-1.2	-11.5	340.0	.401
		14.17	10.71	6.31	3.46	6.87	4.40	16.28	2/1/1	36.3	2.9	53.3	1.122	2.230	88.1	51.6	-83.9	93.6D	1.380
4-8020	4-8230	.297	32.7	6.6	-1.7	1.099	104.3	.325	1.291	296.2	497.4	.871	1.711A	106.1	.737	-.2	19.4	124.0	.164
4-8230	4-8446.2	.193	42.8	-1.6	-5.2	.652	91.6	.356	1.121	182.9	371.9	.722	1.519D	93.1	1.365	6.9	40.1	196.0	.253
4-8446.2	4-8500	.253	208.3	19.3	3.4	1.412	88.4	.446	1.309	5.3	85.0	.725D	1.892A	113.1	1.104	.1	-7.6	341.7	.448
		13.92	10.46	6.31	3.46	6.87	4.15	17.35	2/2/1	36.3	3.1	23.3	.937	4.954	67.0	68.2	50.6	109.5D	3.705
4-8030	4-8230	.297	41.1	4.3	-3.0	1.108	104.0	.335	1.330	300.0	491.5	.885	1.776A	107.9	.753	1.2	23.1	132.6	.182
4-8230	4-8458.4	.181	42.8	15.4	-.4	.646	90.1	.366	1.111	180.2	386.4	.704	1.518D	97.5	1.361	2.3	12.1	191.5	.254
4-8458.4	4-8510	.254	191.8	19.5	3.6	1.356	82.8	.356	1.095	27.9	98.1	.703D	1.485A	110.4	1.037	1.3	-3.5	343.5	.377
		13.99	10.14	6.32	3.85	7.24	3.82	15.78	2/2/1	31.6	4.7	7.3	.931	15.645	87.9	183.8	-74.1	102.5D	13.631
4-8050	4-8230	.300	46.2	35.0	4.6	1.128	103.2	.363	1.430	307.8	480.2	.910	1.949A	111.0	.787	-6.3	-3.4	135.2	.235
4-8230	4-8476.7	.184	57.1	23.7	.9	.631	86.0	.402	1.087	174.0	411.2	.650	1.524	104.0	1.352	1.3	4.7	198.3	.358
4-8476.7	4-8530	.358	178.0	12.2	3.7	1.242	73.6	.305	.829	83.9	144.7	.576D	1.082A	103.2	.890	2.9	-.5	333.4	.262
		15.37	10.26	6.37	5.11	8.50	3.89	13.54	1/2/1	28.8	32.6	21.4	.468	5.386	157.6	117.9	22.4	80.3L	2.055
4-8060	4-8230	.289	55.2	27.7	2.1	1.140	102.8	.382	1.494	311.9	474.7	.923	2.065A	112.5	.805	-3.7	3.2	142.6	.246
4-8230	4-8482.8	.190	64.2	25.7	1.2	.625	84.0	.419	1.078	171.6	418.4	.626	1.530	106.3	1.349	1.2	3.8	202.6	.401
4-8482.8	4-8540	.401	179.5	9.6	3.4	1.204	70.9	.331	.770	100.2	161.2	.515D	1.025A	98.8	.840	3.3	-1.5	324.4	.232
		15.58	10.20	6.17	5.38	8.76	4.03	13.05	1/2/1	19.6	51.0	23.7	.373	4.879	164.2	123.9	19.8	85.0L	1.448
MARS ARRIVAL DATE = 2448240 (14 DEC 1990)																			
4-8020	4-8240	.289	32.9	6.6	-1.7	1.095	104.0	.315	1.276	295.9	502.4	.873	1.678A	104.4	.723	-.1	19.7	123.0	.147
4-8240	4-8448.6	.210	40.1	-1.1	-5.2	.649	94.4	.363	1.129	187.6	375.4	.720	1.539D	94.1	1.367	7.0	39.1	193.7	.263
4-8448.6	4-8500	.263	206.6	18.9	3.5	1.417	87.4	.459	1.338	8.3	84.2	.724D	1.951A	113.6	1.111	.3	-7.0	341.8	.459
		13.76	10.67	6.17	3.09	6.50	4.50	17.59	2/2/1	44.5	3.5	23.1	.871	5.005	65.2	69.2	50.0	108.1D	3.488
4-8030	4-8240	.286	40.8	5.4	-2.6	1.102	103.5	.322	1.309	299.8	496.6	.888	1.730A	106.1	.737	.8	22.0	132.5	.161
4-8240	4-8459.2	.195	39.4	14.6	-.3	.642	92.9	.372	1.118	185.0	389.4	.702	1.534D	97.8	1.363	2.2	11.6	191.7	.261
4-8459.2	4-8510	.261	191.2	19.1	3.6	1.356	82.3	.359	1.096	29.5	98.3	.703D	1.489A	110.5	1.037	1.3	-3.4	343.4	.380
		13.64	10.25	6.12	3.39	6.79	4.14	15.84	2/2/1	36.6	4.9	7.5	.885	15.313	93.3	34.9	81.4	98.5D	12.674
4-8040	4-8240	.299	51.6	-4.6	-6.1	1.110	103.1	.331	1.347	303.7	490.9	.901	1.793A	107.7	.781	4.4	32.9	143.7	.186
4-8240	4-8469.8	.190	45.9	20.0	.7	.633	90.8	.388	1.103	181.2	402.4	.675	1.551D	101.5	1.358	1.4	5.9	194.8	.315
4-8469.8	4-8520	.315	180.6	15.5	3.8	1.293	78.9	.309	.928	60.3	122.1	.642D	1.215A	107.4	.957	2.4	-1.0	339.9	.316
		14.33	10.39	6.36	3.94	7.33	4.04	14.53	2/2/1	34.3	17.0	16.8	.807	6.859	144.3	110.8	38.7	76.1L	3.556
4-8060	4-8240	.278	53.6	34.4	3.7	1.130	102.1	.357	1.442	311.9	479.9	.927	1.957A	110.6	.783	-5.3	-3.1	141.8	.224
4-8240	4-8482.0	.191	58.1	24.6	1.2	.618	87.3	.416	1.083	176.2	416.6	.632	1.533	105.8	1.351	1.1	3.5	202.6	.391
4-8482.0	4-8540	.391	179.1	9.8	3.3	1.207	71.4	.323	.775	98.4	160.7	.524D	1.025A	98.7	.844	3.2	-1.3	325.1	.227
		14.87	10.03	5.97	4.84	8.23	4.06	12.98	1/2/1	28.4	50.4	24.1	.393	4.780	183.5	124.2	16.5	84.1L	1.484

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448240
14 DEC 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECL P	ETA	PERIC
4-8070	4-8240	.269	61.3	29.7	2.1	1.142	101.5	.374	1.502	316.2	474.7	.940	2.065A	112.0	.801	-3.6	1 1	146.0	.237
4-8240	4-8486.0	.196	65.9	26.4	1.4	.612	85.1	.435	1.072	173.6	423.5	.606	1.538	108.1	1.348	1.0	2.9	207.6	.435
4-8486.0	4-8550	.435	183.3	7.4	2.9	1.179	68.9	.359	.736	109.4	172.0	.472D	1.001A	94.4	.807	3.5	-3.3	316.0	.222
		15.14	9.98	5.81	5.17	8.55	4.17	12.90	1/2/1	19.1	69.3	24.6	.318	4.690	168.1	129.5	11.9	88.1L	1.173
MARS ARRIVAL DATE = 2448250 (24 DEC 1990)																			
4-7990	4-8250	.312	11.5	1.2	-1.0	1.078	105.8	.313	1.195	284.0	524.8	.821	1.568A	96.7	.677	-1.1	17.8	82.5	.125
4-8250	4-8402.9	.247	37.2	20.4	2.0	.611	97.6	.440	1.085	189.9	299.0	.607A	1.562D	72.4	1.362	-.8	-2.4	221.3	.435
4-8402.9	4-8470	.435	200.5	10.3	3.1	1.477	103.2	.599	1.673	324.4	444.6	.670	2.675A	119.5	1.172	-3.7	-23.4	315.9	.589
		14.67	12.01	6.61	2.66	6.08	5.39	20.73	2/1/1	87.7	7.1	24.3	.318	4.750	148.1	146.9	30.4	66.0L	1.192
4-8000	4-8250	.301	18.6	3.5	-1.2	1.082	105.0	.308	1.215	287.9	518.9	.840	1.590A	98.9	.688	-.9	19.0	96.0	.122
4-8250	4-8409.9	.240	32.9	19.7	2.2	.629	98.2	.412	1.110	192.0	312.4	.653A	1.568D	76.6	1.369	-.9	-3.3	223.1	.359
4-8409.9	4-8480	.359	207.2	13.5	3.4	1.434	100.3	.506	1.391	329.1	447.6	.687	2.094A	116.3	1.121	-3.2	-21.0	324.2	.511
		14.24	11.63	6.39	2.61	6.02	5.24	18.81	2/1/1	74.8	6.6	23.0	.467	5.014	132.7	152.9	44.9	64.8L	1.876
4-8010	4-8250	.291	25.8	5.3	-1.4	1.086	104.3	.307	1.238	291.8	513.0	.858	1.618A	100.8	.699	-.6	19.6	109.1	.124
4-8250	4-8417.3	.237	29.5	19.5	2.5	.641	98.6	.391	1.131	193.9	326.3	.688A	1.573D	80.7	1.373	-1.0	-4.8	222.6	.291
4-8417.3	4-8490	.291	212.5	17.3	3.6	1.398	97.4	.426	1.224	335.1	451.3	.702	1.746A	113.3	1.078	-2.7	-18.0	331.9	.440
		14.02	11.36	6.21	2.66	6.07	5.15	17.16	2/1/1	62.5	6.0	24.3	.710	4.757	113.9	168.3	60.8	69.6L	2.666
4-8020	4-8250	.284	33.1	6.4	-1.7	1.092	103.8	.308	1.264	295.7	507.2	.875	1.653A	102.7	.711	-.1	20.2	121.0	.132
4-8250	4-8426.8	.235	26.8	20.2	3.0	.650	98.8	.376	1.146	195.2	342.8	.715A	1.576D	85.3	1.376	-1.4	-8.5	217.0	.232
4-8426.8	4-8500	.232	214.8	21.6	3.6	1.369	94.1	.362	1.123	344.5	455.2	.717	1.529A	110.4	1.045	-1.8	-13.9	338.9	.380
		13.97	11.17	6.07	2.80	6.21	5.10	15.84	2/1/1	51.5	5.0	30.2	1.120	3.839	94.0	207.3	66.1	83.2L	3.161
4-8020	4-8250	.284	33.1	6.4	-1.7	1.092	103.8	.308	1.264	295.7	507.2	.875	1.653A	102.7	.711	-.1	20.2	121.0	.132
4-8250	4-8442.4	.245	23.0	32.1	7.6	.652	98.2	.369	1.149	194.5	367.1	.724	1.573D	91.9	1.374	-5.9	-35.6	199.0	.242
4-8442.4	4-8500	.242	210.8	19.8	3.4	1.403	89.8	.427	1.267	.7	86.5	.726D	1.807A	112.6	1.092	-.3	-8.6	341.3	.433
		14.22	11.42	6.07	2.80	6.21	5.34	17.00	2/1/1	51.5	2.5	56.6	1.022	2.111	79.3	79.5	-76.6	100.1D	1.135
4-8020	4-8250	.284	33.1	6.4	-1.7	1.092	103.8	.308	1.264	295.7	507.2	.875	1.653A	102.7	.711	-.1	20.2	121.0	.132
4-8250	4-8451.0	.229	38.0	-.2	-5.2	.648	97.4	.373	1.141	192.8	379.0	.716	1.567D	95.1	1.370	7.0	37.4	191.6	.274
4-8451.0	4-8500	.274	204.9	18.5	3.5	1.422	86.3	.471	1.366	11.5	83.6	.722D	2.010A	114.0	1.116	.5	-6.4	341.9	.470
		13.84	11.04	6.07	2.80	6.21	4.96	17.84	2/2/1	51.5	3.9	22.2	.799	5.197	62.7	71.1	48.8	107.4D	3.356
4-8030	4-8250	.278	40.8	5.9	-2.4	1.098	103.2	.312	1.293	299.6	501.5	.890	1.696A	104.4	.723	.7	21.7	131.6	.143
4-8250	4-8460.7	.213	37.0	14.5	-.2	.640	95.9	.381	1.128	189.8	391.3	.698	1.558D	98.5	1.366	2.1	10.4	191.7	.272
4-8460.7	4-8510	.272	190.3	18.6	3.7	1.356	81.6	.564	1.096	32.1	98.7	.698D	1.495A	110.8	1.037	1.5	-3.1	343.0	.385
		13.55	10.53	5.97	3.02	6.43	4.56	15.95	2/2/1	42.4	5.3	8.2	.814	13.906	98.6	66.2	79.5	94.7D	10.505
4-8040	4-8250	.279	49.5	.9	-4.3	1.105	102.7	.318	1.326	303.6	495.9	.904	1.747A	106.0	.736	2.6	27.4	142.1	.160
4-8250	4-8470.4	.205	42.5	19.2	.8	.629	93.9	.394	1.111	186.0	402.9	.673	1.549D	101.8	1.360	1.3	5.3	195.2	.321
4-8470.4	4-8520	.321	180.6	15.1	3.8	1.292	76.6	.311	.926	61.5	122.5	.638D	1.214A	107.5	.955	2.5	-1.0	339.6	.318
		13.74	10.37	5.99	3.37	6.78	4.38	14.57	2/2/1	36.5	17.3	17.4	.585	6.618	144.1	112.1	35.9	76.5L	3.285
4-8060	4-8250	.291	49.9	49.4	7.6	1.122	101.5	.337	1.404	312.0	485.1	.931	1.877A	108.9	.764	-9.1	-15.6	136.8	.224
4-8250	4-8481.8	.200	53.2	23.6	1.2	.615	90.6	.418	1.089	180.9	415.9	.634	1.944D	105.7	1.353	.9	3.1	202.9	.390
4-8481.8	4-8540	.390	179.1	9.8	3.3	1.208	71.5	.322	.775	98.1	160.7	.526D	1.025A	98.7	.845	3.2	-1.2	325.2	.227
		15.28	10.45	6.20	4.83	8.21	4.25	12.97	1/2/1	39.2	50.3	24.6	.396	4.689	162.9	124.9	17.1	83.8L	1.460
4-8070	4-8250	.257	60.1	34.9	3.2	1.131	100.9	.350	1.452	316.4	479.9	.944	1.960A	110.2	.779	-4.7	-3.9	147.7	.215
4-8250	4-8487.4	.200	60.0	25.4	1.4	.607	88.6	.433	1.078	178.2	422.0	.611	1.544	107.6	1.350	.9	2.6	207.6	.427
4-8487.4	4-8550	.427	182.9	7.6	2.9	1.182	69.3	.353	.740	108.2	171.9	.479D	1.001A	94.4	.811	3.5	-3.1	316.3	.218
		14.47	9.86	5.60	4.61	8.00	4.26	12.84	1/2/1	24.8	68.9	25.1	.330	4.608	167.4	129.8	12.6	87.4L	1.189
4-8080	4-8250	.248	66.6	31.3	2.1	1.142	100.2	.365	1.506	321.0	475.0	.956	2.057A	111.4	.795	-3.5	-.9	153.2	.228
4-8250	4-8493.9	.204	69.0	27.2	1.6	.597	86.0	.454	1.065	175.1	429.1	.582	1.549	110.1	1.346	.8	2.1	213.3	.474
4-8493.9	4-8560	.474	189.0	5.5	2.4	1.159	66.8	.395	.712	116.3	179.6	.431D	.993A	90.2	.781	3.7	-5.6	309.8	.234
		14.73	9.80	5.44	4.93	8.32	4.36	13.10	1/2/1	18.7	85.5	24.5	.267	4.708	171.1	135.4	8.9	91.1D	.990
4-8100	4-8250	.235	75.6	29.2	1.3	1.167	98.2	.403	1.640	330.9	465.9	.979	2.301A	113.6	.829	-2.5	.4	160.7	.262
4-8250	4-8428.6	.234	26.5	20.5	3.1	.651	98.8	.374	1.147	195.3	345.9	.718A	1.577D	86.2	1.376	-1.6	-9.6	215.3	.224
4-8428.6	4-8580	.224	199.2	-71.4	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.5	302.6	.232
		16.11	10.52	5.23	5.78	9.16	5.09	13.06	1/1/2	11.1	90.7	62.6	1.198	1.926	95.6	202.3	-67.7	66.2L	1.109
MARS ARRIVAL DATE = 2448260 (3 JAN 1991)																			
4-7990	4-8260	.316	11.9	1.0	-1.2	1.077	106.0	.315	1.193	283.4	529.2	.817	1.569A	94.9	.669	-1.1	17.9	78.1	.125
4-8260	4-8403.3	.274	34.3	18.8	2.0	.618	102.0	.448	1.107	195.6	300.5	.611A	1.603D	72.5	1.369	-.6	-1.9	221.0	.436
4-8403.3	4-8470	.436	200.8	10.2	3.1	1.479	103.1	.604	1.696	324.7	444.3	.671	2.721A	119.6	1.176	-3.8	-23.3	316.1	.592
		15.45	12.78	6.68	2.68	6.09	6.10	20.82	2/1/1	96.9	7.1	25.5	.316	4.916	146.6	145.8	30.2	65.5L	1.239
4-8000	4-8260	.302	19.0	3.3	-1.3	1.081	105.1	.308	1.212	287.4	523.4	.838	1.585A	97.1	.678	-.8	19.3	91.4	.118
4-8260	4-8410.2	.269	30.5	18.0	2.1	.636	102.3	.421	1.134	198.1	314.1	.656A	1.613D	76.8	1.376	-.7	-2.5	222.3	.359
4-8410.2	4-8480	.359	207.5	13.4	3.4	1.435	100.2	.509	1.400	329.3	447.3	.688	2.112A	116.4	1.123	-3.2	-20.9	324.3	.513
		14.92	12.38	6.41	2.54	5.96	5.97	18.86	2/1/1	84.2	6.6	21.7	.466	5.317	132.3	150.7	45.8	64.2L	2.012
4-8010	4-8260	.290	26.1	5.2	-1.5	1.085	104.3	.304	1.233	291.4	517.7	.858	1.607A	99.1	.689	-.5	20.2	105.1	.116
4-8260	4-8417.7	.266	27.7	17.6	2.3	.648	102.5	.402	1.156	200.2	328.1	.691A	1.621D	81.0	1.380	-.8	-3.6	221.1	.291
4-8417.7	4-8490	.291	212.7	17.2	3.6	1.399	97.3	.428	1.229	335.4	451.1	.703	1.754A	113.3	1.079	-2.6	-17.9	332.0	.442
		14.60	12.08	6.19	2.52	5.93	5.89	17.19	2/1/1	71.4	5.9	22.4	.709	5.139	111.5	166.0	63.9	70.4L	2.934
4-8020	4-8260	.280	33.4	6.3	-1.8	1.089	103.6	.303	1.256	295.4	512.0	.875	1.636A	101.0	.699	-.1	20.8	118.1	.120
4-8260	4-8427.4	.264	25.7	17.9	2.7	.657	102.6	.388	1.171	201.5	345.1	.717A	1.625D	85.8	1.383	-1.0	-6.1	214.4	.231
4-8427.4	4-8500	.231	214.9	21.5	3.8	1.371	94.0	.364	1.128	345.1	454.8	.717	1.538A	110.5	1.047	-1.7	-13.7	339.0	.382
		14.41	11.83	6.01	2.58	6.00	5.62	15.88	2/1/1	59.4	4.8	27.6	1.122	4.189	89.1	207.6	-82.2	87.2L	3.579
4-8020	4-8260	.280	33.4	6.3	-1.8	1.089	103.6	.303	1.256	295.4	512.0	.875	1.636A	101.0	.699	-.1	20.8	118.1	.120
4-8260	4-8446.5	.267	23.3	29.8	7.5	.655	101.4	.382	1.167	199.7	373.6	.721	1.613D	93.8	1.378	-5.7	-32.7	193.6	.254
4-8446.5	4-8500	.254	208.2	19.3	3.4	1.412	88.3	.447	1.310	5.6	85.0	.725D	1.895A	113.2	1.104	.1	-7.5	341.7	.449
		14.51	11.92	6.01	2.58	6.00	5.92	17.36	2/1/1	59.4	3.1	53.8	.933	2.211	75.7	86.8	-74.1	102.1D	1.129
4-8020	4-8260	.280	33.4	6.3	-1.8	1.089	103.6	.303	1.256	295.4	512.0	.875	1.636A	101.0	.699	-.1	20.8	118.1	.120
4-8260	4-8453.4	.252	36.5	1.0	-5.1	.649	100.6	.386	1.157	197.8	382.8	.711	1.603D	96.3	1.375	7.0	35.2	189.7	.268
4-8453.4	4-8500	.268	203.1	18.1	3.6	1.428	85.2	.485	1.397	14.8	83.1	.719D	2.075A	114.5	1.126	.8	-5.9	341.9	.482
		14.13	11.54	6.01	2.58	6.00	5.54	16.12	2/2/1	59.4	4.3	20.8	.723	5.527	59.3	73.8	47.3	107.3D	3.274
4-8030	4-8260	.272	40.8	6.3	-2.3	1.095	103.0	.304	1.281	299.4	506.3	.892	1.670A	102.7	.711	.5	21.9	129.8	.129
4-8260	4-8462.4	.234	35.5	14.8	.1	.639	99.0	.393	1.141	194.6	393.9	.693	1.589D	99.4	1.369	1.8	8.7	191.6	.267
4-8462.4	4-8510	.287	189.4	17.9	3.8	1.356	80.6	.370	1.097	35.6	99.3	.691D	1.502A	111.2	1.037	1.7	-2.8	342.6	.393
		13.70	10.96	5.87	2.74	6.15	5.09	16.10	2/2/1	49.1	5.8	9.5	.728	12.075	102.8	85.5	76.6	92.0D	8.067
4-8040	4-8260	.268	48.8	3.3	-3.5	1.101	102.4	.308	1.309	303.5	500.8	.907	1.712A	104.3	.722	1.8	25.3	140.7	.142
4-8260	4-8471.4	.224	40.3	18.7	.9	.628	97.1	.404	1.122	190.7	404.1	.669	1.575D	102.3	1.363	1.1	4.4	195.7	.332
4-8471.4	4-8520	.332	180.6	14.8	3.9	1.290	76.0	.317	.921	64.1	123.5	.630D	1.213A	107.7	.953	2.6	-1.0	339.0	.322
		13.63	10.64	5.79	2.99	6.40	4.85	14.65	2/2/1	41.2	17.9	18.1	.545	6.354	143.8	113.7	36.1	77.4L	2.919
4-8050	4-8260	.289	60.0	-10.5	-7.8	1.107	101.8	.313	1.341	307.6	495.4	.921	1.761A	105.8	.735	6.2	39.1	154.4	.172
4-8260	4-8477.2	.216	44.8	20.9	1.2	.619	95.5	.413	1.109	187.9	410.6	.630	1.567D	104.2	1.359	.9	3.2	199.6	.365
4-8477.2	4-8530	.365	178.2	12.1	3.7	1.240	73.3	.309	.826	85.2	145.2	.571D	1.082A	103.3	.888	3.0	-.6	333.0	.264
		14.51	10.87	6.17	3.64	7.04	4.70	15.59	2/2/1	42.1	33.0	23.0	.452	5.020	136.0	120.7	24.0	80.6L	1.815
4-8070	4-8260	.256	58.0	44.3	5.3	1.123	100.4	.330	1.415	316.6	465.2	.948	1.882A	108.4	.761	-6.7	-12.0	145.1	.202
4-8260	4-8487.5	.210	55.4	24.5	1.5	.603	92.1	.436	1.085	182.7	421.6	.612	1.558D	107.6	1.352	.7	2.1	207.9	.426
4-8487.5	4-8550	.428	182.9	7.5	2.9	1.182	69.3	.354	.739	108.4	171.9	.478D	1.001A	94.4	.811	3.5	-3.2	316.3	.219
		14.41	10.09	5.59	4.32	7.71	4.51	12.85	1/2/1	33.6	69.0	25.5	.328	4.531	166.7	130.5	13.3	87.4L	1.156
4-8080	4-8260	.236	65.5	35.6	2.9	1.133	99.8	.342	1.458	321.3	480.3	.960	1.956A	109.6	.775	-4.3	-5.1	153.1	.205
4-8260	4-8493.4	.209	63.2	26.3	1.6	.593	89.7	.453	1.072	179.7	427.9	.587	1.556	109.7	1.348	.7	1.8	213.3	.466
4-8493.4	4-8560	.466	186.6	5.6	2.4	1.182	67.1	.390	.715	115.4	179.6	.436D	.993A	90.2	.785	3.7	-5.5	309.9	.231
		14.12	9.73	5.25	4.39	7.78	4.48	13.04	1/2/1	23.8	85.4	24.9	.274	4.635	170.4	135.7	9.8	90.6D	.997

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448260
3 JAN 1991

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-8100	4-8260	.217	74.5	31.4	1.6	1.153	97.6	.370	1.559	331.5	471.5	.982	2.136A	111.7	.803	-2.8	-1.6	161.9		.232
4-8260	4-8428.7	.263	25.5	18.0	2.7	.658	102.5	.387	1.172	201.6	347.2	.719A	1.625D	86.4	1.383	-1.1	-6.6	213.1		.226
4-8428.7	4-8580	.226	199.2	-71.7	-9.8	1.264	90.2	.155	.856	358.2	545.1	.724	.989	89.1	.926	12.9	44.8	302.6		.234
		15.80	10.76	4.95	5.04	8.42	5.81	15.09	1/1/2	14.4	90.7	65.7	1.175	1.844	94.7	204.1	-63.3	70.9L		.991
4-8110	4-8260	.210	76.7	30.5	1.4	1.164	96.3	.386	1.617	337.1	467.5	.992	2.242A	112.6	.817	-2.4	-1.5	165.0		.247
4-8260	4-8436.9	.260	25.0	19.7	3.4	.658	102.2	.382	1.174	201.3	360.1	.725	1.623D	90.0	1.382	-1.7	-11.0	203.4		.211
4-8436.9	4-8590	.211	189.0	-69.3	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5		.227
		15.99	10.58	4.84	5.41	8.79	5.75	12.98	1/1/2	11.4	96.3	59.0	1.346	2.030	95.8	187.7	-70.7	83.6L		1.387
MARS ARRIVAL DATE = 2448270 (13 JAN 1991)																				
4-8000	4-8270	.304	19.4	3.2	-1.3	1.080	105.2	.310	1.210	286.8	527.8	.835	1.585A	95.4	.670	-.8	19.5	86.9		.117
4-8270	4-8410.6	.305	28.9	16.6	2.1	.649	106.8	.435	1.171	204.8	316.4	.661A	1.680D	77.1	1.386	-.5	-1.8	220.9		.359
4-8410.6	4-8480	.359	207.7	15.3	3.4	1.437	100.2	.512	1.409	329.6	447.1	.686	2.130A	116.5	1.125	-3.2	-20.7	324.4		.515
		15.90	13.37	6.46	2.53	5.95	6.92	18.90	2/1/1	93.4	6.5	20.0	.465	5.764	130.3	148.0	48.1	64.1L		2.216
4-8010	4-8270	.290	26.5	5.1	-1.5	1.084	104.3	.303	1.229	290.9	522.2	.856	1.602A	97.4	.680	-.5	20.7	100.6		.112
4-8270	4-8418.1	.302	26.6	16.2	2.2	.661	106.8	.417	1.193	207.0	330.6	.695A	1.691D	81.5	1.390	-.5	-2.5	216.8		.291
4-8418.1	4-8490	.291	212.9	17.2	3.5	1.400	97.2	.430	1.234	335.7	450.8	.703	1.765A	113.4	1.081	-2.6	-17.7	332.1		.443
		15.46	13.03	6.19	2.43	5.85	6.84	17.23	2/1/1	80.6	5.8	20.5	.709	5.609	106.4	167.1	69.2	73.2L		3.267
4-8020	4-8270	.278	33.6	6.3	-1.8	1.087	103.5	.300	1.250	295.0	516.6	.875	1.624A	99.3	.689	-.1	21.5	114.3		.112
4-8270	4-8428.6	.298	25.1	16.3	2.4	.669	106.6	.404	1.208	208.3	348.9	.720A	1.696D	86.8	1.392	-.7	-4.2	210.1		.231
4-8428.6	4-8500	.231	214.9	21.3	3.5	1.373	93.7	.369	1.138	346.3	454.0	.718	1.558A	110.7	1.051	-1.6	-13.2	339.2		.386
		15.14	12.70	5.97	2.44	5.85	6.73	15.96	2/1/1	67.9	4.3	26.0	1.125	4.447	79.8	161.7	-76.6	96.0D		3.878
4-8020	4-8270	.278	33.6	6.3	-1.8	1.087	103.5	.300	1.250	295.0	516.6	.875	1.624A	99.3	.689	-.1	21.5	114.3		.112
4-8270	4-8450.4	.293	24.5	27.5	7.2	.659	104.7	.400	1.190	204.8	380.0	.714	1.665D	95.7	1.384	-5.3	-28.1	189.8		.271
4-8450.4	4-8500	.271	205.3	18.7	3.5	1.420	86.6	.467	1.357	10.6	83.8	.723D	1.991A	113.9	1.116	.5	-6.6	341.9		.466
		14.98	12.55	5.97	2.44	5.85	6.58	17.76	2/1/1	67.9	3.8	49.1	.821	2.407	72.7	93.0	-72.0	103.7D		1.156
4-8020	4-8270	.278	33.6	6.3	-1.8	1.087	103.5	.300	1.250	295.0	516.6	.875	1.624A	99.3	.689	-.1	21.5	114.3		.112
4-8270	4-8455.7	.279	35.8	2.6	-5.0	.653	104.0	.402	1.179	202.9	366.7	.705	1.652D	97.6	1.380	6.9	32.4	186.3		.305
4-8455.7	4-8500	.305	201.5	17.6	3.7	1.433	84.0	.500	1.430	16.2	82.8	.715D	2.146A	115.0	1.133	1.0	-5.4	341.8		.495
		14.63	12.20	5.97	2.44	5.85	6.22	18.43	2/2/1	67.9	4.6	19.0	.645	6.065	55.6	77.3	45.0	107.9D		3.269
4-8030	4-8270	.268	40.8	6.5	-2.2	1.092	102.8	.299	1.272	299.2	511.1	.892	1.652A	101.1	.700	.5	22.3	127.2		.117
4-8270	4-8464.5	.260	34.8	15.5	.5	.641	102.3	.408	1.157	199.3	396.9	.686	1.629D	100.5	1.373	1.5	6.5	191.7		.307
4-8464.5	4-8510	.307	188.5	17.2	3.9	1.356	79.4	.378	1.096	39.7	100.2	.682D	1.510A	111.7	1.037	2.0	-2.6	342.0		.402
		14.05	11.53	5.79	2.52	5.94	5.73	16.30	2/2/1	56.5	6.5	11.1	.637	10.297	106.2	99.4	73.7	89.9L		5.919
4-8040	4-8270	.261	48.4	4.6	-3.1	1.097	102.1	.300	1.297	303.3	505.7	.908	1.686A	102.7	.710	1.4	24.6	139.0		.127
4-8270	4-8472.7	.248	39.1	18.7	1.1	.626	100.4	.416	1.136	195.3	405.9	.663	1.609D	103.1	1.367	.9	5.3	196.5		.346
4-8472.7	4-8520	.348	180.7	14.3	4.0	1.287	75.1	.325	.915	67.4	124.6	.618D	1.212A	108.1	.949	2.8	-1.0	338.2		.329
		13.79	11.09	5.67	2.70	6.11	5.42	14.78	2/2/1	47.2	18.7	18.9	.496	6.088	143.4	115.6	36.5	78.7L		2.522
4-8050	4-8270	.264	57.2	-3.0	-5.3	1.103	101.4	.303	1.324	307.6	500.4	.923	1.725A	104.1	.721	3.8	32.1	151.2		.144
4-8270	4-8478.3	.239	43.1	20.5	1.3	.619	98.9	.424	1.120	192.4	411.9	.645	1.596D	104.8	1.362	.7	2.4	200.4		.379
4-8478.3	4-8530	.379	178.5	11.8	3.8	1.236	72.5	.319	.820	87.9	146.1	.559D	1.081A	103.6	.882	3.1	-.7	332.1		.270
		13.97	10.93	5.71	3.05	6.45	5.21	13.68	2/2/1	42.5	33.9	23.6	.419	4.699	155.5	122.2	24.4	81.6L		1.634
4-8070	4-8270	.295	53.0	63.2	10.4	1.117	99.9	.314	1.387	316.8	490.3	.951	1.822A	106.7	.745	-11.8	-26.3	136.7		.223
4-8270	4-8488.1	.226	52.4	23.7	1.6	.601	95.6	.443	1.094	187.1	422.1	.609	1.578D	108.0	1.355	.5	1.6	208.7		.436
4-8488.1	4-8550	.436	183.3	7.4	2.9	1.179	68.9	.361	.736	109.6	172.1	.470D	1.001A	94.4	.806	3.5	-3.4	315.9		.223
		15.98	11.18	6.28	4.80	6.19	4.90	12.91	1/2/1	49.5	69.4	25.9	.316	4.457	166.1	131.7	13.8	87.8L		1.092
4-8080	4-8270	.231	63.9	42.6	4.3	1.125	99.1	.323	1.422	321.6	485.6	.963	1.881A	107.9	.757	-5.5	-11.2	151.5		.189
4-8270	4-8493.6	.222	59.0	25.4	1.7	.591	93.4	.457	1.079	184.0	427.6	.587	1.572D	109.8	1.350	.5	1.3	213.8		.471
4-8493.6	4-8560	.471	188.8	5.5	2.4	1.161	66.9	.392	.713	115.8	179.6	.434D	.993A	90.2	.783	3.7	-5.5	309.9		.233
		13.96	9.95	5.17	4.02	7.41	4.78	13.07	1/2/1	30.7	85.4	25.5	.271	4.563	169.8	136.4	10.2	90.6D		.965
4-8110	4-8270	.194	75.1	32.7	1.7	1.151	95.8	.356	1.544	337.9	473.5	.995	2.093A	110.8	.792	-2.6	-3.6	166.1		.219
4-8270	4-8437.0	.294	25.1	17.5	2.8	.669	106.1	.399	1.207	207.8	361.8	.725	1.690D	90.5	1.390	-1.0	-6.5	200.4		.218
4-8437.0	4-8590	.218	188.6	-70.2	-9.3	1.262	88.9	.155	.857	8.2	191.8	.724D	.990	87.9	.929	12.7	43.6	302.3		.232
		15.93	11.22	4.61	4.71	8.10	6.61	13.06	1/1/2	14.7	96.2	64.2	1.269	1.883	94.4	191.8	-64.1	87.1L		1.120
4-8120	4-8270	.187	74.8	31.8	1.5	1.161	94.3	.369	1.587	344.1	469.9	1.002	2.172A	111.6	.804	-2.3	-3.1	168.6		.231
4-8270	4-8445.7	.288	25.6	20.3	3.9	.664	105.3	.399	1.198	206.2	373.9	.720	1.675D	93.9	1.386	-2.1	-12.5	192.6		.234
4-8445.7	4-8600	.234	180.5	-68.9	-10.0	1.261	87.5	.159	.858	18.3	198.2	.721D	.994	86.6	.931	13.4	43.0	302.8		.247
		15.99	10.97	4.51	5.01	8.40	6.46	13.30	1/1/1	11.9	101.0	56.9	1.101	2.097	95.0	176.7	-73.3	100.5D		1.208
MARS ARRIVAL DATE = 2448280 (23 JAN 1991)																				
4-8020	4-8280	.278	33.8	6.4	-1.8	1.086	103.6	.298	1.245	294.6	521.0	.874	1.617A	97.7	.681	-.1	22.1	110.0		.106
4-8280	4-8431.9	.338	25.3	15.4	2.3	.687	110.6	.425	1.260	215.3	356.2	.724A	1.795D	88.9	1.403	-.4	-2.7	202.4		.231
4-8431.9	4-8500	.231	214.7	20.9	3.4	1.380	92.9	.382	1.166	349.5	451.9	.721	1.612A	111.1	1.061	-1.5	-12.0	339.8		.397
		16.10	13.76	5.97	2.34	5.76	7.79	16.20	2/1/1	76.9	3.2	26.5	1.124	4.359	63.6	135.8	-61.8	113.6D		3.776
4-8020	4-8280	.278	33.8	6.4	-1.8	1.086	103.6	.298	1.245	294.6	521.0	.874	1.617A	97.7	.681	-.1	22.1	110.0		.106
4-8280	4-8454.3	.321	26.4	25.5	6.7	.667	108.2	.421	1.218	209.6	386.2	.705	1.730D	97.7	1.390	-4.8	-25.0	187.5		.294
4-8454.3	4-8500	.294	202.4	17.9	3.6	1.429	84.7	.490	1.408	16.1	83.0	.718D	2.098A	114.7	1.128	.9	-5.8	341.9		.486
		15.64	13.29	5.97	2.34	5.76	7.33	18.22	2/1/1	76.9	4.4	43.4	.694	2.707	70.9	97.8	-70.7	104.3D		1.184
4-8020	4-8280	.278	33.8	6.4	-1.8	1.086	103.6	.298	1.245	294.6	521.0	.874	1.617A	97.7	.681	-.1	22.1	110.0		.106
4-8280	4-8458.0	.310	35.5	4.5	-4.6	.661	107.5	.422	1.207	208.0	390.5	.697	1.716D	98.9	1.387	6.5	28.7	187.3		.324
4-8458.0	4-8500	.324	199.9	17.1	3.8	1.438	82.7	.514	1.461	21.7	82.8	.710D	2.213A	115.6	1.140	1.3	-4.9	341.7		.508
		15.33	12.99	5.97	2.34	5.76	7.02	18.75	2/2/1	76.9	4.9	16.3	.571	7.036	49.8	82.2	41.0	110.1D		3.449
4-8030	4-8280	.266	40.9	6.8	-2.2	1.090	102.7	.295	1.266	298.9	515.7	.892	1.639A	99.4	.690	.4	23.0	123.7		.108
4-8280	4-8466.7	.289	34.9	16.5	1.0	.646	105.8	.426	1.179	203.9	400.2	.677	1.681D	101.7	1.379	1.0	4.1	192.1		.332
4-8466.7	4-8510	.332	187.6	16.4	4.0	1.355	78.0	.388	1.094	44.5	101.4	.670D	1.519A	112.4	1.036	2.2	-2.3	341.2		.413
		14.60	12.23	5.75	2.37	5.79	6.48	16.56	2/2/1	64.6	7.2	13.0	.546	6.816	109.2	110.1	70.7	88.4L		4.268
4-8040	4-8280	.256	48.2	5.5	-2.8	1.095	102.0	.294	1.288	303.2	510.4	.909	1.667A	101.0	.700	1.2	24.6	136.4		.114
4-8280	4-8474.4	.274	38.8	18.9	1.4	.632	103.9	.432	1.153	199.9	408.2	.655	1.652D	104.0	1.372	.6	2.1	197.1		.369
4-8474.4	4-8520	.369	180.8	13.8	4.1	1.283	73.9	.335	.906	71.7	126.4	.603D	1.210A	108.6	.943	3.0	-1.0	337.2		.337
		14.17	11.69	5.58	2.48	5.90	6.10	14.94	2/2/1	54.0	19.7	19.9	.440	5.798	143.2	117.8	36.5	80.1L		2.113
4-8050	4-8280	.252	56.0	.7	-4.3	1.100	101.2	.295	1.312	307.6	505.2	.925	1.699A	102.5	.710	2.8	29.3	148.8		.127
4-8280	4-8479.8	.264	42.4	20.4	1.5	.621	102.3	.438	1.135	196.8	413.7	.638	1.633D	105.7	1.367	.5	1.6	201.3		.398
4-8479.8	4-8530	.398	179.0	11.4	3.8	1.231	71.5	.331	.811	91.5	147.4	.542D	1.080A	103.9	.875	3.3	-1.0	331.0		.277
		14.05	11.35	5.51	2.70	6.12	5.83	13.82	2/2/1	46.7	35.1	24.2	.380	4.772	155.1	123.9	24.6	82.9L		1.434
4-8060	4-8280	.283	67.5	-16.6	-9.2	1.106	100.4	.298	1.337	312.1	500.2	.939	1.736A	103.9	.720	7.8	44.9	165.0		.166
4-8280	4-8484.5	.255	46.1	21.8	1.6	.611	100.8	.445	1.120	194.1	418.4	.621	1.619D	107.1	1.362	.4	1.2	205.4		.423
4-8484.5	4-8540	.423	180.4	9.2	3.5	1.197	69.8	.348	.760	103.8	162.1	.495D	1.024A	99.1	.829	3.5	-1.9	323.2		.242
		15.16	11.67	6.06	3.49	6.89	5.61	13.21	2/2/1	50.3	52.4	26.1	.335	4.432	161.3	128.7	18.4	86.0L		1.151
MARS ARRIVAL DATE = 2448290 (2 FEB 1991)																				
4-8030	4-8290	.265	41.1	7.0	-2.1	1.089	102.7	.293	1.261	298.5	520.1	.892	1.631A	97.8	.681	.4	23.7	119.5		.102
4-8290	4-8469.1	.321	35.6	17.6	1.5	.654	109.4	.448	1.207	208.4	403.6	.666	1.747D	103.1	1.386	.5	1.7	192.7		.361
4-8469.1	4-8510	.361	187.0	15.6	4.2	1.354	76.4	.400	1.091	49.7	103.0	.655D	1.528A	113.2	1.035	2.6	-2.1	340.3		.427
		15.34	13.07	5.74	2.27	5.69	7.34	16.87	2/2/1	73.3	8.2	15.0	.461	7.660	111.6	118.3	67.5	87.9L		3.073
4-8040	4-8290	.253	48.1	6.2	-2.6	1.093	101.9	.290	1.281	303.0	515.0	.910	1.653A	99.5	.690	1.0	25.0	133.2		.105
4-8290	4-8476.2	.305	39.2	19.3	1.7	.636	107.5	.452	1.176	204.3	410.7	.645	1.708D	105.2	1.376	.3	.9	198.0		.395
4-8476.2	4-8520	.395	181.0	13.2	4.3	1.278	72.6	.349	.896	76.6	128.3	.584D	1.209A	109.2	.936	3.2	-1.1	335.9		.348
		14.74	12.42	5.53	2.32	5.74	6.89	15.16	2/2/1	61.7	20.9	20.9	.385	5.521	143.0	120.3	36.4	81.6L		1.741
4-8050	4-8290	.245	55.4	2.8	-3.7	1.097	101.0	.289	1.302	307.5	509.9	.926	1.679A	100.9	.700	2.2	26.1	146.1		.114
4-8290	4-8481.5	.292	42.5	20.5	1.8	.625	106.0	.456	1.155	201.1	415.9	.628	1.681D	106.7	1.372	.2	.7	202.4		.421
4-8481.5	4-8530	.421	179.6	11.0	4.0	1.224	70.3	.348	.800	95.6	148.8	.522D	1.079A	104.4	.865	3.6	-1.3	329.7		.288
		14.42	11.95	5.39	2.47	5.88	6.56	14.00	2/2/1	52.6	36.4	24.9	.339	4.642	154.7	125.9	24.8	84.4L		1.234

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448290
2 FEB 1991

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8060	4-8290	.251	64.1	-7.4	-6.3	1.102	100.2	.290	1.325	312.1	505.0	.941	1.709A	102.3	.709	4.9	37.2	160.2	.134
4-8290	4-8486.1	.281	45.9	21.7	1.8	.614	104.4	.461	1.136	198.2	420.3	.612	1.660D	108.1	1.367	.2	.5	206.7	.445
4-8486.1	4-8540	.445	181.3	8.9	3.6	1.169	68.6	.366	.750	107.2	163.0	.476D	1.024A	99.4	.819	3.7	-2.4	322.0	.252
		14.60	11.76	5.49	2.84	6.25	6.27	13.38	2/2/1	49.4	53.6	26.6	.304	4.340	160.9	130.6	18.6	87.3L	1.015
MARS ARRIVAL DATE = 2448300 (12 FEB 1991)																			
4-8040	4-8300	.252	48.1	6.8	-2.3	1.092	101.8	.268	1.276	302.6	519.4	.909	1.644A	97.9	.682	.9	25.5	129.2	.098
4-8300	4-8478.3	.338	40.3	19.9	2.0	.648	111.3	.475	1.206	208.5	413.4	.633	1.778D	106.6	1.385	-.1	-.3	199.1	.425
4-8478.3	4-8520	.425	181.3	12.7	4.5	1.272	71.0	.366	.884	81.9	130.4	.561D	1.208A	110.1	.928	3.6	-1.3	334.6	.362
		15.50	13.29	5.50	2.21	5.64	7.79	15.45	2/2/1	70.0	22.3	21.9	.352	5.253	143.1	123.0	36.1	83.1L	1.413
4-8050	4-8300	.241	55.1	4.4	-3.3	1.095	100.9	.265	1.295	307.3	514.5	.926	1.664A	99.4	.691	1.8	27.8	142.9	.104
4-8300	4-8483.4	.323	43.3	20.8	2.0	.653	109.7	.477	1.179	205.2	418.2	.617	1.742D	108.0	1.379	-.1	-.2	203.8	.449
4-8483.4	4-8530	.449	180.4	10.5	4.2	1.216	68.8	.366	.788	100.1	150.3	.498D	1.078A	105.0	.854	3.8	-1.7	326.2	.301
		15.00	12.71	5.32	2.29	5.72	7.39	14.25	2/2/1	59.5	37.9	25.6	.298	4.505	154.5	128.0	24.7	85.9L	1.045

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448200
4 NOV 1990

LAUNCH	ARRIVE	$PEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	$PEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	$PEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-7970	4-8200	.329	354.6	-2.8	-.1	1.076	106.9	.324	1.173	279.6	513.6	.793	1.553A	101.5	.707	-1.8	15.6	79.3	.155
4-8200	4-8435.3	.206	56.5	-13.4	-9.6	.671	84.6	.346	1.108	169.6	357.5	.725A	1.492	89.3	1.363	10.9	57.3	206.9	.308
4-8435.3	4-8490	.308	215.8	15.4	3.2	1.462	93.1	.550	1.603	351.3	438.9	.722	2.484A	116.0	1.164	-1.0	-11.9	336.4	.526
		14.62	11.35	6.95	3.27	6.68	4.40	19.17	2/2/1	64.6	6.6	42.4	.635	2.767	83.2	46.8	52.7	106.4D	1.123
4-7980	4-8200	.327	1.9	.3	-.1	1.082	106.5	.327	1.201	283.1	507.2	.808	1.594A	103.7	.721	-1.7	16.5	90.5	.165
4-8200	4-8438.8	.176	53.1	-.2	-4.9	.671	84.5	.346	1.109	169.4	362.9	.725	1.492	90.7	1.363	6.4	39.8	201.4	.236
4-8438.8	4-8500	.236	212.6	20.2	3.4	1.395	91.0	.411	1.231	356.7	448.1	.725	1.737A	112.1	1.082	-.6	-9.7	340.9	.420
		14.07	10.60	6.89	3.47	6.87	3.71	16.71	2/2/1	53.8	2.1	21.9	1.077	5.272	67.8	71.6	51.1	117.3D	4.599
4-7990	4-8200	.326	9.1	3.3	-.2	1.090	106.3	.334	1.234	286.5	500.8	.822	1.646A	105.9	.737	-1.7	16.8	100.3	.179
4-8200	4-8461.0	.173	57.6	20.4	-.1	.665	82.1	.369	1.099	166.0	394.5	.693	1.505	99.1	1.357	2.0	9.7	188.6	.274
4-8461.0	4-8510	.274	190.2	18.5	3.7	1.356	81.4	.365	1.097	32.7	98.8	.697D	1.497A	110.9	1.037	1.5	-3.1	343.0	.387
		14.31	10.53	6.88	3.77	7.17	3.66	15.98	2/2/1	44.5	5.4	8.9	.799	12.882	80.1	152.8	-72.7	107.3D	6.490
4-8000	4-8200	.327	16.2	6.1	-.2	1.099	106.1	.344	1.273	290.0	494.5	.835	1.711A	107.9	.753	-1.6	16.8	108.6	.196
4-8200	4-8473.5	.192	67.0	24.5	.7	.658	79.1	.402	1.087	162.8	411.1	.651	1.524	104.0	1.352	1.6	5.8	193.3	.358
4-8473.5	4-8520	.358	180.7	14.1	4.0	1.285	74.6	.329	.911	69.4	125.5	.611D	1.211A	108.3	.946	2.9	-1.0	337.7	.332
		15.16	10.98	6.90	4.17	7.57	4.09	14.85	2/2/1	36.5	19.1	14.8	.469	7.742	145.0	108.3	34.9	80.9L	3.163
MARS ARRIVAL DATE = 2448210 (14 NOV 1990)																			
4-7970	4-8210	.328	355.1	-3.2	-.3	1.074	106.8	.321	1.166	279.0	518.5	.792	1.541A	99.5	.695	-1.7	15.3	75.0	.146
4-8210	4-8438.1	.209	53.7	-14.5	-9.9	.664	86.8	.347	1.111	174.0	360.8	.725	1.496	90.2	1.364	11.4	58.8	204.3	.315
4-8438.1	4-8490	.315	215.2	15.3	3.2	1.474	92.1	.576	1.706	354.2	437.2	.724	2.687A	116.5	1.180	-.7	-11.1	337.0	.542
		14.47	11.40	6.91	3.07	6.48	4.49	19.58	2/2/1	74.2	7.3	44.2	.605	2.657	82.2	47.4	51.8	104.5D	1.003
4-7980	4-8210	.322	2.4	-.2	-.4	1.079	106.3	.321	1.191	282.6	512.2	.809	1.574A	101.8	.708	-1.6	16.6	87.3	.150
4-8210	4-8441.3	.178	49.7	-1.1	-5.0	.664	86.7	.348	1.111	173.7	365.6	.725	1.497	91.4	1.363	6.6	40.4	200.0	.241
4-8441.3	4-8500	.241	211.4	19.9	3.4	1.401	90.2	.423	1.257	359.4	446.9	.726	1.787A	112.4	1.089	-.4	-9.0	341.2	.430
		13.72	10.56	6.80	3.16	6.56	3.76	16.92	2/2/1	62.3	2.3	22.7	1.039	5.081	68.5	69.2	51.4	113.9D	4.242
4-7990	4-8210	.319	9.6	2.6	-.4	1.086	106.0	.324	1.220	286.1	505.8	.824	1.616A	104.0	.722	-1.5	17.1	98.4	.160
4-8210	4-8459.1	.169	52.2	18.5	-.2	.658	84.7	.364	1.102	170.7	390.7	.700	1.503	98.1	1.358	2.1	11.0	189.8	.259
4-8459.1	4-8510	.259	191.3	19.2	3.6	1.356	82.4	.358	1.096	29.2	98.3	.703D	1.489A	110.5	1.037	1.3	-3.4	343.4	.380
		13.66	10.50	6.73	3.36	6.77	3.57	15.83	2/2/1	51.6	4.8	8.3	.894	13.778	80.5	156.8	-72.0	107.7D	11.429
4-8000	4-8210	.317	16.9	5.2	-.5	1.093	105.7	.331	1.253	289.6	499.6	.838	1.668A	106.0	.737	-1.4	17.3	108.0	.174
4-8210	4-8471.6	.181	61.6	23.6	.6	.650	82.0	.392	1.089	167.2	407.1	.663	1.516	102.8	1.353	1.6	6.2	193.5	.335
4-8471.6	4-8520	.335	180.6	14.7	3.9	1.289	75.8	.318	.920	64.7	123.7	.627D	1.213A	107.8	.952	2.8	-1.0	338.8	.323
		14.19	10.53	6.70	3.66	7.06	3.83	14.67	2/2/1	42.5	18.0	15.3	.535	7.532	144.6	108.5	35.3	76.8L	3.497
4-8010	4-8210	.317	24.2	7.2	-.8	1.102	105.5	.341	1.293	293.2	493.4	.852	1.734A	108.0	.753	-1.1	17.6	116.2	.191
4-8210	4-8479.4	.195	69.2	25.7	1.0	.644	79.7	.416	1.080	164.8	417.0	.631	1.529	105.9	1.350	1.4	4.7	196.3	.393
4-8479.4	4-8530	.392	178.9	11.5	3.8	1.232	71.8	.328	.813	90.5	147.1	.547D	1.080A	103.8	.877	3.3	-.9	331.3	.275
		14.89	10.84	6.70	4.05	7.44	4.14	13.78	2/2/1	34.7	34.8	20.4	.390	5.658	158.9	117.4	21.1	83.5L	1.817
4-8020	4-8210	.319	32.0	7.6	-1.5	1.112	105.3	.355	1.340	296.8	487.3	.864	1.816A	109.8	.771	-.4	19.1	123.5	.210
4-8210	4-8486.9	.215	77.0	27.1	1.2	.638	76.8	.446	1.071	162.4	426.5	.593	1.548	109.2	1.347	1.4	3.8	204.0	.456
4-8486.9	4-8540	.456	181.7	8.7	3.6	1.185	68.0	.375	.744	108.9	163.4	.465D	1.024A	99.5	.813	3.8	-2.6	321.5	.258
		15.87	11.57	6.74	4.51	7.90	4.63	13.48	2/2/1	28.0	54.1	22.7	.289	5.085	165.9	124.7	14.1	89.4L	1.178
MARS ARRIVAL DATE = 2448220 (24 NOV 1990)																			
4-7950	4-8220	.355	340.7	-9.5	-.4	1.064	108.7	.340	1.125	270.8	535.7	.743	1.507A	92.2	.664	-1.8	10.4	46.2	.163
4-8220	4-8401.1	.205	49.0	25.7	2.3	.619	86.7	.428	1.056	175.6	297.5	.604A	1.508	72.4	1.353	-1.4	-4.3	219.5	.430
4-8401.1	4-8470	.430	199.1	10.6	3.2	1.466	103.4	.580	1.590	323.1	446.1	.667	2.513A	119.1	1.159	-3.8	-24.0	315.2	.576
		15.30	11.65	7.46	3.44	6.84	4.39	20.42	2/1/1	108.0	7.2	25.2	.325	4.582	143.3	147.9	34.2	68.5L	1.163
4-7960	4-8220	.340	348.2	-6.6	-.5	1.068	107.7	.328	1.142	274.7	529.6	.768	1.517A	95.0	.674	-1.7	12.8	57.6	.148
4-8220	4-8408.4	.194	43.8	26.3	2.7	.634	87.8	.398	1.078	176.7	310.4	.649A	1.507	76.5	1.359	-1.7	-6.2	222.4	.357
4-8408.4	4-8480	.357	206.2	13.8	3.5	1.427	100.5	.494	1.354	327.9	448.9	.685	2.024A	116.1	1.112	-3.4	-21.6	323.7	.502
		14.40	11.28	7.15	3.13	6.53	4.12	18.61	2/1/1	96.6	6.9	25.7	.472	4.494	128.4	159.0	47.1	68.3L	1.649
4-7970	4-8220	.328	355.6	-3.6	-.5	1.072	106.9	.321	1.162	278.4	523.3	.789	1.535A	97.6	.685	-1.6	15.0	70.2	.141
4-8220	4-8416.2	.187	38.8	27.8	3.3	.645	88.7	.375	1.095	177.8	324.1	.685A	1.506	80.4	1.363	-2.2	-10.2	223.3	.291
4-8416.2	4-8490	.291	212.0	17.3	3.6	1.394	97.5	.420	1.209	334.2	452.2	.701	1.717A	113.1	1.075	-2.8	-18.5	331.8	.436
		13.87	10.90	6.93	2.97	6.38	3.97	17.06	2/1/1	64.1	6.4	29.9	.710	3.878	111.7	182.0	56.7	73.3L	2.042
4-7980	4-8220	.320	2.9	-.7	-.5	1.077	106.2	.318	1.184	282.0	517.0	.808	1.561A	99.9	.696	-1.5	16.5	83.2	.140
4-8220	4-8443.8	.184	46.2	-1.6	-5.1	.657	89.0	.351	1.115	178.2	368.6	.724	1.505	92.2	1.364	6.7	40.6	198.2	.246
4-8443.8	4-8500	.246	210.0	19.6	3.4	1.406	89.3	.434	1.283	2.3	85.9	.726D	1.840A	112.8	1.097	-.2	-8.3	341.5	.439
		13.61	10.66	6.76	2.95	6.36	3.90	17.13	2/2/1	71.5	2.6	23.2	.992	4.965	68.2	68.1	51.3	111.3D	3.934
4-7990	4-8220	.314	10.1	2.1	-.6	1.083	105.8	.318	1.210	285.6	510.8	.825	1.594A	102.1	.709	-1.4	17.4	95.5	.145
4-8220	4-8458.2	.172	47.1	16.7	-.3	.652	87.4	.364	1.106	175.4	368.7	.704	1.508	97.5	1.359	2.2	11.9	190.9	.253
4-8458.2	4-8510	.253	191.8	19.5	3.6	1.356	82.8	.356	1.095	27.7	98.1	.705D	1.485A	110.3	1.037	1.2	-3.5	343.6	.377
		13.33	10.27	6.64	3.05	6.46	3.63	15.77	2/2/1	59.7	4.6	7.7	.938	14.922	83.4	167.2	-72.9	105.9D	13.053
4-8000	4-8220	.310	17.4	4.6	-.8	1.089	105.4	.322	1.239	289.2	504.6	.840	1.637A	104.2	.723	-1.2	17.8	106.5	.155
4-8220	4-8470.4	.177	55.8	22.4	.6	.643	84.9	.387	1.092	171.8	404.4	.670	1.515	102.0	1.354	1.5	6.3	193.9	.321
4-8470.4	4-8520	.321	180.6	15.1	3.8	1.292	76.6	.312	.926	61.6	122.5	.637D	1.215A	107.5	.955	2.5	-1.0	339.6	.318
		13.57	10.30	6.56	3.26	6.67	3.75	14.58	2/2/1	49.3	17.3	15.7	.584	7.323	144.4	109.0	35.6	77.2L	3.691
4-8010	4-8220	.307	24.7	6.5	-1.0	1.096	105.0	.328	1.272	292.8	498.4	.855	1.690A	106.1	.737	-.9	18.1	115.9	.169
4-8220	4-8477.7	.185	63.1	24.8	.9	.637	82.9	.406	1.083	169.3	413.4	.643	1.523	104.7	1.351	1.4	4.8	198.1	.371
4-8477.7	4-8530	.370	178.3	11.9	3.7	1.239	73.0	.313	.824	86.3	145.6	.566D	1.081A	103.4	.885	3.1	-.6	332.6	.266
		13.99	10.43	6.51	3.56	6.96	3.92	13.62	2/2/1	40.4	33.4	20.9	.438	5.521	158.2	117.5	21.8	81.6L	1.980
4-8020	4-8220	.306	32.4	7.1	-1.6	1.105	104.7	.338	1.312	296.5	492.4	.868	1.756A	107.9	.753	-.2	19.3	124.2	.186
4-8220	4-8484.4	.197	70.8	26.5	1.2	.631	80.8	.429	1.074	167.0	421.7	.613	1.534	107.4	1.348	1.3	3.9	203.1	.422
4-8484.4	4-8540	.422	180.4	9.2	3.5	1.197	69.8	.347	.760	103.6	162.1	.496D	1.024A	99.1	.830	3.5	-1.9	323.2	.241
		14.62	10.69	6.50	3.93	7.33	4.20	13.20	2/2/1	32.8	52.3	23.2	.338	4.983	165.0	124.0	15.0	86.8L	1.345
4-8030	4-8220	.313	42.1	1.4	-4.1	1.115	104.5	.352	1.358	300.2	486.5	.881	1.836A	109.7	.770	2.2	26.2	133.0	.207
4-8220	4-8492.2	.219	80.0	27.7	1.4	.623	77.3	.462	1.063	164.2	431.2	.572	1.554	110.8	1.345	1.2	3.1	209.4	.489
4-8492.2	4-8550	.489	185.9	6.8	3.1	1.159	66.1	.406	.712	116.9	173.0	.422D	1.001A	94.7	.777	3.9	-4.6	314.1	.251
		15.76	11.33	6.63	4.43	7.82	4.70	13.37	2/2/1	27.8	71.4	23.8	.251	4.858	169.7	131.0	10.2	92.2D	.966
MARS ARRIVAL DATE = 2448230 (4 DEC 1990)																			
4-7950	4-8230	.365	341.3	-9.7	-.6	1.064	109.2	.348	1.126	269.8	540.0	.734	1.518A	90.0	.656	-1.7	10.1	43.5	.174
4-8230	4-8401.8	.213	44.8	24.0	2.2	.613	89.9	.431	1.061	179.9	297.7	.604A	1.518	72.4	1.355	-1.2	-3.6	220.5	.432
4-8401.8	4-8470	.432	199.6	10.5	3.2	1.470	103.3	.587	1.620	323.6	445.6	.668	2.572A	119.3	1.164	-3.8	-23.8	315.5	.581
		15.90	12.24	7.68	3.66	7.06	4.56	20.54	2/1/1	115.9	7.1	25.1	.322	4.602	145.4	147.8	32.5	67.6L	1.161
4-7960	4-8230	.346	348.7	-6.8	-.6	1.068	108.0	.333	1.142	273.8	534.0	.761	1.522A	93.0	.665	-1.6	12.4	53.7	.153
4-8230	4-8409.0	.203	39.7	24.0	2.5	.629	90.9	.401	1.084	181.4	310.7	.650A	1.518D	76.5	1.361	-1.4	-5.1	223.1	.358
4-8409.0	4-8480	.357	206.6	13.7	3.4	1.430	100.4	.499	1.368	328.4	448.4	.686	2.050A	116.2	1.115	-3.3	-21.3	323.9	.505
		14.84	11.62	7.28	3.22	6.63	4.33	18.68	2/1/1	105.7	6.8	24.9	.470	4.633	130.6	156.9	45.8	66.9L	1.708
4-7970	4-8230	.331	356.1	-3.9	-.6	1.071	107.1	.323	1.160	277.7	527.9	.785	1.534A	95.6	.675	-1.5	14.6	65.6	.140
4-8230	4-8416.6	.198	35.2	24.6	3.0	.641	91.7	.378	1.102	182.7	324.4	.685A	1.519D	80.4	1.365	-1.7	-8.0	223.6	.291
4-8416.6	4-8490	.291	212.2	17.5	3.6	1.396	97.5	.422	1.214	334.6	451.9	.702	1.727A	113.2	1.075	-2.8	-18.3	331.7	.437
		14.15	11.19	6.99	2.96	6.37	4.21	17.09	2/1/1	93.9	6.2	27.9	.710	4.155	113.6	176.4	57.8	71.3L	2.239
4-7980	4-8230	.320	3.3	-1.0	-.7	1.076	106.3	.317	1.180	281.5	521.8	.806	1.553A	98.1	.686	-1.4	16.4	78.6	.134
4-8230	4-8427.1	.197	30.4	28.1	4.3	.650	92.2	.360	1.117	183.9	342.2	.715A	1.520D	85.3	1.368	-2.9	-17.4	218.6	.231
4-8427.1	4-8500	.231	214.9	21.6	3.6	1.370	84.0	.362	1.125	344.8	455.1	.717	1.552A	110.3	1.046	-1.8	-13.8	339.0	.361
		13.79	10.95	6.76	2.84	6.25	4.19	15.85	2/1/1	81.2	4.9	39.2	1.123	2.982	95.3	210.0	52.6	84.4L	2.226
4-7980	4-8230	.320	3.3	-1.0	-.7	1.076	106.3	.317	1.180	281.5	521.8	.806	1.553A	98.1	.686	-1.4	16.4	78.6	.134
4-8230	4-8433.2	.206	27.1	34.9	6.7	.653	92.2	.355	1.121	184.0	352.1	.723A	1.520D	87.9	1.368	-5.2	-32.5	212.6	.231
4-8433.2	4-8500	.231	214.5	20.8	3.4	1.383	92.6	.386	1.177	350.7	451.2	.722	1.631A	111.3	1.064	-1.2	-11.5	340.0	.401
		13.99	11.16	6.76	2.84	6.25	4.40	16.28	2/1/1	81.2	2.9	53.3	1.122	2.230	88.1	51.6	-85.9	93.6D	1.380

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 520 DAYS | MARS ARRIVAL DATE = 2448230 | 4 DEC 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7980	4-8230	.320	3.3	-1.0	-.7	1.076	106.3	.317	1.180	281.5	521.8	.806	1.553A	98.1	.686	-1.4	16.4	78.6	.134
4-8230	4-8446.2	.195	42.8	-1.6	-5.2	.652	91.6	.356	1.121	182.9	371.9	.722	1.519D	93.1	1.365	6.9	40.1	196.0	.253
4-8446.2	4-8500	.253	208.3	19.3	3.4	1.412	88.4	.446	1.309	5.3	85.0	.725D	1.892A	113.1	1.104	.1	-7.6	341.7	.448
		13.75	10.91	6.76	2.84	6.25	4.15	17.35	2/2/1	81.2	3.1	23.3	.937	4.954	67.0	68.2	50.8	109.5D	3.705
4-7990	4-8230	.311	10.6	1.7	-.8	1.080	105.7	.314	1.202	285.2	515.6	.825	1.580A	100.3	.697	-1.2	17.6	91.7	.134
4-8230	4-8458.4	.181	42.8	15.4	-.4	.646	90.1	.366	1.111	180.2	388.4	.704	1.518D	97.5	1.361	2.3	12.1	191.5	.254
4-8458.4	4-8510	.254	191.8	19.5	3.6	1.356	82.6	.356	1.095	27.9	98.1	.705D	1.485A	110.4	1.037	1.3	-3.5	343.5	.377
		13.26	10.42	6.59	2.84	6.25	3.82	15.78	2/2/1	68.7	4.7	7.3	.931	15.645	87.9	183.8	-74.1	102.5D	13.631
4-8000	4-8230	.305	17.8	4.1	-.9	1.086	105.1	.315	1.228	288.8	509.5	.841	1.615A	102.4	.710	-1.0	18.2	103.9	.140
4-8230	4-8469.8	.181	50.5	21.1	.6	.637	87.8	.386	1.097	176.5	402.9	.674	1.520	101.6	1.356	1.5	6.3	194.3	.315
4-8469.8	4-8520	.315	180.6	15.3	3.8	1.293	76.9	.319	.928	60.2	122.0	.642D	1.215A	107.4	.957	2.4	-1.0	339.9	.316
		13.25	10.28	6.46	2.96	6.37	3.62	14.53	2/2/1	57.0	17.0	16.2	.608	7.092	144.4	109.8	35.6	76.3L	3.701
4-8010	4-8230	.300	25.1	6.0	-1.2	1.092	104.7	.319	1.257	292.5	503.4	.857	1.658A	104.3	.723	-.7	18.6	114.6	.151
4-8230	4-8476.7	.184	57.1	23.7	.9	.651	86.0	.402	1.087	174.0	411.2	.650	1.524	104.0	1.352	1.3	4.7	198.3	.358
4-8476.7	4-8530	.358	178.0	12.2	3.7	1.242	73.6	.305	.829	83.9	144.7	.576D	1.082A	103.2	.890	2.9	-.5	333.4	.262
		13.43	10.26	6.57	3.17	6.58	3.89	13.54	2/2/1	46.9	32.6	21.4	.468	5.386	157.6	117.9	22.4	80.3L	2.055
4-8020	4-8230	.297	32.7	6.8	-1.7	1.099	104.3	.325	1.291	296.2	497.4	.871	1.711A	106.1	.737	-.2	19.4	124.0	.164
4-8230	4-8482.8	.190	64.2	25.7	1.2	.625	84.0	.419	1.078	171.6	418.4	.626	1.530	106.3	1.349	1.2	3.8	202.6	.401
4-8482.8	4-8540	.401	179.5	9.6	3.4	1.204	70.9	.331	.770	100.2	161.2	.515D	1.025A	98.8	.840	3.3	-1.5	324.4	.232
		13.80	10.33	6.31	3.46	6.87	4.03	13.05	2/2/1	38.3	51.0	23.7	.373	4.879	164.2	123.9	15.8	85.0L	1.448
4-8030	4-8230	.297	41.1	4.3	-3.0	1.108	104.0	.335	1.330	300.0	491.5	.885	1.776A	107.9	.753	1.2	23.1	132.8	.182
4-8230	4-8469.5	.201	72.8	27.2	1.4	.617	81.4	.444	1.067	168.9	426.4	.594	1.541	109.1	1.346	1.1	3.1	208.1	.454
4-8469.5	4-8550	.454	184.2	7.2	3.0	1.172	67.9	.376	.728	112.2	172.5	.454D	1.001A	94.5	.797	3.7	-3.8	315.2	.232
		14.46	10.61	6.32	3.85	7.24	4.29	13.06	2/2/1	31.6	70.1	24.2	.292	4.775	168.8	129.9	11.1	89.7L	1.101
4-8060	4-8230	.289	55.2	27.7	2.1	1.140	102.8	.382	1.494	311.9	474.7	.923	2.065A	112.5	.805	-3.7	3.2	142.6	.246
4-8230	4-8428.7	.198	29.7	29.3	4.7	.651	92.2	.359	1.119	184.0	345.0	.717A	1.520D	86.0	1.368	-3.3	-20.2	217.2	.227
4-8428.7	4-8580	.227	199.2	-71.8	-9.8	1.264	90.2	.155	.856	358.2	545.1	.724	.989	89.1	.926	12.9	44.6	302.5	.235
		15.77	10.39	6.17	5.38	8.76	4.21	13.10	1/1/2	19.6	90.7	52.6	1.166	2.256	96.5	172.1	-81.2	63.7L	1.465
MARS ARRIVAL DATE = 2448240 (14 DEC 1990)																			
4-7980	4-8240	.322	3.8	-1.3	-.8	1.075	106.4	.318	1.177	280.8	526.3	.803	1.551A	96.2	.676	-1.3	16.3	73.9	.132
4-8240	4-8448.6	.210	40.1	-1.1	-5.2	.649	94.4	.363	1.129	187.8	375.4	.720	1.539D	94.1	1.367	7.0	39.1	193.7	.263
4-8448.6	4-8500	.263	206.6	18.9	3.5	1.417	87.4	.459	1.338	8.3	84.2	.724D	1.951A	113.6	1.111	.3	-7.0	341.8	.459
		14.11	11.31	6.80	2.80	6.22	4.50	17.59	2/2/1	90.9	3.5	23.1	.871	5.005	65.2	69.2	50.0	108.1D	3.488
4-7990	4-8240	.311	11.0	1.4	-.9	1.079	105.7	.313	1.198	284.6	520.3	.823	1.572A	98.5	.687	-1.2	17.7	87.2	.127
4-8240	4-8459.2	.195	39.4	14.6	-.3	.642	92.9	.372	1.118	185.0	389.4	.702	1.534D	97.8	1.363	2.2	11.6	191.7	.261
4-8459.2	4-8510	.261	191.2	19.1	3.6	1.356	82.3	.359	1.096	29.5	98.3	.703D	1.489A	110.5	1.037	1.3	-3.4	343.4	.380
		13.43	10.72	6.58	2.72	6.13	4.14	15.84	2/2/1	78.1	4.9	7.5	.885	15.313	93.3	34.9	81.4	98.5D	12.674
4-8000	4-8240	.302	18.2	3.7	-1.1	1.083	105.0	.311	1.220	288.4	514.3	.841	1.599A	100.6	.698	-.9	18.6	100.3	.129
4-8240	4-8469.8	.190	45.9	20.0	.7	.633	90.8	.388	1.103	181.2	402.4	.675	1.531D	101.5	1.358	1.4	5.9	194.8	.315
4-8469.8	4-8520	.315	180.6	15.3	3.8	1.293	76.9	.309	.928	60.3	122.1	.642D	1.215A	107.4	.957	2.4	-1.0	339.9	.316
		13.19	10.45	6.41	2.75	6.16	4.04	14.53	2/2/1	65.6	17.0	16.8	.607	6.859	144.3	110.8	35.7	76.1L	3.556
4-8010	4-8240	.295	25.5	5.6	-1.3	1.089	104.5	.312	1.246	292.2	508.3	.858	1.635A	102.6	.710	-.6	19.1	112.4	.136
4-8240	4-8476.3	.190	51.8	22.6	1.0	.626	89.1	.402	1.092	178.6	410.0	.654	1.531	103.8	1.354	1.2	4.4	198.8	.354
4-8476.3	4-8530	.354	177.9	12.3	3.6	1.243	73.8	.303	.831	83.0	144.4	.580D	1.083A	103.2	.892	2.9	-.5	333.6	.260
		13.17	10.30	6.27	2.87	6.29	4.02	13.52	2/2/1	54.3	32.3	21.9	.480	5.259	157.1	118.6	22.9	79.8L	2.044
4-8020	4-8240	.289	32.9	6.6	-1.7	1.095	104.0	.315	1.276	295.9	502.4	.873	1.678A	104.4	.723	-.1	19.7	123.0	.147
4-8240	4-8482.0	.191	58.1	24.6	1.2	.619	87.3	.416	1.083	176.2	416.6	.632	1.533	105.6	1.351	1.1	3.5	202.8	.391
4-8482.0	4-8540	.391	179.1	9.8	3.3	1.207	71.4	.323	.775	98.4	160.7	.524D	1.025A	98.7	.844	3.2	-1.3	325.1	.227
		13.32	10.23	6.17	3.09	6.50	4.06	12.98	2/2/1	44.5	50.4	24.1	.393	4.780	163.5	124.2	16.5	84.1L	1.484
4-8030	4-8240	.286	40.8	5.4	-2.6	1.102	103.5	.322	1.309	299.8	496.6	.868	1.730A	106.1	.737	.8	22.0	132.5	.161
4-8240	4-8488.0	.196	65.9	26.4	1.4	.612	85.1	.435	1.072	173.6	423.5	.606	1.538	108.1	1.348	1.0	2.9	207.8	.435
4-8488.0	4-8550	.435	183.3	7.4	2.9	1.179	68.9	.359	.736	109.4	172.0	.472D	1.001A	94.4	.807	3.5	-3.3	316.0	.222
		13.67	10.29	6.12	3.39	6.79	4.17	12.90	2/2/1	36.6	69.3	24.6	.316	4.690	168.1	129.5	11.9	88.1L	1.173
4-8060	4-8240	.278	53.6	34.4	3.7	1.130	102.1	.357	1.442	311.9	479.9	.927	1.957A	110.6	.783	-5.3	-3.1	141.8	.224
4-8240	4-8428.6	.212	27.9	24.1	3.7	.650	95.3	.365	1.130	189.4	345.1	.718A	1.543D	86.0	1.371	-2.2	-15.8	216.6	.224
4-8428.6	4-8580	.224	199.2	-71.3	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.4	302.6	.232
		15.37	10.52	5.97	4.84	8.23	4.56	13.06	1/1/2	26.4	90.7	58.5	1.201	2.048	96.3	196.4	-73.5	65.9L	1.258
4-8070	4-8240	.269	61.3	29.7	2.1	1.142	101.5	.374	1.502	316.2	474.7	.940	2.065A	112.0	.801	-3.6	1.1	148.0	.237
4-8240	4-8437.1	.220	24.9	31.8	6.5	.652	95.2	.360	1.134	189.3	358.5	.725A	1.543D	89.6	1.371	-4.9	-31.4	206.9	.226
4-8437.1	4-8590	.226	188.1	-71.3	-9.8	1.262	88.9	.155	.857	8.3	191.8	.724D	.990	87.9	.928	13.1	44.0	302.1	.239
		15.72	10.56	5.81	5.17	8.55	4.75	13.16	1/1/2	19.1	96.0	41.2	1.180	2.845	97.7	65.7	-76.5	77.7L	2.176
MARS ARRIVAL DATE = 2448250 (24 DEC 1990)																			
4-7970	4-8250	.344	357.1	-4.2	-.9	1.071	107.8	.333	1.159	276.0	536.5	.773	1.545A	91.7	.658	-1.5	14.2	58.3	.150
4-8250	4-8417.3	.237	29.5	19.5	2.5	.641	98.6	.391	1.131	193.9	326.3	.688A	1.573D	80.7	1.373	-1.0	-4.8	222.6	.291
4-8417.3	4-8490	.291	212.5	17.3	3.6	1.398	97.4	.426	1.224	335.1	451.3	.702	1.746A	113.3	1.078	-2.7	-18.0	331.9	.440
		13.55	12.39	7.24	3.16	6.57	5.15	17.16	2/1/1	111.2	6.0	24.3	.710	4.757	113.9	168.3	60.8	69.6L	2.666
4-7980	4-8250	.326	4.3	-1.5	-1.0	1.074	106.7	.321	1.176	280.1	530.7	.798	1.553A	94.3	.667	-1.3	16.2	69.6	.134
4-8250	4-8426.8	.235	26.8	20.2	3.0	.650	98.8	.376	1.146	195.2	342.8	.715A	1.576D	85.3	1.376	-1.4	-8.5	217.0	.232
4-8426.8	4-8500	.232	214.8	21.6	3.6	1.369	94.1	.362	1.123	344.5	455.2	.717	1.529A	110.4	1.045	-1.8	-13.9	338.9	.380
		14.83	11.99	6.89	2.84	6.25	5.10	15.84	2/1/1	100.1	5.0	30.2	1.120	3.839	94.0	207.3	66.1	83.2L	3.181
4-7980	4-8250	.326	4.3	-1.5	-1.0	1.074	106.7	.321	1.176	280.1	530.7	.798	1.553A	94.3	.667	-1.3	16.2	69.6	.134
4-8250	4-8442.4	.245	23.0	32.1	7.6	.652	98.2	.369	1.149	194.5	367.1	.724	1.573D	91.9	1.374	-5.9	-35.6	199.0	.242
4-8442.4	4-8500	.242	210.8	19.8	3.4	1.403	89.8	.427	1.267	.7	86.5	.726D	1.807A	112.6	1.092	-.3	-8.6	341.3	.433
		15.07	12.23	6.89	2.84	6.25	5.34	17.00	2/1/1	100.1	2.5	56.6	1.022	2.111	79.3	79.5	-76.6	100.1D	1.135
4-7980	4-8250	.326	4.3	-1.5	-1.0	1.074	106.7	.321	1.176	280.1	530.7	.798	1.553A	94.3	.667	-1.3	16.2	69.6	.134
4-8250	4-8451.0	.229	38.0	-.2	-5.2	.648	97.4	.373	1.141	192.8	379.0	.716	1.567D	95.1	1.370	7.0	37.4	191.6	.274
4-8451.0	4-8500	.274	204.9	18.5	3.5	1.422	86.3	.471	1.366	11.5	83.6	.722D	2.010A	114.0	1.118	.5	-6.4	341.9	.470
		14.69	11.85	6.89	2.84	6.25	4.96	17.84	2/2/1	100.1	3.9	22.2	.799	5.197	62.7	71.1	48.8	107.4D	3.356
4-7990	4-8250	.312	11.5	1.2	-1.0	1.078	105.8	.313	1.195	284.0	524.8	.821	1.568A	96.7	.677	-1.1	17.8	82.5	.125
4-8250	4-8460.7	.213	37.0	14.5	-.2	.640	95.9	.381	1.128	189.8	391.3	.698	1.556D	98.5	1.366	2.1	10.4	191.7	.272
4-8460.7	4-8510	.272	190.3	18.6	3.7	1.356	81.6	.364	1.096	32.1	98.7	.696D	1.495A	110.8	1.037	1.5	-3.1	343.0	.365
		13.63	11.17	6.61	2.66	6.08	4.56	15.95	2/2/1	87.7	5.3	8.2	.814	13.906	98.6	66.2	79.3	94.7D	10.505
4-8000	4-8250	.301	18.6	3.5	-1.2	1.082	105.0	.308	1.215	287.9	518.9	.840	1.590A	98.9	.688	-.9	19.0	96.0	.122
4-8250	4-8470.4	.205	42.5	19.2	.8	.629	93.9	.394	1.111	186.0	402.9	.673	1.549D	101.8	1.360	1.3	5.3	195.2	.321
4-8470.4	4-8520	.321	180.6	15.1	3.8	1.292	76.6	.311	.926	61.5	122.5	.636D	1.214A	107.5	.955	2.5	-1.0	339.6	.316
		13.38	10.78	6.39	2.61	6.02	4.38	14.57	2/2/1	74.8	17.3	17.4	.585	6.618	144.1	112.1	35.9	76.5L	3.265
4-8010	4-8250	.291	25.8	5.3	-1.4	1.086	104.3	.307	1.238	291.8	513.0	.858	1.618A	100.8	.699	-.6	19.6	109.1	.124
4-8250	4-8476.5	.201	47.7	21.6	1.1	.622	92.2	.406	1.100	183.3	409.9	.653	1.546D	103.8	1.356	1.1	3.9	199.0	.356
4-8476.5	4-8530	.356	178.0	12.3	3.6	1.242	73.7	.304	.830	83.5	144.6	.578D	1.083A	103.2	.891	2.9	-.5	333.5	.261
		13.17	10.51	6.21	2.66	6.07	4.30	13.53	2/2/1	62.5	32.5	22.4	.473	5.138	156.5	119.6	23.5	79.9L	1.958
4-8020	4-8250	.284	33.1	6.4	-1.7	1.092	103.8	.308	1.264	295.7	507.2	.875	1.653A	102.7	.711	-.1	20.2	121.0	.132
4-8250	4-8481.8	.200	53.2	23.6	1.2	.615	90.6	.418	1.089	180.9	415.9	.634	1.544D	105.7	1.353	.9	3.1	202.9	.390
4-8481.8	4-8540	.390	179.1	9.8	3.3	1.208	71.5	.322	.775	98.1	160.7	.526D	1.025A	98.7	.845	3.2	-1.2	325.2	.227
		13.12	10.32	6.07	2.80	6.21	4.25	12.97	2/2/1	51.3	50.3	24.6	.396	4.689	162.9	124.9	17.1	83.6L	1.460
4-8030	4-8250	.278	40.8	5.9	-2.4	1.098	103.2	.312	1.293	299.6	501.5	.890	1.696A	104.4	.723	.7	21.7	131.6	.143
4-8250	4-8487.4	.200	60.0	25.4	1.4	.607	88.6	.433	1.078	178.2	422.0	.611	1.544	107.6	1.350	.9	2.6	207.6	.427
4-8487.4	4-8550	.427	182.9	7.6	2.9	1.182	69.3	.353	.740	108.2	171.9	.479D	1.001A	94.4	.811	3.5	-3.1	316.3	.218
		13.25	10.23	5.97	3.02	6.43	4.26	12.84	2/2/1	42.4	68.9	25.1	.330	4.608	167.4	129.8	12.6	87.4L	1.189

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448250
24 DEC 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-8040	4-8250	.279	49.5	.9	-4.3	1.105	102.7	.318	1.326	303.6	495.9	.904	1.747A	106.0	.736	2.6	27.4	142.1	.160
4-8250	4-8493.9	.204	69.0	27.2	1.6	.597	86.0	.454	1.065	175.1	429.1	.582	1.549	110.1	1.346	.8	2.1	213.3	.474
4-8493.9	4-8560	.474	189.0	5.5	2.4	1.159	66.8	.395	.712	116.3	179.6	.431D	.993A	90.2	.781	3.7	-5.6	309.8	.234
		13.72	10.34	5.99	3.37	6.78	4.36	13.10	2/2/1	36.5	85.5	24.5	.267	4.708	171.1	135.4	8.9	91.1D	.990
4-8060	4-8250	.291	49.9	49.4	7.6	1.122	101.5	.337	1.404	312.0	485.1	.931	1.877A	108.9	.764	-9.1	-15.6	136.8	.224
4-8250	4-8428.6	.234	26.5	20.5	3.1	.651	98.8	.374	1.147	195.3	345.9	.718A	1.577D	86.2	1.376	-1.6	-9.6	215.3	.224
4-8428.6	4-8580	.224	199.2	-71.4	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.5	302.6	.232
		16.12	11.29	6.20	4.83	8.21	5.09	13.06	1/1/2	39.2	90.7	62.6	1.198	1.926	95.6	202.3	-67.7	68.2L	1.109
4-8070	4-8250	.257	60.1	34.9	5.2	1.131	100.9	.350	1.452	316.4	479.9	.944	1.960A	110.2	.779	-4.7	-3.9	147.7	.215
4-8250	4-8436.9	.235	25.2	23.9	4.4	.653	98.6	.370	1.150	195.2	359.0	.725A	1.575D	89.7	1.375	-2.7	-16.2	205.6	.211
4-8436.9	4-8590	.211	189.0	-69.2	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5	.227
		15.31	10.70	5.60	4.61	8.00	5.09	12.98	1/1/2	24.8	96.3	52.1	1.350	2.278	97.0	165.9	-79.6	80.5L	1.725
MARS ARRIVAL DATE = 2448260 (3 JAN 1991)																			
4-7980	4-8260	.332	4.8	-1.6	-1.1	1.074	107.0	.326	1.176	279.2	534.9	.792	1.559A	92.5	.660	-1.3	16.1	66.2	.139
4-8260	4-8427.4	.264	25.7	17.9	2.7	.657	102.6	.388	1.171	201.5	345.1	.717A	1.625D	85.8	1.383	-1.0	-6.1	214.4	.231
4-8427.4	4-8500	.231	214.9	21.5	3.6	1.371	94.0	.364	1.128	345.1	454.8	.717	1.538A	110.5	1.047	-1.7	-13.7	339.0	.382
		15.77	12.83	7.01	2.94	6.35	5.82	15.88	2/1/1	108.4	4.8	27.6	1.122	4.189	89.1	207.6	-82.2	87.2L	3.579
4-7980	4-8260	.332	4.8	-1.6	-1.1	1.074	107.0	.326	1.176	279.2	534.9	.792	1.559A	92.5	.660	-1.3	16.1	66.2	.139
4-8260	4-8446.5	.267	23.3	29.8	7.5	.655	101.4	.382	1.167	199.7	373.6	.721	1.613D	93.8	1.378	-5.7	-32.7	193.6	.254
4-8446.5	4-8500	.254	208.2	19.3	3.4	1.412	88.3	.447	1.310	5.6	85.0	.725D	1.895A	113.2	1.104	.1	-7.5	341.7	.449
		15.87	12.93	7.01	2.94	6.35	5.92	17.36	2/1/1	108.4	3.1	53.8	.933	2.211	75.7	86.8	-74.1	102.1D	1.129
4-7980	4-8260	.332	4.8	-1.6	-1.1	1.074	107.0	.326	1.176	279.2	534.9	.792	1.559A	92.5	.660	-1.3	16.1	66.2	.139
4-8260	4-8453.4	.252	36.5	1.0	-5.1	.649	100.6	.386	1.157	197.8	382.8	.711	1.603D	96.3	1.375	7.0	35.2	189.7	.268
4-8453.4	4-8500	.288	203.1	18.1	3.6	1.428	85.2	.485	1.397	14.8	83.1	.719D	2.075A	114.5	1.126	.8	-5.9	341.9	.482
		15.49	12.55	7.01	2.94	6.35	5.54	18.12	2/2/1	108.4	4.3	20.8	.723	5.527	59.5	73.8	47.3	107.3D	3.274
4-7990	4-8260	.316	11.9	1.0	-1.2	1.077	106.0	.315	1.193	283.4	529.2	.817	1.569A	94.9	.669	-1.1	17.9	78.1	.125
4-8260	4-8462.4	.234	35.5	14.8	.1	.639	99.0	.393	1.141	194.6	393.9	.693	1.589D	99.4	1.369	1.8	8.7	191.6	.287
4-8462.4	4-8510	.287	189.4	17.9	3.8	1.356	80.6	.370	1.097	35.6	99.3	.691D	1.502A	111.2	1.037	1.7	-2.8	342.6	.393
		14.45	11.77	6.68	2.68	6.09	5.09	16.10	2/2/1	96.9	5.8	9.5	.728	12.075	102.8	85.5	76.6	92.0D	8.067
4-8000	4-8260	.302	19.0	3.3	-1.3	1.081	105.1	.308	1.212	287.4	523.4	.838	1.585A	97.1	.678	-.8	19.3	91.4	.116
4-8260	4-8471.4	.224	40.3	18.7	.9	.628	97.1	.404	1.122	190.7	404.1	.669	1.575D	102.3	1.363	1.1	4.4	195.7	.332
4-8471.4	4-8520	.332	180.6	14.8	3.9	1.290	76.0	.317	.921	64.1	123.5	.630D	1.213A	107.7	.953	2.6	-1.0	339.0	.322
		13.80	11.25	6.41	2.54	5.96	4.85	14.65	2/2/1	84.2	17.9	18.1	.545	6.354	143.8	113.7	36.1	77.4L	2.919
4-8010	4-8260	.290	26.1	5.2	-1.5	1.085	104.3	.304	1.233	291.4	517.7	.858	1.607A	99.1	.689	-.5	20.2	105.1	.116
4-8260	4-8477.2	.218	44.8	20.9	1.2	.619	95.5	.413	1.109	187.9	410.6	.650	1.567D	104.2	1.359	.9	3.2	199.6	.365
4-8477.2	4-8530	.365	178.2	12.1	3.7	1.240	73.3	.309	.826	85.2	145.2	.571D	1.082A	103.3	.888	3.0	-.6	333.0	.264
		13.40	10.89	6.19	2.52	5.93	4.70	13.59	2/2/1	71.4	33.0	23.0	.452	5.020	156.0	120.7	24.0	80.6L	1.615
4-8020	4-8260	.280	33.4	6.3	-1.8	1.089	103.6	.303	1.256	295.4	512.0	.875	1.636A	101.0	.699	-.1	20.8	118.1	.120
4-8260	4-8482.3	.214	49.6	22.7	1.3	.611	93.9	.423	1.097	185.4	416.1	.653	1.562D	105.9	1.355	.8	2.6	203.5	.395
4-8482.3	4-8540	.395	179.3	9.7	3.3	1.206	71.2	.326	.773	99.1	160.9	.521D	1.025A	98.8	.843	3.3	-1.3	324.8	.229
		13.18	10.59	6.01	2.58	6.00	4.59	13.01	2/2/1	59.4	50.7	25.1	.385	4.606	162.3	125.9	17.6	84.1L	1.586
4-8030	4-8260	.272	40.6	6.3	-2.3	1.095	103.0	.304	1.281	299.4	506.3	.892	1.670A	102.7	.711	-.5	21.9	129.8	.129
4-8260	4-8487.5	.210	55.4	24.5	1.5	.603	92.1	.436	1.085	182.7	421.6	.612	1.558D	107.6	1.352	.7	2.1	207.9	.428
4-8487.5	4-8550	.428	182.9	7.5	2.9	1.182	69.3	.354	.739	108.4	171.9	.478D	1.001A	94.4	.811	3.5	-3.2	316.3	.219 *
		13.11	10.38	5.87	2.74	6.15	4.51	12.85	2/2/1	49.1	69.0	25.5	.328	4.531	166.7	130.5	13.3	87.4L	1.156
4-8040	4-8260	.268	48.8	3.3	-3.5	1.101	102.4	.308	1.309	303.5	500.8	.907	1.712A	104.3	.722	1.8	25.3	140.7	.142
4-8260	4-8493.4	.209	63.2	26.3	1.6	.593	89.7	.453	1.072	179.7	427.9	.587	1.556	109.7	1.348	.7	1.8	213.3	.468
4-8493.4	4-8560	.468	188.6	5.6	2.4	1.162	67.1	.390	.715	115.4	179.6	.436D	.993A	90.2	.785	3.7	-5.5	309.9	.231
		13.27	10.28	5.79	2.99	6.40	4.48	13.04	2/2/1	41.2	85.4	24.9	.274	4.635	170.4	135.7	9.6	90.6D	.997
4-8070	4-8260	.256	58.0	44.3	5.3	1.123	100.4	.330	1.415	316.6	485.2	.948	1.882A	108.4	.761	-6.7	-12.0	145.1	.202
4-8260	4-8436.9	.260	25.0	19.7	3.4	.658	102.2	.382	1.174	201.3	360.1	.725	1.623D	90.0	1.382	-1.7	-11.0	203.4	.211
4-8436.9	4-8590	.211	189.0	-69.3	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5	.227
		15.65	11.33	5.59	4.32	7.71	5.75	12.98	1/1/2	33.6	96.3	59.0	1.346	2.030	95.8	187.7	-70.7	83.6L	1.587
4-8060	4-8260	.236	65.5	35.8	2.9	1.133	99.6	.342	1.458	321.3	480.3	.960	1.956A	109.6	.775	-4.3	-5.1	153.1	.203
4-8260	4-8445.7	.264	23.8	27.7	6.6	.655	101.5	.382	1.168	199.9	372.6	.721	1.614D	93.5	1.378	-4.8	-28.2	194.4	.242
4-8445.7	4-8600	.243	179.8	-70.1	-10.4	1.261	87.5	.159	.858	18.3	198.3	.721D	.994	86.6	.931	13.8	43.5	302.7	.254
		15.47	11.08	5.25	4.39	7.78	5.83	13.42	1/1/1	23.8	100.7	42.7	1.023	2.747	96.4	59.8	-80.5	99.4D	1.786
MARS ARRIVAL DATE = 2448270 (13 JAN 1991)																			
4-7990	4-8270	.321	12.4	.9	-1.2	1.077	106.2	.319	1.193	282.6	533.4	.812	1.574A	93.1	.661	-1.0	17.9	74.4	.129
4-8270	4-8464.5	.260	34.8	15.5	.5	.641	102.3	.408	1.157	199.3	396.9	.686	1.629D	100.5	1.373	1.5	6.5	191.7	.307
4-8464.5	4-8510	.307	188.5	17.2	3.9	1.556	79.4	.378	1.096	39.7	100.2	.682D	1.510A	111.7	1.037	2.0	-2.6	342.0	.402
		15.25	12.51	6.78	2.75	6.16	5.73	16.30	2/2/1	105.3	6.5	11.1	.637	10.297	106.2	99.4	73.7	89.9L	5.919
4-8000	4-8270	.304	19.4	3.2	-1.3	1.080	105.2	.310	1.210	286.8	527.8	.835	1.585A	95.4	.670	-.8	19.5	86.9	.117
4-8270	4-8472.7	.248	39.1	18.7	1.1	.628	100.4	.416	1.136	195.3	405.9	.663	1.609D	103.1	1.367	.9	3.3	196.3	.348
4-8472.7	4-8520	.348	180.7	14.3	4.0	1.287	75.1	.325	.915	67.4	124.6	.618D	1.212A	108.1	.949	2.8	-1.0	336.2	.329
		14.41	11.88	6.46	2.53	5.95	5.42	14.78	2/2/1	93.4	18.7	18.9	.496	6.088	143.4	115.6	36.5	78.7L	2.522
4-8010	4-8270	.290	26.5	5.1	-1.5	1.084	104.3	.303	1.229	290.9	522.2	.856	1.602A	97.4	.680	-.5	20.7	100.6	.112
4-8270	4-8478.3	.239	43.1	20.5	1.3	.619	98.9	.424	1.120	192.4	411.9	.645	1.596D	104.8	1.362	.7	2.4	200.4	.379
4-8478.3	4-8530	.379	178.5	11.8	3.8	1.236	72.5	.319	.820	87.9	146.1	.559D	1.081A	103.6	.882	3.1	-.7	332.1	.270
		13.84	11.40	6.19	2.43	5.85	5.21	13.68	2/2/1	60.6	33.9	23.6	.419	4.899	155.5	122.2	24.4	81.6L	1.634
4-8020	4-8270	.278	33.6	6.3	-1.8	1.087	103.5	.300	1.250	295.0	516.6	.875	1.624A	99.3	.689	-.1	21.5	114.3	.112
4-8270	4-8483.2	.232	47.3	22.1	1.5	.610	97.3	.433	1.107	189.8	417.0	.628	1.586D	106.4	1.358	.6	1.9	204.3	.407
4-8483.2	4-8540	.407	179.8	9.5	3.4	1.202	70.6	.335	.768	101.1	161.4	.510D	1.025A	98.9	.837	3.4	-1.6	324.1	.234
		13.45	11.02	5.97	2.44	5.85	5.04	13.09	2/2/1	67.9	51.4	25.6	.364	4.519	161.8	127.2	16.1	84.9L	1.279
4-8030	4-8270	.268	40.8	6.5	-2.2	1.092	102.8	.299	1.272	299.2	511.1	.892	1.652A	101.1	.700	.5	22.3	127.2	.117
4-8270	4-8486.1	.226	52.4	23.7	1.6	.601	95.6	.443	1.094	187.1	422.1	.609	1.576D	108.0	1.355	.5	1.6	208.7	.436
4-8486.1	4-8550	.436	183.3	7.4	2.9	1.179	68.9	.361	.736	109.6	172.1	.470D	1.001A	94.4	.806	3.5	-3.4	315.9	.223
		13.21	10.69	5.79	2.52	5.94	4.90	12.91	2/2/1	56.5	69.4	25.9	.316	4.457	166.1	131.7	13.8	87.8L	1.092
4-8040	4-8270	.261	48.4	4.8	-3.1	1.097	102.1	.300	1.297	303.3	505.7	.908	1.686A	102.7	.710	1.4	24.6	139.0	.127
4-8270	4-8493.6	.222	59.0	25.4	1.7	.591	93.4	.457	1.079	184.0	427.6	.587	1.572D	109.8	1.350	.5	1.3	213.8	.471
4-8493.6	4-8560	.471	186.8	5.5	2.4	1.161	66.9	.392	.713	115.8	179.6	.434D	.993A	90.2	.783	3.7	-5.5	309.9	.233
		13.14	10.45	5.67	2.70	6.11	4.78	13.07	2/2/1	47.2	85.4	25.3	.271	4.563	169.8	136.4	10.2	90.6D	.965
4-8060	4-8270	.231	63.9	42.6	4.3	1.125	99.1	.323	1.422	321.6	485.6	.963	1.881A	107.9	.757	-5.5	-11.2	151.5	.189
4-8270	4-8445.7	.288	25.6	20.3	3.9	.664	105.3	.399	1.198	206.2	373.9	.720	1.675D	93.9	1.386	-2.1	-12.5	192.6	.234
4-8445.7	4-8600	.234	180.5	-68.9	-10.0	1.261	87.5	.159	.858	18.3	198.2	.721D	.994	86.6	.931	13.4	43.0	302.8	.247
		15.65	11.65	5.17	4.02	7.41	6.46	13.30	1/1/1	30.7	101.0	56.9	1.101	2.097	95.0	178.7	-73.3	100.5D	1.208
MARS ARRIVAL DATE = 2448280 (23 JAN 1991)																			
4-8000	4-8280	.308	19.8	3.2	-1.4	1.080	105.5	.313	1.209	286.1	531.9	.831	1.588A	93.6	.663	-.7	19.7	82.9	.120
4-8280	4-8474.4	.274	38.8	18.9	1.4	.632	103.9	.432	1.153	199.9	408.2	.655	1.652D	104.0	1.372	.6	2.1	197.1	.369
4-8474.4	4-8520	.369	180.8	13.6	4.1	1.283	73.9	.335	.906	71.7	126.4	.603D	1.210A	108.6	.943	3.0	-1.0	337.2	.337
		15.21	12.64	6.53	2.57	5.99	6.10	14.94	2/2/1	102.0	19.7	19.9	.440	5.798	143.2	117.8	36.5	80.1L	2.113
4-8010	4-8280	.292	26.8	5.1	-1.6	1.083	104.5	.304	1.227	290.3	526.5	.854	1.600A	95.8	.671	-.5	21.1	96.0	.110
4-8280	4-8479.8	.264	42.4	20.4	1.5	.621	102.3	.438	1.135	196.8	413.7	.638	1.633D	105.7	1.367	.5	1.6	201.3	.398
4-8479.8	4-8530	.398	179.0	11.4	3.8	1.231	71.5	.331	.811	91.5	147.4	.542D	1.080A	103.9	.875	3.3	-1.0	331.0	.277
		14.47	12.06	6.22	2.41	5.83	5.83	13.82	2/2/1	89.7	35.1	24.2	.380	4.772	155.1	123.9	24.6	82.9L	1.434
4-8020	4-8280	.278	33.8	6.4	-1.8	1.086	103.6	.298	1.245	294.6	521.0	.874	1.617A	97.7	.681	-.1	22.1	110.0	.106
4-8280	4-8484.5	.255	46.1	21.8	1.6	.611	100.8	.445	1.120	194.1	418.4	.621	1.619D	107.1	1.362	.4	1.2	205.4	.423
4-8484.5	4-8540	.423	180.4	9.2	3.5	1.197	69.8	.348	.760	103.8	162.1	.495D	1.024A	99.1	.829	3.5	-1.9	323.2	.242
		13.92	11.57	5.97	2.34	5.76	5.61	13.21	2/2/1	78.9	52.4	26.1	.335	4.432	161.3	128.7	18.4	86.0L	1.151

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448260
23 JAN 1991

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8030	4-8280	.266	40.9	6.8	-2.2	1.090	102.7	.295	1.266	298.9	515.7	.892	1.639A	99.4	.690	.4	23.0	123.7	.108
4-8280	4-8489.2	.247	50.6	23.2	1.7	.601	99.1	.454	1.105	191.3	423.1	.604	1.606D	108.6	1.358	.4	1.0	209.8	.450
4-8489.2	4-8550	.450	184.0	7.2	3.0	1.174	68.1	.373	.729	111.6	172.4	.458D	1.001A	94.5	.799	3.6	-3.7	315.4	.230
		15.52	11.15	5.75	2.37	5.79	5.40	13.02	2/2/1	64.6	70.0	26.4	.297	4.382	165.6	133.1	14.2	88.6L	1.003
MARS ARRIVAL DATE = 2448290 (2 FEB 1991)																			
4-8010	4-8290	.295	27.2	5.1	-1.6	1.083	104.6	.306	1.226	289.7	530.6	.850	1.601A	94.1	.664	-.4	21.4	91.8	.111
4-8290	4-8481.5	.292	42.5	20.5	1.8	.625	106.0	.456	1.155	201.1	415.9	.626	1.661D	106.7	1.372	.2	.7	202.4	.421
4-8481.5	4-8530	.421	179.6	11.0	4.0	1.224	70.3	.348	.800	95.6	148.8	.522D	1.079A	104.4	.865	3.6	-1.3	329.7	.268
		15.27	12.85	6.28	2.43	5.84	6.56	14.00	2/2/1	98.4	56.4	24.9	.359	4.642	154.7	125.9	24.8	84.4L	1.234
4-8020	4-8290	.279	34.1	6.5	-1.8	1.086	103.6	.298	1.243	294.1	525.3	.872	1.614A	96.1	.673	-.1	22.7	105.4	.104
4-8290	4-8486.1	.281	45.9	21.7	1.8	.614	104.4	.481	1.136	198.2	420.3	.612	1.660D	108.1	1.387	.2	.5	206.7	.445
4-8486.1	4-8540	.445	181.3	8.9	3.8	1.189	68.6	.366	.750	107.2	163.0	.476D	1.024A	99.4	.819	3.7	-2.4	322.0	.252
		14.56	12.26	5.99	2.30	5.72	6.27	13.38	2/2/1	86.0	53.6	26.6	.304	4.340	160.9	130.6	18.6	87.3L	1.015

STOPOVER TIME = 0 DAYS — 1990 INBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2448200 = 4 NOV 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-7950	4-8200	.343	339.6	-8.9	-.1	1.065	108.0	.330	1.127	272.5	526.5	.756	1.499A	96.4	.682	-1.8	11.7	54.4	.155
4-8200	4-8461.0	.173	57.6	20.4	-.1	.665	82.1	.369	1.099	166.0	394.5	.693	1.505	99.1	1.357	2.0	9.7	188.6	.274
4-8461.0	4-8510	.274	190.2	18.5	3.7	1.356	81.4	.365	1.097	32.7	98.8	.697D	1.497A	110.9	1.037	1.5	-3.1	343.0	.387
		14.14	10.87	7.22	3.27	6.67	3.66	15.98	2/2/1	89.1	5.4	8.9	.799	12.882	80.1	152.8	-72.7	107.3D	9.490
4-7960	4-8200	.335	347.1	-5.9	-.1	1.070	107.3	.325	1.148	276.1	520.1	.775	1.522A	99.1	.694	-1.8	14.0	67.0	.152
4-8200	4-8473.5	.192	67.0	24.5	.7	.658	79.1	.402	1.087	162.8	411.1	.651	1.524	104.0	1.352	1.6	5.8	193.3	.358
4-8473.5	4-8520	.358	180.7	14.1	4.0	1.285	74.6	.329	.911	69.4	125.5	.611D	1.211A	108.3	.946	2.9	-1.0	337.7	.332
		14.34	11.14	7.05	3.20	6.60	4.09	14.85	2/2/1	76.6	19.1	14.8	.469	7.742	145.0	108.3	34.9	80.9L	3.163
4-7970	4-8200	.329	354.6	-2.8	-.1	1.076	106.9	.324	1.173	279.6	513.6	.793	1.553A	101.5	.707	-1.8	15.6	79.3	.155
4-8200	4-8481.9	.214	74.5	26.3	1.0	.652	76.3	.433	1.078	160.5	422.0	.611	1.544	107.6	1.349	1.5	4.5	196.8	.427
4-8481.9	4-8530	.427	179.8	10.9	4.0	1.223	70.0	.352	.798	96.5	149.1	.517D	1.078A	104.5	.863	3.6	-1.4	329.4	.290
		14.83	11.56	6.95	3.27	6.68	4.61	14.05	2/2/1	64.6	36.7	19.9	.330	5.789	159.8	117.8	20.2	86.3L	1.581
4-7980	4-8200	.327	1.9	.3	-.1	1.082	106.5	.327	1.201	283.1	507.2	.808	1.594A	103.7	.721	-1.7	16.5	90.5	.165
4-8200	4-8490.6	.249	82.2	27.2	1.4	.645	72.4	.476	1.068	158.1	433.6	.560	1.576	111.9	1.346	1.5	3.6	205.7	.512
4-8490.6	4-8540	.512	183.7	8.1	3.9	1.166	65.1	.422	.720	116.3	165.0	.416D	1.023A	100.4	.784	4.3	-3.7	319.3	.288
		15.61	12.34	6.89	3.47	6.87	5.45	14.01	2/2/1	53.8	56.5	22.3	.229	5.167	166.9	126.3	13.0	93.1D	.955
4-8010	4-8200	.329	23.4	8.5	-.4	1.109	106.0	.358	1.320	293.6	488.3	.848	1.793A	109.9	.772	-1.5	16.8	115.6	.217
4-8200	4-8421.7	.193	40.1	42.6	7.1	.666	84.3	.358	1.099	169.5	335.3	.706A	1.493	83.6	1.363	-6.1	-31.4	220.5	.274
4-8421.7	4-8570	.274	210.1	-75.0	-12.1	1.265	91.4	.157	.856	349.8	538.0	.722	.991A	90.4	.923	14.9	45.9	302.3	.266
		15.70	11.04	6.95	4.66	8.05	4.10	13.62	2/1/2	29.8	85.7	43.9	.799	2.674	93.3	61.5	-79.9	53.4L	1.337
MARS ARRIVAL DATE = 2448210 (14 NOV 1990)																			
4-7950	4-8210	.347	340.1	-9.3	-.3	1.064	108.3	.333	1.125	271.7	531.2	.750	1.501A	94.3	.673	-1.8	10.9	49.9	.157
4-8210	4-8459.1	.169	52.2	18.5	-.2	.658	84.7	.364	1.102	170.7	390.7	.700	1.503	98.1	1.358	2.1	11.0	189.8	.259
4-8459.1	4-8510	.259	191.3	19.2	3.6	1.356	82.4	.358	1.096	29.2	98.3	.703D	1.489A	110.5	1.037	1.3	-3.4	343.4	.380
		14.19	10.88	7.31	3.31	6.71	3.57	15.83	2/2/1	99.0	4.8	8.3	.894	13.778	80.5	156.8	-72.0	107.7D	11.429
4-7960	4-8210	.336	347.7	-6.3	-.3	1.069	107.4	.325	1.145	275.4	524.9	.772	1.517A	97.0	.684	-1.7	13.4	62.2	.148
4-8210	4-8471.6	.181	61.6	23.6	.6	.650	82.0	.392	1.089	167.2	407.1	.663	1.516	102.8	1.353	1.6	6.2	193.5	.335
4-8471.6	4-8520	.335	180.6	14.7	3.9	1.289	75.8	.318	.920	64.7	123.7	.627D	1.213A	107.8	.952	2.6	-1.0	336.8	.323
		14.02	10.91	7.08	3.11	6.52	3.83	14.67	2/2/1	86.7	18.0	15.3	.535	7.532	144.6	108.5	35.3	78.8L	3.497
4-7970	4-8210	.328	355.1	-3.2	-.3	1.074	106.8	.321	1.166	279.0	516.5	.792	1.541A	99.5	.695	-1.7	15.3	75.0	.146
4-8210	4-8479.4	.195	69.2	25.7	1.0	.644	79.7	.416	1.080	164.8	417.0	.631	1.529	105.9	1.350	1.4	4.7	198.3	.393
4-8479.4	4-8530	.392	178.9	11.5	3.8	1.232	71.8	.328	.813	90.5	147.1	.547D	1.080A	103.8	.877	3.3	-.9	331.3	.275
		14.13	11.06	6.91	3.07	6.48	4.14	13.78	2/2/1	74.2	34.8	20.4	.390	5.658	158.9	117.4	21.1	83.5L	1.817
4-7980	4-8210	.322	2.4	-.2	-.4	1.079	106.3	.321	1.191	282.6	512.2	.809	1.574A	101.8	.708	-1.6	16.6	87.3	.150
4-8210	4-8486.9	.215	77.0	27.1	1 2	.638	76.8	.446	1.071	162.4	426.5	.593	1.548	109.2	1.347	1.4	3.8	204.0	.456
4-8486.9	4-8540	.456	181.7	8.7	3.6	1.185	68.0	.375	.744	108.9	163.4	.465D	1.024A	99.5	.813	3.8	-2.6	321.5	.258
		14.59	11.43	6.80	3.16	6.56	4.63	13.48	2/2/1	62.3	54.1	22.7	.289	5.085	165.9	124.7	14.1	89.4L	1.178
4-8010	4-8210	.317	24.2	7.2	-.8	1.102	105.5	.341	1.293	293.2	493.4	.852	1.734A	108.0	.758	-1.1	17.6	116.2	.191
4-8210	4-8421.4	.184	38.7	35.1	5.1	.657	86.5	.361	1.100	173.8	333.7	.703A	1.497	83.1	1.364	-3.9	-20.9	221.4	.261
4-8421.4	4-8570	.261	209.1	-73.6	-11.4	1.265	91.4	.157	.856	349.4	538.1	.721	.991A	90.4	.923	14.2	45.5	302.7	.255
		14.64	10.59	6.70	4.05	7.44	3.89	13.44	2/1/2	34.7	85.6	53.1	.881	2.256	94.0	187.4	-83.1	55.6L	1.089
MARS ARRIVAL DATE = 2448220 (24 NOV 1990)																			
4-7950	4-8220	.355	340.7	-9.5	-.4	1.064	108.7	.340	1.125	270.8	535.7	.743	1.507A	92.2	.664	-1.8	10.4	46.2	.163
4-8220	4-8458.2	.172	47.1	16.7	-.3	.652	87.4	.364	1.106	175.4	388.7	.704	1.508	97.5	1.359	2.2	11.9	190.9	.253
4-8458.2	4-8510	.253	191.8	19.5	3.6	1.356	82.8	.356	1.095	27.7	98.1	.705D	1.485A	110.3	1.037	1.2	-3.5	343.6	.377
		14.54	11.10	7.46	3.44	6.84	3.63	15.77	2/2/1	108.0	4.6	7.7	.938	14.922	83.4	167.2	-72.9	105.9D	13.053
4-7960	4-8220	.340	348.2	-6.6	-.5	1.068	107.7	.328	1.142	274.7	529.6	.768	1.517A	95.0	.674	-1.7	12.8	57.6	.148
4-8220	4-8470.4	.177	55.8	22.4	.6	.643	84.9	.387	1.092	171.8	404.4	.670	1.515	102.0	1.354	1.5	6.3	193.9	.321
4-8470.4	4-8520	.321	180.6	15.1	3.8	1.292	76.6	.312	.926	61.6	122.5	.637D	1.215A	107.5	.955	2.5	-1.0	339.6	.318
		14.03	10.90	7.15	3.13	6.53	3.75	14.58	2/2/1	96.6	17.3	15.7	.584	7.323	144.4	109.0	35.6	77.2L	3.691
4-7970	4-8220	.328	355.6	-3.6	-.5	1.072	106.9	.321	1.162	278.4	523.3	.789	1.535A	97.6	.685	-1.6	15.0	70.2	.141
4-8220	4-8477.7	.185	65.1	24.8	.9	.637	82.9	.406	1.083	169.3	413.4	.643	1.523	104.7	1.351	1.4	4.8	198.1	.371
4-8477.7	4-8530	.370	178.3	11.9	3.7	1.239	73.0	.313	.824	86.3	145.6	.566D	1.081A	103.4	.885	3.1	-.6	332.6	.266
		13.82	10.85	6.93	2.97	6.38	3.92	13.62	2/2/1	84.1	33.4	20.9	.438	5.521	158.2	117.5	21.8	81.6L	1.980
4-7980	4-8220	.320	2.9	-.7	-.5	1.077	106.2	.318	1.184	282.0	517.0	.808	1.561A	99.9	.696	-1.5	16.5	83.2	.140
4-8220	4-8484.4	.197	70.8	26.5	1.2	.631	80.6	.429	1.074	167.0	421.7	.613	1.534	107.4	1.348	1.3	3.9	203.1	.422
4-8484.4	4-8540	.422	180.4	9.2	3.5	1.197	69.8	.347	.760	103.6	162.1	.496D	1.024A	99.1	.830	3.5	-1.9	323.2	.241
		13.91	10.96	6.76	2.95	6.36	4.20	13.20	2/2/1	71.5	52.3	23.2	.336	4.983	165.0	124.0	15.0	86.8L	1.345
4-7990	4-8220	.314	10.1	2.1	-.6	1.083	105.8	.318	1.210	285.6	510.8	.825	1.594A	102.1	.709	-1.4	17.4	95.5	.145
4-8220	4-8492.2	.219	80.0	27.7	1.4	.623	77.3	.462	1.063	164.2	431.2	.572	1.554	110.8	1.345	1.2	3.1	209.4	.489
4-8492.2	4-8550	.489	185.9	6.8	3.1	1.159	66.1	.406	.712	116.9	173.0	.422D	1.001A	94.7	.777	3.9	-4.6	314.1	.251
		14.40	11.34	6.64	3.05	6.46	4.70	13.37	2/2/1	59.7	71.4	23.8	.251	4.858	169.7	131.0	10.2	92.2D	.968
4-8020	4-8220	.306	32.4	7.1	-1.6	1.103	104.7	.338	1.312	296.5	492.4	.868	1.756A	107.9	.753	-.2	19.3	124.2	.186
4-8220	4-8429.0	.195	30.8	37.5	6.7	.656	89.4	.354	1.112	178.9	345.8	.718A	1.505	86.3	1.366	-5.3	-31.5	217.1	.242
4-8429.0	4-8560	.241	199.1	-73.7	-10.6	1.264	90.2	.155	.856	358.6	545.0	.724	.989	89.1	.926	15.7	45.3	302.1	.247
		14.58	10.65	6.50	3.93	7.33	4.15	13.29	2/1/2	32.8	90.6	43.1	1.030	2.720	96.2	72.1	-78.1	61.3L	1.773
4-8030	4-8220	.313	42.1	1.4	-4.1	1.115	104.5	.352	1.358	300.2	486.5	.881	1.836A	109.7	.770	2.2	26.2	133.0	.207
4-8220	4-8440.6	.227	51.7	-17.4	-11.5	.658	89.2	.350	1.115	178.6	363.9	.725	1.505	91.0	1.365	13.1	63.0	201.1	.346
4-8440.6	4-8590	.346	167.3	61.2	15.7	1.261	88.1	.156	.856	13.9	191.8	.723D	.990	87.8	.928	-12.4	-66.4	11.4	.228
		15.96	11.53	6.63	4.43	7.82	4.90	13.00	2/2/1	27.8	96.3	20.3	.502	5.684	96.4	36.6	36.2	82.0L	2.352
MARS ARRIVAL DATE = 2448230 (4 DEC 1990)																			
4-7950	4-8230	.365	341.3	-9.7	-.6	1.064	109.2	.348	1.126	269.8	540.0	.734	1.518A	90.0	.656	-1.7	10.1	43.5	.174
4-8230	4-8458.4	.181	42.8	15.4	-.4	.646	90.1	.366	1.111	180.2	388.4	.704	1.518D	97.5	1.361	2.3	12.1	191.5	.254
4-8458.4	4-8510	.254	191.8	19.5	3.6	1.356	82.8	.356	1.095	27.9	98.1	.705D	1.485A	110.4	1.037	1.3	-3.5	343.5	.377
		15.16	11.50	7.68	3.66	7.06	3.82	15.78	2/2/1	115.9	4.7	7.3	.931	15.645	87.9	183.8	-74.1	102.5D	13.631
4-7960	4-8230	.346	348.7	-6.8	-.6	1.068	108.0	.333	1.142	273.8	534.0	.761	1.522A	93.0	.665	-1.6	12.4	53.7	.153
4-8230	4-8469.8	.181	50.5	21.1	.6	.637	87.8	.386	1.097	176.5	402.9	.674	1.520	101.6	1.356	1.5	6.3	194.3	.315
4-8469.8	4-8520	.315	180.6	15.3	3.8	1.293	76.9	.309	.928	60.2	122.0	.642D	1.215A	107.4	.957	2.4	-1.0	339.9	.316
		14.33	11.10	7.28	3.22	6.63	3.82	14.53	2/2/1	105.7	17.0	16.2	.608	7.092	144.4	109.8	35.6	76.3L	3.701
4-7970	4-8230	.331	356.1	-3.9	-.6	1.071	107.1	.323	1.160	277.7	527.9	.785	1.534A	95.6	.675	-1.5	14.6	65.6	.140
4-8230	4-8476.7	.184	57.1	23.7	.9	.631	86.0	.402	1.087	174.0	411.2	.650	1.524	104.0	1.352	1.3	4.7	196.3	.358
4-8476.7	4-8530	.358	178.0	12.2	3.7	1.242	73.6	.305	.829	83.9	144.7	.576D	1.082A	103.2	.890	2.9	-.5	333.4	.262
		13.83	10.88	6.99	2.96	6.37	3.89	13.54	2/2/1	93.9	32.6	21.4	.468	5.386	157.6	117.9	22.4	80.3L	2.055
4-7980	4-8230	.320	3.3	-1.0	-.7	1.076	106.3	.317	1.180	281.5	521.8	.806	1.553A	98.1	.686	-1.4	16.4	78.6	.134
4-8230	4-8482.8	.190	64.2	25.7	1.2	.625	84.0	.419	1.078	171.6	418.4	.626	1.530	106.3	1.349	1.2	3.8	202.6	.401
4-8482.8	4-8540	.401	179.5	9.6	3.4	1.204	70.9	.331	.770	100.2	161.2	.515D	1.025A	98.8	.840	3.3	-1.5	324.4	.232
		13.62	10.79	6.76	2.84	6.25	4.03	13.05	2/2/1	81.2	51.0	23.7	.373	4.879	164.2	123.9	15.8	85.0L	1.446
4-7990	4-8230	.311	10.6	1.7	-.8	1.080	105.7	.314	1.202	285.2	515.6	.825	1.560A	100.3	.697	-1.2	17.6	91.7	.134
4-8230	4-8489.8	.201	72.8	27.2	1.4	.617	81.4	.444	1.067	168.9	426.4	.594	1.541	109.1	1.346	1.1	3.1	208.1	.434
4-8489.8	4-8550	.434	184.2	7.2	3.0	1.172	67.9	.376	.728	112.2	172.5	.454D	1.001A	94.5	.797	3.7	-3.8	315.2	.232
		13.72	10.88	6.59	2.84	6.25	4.29	13.06	2/2/1	68.7	70.1	24.2	.292	4.775	168.8	129.9	11.1	89.7L	1.101
4-8020	4-8230	.297	32.7	6.8	-1.7	1.099	104.3	.325	1.291	296.2	497.4	.871	1.711A	106.1	.737	-.2	19.4	124.0	.164
4-8230	4-8428.7	.198	29.7	29.3	4.7	.651	92.2	.359	1.119	184.0	345.0	.717A	1.520D	86.0	1.368	-3.3	-20.2	217.2	.227
4-8428.7	4-8580	.227	199.2	-71.8	-9.8	1.264	90.2	.155	.856	358.2	545.1	.724	.989	89.1	.926	12.9	44.6	302.5	.235
		13.99	10.52	6.31	3.46	6.87	4.21	13.10	2/1/2	38.3	90.7	52.6	1.166	2.256	96.5	172.1	-81.2	63.7L	1.485
MARS ARRIVAL DATE = 2448240 (14 DEC 1990)																			
4-7950	4-8240	.377	342.0	-9.8	-.6	1.065	109.9	.360	1.128	268.6	544.0	.722	1.533	87.8	.648	-1.8	10.1	41.9	.187
4-8240	4-8459.2	.195	39.4	14.6	-.3	.642	92.9	.372	1.118	185.0	389.4	.702	1.534D	97.8	1.363	2.2	11.8	191.7	.261
4-8459.2	4-8510	.261	191.2	19.1	3.6	1.356	82.3	.359	1.096	29.5	98.3	.703D	1.489A	110.5	1.037	1.3	-3.4	343.4	.380
		16.04	12.08	7.95	3.95	7.35	4.14	15.84	2/2/1	122.6	4.9	7.5	.865	15.313	93.3	34.9	81.4	90.5D	12.674

STOPOVER TIME = 0 DAYS — 1990 INBOUND SWINGBY — MISSION DURATION = 560 DAYS; MARS ARRIVAL DATE = 2448240 (14 DEC 1990)

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-7960	4-8240	.354	349.3	-7.0	-.8	1.068	108.5	.341	1.142	272.8	538.2	.753	1.531A	90.9	.657	-1.6	12.2	50.8	.161
4-8240	4-8469.8	.190	45.9	20.0	.7	.633	90.8	.388	1.103	181.2	402.4	.675	1.531D	101.5	1.358	1.4	5.9	194.6	.315
4-8469.8	4-8520	.315	160.6	15.3	3.8	1.293	76.9	.309	.928	60.3	122.1	.642D	1.215A	107.4	.957	2.4	-1.0	339.9	.316
		14.90	11.50	7.46	3.40	6.80	4.04	14.53	2/2/1	113.7	17.0	16.8	.607	6.859	144.3	110.8	35.7	76.1L	3.556
4-7970	4-8240	.336	356.6	-4.1	-.8	1.071	107.3	.327	1.159	276.9	532.3	.780	1.538A	93.7	.666	-1.5	14.3	61.5	.143
4-8240	4-8476.3	.190	51.8	22.6	1.0	.626	89.1	.402	1.092	178.6	410.0	.654	1.531	103.8	1.354	1.2	4.4	198.6	.354
4-8476.3	4-8530	.354	177.9	12.3	3.6	1.243	73.8	.303	.831	83.0	144.4	.580D	1.083A	103.2	.892	2.9	-.5	333.6	.260
		14.14	11.11	7.09	3.02	6.43	4.02	13.52	2/2/1	103.0	32.3	21.9	.480	5.259	157.1	118.6	22.9	79.0L	2.044
4-7980	4-8240	.322	3.8	-1.3	-.8	1.075	106.4	.318	1.177	280.8	526.3	.803	1.551A	96.2	.676	-1.3	16.3	73.9	.132
4-8240	4-8482.0	.191	58.1	24.6	1.2	.619	87.3	.416	1.083	176.2	416.6	.632	1.533	105.8	1.351	1.1	3.5	202.6	.391
4-8482.0	4-8540	.391	179.1	9.8	3.3	1.207	71.4	.323	.775	98.4	160.7	.524D	1.025A	98.7	.844	3.2	-1.3	325.1	.227
		13.67	10.86	6.80	2.80	6.22	4.06	12.98	2/2/1	90.9	50.4	24.1	.393	4.780	163.5	124.2	16.5	84.1L	1.484
4-7990	4-8240	.311	11.0	1.4	-.9	1.079	105.7	.313	1.198	284.6	520.3	.823	1.572A	98.5	.687	-1.2	17.7	87.2	.127
4-8240	4-8488.0	.196	65.9	26.4	1.4	.612	85.1	.435	1.072	173.6	423.5	.606	1.538	108.1	1.348	1.0	2.9	207.6	.435 *
4-8488.0	4-8550	.435	183.3	7.4	2.9	1.179	66.9	.359	.736	109.4	172.0	.472D	1.001A	94.4	.807	3.5	-3.3	316.0	.222 ○
		13.47	10.75	6.58	2.72	6.13	4.17	12.90	2/2/1	78.1	69.3	24.6	.318	4.690	168.1	129.5	11.9	88.1L	1.173
4-8020	4-8240	.289	32.9	6.6	-1.7	1.095	104.0	.315	1.276	295.9	502.4	.873	1.678A	104.4	.723	-.1	19.7	123.0	.147
4-8240	4-8428.6	.212	27.9	24.1	3.7	.650	95.3	.365	1.130	189.4	345.1	.718A	1.543D	86.0	1.371	-2.2	-13.8	216.6	.224
4-8428.6	4-8580	.224	199.2	-71.3	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.4	302.6	.232
		13.82	10.73	6.17	3.09	6.50	4.56	13.06	2/1/2	44.5	90.7	58.5	1.201	2.048	96.3	196.4	-73.5	65.9L	1.258
4-8030	4-8240	.286	40.8	5.4	-2.6	1.102	103.5	.322	1.309	299.8	496.6	.888	1.730A	106.1	.737	.8	22.0	132.5	.161
4-8240	4-8437.1	.220	24.9	31.8	6.5	.652	95.2	.360	1.134	189.3	358.5	.725A	1.543D	89.6	1.371	-4.9	-31.4	206.9	.226
4-8437.1	4-8590	.226	188.1	-71.3	-9.8	1.262	88.9	.155	.857	8.3	191.8	.724D	.990	87.9	.928	13.1	44.0	302.1	.239
		14.25	10.86	6.12	3.39	6.79	4.75	13.16	2/1/2	36.6	96.0	41.2	1.180	2.845	97.7	65.7	-76.5	77.7L	2.176

MARS ARRIVAL DATE = 2448250 (24 DEC 1990)

4-7960	4-8250	.365	349.9	-7.1	-.9	1.068	109.1	.350	1.144	271.7	542.2	.743	1.545	88.8	.649	-1.6	12.2	48.9	.173
4-8250	4-8470.4	.205	42.5	19.2	.8	.629	93.9	.394	1.111	186.0	402.9	.673	1.549D	101.8	1.360	1.3	5.3	195.2	.321
4-8470.4	4-8520	.321	180.6	15.1	3.8	1.292	76.6	.311	.926	61.5	122.5	.636D	1.214A	107.5	.955	2.5	-1.0	339.6	.316
		15.72	12.08	7.69	3.64	7.04	4.38	14.57	2/2/1	120.5	17.3	17.4	.585	6.618	144.1	112.1	35.9	76.5L	3.265
4-7970	4-8250	.344	357.1	-4.2	-.9	1.071	107.8	.333	1.159	276.0	536.5	.773	1.545A	91.7	.658	-1.5	14.2	58.5	.150
4-8250	4-8476.5	.201	47.7	21.6	1.1	.622	92.2	.406	1.100	183.3	409.9	.653	1.546D	103.8	1.356	1.1	3.9	199.0	.356
4-8476.5	4-8530	.356	178.0	12.3	3.6	1.242	73.7	.304	.830	83.5	144.6	.578D	1.083A	103.2	.891	2.9	-.5	333.5	.261
		14.69	11.54	7.24	3.16	6.57	4.30	13.53	2/2/1	111.2	32.5	22.4	.473	5.138	156.5	119.6	23.5	79.9L	1.958
4-7980	4-8250	.326	4.3	-1.5	-1.0	1.074	106.7	.321	1.176	280.1	530.7	.798	1.553A	94.3	.667	-1.3	16.2	69.6	.134
4-8250	4-8481.8	.200	53.2	23.6	1.2	.615	90.6	.416	1.089	180.9	415.9	.634	1.544D	105.7	1.353	.9	3.1	202.9	.390
4-8481.8	4-8540	.390	179.1	9.8	3.3	1.208	71.5	.322	.775	98.1	160.7	.526D	1.025A	98.7	.845	3.2	-1.2	325.2	.227
		13.98	11.14	6.89	2.84	6.25	4.25	12.97	2/2/1	100.1	50.3	24.6	.396	4.689	162.9	124.9	17.1	83.8L	1.460
4-7990	4-8250	.312	11.5	1.2	-1.0	1.078	105.8	.313	1.195	284.0	524.8	.821	1.568A	96.7	.677	-1.1	17.8	82.5	.125
4-8250	4-8487.4	.200	60.0	25.4	1.4	.607	88.6	.433	1.078	178.2	422.0	.611	1.544	107.6	1.350	.9	2.6	207.6	.427
4-8487.4	4-8550	.427	182.9	7.6	2.9	1.182	69.3	.353	.740	108.2	171.9	.479D	1.001A	94.4	.811	3.5	-3.1	316.3	.218
		13.53	10.87	6.61	2.66	6.08	4.26	12.84	2/2/1	87.7	68.9	25.1	.330	4.608	167.4	129.8	12.6	87.4L	1.189
4-8000	4-8250	.301	18.8	3.5	-1.2	1.082	105.0	.308	1.215	287.9	518.9	.840	1.590A	98.9	.688	-.9	19.0	96.0	.122
4-8250	4-8493.9	.204	69.0	27.2	1.6	.597	86.0	.454	1.065	175.1	429.1	.582	1.549	110.1	1.346	.6	2.1	213.3	.474
4-8493.9	4-8560	.474	189.0	5.5	2.4	1.159	66.8	.395	.712	116.3	179.6	.431D	.993A	90.2	.781	3.7	-5.6	309.8	.234
		13.36	10.75	6.39	2.61	6.02	4.36	13.10	2/2/1	74.8	85.5	24.5	.267	4.708	171.1	135.4	8.9	91.1D	.990
4-8020	4-8250	.284	33.1	6.4	-1.7	1.092	103.8	.308	1.264	295.7	507.2	.875	1.653A	102.7	.711	-.1	20.2	121.0	.132
4-8250	4-8428.6	.234	26.5	20.5	3.1	.651	98.8	.374	1.147	195.3	345.9	.718A	1.577D	86.2	1.376	-1.6	-9.6	215.3	.224
4-8428.6	4-8580	.224	199.2	-71.4	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.5	302.6	.232
		13.96	11.16	6.07	2.80	6.21	5.09	13.06	2/1/2	51.5	90.7	62.6	1.198	1.926	95.6	202.3	-67.7	68.2L	1.109
4-8030	4-8250	.278	40.8	5.9	-2.4	1.098	103.2	.312	1.293	299.6	501.5	.890	1.696A	104.4	.723	.7	21.7	131.6	.143
4-8250	4-8436.9	.235	25.2	23.9	4.4	.653	98.6	.370	1.150	195.2	359.0	.725A	1.575D	89.7	1.375	-2.7	-18.2	205.6	.211
4-8436.9	4-8590	.211	189.0	-69.2	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5	.227
		14.09	11.07	5.97	3.02	6.43	5.09	12.98	2/1/2	42.4	96.3	52.1	1.350	2.278	97.0	165.9	-79.6	60.5L	1.725

MARS ARRIVAL DATE = 2448260 (3 JAN 1991)

4-7970	4-8260	.353	357.7	-4.3	-1.1	1.072	108.3	.341	1.160	275.0	540.5	.764	1.557	89.7	.651	-1.4	14.2	56.2	.159
4-8260	4-8477.2	.218	44.8	20.9	1.2	.619	95.5	.413	1.109	187.9	410.6	.650	1.567D	104.2	1.359	.9	3.2	199.6	.365
4-8477.2	4-8530	.365	178.2	12.1	3.7	1.240	73.3	.309	.826	85.2	145.2	.571D	1.082A	103.3	.888	3.0	-.6	333.0	.264
		15.48	12.13	7.43	3.35	6.76	4.70	13.59	2/2/1	118.2	33.0	23.0	.452	5.020	156.0	120.7	24.0	80.6L	1.815
4-7980	4-8260	.332	4.8	-1.6	-1.1	1.074	107.0	.326	1.176	279.2	534.9	.792	1.559A	92.5	.660	-1.3	16.1	66.2	.139
4-8260	4-8482.3	.214	49.6	22.7	1.3	.611	93.9	.423	1.097	185.4	416.1	.633	1.562D	105.9	1.355	.8	2.6	203.5	.395
4-8482.3	4-8540	.395	179.3	9.7	3.3	1.206	71.2	.326	.773	99.1	160.9	.521D	1.025A	98.8	.843	3.3	-1.3	324.8	.229
		14.54	11.60	7.01	2.94	6.35	4.59	13.01	2/2/1	108.4	50.7	25.1	.385	4.603	162.3	125.9	17.6	84.1L	1.386
4-7990	4-8260	.316	11.9	1.0	-1.2	1.077	106.0	.315	1.193	283.4	529.2	.817	1.569A	94.9	.669	-1.1	17.9	78.1	.125
4-8260	4-8487.8	.210	55.4	24.5	1.5	.603	92.1	.436	1.085	182.7	421.6	.612	1.558D	107.6	1.352	.7	2.1	207.9	.428
4-8487.8	4-8550	.428	182.9	7.5	2.9	1.182	69.3	.354	.739	108.4	171.9	.478D	1.001A	94.4	.811	3.5	-3.2	316.3	.219
		13.86	11.19	6.68	2.68	6.09	4.51	12.85	2/2/1	96.9	69.0	25.5	.328	4.531	166.7	130.5	13.5	87.4L	1.158
4-8000	4-8260	.302	19.0	3.3	-1.3	1.081	105.1	.308	1.212	287.4	523.4	.838	1.585A	97.1	.678	-.8	19.3	91.4	.118
4-8260	4-8493.4	.209	63.2	26.3	1.6	.593	89.7	.453	1.072	179.7	427.9	.587	1.556	109.7	1.348	.7	1.8	213.3	.468
4-8493.4	4-8560	.468	188.6	5.6	2.4	1.162	67.1	.390	.715	115.4	179.6	.436D	.993A	90.2	.785	3.7	-5.5	309.9	.231
		13.43	10.89	6.41	2.54	5.96	4.48	13.04	2/2/1	84.2	85.4	24.9	.274	4.635	170.4	135.7	9.6	90.6D	.997
4-8020	4-8260	.280	33.4	6.3	-1.8	1.089	103.6	.303	1.256	295.4	512.0	.875	1.636A	101.0	.699	-.1	20.8	118.1	.120
4-8260	4-8428.7	.263	25.5	18.0	2.7	.658	102.5	.387	1.172	201.6	347.2	.719A	1.625D	86.4	1.383	-1.1	-6.6	213.1	.226
4-8428.7	4-8580	.226	199.2	-71.7	-9.8	1.264	90.2	.155	.856	358.2	545.1	.724	.989	89.1	.926	12.9	44.6	302.6	.234
		14.40	11.82	6.01	2.58	6.00	5.81	13.09	2/1/2	59.4	90.7	65.7	1.175	1.844	94.7	204.1	-63.3	70.9L	.991
4-8030	4-8260	.272	40.8	6.3	-2.3	1.095	103.0	.304	1.281	299.4	506.3	.892	1.670A	102.7	.711	.5	21.9	129.8	.129
4-8260	4-8436.9	.260	25.0	19.7	3.4	.658	102.2	.382	1.174	201.3	360.1	.725	1.623D	90.0	1.382	-1.7	-11.0	203.4	.211
4-8436.9	4-8590	.211	189.0	-69.3	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5	.227
		14.35	11.61	5.87	2.74	6.15	5.75	12.98	2/1/2	49.1	96.3	59.0	1.346	2.030	95.8	187.7	-70.7	83.6L	1.387
4-8040	4-8260	.268	48.8	5.3	-3.5	1.101	102.4	.308	1.309	303.5	500.8	.907	1.712A	104.3	.722	1.8	25.3	140.7	.142
4-8260	4-8445.7	.264	23.8	27.7	6.6	.655	101.5	.382	1.168	199.9	372.6	.721	1.614D	93.5	1.378	-4.8	-28.2	194.4	.242
4-8445.7	4-8600	.243	179.8	-70.1	-10.4	1.261	87.5	.159	.858	18.3	198.5	.721D	.994	86.6	.931	13.8	43.5	302.7	.254
		14.62	11.63	5.79	2.99	6.40	5.83	13.42	2/1/1	41.2	100.7	42.7	1.023	2.747	96.4	59.8	-80.5	99.4D	1.786

MARS ARRIVAL DATE = 2448270 (13 JAN 1991)

4-7980	4-8270	.341	5.3	-1.6	-1.2	1.075	107.5	.333	1.177	278.3	538.9	.785	1.569A	90.5	.653	-1.2	16.2	63.7	.147
4-8270	4-8483.2	.232	47.3	22.1	1.3	.610	97.3	.433	1.107	189.8	417.0	.628	1.566D	106.4	1.358	.6	1.9	204.3	.407
4-8483.2	4-8540	.407	179.8	9.5	3.4	1.202	70.6	.335	.768	101.1	161.4	.510D	1.025A	98.9	.837	3.4	-1.6	324.1	.234
		15.31	12.22	7.17	3.09	6.50	5.04	13.09	2/2/1	115.6	51.4	25.6	.364	4.519	161.8	127.2	18.1	84.9L	1.279
4-7990	4-8270	.321	12.4	.9	-1.2	1.077	106.2	.319	1.193	282.6	533.4	.812	1.574A	93.1	.661	-1.0	17.9	74.4	.129
4-8270	4-8488.1	.226	52.4	23.7	1.6	.601	95.6	.443	1.094	187.1	422.1	.609	1.578D	108.0	1.355	.5	1.6	208.7	.436
4-8488.1	4-8550	.436	183.3	7.4	2.9	1.179	68.9	.361	.736	109.6	172.1	.470D	1.001A	94.4	.806	3.5	-3.4	315.9	.223
		14.42	11.67	6.78	2.75	6.16	4.90	12.91	2/2/1	105.3	69.4	25.9	.316	4.457	166.1	131.7	13.6	87.6L	1.092
4-8000	4-8270	.304	19.4	3.2	-1.3	1.080	105.2	.310	1.210	286.8	527.8	.835	1.585A	95.4	.670	-.8	19.5	86.9	.117
4-8270	4-8493.6	.222	59.0	25.4	1.7	.591	93.4	.457	1.079	184.0	427.6	.587	1.572D	109.8	1.350	.5	1.3	213.8	.471
4-8493.6	4-8560	.471	188.8	5.5	2.4	1.161	66.9	.392	.713	115.8	179.6	.434D	.993A	90.2	.783	3.7	-5.5	309.9	.233
		13.76	11.23	6.46	2.53	5.95	4.78	13.07	2/2/1	93.4	85.4	25.3	.271	4.563	169.8	136.4	10.2	90.6D	.985
4-8030	4-8270	.268	40.8	6.5	-2.2	1.092	102.8	.299	1.272	299.2	511.1	.892	1.652A	101.1	.700	.5	22.3	127.2	.117
4-8270	4-8437.0	.294	25.1	17.5	2.8	.669	106.1	.399	1.207	207.8	361.8	.725	1.690D	90.5	1.390	-1.0	-6.5	200.4	.218
4-8437.0	4-8590	.218	188.6	-70.2	-9.3	1.262	88.9	.155	.857	8.2	191.8	.724D	.990	87.9	.929	12.7	43.6	302.3	.232
		14.92	12.40	5.79	2.52	5.94	6.61	13.06	2/1/2	56.5	96.2	64.2	1.269	1.883	94.4	191.8	-64.1	87.1L	1.120

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 550 DAYS
MARS ARRIVAL DATE = 2448270
13 JAN 1991

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8040	4-8270	.261	48.4	4.6	-3.1	1.097	102.1	.300	1.297	303.3	505.7	.908	1.686A	102.7	.710	1.4	24.6	139.0	.127
4-8270	4-8445.7	.266	25.6	20.3	3.9	.664	105.3	.399	1.198	206.2	373.9	.720	1.675D	93.9	1.386	-2.1	-12.5	192.6	.234
4-8445.7	4-8600	.234	180.5	-68.9	-10.0	1.261	87.5	.159	.858	16.3	198.2	.721D	.994	86.6	.931	13.4	43.0	302.8	.247
		14.83	12.13	5.67	2.70	6.11	6.46	13.30	2/1/1	47.2	101.0	56.9	1.101	2.097	95.0	176.7	-73.3	100.5D	1.208
MARS ARRIVAL DATE = 2448280 (23 JAN 1991)																			
4-7990	4-8280	.327	12.8	.9	-1.3	1.077	106.6	.325	1.193	281.7	537.4	.806	1.581A	91.3	.654	-1.0	18.0	71.6	.135
4-8280	4-8489.2	.247	50.6	23.2	1.7	.601	99.1	.454	1.105	191.3	423.1	.604	1.606D	108.6	1.358	.4	1.0	209.8	.450
4-8489.2	4-8550	.450	184.0	7.2	3.0	1.174	88.1	.373	.729	111.8	172.4	.458D	1.001A	94.5	.799	3.6	-3.7	315.4	.230
		15.17	12.31	6.91	2.86	6.27	5.40	13.02	2/2/1	112.8	70.0	26.4	.297	4.382	165.6	133.1	14.2	68.6L	1.003

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 600 DAYS | MARS ARRIVAL DATE = 2448200 | 4 NOV 1990

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																				
4-7970	4-8200	.329	354.6	-2.8	-.1	1.076	106.9	.324	1.173	279.6	513.6	.793	1.553A	101.5	.707	-1.8	15.6	79.3	.155
4-8200	4-8421.7	.193	40.1	42.6	-7.1	.666	84.3	.358	1.099	169.5	335.3	.706A	1.493	83.6	1.363	-6.1	-31.4	220.5	.274
4-8421.7	4-8570	.274	210.1	-75.0	-12.1	1.265	91.4	.157	.856	349.8	538.0	.722	.991A	90.4	.923	14.9	45.9	302.3	.266
		14.32	11.05	6.95	3.27	6.68	4.10	13.62	2/1/2	64.6	85.7	43.9	.799	2.674	93.5	61.5	-79.9	53.4L	1.337
4-7980	4-8200	.327	1.9	.3	-.1	1.082	106.5	.327	1.201	283.1	507.2	.808	1.594A	103.7	.721	-1.7	16.5	90.5	.165
4-8200	4-8436.3	.192	55.2	-8.8	-7.8	.671	84.6	.346	1.109	169.6	359.0	.725A	1.492	89.7	1.363	9.1	51.4	205.1	.277
4-8436.3	4-8580	.277	180.4	77.0	12.3	1.262	88.7	.155	.856	9.8	184.4	.724D	.989	89.2	.926	-9.1	-62.5	5.2	.176
		14.44	10.97	6.89	3.47	6.87	4.08	12.26	2/2/1	53.8	90.3	27.2	.784	4.247	97.4	43.7	51.0	74.3L	2.545
4-7990	4-8200	.326	9.1	3.3	-.2	1.090	106.3	.334	1.234	286.5	500.8	.822	1.646A	105.9	.737	-1.7	16.8	100.3	.179
4-8200	4-8441.5	.169	52.2	5.4	-3.4	.671	84.4	.347	1.109	169.2	366.8	.724	1.493	91.8	1.363	4.9	31.8	198.1	.220
4-8441.5	4-8590	.220	180.4	68.6	9.4	1.261	87.9	.156	.856	15.3	191.7	.722D	.990	87.9	.928	-6.0	-56.0	347.7	.136
		14.22	10.45	6.88	3.77	7.17	3.57	11.80	2/2/1	44.5	100.5	38.3	1.237	3.051	98.8	57.0	74.3	66.7L	2.537
MARS ARRIVAL DATE = 2448210 (14 NOV 1990)																				
4-7970	4-8210	.328	355.1	-3.2	-.3	1.074	106.8	.321	1.166	279.0	518.5	.792	1.541A	99.5	.695	-1.7	15.3	75.0	.148
4-8210	4-8421.4	.184	38.7	35.1	5.1	.657	86.5	.361	1.100	173.8	333.7	.703A	1.497	83.1	1.364	-3.9	-20.9	221.4	.261
4-8421.4	4-8570	.261	209.1	-73.6	-11.4	1.265	91.4	.157	.856	349.4	538.1	.721	.991A	90.4	.923	14.2	45.5	302.7	.255
		13.87	10.81	6.91	3.07	6.48	3.89	13.44	2/1/2	74.2	85.6	55.1	.881	2.236	94.0	187.4	-83.1	55.6L	1.089
4-7980	4-8210	.322	2.4	-.2	-.4	1.079	106.3	.321	1.191	282.6	512.2	.809	1.574A	101.8	.708	-1.6	16.6	87.3	.150
4-8210	4-8430.6	.262	23.7	57.5	15.7	.662	86.8	.350	1.108	174.1	348.6	.721A	1.496	87.1	1.364	-14.4	-64.1	219.7	.376
4-8430.6	4-8580	.376	201.6	-85.1	-17.2	1.263	89.9	.154	.857	.7	184.7	.724D	.989	89.1	.926	20.4	48.2	300.4	.354
		15.75	12.59	6.80	3.16	6.56	5.78	15.28	2/1/2	62.3	90.3	21.4	.425	5.397	91.8	44.7	-36.5	58.8L	1.870
4-7990	4-8210	.319	9.6	2.6	-.4	1.086	106.0	.324	1.220	286.1	505.8	.824	1.616A	104.0	.722	-1.5	17.1	98.4	.160
4-8210	4-8441.2	.178	49.8	-1.4	-5.1	.664	86.7	.348	1.111	173.7	365.5	.725	1.497	91.4	1.363	6.7	40.8	200.1	.242
4-8441.2	4-8590	.242	179.3	71.6	10.5	1.261	88.0	.156	.856	14.9	191.7	.722D	.990	87.9	.928	-7.1	-59.3	352.6	.151
		15.86	10.50	6.73	3.36	6.77	3.77	11.96	2/2/1	51.6	99.5	32.5	1.030	3.575	99.1	46.6	63.3	85.5L	2.653
MARS ARRIVAL DATE = 2448220 (24 NOV 1990)																				
4-7950	4-8220	.355	340.7	-9.5	-.4	1.064	108.7	.340	1.125	270.8	535.7	.743	1.507A	92.2	.664	-1.8	10.4	46.2	.163
4-8220	4-8492.2	.219	80.0	27.7	1.4	.623	77.3	.462	1.063	164.2	431.2	.572	1.554	110.8	1.345	1.2	3.1	209.4	.469
4-8492.2	4-8550	.489	185.9	6.8	3.1	1.159	66.1	.406	.712	116.9	173.0	.422D	1.001A	94.7	.777	3.9	-4.6	314.1	.251
		15.61	12.17	7.46	3.44	6.84	4.70	13.37	2/2/1	108.0	71.4	23.8	.251	4.858	169.7	131.0	10.2	92.2D	.968
4-7980	4-8220	.320	2.9	-.7	-.5	1.077	106.2	.318	1.184	282.0	517.0	.808	1.561A	99.9	.696	-1.5	16.5	83.2	.140
4-8220	4-8429.0	.195	30.8	37.5	6.7	.656	89.4	.354	1.112	178.9	345.6	.718A	1.505	86.3	1.366	-5.3	-31.5	217.1	.242
4-8429.0	4-8580	.241	199.1	-73.7	-10.6	1.264	90.2	.155	.856	358.6	545.0	.724	.989	89.1	.926	13.7	45.3	302.1	.247
		13.86	10.91	6.76	2.95	6.36	4.15	13.29	2/1/2	71.5	90.6	43.1	1.030	2.720	96.2	72.1	-78.1	61.3L	1.773
4-7990	4-8220	.314	10.1	2.1	-.6	1.083	105.8	.318	1.210	285.6	510.8	.825	1.594A	102.1	.709	-1.4	17.4	95.5	.145
4-8220	4-8440.6	.227	51.7	-17.4	-11.5	.658	89.2	.350	1.115	176.6	363.9	.725	1.505	91.0	1.365	13.1	63.0	201.1	.346
4-8440.6	4-8590	.346	167.3	81.2	15.7	1.261	88.1	.156	.856	13.9	191.8	.723D	.990	87.8	.928	-12.4	-66.4	11.4	.228
		14.60	11.54	6.64	3.05	6.46	4.90	13.00	2/2/1	59.7	96.3	20.3	.502	5.684	96.4	38.6	36.2	82.0L	2.552
MARS ARRIVAL DATE = 2448230 (4 DEC 1990)																				
4-7950	4-8230	.365	341.3	-9.7	-.6	1.064	109.2	.348	1.126	269.8	540.0	.734	1.518A	90.0	.656	-1.7	10.1	43.5	.174
4-8230	4-8489.5	.201	72.8	27.2	1.4	.617	81.4	.444	1.067	168.9	426.4	.594	1.541	109.1	1.346	1.1	3.1	208.1	.454
4-8489.5	4-8550	.454	184.2	7.2	3.0	1.172	67.9	.376	.728	112.2	172.5	.454D	1.001A	94.5	.797	3.7	-3.8	315.2	.232
		15.63	11.97	7.68	3.66	7.06	4.29	13.06	2/2/1	115.9	70.1	24.2	.292	4.775	168.6	129.9	11.1	89.7L	1.101
4-7980	4-8230	.320	3.3	-1.0	-.7	1.076	106.3	.317	1.180	281.5	521.8	.806	1.553A	98.1	.686	-1.4	16.4	78.6	.134
4-8230	4-8428.7	.198	29.7	29.3	4.7	.651	92.2	.359	1.119	184.0	345.0	.717A	1.520D	86.0	1.368	-3.3	-20.2	217.2	.227
4-8428.7	4-8580	.227	199.2	-71.6	-9.8	1.264	90.2	.155	.856	358.2	545.1	.724	.989	89.1	.926	12.9	44.6	302.5	.235
		13.81	10.97	6.76	2.84	6.25	4.21	13.10	2/1/2	81.2	90.7	52.6	1.166	2.256	96.5	172.1	-81.2	63.7L	1.465
4-7990	4-8230	.311	10.6	1.7	-.6	1.080	105.7	.314	1.202	285.2	515.6	.825	1.580A	100.3	.697	-1.2	17.6	91.7	.134
4-8230	4-8438.1	.281	18.2	54.2	16.7	.654	92.1	.354	1.123	183.8	359.7	.725A	1.520D	89.9	1.367	-15.1	-67.6	207.2	.385
4-8438.1	4-8590	.385	166.6	-84.7	-17.7	1.262	88.7	.155	.857	9.8	191.7	.724D	.990	87.9	.928	21.0	48.3	301.2	.365
		15.71	12.87	6.59	2.84	6.25	6.28	15.53	2/1/2	68.7	93.9	18.7	.405	6.164	94.1	39.8	-31.3	75.7L	2.092
4-8000	4-8230	.305	17.8	4.1	-.9	1.086	105.1	.315	1.228	288.8	509.5	.841	1.615A	102.4	.710	-1.0	18.2	103.9	.140
4-8230	4-8445.6	.199	43.7	-4.2	-6.1	.653	91.6	.355	1.121	183.0	371.0	.723	1.519D	92.9	1.365	7.8	44.2	196.4	.264
4-8445.6	4-8600	.265	177.9	72.7	11.6	1.261	87.5	.159	.858	18.2	198.2	.721D	.994	86.6	.931	-8.2	-60.7	352.9	.170
		13.67	10.71	6.46	2.96	6.37	4.25	12.18	2/2/2	57.0	106.1	29.8	.860	3.883	97.8	37.3	59.3	95.9D	2.480
MARS ARRIVAL DATE = 2448240 (14 DEC 1990)																				
4-7950	4-8240	.377	342.0	-9.8	-.8	1.065	109.9	.360	1.128	268.6	544.0	.722	1.533	87.8	.648	-1.8	10.1	41.9	.187
4-8240	4-8488.0	.196	65.9	26.4	1.4	.612	85.1	.435	1.072	173.6	423.5	.606	1.538	108.1	1.348	1.0	2.9	207.6	.435
4-8488.0	4-8550	.435	183.3	7.4	2.9	1.179	68.9	.359	.736	109.4	172.0	.472D	1.001A	94.4	.807	3.5	-3.3	316.0	.222
		16.07	12.12	7.95	3.95	7.35	4.17	12.90	2/2/1	122.6	69.3	24.6	.318	4.690	168.1	129.5	11.9	88.1L	1.173
4-7980	4-8240	.322	3.8	-1.3	-.8	1.075	106.4	.318	1.177	280.8	526.3	.803	1.551A	96.2	.676	-1.3	16.3	73.9	.132
4-8240	4-8428.6	.212	27.9	24.1	3.7	.650	95.3	.365	1.130	189.4	345.1	.718A	1.543D	86.0	1.371	-2.2	-13.8	216.6	.224
4-8428.6	4-8580	.224	199.2	-71.3	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.4	302.8	.232
		14.16	11.56	6.80	2.80	6.22	4.56	13.06	2/1/2	90.9	90.7	58.5	1.201	2.048	96.3	196.4	-73.5	65.9L	1.258
4-7990	4-8240	.311	11.0	1.4	-.9	1.079	105.7	.313	1.198	284.6	520.3	.823	1.572A	98.5	.687	-1.2	17.7	87.2	.127
4-8240	4-8437.1	.220	24.9	31.8	6.5	.652	95.2	.360	1.134	189.3	358.5	.725A	1.543D	89.6	1.371	-4.9	-31.4	206.9	.226
4-8437.1	4-8590	.226	188.1	-71.3	-9.8	1.262	88.9	.155	.857	8.3	191.8	.724D	.990	87.9	.928	13.1	44.0	302.1	.239
		14.05	11.33	6.58	2.72	6.13	4.75	13.16	2/1/2	78.1	96.0	41.2	1.160	2.845	97.7	65.7	-76.5	77.7L	2.176
4-8000	4-8240	.302	18.2	3.7	-1.1	1.083	105.0	.311	1.220	288.4	514.3	.841	1.599A	100.6	.698	-.9	18.6	100.3	.129
4-8240	4-8445.8	.291	50.6	-22.7	-16.8	.650	94.7	.361	1.131	188.4	371.3	.722	1.540D	93.0	1.368	18.5	72.1	187.9	.455
4-8445.8	4-8600	.452	131.6	83.9	20.9	1.261	87.5	.159	.858	18.2	198.2	.721D	.994	86.6	.931	-17.5	-66.9	19.6	.311
		15.69	12.94	6.41	2.75	6.16	6.53	14.45	2/2/2	65.6	98.7	15.4	.290	7.486	95.9	29.3	24.5	97.7D	1.881
MARS ARRIVAL DATE = 2448250 (24 DEC 1990)																				
4-7960	4-8250	.365	349.9	-7.1	-.9	1.068	109.1	.350	1.144	271.7	542.2	.743	1.545	88.8	.649	-1.6	12.2	48.9	.173
4-8250	4-8493.9	.204	69.0	27.2	1.6	.597	86.0	.454	1.065	175.1	429.1	.582	1.549	110.1	1.346	.8	2.1	213.3	.474
4-8493.9	4-8560	.474	189.0	5.5	2.4	1.159	66.8	.395	.712	116.3	179.6	.431D	.993A	90.2	.781	3.7	-5.6	309.6	.234
		15.69	12.05	7.69	3.64	7.04	4.36	13.10	2/2/1	120.5	85.5	24.5	.267	4.708	171.1	135.4	8.9	91.1D	.990
4-7980	4-8250	.326	4.3	-1.5	-1.0	1.074	106.7	.321	1.176	280.1	530.7	.798	1.553A	94.3	.667	-1.3	16.2	69.6	.134
4-8250	4-8428.6	.234	26.5	20.5	3.1	.651	98.8	.374	1.147	195.3	345.9	.718A	1.577D	86.2	1.376	-1.6	-9.6	215.3	.224
4-8428.6	4-8580	.224	199.2	-71.4	-9.7	1.264	90.3	.155	.856	358.1	545.1	.724	.989	89.1	.926	12.8	44.5	302.6	.232
		14.82	11.98	6.89	2.84	6.25	5.09	13.06	2/1/2	100.1	90.7	62.6	1.198	1.926	95.6	202.3	-67.7	68.2L	1.109
4-7990	4-8250	.312	11.5	1.2	-1.0	1.078	105.8	.313	1.195	284.0	524.8	.821	1.568A	98.7	.677	-1.1	17.8	82.5	.125
4-8250	4-8436.9	.235	25.2	23.9	4.4	.653	98.6	.370	1.150	195.2	359.0	.725A	1.575D	89.7	1.375	-2.7	-16.2	205.6	.211
4-8436.9	4-8590	.211	189.0	-69.2	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5	.227
		14.37	11.71	6.61	2.66	6.08	5.09	12.98	2/1/2	67.7	96.3	52.1	1.350	2.278	97.0	165.9	-79.6	80.9L	1.725
MARS ARRIVAL DATE = 2448260 (3 JAN 1991)																				
4-7960	4-8260	.332	4.8	-1.6	-1.1	1.074	107.0	.326	1.176	279.2	534.9	.792	1.559A	92.5	.660	-1.3	16.1	66.2	.139
4-8260	4-8428.7	.263	25.5	18.0	2.7	.658	102.5	.387	1.172	201.6	347.2	.719A	1.625D	86.4	1.383	-1.1	-6.6	213.1	.226
4-8428.7	4-8580	.226	199.2	-71.7	-9.8	1.264	90.2	.155	.856	358.2	545.1	.724	.989	89.1	.926	12.9	44.6	302.6	.234
		15.76	12.82	7.01	2.94	6.35	5.81	13.09	2/1/2	108.4	90.7	65.7	1.175	1.844	94.7	204.1	-63.3	70.9L	.991
4-7990	4-8260	.316	11.9	1.0	-1.2	1.077	106.0	.315	1.193	283.4	529.2	.817	1.569A	94.9	.669	-1.1	17.9	78.1	.125
4-8260	4-8436.9	.260	25.0	19.7	3.4	.658	102.2	.382	1.174	201.3	360.1	.725	1.623D	90.0	1.382	-1.7	-11.0	203.4	.211
4-8436.9	4-8590	.211	189.0	-69.3	-9.0	1.262	88.9	.155	.857	8.1	191.8	.724D	.990	87.9	.929	12.3	43.2	302.5	.227
		15.10	12.42	6.68	2.66	6.09	5.75	12.98	2/1/2	96.9	96.3	59.0	1.346	2.030	95.8	187.7	-70.7	83.6L	1.387
4-8000	4-8260	.302	19.0	3.5	-1.3	1.081	105.1	.308	1.212	287.4	523.4	.836	1.585A	97.1	.678	-.6	19.3	91.4	.118
4-8260	4-8445.7	.264	23.8	27.7	6.6	.655	101.5	.382	1.168	199.9	372.6	.721	1.614D	93.5	1.378	-4.8	-28.2	194.4	.242
4-8445.7	4-8600	.243	179.8	-70.1	-10.4	1.261	87.5	.159	.858	18.3	198.3	.721D	.994	86.6	.931	13.8	43.5	302.7	.254
		14.78	12.24	6.41	2.54	5.96	5.83	13.42	2/1/1	84.2	100.7	42.7	1.023	2.747	96.4	59.8	-80.5	99.4D	1.786

STOPOVER TIME = 0 DAYS | 1990 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448270
13 JAN 1991

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448270 (13 JAN 1991)																			
4-7990	4-8270	.321	12.4	.9	-1.2	1.077	106.2	.319	1.193	282.6	533.4	.812	1.574A	93.1	.661	-1.0	17.9	74.4	.129
4-8270	4-8437.0	.294	25.1	17.3	2.8	.669	106.1	.399	1.207	207.8	361.8	.725	1.690D	90.5	1.390	-1.0	-6.5	200.4	.218
4-8437.0	4-8590	.218	188.6	-70.2	-9.3	1.262	88.9	.155	.657	8.2	191.8	.724D	.990	87.9	.929	12.7	43.6	302.3	.232
		16.13	13.38	6.78	2.75	6.16	6.61	13.06	2/1/2	105.3	96.2	64.2	1.269	1.883	94.4	191.8	-64.1	87.1L	1.120
4-8000	4-8270	.304	19.4	3.2	-1.3	1.080	105.2	.310	1.210	286.8	527.8	.835	1.585A	95.4	.670	-.8	19.5	86.9	.117
4-8270	4-8445.7	.288	25.8	20.3	3.9	.664	105.3	.399	1.198	206.2	373.9	.720	1.675D	93.9	1.386	-2.1	-12.5	192.6	.234
4-8445.7	4-8600	.234	180.5	-68.9	-10.0	1.261	87.5	.159	.838	18.3	196.2	.721D	.994	86.6	.931	13.4	43.0	302.8	.247
		15.45	12.92	6.46	2.53	5.95	6.46	13.30	2/1/1	95.4	101.0	56.9	1.101	2.097	95.0	176.7	-73.3	100.9D	1.208

STOPOVER TIME = 0 DAYS

1990 INBOUND SWINGBY

MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2448200
4 NOV 1990

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448200 (4 NOV 1990)																			
4-7950	4-8200	.343	339.6	-8.9	-.1	1.065	108.0	.330	1.127	272.5	526.5	.756	1.499A	96.4	.682	-1.8	11.7	54.4	.155
4-8200	4-8441.5	.169	52.2	5.4	-3.4	.671	84.4	.347	1.109	169.2	366.8	.724	1.493	91.8	1.363	4.9	31.8	198.1	.220
4-8441.5	4-8590	.220	180.4	68.6	9.4	1.261	87.9	.156	.856	15.3	191.7	.722D	.990	87.9	.928	-6.0	-56.0	347.7	.136
		14.05	10.79	7.22	3.27	6.67	3.57	11.80	2/2/1	89.1	100.5	38.3	1.237	3.051	98.8	57.0	74.3	88.7L	2.537
MARS ARRIVAL DATE = 2448210 (14 NOV 1990)																			
4-7950	4-8210	.347	340.1	-9.3	-.3	1.064	108.3	.333	1.125	271.7	531.2	.750	1.501A	94.3	.673	-1.8	10.9	49.9	.157
4-8210	4-8441.2	.178	49.8	-1.4	-5.1	.664	86.7	.348	1.111	173.7	365.5	.725	1.497	91.4	1.363	6.7	40.8	200.1	.242
4-8441.2	4-8590	.242	179.3	71.6	10.5	1.261	88.0	.156	.856	14.9	191.7	.722D	.990	87.9	.928	-7.1	-59.3	352.6	.151
		14.39	11.08	7.31	3.31	6.71	3.77	11.96	2/2/1	99.0	99.5	32.5	1.030	3.575	99.1	46.6	63.3	85.5L	2.653
MARS ARRIVAL DATE = 2448220 (24 NOV 1990)																			
4-7950	4-8220	.355	340.7	-9.5	-.4	1.064	108.7	.340	1.125	270.8	535.7	.743	1.507A	92.2	.664	-1.8	10.4	46.2	.163
4-8220	4-8440.6	.227	51.7	-17.4	-11.5	.656	89.2	.350	1.115	178.6	363.9	.725	1.505	91.0	1.365	13.1	63.0	201.1	.346
4-8440.6	4-8590	.346	167.3	81.2	15.7	1.261	88.1	.156	.856	13.9	191.8	.723D	.990	87.8	.928	-12.4	-66.4	11.4	.228
		15.81	12.37	7.46	3.44	6.84	4.90	13.00	2/2/1	108.0	96.3	20.3	.502	5.684	96.4	38.6	36.2	82.0L	2.352
MARS ARRIVAL DATE = 2448230 (4 DEC 1990)																			
4-7960	4-8230	.346	348.7	-6.8	-.6	1.068	108.0	.333	1.142	273.8	534.0	.761	1.522A	93.0	.665	-1.8	12.4	53.7	.153
4-8230	4-8445.6	.199	43.7	-4.2	-6.1	.653	91.6	.355	1.121	163.0	371.0	.723	1.519D	92.9	1.365	7.8	44.2	196.4	.264
4-8445.6	4-8600	.265	177.9	72.7	11.6	1.261	87.5	.159	.858	18.2	198.2	.721D	.994	86.6	.931	-8.2	-60.7	352.9	.170
		14.76	11.53	7.28	3.22	6.63	4.25	12.16	2/2/2	105.7	106.1	29.6	.860	5.883	97.8	37.3	59.3	95.9D	2.480

1993

OUTBOUND SWINGBY

4.12

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 460 DAYS | MARS ARRIVAL DATE = 2448780 | 6 JUN 1992

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448780 (6 JUN 1992)																				
4-8520	4-8664.6	.184	228.2	-20.6	-.6	.655	98.2	.300	.793	200.2	451.0	.555	1.031D	106.8	1.224	3.5	11.8	115.8	.354	
4-8664.6	4-8780	.354	138.4	6.7	1.8	1.347	75.7	.392	1.059	53.3	154.1	.643D	1.474A	104.8	.708	-1.1	8.5	27.6	.263	
4-8780	4-9000	.226	31.9	6.5	-2.0	.741	76.9	.325	1.116	149.0	272.7	.754A	1.479	72.3	1.067	1.9	-15.7	292.8	.330	
		15.15	9.35	4.47	5.80	9.18	4.88	14.80	2/1/1	51.3	174.0	22.9	.481	5.039	16.0	35.0	12.6	98.4D	1.943	
4-8530	4-8666.2	.215	227.8	-19.6	-.4	.666	101.3	.314	.801	207.4	450.9	.549	1.033D	107.5	1.229	3.6	11.3	118.4	.370	
4-8666.2	4-8780	.370	138.6	6.3	1.8	1.345	74.8	.398	1.052	56.5	154.8	.633D	1.471A	104.8	.704	-1.0	8.5	26.9	.265	
4-8780	4-9010	.205	32.5	4.0	-2.4	.753	78.4	.292	1.139	147.9	281.7	.807A	1.472	74.9	1.075	2.2	-12.7	298.3	.289	
		15.15	9.29	4.91	5.86	9.24	4.38	14.03	2/1/1	51.9	170.9	20.6	.439	5.597	16.8	36.3	14.1	97.2D	2.017	
MARS ARRIVAL DATE = 2448790 (16 JUN 1992)																				
4-8520	4-8665.8	.181	230.3	-20.6	-.4	.653	97.8	.300	.791	199.0	451.6	.553	1.028D	106.8	1.222	3.5	11.6	117.3	.354	
4-8665.8	4-8790	.354	138.8	7.0	1.9	1.340	75.5	.385	1.038	55.2	160.5	.639D	1.438A	101.4	.692	-1.1	6.7	23.6	.236	
4-8790	4-9000	.223	34.2	7.8	-1.8	.731	77.1	.337	1.102	151.5	268.9	.731A	1.473	71.3	1.062	1.7	-16.5	294.9	.345	
		14.36	9.24	4.43	5.14	8.52	4.81	15.12	2/1/1	61.9	174.6	21.7	.479	5.320	15.5	36.0	12.2	97.7D	2.071	
4-8530	4-8667.5	.211	229.4	-19.5	-.3	.863	100.9	.314	.798	206.3	451.5	.548	1.049D	107.5	1.227	3.5	11.2	119.8	.370	
4-8667.5	4-8790	.370	139.0	6.6	1.9	1.336	74.6	.391	1.032	58.3	161.1	.629D	1.436A	101.3	.688	-1.0	6.7	22.9	.239	
4-8790	4-9010	.201	34.6	5.5	-2.2	.745	78.6	.301	1.127	150.4	277.9	.788A	1.466	74.0	1.071	1.9	-13.9	300.5	.303	
		14.34	9.13	4.86	5.20	8.59	4.28	14.28	2/1/1	62.6	173.1	19.5	.439	5.890	16.2	37.3	13.3	96.6D	2.149	
4-8540	4-8669.3	.248	231.5	-19.1	-.1	.876	104.1	.332	.809	212.9	451.5	.540	1.078D	108.5	1.233	3.4	10.3	123.1	.392	
4-8669.3	4-8790	.392	139.6	6.1	1.9	1.334	73.4	.399	1.024	62.3	162.0	.615D	1.433A	101.3	.682	-.9	6.7	21.8	.243	
4-8790	4-9020	.183	34.8	2.4	-2.7	.756	79.9	.270	1.148	149.6	287.2	.838A	1.459	76.6	1.077	2.2	-10.3	305.4	.264	
		14.61	9.31	5.45	5.30	8.69	3.87	13.59	2/1/1	63.5	168.7	16.9	.392	6.820	16.7	39.2	14.4	95.2D	2.280	
MARS ARRIVAL DATE = 2448800 (26 JUN 1992)																				
4-8520	4-8667.0	.178	232.7	-20.6	-.3	.851	97.3	.300	.788	197.8	452.3	.551	1.025D	106.9	1.220	3.5	11.5	118.9	.355	
4-8667.0	4-8800	.355	139.8	7.4	2.0	1.336	75.3	.380	1.027	56.4	166.1	.636D	1.418A	98.3	.680	-1.1	4.9	19.4	.220	
4-8600	4-9000	.220	36.2	8.8	-1.8	.719	77.4	.350	1.088	154.1	265.2	.707A	1.468	70.3	1.056	1.5	-17.0	296.8	.361	
		13.88	9.15	4.39	4.73	8.12	4.75	15.44	2/1/1	72.8	174.5	21.1	.477	5.472	14.8	37.5	11.1	97.3D	2.134	
4-8530	4-8668.4	.207	231.2	-19.5	-.2	.861	100.5	.313	.796	205.1	452.1	.546	1.045D	107.6	1.225	3.5	11.0	121.3	.370	
4-8668.4	4-8800	.370	140.2	6.9	2.0	1.334	74.5	.386	1.022	59.2	166.5	.627D	1.417A	98.2	.677	-1.0	4.9	18.7	.223	
4-8800	4-9010	.197	36.2	6.7	-2.1	.734	79.0	.311	1.115	153.0	274.3	.766A	1.461	73.2	1.066	1.6	-14.7	302.5	.316	
		13.79	8.98	4.80	4.80	8.19	4.19	14.53	2/1/1	73.3	174.7	19.1	.440	6.030	15.3	38.8	12.2	96.3D	2.213	
4-8540	4-8670.4	.243	232.9	-19.0	.0	.873	103.6	.331	.806	211.8	452.1	.539	1.073D	108.5	1.231	3.4	10.2	124.5	.391	
4-8670.4	4-8800	.391	140.8	6.4	2.0	1.331	73.4	.395	1.014	63.1	167.3	.614D	1.415A	98.1	.671	-.9	5.0	17.7	.227	
4-8800	4-9020	.177	35.9	3.8	-2.4	.747	80.3	.278	1.138	152.3	283.7	.822A	1.454	75.8	1.074	1.8	-11.7	307.6	.275	
		14.02	9.11	5.37	4.91	8.29	3.74	13.78	2/1/1	74.3	171.3	16.6	.394	6.948	15.5	40.8	13.0	95.1D	2.343	
4-8550	4-8672.8	.266	236.7	-19.0	.3	.889	106.8	.354	.820	217.9	452.1	.529	1.111D	109.7	1.239	3.2	9.0	128.4	.416	
4-8672.8	4-8800	.418	141.7	5.8	1.9	1.327	71.9	.407	1.005	67.8	168.1	.596D	1.413A	97.9	.664	-.7	5.0	16.5	.233	
4-8600	4-9030	.162	35.6	-.1	-3.0	.757	81.4	.250	1.158	151.9	293.4	.868A	1.448	78.2	1.079	2.2	-7.6	311.8	.239	
		14.58	9.53	6.11	5.06	8.44	3.42	13.16	2/1/1	75.4	165.8	13.6	.345	6.469	15.4	43.3	13.4	93.8D	2.575	
MARS ARRIVAL DATE = 2448810 (6 JUL 1992)																				
4-8520	4-8668.3	.176	235.3	-20.6	-.2	.848	96.8	.301	.786	196.4	453.0	.549	1.022D	107.0	1.218	3.4	11.3	120.6	.356	
4-8668.3	4-8810	.356	141.5	7.7	2.1	1.334	75.2	.379	1.023	57.0	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.4	.212	
4-8810	4-9000	.218	37.7	9.5	-1.7	.706	77.9	.363	1.074	156.9	261.8	.684A	1.463	69.3	1.051	1.3	-17.4	298.6	.377	
		13.59	9.06	4.36	4.53	7.93	4.70	15.78	2/1/1	83.2	173.7	20.9	.474	5.515	13.9	39.4	9.9	97.1D	2.142	
4-8530	4-8669.6	.203	233.2	-19.4	-.1	.858	100.0	.313	.793	203.8	452.8	.545	1.040D	107.6	1.223	3.4	10.8	122.9	.370	
4-8669.6	4-8810	.370	141.9	7.2	2.1	1.332	74.5	.385	1.018	59.6	171.2	.627D	1.409A	95.4	.669	-.9	3.3	14.8	.214	
4-8810	4-9010	.193	37.3	7.5	-2.0	.723	79.5	.321	1.103	155.9	270.9	.749A	1.457	72.3	1.062	1.4	-15.4	304.3	.329	
		13.45	8.84	4.74	4.61	8.00	4.10	14.80	2/1/1	83.7	175.7	19.1	.440	6.040	14.2	40.7	10.8	96.3D	2.218	
4-8540	4-8671.6	.239	234.4	-18.9	.1	.870	103.2	.330	.802	210.6	452.7	.538	1.067D	108.5	1.228	3.3	10.0	126.1	.390	
4-8671.6	4-8810	.390	142.6	6.7	2.0	1.329	73.4	.393	1.011	63.2	171.8	.614D	1.408A	95.2	.664	-.8	3.4	13.9	.219	
4-8810	4-9020	.172	36.6	4.8	-2.2	.738	80.8	.285	1.128	155.2	280.5	.806A	1.451	75.1	1.070	1.5	-12.8	309.5	.286	
		13.64	8.93	5.29	4.71	8.10	3.64	13.98	2/1/1	84.5	173.4	16.6	.396	6.909	14.2	42.7	11.4	95.2D	2.341	
4-8550	4-8674.0	.280	238.0	-18.9	.4	.885	106.3	.352	.816	216.7	452.7	.528	1.103D	109.7	1.236	3.1	8.8	130.0	.416	
4-8674.0	4-8810	.416	143.6	6.1	2.0	1.325	72.0	.405	1.002	67.8	172.5	.596D	1.407A	95.0	.657	-.7	3.5	12.8	.225	
4-8610	4-9030	.156	35.7	1.2	-2.6	.749	82.0	.256	1.150	155.0	290.3	.856A	1.444	77.6	1.076	1.8	-9.5	314.0	.247	
		14.16	9.29	6.00	4.87	8.25	3.29	13.30	2/1/1	85.5	168.5	13.8	.348	8.337	13.8	45.3	11.3	94.0D	2.554	
4-8560	4-8676.8	.327	243.2	-19.1	.8	.903	109.5	.380	.834	222.2	452.7	.517	1.151D	111.1	1.247	2.8	7.4	134.5	.447	
4-8676.8	4-8810	.447	144.9	5.5	2.0	1.321	70.3	.420	.990	73.1	173.4	.574D	1.406A	94.7	.648	-.5	3.5	11.5	.254	
4-8610	4-9040	.145	34.8	-3.5	-3.2	.758	82.9	.232	1.168	155.0	300.4	.897A	1.439	79.9	1.080	2.2	-4.9	317.3	.213	
		15.03	9.96	6.90	5.07	8.46	3.06	12.77	2/1/1	86.7	162.1	10.6	.300	10.862	12.3	48.5	10.5	92.8D	2.961	
MARS ARRIVAL DATE = 2448820 (16 JUL 1992)																				
4-8520	4-8669.7	.173	238.3	-20.5	-.1	.846	96.3	.302	.783	195.0	453.8	.547	1.019D	107.1	1.216	3.4	11.1	122.5	.357	
4-8669.7	4-8820	.357	143.6	7.9	2.2	1.334	75.2	.379	1.022	57.2	174.9	.635D	1.410A	93.1	.667	-1.0	2.0	12.2	.209	
4-8820	4-9000	.217	38.6	10.0	-1.7	.692	78.6	.376	1.060	159.8	258.5	.661A	1.459	68.3	1.045	1.1	-17.8	300.3	.393	
		13.47	8.99	4.33	4.48	7.88	4.66	16.12	2/1/1	92.8	172.6	21.0	.471	5.479	13.1	41.6	8.7	97.1D	2.108	
4-8530	4-8670.9	.200	235.5	-19.4	.1	.855	99.5	.312	.789	202.5	453.5	.543	1.036D	107.6	1.220	3.4	10.7	124.7	.370	
4-8670.9	4-8820	.370	144.0	7.5	2.2	1.332	74.5	.384	1.018	59.5	175.2	.627D	1.410A	93.0	.664	-.9	2.1	11.7	.212	
4-8820	4-9010	.190	37.9	8.0	-1.9	.712	80.2	.331	1.092	158.9	267.8	.730A	1.453	71.5	1.057	1.2	-15.9	306.0	.343	
		13.27	8.72	4.69	4.55	7.94	4.03	15.06	2/1/1	93.3	175.8	19.3	.440	5.955	13.2	42.9	9.4	96.4D	2.180	
4-8540	4-8672.8	.234	236.2	-18.8	.3	.867	102.7	.329	.798	209.2	453.4	.536	1.061D	108.5	1.226	3.3	9.8	127.6	.389	
4-8672.8	4-8820	.389	144.8	6.9	2.1	1.329	73.5	.393	1.012	63.0	175.7	.615D	1.409A	92.8	.659	-.8	2.2	10.9	.217	
4-8820	4-9020	.169	36.6	5.3	-2.1	.727	81.6	.293	1.119	158.4	277.5	.791A	1.448	74.4	1.067	1.2	-13.6	311.2	.297	
		13.42	8.76	5.21	4.66	8.05	3.55	14.18	2/1/1	93.9	175.1	17.0	.398	6.750	13.0	44.8	9.8	95.3D	2.289	
4-8550	4-8675.2	.274	239.4	-18.7	.5	.881	105.8	.350	.811	215.4	453.4	.527	1.095D	109.6	1.233	3.1	8.7	131.6	.414	
4-8675.2	4-8820	.414	145.8	6.3	2.1	1.326	72.1	.404	1.003	67.4	176.3	.598D	1.409A	92.5	.652	-.6	2.4	10.0	.223	
4-8820	4-9030	.152	35.0	2.0	-2.4	.740	82.7	.262	1.143	158.3	287.5	.844A	1.442	77.0	1.074	1.4	-10.8	315.6	.256	
		13.91	9.09	5.90	4.82	8.21	3.19	13.45	2/1/1	94.7	170.8	14.3	.351	8.044	12.2	47.4	9.6	94.2D	2.476	
4-8560	4-8676.0	.320	244.3	-18.9	.9	.899	109.0	.377	.828	221.0	453.4	.516	1.140D	111.0	1.243	2.8	7.2	136.1	.444	
4-8676.0	4-8820	.444	147.2	5.6	2.0	1.321	70.5	.419	.992	72.5	177.0	.577D	1.408A	92.1	.644	-.5	2.5	8.9	.232	
4-8820	4-9040	.139	33.3	-2.2	-2.8	.750	83.7	.236	1.163	158.5	297.8	.888A	1.437	79.4	1.079	1.7	-7.2	319.5	.220	
		14.73	9.71	6.76	5.03	8.41	2.94	12.87	2/1/1	95.6	164.9	11.2	.304	10.269	10.5	50.7	8.3	93.1D	2.820	
MARS ARRIVAL DATE = 2448830 (26 JUL 1992)																				
4-8520	4-8671.2	.171	241.7	-20.4	.1	.843	95.6	.303	.780	193.3	454.7	.544	1.016D	107.2	1.214	3.4	11.0	124.6	.359	
4-8671.2	4-8830	.359	146.1	8.1	2.3	1.334	75.1	.381	1.025	57.2	178.5	.635D	1.415A	90.9	.662	-.9	1.2	9.9	.212	
4-8830	4-9000	.216	39.0	10.3	-1.6	.677	79.6	.391	1.047	162.8	255.5	.638A	1.456	67.3	1.039	.9	-16.0	301.9	.409	
		13.48	8.94	4.30	4.54	7.93	4.64	16.47	2/1/1	101.4	171.4	21.4	.466	5.388	12.4	44.1	7.6	97.1D	2.045	
4-8530	4-8672.4	.196	238.0	-19.3	.2	.852	99.0	.312	.786	200.9	454.3	.541	1.031D	107.7	1.218	3.3	10.5	126.6	.370	
4-8672.4	4-8830	.370	146.5	7.7	2.2	1.333	74.5	.386	1.022	59.2	178.7	.628D	1.415A	90.8	.659	-.8	1.3	9.5	.214	
4-8830	4-9010	.188	37.8	8.2	-1.8	.699	81.1	.342	1.081	162.1	264.9	.711A	1.451	70.6	1.053	1.0	-16.3	307.5	.356	*
		13.22	8.62	4.63	4.60	7.99	3.99	15.33	2/1/1	101.7	175.4	19.8	.439	5.804	12.3	45.3	8.0	96.5D	2.110	
4-8540	4-8674.2	.228	238.1	-18.7	.4	.863	102.1	.327	.795	207.8	454.1	.534	1.055D	108.5	1.223	3.2	9.6	129.6	.388	
4-8674.2	4-8830	.388	147.2	7.1	2.2	1.331	73.6	.393	1.016	62.4	179.1	.616D	1.415A	90.6	.655	-.7	1.6	8.9	.219	
4-8830	4-9020	.166	35.9	5.5	-2.0	.717	82.5	.301	1.111	161.8	274.8	.776A	1.446	73.7	1.063	1.0	-14.2	312.7	.308	
		13.33	8.62	5.12	4.71	8.10	3.49	14.36	2/1/1	102.1	176.5	17.7	.400	6.517	11.9	47.2	8.2	95.6D	2.206	
4-8550	4-8676.5	.268	240.9	-18.8	.7	.877	105.3	.348	.806	214.1	454.1	.526	1.067D	109.6	1.230	3.0	8.5	133.3	.412	
4-8676.5	4-8830	.412	148.3	6.4	2.1	1.327	72.3	.404	1.008	66.6	179.6	.601D	1.415A	90.3	.649	-.6	1.8	8.1	.225	
4-8830	4-9030	.149	33.6	2.3	-2.2	.731	83.6	.267	1.137	161.9	285.0	.833A	1.441	76.4	1.071	1.1	-11.8	317.4	.265	
		13.78	8.91	5.79	4.87	8.26	3.13	13.60	2/1/1	102.7	172.6	15.0	.355	7.662	10.9	49.8	7.9	94.5D	2.363	

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448830
26 JUL 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8560	4-8679.2	.313	245.6	-18.7	1.0	.894	108.5	.373	.822	219.7	454.1	.515	1.129D	110.9	1.240	2.7	7.1	137.7	.442
4-8679.2	4-8830	.442	149.7	5.8	2.0	1.323	70.7	.418	.998	71.6	180.2	.580D	1.415	89.9	.642	-.4	2.0	7.3	.234
4-8830	4-9040	.136	31.1	-1.6	-2.5	.742	84.6	.240	1.158	162.4	295.6	.880A	1.436	78.9	1.077	1.3	-8.9	321.3	.226
		14.57	9.50	6.62	5.08	8.46	2.88	12.96	2/1/1	103.4	167.0	12.0	.308	9.572	9.0	53.0	6.3	93.4D	2.643
MARS ARRIVAL DATE = 2448840 (5 AUG 1992)																			
4-8520	4-8673.0	.169	245.5	-20.3	.3	.840	95.0	.304	.777	191.5	455.6	.541	1.013D	107.3	1.211	3.4	10.8	126.9	.361
4-8673.0	4-8840	.361	148.9	8.2	2.3	1.336	75.1	.384	1.030	57.0	181.6	.635D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9000	.217	38.7	10.3	-1.6	.661	80.8	.405	1.034	166.0	252.6	.615A	1.454	66.2	1.033	.6	-18.2	303.4	.425
		13.60	8.94	4.28	4.66	8.05	4.66	16.83	2/1/1	108.7	170.2	21.9	.460	5.267	11.8	46.8	6.7	97.1D	1.964
4-8530	4-8673.9	.192	240.9	-19.2	.4	.849	98.3	.312	.783	199.3	455.1	.538	1.027D	107.7	1.215	3.3	10.3	128.7	.371
4-8673.9	4-8840	.371	149.3	7.8	2.3	1.335	74.6	.388	1.027	58.7	181.8	.629D	1.425	88.9	.656	-.8	1.1	8.2	.219
4-8840	4-9010	.188	37.0	8.1	-1.8	.686	82.3	.353	1.071	165.5	262.3	.693A	1.450	69.8	1.049	.8	-16.6	308.9	.369
		13.27	8.55	4.57	4.72	8.11	3.98	15.61	2/1/1	108.9	174.6	20.5	.438	5.620	11.6	47.9	6.9	96.7D	2.022
4-8540	4-8675.6	.223	240.3	-18.6	.5	.860	101.6	.326	.791	206.3	454.9	.533	1.049D	108.5	1.220	3.2	9.5	131.5	.387
4-8675.6	4-8840	.387	150.0	7.2	2.2	1.333	73.7	.395	1.022	61.7	182.1	.618D	1.425	88.6	.653	-.7	1.3	7.8	.224
4-8840	4-9020	.165	34.4	5.4	-1.9	.706	83.6	.309	1.104	165.4	272.4	.762A	1.445	73.0	1.061	.8	-14.7	314.1	.316
		13.34	8.51	5.04	4.82	8.21	3.47	14.58	2/1/1	109.2	177.5	18.4	.401	6.243	11.0	49.8	6.9	95.9D	2.104
4-8550	4-8677.9	.261	242.7	-18.4	.8	.873	104.7	.346	.801	212.6	454.9	.524	1.079D	109.6	1.227	2.9	8.3	135.2	.410
4-8677.9	4-8840	.410	151.1	6.6	2.1	1.330	72.4	.405	1.015	65.7	182.5	.604D	1.426	88.3	.647	-.5	1.6	7.2	.230
4-8840	4-9030	.147	31.3	2.2	-2.1	.722	84.8	.273	1.132	165.8	282.9	.822A	1.441	75.9	1.070	.8	-12.6	316.8	.273
		13.76	8.78	5.67	4.98	8.37	3.11	13.74	2/1/1	109.6	174.1	15.9	.358	7.238	9.9	52.3	6.4	94.6D	2.232
4-8560	4-8680.6	.305	247.0	-18.5	1.1	.889	107.9	.370	.816	218.3	454.9	.514	1.119D	110.9	1.236	2.6	6.9	139.5	.439
4-8680.6	4-8840	.439	152.5	5.8	2.0	1.326	70.9	.419	1.005	70.4	183.0	.584D	1.426	87.9	.640	-.3	1.9	6.6	.238
4-8840	4-9040	.135	28.0	-1.5	-2.3	.734	85.7	.244	1.155	166.5	293.7	.873A	1.437	78.5	1.076	.9	-10.2	322.7	.232
		14.52	9.34	6.48	5.19	8.57	2.86	13.06	2/1/1	110.1	168.5	13.0	.313	8.853	8.0	55.5	4.7	93.6D	2.455
MARS ARRIVAL DATE = 2448850 (15 AUG 1992)																			
4-8520	4-8674.8	.168	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.3	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	8.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.438	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9000	.219	37.8	10.1	-1.7	.645	82.4	.421	1.023	169.3	250.0	.593A	1.453	65.2	1.028	.6	-18.3	304.8	.442
		13.81	8.98	4.26	4.83	8.22	4.72	17.20	2/1/1	114.9	169.0	22.5	.453	5.131	11.4	49.7	6.1	97.1D	1.870
4-8530	4-8675.6	.188	244.2	-19.0	.5	.845	97.6	.313	.779	197.6	456.0	.536	1.023D	107.8	1.213	3.3	10.2	131.0	.372
4-8675.6	4-8850	.372	152.4	7.9	2.3	1.337	74.6	.391	1.034	58.2	184.5	.630D	1.438	87.1	.654	-.7	1.3	7.9	.226
4-8850	4-9010	.189	35.5	7.8	-1.8	.673	83.8	.365	1.063	169.0	259.9	.675A	1.450	69.0	1.045	.6	-16.8	310.2	.382
		13.41	8.54	4.52	4.87	8.26	4.02	15.88	2/1/1	115.0	173.7	21.3	.435	5.419	11.0	50.7	6.0	96.8D	1.924
4-8540	4-8677.2	.218	242.8	-18.4	.7	.856	100.9	.326	.787	204.7	455.8	.530	1.043D	108.5	1.217	3.1	9.3	133.6	.387
4-8677.2	4-8850	.387	153.0	7.3	2.2	1.335	73.8	.397	1.030	60.9	184.7	.621D	1.438	86.9	.650	-.6	1.5	7.6	.230
4-8850	4-9020	.166	32.2	5.0	-1.9	.695	85.1	.318	1.098	169.2	270.3	.749A	1.447	72.4	1.058	.6	-15.1	315.3	.329
		13.43	8.46	4.96	4.97	8.36	3.50	14.78	2/1/1	115.2	177.9	19.3	.402	5.956	10.3	52.5	5.9	96.1D	1.994
4-8550	4-8679.3	.255	244.5	-18.2	.9	.869	104.1	.344	.797	211.1	455.7	.523	1.071D	109.5	1.224	2.9	8.2	137.1	.408
4-8679.3	4-8850	.408	154.1	6.6	2.1	1.332	72.6	.407	1.023	64.6	185.0	.607D	1.439	86.6	.645	-.4	1.9	7.2	.236
4-8850	4-9030	.149	28.4	1.8	-2.0	.713	86.2	.279	1.128	170.0	281.1	.813A	1.444	75.4	1.068	.6	-13.2	319.9	.281
		13.82	8.70	5.56	5.12	8.51	3.14	13.88	2/1/1	115.5	175.3	16.9	.361	6.815	9.2	54.9	5.2	95.2D	2.099
4-8560	4-8682.0	.298	248.5	-18.4	1.3	.884	107.3	.367	.810	216.8	455.6	.513	1.108D	110.8	1.232	2.6	6.8	141.4	.436
4-8682.0	4-8850	.436	155.5	5.9	2.0	1.329	71.2	.420	1.014	69.2	185.4	.589D	1.440	86.1	.639	-.3	2.2	6.7	.244
4-8850	4-9040	.137	24.3	-1.7	-2.1	.726	87.1	.249	1.154	171.1	292.3	.867A	1.441	78.1	1.076	.7	-11.2	323.8	.238
		14.56	9.23	6.34	5.33	8.71	2.90	13.15	2/1/1	115.8	169.6	14.1	.317	8.173	7.3	58.0	3.6	94.1D	2.272
MARS ARRIVAL DATE = 2448860 (25 AUG 1992)																			
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.008D	107.7	1.206	3.3	10.5	132.1	.368
4-8676.9	4-8860	.368	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.5	.232
4-8860	4-9000	.225	36.2	9.7	-1.7	.630	84.5	.436	1.013	172.8	247.6	.571A	1.455	64.2	1.024	.4	-18.5	306.0	.459
		14.14	9.12	4.26	5.02	8.41	4.66	17.59	2/1/1	120.2	167.9	23.1	.444	4.995	11.2	52.8	5.9	96.9D	1.772
4-8530	4-8677.4	.184	247.8	-18.8	.7	.842	96.9	.313	.775	195.7	457.0	.532	1.018D	107.9	1.210	3.2	10.0	133.4	.373
4-8677.4	4-8860	.373	155.6	7.9	2.3	1.340	74.6	.394	1.042	57.6	186.9	.631D	1.453	85.6	.651	-.6	1.8	8.4	.233
4-8860	4-9010	.194	33.3	7.3	-1.8	.661	85.7	.376	1.056	172.8	257.9	.659A	1.453	68.2	1.042	.4	-17.1	311.3	.395
		13.65	8.59	4.47	5.06	8.44	4.12	16.17	2/1/1	120.2	172.9	22.1	.432	5.218	10.6	53.6	5.4	96.9D	1.823
4-8540	4-8678.8	.213	245.5	-18.2	.8	.852	100.3	.325	.782	203.0	456.6	.528	1.037D	108.5	1.214	3.1	9.2	135.8	.386
4-8678.8	4-8860	.386	156.2	7.3	2.2	1.338	73.9	.400	1.038	60.0	187.1	.623D	1.454	85.3	.648	-.5	2.1	8.1	.237
4-8860	4-9020	.170	29.4	4.4	-1.8	.685	86.8	.326	1.094	173.4	268.6	.737A	1.451	71.8	1.057	.4	-15.5	316.2	.339
		13.62	8.47	4.88	5.15	8.53	3.59	14.98	2/1/1	120.3	177.8	20.3	.403	5.674	9.8	55.3	5.1	96.3D	1.882
4-8550	4-8680.9	.248	246.6	-18.0	1.1	.864	103.5	.342	.792	209.5	456.5	.521	1.063D	109.5	1.220	2.8	8.0	139.2	.407
4-8680.9	4-8860	.407	157.2	6.7	2.1	1.336	72.8	.409	1.032	63.5	187.3	.610D	1.454	85.0	.644	-.4	2.4	7.8	.242
4-8860	4-9030	.154	24.9	1.1	-1.9	.704	87.8	.286	1.127	174.5	279.8	.805A	1.449	75.0	1.068	.4	-13.8	320.7	.288
		13.98	8.69	5.45	5.29	8.67	3.24	14.01	2/1/1	120.5	176.2	18.0	.364	6.409	8.6	57.6	4.4	95.4D	1.967
4-8560	4-8683.4	.290	250.1	-18.1	1.4	.879	106.7	.364	.805	215.3	456.4	.511	1.098D	110.7	1.228	2.5	6.7	143.3	.433
4-8683.4	4-8860	.433	158.6	5.9	2.0	1.332	71.4	.421	1.024	67.9	187.6	.593D	1.456	84.5	.638	-.2	2.8	7.5	.250
4-8860	4-9040	.143	20.3	-2.2	-2.0	.719	88.7	.253	1.155	176.0	291.5	.862A	1.447	77.8	1.076	.4	-12.1	324.6	.243
		14.69	9.21	6.19	5.49	8.87	3.01	13.24	2/1/1	120.7	170.3	15.2	.321	7.556	6.9	60.7	2.8	94.4D	2.103
MARS ARRIVAL DATE = 2448870 (4 SEP 1992)																			
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9000	.234	34.1	9.1	-1.8	.614	87.0	.453	1.005	176.4	245.6	.550A	1.460	63.1	1.020	.2	-18.6	307.2	.476
		14.59	9.36	4.27	5.23	8.62	5.08	18.00	2/1/1	124.6	166.9	23.7	.432	4.869	11.1	56.1	6.0	96.7D	1.672
4-8530	4-8679.3	.181	251.9	-18.5	.8	.838	96.1	.314	.772	193.6	458.0	.529	1.014D	108.0	1.207	3.2	9.9	135.9	.375
4-8679.3	4-8870	.375	159.1	7.8	2.2	1.342	74.6	.398	1.051	57.1	189.0	.633D	1.470	84.1	.649	-.5	2.7	9.5	.241
4-8870	4-9010	.202	30.6	6.6	-1.8	.649	88.0	.388	1.051	176.8	256.2	.643A	1.459	67.4	1.040	.2	-17.3	312.2	.409
		13.99	8.74	4.43	5.25	8.63	4.31	16.46	2/1/1	124.6	172.1	23.0	.428	5.025	10.4	56.7	5.2	96.9D	1.722
4-8540	4-8680.6	.207	248.5	-18.0	1.0	.848	99.5	.325	.778	201.1	457.5	.526	1.031D	108.6	1.211	3.0	9.0	138.1	.386
4-8680.6	4-8870	.386	159.6	7.3	2.2	1.341	74.0	.403	1.048	59.1	189.2	.625D	1.471	83.9	.647	-.4	2.9	9.3	.244
4-8870	4-9020	.179	26.2	3.6	-1.8	.676	88.9	.335	1.093	177.8	267.3	.727A	1.459	71.2	1.056	.2	-15.9	317.0	.349
		13.90	8.58	4.80	5.33	8.71	3.78	15.18	2/1/1	124.7	177.4	21.3	.403	5.405	9.5	58.2	4.7	96.5D	1.773
4-8550	4-8682.5	.242	248.9	-17.8	1.2	.860	102.8	.341	.787	207.8	457.3	.519	1.055D	109.5	1.217	2.8	7.9	141.3	.405
4-8682.5	4-8870	.405	160.5	6.6	2.1	1.339	73.0	.411	1.043	62.4	189.3	.614D	1.472	83.6	.643	-.3	3.3	9.1	.249
4-8870	4-9030	.163	21.2	.4	-1.9	.697	89.8	.292	1.129	179.4	279.0	.799A	1.458	74.6	1.068	.2	-14.4	321.3	.295
		14.23	8.77	5.34	5.46	8.84	3.43	14.14	2/1/1	124.8	176.7	19.1	.366	6.034	8.3	60.4	3.9	95.7D	1.843
4-8560	4-8685.0	.283	251.9	-17.9	1.5	.874	106.0	.362	.799	213.7	457.3	.510	1.088D	110.6	1.224	2.4	6.5	145.3	.430
4-8685.0	4-8870	.430	161.8	5.9	2.0	1.336	71.6	.423	1.035	66.5	189.6	.597D	1.473	83.1	.637	-.1	3.7	8.8	.257
4-8870	4-9040	.153	16.3	-2.8	-1.9	.714	90.5	.258	1.159	181.5	291.2	.859A	1.458D	77.6	1.077	.2	-13.0	325.0	.248
		14.92	9.27	6.05	5.65	9.03	3.22	13.32	2/1/1	124.8	170.6	16.4	.325	7.003	6.7	63.3	2.3	94.7D	1.949
MARS ARRIVAL DATE = 2448880 (14 SEP 1992)																			
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9000	.248	31.6	8.4	-1.8	.601	90.3	.470	1.000	180.3	243.8	.530A	1.470D	62.0	1.017	.0	-18.8	306.1	.495
		15.20	9.75	4.31	5.45	8.84	5.44	18.44	2/1/1	128.3	166.1	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	138.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9010	.215	27.6	5.8	-1.8	.639	90.8	.401	1.050	181.2	254.8	.629A	1.471D	66.6	1.040	.0	-17.6	312.9	.423
		14.47	9.02	4.40	5.44	8.83	4.62	16.77	2/1/1	128.3	171.5	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2448880
14 SEP 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8540	4-8682.4	.202	251.9	-17.7	1.1	.844	98.7	.325	.774	199.2	458.5	.523	1.025D	108.6	1.208	3.0	8.9	140.6	.387
4-8682.4	4-8880	.387	163.1	7.1	2.1	1.344	74.1	.407	1.058	58.3	191.1	.628D	1.489	82.6	.645	-.3	4.0	11.0	.251
4-8880	4-9020	.192	22.8	2.8	-1.8	.669	91.4	.344	1.095	182.7	266.6	.718A	1.471D	70.7	1.057	.0	-16.3	317.5	.359
		14.30	8.80	4.73	5.51	8.89	4.07	15.39	2/1/1	128.4	177.2	22.4	.402	5.157	9.3	61.2	4.5	96.6D	1.670
4-8550	4-8684.2	.235	251.4	-17.5	1.3	.855	102.1	.339	.782	206.0	458.2	.517	1.047D	109.4	1.214	2.7	7.8	143.6	.404
4-8684.2	4-8880	.404	163.9	6.5	2.0	1.343	73.1	.414	1.053	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9030	.176	17.6	-.2	-1.9	.692	92.1	.299	1.134	184.9	278.8	.795A	1.473D	74.2	1.070	.0	-15.0	321.6	.302
		14.59	8.96	5.23	5.63	9.01	3.73	14.27	2/1/1	128.4	176.9	20.2	.368	5.691	8.1	63.3	3.6	95.9D	1.727
MARS ARRIVAL DATE = 2448890 (24 SEP 1992)																			
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9010	.234	24.6	5.0	-1.9	.632	94.1	.414	1.053	185.9	254.0	.617A	1.489D	65.8	1.041	-.2	-17.9	313.4	.438
		15.10	9.47	4.39	5.64	9.02	5.08	17.10	2/1/1	131.5	171.2	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8540	4-8684.3	.198	255.6	-17.3	1.3	.839	97.9	.325	.770	197.1	459.5	.520	1.020D	108.7	1.205	3.0	8.8	143.1	.388
4-8684.3	4-8890	.388	166.7	6.9	2.1	1.348	74.1	.411	1.069	57.5	192.8	.629D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9020	.210	19.6	2.1	-1.9	.664	94.4	.354	1.101	188.1	266.4	.711A	1.491D	70.1	1.060	-.2	-16.7	317.7	.369
		14.85	9.17	4.66	5.69	9.07	4.50	15.60	2/1/1	131.5	177.1	23.4	.400	4.932	9.2	64.3	4.6	96.6D	1.572
4-8550	4-8685.9	.229	254.2	-17.2	1.5	.850	101.3	.338	.777	204.1	459.2	.514	1.040D	109.4	1.210	2.7	7.7	145.9	.403
4-8685.9	4-8890	.403	167.5	6.5	2.0	1.346	73.3	.418	1.065	60.1	192.9	.620D	1.510	81.1	.640	-.0	5.6	13.0	.263
4-8890	4-9030	.195	14.4	-.8	-1.8	.689	94.7	.307	1.144	190.9	279.3	.793A	1.495D	73.9	1.074	-.2	-15.6	321.5	.309
		15.08	9.29	5.13	5.60	9.18	4.16	14.40	2/1/1	131.5	176.6	21.4	.370	5.382	8.0	66.3	3.6	96.0D	1.620

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448770
27 MAY 1992

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448770 (27 MAY 1992)																				
4-8500	4-8662.1	.152	237.5	-24.4	-.8	.842	92.1	.288	.785	185.2	451.5	.559	1.011D	106.2	1.219	3.4	11.7	111.6	.339	
4-8662.1	4-8770	.339	139.0	6.6	1.7	1.360	76.9	.402	1.099	47.5	146.0	.658D	1.541A	108.6	.734	-1.2	10.0	31.5	.298	
4-8770	4-9020	.196	31.4	-2.4	-3.7	.770	79.4	.257	1.170	144.7	295.0	.869A	1.470	78.1	1.084	3.4	-5.0	300.3	.244	
		14.96	8.23	4.06	6.73	10.10	4.17	13.25	2/1/1	40.9	161.4	27.5	.522	4.205	14.2	33.6	10.5	101.0D	1.673	
4-8510	4-8662.4	.163	229.6	-22.3	-.8	.849	95.5	.290	.789	193.7	450.7	.560	1.019D	106.3	1.222	3.5	12.0	112.4	.342	
4-8662.4	4-8770	.342	138.9	6.6	1.7	1.360	76.7	.403	1.098	48.1	146.1	.656D	1.540A	108.6	.733	-1.2	10.0	31.5	.299	
4-8770	4-9030	.191	33.5	-10.4	-5.5	.777	80.3	.235	1.184	144.1	304.5	.906A	1.463	80.3	1.088	5.1	5.9	302.9	.223	
		15.00	8.26	4.20	6.74	10.11	4.06	12.92	2/1/1	41.0	150.5	26.8	.514	4.320	15.2	33.8	11.7	100.7D	1.706	
MARS ARRIVAL DATE = 2448780 (6 JUN 1992)																				
4-8490	4-8664.8	.164	253.1	-25.2	-.5	.834	87.5	.301	.780	174.1	454.3	.545	1.014	107.1	1.215	3.3	10.7	114.5	.356	
4-8664.8	4-8780	.356	138.4	6.6	1.8	1.347	75.6	.393	1.058	53.7	154.2	.642D	1.474A	104.8	.707	-1.1	8.5	27.5	.263	
4-8780	4-9010	.205	32.5	4.0	-2.4	.753	78.4	.292	1.139	147.9	281.7	.807A	1.472	74.9	1.075	2.2	-12.7	298.3	.289	
		14.40	8.59	4.21	5.81	9.19	4.38	14.03	2/1/1	51.3	170.9	24.0	.476	4.809	13.2	35.0	9.8	98.2D	1.811	
4-8500	4-8663.5	.152	241.1	-24.3	-.6	.840	91.5	.290	.783	183.8	452.3	.556	1.010D	106.4	1.217	3.4	11.5	113.4	.343	
4-8663.5	4-8780	.343	138.3	7.0	1.8	1.349	76.3	.389	1.063	51.1	153.6	.650D	1.476A	104.8	.710	-1.2	8.5	28.1	.261	
4-8780	4-9020	.189	33.2	.4	-3.1	.763	79.6	.263	1.159	147.0	291.0	.854A	1.464	77.3	1.081	2.8	-8.2	303.0	.253	
		13.84	8.08	4.07	5.76	9.14	4.00	13.41	2/1/1	50.8	165.5	25.0	.512	4.626	14.1	34.2	10.4	99.4D	1.856	
4-8510	4-8663.7	.162	232.4	-22.3	-.6	.847	95.0	.292	.787	192.4	451.4	.558	1.017D	106.4	1.220	3.5	11.9	114.0	.344	
4-8663.7	4-8780	.344	138.3	6.9	1.8	1.348	76.3	.389	1.062	51.4	153.7	.649D	1.476A	104.8	.710	-1.2	8.5	28.0	.261	
4-8780	4-9030	.179	34.3	-5.4	-4.2	.771	80.6	.240	1.175	146.4	300.5	.893A	1.457	79.6	1.085	3.7	-.8	306.3	.224	
		13.72	7.96	4.18	5.76	9.14	3.77	12.94	2/1/1	50.9	157.5	24.4	.509	4.725	15.1	34.3	11.5	99.3D	1.896	
4-8520	4-8664.6	.164	228.2	-20.6	-.6	.855	98.2	.300	.793	200.2	451.0	.555	1.031D	106.8	1.224	3.5	11.8	115.8	.354	
4-8664.6	4-8780	.354	138.4	6.7	1.8	1.347	75.7	.392	1.059	53.3	154.1	.643D	1.474A	104.8	.708	-1.1	8.5	27.6	.263	
4-8780	4-9040	.182	36.8	-16.0	-6.6	.777	81.4	.221	1.188	146.1	310.3	.926A	1.451	81.6	1.087	5.9	13.6	307.2	.213	
		14.12	8.32	4.47	5.80	9.18	3.86	12.76	2/1/1	51.3	143.8	22.9	.481	5.039	16.0	35.0	12.8	98.4D	1.943	
MARS ARRIVAL DATE = 2448790 (16 JUN 1992)																				
4-8490	4-8666.6	.170	257.1	-24.6	-.4	.832	86.7	.306	.777	172.4	455.5	.539	1.016	107.4	1.213	3.3	10.6	116.8	.363	
4-8666.6	4-8790	.363	138.9	6.8	1.9	1.339	75.0	.388	1.035	56.9	160.9	.634D	1.437A	101.4	.690	-1.0	6.7	23.2	.238	
4-8790	4-9010	.201	34.6	5.5	-2.2	.745	78.6	.301	1.127	150.4	277.9	.788A	1.466	74.0	1.071	1.9	-13.9	300.5	.303	
		13.74	8.56	4.28	5.18	8.56	4.28	14.28	2/1/1	62.2	173.1	22.2	.456	5.195	13.2	36.4	9.7	96.7D	1.914	
4-8500	4-8665.0	.154	244.7	-24.1	-.5	.838	91.0	.293	.781	182.3	453.1	.552	1.010D	106.6	1.216	3.4	11.3	115.3	.346	
4-8665.0	4-8790	.346	138.6	7.3	1.9	1.341	75.9	.382	1.041	53.7	160.2	.644D	1.438A	101.4	.694	-1.1	6.7	24.0	.235	
4-8790	4-9020	.183	34.8	2.4	-2.7	.756	79.9	.270	1.148	149.6	287.2	.838A	1.459	76.6	1.077	2.2	-10.3	305.4	.264	
		13.06	7.96	4.09	5.11	8.49	3.87	13.59	2/1/1	61.5	168.7	23.4	.501	4.936	13.8	35.4	10.0	98.3D	1.973	
4-8510	4-8664.9	.160	235.2	-22.3	-.5	.845	94.5	.293	.785	191.1	452.1	.555	1.015D	106.5	1.218	3.4	11.7	115.7	.346	
4-8664.9	4-8790	.346	138.6	7.3	1.9	1.341	76.0	.381	1.041	53.5	160.2	.644D	1.439A	101.4	.694	-1.1	6.7	24.0	.235	
4-8790	4-9030	.170	35.1	-2.2	-3.5	.764	80.9	.245	1.166	149.1	296.9	.881A	1.452	78.9	1.082	2.8	-4.9	309.3	.231	
		12.85	7.74	4.17	5.10	8.49	3.57	13.04	2/1/1	61.5	162.3	23.0	.504	5.007	14.7	35.3	11.0	98.4D	2.018	
4-8520	4-8665.8	.181	230.3	-20.6	-.4	.853	97.8	.300	.791	199.0	451.6	.553	1.020D	106.8	1.222	3.5	11.6	117.3	.354	
4-8665.8	4-8790	.354	138.8	7.0	1.9	1.340	75.5	.385	1.038	55.2	160.5	.639D	1.438A	101.4	.692	-1.1	6.7	23.6	.236	
4-8790	4-9040	.164	36.2	-9.6	-4.8	.771	81.8	.224	1.181	148.8	306.7	.916A	1.446	81.0	1.085	4.0	4.2	311.3	.206	
		13.02	7.88	4.43	5.14	8.52	3.45	12.66	2/1/1	61.9	152.7	21.7	.479	5.320	15.5	36.0	12.2	97.7D	2.071	
4-8530	4-8667.3	.211	229.4	-19.5	-.3	.863	100.9	.314	.798	206.3	451.5	.548	1.049D	107.5	1.227	3.5	11.2	119.8	.370	
4-8667.3	4-8790	.370	139.0	6.6	1.9	1.338	74.6	.391	1.032	58.3	161.1	.629D	1.436A	101.3	.688	-1.0	6.7	22.9	.239	
4-8790	4-9050	.181	39.5	-23.4	-8.1	.777	82.5	.208	1.193	148.8	316.7	.945A	1.441	82.9	1.086	7.2	23.5	309.8	.210	
		13.90	8.69	4.86	5.20	8.59	3.84	12.72	2/1/1	62.6	134.9	19.5	.439	5.890	16.2	37.3	13.3	96.6D	2.149	
MARS ARRIVAL DATE = 2448800 (26 JUN 1992)																				
4-8490	4-8668.6	.178	261.3	-23.9	-.2	.829	85.7	.313	.775	170.5	456.8	.532	1.018	107.9	1.211	3.3	10.4	119.4	.372	
4-8668.6	4-8800	.372	140.3	6.9	2.0	1.333	74.4	.387	1.021	59.7	166.6	.626D	1.417A	98.2	.676	-1.0	4.9	18.6	.223	
4-8800	4-9010	.197	36.2	6.7	-2.1	.734	79.0	.311	1.115	153.0	274.3	.768A	1.461	73.2	1.066	1.6	-14.7	302.5	.316	
		13.39	8.57	4.39	4.82	8.20	4.19	14.53	2/1/1	73.5	174.7	20.9	.434	5.501	13.1	38.4	9.7	95.5D	1.953	
4-8500	4-8666.5	.156	248.5	-23.9	-.4	.836	90.3	.296	.779	180.8	454.1	.548	1.009D	106.8	1.214	3.4	11.2	117.3	.351	
4-8666.5	4-8800	.351	139.7	7.5	2.0	1.336	75.6	.379	1.029	55.5	165.9	.639D	1.419A	98.3	.681	-1.1	4.9	19.6	.219	
4-8800	4-9020	.177	35.9	3.8	-2.4	.747	80.3	.278	1.138	152.3	283.7	.822A	1.454	75.8	1.074	1.8	-11.7	307.6	.275	
		12.57	7.86	4.11	4.72	8.11	3.74	13.78	2/1/1	72.5	171.3	22.4	.489	5.143	13.4	37.0	9.4	97.5D	2.027	
4-8510	4-8666.2	.159	238.3	-22.3	-.4	.842	94.0	.294	.783	189.7	452.8	.553	1.013D	106.6	1.217	3.4	11.5	117.4	.348	
4-8666.2	4-8800	.348	139.7	7.6	2.0	1.337	75.7	.378	1.030	55.0	165.8	.641D	1.419A	98.3	.682	-1.1	4.9	19.7	.218	
4-8800	4-9030	.162	35.6	-.1	-3.0	.757	81.4	.250	1.158	151.9	293.4	.868A	1.448	78.2	1.079	2.2	-7.6	311.8	.239	
		12.28	7.58	4.16	4.70	8.09	3.42	13.16	2/1/1	72.4	165.8	22.3	.497	5.178	14.1	36.9	10.1	97.8D	2.078	
4-8520	4-8667.0	.178	232.7	-20.6	-.3	.851	97.3	.300	.788	197.8	452.3	.551	1.025D	106.9	1.220	3.5	11.5	118.9	.355	
4-8667.0	4-8800	.355	139.8	7.4	2.0	1.336	75.3	.380	1.027	56.4	166.1	.636D	1.418A	98.3	.680	-1.1	4.9	19.4	.220	
4-8800	4-9040	.153	35.7	-5.8	-3.8	.765	82.3	.228	1.174	151.8	303.4	.907A	1.442	80.4	1.083	2.9	-1.4	314.6	.208	
		12.35	7.61	4.39	4.73	8.12	3.22	12.69	2/1/1	72.8	158.3	21.1	.477	5.472	14.8	37.5	11.1	97.3D	2.134	
4-8530	4-8668.4	.207	231.2	-19.5	-.2	.861	100.5	.313	.796	205.1	452.1	.546	1.045D	107.6	1.225	3.5	11.0	121.5	.370	
4-8668.4	4-8800	.370	140.2	6.9	2.0	1.334	74.5	.386	1.022	59.2	166.5	.627D	1.417A	98.2	.677	-1.0	4.9	18.7	.223	
4-8800	4-9050	.153	37.0	-14.9	-5.4	.771	83.1	.210	1.187	151.9	313.5	.938A	1.437	82.4	1.085	4.4	10.1	315.0	.189	
		12.83	8.03	4.80	4.80	8.19	3.23	12.42	2/1/1	73.3	146.6	19.1	.440	6.030	15.3	38.8	12.2	96.3D	2.213	
4-8540	4-8670.4	.243	232.9	-19.0	.0	.873	103.6	.331	.806	211.8	452.1	.539	1.073D	108.5	1.231	3.4	10.2	124.5	.391	
4-8670.4	4-8800	.391	140.8	6.4	2.0	1.331	73.4	.395	1.014	63.1	167.3	.614D	1.415A	98.1	.671	-.9	5.0	17.7	.227	
4-8800	4-9060	.197	42.1	-32.7	-10.7	.776	83.6	.196	1.197	152.1	323.7	.962A	1.433	84.3	1.085	9.5	36.6	309.6	.226	
		14.47	9.56	5.37	4.91	8.29	4.19	12.96	2/1/1	74.3	123.4	16.6	.394	6.948	15.5	40.8	13.0	95.1D	2.343	
MARS ARRIVAL DATE = 2448810 (6 JUL 1992)																				
4-8490	4-8671.1	.189	266.0	-23.0	.1	.827	84.5	.323	.773	168.2	458.3	.523	1.022	108.5	1.209	3.4	10.3	122.5	.384	
4-8671.1	4-8810	.384	142.4	6.8	2.0	1.330	73.7	.391	1.013	62.3	171.7	.617D	1.409A	95.3	.665	-.8	3.4	14.1	.218	
4-8810	4-9010	.193	37.3	7.5	-2.0	.723	79.5	.321	1.103	155.9	270.9	.749A	1.457	72.3	1.062	1.4	-15.4	304.3	.329	
		13.33	8.65	4.54	4.68	8.07	4.10	14.80	2/1/1	84.3	175.7	20.0	.407	5.758	13.2	41.0	9.8	94.3D	1.935	
4-8500	4-8668.2	.159	252.7	-23.5	-.2	.833	89.6	.300	.777	179.1	455.1	.544	1.009	107.1	1.212	3.4	11.0	119.6	.356	
4-8668.2	4-8810	.356	141.5	7.7	2.1	1.334	75.3	.379	1.023	56.9	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.5	.212	
4-8810	4-9020	.172	36.6	4.8	-2.2	.738	80.8	.285	1.128	155.2	280.5	.806A	1.451	75.1	1.070	1.5	-12.8	309.5	.286	
		12.32	7.79	4.15	4.53	7.93	3.64	13.98	2/1/1	83.2	173.4	21.9	.475	5.269	13.0	39.1	8.8	96.9D	2.028	
4-8510	4-8667.7	.159	241.8	-22.2	-.2	.840	93.4	.296	.780	188.3	453.6	.550	1.011D	106.7	1.215	3.4	11.4	119.4	.350	
4-8667.7	4-8810	.350	141.3	7.9	2.1	1.335	75.6	.377	1.025	55.9	170.6	.639D	1.410A	95.6	.674	-1.1	3.2	15.7	.210	
4-8810	4-9030	.156	35.7	1.2	-2.6	.749	82.0	.256	1.150	155.0	290.3	.856A	1.444	77.6	1.076	1.8	-9.5	314.0	.247	
		11.95	7.44	4.15	4.51	7.90	3.29	13.30	2/1/1	83.0	168.5	21.9	.490	5.255	13.4	38.8	9.1	97.5D	2.085	
4-8520	4-8668.3	.176	235.3	-20.6	-.2	.848	96.8	.301	.786	196.4	453.0	.549	1.022D	107.0	1.218	3.4	11.3	120.6	.356	
4-8668.3	4-8810	.356	141.5	7.7	2.1	1.334	75.2	.379	1.023	57.0	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.4	.212	
4-8810	4-9040	.145	34.8	-3.5	-3.2	.758	82.9	.232	1.168	155.0	300.4	.897A	1.439	79.9	1.080	2.2	-4.9	317.3	.213	
		11.95	7.42	4.36	4.53	7.93	3.06	12.77	2/1/1	83.2	162.1	20.9	.474	5.515	13.9	39.4	9.9	97.1D	2.152	
4-8530	4-8669.8	.203	233.2	-19.4	-.1	.858	100.0	.313	.793	203.8	452.8	.545	1.040D	107.6	1.223	3.4	10.8	122.9	.370	
4-8669.8	4-8810	.370	141.9	7.2	2.1	1.332	74.5	.365	1.018	59.6	171.2	.627D	1.409A	95.4	.669	-.9	3.3	14.8	.214	
4-8810	4-9050	.140	34.7	-10.1	-4.1	.765	83.7	.213	1.182	155.3	310.7	.951A	1.434	82.0	1.083	3.0	2.5	316.8	.186	
		12.30	7.69	4.74	4.61	8.00	2.95	12.39	2/1/1	83.7	153.3	19.1	.440	6.040	14.2	40.7	10.8	96.3D	2.218	
4-8540	4-8671.6	.239	234.4	-18.9	.1	.870	103.2	.330	.802	210.6	452.7	.538	1.067D	108.5	1.226	3.3	10.0	126.1	.390	
4-8671.6	4-8810	.390	142.6	6.7	2.0	1.329	73.4	.393	1.011	63.2	171.8	.614D	1.408A	95.2	.664	-.8	3.4	13.9	.219	
4-8810	4-9060	.148	36.7	-21.2	-6.2	.770	84.3	.198	1.194	155.7	321.1	.958A	1.430	83.9	1.084	5.0	17.3	316.8	.175	
		13.12	8.40	5.29	4.71	8.10	3.12	12.24	2/1/1	84.5	136.8	16.6	.396	6.909	14.2	42.7	11.4	95.2D	2.341	

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448820
16 JUL 1992

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448820 (16 JUL 1992)																				
4-8490	4-8674.1	.206	271.2	-21.9	.4	.824	82.9	.336	.770	165.4	460.4	.511	1.028	109.4	1.206	3.5	10.1	126.3	.402
4-8674.1	4-8820	.402	145.3	6.5	2.1	1.327	72.7	.399	1.007	65.4	176.0	.606D	1.409A	92.6	.655	-.7	2.3	10.4	.220
4-8820	4-9010	.190	37.9	8.0	-1.9	.712	80.2	.331	1.092	158.9	267.8	.730A	1.453	71.5	1.057	1.2	-15.9	306.0	.343
		13.57	8.82	4.79	4.75	8.13	4.03	15.06	2/1/1	94.3	175.8	19.1	.372	6.022	13.6	44.3	10.6	92.8D	1.867
4-8500	4-8670.2	.164	257.4	-22.9	.0	.831	88.7	.305	.774	177.1	456.2	.538	1.010	107.4	1.210	3.4	10.9	122.1	.362
4-8670.2	4-8820	.362	143.8	7.7	2.2	1.333	74.9	.381	1.021	58.1	175.0	.632D	1.410A	93.1	.665	-.9	2.0	12.0	.211
4-8820	4-9020	.169	36.6	5.3	-2.1	.727	81.6	.293	1.119	158.4	277.5	.791A	1.448	74.4	1.067	1.2	-13.6	311.2	.297
		12.27	7.76	4.21	4.51	7.90	3.55	14.18	2/1/1	93.0	175.1	21.6	.458	5.341	12.6	41.6	8.3	96.3D	1.988
4-8510	4-8669.3	.159	245.6	-22.1	-.1	.838	92.8	.298	.778	186.6	454.5	.546	1.010D	106.9	1.213	3.4	11.2	121.5	.353
4-8669.3	4-8820	.353	143.5	6.1	2.2	1.334	75.4	.378	1.024	56.4	174.8	.637D	1.410A	93.2	.667	-1.0	1.9	12.4	.208
4-8820	4-9030	.152	35.0	2.0	-2.4	.740	82.7	.262	1.143	158.3	287.5	.844A	1.442	77.0	1.074	1.4	-10.8	315.8	.256
		11.81	7.34	4.15	4.46	7.85	3.19	13.45	2/1/1	92.7	170.8	21.9	.481	5.263	12.8	41.1	8.2	97.3D	2.052
4-8520	4-8669.7	.173	238.3	-20.5	-.1	.846	96.3	.302	.783	195.0	453.8	.547	1.019D	107.1	1.216	3.4	11.1	122.5	.357
4-8669.7	4-8820	.357	143.6	7.9	2.2	1.334	75.2	.379	1.022	57.2	174.9	.635D	1.410A	93.1	.667	-1.0	2.0	12.2	.209
4-8820	4-9040	.139	33.3	-2.2	-2.8	.750	83.7	.236	1.163	158.5	297.8	.888A	1.437	79.4	1.079	1.7	-7.2	319.5	.220
		11.76	7.27	4.33	4.48	7.88	2.94	12.87	2/1/1	92.8	164.9	21.0	.471	5.479	13.1	41.6	8.7	97.1D	2.108
4-8530	4-8670.9	.200	235.5	-19.4	.1	.855	99.5	.312	.789	202.5	453.5	.543	1.036D	107.6	1.220	3.4	10.7	124.7	.370
4-8670.9	4-8820	.370	144.0	7.5	2.2	1.332	74.5	.384	1.018	59.5	175.2	.627D	1.410A	93.0	.664	-.9	2.1	11.7	.212
4-8820	4-9050	.132	32.1	-7.5	-3.3	.758	84.5	.215	1.179	159.0	308.3	.925A	1.432	81.5	1.082	2.1	-2.1	321.7	.188
		12.03	7.48	4.69	4.55	7.94	2.80	12.42	2/1/1	93.3	157.5	19.3	.440	5.955	13.2	42.9	9.4	96.4D	2.180
4-8540	4-8672.8	.234	236.2	-18.8	.3	.867	102.7	.329	.798	209.2	453.4	.536	1.061D	108.5	1.226	3.3	9.8	127.8	.389
4-8672.8	4-8820	.389	144.8	6.9	2.1	1.329	73.5	.393	1.012	63.0	175.7	.615D	1.409A	92.8	.659	-.8	2.2	10.9	.217
4-8820	4-9060	.131	32.0	-15.0	-4.4	.764	85.1	.199	1.191	159.6	318.9	.953A	1.429	83.5	1.083	3.1	6.6	321.5	.165
		12.65	7.99	5.21	4.66	8.05	2.78	12.12	2/1/1	93.9	147.0	17.0	.398	6.750	13.0	44.8	9.8	95.3D	2.289
4-8550	4-8675.2	.274	239.4	-18.7	.5	.881	105.8	.350	.811	215.4	453.4	.527	1.095D	109.6	1.233	3.1	8.7	131.6	.414
4-8675.2	4-8820	.414	145.8	6.3	2.1	1.326	72.1	.404	1.003	67.4	176.3	.598D	1.409A	92.5	.652	-.6	2.4	10.0	.223
4-8820	4-9070	.151	35.6	-28.3	-7.2	.768	85.6	.188	1.200	160.2	329.4	.975A	1.426	85.3	1.084	5.8	26.3	315.9	.168
		13.88	9.07	5.90	4.82	8.21	3.17	12.16	2/1/1	94.7	128.8	14.3	.351	8.044	12.2	47.4	9.6	94.2D	2.476
MARS ARRIVAL DATE = 2448830 (26 JUL 1992)																				
4-8490	4-8674.4	.237	277.7	-20.2	.9	.819	80.2	.360	.765	161.6	463.4	.490	1.041	110.9	1.203	3.8	9.9	131.7	.433
4-8674.4	4-8830	.433	149.3	5.9	2.0	1.324	71.1	.414	1.001	70.2	180.0	.586D	1.415	90.0	.644	-.5	2.0	7.5	.231
4-8830	4-9010	.188	37.8	8.2	-1.8	.699	81.1	.342	1.081	162.1	264.9	.711A	1.451	70.6	1.053	1.0	-16.3	307.5	.356
		14.26	9.25	5.26	5.02	8.40	3.99	15.33	2/1/1	103.2	175.4	17.9	.321	6.430	15.0	48.7	12.6	90.4D	1.741
4-8500	4-8672.5	.170	262.6	-22.2	.2	.828	87.7	.311	.771	174.9	457.6	.531	1.011	107.8	1.208	3.4	10.7	125.1	.371
4-8672.5	4-8830	.371	146.5	7.7	2.2	1.333	74.5	.386	1.021	59.4	178.7	.627D	1.415A	90.8	.659	-.8	1.4	9.4	.214
4-8830	4-9020	.166	35.9	5.5	-2.0	.717	82.5	.301	1.111	161.8	274.8	.776A	1.446	73.7	1.063	1.0	-14.2	312.7	.308
		12.39	7.79	4.29	4.61	8.00	3.49	14.38	2/1/1	101.7	176.5	21.4	.437	5.383	12.4	44.5	8.1	95.6D	1.916
4-8510	4-8671.1	.160	250.1	-21.8	.1	.835	92.1	.301	.775	184.8	455.6	.542	1.008D	107.1	1.211	3.4	11.1	123.9	.357
4-8671.1	4-8830	.357	146.0	8.2	2.3	1.335	75.2	.380	1.026	56.8	178.4	.636D	1.415A	91.0	.662	-.9	1.2	9.9	.211
4-8830	4-9030	.149	33.6	2.3	-2.2	.731	83.6	.267	1.137	161.9	285.0	.833A	1.441	76.4	1.071	1.1	-11.8	317.4	.265
		11.82	7.29	4.16	4.53	7.92	3.13	13.60	2/1/1	101.3	172.6	22.1	.471	5.226	12.3	43.7	7.4	97.0D	1.989
4-8520	4-8671.2	.171	241.7	-20.4	.1	.843	95.6	.303	.780	193.3	454.7	.544	1.016D	107.2	1.214	3.4	11.0	124.6	.359
4-8671.2	4-8830	.359	146.1	8.1	2.3	1.334	75.1	.381	1.025	57.2	178.5	.635D	1.415A	90.9	.662	-.9	1.2	9.9	.212
4-8830	4-9040	.136	31.1	-1.6	-2.5	.742	84.6	.240	1.158	162.4	295.6	.880A	1.436	78.9	1.077	1.3	-8.9	321.3	.226 *
		11.71	7.18	4.30	4.54	7.93	2.88	12.96	2/1/1	101.4	167.0	21.4	.466	5.388	12.4	44.1	7.6	97.1D	2.045
4-8530	4-8672.4	.196	238.0	-19.3	.2	.852	99.0	.312	.786	200.9	454.3	.541	1.031D	107.7	1.218	3.3	10.5	126.6	.370
4-8672.4	4-8830	.370	146.5	7.7	2.2	1.333	74.5	.386	1.022	59.2	178.7	.628D	1.415A	90.8	.659	-.8	1.3	9.5	.214
4-8830	4-9050	.127	28.8	-6.1	-2.8	.751	85.4	.218	1.176	163.1	306.3	.919A	1.432	81.2	1.081	1.5	-5.2	324.0	.192
		11.95	7.34	4.63	4.60	7.99	2.72	12.47	2/1/1	101.7	160.2	19.8	.439	5.804	12.3	45.3	8.0	96.5D	2.110
4-8540	4-8674.2	.228	238.1	-18.7	.4	.863	102.1	.327	.795	207.8	454.1	.534	1.055D	108.5	1.223	3.2	9.6	129.6	.388
4-8674.2	4-8830	.388	147.2	7.1	2.2	1.331	73.6	.393	1.016	62.4	179.1	.616D	1.415A	90.6	.655	-.7	1.6	8.9	.219
4-8830	4-9060	.124	27.3	-11.6	-3.4	.757	86.0	.202	1.189	163.9	317.2	.950A	1.429	83.2	1.083	2.1	.4	324.7	.164
		12.48	7.77	5.12	4.71	8.10	2.65	12.11	2/1/1	102.1	151.5	17.7	.400	6.517	11.9	47.2	8.2	95.6D	2.206
4-8550	4-8676.5	.268	240.9	-18.6	.7	.877	105.3	.348	.806	214.1	454.1	.526	1.087D	109.6	1.230	3.0	8.5	133.5	.412
4-8676.5	4-8830	.412	148.3	6.4	2.1	1.327	72.3	.404	1.008	66.6	179.6	.601D	1.415A	90.3	.649	-.6	1.8	8.1	.225
4-8830	4-9070	.127	27.8	-19.7	-4.7	.762	86.5	.189	1.200	164.8	327.9	.973A	1.427	85.1	1.084	3.2	10.9	322.1	.146
		13.37	8.50	5.79	4.87	8.26	2.71	11.90	2/1/1	102.7	139.0	15.0	.355	7.662	10.9	49.8	7.9	94.5D	2.363
MARS ARRIVAL DATE = 2448840 (5 AUG 1992)																				
4-8500	4-8675.1	.180	268.3	-21.3	.5	.825	86.4	.320	.768	172.3	459.2	.523	1.014	108.4	1.205	3.5	10.5	128.5	.382
4-8675.1	4-8840	.382	149.8	7.4	2.2	1.333	73.9	.393	1.023	60.8	182.0	.622D	1.425	88.7	.654	-.7	1.3	7.9	.222
4-8840	4-9020	.165	34.4	5.4	-1.9	.706	83.6	.309	1.104	165.4	272.4	.762A	1.445	73.0	1.061	.8	-14.7	314.1	.318
		12.68	7.89	4.42	4.79	8.18	3.47	14.58	2/1/1	109.1	177.5	21.2	.412	5.425	12.4	47.8	8.4	94.7D	1.822
4-8510	4-8673.0	.162	255.0	-21.4	.3	.832	91.2	.304	.772	182.7	456.7	.537	1.007D	107.4	1.208	3.4	10.9	126.5	.362
4-8673.0	4-8840	.362	149.0	8.2	2.3	1.336	75.0	.384	1.030	57.2	181.6	.634D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9030	.147	31.3	2.2	-2.1	.722	84.8	.273	1.132	165.8	282.9	.822A	1.441	75.9	1.070	.8	-12.6	318.8	.273
		11.96	7.29	4.18	4.67	8.05	3.11	13.74	2/1/1	108.7	174.1	22.3	.458	5.165	12.0	46.6	6.9	96.8D	1.907
4-8520	4-8673.0	.169	245.5	-20.3	.3	.840	95.0	.304	.777	191.5	455.6	.541	1.013D	107.3	1.211	3.4	10.8	126.9	.361
4-8673.0	4-8840	.361	148.9	8.2	2.3	1.336	75.1	.384	1.030	57.0	181.6	.635D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9040	.135	28.0	-1.5	-2.3	.734	85.7	.244	1.155	166.5	293.7	.873A	1.437	78.5	1.076	.9	-10.2	322.7	.232 ○
		11.80	7.14	4.28	4.66	8.05	2.86	13.06	2/1/1	108.7	168.5	21.9	.460	5.267	11.8	46.8	6.7	97.1D	1.964
4-8530	4-8673.9	.192	240.9	-19.2	.4	.849	98.3	.312	.783	199.3	455.1	.538	1.027D	107.7	1.215	3.3	10.3	128.7	.371
4-8673.9	4-8840	.371	149.3	7.8	2.3	1.335	74.6	.388	1.027	58.7	181.8	.629D	1.425	88.9	.656	-.8	1.1	8.2	.219
4-8840	4-9050	.127	24.8	-5.4	-2.5	.744	86.5	.221	1.174	167.6	304.8	.914A	1.434	80.8	1.080	1.1	-7.4	325.6	.196
		11.99	7.27	4.57	4.72	8.11	2.70	12.53	2/1/1	108.9	161.9	20.5	.438	5.620	11.6	47.9	6.9	96.7D	2.022
4-8540	4-8675.6	.223	240.3	-18.6	.5	.860	101.6	.326	.791	206.3	454.9	.533	1.049D	108.5	1.220	3.2	9.5	131.5	.387
4-8675.6	4-8840	.387	150.0	7.2	2.2	1.333	73.7	.395	1.022	61.7	182.1	.618D	1.425	88.6	.653	-.7	1.3	7.8	.224
4-8840	4-9060	.122	22.3	-9.8	-2.9	.751	87.1	.204	1.189	168.7	315.9	.947A	1.432	82.9	1.083	1.4	-3.7	327.0	.166
		12.48	7.66	5.04	4.82	8.21	2.62	12.13	2/1/1	109.2	153.9	18.4	.401	6.243	11.0	49.8	6.9	95.9D	2.104
4-8550	4-8677.9	.261	242.7	-18.4	.8	.873	104.7	.346	.801	212.6	454.9	.524	1.079D	109.6	1.227	2.9	8.3	135.2	.410
4-8677.9	4-8840	.410	151.1	6.6	2.1	1.330	72.4	.405	1.015	65.7	182.5	.604D	1.426	88.3	.647	-.5	1.6	7.2	.230
4-8840	4-9070	.121	21.1	-15.0	-3.5	.756	87.6	.191	1.201	169.8	326.9	.971A	1.430	84.9	1.084	1.9	2.3	325.8	.141
		13.26	8.28	5.67	4.98	8.37	2.60	11.85	2/1/1	109.6	143.6	15.9	.358	7.238	9.9	52.3	6.4	94.6D	2.232
4-8560	4-8680.6	.305	247.0	-18.5	1.1	.889	107.9	.370	.816	218.3	454.9	.514	1.119D	110.9	1.236	2.6	6.9	139.5	.439
4-8680.6	4-8840	.439	152.5	5.8	2.0	1.326	70.9	.419	1.005	70.4	183.0	.584D	1.426	87.9	.640	-.3	1.9	6.6	.238
4-8840	4-9080	.129	22.9	-23.5	-5.0	.760	87.9	.182	1.209	170.6	337.7	.988A	1.429	86.6	1.084	3.4	15.3	320.0	.130
		14.41	9.23	6.48	5.19	8.57	2.75	11.74	2/1/1	110.1	128.5	13.0	.313	8.853	8.0	55.5	4.7	93.8D	2.455
MARS ARRIVAL DATE = 2448850 (15 AUG 1992)																				
4-8500	4-8678.3	.196	274.7	-20.0	.8	.821	84.7	.332	.765	169.2	461.2	.511	1.018	109.2	1.202	3.6	10.4	132.7	.398
4-8678.3	4-8850	.398	153.6	6.9	2.2	1.334	73.2	.402	1.026	62.9	184.9	.613D	1.439	86.7	.648	-.5	1.7	7.3	.233
4-8850	4-9020	.166	32.2	5.0	-1.9	.695	85.1	.318	1.098	169.2	270.3	.749A	1.447	72.4	1.058	.6	-15.1	315.3	.329
		13.18	8.13	4.63	5.05	8.44	3.50	14.78	2/1/1	115.4	177.9	20.9	.379	5.501	12.9	51.7	9.3	93.5D	1.706
4-8510	4-8675.3	.165	260.5	-20.8	.5	.829	90.2	.309	.769	180.4	457.9	.531	1.007D	107.7	1.206	3.4	10.7	129.3	.369
4-8675.3	4-8850	.369	152.2	6.0	2.3	1.337	74.8	.389	1.035	57.7	184.4	.632D	1.438	87.2	.654	-.7	1.2	8.0	.225
4-8850	4-9030	.149	28.4	1.8	-2.0	.713	86.2	.279	1.128	170.0	281.1	.813A	1.444	75.4	1.068	.6	-13.2	319.9	.281
		12.22	7.37	4.23	4.86	8.24	3.14	13.88	2/1/1	115.0	175.3	22.6	.442	5.098	11.6	49.8	6.8	96.3D	1.811
4-8520	4-8674.8	.188	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.3	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	6.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.436	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9040	.137	24.3	-1.7	-2.1	.726	87.1	.249	1.154	171.1	292.3	.867A	1.441	78.1	1.076	.7	-11.2	323.8	.238
		11.99	7.16	4.26	4.83	8.22	2.90	13.15	2/1/1	114.9	169.6	22.5	.453	5.131	11.4	49.7	8.1	97.1D	1.870

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448850
15 AUG 1992

LAUNCH SWNGBY DEPART	SWNGBY ARRIVE RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-8530	4-8675.6	.188	244.2	-19.0	.5	.845	97.6	.313	.779	197.6	456.0	.536	1.023D	107.8	1.213	3.3	10.2	131.0	.372
4-8675.6	4-8850	.372	152.4	7.9	2.3	1.337	74.6	.391	1.034	58.2	184.5	.630D	1.438	87.1	.654	-.7	1.3	7.9	.226
4-8850	4-9050	.129	20.5	-5.2	-2.3	.737	87.8	.225	1.175	172.4	303.8	.911A	1.439	80.6	1.080	.8	-9.0	326.8	.200
		12.15	7.27	4.52	4.87	8.26	2.75	12.58	2/1/1	115.0	163.0	21.3	.435	5.419	11.0	50.7	6.0	96.8D	1.924
4-8540	4-8677.2	.218	242.8	-18.4	.7	.856	100.9	.326	.787	204.7	455.8	.530	1.043D	108.5	1.217	3.1	9.3	133.6	.387
4-8677.2	4-8850	.387	153.0	7.3	2.2	1.335	73.8	.397	1.030	60.9	184.7	.621D	1.438	86.9	.650	-.6	1.5	7.6	.230
4-8850	4-9060	.125	17.2	-8.7	-2.5	.745	88.4	.207	1.191	173.9	315.2	.945A	1.437	82.8	1.083	.9	-6.5	328.4	.168
		12.60	7.63	4.96	4.97	8.36	2.67	12.15	2/1/1	115.2	155.2	19.3	.402	5.956	10.3	52.5	5.9	96.1D	1.994
4-8550	4-8679.3	.255	244.5	-18.2	.9	.869	104.1	.344	.797	211.1	455.7	.523	1.071D	109.5	1.224	2.9	8.2	137.1	.408
4-8679.3	4-8850	.408	154.1	6.6	2.1	1.332	72.6	.407	1.023	64.6	185.0	.607D	1.439	86.6	.645	-.4	1.9	7.2	.236
4-8850	4-9070	.123	15.1	-12.3	-2.8	.750	88.9	.194	1.203	175.2	326.5	.970A	1.436	84.7	1.085	1.2	-5.1	328.0	.141
		13.32	8.20	5.56	5.12	8.51	2.64	11.85	2/1/1	115.5	145.5	16.9	.361	6.815	9.2	54.9	5.2	95.2D	2.099
4-8560	4-8682.0	.298	248.5	-18.4	1.3	.884	107.3	.367	.810	216.8	455.6	.513	1.108D	110.8	1.232	2.6	6.8	141.4	.436
4-8682.0	4-8850	.436	155.5	5.9	2.0	1.329	71.2	.420	1.014	69.2	185.4	.589D	1.440	86.1	.639	-.3	2.2	6.7	.244
4-8850	4-9080	.125	14.6	-16.9	-3.4	.754	89.2	.185	1.212	176.3	337.4	.988A	1.436	86.5	1.085	1.8	2.9	324.3	.121
		14.33	9.00	6.34	5.33	8.71	2.66	11.65	2/1/1	115.8	133.0	14.1	.317	8.173	7.3	58.0	3.6	94.1D	2.272
MARS ARRIVAL DATE = 2448860 (25 AUG 1992)																			
4-8500	4-8682.6	.222	282.0	-16.2	1.3	.816	82.2	.352	.760	165.2	463.9	.492	1.028	110.5	1.198	3.8	10.2	138.1	.424
4-8682.6	4-8860	.424	158.1	6.1	2.1	1.333	71.9	.417	1.027	66.5	187.5	.599D	1.455	84.7	.640	-.2	2.7	7.6	.248
4-8860	4-9020	.170	29.4	4.4	-1.8	.685	86.8	.326	1.094	173.4	268.6	.737A	1.451	71.8	1.057	.4	-15.5	316.2	.339
		14.03	8.61	5.02	5.42	8.80	3.59	14.98	2/1/1	120.6	177.8	20.3	.334	5.684	14.1	56.5	11.4	91.5D	1.564
4-8510	4-8677.8	.171	266.6	-19.9	.7	.825	89.0	.315	.766	177.8	459.4	.524	1.007	108.2	1.203	3.5	10.6	132.8	.377
4-8677.8	4-8860	.377	155.8	7.7	2.2	1.339	74.4	.396	1.041	58.4	186.9	.629D	1.453	85.5	.650	-.6	1.9	8.3	.234
4-8860	4-9030	.154	24.9	1.1	-1.9	.704	87.8	.286	1.127	174.5	279.8	.805A	1.449	75.0	1.068	.4	-13.8	320.7	.288
		12.62	7.54	4.30	5.08	8.47	3.24	14.01	2/1/1	120.3	176.2	22.9	.423	5.040	11.7	53.2	7.1	95.8D	1.708
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.008D	107.7	1.206	3.3	10.5	132.1	.368
4-8676.9	4-8860	.368	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.5	.232
4-8860	4-9040	.143	20.3	-2.2	-2.0	.719	88.7	.253	1.155	176.0	291.5	.862A	1.447	77.8	1.076	.4	-12.1	324.6	.243
		12.30	7.27	4.26	5.02	8.41	3.01	13.24	2/1/1	120.2	170.3	23.1	.444	4.995	11.2	52.8	5.9	96.9D	1.772
4-8530	4-8677.4	.184	247.8	-18.8	.7	.842	96.9	.313	.775	195.7	457.0	.532	1.018D	107.9	1.210	3.2	10.0	133.4	.373
4-8677.4	4-8860	.373	155.6	7.9	2.3	1.340	74.6	.394	1.042	57.6	186.9	.631D	1.453	85.6	.651	-.6	1.8	8.4	.233
4-8860	4-9050	.136	16.0	-5.3	-2.1	.731	89.4	.229	1.177	177.8	303.3	.908A	1.447	80.4	1.081	.5	-10.4	327.6	.204
		12.41	7.36	4.47	5.06	8.44	2.88	12.63	2/1/1	120.2	163.6	22.1	.432	5.218	10.6	55.6	5.4	96.9D	1.823
4-8540	4-8678.8	.213	245.5	-18.2	.8	.852	100.3	.325	.782	203.0	456.6	.528	1.037D	108.5	1.214	3.1	9.2	135.8	.386
4-8678.8	4-8860	.386	153.2	7.3	2.2	1.338	73.9	.400	1.038	60.0	187.1	.623D	1.454	85.3	.648	-.5	2.1	8.1	.237
4-8860	4-9060	.132	12.5	-8.1	-2.2	.739	89.9	.210	1.195	179.6	315.1	.944A	1.446	82.6	1.085	.6	-8.7	329.2	.170
		12.83	7.69	4.88	5.15	8.53	2.81	12.18	2/1/1	120.3	155.6	20.3	.403	5.674	9.8	55.3	5.1	96.3D	1.882
4-8550	4-8680.9	.248	246.6	-18.0	1.1	.864	103.5	.342	.792	209.5	456.5	.521	1.063D	109.5	1.220	2.8	8.0	139.2	.407
4-8680.9	4-8860	.407	157.2	6.7	2.1	1.336	72.8	.409	1.032	63.5	187.3	.610D	1.454	85.0	.644	-.4	2.4	7.8	.242
4-8860	4-9070	.131	9.9	-10.6	-2.4	.746	90.3	.197	1.208	181.2	326.7	.970A	1.446D	84.7	1.086	.7	-6.9	329.0	.141
		13.52	8.23	5.45	5.29	8.67	2.78	11.85	2/1/1	120.5	146.0	18.0	.364	6.409	8.6	57.6	4.4	95.4D	1.967
4-8560	4-8683.4	.290	250.1	-18.1	1.4	.879	106.7	.364	.805	215.3	456.4	.511	1.098D	110.7	1.228	2.5	6.7	143.3	.433
4-8683.4	4-8860	.433	158.6	5.9	2.0	1.332	71.4	.421	1.024	67.9	187.6	.593D	1.456	84.5	.638	-.2	2.8	7.5	.250
4-8860	4-9080	.130	8.6	-13.1	-2.7	.750	90.6	.188	1.217	182.4	337.8	.988A	1.447D	86.5	1.087	.9	-4.4	326.2	.119
		14.45	8.97	6.19	5.49	8.87	2.77	11.63	2/1/1	120.7	134.0	15.2	.321	7.556	6.9	60.7	2.8	94.4D	2.103
MARS ARRIVAL DATE = 2448870 (4 SEP 1992)																			
4-8510	4-8680.7	.181	273.1	-18.8	1.0	.822	87.6	.324	.762	174.9	461.0	.515	1.009	108.7	1.200	3.5	10.4	136.6	.388
4-8680.7	4-8870	.388	159.7	7.2	2.2	1.341	73.9	.404	1.048	59.4	189.2	.624D	1.471	83.9	.646	-.4	3.0	9.3	.244
4-8870	4-9030	.163	21.2	.4	-1.9	.697	89.8	.292	1.129	179.4	279.0	.799A	1.458	74.6	1.068	.2	-14.4	321.3	.295
		13.19	7.85	4.42	5.34	8.72	3.43	14.14	2/1/1	124.7	176.7	23.0	.399	5.007	12.0	56.9	7.9	94.9D	1.599
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9040	.153	16.3	-2.6	-1.9	.714	90.5	.258	1.159	181.5	291.2	.859A	1.458D	77.6	1.077	.2	-13.0	325.0	.248
		12.72	7.49	4.27	5.23	8.62	3.22	13.32	2/1/1	124.6	170.6	23.7	.432	4.869	11.1	56.1	6.0	96.7D	1.672
4-8530	4-8679.3	.181	251.9	-18.5	.8	.838	96.1	.314	.772	193.6	458.0	.529	1.014D	108.0	1.207	3.2	9.9	135.9	.375
4-8679.3	4-8870	.375	159.1	7.8	2.2	1.342	74.6	.398	1.051	57.1	189.0	.633D	1.470	84.1	.649	-.5	2.7	9.5	.241
4-8870	4-9050	.147	12.0	-5.3	-2.0	.726	91.1	.233	1.183	183.7	303.5	.907A	1.459D	80.2	1.083	.2	-11.7	327.9	.207
		12.78	7.53	4.43	5.25	8.63	3.10	12.68	2/1/1	124.6	163.5	23.0	.428	5.025	10.4	56.7	5.2	96.9D	1.722
4-8540	4-8680.6	.207	248.5	-18.0	1.0	.848	99.5	.325	.778	201.1	457.5	.526	1.031D	108.6	1.211	3.0	9.0	138.1	.386
4-8680.6	4-8870	.386	159.6	7.3	2.2	1.341	74.0	.403	1.048	59.1	189.2	.625D	1.471	83.9	.647	-.4	2.9	9.3	.244
4-8870	4-9060	.144	8.4	-7.6	-2.0	.735	91.6	.215	1.202	185.9	315.7	.944A	1.460D	82.6	1.087	.3	-10.6	329.4	.172
		13.17	7.84	4.80	5.33	8.71	3.04	12.20	2/1/1	124.7	155.3	21.3	.403	5.405	9.5	58.2	4.7	96.5D	1.775
4-8550	4-8682.5	.242	248.9	-17.8	1.2	.860	102.8	.341	.787	207.8	457.3	.519	1.055D	109.5	1.217	2.8	7.9	141.3	.405
4-8682.5	4-8870	.405	160.5	6.6	2.1	1.339	73.0	.411	1.043	62.4	189.3	.614D	1.472	83.6	.643	-.3	3.3	9.1	.249
4-8870	4-9070	.143	5.8	-9.3	-2.1	.742	92.0	.202	1.216	187.8	327.5	.971A	1.461D	84.7	1.089	.3	-9.9	329.2	.142
		13.81	8.35	5.34	5.46	8.84	3.01	11.86	2/1/1	124.8	145.4	19.1	.366	6.034	8.3	60.4	3.9	95.7D	1.843
4-8560	4-8685.0	.283	251.9	-17.9	1.5	.874	106.0	.362	.799	213.7	457.3	.510	1.088D	110.6	1.224	2.4	6.5	145.3	.430
4-8685.0	4-8870	.430	161.8	5.9	2.0	1.336	71.6	.423	1.035	66.5	189.6	.597D	1.473	83.1	.637	-.1	3.7	8.8	.257
4-8870	4-9080	.142	4.2	-10.8	-2.2	.746	92.2	.193	1.226	189.1	338.7	.989A	1.462D	86.6	1.089	.4	-9.4	326.5	.119
		14.70	9.05	6.05	5.65	9.03	3.00	11.63	2/1/1	124.8	133.2	16.4	.325	7.003	6.7	63.3	2.3	94.7D	1.949
MARS ARRIVAL DATE = 2448880 (14 SEP 1992)																			
4-8510	4-8684.1	.195	280.2	-17.4	1.4	.817	85.8	.336	.758	171.5	463.0	.504	1.013	109.5	1.197	3.6	10.2	141.0	.404
4-8684.1	4-8880	.404	163.9	6.5	2.0	1.343	73.2	.414	1.054	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9030	.176	17.6	-.2	-1.9	.692	92.1	.299	1.134	184.9	278.8	.795A	1.473D	74.2	1.070	.0	-15.0	321.6	.302
		13.98	8.35	4.62	5.63	9.01	3.73	14.27	2/1/1	128.4	176.9	23.0	.369	5.019	12.7	61.1	9.3	93.7D	1.482
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9040	.167	12.7	-3.0	-1.9	.710	92.7	.264	1.167	187.5	291.5	.858A	1.475D	77.4	1.080	.0	-13.8	325.1	.253
		13.29	7.83	4.31	5.45	8.84	3.53	13.39	2/1/1	128.3	170.4	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	138.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9050	.163	8.5	-5.3	-1.9	.723	93.2	.239	1.193	190.2	304.3	.908A	1.478D	80.1	1.086	.0	-12.9	327.7	.210
		13.27	7.83	4.40	5.44	8.83	3.42	12.72	2/1/1	128.3	163.0	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623
4-8540	4-8682.4	.202	251.9	-17.7	1.1	.844	98.7	.325	.774	199.2	458.5	.523	1.025D	108.6	1.208	3.0	8.9	140.6	.387
4-8682.4	4-8880	.387	163.1	7.1	2.1	1.344	74.1	.407	1.058	58.3	191.1	.628D	1.489	82.6	.645	-.3	4.0	11.0	.251
4-8880	4-9060	.160	5.2	-7.1	-1.9	.733	93.6	.221	1.213	192.8	316.9	.946A	1.481D	82.6	1.090	.0	-12.4	329.0	.173
		13.61	8.10	4.73	5.51	8.89	3.37	12.22	2/1/1	128.4	154.5	22.4	.402	5.157	9.3	61.2	4.5	96.6D	1.670
4-8550	4-8684.2	.235	251.4	-17.5	1.3	.855	102.1	.339	.782	206.0	458.2	.517	1.047D	109.4	1.214	2.7	7.8	143.6	.404
4-8684.2	4-8880	.404	163.9	6.5	2.0	1.343	73.1	.414	1.053	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9070	.159	2.8	-8.3	-1.9	.739	93.8	.208	1.228	194.9	329.0	.972A	1.483D	84.8	1.092	.0	-12.5	328.4	.143
		14.22	8.58	5.23	5.63	9.01	3.35	11.87	2/1/1	128.4	143.9	20.2	.368	5.691	8.1	63.3	3.6	95.9D	1.727
4-8560	4-8686.5	.275	253.9	-17.7	1.6	.868	105.3	.359	.793	212.1	458.1	.506	1.078D	110.5	1.221	2.4	6.4	147.4	.428
4-8686.5	4-8880	.428	165.2	5.8	1.9	1.340	71.9	.425	1.047	65.2	191.4	.602D	1.492	81.8	.637	.0	4.7	10.7	.263
4-8880	4-9080	.158	1.3	-9.2	-1.9	.744	94.0	.200	1.238	196.3	340.3	.990A	1.485D	86.7	1.093	.0	-13.3	325.6	.120
		15.05	9.25	5.91	5.81	9.19	3.33	11.64	2/1/1	128.4	131.1	17.7	.328	6.513	6.5	66.1	2.1	94.9D	1.810
MARS ARRIVAL DATE = 2448890 (24 SEP 1992)																			
4-8510	4-8688.5	.220	288.1	-15.5	1.9	.812	83.2	.355	.753	167.3	465.6	.486	1.021	110.7	1.193	3.9	10.1	146.5	.429
4-8688.5	4-8890	.429	168.8	5.5	1.9	1.344	72.0	.429	1.058	64.3	193.0	.604D	1.512	80.6	.635	.1	6.0	12.9	.270
4-8890	4-9030	.195	14.4	-.8	-1.8	.689	94.7	.307	1.144	190.9	279.3	.793A	1.495D	73.9	1.074	-.2	-15.6	321.5	.309
		15.13	9.15	4.99	5.99	9.36	4.16	14.40	2/1/1	131.4	176.6	22.5	.327	5.125	14.2	66.1	11.7	91.8D	1.350

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2448890
24 SEP 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8520	4-8684.2	.177	272.5	-17.3	1.3	.822	89.9	.323	.759	179.7	461.6	.514	1.004	108.7	1.197	3.4	10.0	141.9	.387
4-8684.2	4-8890	.387	166.7	6.9	2.1	1.348	74.2	.411	1.069	57.4	192.8	.630D	1.509	81.4	.643	-.2	5.3	13.1	.256
4-8890	4-9040	.187	9.8	-3.2	-1.8	.708	95.1	.272	1.179	194.1	292.6	.859A	1.500D	77.2	1.084	-.2	-14.7	324.7	.257
		14.02	8.34	4.37	5.68	9.06	3.96	13.47	2/1/1	131.5	169.7	24.7	.401	4.674	11.4	63.2	7.3	95.6D	1.474
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9050	.183	5.8	-5.1	-1.8	.722	95.5	.246	1.208	197.4	306.0	.911A	1.505D	80.1	1.091	-.2	-14.2	326.9	.212
		13.89	8.26	4.39	5.64	9.02	3.87	12.76	2/1/1	131.5	161.9	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8540	4-8684.3	.198	255.6	-17.3	1.3	.839	97.9	.325	.770	197.1	459.5	.520	1.020D	108.7	1.205	3.0	8.8	143.1	.388
4-8684.3	4-8890	.388	166.7	6.9	2.1	1.348	74.1	.411	1.069	57.5	192.8	.629D	1.509	81.4	.643	-.2	5.3	13.1	.256
4-8890	4-9060	.181	2.9	-6.5	-1.8	.732	95.8	.229	1.229	200.3	318.9	.948A	1.510D	82.7	1.095	-.2	-14.2	327.8	.175
		14.17	8.49	4.66	5.69	9.07	3.82	12.24	2/1/1	131.5	152.7	23.4	.400	4.932	9.2	64.3	4.6	96.6D	1.572
4-8550	4-8685.9	.229	254.2	-17.2	1.5	.850	101.3	.338	.777	204.1	459.2	.514	1.040D	109.4	1.210	2.7	7.7	145.9	.403
4-8685.9	4-8890	.403	167.5	6.3	2.0	1.346	73.3	.418	1.065	60.1	192.9	.620D	1.510	81.1	.640	-.0	5.6	13.0	.263
4-8890	4-9070	.180	.8	-7.4	-1.7	.739	95.9	.217	1.245	202.6	331.1	.975A	1.515D	85.0	1.097	-.2	-14.9	326.8	.144
		14.73	8.93	5.13	5.80	9.18	3.80	11.88	2/1/1	131.5	141.5	21.4	.370	5.382	8.0	66.3	3.6	96.0D	1.620
MARS ARRIVAL DATE = 2448900 (4 OCT 1992)																			
4-8520	4-8687.2	.185	279.4	-16.1	1.6	.817	88.3	.331	.755	176.6	463.3	.505	1.005	109.2	1.194	3.5	9.9	145.8	.398
4-8687.2	4-8900	.398	170.8	6.2	1.9	1.350	73.7	.419	1.078	58.3	194.4	.626D	1.530	80.0	.640	.1	6.9	15.4	.267
4-8900	4-9040	.212	7.5	-3.2	-1.8	.710	98.0	.281	1.200	201.5	294.6	.862A	1.537D	77.1	1.091	-.3	-15.8	323.8	.261
		14.95	9.03	4.49	5.92	9.30	4.55	13.54	2/1/1	134.2	168.5	25.0	.380	4.619	11.9	67.1	8.6	94.8D	1.374
4-8530	4-8685.9	.178	267.0	-16.8	1.4	.826	93.1	.322	.760	186.6	461.4	.516	1.005D	108.6	1.198	3.2	9.5	144.7	.385
4-8685.9	4-8900	.385	170.2	6.7	2.0	1.351	74.4	.414	1.081	56.1	194.3	.633D	1.529	80.3	.642	-.0	6.7	15.3	.264
4-8900	4-9050	.208	4.0	-4.8	-1.7	.724	98.1	.256	1.230	205.3	308.4	.915A	1.545D	80.2	1.098	-.3	-15.6	325.5	.215
		14.67	8.84	4.39	5.83	9.21	4.45	12.79	2/1/1	134.2	160.1	25.4	.405	4.550	10.4	66.8	6.3	96.4D	1.438
4-8540	4-8686.3	.194	259.7	-16.8	1.5	.835	97.0	.326	.766	194.9	460.5	.516	1.010D	108.8	1.202	3.0	8.7	145.9	.389
4-8686.3	4-8900	.389	170.4	6.5	1.9	1.351	74.2	.416	1.080	56.8	194.3	.631D	1.529	80.2	.642	-.0	6.7	15.5	.265
4-8900	4-9060	.206	1.4	-5.9	-1.7	.734	98.2	.240	1.253	208.5	321.6	.953A	1.553D	82.9	1.102	-.4	-16.0	325.8	.176
		14.86	9.01	4.61	5.86	9.24	4.40	12.26	2/1/1	134.2	150.2	24.4	.397	4.730	9.3	67.5	5.0	96.6D	1.480

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2448770 (27 MAY 1992)																			
4-8500	4-8662.1	.152	237.5	-24.4	-.8	.842	92.1	.288	.785	185.2	451.5	.559	1.011D	106.2	1.219	3.4	11.7	111.6	.339
4-8662.1	4-8770	.339	139.0	6.6	1.7	1.360	76.9	.402	1.099	47.5	146.0	.658D	1.541A	108.6	.734	-1.2	10.0	31.5	.298
4-8770	4-9060	.189	4.0	42.7	8.3	.789	82.3	.193	1.213	143.6	334.3	.978A	1.447	85.9	1.090	-9.2	-66.3	357.8	.208
		14.81	8.08	4.06	6.73	10.10	4.01	12.70	2/1/2	40.9	116.6	27.5	.522	4.205	14.2	33.6	10.5	101.0D	1.673
4-8510	4-8662.4	.163	229.6	-22.3	-.8	.849	95.5	.290	.789	193.7	450.7	.560	1.019D	106.3	1.222	3.5	12.0	112.4	.342
4-8662.4	4-8770	.342	138.9	6.6	1.7	1.360	76.7	.403	1.098	48.1	146.1	.656D	1.540A	108.6	.733	-1.2	10.0	31.3	.299
4-8770	4-9070	.151	14.5	26.5	3.8	.792	82.6	.186	1.218	143.4	344.1	.991A	1.444	87.5	1.089	-4.9	-56.8	332.5	.138
		14.12	7.39	4.20	6.74	10.11	3.19	11.82	2/1/2	41.0	117.5	26.8	.514	4.320	15.2	33.8	11.7	100.7D	1.706
4-8520	4-8663.4	.187	226.0	-20.6	-.7	.858	98.6	.300	.795	201.4	450.4	.557	1.034D	106.7	1.226	3.6	12.0	114.2	.353
4-8663.4	4-8770	.353	138.9	6.3	1.7	1.359	76.1	.406	1.095	50.2	146.5	.650D	1.539A	108.7	.731	-1.2	10.0	31.0	.301
4-8770	4-9080	.142	18.2	21.2	2.2	.793	82.7	.182	1.221	143.3	353.8	.999A	1.443	89.0	1.088	-3.4	-52.4	320.0	.112
		14.29	7.50	4.51	6.79	10.17	2.99	11.57	2/1/2	41.3	108.2	25.0	.482	4.615	16.1	34.5	13.0	99.7D	1.744
4-8530	4-8665.1	.219	226.2	-19.6	-.6	.869	101.8	.315	.804	208.5	450.3	.551	1.057D	107.5	1.231	3.6	11.5	116.9	.371
4-8665.1	4-8770	.371	138.9	5.9	1.7	1.356	75.1	.412	1.087	53.6	147.3	.639D	1.535A	108.8	.727	-1.1	10.0	30.3	.303
4-8770	4-9090	.138	20.4	16.9	1.3	.794	82.8	.180	1.223	143.0	363.3	1.002	1.444	90.5	1.086	-2.6	-50.0	307.4	.100
		14.75	7.90	4.97	6.85	10.23	2.93	11.48	2/1/2	41.9	94.0	22.5	.438	5.132	17.0	35.7	14.3	98.3D	1.809
MARS ARRIVAL DATE = 2448780 (6 JUN 1992)																			
4-8480	4-8669.0	.214	265.5	-23.9	-.1	.828	81.5	.337	.776	162.6	459.0	.514	1.037	109.4	1.211	3.3	9.5	118.8	.402
4-8669.0	4-8780	.402	139.1	5.7	1.8	1.340	73.0	.411	1.040	62.4	156.2	.613D	1.467A	104.9	.695	-.9	8.4	25.4	.270
4-8780	4-9040	.182	36.8	-16.0	-6.6	.777	81.4	.221	1.188	146.1	310.3	.926A	1.451	81.6	1.087	5.9	13.6	307.2	.213
		14.75	8.75	4.90	6.00	9.38	3.86	12.76	2/1/1	53.3	143.8	20.5	.372	5.630	13.3	37.5	10.8	94.1D	1.723
4-8510	4-8663.7	.162	232.4	-22.3	-.6	.847	95.0	.292	.787	192.4	451.4	.558	1.017D	106.4	1.220	3.5	11.9	114.0	.344
4-8663.7	4-8780	.344	138.3	6.9	1.8	1.348	76.3	.389	1.062	51.4	153.7	.649D	1.476A	104.8	.710	-1.2	8.5	28.0	.261
4-8780	4-9070	.154	10.7	36.5	5.5	.788	83.0	.186	1.213	146.1	340.4	.988A	1.438	87.0	1.088	-6.6	-61.0	347.6	.163
		13.19	7.43	4.18	5.76	9.14	3.25	12.10	2/1/2	50.9	117.0	24.4	.509	4.725	15.1	34.3	11.5	99.3D	1.896
4-8520	4-8664.6	.184	228.2	-20.6	-.6	.855	98.2	.300	.793	200.2	451.0	.555	1.031D	106.8	1.224	3.5	11.8	115.8	.354
4-8664.6	4-8780	.354	138.4	6.7	1.8	1.347	75.7	.392	1.059	53.3	154.1	.643D	1.474A	104.8	.708	-1.1	8.5	27.6	.263
4-8780	4-9080	.135	17.3	25.0	2.7	.790	83.2	.180	1.217	146.0	350.2	.997A	1.436	88.5	1.086	-4.0	-53.8	330.1	.120
		13.12	7.32	4.47	5.80	9.18	2.86	11.65	2/1/2	51.3	112.0	22.9	.481	5.039	16.0	35.0	12.8	98.4D	1.943
4-8530	4-8666.2	.215	227.8	-19.6	-.4	.866	101.3	.314	.801	207.4	450.9	.549	1.053D	107.5	1.229	3.6	11.3	118.4	.370
4-8666.2	4-8780	.370	138.6	6.3	1.8	1.345	74.8	.398	1.052	56.5	154.8	.633D	1.471A	104.8	.704	-1.0	8.5	26.9	.265
4-8780	4-9090	.129	20.4	18.8	1.5	.791	83.3	.178	1.219	145.8	359.8	1.003A	1.436	90.0	1.085	-2.9	-50.3	317.0	.103
		13.52	7.66	4.91	5.86	9.24	2.75	11.50	2/1/2	51.9	99.6	20.6	.439	5.597	16.8	36.3	14.1	97.2D	2.017
4-8540	4-8668.2	.253	230.1	-19.2	-.2	.879	104.5	.334	.813	214.0	450.9	.541	1.084D	108.6	1.236	3.5	10.5	121.7	.393
4-8668.2	4-8780	.393	138.9	5.8	1.8	1.341	73.5	.407	1.043	60.7	155.8	.619D	1.468A	104.9	.698	-.9	8.4	25.9	.269
4-8780	4-9100	.128	22.6	15.0	.8	.791	83.2	.178	1.221	145.3	369.1	1.003	1.438	91.4	1.082	-2.3	-47.5	304.2	.097
		14.22	8.25	5.52	5.96	9.34	2.73	11.45	2/1/2	52.9	84.1	17.7	.389	6.490	17.4	38.1	15.2	95.7D	2.138
4-8550	4-8670.7	.297	234.4	-19.3	.1	.896	107.7	.359	.829	220.0	450.9	.531	1.126D	109.8	1.245	3.4	9.4	125.6	.422
4-8670.7	4-8780	.422	139.6	5.4	1.8	1.337	71.9	.419	1.032	65.8	157.0	.600D	1.464A	104.9	.690	-.8	8.3	24.6	.274
4-8780	4-9110	.130	24.7	12.5	.3	.791	83.0	.180	1.221	144.6	378.1	1.000	1.441	92.7	1.080	-2.0	-44.1	293.8	.101
		15.17	9.08	6.31	6.09	9.47	2.76	11.48	2/1/2	54.1	68.4	14.4	.338	7.971	17.8	40.5	16.1	94.3D	2.357
MARS ARRIVAL DATE = 2448790 (16 JUN 1992)																			
4-8480	4-8672.4	.238	270.1	-22.6	.2	.825	79.5	.357	.773	159.8	461.6	.497	1.048	110.6	1.209	3.5	9.3	122.9	.427
4-8672.4	4-8790	.427	140.6	5.5	1.9	1.329	71.5	.415	1.010	68.6	163.3	.591D	1.429A	101.2	.672	-.7	6.6	20.1	.250
4-8790	4-9040	.164	36.2	-9.6	-4.8	.771	81.8	.224	1.181	148.8	306.7	.916A	1.446	81.0	1.085	4.0	4.2	311.3	.206
		14.22	8.74	5.28	5.48	8.87	3.45	12.66	2/1/1	65.1	152.7	17.9	.329	6.414	14.5	40.2	12.4	91.4D	1.782
4-8490	4-8666.6	.170	257.1	-24.6	-.4	.832	86.7	.306	.777	172.4	455.5	.539	1.016	107.4	1.213	3.3	10.6	116.8	.363
4-8666.6	4-8790	.363	138.9	6.0	1.9	1.339	75.0	.388	1.035	56.9	160.9	.634D	1.437A	101.4	.690	-1.0	6.7	23.2	.238
4-8790	4-9050	.181	39.5	-23.4	-8.1	.777	82.5	.208	1.193	148.8	316.7	.945A	1.441	82.9	1.086	7.2	23.5	309.8	.210
		13.30	8.12	4.28	5.18	8.56	3.84	12.72	2/1/1	62.2	134.9	22.2	.456	5.195	13.2	36.4	9.7	96.7D	1.914
4-8510	4-8664.9	.160	235.2	-22.3	-.5	.845	94.5	.293	.785	191.1	452.1	.555	1.015D	106.5	1.218	3.4	11.7	115.7	.346
4-8664.9	4-8790	.346	138.6	7.3	1.9	1.341	76.0	.381	1.041	53.5	160.2	.644D	1.439A	101.4	.694	-1.1	6.7	24.0	.235
4-8790	4-9070	.187	358.7	49.2	9.7	.784	83.5	.185	1.209	149.1	337.2	.985A	1.433	86.5	1.086	-10.8	-66.8	18.1	.228
		13.24	8.13	4.17	5.10	8.49	3.97	13.00	2/1/2	61.5	111.3	23.0	.504	5.007	14.7	35.3	11.0	98.4D	2.018
4-8520	4-8665.8	.181	230.3	-20.6	-.4	.853	97.8	.300	.791	199.0	451.6	.553	1.028D	106.8	1.222	3.5	11.6	117.3	.354
4-8665.8	4-8790	.354	138.8	7.0	1.9	1.340	75.5	.385	1.038	55.2	160.5	.639D	1.438A	101.4	.692	-1.1	6.7	23.6	.236
4-8790	4-9080	.132	14.3	30.4	3.6	.786	83.8	.179	1.213	149.1	347.0	.996A	1.431	86.0	1.085	-4.9	-56.6	341.0	.134
		12.36	7.23	4.43	5.14	8.52	2.80	11.78	2/1/2	61.9	113.7	21.7	.479	5.320	15.5	36.0	12.2	97.7D	2.071
4-8530	4-8667.3	.211	229.4	-19.5	-.3	.863	100.9	.314	.798	206.3	451.5	.548	1.049D	107.5	1.227	3.5	11.2	119.8	.370
4-8667.3	4-8790	.370	139.0	6.6	1.9	1.338	74.6	.391	1.032	58.3	161.1	.629D	1.436A	101.3	.688	-1.0	6.7	22.9	.239
4-8790	4-9090	.122	19.0	21.0	1.8	.787	83.9	.176	1.216	149.0	356.7	1.002A	1.430	89.5	1.084	-3.3	-51.1	325.8	.107
		12.67	7.46	4.86	5.20	8.59	2.61	11.53	2/1/2	62.6	104.0	19.5	.439	5.890	16.2	37.3	13.3	96.6D	2.149
4-8540	4-8669.3	.248	231.5	-19.1	-.1	.876	104.1	.332	.809	212.9	451.5	.540	1.078D	108.5	1.233	3.4	10.3	123.1	.392
4-8669.3	4-8790	.392	139.6	6.1	1.9	1.334	73.4	.399	1.024	62.3	162.0	.615D	1.433A	101.3	.682	-.9	6.7	21.8	.243
4-8790	4-9100	.119	21.8	15.8	.9	.788	83.9	.175	1.218	148.6	366.0	1.005	1.431	90.9	1.082	-2.5	-47.8	312.4	.097
		13.31	8.01	5.45	5.30	8.69	2.57	11.45	2/1/2	63.5	89.3	16.9	.392	6.820	16.7	39.2	14.4	95.2D	2.280
4-8550	4-8671.7	.291	235.5	-19.2	.2	.893	107.2	.357	.824	219.0	451.5	.530	1.118D	109.8	1.242	3.3	9.2	127.0	.420
4-8671.7	4-8790	.420	140.4	5.6	1.9	1.330	71.9	.411	1.013	67.2	163.0	.596D	1.430A	101.2	.674	-.8	6.6	20.5	.248
4-8790	4-9110	.120	24.2	12.7	.3	.788	83.7	.177	1.218	147.9	375.1	1.003	1.433	92.3	1.079	-2.1	-44.4	300.9	.098
		14.23	8.79	6.21	5.44	8.82	2.58	11.46	2/1/2	64.8	73.4	13.7	.341	8.366	16.8	41.7	15.0	93.9D	2.516
MARS ARRIVAL DATE = 2448800 (26 JUN 1992)																			
4-8490	4-8668.8	.178	261.3	-23.9	-.2	.829	85.7	.313	.775	170.5	456.8	.532	1.018	107.9	1.211	3.3	10.4	119.4	.372
4-8668.8	4-8800	.372	140.3	6.9	2.0	1.333	74.4	.387	1.021	59.7	166.6	.626D	1.417A	98.2	.676	-1.0	4.9	18.6	.223
4-8800	4-9050	.153	37.0	-14.9	-5.4	.771	83.1	.210	1.187	151.9	313.5	.938A	1.437	82.4	1.085	4.4	10.1	315.0	.189
		12.43	7.62	4.39	4.82	8.20	3.23	12.42	2/1/1	73.5	146.6	20.9	.434	5.501	13.1	38.4	9.7	95.5D	1.957
4-8500	4-8668.5	.158	248.5	-23.9	-.4	.836	90.3	.296	.779	180.8	454.1	.548	1.009D	106.8	1.214	3.4	11.2	117.3	.351
4-8668.5	4-8800	.351	139.7	7.5	2.0	1.336	75.6	.379	1.029	55.5	165.9	.639D	1.419A	98.3	.681	-1.1	4.9	19.6	.219
4-8800	4-9060	.197	42.1	-32.7	-10.7	.776	83.6	.196	1.197	152.1	323.7	.962A	1.433	84.3	1.085	9.5	36.6	309.6	.226
		13.03	8.31	4.11	4.72	8.11	4.19	12.96	2/1/1	72.5	123.4	22.4	.489	5.143	13.4	37.0	9.4	97.5D	2.027
4-8520	4-8667.0	.178	232.7	-20.6	-.3	.851	97.3	.300	.788	197.8	452.3	.551	1.025D	106.9	1.220	3.5	11.5	118.9	.355
4-8667.0	4-8800	.355	139.8	7.4	2.0	1.336	75.3	.380	1.027	56.4	166.1	.636D	1.418A	98.3	.680	-1.1	4.9	19.4	.220
4-8800	4-9080	.139	7.1	39.2	5.5	.781	84.4	.179	1.210	152.6	344.2	.994A	1.427	87.6	1.084	-6.9	-62.0	357.5	.162
		12.07	7.33	4.30	4.73	8.12	2.94	12.09	2/1/2	72.8	112.3	21.1	.477	5.472	14.8	37.5	11.1	97.3D	2.134
4-8530	4-8668.4	.207	231.2	-19.5	-.2	.861	100.5	.313	.796	205.1	452.1	.546	1.045D	107.6	1.225	3.5	11.0	121.3	.370
4-8668.4	4-8800	.370	140.2	6.9	2.0	1.334	74.5	.386	1.022	59.2	166.5	.627D	1.417A	98.2	.677	-1.0	4.9	18.7	.223
4-8800	4-9090	.117	16.0	24.0	2.3	.783	84.6	.175	1.214	152.6	354.0	1.002A	1.426	89.1	1.083	-3.8	-52.9	334.2	.114
		12.12	7.32	4.80	4.80	8.19	2.52	11.59	2/1/2	73.3	107.0	19.1	.440	6.030	15.3	38.8	12.2	96.3D	2.213
4-8540	4-8670.4	.243	232.9	-19.0	.0	.873	103.6	.331	.806	211.8	452.1	.539	1.073D	108.5	1.231	3.4	10.2	124.5	.391
4-8670.4	4-8800	.391	140.8	6.4	2.0	1.331	73.4	.395	1.014	63.1	167.3	.614D	1.415A	98.1	.671	-.9	5.0	17.7	.227
4-8800	4-9100	.112	19.7	16.6	1.1	.784	84.6	.173	1.216	152.2	363.4	1.005	1.427	90.5	1.081	-2.7	-48.2	319.5	.099
		12.71	7.80	5.37	4.91	8.29	2.44	11.46	2/1/2	74.3	93.6	16.6	.394	6.948	15.5	40.8	13.0	95.1D	2.343
4-8550	4-8672.8	.286	236.7	-19.0	.3	.889	106.8	.354	.820	217.9	452.1	.529	1.111D	109.7	1.239	3.2	9.0	128.4	.418
4-8672.8	4-8800	.418	141.7	5.8	1.9	1.327	71.9	.407	1.005	67.8	168.1	.596D	1.413A	97.9	.664	-.7	5.0	16.5	.233
4-8800	4-9110	.112	22.5	12.5	.4	.784	84.4	.174	1.216	151.6	372.5	1.004	1.428	91.8	1.079	-2.1	-44.4	307.0	.096
		13.60	8.54	6.11	5.06	8.44	2.43	11.44	2/1/2	75.4	77.8	13.6	.345	8.469	15.4	43.3	13.4	93.8D	2.575
4-8560	4-8675.6	.334	242.1	-19.2	.7	.908	110.0	.383	.840	223.4	452.1	.518	1.161D	111.2	1.250	2.9	7.6	133.0	.450
4-8675.6	4-8800	.450	143.0	5.3	1.9	1.321	70.2	.422	.992	73.3	169.2	.573D	1.411A	97.7	.654	-.6	4.9	15.0	.241
4-8800	4-9120	.114	25.5	10.1	-.1	.784	84.1	.177	1.216	150.7	381.2	1.000	1.431	93.2	1.076	-1.8	-40.6	296.5	.102
		14.75	9.50	7.03	5.25	8.64	2.47	11.49	2/1/2	76.8	62.9	10.2	.296	11.224	14.4	46.5	12.8	92.6D	3.029

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2448810 = 6 JUL 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC.	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448810 (6 JUL 1992)																			
4-8490	4-8671.1	.189	266.0	-23.0	.1	.827	84.5	.323	.773	168.2	458.3	.523	1.022	108.5	1.209	3.4	10.3	122.5	.384
4-8671.1	4-8810	.384	142.4	6.8	2.0	1.330	73.7	.391	1.013	62.3	171.7	.617D	1.409A	95.3	.665	-.8	3.4	14.1	.218
4-8810	4-9050	.140	34.7	-10.1	-4.1	.765	83.7	.213	1.182	155.3	310.7	.931A	1.434	82.0	1.083	3.0	2.5	318.8	.186
		12.18	7.49	4.54	4.68	8.07	2.95	12.39	2/1/1	84.3	153.3	20.0	.407	5.758	13.2	41.0	9.8	94.3D	1.935
4-8500	4-8668.2	.159	252.7	-23.5	-.2	.833	89.6	.300	.777	179.1	455.1	.544	1.009	107.1	1.212	3.4	11.0	119.6	.356
4-8668.2	4-8810	.356	141.5	7.7	2.1	1.334	75.3	.379	1.023	56.9	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.5	.212
4-8810	4-9060	.148	36.7	-21.2	-6.2	.770	84.3	.198	1.194	155.7	321.1	.958A	1.430	83.9	1.084	5.0	17.3	316.8	.175
		11.80	7.27	4.15	4.53	7.93	3.12	12.24	2/1/1	83.2	138.8	21.9	.475	5.269	13.0	39.1	8.8	96.9D	2.028
4-8510	4-8667.7	.159	241.8	-22.2	-.2	.840	93.4	.296	.780	188.3	453.6	.550	1.011D	106.7	1.215	3.4	11.4	119.4	.350
4-8667.7	4-8810	.350	141.3	7.9	2.1	1.335	75.6	.377	1.025	55.9	170.6	.639D	1.410A	95.6	.674	-1.1	3.2	15.7	.210
4-8810	4-9070	.263	45.5	-43.2	-16.6	.774	84.8	.187	1.202	156.0	331.3	.978A	1.427	85.6	1.084	15.3	54.4	304.9	.305
		14.47	9.97	4.15	4.51	7.90	5.82	14.32	2/1/1	83.0	109.1	21.9	.490	5.255	13.4	58.8	9.1	97.5D	2.085
4-8520	4-8668.3	.176	235.3	-20.6	-.2	.848	96.8	.301	.786	196.4	453.0	.549	1.022D	107.0	1.218	3.4	11.3	120.6	.356
4-8668.3	4-8810	.356	141.5	7.7	2.1	1.334	75.2	.379	1.023	57.0	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.4	.212
4-8810	4-9080	.201	348.4	53.7	11.7	.776	85.1	.179	1.208	156.5	342.0	.992A	1.424	87.3	1.084	-13.2	-67.4	39.3	.261
		13.17	8.64	4.36	4.53	7.93	4.28	13.54	2/1/2	83.2	105.0	20.9	.474	5.515	13.9	39.4	9.9	97.1D	2.142
4-8530	4-8669.6	.203	233.2	-19.4	-.1	.858	100.0	.313	.793	203.8	452.8	.545	1.040D	107.6	1.223	3.4	10.8	122.9	.370
4-8669.6	4-8810	.370	141.9	7.2	2.1	1.332	74.5	.385	1.018	59.6	171.2	.627D	1.409A	95.4	.669	-.9	3.3	14.8	.214
4-8810	4-9090	.116	10.5	28.8	3.2	.778	85.3	.174	1.212	156.6	351.8	1.001A	1.424	88.8	1.082	-4.7	-56.7	344.1	.127
		11.86	7.25	4.74	4.61	8.00	2.51	11.71	2/1/2	83.7	108.2	19.1	.440	6.040	14.2	40.7	10.8	96.2D	2.218
4-8540	4-8671.6	.239	234.4	-18.9	.1	.870	103.2	.330	.802	210.6	452.7	.538	1.067D	108.5	1.228	3.3	10.0	126.1	.390
4-8671.6	4-8810	.390	142.6	6.7	2.0	1.329	73.4	.393	1.011	63.2	171.8	.614D	1.408A	95.2	.664	-.8	3.4	13.9	.219
4-8810	4-9100	.107	16.2	17.4	1.3	.779	85.3	.172	1.215	156.3	361.3	1.005	1.424	90.2	1.080	-3.0	-49.2	325.7	.101
		12.35	7.64	5.29	4.71	8.10	2.35	11.49	2/1/2	84.5	96.9	16.6	.396	6.909	14.2	42.7	11.4	95.2D	2.341
4-8550	4-8674.0	.280	238.0	-18.9	.4	.865	106.3	.352	.816	216.7	452.7	.528	1.103D	109.7	1.236	3.1	8.8	130.0	.416
4-8674.0	4-8810	.416	143.6	6.1	2.0	1.325	72.0	.405	1.002	67.8	172.5	.596D	1.407A	95.0	.657	-.7	3.5	12.8	.225
4-8810	4-9110	.106	19.6	11.9	.4	.779	85.2	.173	1.215	155.7	370.4	1.006	1.425	91.5	1.078	-2.2	-44.5	312.2	.095
		13.20	8.35	6.00	4.87	8.25	2.33	11.44	2/1/2	85.5	81.4	13.8	.348	8.337	13.8	45.3	11.5	94.0D	2.554
4-8560	4-8676.8	.327	243.2	-19.1	.8	.903	109.5	.380	.834	222.2	452.7	.517	1.151D	111.1	1.247	2.8	7.4	134.5	.447
4-8676.8	4-8810	.447	144.9	5.5	2.0	1.321	70.3	.420	.990	73.1	173.4	.574D	1.406A	94.7	.648	-.5	3.5	11.5	.234
4-8810	4-9120	.107	22.7	9.0	-.1	.779	84.9	.175	1.215	154.8	379.1	1.002	1.428	92.8	1.076	-1.8	-40.3	302.6	.099
		14.32	9.25	6.90	5.07	8.46	2.35	11.47	2/1/2	86.7	66.2	10.6	.300	10.862	12.3	46.5	10.5	92.6D	2.961
MARS ARRIVAL DATE = 2448820 (16 JUL 1992)																			
4-8490	4-8674.1	.206	271.2	-21.9	.4	.824	82.9	.336	.770	165.4	460.4	.511	1.028	109.4	1.206	3.5	10.1	126.3	.402
4-8674.1	4-8820	.402	145.3	6.5	2.1	1.327	72.7	.399	1.007	65.4	176.0	.606D	1.409A	92.6	.655	-.7	2.3	10.4	.220
4-8820	4-9050	.132	32.1	-7.5	-3.3	.758	84.5	.215	1.179	159.0	308.3	.925A	1.432	81.5	1.082	2.1	-2.1	321.7	.188
		12.33	7.58	4.79	4.75	8.13	2.80	12.42	2/1/1	94.3	157.5	19.1	.372	6.022	13.6	44.3	10.6	92.8D	1.867
4-8500	4-8670.2	.164	257.4	-22.9	.0	.831	88.7	.305	.774	177.1	456.2	.538	1.010	107.4	1.210	3.4	10.9	122.1	.362
4-8670.2	4-8820	.362	143.8	7.7	2.2	1.333	74.9	.381	1.021	58.1	175.0	.632D	1.410A	93.1	.665	-.9	2.0	12.0	.211
4-8820	4-9060	.151	32.0	-15.0	-4.4	.764	85.1	.199	1.191	159.6	318.9	.953A	1.429	83.5	1.083	3.1	6.6	321.5	.165
		11.50	6.99	4.21	4.51	7.90	2.78	12.12	2/1/1	93.0	147.0	21.6	.458	5.341	12.6	41.6	8.3	96.3D	1.988
4-8510	4-8669.3	.159	245.6	-22.1	-.1	.838	92.8	.298	.778	186.6	454.5	.546	1.010D	106.9	1.213	3.4	11.2	121.5	.353
4-8669.3	4-8820	.353	143.5	8.1	2.2	1.334	75.4	.378	1.024	56.4	174.8	.637D	1.410A	93.2	.667	-1.0	1.9	12.4	.208
4-8820	4-9070	.151	35.6	-28.3	-7.2	.768	85.6	.188	1.200	160.2	329.4	.975A	1.426	85.3	1.084	5.8	26.3	315.9	.168
		11.78	7.32	4.15	4.46	7.85	3.17	12.16	2/1/1	92.7	128.8	21.9	.481	5.263	12.8	41.1	8.2	97.3D	2.052
4-8530	4-8670.9	.200	235.5	-19.4	.1	.855	99.5	.312	.789	202.5	453.5	.543	1.036D	107.6	1.220	3.4	10.7	124.7	.370
4-8670.9	4-8820	.370	144.0	7.5	2.2	1.332	74.5	.384	1.018	59.5	175.2	.627D	1.410A	93.0	.664	-.9	2.1	11.7	.212
4-8820	4-9090	.129	.5	37.9	5.4	.775	86.1	.174	1.212	161.0	350.1	1.000A	1.423	88.5	1.082	-6.9	-65.7	2.3	.157
		11.98	7.43	4.69	4.55	7.94	2.74	12.03	2/1/2	93.3	106.3	19.3	.440	5.955	13.2	42.9	9.4	96.4D	2.180
4-8540	4-8672.8	.234	236.2	-18.8	.3	.867	102.7	.329	.798	209.2	453.4	.536	1.061D	108.5	1.226	3.3	9.8	127.8	.389
4-8672.8	4-8820	.389	144.8	6.9	2.1	1.329	73.5	.393	1.012	63.0	175.7	.615D	1.409A	92.8	.659	-.8	2.2	10.9	.217
4-8820	4-9100	.105	11.2	18.8	1.7	.774	86.1	.172	1.214	160.8	359.6	1.005A	1.423	89.9	1.080	-3.4	-51.5	331.7	.106
		12.19	7.53	5.21	4.66	8.05	2.32	11.52	2/1/2	93.9	99.1	17.0	.398	6.750	13.0	44.8	9.8	95.3D	2.289
4-8550	4-8675.2	.274	239.4	-18.7	.5	.881	105.8	.350	.811	213.4	453.4	.527	1.095D	109.6	1.233	3.1	8.7	131.6	.414
4-8675.2	4-8820	.414	145.8	6.3	2.1	1.326	72.1	.404	1.003	67.4	176.3	.598D	1.409A	92.5	.652	-.6	2.4	10.0	.223
4-8820	4-9110	.102	15.6	11.1	.5	.774	86.0	.172	1.215	160.3	368.8	1.006	1.424	91.3	1.078	-2.5	-44.6	316.4	.095
		12.99	8.17	5.90	4.82	8.21	2.28	11.44	2/1/2	94.7	84.2	14.3	.351	8.044	12.2	47.4	9.6	94.2D	2.476
4-8560	4-8678.0	.320	244.3	-18.9	.9	.899	109.0	.377	.828	221.0	453.4	.516	1.140D	111.0	1.243	2.8	7.2	136.1	.444
4-8678.0	4-8820	.444	147.2	5.6	2.0	1.321	70.5	.419	.992	72.5	177.0	.577D	1.408A	92.1	.644	-.5	2.5	8.9	.232
4-8820	4-9120	.103	19.1	7.4	-.1	.774	85.8	.174	1.215	159.3	377.5	1.003	1.426	92.6	1.076	-1.8	-39.9	305.9	.097
		14.07	9.04	6.76	5.03	8.41	2.28	11.45	2/1/2	95.6	68.7	11.2	.304	10.269	10.5	50.7	8.3	93.1D	2.820
MARS ARRIVAL DATE = 2448830 (26 JUL 1992)																			
4-8490	4-8678.4	.237	277.7	-20.2	.9	.819	80.2	.360	.765	161.6	463.4	.490	1.041	110.9	1.203	3.8	9.9	131.7	.433
4-8678.4	4-8830	.433	149.3	5.9	2.0	1.324	71.1	.414	1.001	70.2	180.0	.586D	1.415	90.0	.644	-.5	2.0	7.5	.231
4-8830	4-9050	.127	28.8	-6.1	-2.8	.751	85.4	.218	1.176	163.1	306.3	.919A	1.432	81.2	1.081	1.5	-5.2	324.0	.192
		12.99	7.97	5.26	5.02	8.40	2.72	12.47	2/1/1	103.2	160.2	17.9	.321	6.430	15.0	48.7	12.6	90.4D	1.741
4-8500	4-8672.5	.170	262.6	-22.2	.2	.828	87.7	.311	.771	174.9	457.6	.531	1.011	107.8	1.208	3.4	10.7	125.1	.371
4-8672.5	4-8830	.371	146.5	7.7	2.2	1.333	74.5	.386	1.021	59.4	178.7	.627D	1.415A	90.8	.659	-.8	1.4	9.4	.214
4-8830	4-9060	.124	27.3	-11.6	-3.4	.757	86.0	.202	1.189	163.9	317.2	.950A	1.429	83.2	1.083	2.1	.4	324.7	.164
		11.54	6.94	4.29	4.61	8.00	2.65	12.11	2/1/1	101.7	151.5	21.4	.437	5.383	12.4	44.5	8.1	95.6D	1.916
4-8510	4-8671.1	.160	250.1	-21.8	.1	.835	92.1	.301	.775	184.8	455.6	.542	1.008D	107.1	1.211	3.4	11.1	123.9	.357
4-8671.1	4-8830	.357	146.0	8.2	2.3	1.335	75.2	.380	1.026	56.8	178.4	.636D	1.415A	91.0	.662	-.9	1.2	9.9	.211
4-8830	4-9070	.127	27.8	-19.7	-4.7	.762	86.5	.189	1.200	164.8	327.9	.973A	1.427	85.1	1.084	3.2	10.9	322.1	.146 *
		11.40	6.87	4.16	4.53	7.92	2.71	11.90	2/1/1	101.3	139.0	22.1	.471	5.226	12.3	43.7	7.4	97.0D	1.989
4-8520	4-8671.2	.171	241.7	-20.4	.1	.843	95.6	.303	.780	193.5	454.7	.544	1.016D	107.2	1.214	3.4	11.0	124.6	.359
4-8671.2	4-8830	.359	146.1	8.1	2.3	1.334	75.1	.381	1.025	57.2	178.5	.635D	1.415A	90.9	.662	-.9	1.2	9.9	.212
4-8830	4-9080	.168	35.2	-36.1	-9.2	.765	86.8	.181	1.207	165.4	338.4	.989A	1.425	86.7	1.083	7.7	38.4	310.9	.179
		12.38	7.84	4.30	4.54	7.93	3.54	12.29	2/1/1	101.4	116.0	21.4	.466	5.388	12.4	44.1	7.6	97.1D	2.043
4-8530	4-8672.4	.196	238.0	-19.3	.2	.852	99.0	.312	.786	200.9	454.3	.541	1.031D	107.7	1.218	3.3	10.5	126.6	.370
4-8672.4	4-8830	.370	146.5	7.7	2.2	1.333	74.5	.386	1.022	59.2	178.7	.628D	1.415A	90.8	.659	-.8	1.3	9.5	.214
4-8830	4-9090	.249	337.1	56.1	16.0	.767	87.1	.175	1.212	165.9	349.0	1.000A	1.424	88.4	1.082	-17.6	-66.8	64.5	.332
		14.69	10.09	4.63	4.60	7.99	5.46	14.85	2/1/2	101.7	98.2	19.8	.439	5.804	12.3	45.3	8.0	96.5D	2.110
4-8540	4-8674.2	.228	238.1	-18.7	.4	.863	102.1	.327	.795	207.8	454.1	.534	1.055D	108.5	1.223	3.2	9.6	129.6	.388
4-8674.2	4-8830	.388	147.2	7.1	2.2	1.331	73.6	.393	1.016	62.4	179.1	.616D	1.415A	90.6	.655	-.7	1.8	8.9	.219
4-8830	4-9100	.108	4.6	21.8	2.5	.769	87.1	.172	1.215	165.7	358.5	1.005A	1.424	89.8	1.081	-4.2	-56.1	339.2	.116
		12.21	7.50	5.12	4.71	8.10	2.37	11.61	2/1/2	102.1	99.9	17.7	.400	6.517	11.9	47.2	8.2	95.6D	2.206
4-8550	4-8676.5	.268	240.9	-18.6	.7	.877	105.3	.348	.806	214.1	454.1	.526	1.087D	109.6	1.230	3.0	8.5	133.3	.412
4-8676.5	4-8830	.412	148.3	6.4	2.1	1.327	72.3	.404	1.008	66.6	179.6	.601D	1.415A	90.3	.649	-.6	1.6	8.1	.225
4-8830	4-9110	.102	10.9	10.1	.6	.769	87.0	.172	1.216	165.2	367.6	1.007	1.425	91.1	1.078	-2.4	-45.5	319.5	.096
		12.93	8.06	5.79	4.87	8.26	2.27	11.45	2/1/2	102.7	86.1	15.0	.355	7.662	10.9	49.8	7.9	94.5D	2.363
4-8560	4-8679.2	.313	245.6	-18.7	1.0	.894	108.5	.373	.822	219.7	454.1	.515	1.129D	110.9	1.240	2.7	7.1	137.7	.442
4-8679.2	4-8830	.442	149.7	5.8	2.0	1.323	70.7	.418	.998	71.6	180.2	.560D	1.415	89.9	.642	-.4	2.0	7.3	.234
4-8830	4-9120	.102	14.8	5.5	-.1	.769	86.8	.174	1.215	164.2	376.3	1.004	1.426	92.4	1.076	-1.7	-39.4	308.2	.096
		13.97	8.89	6.62	5.08	8.46	2.27	11.45	2/1/2	103.4	70.6	12.0	.308	9.572	9.0	53.0	8.3	93.4D	2.643
MARS ARRIVAL DATE = 2448840 (5 AUG 1992)																			
4-8500	4-8675.1	.180	268.3	-21.3	.5	.825	86.4	.320	.768	172.3	459.2	.523	1.014	108.4	1.205	3.5	10.5	128.5	.382
4-8675.1	4-8840	.382	149.8	7.4	2.2	1.333	73.9	.393	1.023	60.8	182.0	.622D	1.425	88.7	.654	-.7	1.3	7.9	.222
4-8840	4-9060	.122	22.3	-9.8	-2.9	.751	87.1	.204	1.169	168.7	315.9	.947A	1.432	82.9	1.083	1.4	-3.7	327.0	.166
		11.83	7.04	4.42	4.79	8.18	2.62	12.13	2/1/1	109.1	153.9	21.2	.412	5.425	12.4	47.8	8.4	94.7D	1.822

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2448840
5 AUG 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8510	4-8673.0	.162	255.0	-21.4	.3	.832	91.2	.304	.772	182.7	456.7	.537	1.007D	107.4	1.208	3.4	10.9	126.5	.362
4-8673.0	4-8840	.362	149.0	8.2	2.3	1.336	75.0	.384	1.030	57.2	181.6	.634D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9070	.121	21.1	-15.0	-3.5	.756	87.6	.191	1.201	169.8	326.9	.971A	1.430	84.9	1.084	1.9	2.3	325.8	.141
		11.45	6.79	4.18	4.67	8.05	2.60	11.85	2/1/1	108.7	143.6	22.3	.458	5.165	12.0	46.6	6.9	96.8D	1.907
4-8520	4-8673.0	.169	245.5	-20.3	.3	.840	95.0	.304	.777	191.5	455.6	.541	1.013D	107.3	1.211	3.4	10.8	126.9	.361
4-8673.0	4-8840	.361	148.9	8.2	2.3	1.336	75.1	.384	1.030	57.0	181.6	.635D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9080	.129	22.9	-23.5	-5.0	.760	87.9	.182	1.209	170.6	337.7	.988A	1.429	86.6	1.084	3.4	15.3	320.0	.130
		11.69	7.03	4.28	4.66	8.05	2.75	11.74	2/1/1	108.7	128.5	21.9	.460	5.267	11.8	46.8	6.7	97.1D	1.964
4-8530	4-8673.9	.192	240.9	-19.2	.4	.849	98.3	.312	.783	199.3	455.1	.538	1.027D	107.7	1.215	3.3	10.3	128.7	.371
4-8673.9	4-8840	.371	149.3	7.8	2.3	1.335	74.6	.388	1.027	58.7	181.8	.629D	1.425	88.9	.656	-.8	1.1	8.2	.219
4-8840	4-9090	.242	40.0	-45.6	-15.4	.762	88.1	.177	1.214	171.0	347.8	.999A	1.428	88.2	1.083	13.7	56.8	297.3	.268
		14.58	9.86	4.57	4.72	8.11	5.29	13.65	2/1/1	108.9	101.0	20.5	.438	5.620	11.6	47.9	6.9	96.7D	2.022
4-8540	4-8675.6	.223	240.3	-18.6	.5	.860	101.6	.326	.791	206.3	454.9	.533	1.049D	108.5	1.220	3.2	9.5	131.5	.387
4-8675.6	4-8840	.387	150.0	7.2	2.2	1.333	73.7	.395	1.022	61.7	182.1	.618D	1.425	88.6	.653	-.7	1.3	7.8	.224
4-8840	4-9100	.125	354.6	30.8	4.7	.763	88.1	.174	1.217	171.1	357.8	1.005A	1.428	89.7	1.081	-6.4	-65.6	357.3	.146
		12.53	7.71	5.04	4.82	8.21	2.67	11.91	2/1/2	109.2	98.6	18.4	.401	6.243	11.0	49.8	6.9	95.9D	2.104
4-8550	4-8677.9	.261	242.7	-18.4	.8	.873	104.7	.346	.801	212.6	454.9	.524	1.079D	109.6	1.227	2.9	8.3	135.2	.410
4-8677.9	4-8840	.410	151.1	6.6	2.1	1.330	72.4	.405	1.015	65.7	182.5	.604D	1.426	88.3	.647	-.5	1.6	7.2	.230
4-8840	4-9110	.106	5.8	9.4	.9	.764	88.0	.173	1.218	170.6	367.0	1.007	1.429	91.0	1.079	-2.7	-47.2	322.0	.099
		12.98	8.00	5.67	4.98	8.37	2.33	11.47	2/1/2	109.6	87.2	15.9	.358	7.238	9.9	52.3	6.4	94.8D	2.232
4-8560	4-8680.6	.305	247.0	-18.5	1.1	.889	107.9	.370	.816	218.3	454.9	.514	1.119D	110.9	1.236	2.6	6.9	139.5	.439
4-8680.6	4-8840	.439	152.5	5.8	2.0	1.326	70.9	.419	1.005	70.4	183.0	.584D	1.426	87.9	.640	-.3	1.9	6.6	.258
4-8840	4-9120	.104	10.3	3.3	-.2	.764	87.8	.175	1.217	169.5	375.6	1.005	1.430	92.3	1.077	-1.7	-38.8	309.4	.096
		13.97	8.79	6.48	5.19	8.57	2.31	11.44	2/1/2	110.1	71.6	13.0	.313	8.853	8.0	55.5	4.7	93.8D	2.455

MARS ARRIVAL DATE = 2448850 (15 AUG 1992)

4-8500	4-8678.3	.196	274.7	-20.0	.8	.821	84.7	.332	.765	169.2	461.2	.511	1.018	109.2	1.202	3.6	10.4	132.7	.398
4-8678.3	4-8850	.398	153.6	6.9	2.2	1.334	73.2	.402	1.026	62.9	184.9	.613D	1.439	86.7	.648	-.5	1.7	7.3	.253
4-8850	4-9060	.125	17.2	-8.7	-2.5	.745	88.4	.207	1.191	173.9	315.2	.945A	1.437	82.8	1.083	.9	-6.5	328.4	.168
		12.36	7.30	4.63	5.05	8.44	2.67	12.15	2/1/1	115.4	155.2	20.9	.379	5.501	12.9	51.7	9.3	93.5D	1.706
4-8510	4-8675.5	.165	260.5	-20.8	.5	.829	90.2	.309	.769	180.4	457.9	.531	1.007D	107.7	1.206	3.4	10.7	129.5	.369
4-8675.5	4-8850	.369	152.2	8.0	2.3	1.337	74.8	.389	1.035	57.7	184.4	.632D	1.438	87.2	.654	-.7	1.2	8.0	.225
4-8850	4-9070	.123	15.1	-12.3	-2.8	.750	88.9	.194	1.203	175.2	326.5	.970A	1.436	84.7	1.085	1.2	-3.1	328.0	.141
		11.73	6.87	4.23	4.86	8.24	2.64	11.85	2/1/1	115.0	145.5	22.6	.442	5.098	11.8	49.8	6.8	96.3D	1.811
4-8520	4-8674.8	.168	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.3	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	8.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.438	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9080	.125	14.6	-16.9	-3.4	.754	89.2	.185	1.212	176.3	337.4	.988A	1.436	86.5	1.085	1.8	2.9	324.3	.121
		11.76	6.93	4.26	4.83	8.22	2.66	11.65	2/1/1	114.9	133.0	22.5	.453	5.131	11.4	49.7	6.1	97.1D	1.670
4-8530	4-8675.6	.188	244.2	-19.0	.5	.845	97.6	.313	.779	197.6	456.0	.536	1.023D	107.8	1.213	3.3	10.2	131.0	.372
4-8675.6	4-8850	.372	152.4	7.9	2.3	1.337	74.6	.391	1.034	58.2	184.5	.630D	1.438	87.1	.654	-.7	1.3	7.9	.226
4-8850	4-9090	.136	18.5	-26.3	-5.4	.757	89.3	.179	1.217	176.8	347.8	.999A	1.436	88.2	1.084	3.7	19.8	314.4	.120
		12.28	7.41	4.52	4.87	8.26	2.89	11.64	2/1/1	115.0	115.4	21.3	.435	5.419	11.0	50.7	6.0	96.8D	1.924
4-8550	4-8679.3	.255	244.5	-18.2	.9	.869	104.1	.344	.797	211.1	455.7	.523	1.071D	109.5	1.224	2.9	8.2	137.1	.408
4-8679.3	4-8850	.408	154.1	6.6	2.1	1.332	72.6	.407	1.023	64.6	185.0	.607D	1.439	86.6	.645	-.4	1.9	7.2	.236
4-8850	4-9110	.113	.6	10.2	1.3	.759	89.2	.176	1.221	176.4	366.9	1.007	1.436	91.0	1.080	-3.2	-51.1	324.6	.105
		13.14	8.02	5.56	5.12	8.51	2.46	11.51	2/1/2	115.5	87.4	16.9	.361	6.815	9.2	54.9	5.2	95.2D	2.099
4-8560	4-8682.0	.298	248.5	-18.4	1.3	.884	107.3	.367	.810	216.8	455.6	.513	1.108D	110.8	1.232	2.6	6.8	141.4	.436
4-8682.0	4-8850	.436	155.5	5.9	2.0	1.329	71.2	.420	1.014	69.2	185.4	.589D	1.440	86.1	.639	-.3	2.2	6.7	.244
4-8850	4-9120	.110	6.2	1.3	-.2	.758	89.0	.177	1.221	175.2	375.4	1.005	1.436	92.3	1.078	-1.7	-38.1	309.6	.097
		14.07	8.75	6.34	5.33	8.71	2.41	11.45	2/1/2	115.8	71.8	14.1	.317	8.173	7.3	58.0	3.6	94.1D	2.272

MARS ARRIVAL DATE = 2448860 (25 AUG 1992)

4-8500	4-8682.6	.222	282.0	-18.2	1.3	.816	82.2	.352	.760	165.2	463.9	.492	1.028	110.5	1.198	3.8	10.2	136.1	.424
4-8682.6	4-8860	.424	158.1	6.1	2.1	1.333	71.9	.417	1.027	66.5	187.5	.599D	1.455	84.7	.640	-.2	2.7	7.6	.248
4-8860	4-9060	.132	12.5	-8.1	-2.2	.759	89.9	.210	1.195	179.6	315.1	.944A	1.446	82.6	1.085	.6	-8.7	329.2	.170
		13.25	7.83	5.02	5.42	8.80	2.81	12.18	2/1/1	120.6	155.6	20.3	.334	5.684	14.1	56.5	11.4	91.5D	1.564
4-8510	4-8677.8	.171	266.6	-19.9	.7	.825	89.0	.315	.766	177.8	459.4	.524	1.007	108.2	1.203	3.5	10.6	132.8	.377
4-8677.8	4-8860	.377	155.8	7.7	2.2	1.339	74.4	.396	1.041	58.4	186.9	.629D	1.453	85.5	.650	-.6	1.9	8.3	.234
4-8860	4-9070	.131	9.9	-10.6	-2.4	.746	90.3	.197	1.208	181.2	326.7	.970A	1.446D	84.7	1.086	.7	-6.9	329.0	.141
		12.16	7.08	4.30	5.08	8.47	2.78	11.85	2/1/1	120.3	146.0	22.9	.423	5.040	11.7	55.2	7.1	95.8D	1.708
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.008D	107.7	1.206	3.3	10.5	132.1	.388
4-8676.9	4-8860	.388	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.5	.232
4-8860	4-9080	.130	8.6	-13.1	-2.7	.750	90.6	.188	1.217	182.4	337.8	.988A	1.447D	86.5	1.087	.9	-4.4	326.2	.119
		12.06	7.03	4.26	5.02	8.41	2.77	11.63	2/1/1	120.2	134.0	23.1	.444	4.995	11.2	52.8	5.9	96.9D	1.772
4-8530	4-8677.4	.184	247.8	-18.8	.7	.842	96.9	.313	.775	195.7	457.0	.532	1.018D	107.9	1.210	3.2	10.0	133.4	.373
4-8677.4	4-8860	.373	155.5	7.9	2.3	1.340	74.6	.394	1.042	57.6	186.9	.631D	1.453	85.6	.651	-.6	1.8	8.4	.233
4-8860	4-9090	.132	9.1	-16.9	-3.3	.752	90.7	.183	1.223	183.1	348.5	.999A	1.447D	86.2	1.086	1.5	1.3	319.6	.105
		12.34	7.28	4.47	5.06	8.44	2.81	11.51	2/1/1	120.2	119.0	22.1	.432	5.218	10.6	53.6	5.4	96.9D	1.823
4-8540	4-8678.8	.213	245.5	-18.2	.8	.852	100.3	.325	.782	203.0	456.6	.528	1.037D	108.5	1.214	3.1	9.2	135.8	.386
4-8678.8	4-8860	.386	156.2	7.3	2.2	1.338	73.9	.400	1.038	60.0	187.1	.623D	1.454	85.3	.648	-.5	2.1	8.1	.237
4-8860	4-9100	.151	16.3	-29.1	-6.2	.754	90.7	.180	1.226	183.1	358.0	1.005A	1.447D	89.7	1.084	4.5	25.6	305.3	.122
		13.20	8.05	4.88	5.15	8.53	3.17	11.66	2/1/1	120.3	100.1	20.3	.403	5.674	9.8	55.3	5.1	96.3D	1.882
4-8550	4-8680.9	.248	246.6	-18.0	1.1	.864	103.5	.342	.792	209.5	456.5	.521	1.063D	109.5	1.220	2.8	8.0	139.2	.407
4-8680.9	4-8860	.407	157.2	6.7	2.1	1.336	72.8	.409	1.032	63.5	187.3	.610D	1.454	85.0	.644	-.4	2.4	7.8	.242
4-8860	4-9110	.129	353.8	16.9	3.0	.754	90.6	.179	1.227	182.5	367.2	1.007	1.447D	91.1	1.082	-4.8	-62.2	333.6	.125
		13.48	8.19	5.45	5.29	8.67	2.74	11.69	2/1/2	120.5	87.2	18.0	.364	6.409	8.6	57.6	4.4	95.4D	1.967
4-8560	4-8683.4	.290	250.1	-18.1	1.4	.879	106.7	.364	.805	215.3	456.4	.511	1.098D	110.7	1.228	2.5	6.7	143.3	.433
4-8683.4	4-8860	.433	158.6	5.9	2.0	1.332	71.4	.421	1.024	67.9	187.6	.593D	1.456	84.5	.638	-.2	2.8	7.5	.250
4-8860	4-9120	.120	3.0	-.5	-.3	.753	90.3	.180	1.226	181.3	375.6	1.005	1.446D	92.4	1.079	-1.6	-37.1	308.6	.098
		14.26	8.77	6.19	5.49	8.87	2.58	11.46	2/1/2	120.7	71.2	15.2	.321	7.556	6.9	60.7	2.8	94.4D	2.103

MARS ARRIVAL DATE = 2448870 (4 SEP 1992)

4-8510	4-8680.7	.181	273.1	-18.8	1.0	.822	87.6	.324	.762	174.9	461.0	.515	1.009	108.7	1.200	3.5	10.4	136.6	.388
4-8680.7	4-8870	.388	159.7	7.2	2.2	1.341	73.9	.404	1.048	59.4	189.2	.624D	1.471	83.9	.646	-.4	3.0	9.3	.244
4-8870	4-9070	.143	5.8	-9.3	-2.1	.742	92.0	.202	1.216	187.8	327.5	.971A	1.461D	84.7	1.089	.3	-9.9	329.2	.142
		12.78	7.44	4.42	5.34	8.72	3.01	11.86	2/1/1	124.7	145.4	23.0	.399	5.007	12.0	56.9	7.9	94.9D	1.599
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9080	.142	4.2	-10.8	-2.2	.746	92.2	.193	1.226	189.1	338.7	.989A	1.462D	86.6	1.089	.4	-9.4	326.5	.119
		12.51	7.27	4.27	5.23	8.62	3.00	11.63	2/1/1	124.6	133.2	23.7	.432	4.869	11.1	56.1	6.0	96.7D	1.672
4-8530	4-8679.3	.181	251.9	-18.5	.8	.838	96.1	.314	.772	193.6	458.0	.529	1.014D	108.0	1.207	3.2	9.9	135.9	.375
4-8679.3	4-8870	.375	159.1	7.8	2.2	1.342	74.6	.398	1.051	57.1	189.0	.633D	1.470	84.1	.649	-.5	2.7	9.5	.241
4-8870	4-9090	.142	3.8	-12.3	-2.4	.749	92.3	.188	1.231	189.8	349.2	1.000A	1.463D	86.3	1.088	.6	-8.6	321.0	.103
		12.66	7.43	4.43	5.25	8.63	3.00	11.50	2/1/1	124.6	118.3	23.0	.428	5.025	10.4	56.7	5.2	96.9D	1.722
4-8540	4-8680.6	.207	248.5	-18.0	1.0	.848	99.5	.325	.778	201.1	457.5	.526	1.031D	108.6	1.211	3.0	9.0	138.1	.386
4-8680.6	4-8870	.386	159.6	7.3	2.2	1.341	74.0	.403	1.048	59.1	189.2	.625D	1.471	83.9	.647	-.4	2.9	9.3	.244
4-8870	4-9100	.143	4.9	-15.0	-2.9	.750	92.2	.185	1.234	189.8	359.0	1.005A	1.463D	89.8	1.087	1.1	-4.4	312.3	.099
		13.14	7.81	4.80	5.33	8.71	3.01	11.44	2/1/1	124.7	101.5	21.3	.403	5.405	9.5	58.2	4.7	96.5D	1.773
4-8560	4-8685.0	.283	251.9	-17.9	1.5	.874	106.0	.362	.799	213.7	457.3	.510	1.086D	110.6	1.224	2.4	6.5	145.3	.430
4-8685.0	4-8870	.430	161.8	5.9	2.0	1.336	71.6	.423	1.035	66.5	189.6	.597D	1.473	83.1	.637	-.1	3.7	8.8	.257
4-8870	4-9120	.133	1.0	-2.3	-.4	.749	91.7	.185	1.233	187.7	376.3	1.004	1.461D	92.5	1.081	-1.4	-35.1	306.4	.100
		14.52	8.87	6.05	5.65	9.03	2.82	11.47	2/1/2	124.8	69.7	16.4	.325	7.003	8.7	63.3	2.3	94.7D	1.949

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2448880
14 SEP 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448880 (14 SEP 1992)																			
4-8510	4-8684.1	.195	280.2	-17.4	1.4	.817	85.8	.336	.758	171.5	463.0	.504	1.013	109.5	1.197	3.6	10.2	141.0	.404
4-8684.1	4-8880	.404	163.9	6.5	2.0	1.343	73.2	.414	1.054	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9070	.159	2.8	-8.3	-1.9	.739	93.8	.208	1.228	194.9	329.0	.972A	1.483D	84.8	1.092	.0	-12.5	328.4	.143
		13.60	7.97	4.62	5.63	9.01	3.35	11.87	2/1/1	128.4	143.9	23.0	.369	5.019	12.7	61.1	9.3	93.7D	1.482
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9080	.158	1.3	-9.2	-1.9	.744	94.0	.200	1.238	196.3	340.3	.990A	1.485D	86.7	1.093	.0	-13.3	325.6	.120
		13.09	7.64	4.31	5.45	8.84	3.33	11.64	2/1/1	128.3	131.1	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	136.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9090	.157	.6	-9.6	-1.9	.746	94.0	.195	1.243	197.0	350.8	1.000A	1.486D	88.5	1.092	.1	-14.8	320.2	.104
		13.16	7.72	4.40	5.44	8.83	3.31	11.51	2/1/1	128.3	115.8	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623
4-8540	4-8682.4	.202	251.9	-17.7	1.1	.844	98.7	.325	.774	199.2	458.5	.523	1.025D	108.6	1.208	3.0	8.9	140.6	.387
4-8682.4	4-8880	.387	163.1	7.1	2.1	1.344	74.1	.407	1.058	58.3	191.1	.628D	1.489	82.6	.645	-.3	4.0	11.0	.251
4-8880	4-9100	.156	.7	-9.9	-1.9	.747	93.9	.193	1.245	196.8	360.4	1.005	1.485D	90.1	1.090	.1	-16.5	312.8	.096
		13.52	8.01	4.73	5.51	8.89	3.28	11.44	2/1/1	128.4	98.8	22.4	.402	5.157	9.3	61.2	4.5	96.6D	1.670
4-8550	4-8684.2	.235	251.4	-17.5	1.3	.855	102.1	.339	.782	206.0	458.2	.517	1.047D	109.4	1.214	2.7	7.8	143.6	.404
4-8684.2	4-8880	.404	163.9	6.5	2.0	1.343	73.1	.414	1.053	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9110	.154	1.7	-10.4	-2.1	.747	93.7	.192	1.245	195.9	369.2	1.006	1.484D	91.5	1.087	.2	-16.6	305.2	.095
		14.11	8.48	5.23	5.63	9.01	3.24	11.44	2/1/1	128.4	81.9	20.2	.368	5.691	8.1	63.3	3.6	95.9D	1.727
4-8560	4-8686.5	.275	253.9	-17.7	1.6	.868	105.3	.359	.793	212.1	458.1	.508	1.078D	110.5	1.221	2.4	6.4	147.4	.428
4-8686.5	4-8880	.428	165.2	5.8	1.9	1.340	71.9	.425	1.047	65.2	191.4	.602D	1.492	81.8	.637	.0	4.7	10.7	.263
4-8880	4-9120	.149	1.2	-6.5	-1.3	.746	93.4	.193	1.242	194.3	377.3	1.003	1.481D	92.8	1.084	-.6	-26.4	301.8	.101
		14.87	9.06	5.91	5.81	9.19	3.15	11.49	2/1/2	128.4	67.2	17.7	.328	6.513	6.5	66.1	2.1	94.9D	1.810
MARS ARRIVAL DATE = 2448890 (24 SEP 1992)																			
4-8510	4-8686.5	.220	288.1	-15.5	1.9	.812	83.2	.355	.753	167.3	465.6	.486	1.021	110.7	1.193	3.9	10.1	146.5	.429
4-8686.5	4-8890	.429	168.8	5.5	1.9	1.344	72.0	.429	1.058	64.3	193.0	.604D	1.512	80.6	.635	.1	6.0	12.9	.270
4-8890	4-9070	.180	.8	-7.4	-1.7	.739	95.9	.217	1.245	202.6	331.1	.975A	1.515D	85.0	1.097	-.2	-14.9	326.8	.144
		14.77	8.79	4.99	5.99	9.36	3.80	11.88	2/1/1	131.4	141.5	22.5	.327	5.125	14.2	66.1	11.7	91.8D	1.350
4-8520	4-8684.2	.177	272.5	-17.3	1.3	.822	89.9	.323	.759	179.7	461.6	.514	1.004	108.7	1.197	3.4	10.0	141.9	.387
4-8684.2	4-8890	.387	166.7	3.9	2.1	1.348	74.2	.411	1.069	57.4	192.8	.630D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9080	.179	359.5	-7.8	-1.7	.743	96.0	.209	1.254	204.0	342.4	.992A	1.517D	87.0	1.098	-.2	-16.7	323.4	.121
		13.83	8.15	4.37	5.68	9.06	3.77	11.65	2/1/1	131.5	128.0	24.7	.401	4.674	11.4	63.2	7.3	95.6D	1.474
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9090	.177	358.9	-7.9	-1.6	.745	96.0	.205	1.259	204.5	352.8	1.001A	1.518D	88.6	1.096	-.3	-19.4	317.7	.108
		13.77	8.13	4.39	5.64	9.02	3.74	11.53	2/1/1	131.5	112.1	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8540	4-8684.3	.198	255.6	-17.3	1.3	.839	97.9	.325	.770	197.1	459.5	.520	1.020D	108.7	1.205	3.0	8.8	143.1	.388
4-8684.3	4-8890	.388	166.7	6.9	2.1	1.348	74.1	.411	1.069	57.5	192.8	.629D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9100	.175	358.8	-7.4	-1.5	.746	95.8	.203	1.261	204.2	362.2	1.005	1.516D	90.4	1.094	-.4	-22.8	310.6	.100
		14.04	8.35	4.66	5.69	9.07	3.69	11.47	2/1/1	131.5	95.0	23.4	.400	4.932	9.2	64.3	4.6	96.6D	1.572
4-8550	4-8685.9	.229	254.2	-17.2	1.5	.850	101.3	.338	.777	204.1	459.2	.514	1.040D	109.4	1.210	2.7	7.7	145.9	.403
4-8685.9	4-8890	.403	167.5	6.3	2.0	1.346	73.3	.418	1.065	60.1	192.9	.620D	1.510	81.1	.640	-.0	5.8	13.0	.263
4-8890	4-9110	.171	358.9	-6.0	-1.2	.745	95.5	.202	1.259	203.0	370.7	1.005	1.513D	91.8	1.091	-.7	-27.6	304.4	.101
		14.54	8.74	5.13	5.80	9.18	3.61	11.48	2/1/1	131.5	78.8	21.4	.370	5.382	8.0	66.3	3.6	96.0D	1.620
MARS ARRIVAL DATE = 2448900 (4 OCT 1992)																			
4-8520	4-8687.2	.185	279.4	-16.1	1.6	.817	88.3	.331	.755	176.6	463.3	.505	1.005	109.2	1.194	3.5	9.9	145.8	.398
4-8687.2	4-8900	.398	170.8	6.2	1.9	1.350	73.7	.419	1.078	58.3	194.4	.626D	1.530	80.0	.640	.1	6.9	15.4	.267
4-8900	4-9080	.203	358.6	-6.7	-1.5	.745	98.3	.222	1.277	212.1	345.0	.994A	1.561D	87.3	1.104	-.4	-19.8	320.0	.123
		14.73	8.81	4.49	5.92	9.30	4.33	11.68	2/1/1	134.2	123.9	25.0	.380	4.619	11.9	67.1	8.6	94.8D	1.374
4-8530	4-8685.9	.178	267.0	-16.8	1.4	.826	93.1	.322	.760	186.6	461.4	.516	1.005D	108.6	1.198	3.2	9.5	144.7	.385
4-8685.9	4-8900	.385	170.2	6.7	2.0	1.351	74.4	.414	1.081	56.1	194.3	.633D	1.529	80.3	.642	-.0	6.7	15.5	.264
4-8900	4-9090	.200	358.2	-6.4	-1.4	.747	98.1	.218	1.281	212.4	355.2	1.002A	1.561D	89.1	1.103	-.5	-23.0	313.7	.110
		14.49	8.66	4.39	5.83	9.21	4.27	11.56	2/1/1	134.2	107.5	25.4	.405	4.550	10.4	66.6	6.3	96.4D	1.438
4-8540	4-8686.5	.194	259.7	-16.8	1.5	.835	97.0	.326	.786	194.9	460.5	.516	1.015D	108.8	1.202	3.0	8.7	145.9	.389
4-8686.5	4-8900	.389	170.4	6.5	1.9	1.351	74.2	.416	1.080	56.8	194.3	.631D	1.529	80.2	.642	-.0	6.7	15.5	.265
4-8900	4-9100	.197	358.2	-5.7	-1.2	.748	97.9	.216	1.281	211.8	364.3	1.005	1.557D	90.8	1.100	-.7	-26.8	306.7	.106
		14.67	8.81	4.61	5.86	9.24	4.20	11.52	2/1/1	134.2	90.6	24.4	.397	4.730	9.3	67.5	5.0	96.6D	1.480
4-8550	4-8687.8	.223	257.2	-16.9	1.6	.846	100.5	.337	.773	202.2	460.1	.512	1.033D	109.4	1.207	2.7	7.5	148.4	.403
4-8687.8	4-8900	.403	171.1	6.0	1.9	1.350	73.4	.422	1.076	59.1	194.4	.623D	1.530	79.9	.639	.1	7.0	15.4	.269
4-8900	4-9110	.193	358.3	-4.1	-.8	.745	97.6	.214	1.278	210.3	372.6	1.004	1.552D	92.2	1.097	-1.1	-31.4	301.0	.109
		15.09	9.14	5.04	5.95	9.33	4.10	11.55	2/1/1	134.2	75.2	22.6	.370	5.108	7.9	69.3	3.9	96.2D	1.522

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448770
27 MAY 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448770 (27 MAY 1992)																			
4-8480	4-8666.3	.197	261.3	-24.9	-.4	.830	83.0	.324	.778	164.9	457.1	.526	1.030	108.5	1.214	3.2	9.7	115.5	.384
4-8666.3	4-8770	.384	139.0	5.7	1.7	1.354	74.3	.417	1.082	56.2	148.0	.631D	1.532A	108.9	.723	-1.0	10.0	29.7	.305
4-8770	4-9080	.142	18.2	21.2	2.2	.793	82.7	.182	1.221	143.3	353.8	.999A	1.443	89.0	1.088	-3.4	-52.4	320.0	.112
		14.55	7.64	4.65	6.91	10.28	2.99	11.57	2/1/2	42.4	108.2	23.6	.407	4.886	12.5	35.9	9.7	96.8D	1.580
4-8490	4-8663.1	.159	249.1	-25.7	-.7	.836	88.2	.296	.782	175.8	453.2	.550	1.013	106.7	1.217	3.2	10.9	112.2	.349
4-8663.1	4-8770	.349	138.9	6.4	1.7	1.359	76.3	.405	1.096	49.4	146.4	.652D	1.539A	108.7	.731	-1.2	10.0	31.1	.300
4-8770	4-9090	.138	20.4	16.9	1.3	.794	82.8	.180	1.223	143.0	363.3	1.002	1.444	90.5	1.086	-2.6	-50.0	307.4	.100
		13.84	7.07	4.15	6.77	10.14	2.93	11.48	2/1/2	41.2	94.0	26.8	.494	4.322	13.1	34.1	9.6	100.1D	1.640
4-8500	4-8662.1	.152	237.5	-24.4	-.8	.842	92.1	.288	.785	185.2	451.5	.559	1.011D	106.2	1.219	3.4	11.7	111.6	.339
4-8662.1	4-8770	.339	139.0	6.6	1.7	1.360	76.9	.402	1.099	47.5	146.0	.658D	1.541A	108.6	.734	-1.2	10.0	31.5	.298
4-8770	4-9100	.139	22.3	14.0	.7	.794	82.6	.181	1.224	142.4	372.5	1.002	1.446	91.9	1.083	-2.2	-47.1	295.2	.099
		13.73	6.99	4.06	6.73	10.10	2.93	11.46	2/1/2	40.9	78.0	27.5	.522	4.205	14.2	33.6	10.5	101.0D	1.673
4-8510	4-8662.4	.163	229.6	-22.3	-.8	.849	95.5	.290	.789	193.7	450.7	.560	1.019D	106.3	1.222	3.5	12.0	112.4	.342
4-8662.4	4-8770	.342	138.9	6.6	1.7	1.360	76.7	.403	1.098	48.1	146.1	.656D	1.540A	108.6	.733	-1.2	10.0	31.3	.299
4-8770	4-9110	.141	24.2	12.0	.3	.794	82.4	.185	1.223	141.7	381.5	.997	1.450	93.3	1.081	-2.0	-43.5	286.2	.105
		13.92	7.19	4.20	6.74	10.11	2.99	11.52	2/1/2	41.0	62.9	26.8	.514	4.320	15.2	33.8	11.7	100.7D	1.706
4-8520	4-8663.4	.187	226.0	-20.6	-.7	.858	98.6	.300	.795	201.4	450.4	.557	1.034D	106.7	1.226	3.6	12.0	114.2	.353
4-8663.4	4-8770	.353	138.9	6.3	1.7	1.359	76.1	.406	1.095	50.2	146.5	.650D	1.539A	108.7	.731	-1.2	10.0	31.0	.301
4-8770	4-9120	.147	26.3	10.7	-.1	.794	81.9	.191	1.222	140.7	390.2	.988	1.456	94.7	1.078	-1.8	-39.9	281.6	.118
		14.39	7.60	4.51	6.79	10.17	3.09	11.63	2/1/2	41.3	50.1	25.0	.482	4.615	16.1	34.5	13.0	99.7D	1.744
4-8530	4-8665.1	.219	226.2	-19.6	-.6	.869	101.8	.315	.804	208.5	450.3	.551	1.057D	107.5	1.231	3.6	11.5	116.9	.371
4-8665.1	4-8770	.371	138.9	5.9	1.7	1.356	75.1	.412	1.087	53.6	147.3	.639D	1.535A	108.8	.727	-1.1	10.0	30.3	.303
4-8770	4-9130	.154	28.6	9.9	-.4	.793	81.2	.201	1.221	139.5	398.6	.976	1.466	96.2	1.076	-1.7	-36.9	280.6	.136
		15.08	8.22	4.97	6.85	10.23	3.25	11.80	2/1/2	41.9	39.8	22.5	.438	5.132	17.0	35.7	14.3	98.3D	1.809
MARS ARRIVAL DATE = 2448780 (6 JUN 1992)																			
4-8480	4-8669.0	.214	265.5	-23.9	-.1	.828	81.5	.337	.776	162.6	459.0	.514	1.037	109.4	1.211	3.3	9.5	116.8	.402
4-8669.0	4-8780	.402	139.1	5.7	1.8	1.340	73.0	.411	1.040	62.4	156.2	.613D	1.467A	104.9	.695	-.9	8.4	25.4	.270
4-8780	4-9080	.135	17.3	25.0	2.7	.790	83.2	.180	1.217	146.0	350.2	.997A	1.436	88.5	1.086	-4.0	-53.8	330.1	.120
		13.75	7.75	4.90	6.00	9.38	2.86	11.65	2/1/2	53.3	112.0	20.5	.372	5.630	13.3	37.5	10.8	94.1D	1.723
4-8490	4-8664.8	.164	253.1	-25.2	-.5	.834	87.5	.301	.780	174.1	454.3	.545	1.014	107.1	1.215	3.3	10.7	114.5	.356
4-8664.8	4-8780	.356	138.4	6.6	1.8	1.347	75.6	.393	1.058	53.7	154.2	.642D	1.474A	104.8	.707	-1.1	8.5	27.5	.263
4-8780	4-9090	.129	20.4	18.8	1.5	.791	83.3	.178	1.219	145.8	359.8	1.003A	1.436	90.0	1.085	-2.9	-50.3	317.0	.103
		12.77	6.96	4.21	5.81	9.19	2.75	11.50	2/1/2	51.3	99.6	24.0	.476	4.809	13.2	35.0	9.8	98.2D	1.811
4-8500	4-8663.5	.152	241.1	-24.3	-.6	.840	91.5	.290	.783	183.8	452.3	.556	1.010D	106.4	1.217	3.4	11.5	113.4	.343
4-8663.5	4-8780	.343	138.3	7.0	1.8	1.349	76.3	.389	1.063	51.1	153.6	.650D	1.476A	104.8	.710	-1.2	8.5	28.1	.261
4-8780	4-9100	.128	22.6	15.0	.8	.791	83.2	.178	1.221	145.3	369.1	1.003	1.438	91.4	1.082	-2.3	-47.5	304.2	.097
		12.57	6.81	4.07	5.76	9.14	2.73	11.45	2/1/2	50.8	84.1	25.0	.512	4.626	14.1	34.2	10.4	99.4D	1.856
4-8510	4-8663.7	.162	232.4	-22.3	-.6	.847	95.0	.292	.787	192.4	451.4	.558	1.017D	106.4	1.220	3.5	11.9	114.0	.344
4-8663.7	4-8780	.344	138.3	6.9	1.8	1.348	76.3	.389	1.062	51.4	153.7	.649D	1.476A	104.8	.710	-1.2	8.5	28.0	.261
4-8780	4-9110	.130	24.7	12.5	.3	.791	83.0	.180	1.221	144.6	378.1	1.000	1.441	92.7	1.080	-2.0	-44.1	293.8	.101
		12.71	6.95	4.18	5.76	9.14	2.76	11.48	2/1/2	50.9	68.4	24.4	.509	4.725	15.1	34.3	11.5	99.3D	1.896
4-8520	4-8664.6	.184	228.2	-20.6	-.6	.855	98.2	.300	.793	200.2	451.0	.555	1.031D	106.8	1.224	3.5	11.8	115.8	.354
4-8664.6	4-8780	.354	138.4	6.7	1.8	1.347	75.7	.392	1.059	53.3	154.1	.643D	1.474A	104.8	.708	-1.1	8.5	27.6	.263
4-8780	4-9120	.134	27.0	10.9	-.1	.791	82.6	.185	1.220	143.6	386.8	.993	1.446	94.1	1.078	-1.8	-40.5	287.6	.111
		13.11	7.31	4.47	5.80	9.18	2.84	11.56	2/1/2	51.3	54.8	22.9	.481	5.039	16.0	35.0	12.8	98.4D	1.943
4-8530	4-8666.2	.215	227.8	-19.6	-.4	.866	101.3	.314	.801	207.4	450.9	.549	1.053D	107.5	1.229	3.6	11.3	118.4	.370
4-8666.2	4-8780	.370	138.6	6.3	1.8	1.345	74.8	.398	1.052	56.5	154.8	.633D	1.471A	104.8	.704	-1.0	8.5	26.9	.265
4-8780	4-9130	.140	29.5	10.0	-.4	.790	82.1	.193	1.218	142.4	395.1	.983	1.453	95.5	1.075	-1.7	-37.2	285.3	.127
		13.74	7.88	4.91	5.86	9.24	2.96	11.71	2/1/2	51.9	43.6	20.6	.439	5.597	16.8	36.3	14.1	97.2D	2.017
4-8540	4-8668.2	.253	230.1	-19.2	-.2	.879	104.5	.334	.813	214.0	450.9	.541	1.084D	108.6	1.236	3.5	10.5	121.7	.393
4-8668.2	4-8780	.393	138.9	5.8	1.8	1.341	73.5	.407	1.043	60.7	155.8	.619D	1.468A	104.9	.698	-.9	8.4	25.9	.269
4-8780	4-9140	.149	32.2	9.6	-.7	.789	81.3	.204	1.216	140.9	403.2	.967	1.464	96.9	1.073	-1.6	-34.6	286.0	.147
		14.63	8.67	5.52	5.96	9.54	3.15	11.92	2/1/2	52.9	34.7	17.7	.389	6.490	17.4	38.1	15.2	95.7D	2.138
MARS ARRIVAL DATE = 2448790 (16 JUN 1992)																			
4-8480	4-8672.4	.238	270.1	-22.6	.2	.825	79.5	.357	.773	159.8	461.6	.497	1.048	110.6	1.209	3.5	9.3	122.9	.427
4-8672.4	4-8790	.427	140.6	5.5	1.9	1.329	71.5	.415	1.010	68.6	163.3	.591D	1.429A	101.2	.672	-.7	6.6	20.1	.250
4-8790	4-9080	.132	14.3	30.4	3.6	.786	83.8	.179	1.213	149.1	347.0	.996A	1.431	88.0	1.085	-4.9	-56.6	341.0	.134
		13.56	8.08	5.28	5.48	8.87	2.80	11.78	2/1/2	65.1	113.7	17.9	.329	6.414	14.5	40.2	12.4	91.4D	1.782
4-8490	4-8666.8	.170	257.1	-24.6	-.4	.832	86.7	.306	.777	172.4	455.5	.539	1.016	107.4	1.213	3.3	10.6	116.8	.363
4-8666.8	4-8790	.363	138.9	6.8	1.9	1.339	75.0	.388	1.035	56.9	160.9	.634D	1.437A	101.4	.690	-1.0	6.7	23.2	.238
4-8790	4-9090	.122	19.0	21.0	1.8	.787	83.9	.176	1.216	149.0	356.7	1.002A	1.430	89.5	1.084	-3.3	-51.1	325.6	.107
		12.07	6.89	4.26	5.18	8.56	2.61	11.53	2/1/2	62.2	104.0	22.2	.456	5.195	13.2	36.4	9.7	96.7D	1.914
4-8500	4-8665.0	.154	244.7	-24.1	-.5	.838	91.0	.293	.781	182.3	453.1	.552	1.010D	106.6	1.216	3.4	11.3	115.3	.346
4-8665.0	4-8790	.346	138.6	7.3	1.9	1.341	75.9	.382	1.041	53.7	160.2	.644D	1.438A	101.4	.694	-1.1	6.7	24.0	.235
4-8790	4-9100	.119	21.8	15.8	.9	.788	83.9	.175	1.218	148.6	366.0	1.005	1.431	90.9	1.082	-2.5	-47.8	312.4	.097
		11.76	6.66	4.09	5.11	8.49	2.57	11.45	2/1/2	61.5	89.3	23.4	.501	4.936	13.8	35.4	10.0	98.3D	1.973
4-8510	4-8664.9	.160	235.2	-22.3	-.5	.845	94.5	.293	.785	191.1	452.1	.555	1.015D	106.5	1.218	3.4	11.7	115.7	.346
4-8664.9	4-8790	.346	138.6	7.3	1.9	1.341	76.0	.381	1.041	53.5	160.2	.644D	1.439A	101.4	.694	-1.1	6.7	24.0	.235
4-8790	4-9110	.120	24.2	12.7	.3	.788	83.7	.177	1.218	147.9	375.1	1.003	1.433	92.3	1.079	-2.1	-44.4	300.9	.098
		11.85	6.75	4.17	5.10	8.49	2.58	11.46	2/1/2	61.5	73.4	23.0	.504	5.007	14.7	35.3	11.0	98.4D	2.016
4-8520	4-8665.8	.181	230.3	-20.6	-.4	.853	97.8	.300	.791	199.0	451.6	.553	1.028D	106.8	1.222	3.5	11.6	117.3	.354
4-8665.8	4-8790	.354	138.8	7.0	1.9	1.340	75.5	.385	1.038	55.2	160.5	.639D	1.438A	101.4	.692	-1.1	6.7	23.6	.236
4-8790	4-9120	.123	26.7	10.8	-.1	.788	83.4	.181	1.217	146.9	383.8	.997	1.436	93.6	1.077	-1.8	-40.7	293.3	.106
		12.20	7.06	4.43	5.14	8.52	2.63	11.52	2/1/2	61.9	59.1	21.7	.479	5.320	15.5	36.0	12.2	97.7D	2.071
4-8530	4-8667.3	.211	229.4	-19.5	-.3	.863	100.9	.314	.798	206.3	451.5	.548	1.049D	107.5	1.227	3.5	11.2	119.8	.370
4-8667.3	4-8790	.370	139.0	6.6	1.9	1.338	74.6	.391	1.032	58.3	161.1	.629D	1.436A	101.3	.688	-1.0	6.7	22.9	.239
4-8790	4-9130	.128	29.5	9.7	-.4	.787	82.9	.187	1.216	145.7	392.1	.988	1.444	94.9	1.074	-1.6	-37.3	289.6	.119
		12.79	7.58	4.86	5.20	8.59	2.73	11.64	2/1/2	62.6	47.2	19.5	.439	5.890	16.2	37.3	13.3	96.6D	2.149
4-8540	4-8669.3	.248	231.5	-19.1	-.1	.876	104.1	.332	.809	212.9	451.5	.540	1.078D	108.5	1.233	3.4	10.3	123.1	.392
4-8669.3	4-8790	.392	139.6	6.1	1.9	1.334	73.4	.399	1.024	62.3	162.0	.615D	1.433A	101.3	.682	-.9	6.7	21.8	.243
4-8790	4-9140	.135	32.6	9.2	-.7	.786	82.2	.197	1.214	144.1	400.2	.975	1.453	96.3	1.072	-1.6	-34.5	289.6	.137
		13.62	8.31	5.45	5.30	8.69	2.87	11.81	2/1/2	63.5	37.7	16.9	.392	6.820	16.7	39.2	14.4	95.2D	2.280
4-8550	4-8671.7	.291	235.5	-19.2	.2	.893	107.2	.357	.824	219.0	451.5	.530	1.118D	109.8	1.242	3.3	9.2	127.0	.420
4-8671.7	4-8790	.420	140.4	5.6	1.9	1.330	71.9	.411	1.013	67.2	163.0	.596D	1.430A	101.2	.674	-.8	6.6	20.5	.248
4-8790	4-9150	.146	35.9	9.2	-1.0	.785	81.3	.209	1.211	142.3	408.0	.957	1.465	97.8	1.070	-1.5	-32.2	291.6	.160
		14.72	9.28	6.21	5.44	8.82	3.07	12.06	2/1/2	64.8	30.0	13.7	.341	8.366	16.8	41.7	15.0	93.9D	2.516
MARS ARRIVAL DATE = 2448800 (26 JUN 1992)																			
4-8490	4-8668.6	.178	261.3	-23.9	-.2	.829	85.7	.313	.775	170.5	456.8	.532	1.018	107.9	1.211	3.3	10.4	119.4	.372
4-8668.6	4-8800	.372	140.3	6.9	2.0	1.333	74.4	.387	1.021	59.7	166.6	.626D	1.417A	98.2	.676	-1.0	4.9	18.6	.223
4-8800	4-9090	.117	16.0	24.0	2.3	.783	84.6	.175	1.214	152.6	354.0	1.002A	1.426	89.1	1.083	-3.8	-52.9	334.2	.114
		11.72	6.91	4.39	4.82	8.20	2.52	11.59	2/1/2	73.5	107.0	20.9	.434	5.501	13.1	38.4	9.7	95.5D	1.953
4-8500	4-8666.5	.156	248.5	-23.9	-.4	.836	90.3	.296	.779	180.8	454.1	.548	1.009D	106.8	1.214	3.4	11.2	117.3	.351
4-8666.5	4-8800	.351	139.7	7.5	2.0	1.336	75.6	.379	1.029	55.5	165.9	.639D	1.419A	98.3	.681	-1.1	4.9	19.6	.219
4-8800	4-9100	.112	19.7	16.6	1.1	.784	84.6	.173	1.216	152.2	363.4	1.005	1.427	90.5	1.081	-2.7	-48.2	319.5	.099
		11.27	6.55	4.11	4.72	8.11	2.44	11.46	2/1/2	72.5	93.6	22.4	.489	5.143	13.4	37.0	9.4	97.5D	2.027
4-8510	4-8666.2	.159	238.3	-22.3	-.4	.842	94.0	.294	.783	189.7	452.8	.553	1.013D	106.6	1.217	3.4	11.5	117.4	.348
4-8666.2	4-8800	.348	139.7	7.6	2.0	1.337	75.7	.378	1.030	55.0	165.8	.641D	1.419A	98.3	.682	-1.1	4.9	19.7	.218
4-8800	4-9110	.112	22.5	12.5	.4	.784	84.4	.174	1.216	151.6	372.5	1.004	1.428	91.8	1.079	-2.1	-44.4	307.0	.096
		11.29	6.59	4.16	4.70	8.09	2.43	11.44	2/1/2	72.4	77.8	22.3	.497	5.178	14.1	36.9	10.1	97.8D	2.078

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448800
26 JUN 1992

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-8520	4-8667.0	.178	232.7	-20.6	-.3	.851	97.3	.300	.788	197.8	452.3	.551	1.025D	106.9	1.220	3.5	11.5	118.9	.355
4-8667.0	4-8800	.355	139.8	7.4	2.0	1.336	75.3	.380	1.027	56.4	166.1	.636D	1.418A	98.3	.680	-1.1	4.9	19.4	.220
4-8800	4-9120	.114	25.3	10.1	-.1	.784	84.1	.177	1.216	150.7	381.2	1.000	1.431	93.2	1.076	-1.8	-40.6	298.3	.102
		11.60	6.86	4.39	4.73	8.12	2.47	11.49	2/1/2	72.8	62.9	21.1	.477	5.472	14.8	37.5	11.1	97.3D	2.134
4-8530	4-8668.4	.207	231.2	-19.5	-.2	.861	100.5	.313	.796	205.1	452.1	.546	1.045D	107.6	1.225	3.5	11.0	121.3	.370
4-8668.4	4-8800	.370	140.2	6.9	2.0	1.334	74.5	.386	1.022	59.2	166.5	.627D	1.417A	98.2	.677	-1.0	4.9	18.7	.223
4-8800	4-9130	.118	28.4	8.9	-.4	.783	83.7	.183	1.214	149.4	389.6	.992	1.437	94.5	1.074	-1.6	-37.1	293.9	.113
		12.14	7.34	4.80	4.80	8.19	2.54	11.58	2/1/2	73.3	50.4	19.1	.440	6.030	15.3	38.8	12.2	96.3D	2.213
4-8540	4-8670.4	.243	232.9	-19.0	.0	.873	103.6	.331	.806	211.8	452.1	.539	1.073D	108.5	1.231	3.4	10.2	124.5	.391
4-8670.4	4-8800	.391	140.8	6.4	2.0	1.331	73.4	.395	1.014	63.1	167.3	.614D	1.415A	98.1	.671	-.9	5.0	17.7	.227
4-8800	4-9140	.124	31.8	8.4	-.7	.782	83.1	.191	1.212	147.7	397.5	.980	1.444	95.8	1.072	-1.5	-34.1	292.9	.130
		12.92	8.01	5.37	4.91	8.29	2.64	11.74	2/1/2	74.3	40.3	16.6	.394	6.948	15.5	40.8	13.0	95.1D	2.343
4-8550	4-8672.8	.286	236.7	-19.0	.3	.889	106.8	.354	.820	217.9	452.1	.529	1.111D	109.7	1.239	3.2	9.0	128.4	.418
4-8672.8	4-8800	.418	141.7	5.8	1.9	1.327	71.9	.407	1.005	67.8	168.1	.596D	1.413A	97.9	.664	-.7	5.0	16.5	.233
4-8800	4-9150	.132	35.6	8.5	-1.0	.781	82.2	.202	1.209	145.9	405.2	.965	1.454	97.2	1.070	-1.4	-31.7	294.4	.150
		13.97	8.91	6.11	5.06	8.44	2.80	11.95	2/1/2	75.4	32.3	13.6	.345	8.469	15.4	43.3	13.4	93.6D	2.575
MARS ARRIVAL DATE = 2448810 (6 JUL 1992)																			
4-8490	4-8671.1	.189	266.0	-23.0	.1	.827	84.5	.323	.773	168.2	458.3	.523	1.022	108.5	1.209	3.4	10.3	122.5	.384
4-8671.1	4-8810	.384	142.4	6.8	2.0	1.330	73.7	.391	1.013	62.3	171.7	.617D	1.409A	95.3	.665	-.8	3.4	14.1	.218
4-8810	4-9090	.116	10.5	28.8	3.2	.778	85.3	.174	1.212	156.6	351.8	1.001A	1.424	88.8	1.082	-4.7	-56.7	344.1	.127
		11.74	7.05	4.54	4.68	8.07	2.51	11.71	2/1/2	84.5	108.2	20.0	.407	5.758	13.2	41.0	9.8	94.3D	1.935
4-8500	4-8668.2	.159	252.7	-23.5	-.2	.833	89.6	.300	.777	179.1	455.1	.544	1.009	107.1	1.212	3.4	11.0	119.6	.356
4-8668.2	4-8810	.356	141.5	7.7	2.1	1.334	75.3	.379	1.023	56.9	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.5	.212
4-8810	4-9100	.107	16.2	17.4	1.3	.779	85.3	.172	1.215	156.3	361.3	1.005	1.424	90.2	1.080	-3.0	-49.2	325.7	.101
		11.04	6.50	4.15	4.53	7.93	2.35	11.49	2/1/2	83.2	96.9	21.9	.475	5.269	13.0	39.1	8.6	96.9D	2.028
4-8510	4-8667.7	.159	241.8	-22.2	-.2	.840	93.4	.296	.780	188.3	453.6	.550	1.011D	106.7	1.215	3.4	11.4	119.4	.350
4-8667.7	4-8810	.350	141.3	7.9	2.1	1.335	75.6	.377	1.025	55.9	170.6	.639D	1.410A	95.6	.674	-1.1	3.2	15.7	.210
4-8810	4-9110	.106	19.6	11.9	.4	.779	85.2	.173	1.215	155.7	370.4	1.006	1.425	91.5	1.078	-2.2	-44.5	312.2	.095
		10.99	6.48	4.15	4.51	7.90	2.33	11.44	2/1/2	83.0	81.4	21.9	.490	5.255	13.4	38.8	9.1	97.5D	2.085
4-8520	4-8668.3	.176	235.3	-20.6	-.2	.848	96.8	.301	.786	196.4	453.0	.549	1.022D	107.0	1.218	3.4	11.3	120.6	.358
4-8668.3	4-8810	.356	141.5	7.7	2.1	1.334	75.2	.379	1.023	57.0	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.4	.212
4-8810	4-9120	.107	22.7	9.0	-.1	.779	84.9	.175	1.215	154.8	379.1	1.002	1.428	92.8	1.076	-1.6	-40.5	302.6	.099
		11.25	6.71	4.36	4.53	7.93	2.35	11.47	2/1/2	83.2	66.2	20.9	.474	5.515	13.9	39.4	9.9	97.1D	2.142
4-8530	4-8669.6	.203	233.2	-19.4	-.1	.858	100.0	.313	.793	203.8	452.8	.545	1.040D	107.6	1.223	3.4	10.8	122.9	.370
4-8669.6	4-8810	.370	141.9	7.2	2.1	1.332	74.5	.385	1.018	59.6	171.2	.627D	1.409A	95.4	.669	-.9	3.3	14.8	.214
4-8810	4-9130	.110	26.1	7.6	-.5	.778	84.5	.180	1.213	153.4	387.4	.995	1.432	94.1	1.074	-1.5	-36.6	297.3	.109
		11.75	7.14	4.74	4.61	8.00	2.40	11.55	2/1/2	83.7	53.1	19.1	.440	6.040	14.2	40.7	10.8	96.3D	2.218
4-8540	4-8671.6	.239	234.4	-18.9	.1	.870	103.2	.330	.802	210.6	452.7	.538	1.067D	108.5	1.228	3.3	10.0	126.1	.390
4-8671.6	4-8810	.390	142.6	6.7	2.0	1.329	73.4	.393	1.011	63.2	171.8	.614D	1.408A	95.2	.664	-.8	3.4	13.9	.219
4-8810	4-9140	.114	29.9	7.1	-.7	.777	84.0	.187	1.211	151.8	395.3	.985	1.437	95.4	1.071	-1.4	-33.6	295.8	.124
		12.48	7.77	5.29	4.71	8.10	2.48	11.68	2/1/2	84.5	42.6	16.6	.396	6.909	14.2	42.7	11.4	95.2D	2.341
4-8550	4-8674.0	.280	238.0	-18.9	.4	.885	106.3	.352	.816	216.7	452.7	.528	1.103D	109.7	1.236	3.1	8.8	130.0	.416
4-8674.0	4-8810	.416	143.6	6.1	2.0	1.325	72.0	.405	1.002	67.8	172.5	.596D	1.407A	95.0	.657	-.7	3.5	12.8	.225
4-8810	4-9150	.121	34.1	7.3	-1.0	.776	83.2	.197	1.208	149.8	402.9	.971	1.446	96.7	1.069	-1.3	-31.1	296.8	.143
		13.46	8.60	6.00	4.87	8.25	2.59	11.87	2/1/2	85.5	34.2	13.8	.348	8.337	13.8	45.3	11.5	94.0D	2.554
4-8560	4-8676.8	.327	243.2	-19.1	.8	.903	109.5	.380	.834	222.2	452.7	.517	1.151D	111.1	1.247	2.8	7.4	134.5	.447
4-8676.8	4-8810	.447	144.9	5.5	2.0	1.321	70.3	.420	.990	73.1	173.4	.574D	1.406A	94.7	.648	-.5	3.5	11.5	.234
4-8810	4-9160	.130	38.7	8.0	-1.2	.775	82.2	.209	1.205	147.5	410.2	.953	1.457	98.1	1.067	-1.3	-28.9	299.6	.165
		14.73	9.66	6.90	5.07	8.46	2.76	12.12	2/1/2	86.7	27.4	10.6	.300	10.862	12.3	48.5	10.5	92.8D	2.961
MARS ARRIVAL DATE = 2448820 (16 JUL 1992)																			
4-8490	4-8674.1	.206	271.2	-21.9	.4	.824	82.9	.336	.770	165.4	460.4	.511	1.028	109.4	1.206	3.5	10.1	126.3	.402
4-8674.1	4-8820	.402	145.3	6.5	2.1	1.327	72.7	.399	1.007	65.4	176.0	.606D	1.409A	92.6	.655	-.7	2.3	10.4	.220
4-8820	4-9090	.129	.5	37.9	5.4	.773	86.1	.174	1.212	161.0	350.1	1.000A	1.423	86.5	1.082	-6.9	-63.7	2.3	.157
		12.27	7.53	4.79	4.75	8.13	2.74	12.03	2/1/2	94.3	106.3	19.1	.372	6.022	15.6	44.3	10.6	92.8D	1.867
4-8500	4-8670.2	.164	257.4	-22.9	.0	.831	88.7	.305	.774	177.1	456.2	.538	1.010	107.4	1.210	3.4	10.9	122.1	.362
4-8670.2	4-8820	.362	143.8	7.7	2.2	1.333	74.9	.381	1.021	58.1	175.0	.632D	1.410A	93.1	.665	-.9	2.0	12.0	.211
4-8820	4-9100	.105	11.2	18.6	1.7	.774	86.1	.172	1.214	160.8	359.6	1.005A	1.423	89.9	1.080	-3.4	-51.5	331.7	.106
		11.04	6.53	4.21	4.51	7.90	2.32	11.52	2/1/2	93.0	99.1	21.6	.458	5.341	12.6	41.6	8.3	96.3D	1.988
4-8510	4-8669.3	.159	245.6	-22.1	-.1	.838	92.8	.298	.778	186.6	454.5	.546	1.010D	106.9	1.213	3.4	11.2	121.5	.353
4-8669.3	4-8820	.353	143.5	8.1	2.2	1.334	75.4	.378	1.024	56.4	174.8	.637D	1.410A	93.2	.667	-1.0	1.9	12.4	.208
4-8820	4-9110	.102	15.6	11.1	.5	.774	86.0	.172	1.215	160.3	368.8	1.006	1.424	91.3	1.078	-2.3	-44.8	316.4	.095
		10.89	6.43	4.15	4.46	7.85	2.28	11.44	2/1/2	92.7	84.2	21.9	.481	5.263	12.8	41.1	8.2	97.3D	2.052
4-8520	4-8669.7	.173	238.3	-20.5	-.1	.846	96.3	.302	.783	195.0	453.8	.547	1.019D	107.1	1.216	3.4	11.1	122.5	.357
4-8669.7	4-8820	.357	143.6	7.9	2.2	1.334	75.2	.379	1.022	57.2	174.9	.635D	1.410A	93.1	.667	-1.0	2.0	12.2	.209
4-8820	4-9120	.103	19.1	7.4	-.1	.774	85.8	.174	1.215	159.3	377.5	1.003	1.426	92.6	1.076	-1.8	-39.9	305.9	.097
		11.10	6.61	4.33	4.48	7.88	2.28	11.45	2/1/2	92.8	68.7	21.0	.471	5.479	13.1	41.6	8.7	97.1D	2.108
4-8530	4-8670.9	.200	235.5	-19.4	.1	.855	99.5	.312	.789	202.5	453.5	.543	1.036D	107.6	1.220	3.4	10.7	124.7	.370
4-8670.9	4-8820	.370	144.0	7.5	2.2	1.332	74.5	.384	1.018	59.5	175.2	.627D	1.410A	93.0	.664	-.9	2.1	11.7	.212
4-8820	4-9130	.105	22.8	5.7	-.5	.773	85.4	.178	1.213	157.9	385.7	.997	1.429	93.8	1.074	-1.5	-36.0	300.1	.106
		11.55	7.00	4.69	4.55	7.94	2.31	11.52	2/1/2	93.3	55.3	19.3	.440	5.955	13.2	42.9	9.4	96.4D	2.180
4-8540	4-8672.8	.234	236.2	-18.8	.3	.867	102.7	.329	.798	209.2	453.4	.536	1.061D	108.5	1.226	3.3	9.8	127.8	.389
4-8672.8	4-8820	.389	144.8	6.9	2.1	1.329	73.5	.393	1.012	63.0	175.7	.615D	1.409A	92.8	.659	-.8	2.2	10.9	.217
4-8820	4-9140	.108	26.9	5.3	-.8	.772	84.9	.184	1.211	156.2	393.6	.988	1.434	95.0	1.071	-1.3	-32.8	298.0	.120
		12.24	7.57	5.21	4.66	8.05	2.37	11.64	2/1/2	93.9	44.5	17.0	.398	6.750	13.0	44.8	9.8	95.3D	2.269
4-8550	4-8675.2	.274	239.4	-18.7	.5	.881	105.8	.350	.811	215.4	453.4	.527	1.095D	109.6	1.233	3.1	8.7	131.6	.414
4-8675.2	4-8820	.414	145.8	6.3	2.1	1.326	72.1	.404	1.003	67.4	176.3	.598D	1.409A	92.5	.652	-.6	2.4	10.0	.223
4-8820	4-9150	.113	31.5	5.6	-1.0	.771	84.2	.193	1.208	154.1	401.0	.975	1.440	96.3	1.069	-1.2	-30.2	298.6	.137
		13.16	8.34	5.90	4.82	8.21	2.45	11.81	2/1/2	94.7	35.9	14.3	.351	8.044	12.2	47.4	9.6	94.2D	2.476
4-8560	4-8678.0	.320	244.3	-18.9	.9	.899	109.0	.377	.828	221.0	453.4	.516	1.140D	111.0	1.243	2.8	7.2	136.1	.444
4-8678.0	4-8820	.444	147.2	5.6	2.0	1.321	70.5	.419	.992	72.5	177.0	.577D	1.408A	92.1	.644	-.5	2.5	8.9	.232
4-8820	4-9160	.120	36.6	6.5	-1.2	.770	83.3	.204	1.204	151.7	408.2	.959	1.450	97.6	1.067	-1.1	-28.1	301.4	.157
		14.36	9.33	6.76	5.03	8.41	2.57	12.03	2/1/2	95.6	28.9	11.2	.304	10.269	10.5	50.7	8.3	93.1D	2.820
MARS ARRIVAL DATE = 2448830 (26 JUL 1992)																			
4-8500	4-8672.5	.170	262.6	-22.2	.2	.828	87.7	.311	.771	174.9	457.6	.531	1.011	107.8	1.208	3.4	10.7	125.1	.371
4-8672.5	4-8830	.371	146.5	7.7	2.2	1.333	74.5	.386	1.021	59.4	178.7	.627D	1.415A	90.8	.659	-.8	1.4	9.4	.214
4-8830	4-9100	.108	4.6	21.8	2.5	.769	87.1	.172	1.215	165.7	358.5	1.005A	1.424	89.8	1.081	-4.2	-56.1	339.2	.116
		11.27	6.67	4.29	4.61	8.00	2.37	11.61	2/1/2	101.7	99.9	21.4	.437	5.383	12.4	44.5	8.1	95.6D	1.916
4-8510	4-8671.1	.160	250.1	-21.8	.1	.835	92.1	.301	.775	184.8	455.6	.542	1.008D	107.1	1.211	3.4	11.1	123.9	.357
4-8671.1	4-8830	.357	146.0	8.2	2.3	1.335	75.2	.380	1.026	56.8	178.4	.636D	1.415A	91.0	.662	-.9	1.2	9.9	.211
4-8830	4-9110	.102	10.9	10.1	.6	.769	87.0	.172	1.216	165.2	367.6	1.007	1.425	91.1	1.078	-2.4	-45.5	319.5	.096
		10.96	6.43	4.16	4.53	7.92	2.27	11.45	2/1/2	101.3	86.1	22.1	.471	5.226	12.3	43.7	7.4	97.0D	1.989
4-8520	4-8671.2	.171	241.7	-20.4	.1	.843	95.6	.303	.780	193.3	454.7	.544	1.016D	107.2	1.214	3.4	11.0	124.6	.359
4-8671.2	4-8830	.359	146.1	8.1	2.3	1.334	75.1	.381	1.025	57.2	178.5	.635D	1.415A	90.9	.662	-.9	1.2	9.9	.212
4-8830	4-9120	.102	14.8	5.5	-.1	.769	86.8	.174	1.215	164.2	376.3	1.004	1.426	92.4	1.076	-1.7	-39.4	308.2	.096
		11.11	6.57	4.30	4.54	7.93	2.27	11.45	2/1/2	101.4	70.6	21.4	.466	5.386	12.4	44.1	7.6	97.1D	2.045
4-8530	4-8672.4	.198	238.0	-19.3	.2	.852	99.0	.312	.786	200.9	454.3	.541	1.031D	107.7	1.218	3.3	10.5	126.6	.370
4-8672.4	4-8830	.370	146.5	7.7	2.2	1.333	74.5	.386	1.022	59.2	178.7	.628D	1.415A	90.8	.659	-.8	1.3	9.5	.214
4-8830	4-9130	.103	18.6	8.5	-.6	.768	86.4	.177	1.214	162.8	384.5	.999	1.429	93.6	1.074	-1.4	-35.0	302.0	.104
		11.51	6.91	4.63	4.60	7.99	2.28	11.51	2/1/2	101.7	56.9	19.8	.439	5.804	12.3	45.3	8.0	96.5D	2.110

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448830
26 JUL 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	TYPE	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR		SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8540	4-8674.2	.228	238.1	-18.7	.4	.863	102.1	.327	.795	207.8	454.1	.534	1.055D	108.5	1.223	3.2	9.6	129.6	.388
4-8674.2	4-8830	.388	147.2	7.1	2.2	1.331	73.6	.393	1.016	62.4	179.1	.616D	1.415A	90.6	.655	-.7	1.6	8.9	.219
4-8830	4-9140	.105	22.9	3.0	-.9	.767	85.9	.183	1.211	160.9	392.3	.990	1.433	94.8	1.071	-1.2	-31.8	299.7	.117
		12.15	7.44	5.12	4.71	8.10	2.31	11.61	2/1/2	102.1	45.9	17.7	.400	6.517	11.9	47.2	8.2	95.6D	2.206
4-8550	4-8676.5	.268	240.9	-18.6	.7	.877	105.3	.348	.806	214.1	454.1	.526	1.087D	109.6	1.230	3.0	8.5	133.3	.412
4-8676.5	4-8830	.412	148.3	6.4	2.1	1.327	72.3	.404	1.008	66.6	179.6	.601D	1.415A	90.3	.649	-.6	1.8	8.1	.225
4-8830	4-9150	.108	27.8	3.5	-1.1	.766	85.2	.190	1.208	158.7	399.6	.978	1.438	96.0	1.069	-1.1	-29.2	300.2	.133
		13.02	8.15	5.79	4.87	8.26	2.37	11.77	2/1/2	102.7	57.1	15.0	.355	7.662	10.9	49.8	7.9	94.5D	2.363
4-8560	4-8679.2	.313	245.6	-18.7	1.0	.894	108.5	.373	.822	219.7	454.1	.515	1.129D	110.9	1.240	2.7	7.1	137.7	.442
4-8679.2	4-8830	.442	149.7	5.8	2.0	1.323	70.7	.418	.998	71.6	180.2	.580D	1.415	89.9	.642	-.4	2.0	7.3	.234
4-8830	4-9160	.113	33.3	4.5	-1.3	.764	84.3	.200	1.204	156.2	406.6	.963	1.445	97.3	1.067	-1.0	-27.1	302.7	.152
		14.15	9.07	6.62	5.08	8.46	2.45	11.97	2/1/2	103.4	30.0	12.0	.308	9.572	9.0	53.0	6.3	93.4D	2.643
MARS ARRIVAL DATE = 2448840 (5 AUG 1992)																			
4-8500	4-8675.1	.180	268.3	-21.3	.5	.825	86.4	.320	.768	172.3	459.2	.523	1.014	108.4	1.205	3.5	10.5	126.5	.382
4-8675.1	4-8840	.382	149.8	7.4	2.2	1.333	73.9	.393	1.023	60.8	182.0	.622D	1.425	88.7	.654	-.7	1.3	7.9	.222
4-8840	4-9100	.125	354.6	30.8	4.7	.763	88.1	.174	1.217	171.1	357.8	1.005A	1.428	89.7	1.081	-6.4	-63.6	357.3	.146
		11.88	7.09	4.42	4.79	8.18	2.67	11.91	2/1/2	109.1	98.6	21.2	.412	5.425	12.4	47.8	8.4	94.7D	1.822
4-8510	4-8673.0	.162	255.0	-21.4	.3	.832	91.2	.304	.772	182.7	456.7	.537	1.007D	107.4	1.208	3.4	10.9	126.5	.362
4-8673.0	4-8840	.362	149.0	8.2	2.3	1.336	75.0	.384	1.030	57.2	181.6	.634D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9110	.106	5.8	9.4	.9	.764	88.0	.173	1.216	170.6	367.0	1.007	1.429	91.0	1.079	-2.7	-47.2	322.0	.099
		11.18	6.51	4.18	4.67	8.05	2.33	11.47	2/1/2	108.7	87.2	22.3	.458	5.165	12.0	46.6	6.9	96.8D	1.907
4-8520	4-8673.0	.169	245.5	-20.3	.3	.840	95.0	.304	.777	191.5	455.6	.541	1.013D	107.3	1.211	3.4	10.8	126.9	.361
4-8673.0	4-8840	.361	148.9	8.2	2.3	1.336	75.1	.384	1.030	57.0	181.6	.635D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9120	.104	10.3	3.3	-.2	.764	87.8	.175	1.217	169.5	375.6	1.005	1.430	92.3	1.077	-1.7	-38.8	309.4	.096
		11.25	6.59	4.28	4.66	8.05	2.31	11.44	2/1/2	108.7	71.6	21.9	.460	5.267	11.8	46.8	6.7	97.1D	1.964
4-8530	4-8673.9	.192	240.9	-19.2	.4	.849	98.3	.312	.783	199.3	455.1	.538	1.027D	107.7	1.215	3.3	10.3	126.7	.371
4-8673.9	4-8840	.371	149.3	7.8	2.3	1.335	74.6	.388	1.027	58.7	181.8	.629D	1.425	88.9	.656	-.8	1.1	8.2	.219
4-8840	4-9130	.104	14.2	1.1	-.6	.763	87.4	.178	1.215	168.0	383.7	1.000	1.431	93.5	1.074	-1.3	-33.9	303.0	.103
		11.60	6.88	4.57	4.72	8.11	2.31	11.50	2/1/2	108.9	57.8	20.5	.438	5.620	11.6	47.9	6.9	96.7D	2.022
4-8540	4-8675.6	.223	240.3	-18.6	.5	.860	101.6	.326	.791	206.3	454.9	.533	1.049D	108.5	1.220	3.2	9.5	131.5	.387
4-8675.6	4-8840	.387	150.0	7.2	2.2	1.333	73.7	.395	1.022	61.7	182.1	.618D	1.425	88.6	.653	-.7	1.3	7.8	.224
4-8840	4-9140	.105	18.5	.6	-.9	.762	86.9	.183	1.213	166.0	391.4	.991	1.434	94.7	1.072	-1.1	-30.6	300.6	.115
		12.18	7.56	5.04	4.82	8.21	2.32	11.60	2/1/2	109.2	46.7	18.4	.401	6.243	11.0	49.8	6.9	95.9D	2.104
4-8550	4-8677.9	.261	242.7	-18.4	.8	.873	104.7	.346	.801	212.6	454.9	.524	1.079D	109.6	1.227	2.9	8.3	135.2	.410
4-8677.9	4-8840	.410	151.1	6.6	2.1	1.330	72.4	.405	1.015	65.7	182.5	.604D	1.426	88.3	.647	-.5	1.6	7.2	.230
4-8840	4-9150	.106	23.5	1.1	-1.2	.760	86.3	.189	1.209	163.7	398.6	.980	1.438	95.9	1.070	-.9	-28.1	301.1	.131
		13.00	8.02	5.67	4.98	8.37	2.34	11.75	2/1/2	109.6	37.9	15.9	.358	7.238	9.9	52.3	6.4	94.8D	2.232
4-8560	4-8680.6	.305	247.0	-18.5	1.1	.889	107.9	.370	.816	218.3	454.9	.514	1.119D	110.9	1.236	2.6	6.9	139.5	.439
4-8680.6	4-8840	.439	152.5	5.8	2.0	1.326	70.9	.419	1.005	70.4	183.0	.584D	1.426	87.9	.640	-.3	1.9	6.6	.238
4-8840	4-9160	.109	29.2	2.3	-1.3	.758	85.5	.198	1.205	161.0	405.4	.966	1.444	97.1	1.067	-.8	-26.0	303.6	.149
		14.05	8.87	6.48	5.19	8.57	2.39	11.93	2/1/2	110.1	30.9	13.0	.313	8.853	8.0	55.5	4.7	93.8D	2.455
MARS ARRIVAL DATE = 2448850 (15 AUG 1992)																			
4-8510	4-8675.3	.165	260.5	-20.8	.5	.829	90.2	.309	.769	180.4	457.9	.531	1.007D	107.7	1.206	3.4	10.7	129.5	.369
4-8675.3	4-8850	.369	152.2	8.0	2.3	1.337	74.8	.389	1.035	57.7	184.4	.632D	1.438	87.2	.654	-.7	1.2	8.0	.225
4-8850	4-9110	.113	.6	10.2	1.3	.759	89.2	.176	1.221	176.4	366.9	1.007	1.436	91.0	1.080	-3.2	-51.1	324.6	.105
		11.54	6.69	4.23	4.86	8.24	2.46	11.51	2/1/2	115.0	87.4	22.6	.442	5.098	11.8	49.8	6.8	96.3D	1.811
4-8520	4-8674.8	.168	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.3	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	8.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.438	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9120	.110	6.2	1.3	-.2	.758	89.0	.177	1.221	175.2	375.4	1.005	1.436	92.3	1.078	-1.7	-38.1	309.6	.097
		11.50	6.67	4.26	4.83	8.22	2.41	11.45	2/1/2	114.9	71.8	22.5	.453	5.151	11.4	49.7	6.1	97.1D	1.870
4-8530	4-8675.6	.188	244.2	-19.0	.5	.845	97.6	.313	.779	197.6	456.0	.536	1.023D	107.8	1.213	3.3	10.2	131.0	.372
4-8675.6	4-8850	.372	152.4	7.9	2.3	1.337	74.6	.391	1.034	58.2	184.5	.630D	1.438	87.1	.654	-.7	1.3	7.9	.226
4-8850	4-9130	.110	10.2	-1.2	-.8	.757	88.6	.179	1.218	173.6	383.4	1.000	1.437	93.5	1.075	-1.2	-32.4	303.1	.103
		11.80	6.92	4.52	4.87	8.26	2.40	11.50	2/1/2	115.0	58.0	21.3	.435	5.419	11.0	50.7	6.0	96.8D	1.924
4-8540	4-8677.2	.218	242.8	-18.4	.7	.856	100.9	.326	.787	204.7	455.8	.530	1.043D	108.5	1.217	3.1	9.3	133.6	.387
4-8677.2	4-8850	.387	153.0	7.3	2.2	1.335	73.8	.397	1.030	60.9	184.7	.621D	1.438	86.9	.650	-.6	1.5	7.6	.230
4-8850	4-9140	.109	14.3	-1.7	-1.1	.756	88.1	.184	1.215	171.5	390.9	.992	1.439	94.7	1.073	-.9	-29.1	300.9	.115
		12.32	7.35	4.98	4.97	8.36	2.39	11.60	2/1/2	115.2	47.0	19.3	.402	5.956	10.3	52.5	5.9	96.1D	1.994
4-8550	4-8679.3	.255	244.5	-18.2	.9	.869	104.1	.344	.797	211.1	455.7	.523	1.071D	109.5	1.224	2.9	8.2	137.1	.408
4-8679.3	4-8850	.408	154.1	6.6	2.1	1.332	72.6	.407	1.023	64.6	185.0	.607D	1.439	86.6	.645	-.4	1.9	7.2	.236
4-8850	4-9150	.109	19.1	-1.2	-1.3	.754	87.4	.190	1.211	169.0	398.0	.981	1.441	95.8	1.070	-.8	-26.7	301.5	.130
		13.07	7.95	5.56	5.12	8.51	2.39	11.74	2/1/2	115.5	38.4	16.9	.361	6.815	9.2	54.9	5.2	95.2D	2.099
4-8560	4-8682.0	.298	248.5	-18.4	1.3	.884	107.3	.367	.810	216.8	455.6	.513	1.108D	110.8	1.232	2.6	6.8	141.4	.436
4-8682.0	4-8850	.436	155.5	5.9	2.0	1.329	71.2	.420	1.014	69.2	185.4	.589D	1.440	86.1	.639	-.3	2.2	6.7	.244
4-8850	4-9160	.110	24.7	.1	-1.4	.752	86.6	.198	1.207	166.1	404.6	.968	1.445	96.9	1.068	-.7	-24.8	304.1	.147
		14.06	8.73	6.34	5.33	8.71	2.40	11.92	2/1/2	115.8	31.4	14.1	.317	8.173	7.3	58.0	3.6	94.1D	2.272
MARS ARRIVAL DATE = 2448860 (25 AUG 1992)																			
4-8500	4-8682.6	.222	262.0	-18.2	1.3	.816	82.2	.352	.760	165.2	463.9	.492	1.028	110.5	1.198	3.8	10.2	138.1	.424
4-8682.6	4-8860	.424	158.1	6.1	2.1	1.333	71.9	.417	1.027	66.5	187.5	.599D	1.455	84.7	.640	-.2	2.7	7.6	.248
4-8860	4-9100	.151	16.3	-29.1	-6.2	.754	90.7	.180	1.226	183.1	358.0	1.005A	1.447D	89.7	1.084	4.3	25.6	305.3	.122
		13.61	8.19	5.02	5.42	8.80	3.17	11.66	2/1/1	120.6	100.1	20.3	.334	5.684	14.1	56.5	11.4	91.5D	1.564
4-8510	4-8677.8	.171	266.6	-19.9	.7	.825	89.0	.315	.766	177.8	459.4	.524	1.007	108.2	1.203	3.5	10.6	132.6	.377
4-8677.8	4-8860	.377	155.8	7.7	2.2	1.339	74.4	.396	1.041	58.4	186.9	.629D	1.453	85.5	.650	-.6	1.9	8.3	.234
4-8860	4-9110	.129	353.6	16.9	3.0	.754	90.6	.179	1.227	182.5	367.2	1.007	1.447D	91.1	1.082	-4.8	-62.2	333.6	.125
		12.12	7.04	4.30	5.08	8.47	2.74	11.69	2/1/2	120.3	87.2	22.9	.423	5.040	11.7	53.2	7.1	95.8D	1.708
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.008D	107.7	1.206	3.3	10.5	132.1	.368
4-8676.9	4-8860	.368	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.5	.232
4-8860	4-9120	.120	3.0	-.5	-.3	.753	90.3	.180	1.226	181.3	375.6	1.005	1.446D	92.4	1.079	-1.6	-37.1	308.6	.096
		11.86	6.84	4.26	5.02	8.41	2.58	11.46	2/1/2	120.2	71.2	23.1	.444	4.995	11.2	52.8	5.9	96.9D	1.772
4-8530	4-8677.4	.184	247.8	-18.8	.7	.842	96.9	.313	.775	195.7	457.0	.532	1.018D	107.9	1.210	3.2	10.0	133.4	.373
4-8677.4	4-8860	.373	155.6	7.9	2.3	1.340	74.6	.394	1.042	57.6	186.9	.631D	1.453	85.6	.651	-.6	1.8	8.4	.233
4-8860	4-9130	.119	6.9	-3.3	-.9	.752	89.9	.183	1.223	179.5	383.5	.999	1.446	93.6	1.077	-1.0	-30.4	302.3	.104
		12.08	7.03	4.47	5.06	8.44	2.55	11.51	2/1/2	120.2	57.6	22.1	.432	5.218	10.6	55.6	5.4	96.9D	1.823
4-8540	4-8678.8	.213	245.5	-18.2	.8	.852	100.3	.325	.782	203.0	456.6	.528	1.037D	108.5	1.214	3.1	9.2	135.8	.386
4-8678.8	4-8860	.386	156.2	7.3	2.2	1.338	73.9	.400	1.038	60.0	187.1	.623D	1.454	85.3	.648	-.5	2.1	8.1	.237
4-8860	4-9140	.117	10.7	-3.8	-1.2	.751	89.4	.187	1.219	177.2	390.8	.992	1.447	94.7	1.074	-.7	-27.2	300.5	.116
		12.55	7.40	4.88	5.15	8.53	2.52	11.61	2/1/2	120.3	46.9	20.3	.403	5.674	9.8	55.3	5.1	96.3D	1.882
4-8550	4-8680.9	.248	246.6	-18.0	1.1	.864	103.5	.342	.792	209.5	456.5	.521	1.063D	109.5	1.220	2.8	8.0	139.2	.407
4-8680.9	4-8860	.407	157.2	6.7	2.1	1.336	72.8	.409	1.032	63.5	187.3	.610D	1.454	85.0	.644	-.4	2.4	7.8	.242
4-8860	4-9150	.115	15.1	-3.2	-1.4	.748	88.7	.192	1.215	174.6	397.7	.981	1.448	95.8	1.071	-.6	-25.1	301.4	.131
		13.23	7.94	5.45	5.29	8.67	2.49	11.74	2/1/2	120.5	38.4	18.0	.364	6.409	8.6	57.6	4.4	95.4D	1.967
4-8560	4-8683.4	.290	250.1	-18.1	1.4	.879	106.7	.364	.805	215.3	456.4	.511	1.098D	110.7	1.228	2.5	6.7	143.3	.433
4-8683.4	4-8860	.433	158.6	5.9	2.0	1.332	71.4	.421	1.024	67.9	187.6	.593D	1.456	84.5	.638	-.2	2.8	7.5	.250
4-8860	4-9160	.114	20.4	-1.9	-1.5	.746	87.9	.199	1.209	171.5	404.2	.969	1.450	96.9	1.069	-.5	-23.4	304.2	.147
		14.15	8.66	6.19	5.49	8.87	2.47	11.92	2/1/2	120.7	31.6	15.2	.321	7.556	6.9	60.7	2.8	94.4D	2.103
MARS ARRIVAL DATE = 2448870 (4 SEP 1992)																			
4-8510	4-8680.7	.181	273.1	-18.8	1.0	.822	87.6	.324	.762	174.9	461.0	.515	1.009	108.7	1.200	3.5	10.4	136.6	.388
4-8680.7	4-8870	.388	159.7	7.2	2.2	1.341	73.9	.404	1.048	59.4	189.2	.624D	1.471	83.9	.646	-.4	3.0	9.3	.244
4-8870	4-9110	.224	27.4	-41.6	-12.9	.750	92.0	.185	1.234	189.0	367.9	1.006	1.462D	91.2	1.084	11.0	49.4	286.6	.220
		14.59	9.25	4.42	5.34	8.72	4.82	12.87	2/1/1	124.7	87.7	23.0	.399	5.007	12.0	56.9	7.9	94.9D	1.599

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2448870
4 SEP 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9120	.133	1.0	-2.3	-.4	.749	91.7	.185	1.233	187.7	376.3	1.004	1.461D	92.5	1.081	-1.4	-35.1	306.4	.100
		12.32	7.09	4.27	5.23	8.62	2.82	11.47	2/1/2	124.6	69.7	23.7	.432	4.869	11.1	56.1	6.0	96.7D	1.672
4-8530	4-8679.3	.181	251.9	-18.5	.8	.838	96.1	.314	.772	193.6	458.0	.529	1.014D	108.0	1.207	3.2	9.9	135.9	.375
4-8679.3	4-8870	.375	159.1	7.8	2.2	1.342	74.6	.398	1.051	57.1	189.0	.633D	1.470	84.1	.649	-.5	2.7	9.5	.241
4-8870	4-9130	.131	4.8	-5.4	-1.2	.748	91.3	.186	1.229	185.7	383.9	.999	1.460D	93.7	1.079	-.7	-27.4	300.7	.107
		12.46	7.22	4.43	5.25	8.63	2.78	11.53	2/1/2	124.6	56.5	23.0	.428	5.025	10.4	56.7	5.2	96.9D	1.722
4-8540	4-8680.6	.207	248.5	-18.0	1.0	.848	99.5	.325	.778	201.1	457.5	.526	1.031D	108.6	1.211	3.0	9.0	136.1	.386
4-8680.6	4-8870	.386	159.6	7.3	2.2	1.341	74.0	.403	1.048	59.1	189.2	.625D	1.471	83.9	.647	-.4	2.9	9.3	.244
4-8870	4-9140	.128	8.1	-5.6	-1.4	.746	90.8	.191	1.225	183.3	391.1	.991	1.459D	94.8	1.076	-.5	-24.8	299.5	.119
		12.85	7.53	4.80	5.33	8.71	2.73	11.63	2/1/2	124.7	46.2	21.3	.403	5.405	9.5	58.2	4.7	96.5D	1.773
4-8550	4-8682.5	.242	248.9	-17.8	1.2	.860	102.8	.341	.787	207.8	457.3	.519	1.055D	109.5	1.217	2.8	7.9	141.3	.405
4-8682.5	4-8870	.405	160.5	6.6	2.1	1.339	73.0	.411	1.043	62.4	189.3	.614D	1.472	83.6	.643	-.3	3.3	9.1	.249
4-8870	4-9150	.125	12.0	-4.9	-1.6	.743	90.1	.196	1.219	180.4	397.8	.981	1.458D	95.9	1.073	-.3	-23.3	300.9	.133
		13.47	8.01	5.34	5.46	8.84	2.67	11.77	2/1/2	124.8	38.1	19.1	.366	6.034	8.3	60.4	3.9	95.7D	1.843
4-8560	4-8685.0	.283	251.9	-17.9	1.5	.874	106.0	.362	.799	213.7	457.3	.510	1.088D	110.6	1.224	2.4	6.5	145.3	.430
4-8685.0	4-8870	.430	161.8	5.9	2.0	1.336	71.6	.423	1.035	66.5	189.6	.597D	1.473	83.1	.637	-.1	3.7	8.8	.257
4-8870	4-9160	.122	16.7	-3.6	-1.6	.740	89.3	.202	1.213	177.1	404.1	.968	1.459	97.0	1.070	-.3	-21.9	303.9	.149
		14.51	8.66	6.05	5.65	9.03	2.61	11.93	2/1/2	124.8	31.6	16.4	.325	7.003	6.7	63.3	2.3	94.7D	1.949

MARS ARRIVAL DATE = 2448880 (14 SEP 1992)

4-8510	4-8684.1	.195	280.2	-17.4	1.4	.817	85.8	.336	.758	171.5	463.0	.504	1.013	109.5	1.197	3.6	10.2	141.0	.404
4-8684.1	4-8880	.404	163.9	6.5	2.0	1.343	73.2	.414	1.054	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9110	.154	1.7	-10.4	-2.1	.747	93.7	.192	1.245	195.9	369.2	1.006	1.484D	91.5	1.087	.2	-16.6	305.2	.095
		13.50	7.87	4.62	5.63	9.01	3.24	11.44	2/1/1	128.4	81.9	23.0	.369	5.019	12.7	61.1	9.3	93.7D	1.482
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9120	.149	1.2	-6.5	-1.5	.746	93.4	.193	1.242	194.3	377.3	1.003	1.481D	92.8	1.084	-.6	-26.4	301.6	.101
		12.91	7.45	4.31	5.45	8.84	3.15	11.49	2/1/2	128.3	67.2	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	138.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9130	.147	4.0	-7.8	-1.7	.744	92.9	.194	1.238	192.2	384.7	.997	1.478D	94.0	1.081	-.1	-22.2	298.1	.111
		12.94	7.49	4.40	5.44	8.83	3.09	11.56	2/1/2	128.3	54.9	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623
4-8540	4-8682.4	.202	251.9	-17.7	1.1	.844	98.7	.325	.774	199.2	458.5	.523	1.025D	108.6	1.208	3.0	8.9	140.6	.387
4-8682.4	4-8880	.387	163.1	7.1	2.1	1.344	74.1	.407	1.058	58.3	191.1	.628D	1.489	82.6	.645	-.3	4.0	11.0	.251
4-8880	4-9140	.142	6.7	-7.2	-1.8	.741	92.3	.197	1.232	189.5	391.7	.989	1.475D	95.1	1.078	-.1	-21.6	297.9	.123
		13.24	7.73	4.73	5.51	8.89	3.01	11.67	2/1/2	128.4	45.3	22.4	.402	5.157	9.3	61.2	4.5	96.6D	1.670
4-8550	4-8684.2	.235	251.4	-17.5	1.3	.855	102.1	.339	.782	206.0	458.2	.517	1.047D	109.4	1.214	2.7	7.6	143.6	.404
4-8684.2	4-8880	.404	163.9	6.5	2.0	1.343	73.1	.414	1.053	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9150	.138	10.0	-6.2	-1.8	.738	91.6	.201	1.226	186.4	398.1	.979	1.473D	96.1	1.075	-.1	-21.0	299.9	.137
		13.78	8.15	5.23	5.63	9.01	2.91	11.81	2/1/2	128.4	37.6	20.2	.388	5.691	8.1	63.3	3.6	95.9D	1.727
4-8560	4-8686.5	.275	253.9	-17.7	1.6	.868	105.3	.359	.793	212.1	458.1	.508	1.078D	110.5	1.221	2.4	6.4	147.4	.428
4-8686.5	4-8880	.428	165.2	5.8	1.9	1.340	71.9	.425	1.047	65.2	191.4	.602D	1.492	81.8	.637	.0	4.7	10.7	.263
4-8880	4-9160	.133	14.1	-4.8	-1.8	.735	90.8	.207	1.219	182.9	404.2	.967	1.471D	97.2	1.072	-.0	-20.2	303.3	.152
		14.54	8.73	5.91	5.81	9.19	2.82	11.97	2/1/2	128.4	31.3	17.7	.328	6.513	6.5	66.1	2.1	94.9D	1.810

MARS ARRIVAL DATE = 2448890 (24 SEP 1992)

4-8510	4-8688.5	.220	288.1	-15.5	1.9	.812	83.2	.355	.753	167.5	465.8	.486	1.021	110.7	1.193	3.9	10.1	146.5	.429
4-8688.5	4-8890	.429	168.8	5.5	1.9	1.344	72.0	.429	1.058	64.3	193.0	.604D	1.512	80.6	.635	.1	6.0	12.9	.270
4-8890	4-9110	.171	358.9	-6.0	-1.2	.745	95.5	.202	1.259	203.0	370.7	1.005	1.513D	91.8	1.091	-.7	-27.8	304.4	.101
		14.59	8.60	4.99	5.99	9.36	3.61	11.48	2/1/1	131.4	78.8	22.5	.327	5.125	14.2	66.1	11.7	91.8D	1.350
4-8520	4-8684.2	.177	272.5	-17.3	1.3	.822	89.9	.323	.759	179.7	461.6	.514	1.004	106.7	1.197	3.4	10.0	141.9	.387
4-8684.2	4-8890	.387	166.7	6.9	2.1	1.348	74.2	.411	1.069	57.4	192.8	.630D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9120	.168	355.5	5.0	1.5	.743	95.1	.202	1.255	201.2	378.6	1.002	1.508D	93.1	1.088	-3.5	-51.1	306.1	.122
		13.59	7.91	4.37	5.68	9.06	3.54	11.66	2/1/1	131.5	68.1	24.7	.401	4.674	11.4	63.2	7.3	95.6D	1.474
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9130	.167	5.6	-12.4	-3.1	.741	94.6	.203	1.249	198.8	385.8	.995	1.503D	94.3	1.085	1.2	-10.2	294.0	.119
		13.55	7.92	4.39	5.64	9.02	3.53	11.63	2/1/2	131.5	54.0	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8540	4-8684.3	.198	255.6	-17.3	1.3	.839	97.9	.325	.770	197.1	459.5	.520	1.020D	108.7	1.205	3.0	8.8	143.1	.388
4-8684.3	4-8890	.388	166.7	6.9	2.1	1.348	74.1	.411	1.069	57.5	192.8	.629D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9140	.160	6.5	-9.0	-2.3	.738	94.0	.205	1.242	195.9	392.5	.987	1.498D	95.4	1.081	.5	-16.9	295.8	.129
		13.72	8.03	4.66	5.69	9.07	3.37	11.73	2/1/2	131.5	44.3	23.4	.400	4.932	9.2	64.3	4.6	96.6D	1.572
4-8550	4-8685.9	.228	254.2	-17.2	1.5	.850	101.3	.338	.777	204.1	459.2	.514	1.040D	109.4	1.210	2.7	7.7	145.9	.403
4-8685.9	4-8890	.403	167.5	6.3	2.0	1.346	73.3	.418	1.065	60.1	192.9	.620D	1.510	81.1	.640	-.0	5.6	13.0	.263
4-8890	4-9150	.154	9.0	-7.3	-2.1	.734	93.3	.209	1.235	192.5	398.7	.977	1.492D	96.4	1.078	.3	-18.3	298.5	.143
		14.16	8.36	5.13	5.80	9.18	3.23	11.87	2/1/2	131.5	37.0	21.4	.370	5.382	8.0	66.3	3.6	96.0D	1.620
4-8560	4-8688.2	.267	256.0	-17.4	1.7	.863	104.6	.357	.788	210.4	459.0	.506	1.069D	110.5	1.217	2.4	6.3	149.6	.426
4-8688.2	4-8890	.426	168.6	5.6	1.9	1.344	72.1	.428	1.059	63.8	193.0	.606D	1.511	80.6	.636	.1	6.0	12.9	.269
4-8890	4-9160	.147	12.5	-5.7	-2.1	.731	92.4	.213	1.226	188.9	404.6	.965	1.488D	97.4	1.074	.3	-18.3	302.4	.157
		14.84	8.87	5.77	5.96	9.34	3.10	12.03	2/1/2	131.4	31.0	18.9	.332	6.084	6.4	68.9	2.1	95.1D	1.687

MARS ARRIVAL DATE = 2448900 (4 OCT 1992)

4-8520	4-8687.2	.185	279.4	-16.1	1.6	.817	88.3	.331	.755	176.6	463.3	.505	1.005	109.2	1.194	3.5	9.9	145.8	.398
4-8687.2	4-8900	.398	170.8	6.2	1.9	1.350	73.7	.419	1.078	58.3	194.4	.626D	1.530	80.0	.640	.1	6.9	15.4	.267
4-8900	4-9120	.188	357.4	.9	.5	.743	97.1	.214	1.272	208.2	380.1	.999	1.544D	93.5	1.093	-2.3	-42.4	299.5	.122
		14.39	8.47	4.49	5.92	9.30	3.99	11.66	2/1/1	134.2	63.7	25.0	.380	4.619	11.9	67.1	8.6	94.6D	1.374
4-8540	4-8686.3	.194	259.7	-16.8	1.5	.835	97.0	.326	.766	194.9	460.5	.516	1.015D	108.8	1.202	3.0	8.7	145.9	.389
4-8686.3	4-8900	.389	170.4	6.5	1.9	1.351	74.2	.416	1.080	56.8	194.3	.631D	1.529	80.2	.642	-.0	6.7	15.5	.265
4-8900	4-9140	.182	7.9	-11.9	-3.5	.736	95.9	.216	1.256	202.3	393.5	.984	1.527D	95.8	1.085	1.7	-8.6	292.8	.140
		14.31	8.46	4.61	5.86	9.24	3.85	11.84	2/1/2	134.2	44.2	24.4	.397	4.730	9.5	67.5	5.0	96.6D	1.480
4-8550	4-8687.8	.223	257.2	-16.9	1.6	.846	100.5	.337	.773	202.2	460.1	.512	1.033D	109.4	1.207	2.7	7.5	148.4	.403
4-8687.8	4-8900	.403	171.1	6.0	1.9	1.350	73.4	.422	1.076	59.1	194.4	.623D	1.530	79.9	.639	.1	7.0	15.4	.269
4-8900	4-9150	.172	9.2	-8.4	-2.7	.731	95.1	.218	1.246	198.8	399.5	.974	1.518D	96.8	1.081	.9	-14.5	296.8	.151
		14.62	8.67	5.04	5.95	9.33	3.63	11.96	2/1/2	134.2	36.4	22.6	.370	5.108	7.9	69.3	3.9	96.2D	1.522
4-8560	4-8689.9	.260	258.3	-17.0	1.9	.858	103.8	.355	.782	208.6	459.9	.505	1.060D	110.4	1.213	2.3	6.2	151.9	.424
4-8689.9	4-8900	.424	172.1	5.4	1.8	1.348	72.3	.431	1.071	62.5	194.5	.610D	1.532	79.5	.635	.2	7.3	15.4	.275
4-8900	4-9160	.164	11.9	-6.3	-2.4	.727	94.2	.222	1.236	194.9	405.2	.962	1.510D	97.7	1.077	.6	-16.1	301.2	.164
		15.20	9.09	5.64	6.11	9.49	3.45	12.12	2/1/2	134.1	30.6	20.2	.335	5.707	6.4	71.8	2.4	95.3D	1.576

MARS ARRIVAL DATE = 2448910 (14 OCT 1992)

4-8530	4-8688.4	.180	273.0	-15.8	1.7	.822	91.9	.326	.756	184.0	462.7	.510	1.003D	108.9	1.195	3.2	9.4	148.0	.391
4-8688.4	4-8910	.391	174.1	6.1	1.8	1.354	74.2	.421	1.091	56.2	195.8	.632D	1.550	79.1	.640	.2	8.3	16.1	.271
4-8910	4-9130	.218	353.2	16.0	5.6	.740	98.6	.229	1.284	212.3	388.4	.990	1.578D	95.2	1.095	-7.4	-69.2	304.5	.190
		15.13	9.11	4.42	6.02	9.40	4.70	12.44	2/1/1	136.5	62.5	26.1	.393	4.435	10.8	70.1	7.3	95.9D	1.350
4-8550	4-8689.6	.217	260.5	-16.4	1.8	.841	99.6	.337	.768	200.2	461.1	.509	1.027D	109.5	1.203	2.6	7.5	150.9	.403
4-8689.6	4-8910	.403	174.7	5.6	1.7	1.353	73.6	.425	1.088	58.2	195.8	.625D	1.551	78.9	.638	.3	8.3	16.1	.274
4-8910	4-9150	.195	10.5	-10.1	-3.6	.730	97.0	.231	1.261	205.1	400.4	.970	1.592D	97.3	1.085	1.9	-8.9	294.6	.163
		15.19	9.08	4.95	6.10	9.48	4.14	12.10	2/1/2	136.5	36.7	23.7	.371	4.865	8.0	72.3	4.4	96.2D	1.432

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2448770 (27 MAY 1992)																			
4-8480	4-8666.3	.197	261.3	-24.9	-.4	.830	83.0	.324	.778	164.9	457.1	.526	1.030	108.5	1.214	3.2	9.7	115.5	.384
4-8666.3	4-8770	.384	139.0	5.7	1.7	1.354	74.3	.417	1.082	56.2	148.0	.631D	1.532A	108.9	.723	-1.0	10.0	29.7	.305
4-8770	4-9120	.147	26.3	10.7	-.1	.794	81.9	.191	1.222	140.7	390.2	.988	1.456	94.7	1.078	-1.8	-39.9	281.6	.118
		14.65	7.74	4.65	6.91	10.28	3.09	11.63	2/1/2	42.4	50.1	23.6	.407	4.886	12.5	35.9	9.7	96.8D	1.580
4-8490	4-8663.1	.159	249.1	-25.7	-.7	.836	88.2	.296	.782	175.8	453.2	.550	1.013	106.7	1.217	3.2	10.9	112.2	.349
4-8663.1	4-8770	.349	138.9	6.4	1.7	1.359	76.3	.405	1.096	49.4	146.4	.652D	1.539A	108.7	.731	-1.2	10.0	31.1	.300
4-8770	4-9130	.154	28.6	9.9	-.4	.793	81.2	.201	1.221	139.5	398.6	.976	1.466	96.2	1.076	-1.7	-36.9	280.6	.136
		14.16	7.40	4.15	6.77	10.14	3.25	11.80	2/1/2	41.2	39.8	26.8	.494	4.322	13.1	34.1	9.6	100.1D	1.640
4-8500	4-8662.1	.152	237.5	-24.4	-.8	.842	92.1	.288	.785	185.2	451.5	.559	1.011D	106.2	1.219	3.4	11.7	111.6	.339
4-8662.1	4-8770	.339	139.0	6.6	1.7	1.360	76.9	.402	1.099	47.5	146.0	.658D	1.541A	108.6	.734	-1.2	10.0	31.5	.298
4-8770	4-9140	.165	31.0	9.5	-.7	.792	80.4	.214	1.218	138.0	406.7	.958	1.478	97.7	1.074	-1.7	-34.5	282.0	.159
		14.28	7.55	4.06	6.73	10.10	3.48	12.05	2/1/2	40.9	31.5	27.5	.522	4.205	14.2	33.6	10.5	101.0D	1.673
4-8510	4-8662.4	.163	229.6	-22.3	-.8	.849	95.5	.290	.789	193.7	450.7	.560	1.019D	106.3	1.222	3.5	12.0	112.4	.342
4-8662.4	4-8770	.342	138.9	6.6	1.7	1.360	76.7	.403	1.098	48.1	146.1	.656D	1.540A	108.6	.733	-1.2	10.0	31.3	.299
4-8770	4-9150	.180	33.6	9.4	-1.0	.791	79.2	.231	1.216	136.5	414.7	.935	1.496	99.4	1.072	-1.7	-32.6	285.2	.187
		14.75	8.01	4.20	6.74	10.11	3.81	12.40	2/1/2	41.0	24.7	26.8	.514	4.320	15.2	33.8	11.7	100.7D	1.706
MARS ARRIVAL DATE = 2448780 (6 JUN 1992)																			
4-8480	4-8669.0	.214	265.5	-23.9	-.1	.828	81.5	.337	.776	162.6	459.0	.514	1.037	109.4	1.211	3.3	9.5	118.6	.402
4-8669.0	4-8780	.402	139.1	5.7	1.8	1.340	73.0	.411	1.040	62.4	156.2	.613D	1.467A	104.9	.695	-.9	8.4	25.4	.270
4-8780	4-9120	.134	27.0	10.9	-.1	.791	82.6	.185	1.220	143.6	386.8	.993	1.446	94.1	1.078	-1.8	-40.5	287.6	.111
		13.74	7.74	4.90	6.00	9.38	2.84	11.56	2/1/2	53.3	54.8	20.5	.372	5.630	13.3	37.5	10.8	94.1D	1.723
4-8490	4-8664.8	.164	253.1	-25.2	-.5	.834	87.5	.301	.780	174.1	454.3	.545	1.014	107.1	1.215	3.3	10.7	114.5	.358
4-8664.8	4-8780	.356	138.4	6.6	1.8	1.347	75.6	.393	1.058	53.7	154.2	.642D	1.474A	104.8	.707	-1.1	8.5	27.5	.263
4-8780	4-9130	.140	29.5	10.0	-.4	.790	82.1	.193	1.218	142.4	395.1	.983	1.453	95.5	1.075	-1.7	-37.2	285.3	.127
		12.98	7.17	4.21	5.81	9.19	2.96	11.71	2/1/2	51.3	43.6	24.0	.476	4.809	13.2	35.0	9.8	98.2D	1.611
4-8500	4-8663.5	.152	241.1	-24.3	-.6	.840	91.5	.290	.783	183.8	452.3	.556	1.010D	106.4	1.217	3.4	11.5	113.4	.343
4-8663.5	4-8780	.343	138.3	7.0	1.8	1.349	76.3	.389	1.063	51.1	153.6	.650D	1.476A	104.8	.710	-1.2	8.5	28.1	.261
4-8780	4-9140	.149	32.2	9.6	-.7	.789	81.3	.204	1.216	140.9	403.2	.967	1.464	96.9	1.073	-1.6	-34.6	286.0	.147
		12.98	7.22	4.07	5.76	9.14	3.15	11.92	2/1/2	50.8	34.7	25.0	.512	4.626	14.1	34.2	10.4	99.4D	1.656
4-8510	4-8663.7	.162	232.4	-22.3	-.6	.847	95.0	.292	.787	192.4	451.4	.558	1.017D	106.4	1.220	3.5	11.9	114.0	.344
4-8663.7	4-8780	.344	138.3	6.9	1.8	1.348	76.3	.389	1.062	51.4	153.7	.649D	1.476A	104.8	.710	-1.2	8.5	28.0	.261
4-8780	4-9150	.162	35.2	9.5	-.9	.788	80.3	.219	1.213	139.2	411.1	.948	1.479	98.5	1.071	-1.6	-32.5	288.5	.172
		13.35	7.59	4.18	5.76	9.14	3.40	12.20	2/1/2	50.9	27.5	24.4	.509	4.725	15.1	34.3	11.5	99.3D	1.696
4-8520	4-8664.6	.184	228.2	-20.6	-.6	.855	98.2	.300	.793	200.2	451.0	.555	1.031D	106.8	1.224	3.5	11.8	115.8	.354
4-8664.6	4-8780	.354	138.4	6.7	1.8	1.347	75.7	.392	1.059	53.3	154.1	.643D	1.474A	104.8	.708	-1.1	8.5	27.6	.263
4-8780	4-9160	.178	38.2	9.8	-1.2	.787	78.9	.238	1.210	137.4	418.9	.922	1.498	100.3	1.069	-1.7	-30.6	292.3	.201
		14.03	8.23	4.47	5.80	9.18	3.76	12.60	2/1/2	51.3	21.4	22.9	.481	5.039	16.0	35.0	12.6	98.4D	1.943
4-8530	4-8666.2	.215	227.8	-19.6	-.4	.866	101.3	.314	.801	207.4	450.9	.549	1.053D	107.5	1.229	3.6	11.3	118.4	.370
4-8666.2	4-8780	.370	138.6	6.3	1.8	1.345	74.8	.398	1.052	56.5	154.8	.633D	1.471A	104.8	.704	-1.0	8.5	26.9	.265
4-8780	4-9170	.200	41.2	10.2	-1.5	.785	77.2	.264	1.207	135.7	426.7	.888	1.525	102.4	1.068	-1.7	-28.9	296.9	.238
		15.04	9.18	4.91	5.86	9.24	4.27	13.15	2/1/2	51.9	16.2	20.6	.439	5.597	16.8	36.3	14.1	97.2D	2.017
MARS ARRIVAL DATE = 2448790 (16 JUN 1992)																			
4-8480	4-8672.4	.238	270.1	-22.6	.2	.825	79.5	.357	.773	159.8	461.6	.497	1.048	110.6	1.209	3.5	9.3	122.9	.427
4-8672.4	4-8790	.427	140.6	5.5	1.9	1.329	71.5	.415	1.010	68.6	163.3	.591D	1.429A	101.2	.672	-.7	6.6	20.1	.250
4-8790	4-9120	.123	26.7	10.8	-.1	.788	83.4	.181	1.217	146.9	383.8	.997	1.438	93.6	1.077	-1.8	-40.7	293.3	.106
		13.40	7.91	5.28	5.48	8.87	2.63	11.52	2/1/2	65.1	59.1	17.9	.329	6.414	14.5	40.2	12.4	91.4D	1.782
4-8490	4-8666.6	.170	257.1	-24.6	-.4	.852	86.7	.306	.777	172.4	455.5	.539	1.016	107.4	1.213	3.3	10.6	116.8	.363
4-8666.6	4-8790	.363	138.9	6.8	1.9	1.339	75.0	.388	1.035	56.9	160.9	.634D	1.437A	101.4	.690	-1.0	6.7	23.2	.238
4-8790	4-9130	.128	29.5	9.7	-.4	.787	82.9	.187	1.216	145.7	392.1	.988	1.444	94.9	1.074	-1.6	-37.3	289.6	.119
		12.19	7.01	4.28	5.18	8.56	2.73	11.64	2/1/2	62.2	47.2	22.2	.456	5.195	13.2	36.4	9.7	96.7D	1.914
4-8500	4-8665.0	.154	244.7	-24.1	-.5	.838	91.0	.293	.781	182.3	453.1	.552	1.010D	106.6	1.216	3.4	11.3	115.3	.346
4-8665.0	4-8790	.346	138.6	7.3	1.9	1.341	75.9	.382	1.041	53.7	160.2	.644D	1.438A	101.4	.694	-1.1	6.7	24.0	.235
4-8790	4-9140	.135	32.6	9.2	-.7	.786	82.2	.197	1.214	144.1	400.2	.975	1.453	96.3	1.072	-1.6	-34.5	289.6	.137
		12.06	6.96	4.09	5.11	8.49	2.67	11.81	2/1/2	61.5	37.7	23.4	.501	4.936	13.8	35.4	10.0	98.3D	1.973
4-8510	4-8664.9	.160	235.2	-22.3	-.5	.845	94.5	.293	.785	191.1	452.1	.555	1.015D	106.5	1.218	3.4	11.7	115.7	.346
4-8664.9	4-8790	.346	138.6	7.3	1.9	1.341	76.0	.381	1.041	53.5	160.2	.644D	1.439A	101.4	.694	-1.1	6.7	24.0	.235
4-8790	4-9150	.146	35.9	9.2	-1.0	.785	81.3	.209	1.211	142.3	408.0	.957	1.465	97.8	1.070	-1.5	-32.2	291.6	.160
		12.34	7.24	4.17	5.10	8.49	3.07	12.06	2/1/2	61.5	30.0	23.0	.504	5.007	14.7	35.3	11.0	98.4D	2.018
4-8520	4-8665.8	.181	230.3	-20.6	-.4	.853	97.8	.300	.791	199.0	451.6	.553	1.028D	106.8	1.222	3.5	11.6	117.3	.354
4-8665.8	4-8790	.354	138.8	7.0	1.9	1.340	75.5	.385	1.038	55.2	160.5	.639D	1.438A	101.4	.692	-1.1	6.7	23.6	.236
4-8790	4-9160	.159	39.4	9.6	-1.2	.783	80.1	.226	1.208	140.4	415.6	.935	1.481	99.4	1.068	-1.5	-30.2	295.1	.186
		12.92	7.78	4.43	5.14	8.52	3.35	12.39	2/1/2	61.9	23.6	21.7	.479	5.320	15.5	36.0	12.2	97.7D	2.071
4-8530	4-8667.3	.211	229.4	-19.5	-.3	.863	100.9	.314	.798	206.3	451.5	.548	1.049D	107.5	1.227	3.5	11.2	119.8	.370
4-8667.3	4-8790	.370	139.0	6.6	1.9	1.338	74.6	.391	1.032	58.3	161.1	.629D	1.436A	101.3	.688	-1.0	6.7	22.9	.239
4-8790	4-9170	.178	42.9	10.2	-1.5	.782	78.6	.248	1.205	138.4	423.1	.906	1.503	101.2	1.067	-1.6	-28.4	299.4	.218
		13.81	8.61	4.86	5.20	8.59	3.75	12.84	2/1/2	62.6	18.2	19.5	.439	5.890	16.2	37.3	13.3	96.6D	2.149
4-8540	4-8669.3	.248	231.5	-19.1	-.1	.876	104.1	.332	.809	212.9	451.5	.540	1.078D	108.5	1.233	3.4	10.3	123.1	.392
4-8669.3	4-8790	.392	139.6	6.1	1.9	1.334	73.4	.399	1.024	62.3	162.0	.615D	1.433A	101.3	.682	-.9	6.7	21.8	.243
4-8790	4-9180	.202	46.3	11.0	-1.7	.781	76.6	.277	1.201	136.5	430.8	.869	1.533	103.5	1.066	-1.7	-26.6	304.3	.257
		15.07	9.77	5.45	5.30	8.69	4.32	13.47	2/1/2	63.5	13.5	16.9	.392	6.820	16.7	39.2	14.4	95.2D	2.280
MARS ARRIVAL DATE = 2448800 (26 JUN 1992)																			
4-8490	4-8668.6	.176	261.3	-23.9	-.2	.829	85.7	.313	.775	170.5	456.8	.532	1.018	107.9	1.211	3.3	10.4	119.4	.372
4-8668.6	4-8800	.372	140.3	6.9	2.0	1.333	74.4	.387	1.021	59.7	166.6	.626D	1.417A	98.2	.676	-1.0	4.9	18.6	.223
4-8800	4-9130	.118	28.4	8.9	-.4	.783	83.7	.183	1.214	149.4	389.6	.992	1.437	94.5	1.074	-1.6	-37.1	293.9	.113
		11.74	6.93	4.39	4.82	8.20	2.54	11.58	2/1/2	73.5	50.4	20.9	.434	5.501	13.1	38.4	9.7	95.5D	1.953
4-8500	4-8666.5	.156	248.5	-23.9	-.4	.836	90.3	.296	.779	180.8	454.1	.548	1.009D	106.8	1.214	3.4	11.2	117.3	.351
4-8666.5	4-8800	.351	139.7	7.5	2.0	1.336	75.6	.379	1.029	55.5	165.9	.639D	1.419A	98.3	.681	-1.1	4.9	19.6	.219
4-8800	4-9140	.124	31.8	8.4	-.7	.782	83.1	.191	1.212	147.7	397.5	.980	1.444	95.8	1.072	-1.5	-34.1	292.9	.130
		11.48	6.76	4.11	4.72	8.11	2.64	11.74	2/1/2	72.5	40.3	22.4	.489	5.143	13.4	37.0	9.4	97.5D	2.027
4-8510	4-8666.2	.159	238.3	-22.3	-.4	.842	94.0	.294	.783	189.7	452.8	.553	1.013D	106.6	1.217	3.4	11.5	117.4	.348
4-8666.2	4-8800	.348	139.7	7.6	2.0	1.337	75.7	.378	1.030	55.0	165.8	.641D	1.419A	98.3	.682	-1.1	4.9	19.7	.218
4-8800	4-9150	.132	35.6	8.5	-1.0	.781	82.2	.202	1.209	145.9	405.2	.965	1.454	97.2	1.070	-1.4	-31.7	294.4	.150
		11.66	6.96	4.16	4.70	8.09	2.80	11.95	2/1/2	72.4	32.3	22.3	.497	5.178	14.1	36.9	10.1	97.8D	2.078
4-8520	4-8667.0	.178	232.7	-20.6	-.3	.851	97.3	.300	.788	197.8	452.3	.551	1.025D	106.9	1.220	3.5	11.5	118.9	.355
4-8667.0	4-8800	.355	139.8	7.4	2.0	1.336	75.3	.380	1.027	56.4	166.1	.636D	1.418A	98.3	.680	-1.1	4.9	19.4	.220
4-8800	4-9160	.143	39.6	9.0	-1.2	.779	81.2	.216	1.206	143.8	412.7	.945	1.467	98.7	1.068	-1.4	-29.6	297.5	.174
		12.15	7.42	4.39	4.73	8.12	3.02	12.23	2/1/2	72.8	25.7	21.1	.477	5.472	14.8	37.5	11.1	97.3D	2.134
4-8530	4-8668.4	.207	231.2	-19.5	-.2	.861	100.5	.313	.796	205.1	452.1	.546	1.045D	107.6	1.225	3.5	11.0	121.3	.370
4-8668.4	4-8800	.370	140.2	6.9	2.0	1.334	74.5	.386	1.022	59.2	166.5	.627D	1.417A	98.2	.677	-1.0	4.9	18.7	.223
4-8800	4-9170	.158	43.7	9.8	-1.4	.778	79.8	.235	1.203	141.6	420.0	.920	1.486	100.3	1.066	-1.4	-27.7	301.7	.203
		12.94	8.13	4.80	4.80	8.19	3.33	12.62	2/1/2	73.3	20.1	19.1	.440	6.030	15.3	38.8	12.2	96.3D	2.213
4-8540	4-8670.4	.243	232.9	-19.0	.0	.873	103.6	.331	.806	211.8	452.1	.539	1.073D	108.5	1.231	3.4	10.2	124.5	.391
4-8670.4	4-8800	.391	140.8	6.4	2.0	1.331	73.4	.395	1.014	63.1	167.3	.614D	1.415A	98.1	.671	-.9	5.0	17.7	.227
4-8800	4-9180	.179	47.8	10.8	-1.7	.776	78.1	.260	1.199	139.4	427.4	.888	1.511	102.3	1.065	-1.5	-25.8	306.5	.237
		14.05	9.14	5.37	4.91	8.29	3.78	13.14	2/1/2	74.3	15.2	18.6	.394	6.948	15.5	40.8	13.0	95.1D	2.343
MARS ARRIVAL DATE = 2448810 (6 JUL 1992)																			
4-8490	4-8671.1	.189	266.0	-23.0	.1	.827	84.6	.323	.773	168.2	458.3	.523	1.022	108.5	1.209	3.4	10.3	122.5	.364
4-8671.1	4-8810	.364	142.4	6.8	2.0	1.330	73.7	.391	1.013	62.3	171.7	.617D	1.409A	95.3	.665	-.8	3.4	14.1	.216
4-8810	4-9130	.110	26.1	7.6	-.5	.778	84.5	.180	1.213	153.4	387.4	.995	1.432	94.1	1.074	-1.5	-36.6	297.3	.109
		11.63	6.94	4.54	4.68	8.07	2.40	11.55	2/1/2	64.3	55.1	20.0	.407	5.758	13.2	41.0	9.8	94.3D	1.935

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2448810
6 JUL 1992

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
4-8500	4-8668.2	.159	252.7	-23.5	-.2	.833	89.6	.300	.777	179.1	455.1	.544	1.009	107.1	1.212	3.4	11.0	119.6	.356
4-8668.2	4-8810	.356	141.5	7.7	2.1	1.334	75.3	.379	1.023	56.9	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.5	.212
4-8810	4-9140	.114	29.9	7.1	-.7	.777	84.0	.187	1.211	151.8	395.3	.985	1.437	95.4	1.071	-1.4	-33.6	295.8	.124
		11.16	6.63	4.15	4.53	7.93	2.48	11.68	2/1/2	83.2	42.6	21.9	.475	5.269	13.0	39.1	8.8	96.9D	2.028
4-8510	4-8667.7	.159	241.8	-22.2	-.2	.840	93.4	.296	.780	188.3	453.6	.550	1.011D	106.7	1.215	3.4	11.4	119.4	.350
4-8667.7	4-8810	.350	141.3	7.9	2.1	1.335	75.6	.377	1.025	55.9	170.6	.639D	1.410A	95.6	.674	-1.1	3.2	15.7	.210
4-8810	4-9150	.121	34.1	7.3	-1.0	.776	83.2	.197	1.208	149.8	402.9	.971	1.446	96.7	1.069	-1.3	-31.1	296.8	.143
		11.25	6.74	4.15	4.51	7.90	2.59	11.87	2/1/2	83.0	34.2	21.9	.490	5.255	13.4	38.8	9.1	97.5D	2.085
4-8520	4-8668.3	.176	235.3	-20.6	-.2	.848	96.8	.301	.786	196.4	453.0	.549	1.022D	107.0	1.218	3.4	11.3	120.6	.356
4-8668.3	4-8810	.356	141.5	7.7	2.1	1.334	75.2	.379	1.023	57.0	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.4	.212
4-8810	4-9160	.130	38.7	8.0	-1.2	.775	82.2	.209	1.205	147.5	410.2	.953	1.457	98.1	1.067	-1.3	-28.9	299.6	.165
		11.66	7.12	4.36	4.53	7.93	2.76	12.12	2/1/2	83.2	27.4	20.9	.474	5.515	13.9	39.4	9.9	97.1D	2.142
4-8530	4-8669.6	.203	233.2	-19.4	-.1	.858	100.0	.313	.793	203.8	452.8	.545	1.040D	107.6	1.223	3.4	10.8	122.9	.370
4-8669.6	4-8810	.370	141.9	7.2	2.1	1.332	74.5	.385	1.018	59.6	171.2	.627D	1.409A	95.4	.669	-.9	3.3	14.8	.214
4-8810	4-9170	.142	43.4	9.0	-1.4	.773	81.0	.225	1.201	145.2	417.4	.930	1.472	99.6	1.066	-1.2	-26.9	303.6	.191
		12.35	7.74	4.74	4.61	8.00	3.00	12.45	2/1/2	83.7	21.7	19.1	.440	6.040	14.2	40.7	10.8	96.3D	2.216
4-8540	4-8671.6	.239	234.4	-18.9	.1	.870	103.2	.330	.802	210.6	452.7	.538	1.067D	108.5	1.228	3.3	10.0	126.1	.390
4-8671.6	4-8810	.390	142.6	6.7	2.0	1.329	73.4	.393	1.011	63.2	171.8	.614D	1.408A	95.2	.664	-.8	3.4	13.9	.219
4-8810	4-9180	.159	48.2	10.3	-1.6	.771	79.5	.247	1.197	142.7	424.5	.902	1.493	101.4	1.065	-1.3	-25.0	308.3	.221
		13.35	8.63	5.29	4.71	8.10	3.35	12.89	2/1/2	84.5	16.8	16.6	.396	6.909	14.2	42.7	11.4	95.2D	2.341
4-8550	4-8674.0	.280	238.0	-18.9	.4	.885	106.3	.352	.816	216.7	452.7	.528	1.103D	109.7	1.236	3.1	8.8	130.0	.416
4-8674.0	4-8810	.416	143.6	6.1	2.0	1.325	72.0	.405	1.002	67.8	172.5	.596D	1.407A	95.0	.657	-.7	3.5	12.6	.225
4-8810	4-9190	.182	52.9	11.6	-1.9	.770	77.5	.274	1.194	140.4	431.6	.866	1.521	103.5	1.064	-1.3	-23.1	313.4	.258
		14.71	9.85	6.00	4.87	8.25	3.84	13.49	2/1/2	85.5	12.3	13.8	.348	8.337	13.8	45.3	11.5	94.0D	2.554
MARS ARRIVAL DATE = 2448820 (16 JUL 1992)																			
4-8490	4-8674.1	.206	271.2	-21.9	.4	.824	82.9	.336	.770	165.4	460.4	.511	1.028	109.4	1.206	3.5	10.1	126.3	.402
4-8674.1	4-8820	.402	145.3	6.5	2.1	1.327	72.7	.399	1.007	65.4	176.0	.606D	1.409A	92.6	.655	-.7	2.5	10.4	.220
4-8820	4-9130	.105	22.8	5.7	-.5	.773	85.4	.178	1.213	157.9	385.7	.997	1.429	93.8	1.074	-1.5	-36.0	300.1	.106
		11.85	7.10	4.79	4.75	8.13	2.31	11.52	2/1/2	94.3	55.3	19.1	.372	6.022	13.6	44.3	10.6	92.8D	1.867
4-8500	4-8670.2	.164	257.4	-22.9-	.0	.831	88.7	.305	.774	177.1	456.2	.538	1.010	107.4	1.210	3.4	10.9	122.1	.362
4-8670.2	4-8820	.362	143.8	7.7	2.2	1.333	74.9	.381	1.021	58.1	175.0	.632D	1.410A	93.1	.665	-.9	2.0	12.0	.211
4-8820	4-9140	.108	26.9	5.3	-.8	.772	84.9	.184	1.211	156.2	393.6	.988	1.434	95.0	1.071	-1.3	-32.8	298.0	.120
		11.09	6.57	4.21	4.51	7.90	2.37	11.64	2/1/2	93.0	44.5	21.6	.458	5.341	12.8	41.6	8.3	96.3D	1.988
4-8510	4-8669.3	.159	245.6	-22.1	-.1	.838	92.8	.298	.778	186.6	454.5	.546	1.010D	106.9	1.213	3.4	11.2	121.5	.353
4-8669.3	4-8820	.353	143.5	8.1	2.2	1.334	75.4	.378	1.024	56.4	174.8	.637D	1.410A	93.2	.667	-1.0	1.9	12.4	.208
4-8820	4-9150	.113	31.5	5.6	-1.0	.771	84.2	.193	1.208	154.1	401.0	.975	1.440	96.3	1.069	-1.2	-30.2	298.8	.137
		11.06	6.60	4.15	4.46	7.85	2.45	11.81	2/1/2	92.7	35.9	21.9	.481	5.263	12.8	41.1	8.2	97.3D	2.052
4-8520	4-8669.7	.173	238.5	-20.5	-.1	.846	96.3	.302	.783	195.0	453.8	.547	1.019D	107.1	1.216	3.4	11.1	122.5	.357
4-8669.7	4-8820	.357	143.6	7.9	2.2	1.334	75.2	.379	1.022	57.2	174.9	.635D	1.410A	93.1	.667	-1.0	2.0	12.2	.209
4-8820	4-9160	.120	36.6	6.5	-1.2	.770	83.3	.204	1.204	151.7	408.2	.959	1.450	97.6	1.067	-1.1	-28.1	301.4	.157
		11.39	6.90	4.33	4.48	7.88	2.57	12.03	2/1/2	92.8	28.9	21.0	.471	5.479	13.1	41.6	8.7	97.1D	2.108
4-8530	4-8670.9	.200	235.5	-19.4	.1	.855	99.5	.312	.789	202.5	453.5	.543	1.036D	107.6	1.220	3.4	10.7	124.7	.370
4-8670.9	4-8820	.370	144.0	7.5	2.2	1.332	74.5	.384	1.018	59.5	175.2	.627D	1.410A	93.0	.664	-.9	2.1	11.7	.212
4-8820	4-9170	.129	42.0	7.8	-1.4	.768	82.2	.218	1.200	149.1	415.2	.939	1.462	99.0	1.066	-1.1	-26.1	305.2	.181
		11.99	7.44	4.69	4.55	7.94	2.75	12.32	2/1/2	93.3	23.1	19.3	.440	5.955	13.2	42.9	9.4	96.4D	2.180
4-8540	4-8672.8	.234	236.2	-18.8	.3	.867	102.7	.329	.798	209.2	453.4	.536	1.061D	108.5	1.226	3.3	9.8	127.8	.389
4-8672.8	4-8820	.389	144.8	6.9	2.1	1.329	73.5	.393	1.012	63.0	175.7	.615D	1.409A	92.8	.659	-.8	2.2	10.9	.217
4-8820	4-9180	.143	47.5	9.3	-1.6	.766	80.7	.237	1.196	146.4	422.0	.913	1.479	100.7	1.064	-1.1	-24.1	309.8	.209
		12.88	8.22	5.21	4.66	8.05	3.01	12.71	2/1/2	93.9	18.1	17.0	.398	6.750	13.0	44.8	9.8	95.3D	2.289
4-8550	4-8675.2	.274	239.4	-18.7	.5	.881	105.8	.350	.811	215.4	453.4	.527	1.095D	109.8	1.233	3.1	8.7	131.6	.414
4-8675.2	4-8820	.414	145.8	6.3	2.1	1.326	72.1	.404	1.003	67.4	176.3	.598D	1.409A	92.5	.652	-.6	2.4	10.0	.223
4-8820	4-9190	.161	53.0	11.0	-1.8	.764	79.0	.260	1.192	143.8	428.9	.882	1.502	102.5	1.063	-1.1	-22.1	314.9	.242
		14.11	9.29	5.90	4.82	8.21	3.39	13.22	2/1/2	94.7	13.6	14.3	.351	8.044	12.2	47.4	9.6	94.2D	2.476
MARS ARRIVAL DATE = 2448830 (26 JUL 1992)																			
4-8490	4-8678.4	.237	277.7	-20.2	.9	.819	80.2	.360	.765	161.6	463.4	.490	1.041	110.9	1.203	3.8	9.9	131.7	.433
4-8678.4	4-8830	.433	149.3	5.9	2.0	1.324	71.1	.414	1.001	70.2	180.0	.586D	1.415	90.0	.644	-.5	2.0	7.5	.231
4-8830	4-9130	.103	18.6	3.5	-.6	.768	86.4	.177	1.214	162.8	384.5	.999	1.429	93.6	1.074	-1.4	-35.0	302.0	.104
		12.55	7.54	5.26	5.02	8.40	2.28	11.51	2/1/2	103.2	56.9	17.9	.321	6.430	15.0	48.7	12.6	90.4D	1.741
4-8500	4-8672.5	.170	262.6	-22.2	.2	.828	87.7	.311	.771	174.9	457.6	.531	1.011	107.8	1.208	3.4	10.7	125.1	.371
4-8672.5	4-8830	.371	146.5	7.7	2.2	1.333	74.5	.386	1.021	59.4	178.7	.627D	1.415A	90.8	.659	-.8	1.4	9.4	.214
4-8830	4-9140	.105	22.9	3.0	-.9	.767	85.9	.183	1.211	160.9	392.3	.990	1.433	94.8	1.071	-1.2	-31.8	299.7	.117
		11.21	6.61	4.29	4.61	8.00	2.31	11.61	2/1/2	101.7	45.9	21.4	.437	5.383	12.4	44.5	8.1	95.6D	1.916
4-8510	4-8671.1	.160	250.1	-21.8	.1	.835	92.1	.301	.775	184.8	455.6	.542	1.008D	107.1	1.211	3.4	11.1	123.9	.357
4-8671.1	4-8830	.357	146.0	8.2	2.3	1.335	75.2	.380	1.026	56.8	178.4	.636D	1.415A	91.0	.662	-.9	1.2	9.9	.211
4-8830	4-9150	.108	27.8	3.5	-1.1	.766	85.2	.190	1.208	158.7	399.6	.978	1.438	96.0	1.069	-1.1	-29.2	300.2	.133
		11.05	6.93	4.16	4.53	7.92	2.37	11.77	2/1/2	101.3	37.1	22.1	.471	5.226	12.3	43.7	7.4	97.0D	1.989
4-8520	4-8671.2	.171	241.7	-20.4	.1	.843	95.6	.303	.780	193.3	454.7	.544	1.016D	107.2	1.214	3.4	11.0	124.6	.359
4-8671.2	4-8830	.359	146.1	8.1	2.3	1.334	75.1	.381	1.025	57.2	178.5	.635D	1.415A	90.9	.662	-.9	1.2	9.9	.212
4-8830	4-9160	.113	33.3	4.5	-1.3	.764	84.3	.200	1.204	156.2	406.6	.963	1.445	97.3	1.067	-1.0	-27.1	302.7	.152
		11.29	6.75	4.30	4.54	7.93	2.45	11.97	2/1/2	101.4	30.0	21.4	.466	5.388	12.4	44.1	7.6	97.1D	2.045
4-8530	4-8672.4	.196	238.0	-19.3	.2	.852	99.0	.312	.786	200.9	454.3	.541	1.031D	107.7	1.218	3.3	10.5	126.6	.370
4-8672.4	4-8830	.370	146.5	7.7	2.2	1.333	74.5	.386	1.022	59.2	178.7	.626D	1.415A	90.8	.659	-.8	1.3	9.5	.214
4-8830	4-9170	.120	39.3	6.1	-1.4	.762	83.3	.213	1.200	153.4	413.4	.945	1.456	98.6	1.066	-.9	-25.1	306.5	.174
		11.80	7.20	4.63	4.60	7.99	2.57	12.24	2/1/2	101.7	24.2	19.8	.439	5.804	12.3	45.3	8.0	96.5D	2.110
4-8540	4-8674.2	.228	236.1	-18.7	.4	.863	102.1	.327	.795	207.8	454.1	.534	1.055D	108.5	1.223	3.2	9.6	129.6	.388
4-8674.2	4-8830	.388	147.2	7.1	2.2	1.331	73.6	.393	1.016	62.4	179.1	.616D	1.415A	90.6	.655	-.7	1.6	8.9	.219
4-8830	4-9180	.130	45.6	8.0	-1.6	.760	82.0	.229	1.196	150.5	420.0	.922	1.470	100.1	1.064	-.9	-23.2	311.1	.200
		12.60	7.89	5.12	4.71	8.10	2.76	12.57	2/1/2	102.1	19.2	17.7	.400	6.517	11.9	47.2	8.2	95.6D	2.206
4-8550	4-8676.5	.268	240.9	-18.6	.7	.877	105.3	.348	.806	214.1	454.1	.526	1.087D	109.6	1.230	3.0	8.5	133.3	.412
4-8676.5	4-8830	.412	148.3	6.4	2.1	1.327	72.3	.404	1.008	66.6	179.6	.601D	1.415A	90.3	.649	-.6	1.8	8.1	.225
4-8830	4-9190	.145	52.0	10.0	-1.7	.758	80.4	.250	1.191	147.6	426.6	.894	1.489	101.8	1.063	-.9	-21.2	316.2	.229
		13.70	8.84	5.79	4.87	8.26	3.05	13.02	2/1/2	102.7	14.8	15.0	.355	7.662	10.9	49.8	7.9	94.5D	2.363
4-8560	4-8679.2	.313	245.6	-18.7	1.0	.894	108.5	.375	.822	219.7	454.1	.515	1.129D	110.9	1.240	2.7	7.1	137.7	.442
4-8679.2	4-8830	.442	149.7	5.8	2.0	1.323	70.7	.418	.998	71.6	180.2	.580D	1.415	89.9	.642	-.4	2.0	7.3	.234
4-8830	4-9200	.165	58.3	11.9	-1.9	.756	78.3	.277	1.186	144.7	433.3	.858	1.515	103.8	1.063	-1.0	-19.1	321.5	.265
		15.18	10.10	6.62	5.08	8.46	3.48	13.61	2/1/2	103.4	10.7	12.0	.308	9.572	9.0	55.0	6.3	93.4D	2.643
MARS ARRIVAL DATE = 2448840 (5 AUG 1992)																			
4-8500	4-8675.1	.180	268.3	-21.3	.5	.825	86.4	.320	.768	172.3	459.2	.523	1.014	108.4	1.205	3.5	10.5	128.5	.382
4-8675.1	4-8840	.382	149.8	7.4	2.2	1.333	73.9	.393	1.023	60.8	182.0	.622D	1.425	88.7	.654	-.7	1.3	7.9	.222
4-8840	4-9140	.105	18.5	.6	-.9	.762	86.9	.183	1.213	166.0	391.4	.991	1.434	94.7	1.072	-1.1	-30.6	300.6	.119
		11.53	6.74	4.42	4.79	8.18	2.32	11.60	2/1/2	109.1	46.7	21.2	.412	5.425	12.4	47.8	8.4	94.7D	1.822
4-8510	4-8675.0	.162	255.0	-21.4	.3	.832	91.2	.304	.772	182.7	456.7	.537	1.007D	107.4	1.208	3.4	10.9	126.5	.362
4-8675.0	4-8840	.362	149.0	8.2	2.3	1.336	75.0	.384	1.030	57.2	181.6	.634D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9150	.106	23.5	1.1	-1.2	.760	86.3	.189	1.209	163.7	398.6	.980	1.438	95.9	1.070	-.9	-28.1	301.1	.131
		11.19	6.55	4.18	4.67	8.05	2.34	11.75	2/1/2	108.7	37.9	22.3	.458	5.165	12.0	46.6	8.9	96.8D	1.907
4-8520	4-8675.0	.169	245.5	-20.3	.3	.840	95.0	.304	.777	191.5	455.6	.541	1.013D	107.3	1.211	3.4	10.8	126.9	.361
4-8675.0	4-8840	.361	148.9	8.2	2.3	1.336	75.1	.384	1.030	57.0	181.6	.635D	1.425	89.0	.656	-.9	.9	8.5	.217
4-8840	4-9160	.109	29.2	2.3	-1.3	.758	85.5	.198	1.205	161.0	405.4	.966	1.444	97.1	1.067	-.8	-26.0	303.6	.149
		11.33	6.67	4.28	4.66	8.05	2.39	11.93	2/1/2	108.7	30.9	21.9	.460	5.267	11.9	48.8	8.7	97.1D	1.964

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-8530	4-8673.9	.192	240.9	-19.2	.4	.849	98.3	.312	.783	199.3	455.1	.538	1.027D	107.7	1.215	3.3	10.3	128.7	.371
4-8673.9	4-8840	.371	149.3	7.8	2.3	1.335	74.6	.388	1.027	58.7	181.8	.629D	1.425	88.9	.656	-.8	1.1	8.2	.219
4-8840	4-9170	.114	35.6	4.1	-1.5	.756	84.4	.210	1.200	158.1	412.0	.949	1.452	98.3	1.066	-.6	-24.1	307.4	.169
		11.76	7.04	4.57	4.72	8.11	2.47	12.17	2/1/2	108.9	25.1	20.5	.438	5.620	11.6	47.9	6.9	96.7D	2.022
4-8540	4-8675.6	.223	240.3	-18.6	.5	.860	101.6	.326	.791	206.3	454.9	.533	1.049D	108.5	1.220	3.2	9.5	131.5	.387
4-8675.6	4-8840	.387	150.0	7.2	2.2	1.333	73.7	.395	1.022	61.7	182.1	.618D	1.425	88.6	.653	-.7	1.3	7.8	.224
4-8840	4-9180	.121	42.5	6.3	-1.6	.754	83.2	.224	1.196	154.9	418.5	.928	1.463	99.7	1.064	-.8	-22.2	312.0	.193
		12.46	7.64	5.04	4.82	8.21	2.60	12.48	2/1/2	109.2	20.1	18.4	.401	6.243	11.0	49.8	6.9	95.9D	2.104
4-8550	4-8677.9	.261	242.7	-18.4	.8	.873	104.7	.346	.801	212.6	454.9	.524	1.079D	109.6	1.227	2.9	8.3	135.2	.410
4-8677.9	4-8840	.410	151.1	6.6	2.1	1.330	72.4	.405	1.015	65.7	182.5	.604D	1.426	88.3	.647	-.5	1.6	7.2	.230
4-8840	4-9190	.132	49.8	8.6	-1.7	.751	81.7	.242	1.191	151.7	424.8	.902	1.479	101.2	1.063	-.8	-20.2	317.1	.220
		13.45	8.47	5.67	4.98	8.37	2.80	12.87	2/1/2	109.6	15.7	15.9	.358	7.238	9.9	52.3	6.4	94.8D	2.232
4-8560	4-8680.6	.305	247.0	-18.5	1.1	.889	107.9	.370	.816	218.3	454.9	.514	1.119D	110.9	1.236	2.6	6.9	139.5	.439
4-8680.6	4-8840	.439	152.5	5.8	2.0	1.326	70.9	.419	1.005	70.4	183.0	.584D	1.426	87.9	.640	-.3	1.9	6.6	.238
4-8840	4-9200	.148	57.0	10.9	-1.9	.749	79.8	.265	1.186	148.6	431.2	.871	1.500	103.0	1.062	-.8	-18.1	322.5	.252
		14.79	9.60	6.48	5.19	8.57	3.12	13.38	2/1/2	110.1	11.7	13.0	.313	8.853	8.0	55.5	4.7	93.8D	2.455

MARS ARRIVAL DATE = 2448850 (15 AUG 1992)

4-8500	4-8678.3	.196	274.7	-20.0	.8	.821	84.7	.332	.765	169.2	461.2	.511	1.018	109.2	1.202	3.6	10.4	132.7	.398
4-8678.3	4-8850	.398	153.6	6.9	2.2	1.334	73.2	.402	1.026	62.9	184.9	.613D	1.439	86.7	.648	-.5	1.7	7.3	.233
4-8850	4-9140	.109	14.3	-1.7	-1.1	.756	88.1	.184	1.215	171.5	390.9	.992	1.439	94.7	1.073	-.9	-29.1	300.9	.115
		12.08	7.02	4.63	5.05	8.44	2.39	11.60	2/1/2	115.4	47.0	20.9	.379	5.501	12.9	51.7	9.3	93.5D	1.706
4-8510	4-8675.3	.165	260.5	-20.8	.5	.829	90.2	.309	.769	180.4	457.9	.531	1.007D	107.7	1.206	3.4	10.7	129.5	.369
4-8675.3	4-8850	.369	152.2	8.0	2.3	1.337	74.8	.389	1.035	57.7	184.4	.632D	1.438	87.2	.654	-.7	1.2	8.0	.225
4-8850	4-9150	.109	19.1	-1.2	-1.3	.754	87.4	.190	1.211	169.0	398.0	.981	1.441	95.8	1.070	-.8	-26.7	301.5	.130
		11.47	6.62	4.23	4.86	8.24	2.39	11.74	2/1/2	115.0	38.4	22.6	.442	5.098	11.8	49.8	6.8	96.3D	1.811
4-8520	4-8674.8	.168	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.3	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	8.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.438	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9160	.110	24.7	.1	-1.4	.752	86.6	.198	1.207	166.1	404.6	.968	1.445	96.9	1.068	-.7	-24.8	304.1	.147
		11.49	6.66	4.26	4.83	8.22	2.40	11.92	2/1/2	114.9	31.4	22.5	.453	5.131	11.4	49.7	6.1	97.1D	1.870
4-8530	4-8675.6	.188	244.2	-19.0	.5	.845	97.6	.313	.779	197.6	456.0	.536	1.023D	107.8	1.213	3.3	10.2	131.0	.372
4-8675.6	4-8850	.372	152.4	7.9	2.3	1.337	74.6	.391	1.034	58.2	184.5	.630D	1.438	87.1	.654	-.7	1.3	7.9	.226
4-8850	4-9170	.112	31.1	2.0	-1.5	.750	85.7	.208	1.202	163.0	411.0	.952	1.452	98.1	1.066	-.6	-23.0	307.9	.166
		11.83	6.95	4.52	4.87	8.26	2.43	12.14	2/1/2	115.0	25.7	21.3	.435	5.419	11.0	50.7	6.0	96.8D	1.924
4-8540	4-8677.2	.218	242.8	-18.4	.7	.856	100.9	.326	.787	204.7	455.8	.530	1.043D	108.5	1.217	3.1	9.3	133.6	.387
4-8677.2	4-8850	.387	153.0	7.3	2.2	1.335	73.8	.397	1.030	60.9	184.7	.621D	1.438	86.9	.650	-.6	1.5	7.6	.230
4-8850	4-9180	.116	38.4	4.3	-1.6	.747	84.5	.221	1.196	159.7	417.3	.932	1.460	99.4	1.064	-.6	-21.1	312.6	.188
		12.43	7.46	4.96	4.97	8.36	2.50	12.42	2/1/2	115.2	20.7	19.3	.402	5.956	10.3	52.5	5.9	96.1D	1.994
4-8550	4-8679.3	.255	244.5	-18.2	.9	.869	104.1	.344	.797	211.1	455.7	.523	1.071D	109.5	1.224	2.9	8.2	137.1	.408
4-8679.3	4-8850	.408	154.1	6.6	2.1	1.332	72.6	.407	1.023	64.6	185.0	.607D	1.439	86.6	.645	-.4	1.9	7.2	.236
4-8850	4-9190	.123	46.3	7.0	-1.7	.745	83.0	.237	1.191	156.2	423.3	.909	1.473	100.8	1.063	-.6	-19.2	317.8	.213
		13.32	8.20	5.56	5.12	8.51	2.64	12.77	2/1/2	115.5	16.4	16.9	.361	6.815	9.2	54.9	5.2	95.2D	2.099
4-8560	4-8682.0	.298	248.5	-18.4	1.3	.884	107.3	.367	.810	216.8	455.6	.513	1.108D	110.8	1.232	2.6	6.8	141.4	.436
4-8682.0	4-8850	.436	155.5	5.9	2.0	1.329	71.2	.420	1.014	69.2	185.4	.589D	1.440	86.1	.639	-.3	2.2	6.7	.244
4-8850	4-9200	.135	54.5	9.7	-1.8	.742	81.3	.257	1.185	152.7	429.4	.880	1.490	102.5	1.062	-.6	-17.1	323.3	.242
		14.53	9.20	6.34	5.33	8.71	2.86	13.22	2/1/2	115.8	12.5	14.1	.317	8.173	7.3	58.0	3.6	94.1D	2.272

MARS ARRIVAL DATE = 2448860 (25 AUG 1992)

4-8500	4-8682.6	.222	282.0	-18.2	1.3	.816	82.2	.352	.760	165.2	463.9	.492	1.028	110.5	1.198	3.8	10.2	138.1	.424
4-8682.6	4-8860	.424	158.1	6.1	2.1	1.333	71.9	.417	1.027	66.5	187.5	.599D	1.455	84.7	.640	-.2	2.7	7.6	.248
4-8860	4-9140	.117	10.7	-3.8	-1.2	.751	89.4	.187	1.219	177.2	390.8	.992	1.447	94.7	1.074	-.7	-27.2	300.5	.116
		12.96	7.54	5.02	5.42	8.80	2.52	11.61	2/1/2	120.6	46.9	20.3	.334	5.684	14.1	56.5	11.4	91.5D	1.564
4-8510	4-8677.8	.171	266.6	-19.9	.7	.825	89.0	.315	.766	177.8	459.4	.524	1.007	108.2	1.203	3.5	10.6	132.8	.377
4-8677.8	4-8860	.377	155.8	7.7	2.2	1.339	74.4	.396	1.041	58.4	186.9	.629D	1.453	85.5	.650	-.6	1.9	8.3	.234
4-8860	4-9150	.115	15.1	-3.2	-1.4	.748	88.7	.192	1.215	174.6	397.7	.981	1.448	95.8	1.071	-.6	-25.1	301.4	.131
		11.88	6.80	4.30	5.08	8.47	2.49	11.74	2/1/2	120.3	38.4	22.9	.423	5.040	11.7	53.2	7.1	95.8D	1.708
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.008D	107.7	1.206	3.3	10.5	132.1	.368
4-8676.9	4-8860	.368	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.5	.232
4-8860	4-9160	.114	20.4	-1.9	-1.5	.746	87.9	.199	1.209	171.5	404.2	.969	1.450	96.9	1.069	-.5	-23.4	304.2	.147
		11.75	6.73	4.26	5.02	8.41	2.47	11.92	2/1/2	120.2	31.6	23.1	.444	4.995	11.2	52.8	5.9	96.9D	1.772
4-8530	4-8677.4	.184	247.8	-18.8	.7	.842	96.9	.313	.775	195.7	457.0	.532	1.018D	107.9	1.210	3.2	10.0	133.4	.373
4-8677.4	4-8860	.373	155.6	7.9	2.3	1.340	74.6	.394	1.042	57.6	186.9	.631D	1.453	85.6	.651	-.6	1.8	8.4	.233
4-8860	4-9170	.113	26.6	-.1	-1.6	.744	86.9	.208	1.204	168.2	410.4	.953	1.454	98.1	1.067	-.4	-21.8	308.1	.165
		11.99	6.94	4.47	5.06	8.44	2.46	12.13	2/1/2	120.2	26.0	22.1	.432	5.218	10.6	53.8	5.4	96.9D	1.823
4-8540	4-8678.8	.213	245.5	-18.2	.8	.852	100.3	.325	.782	203.0	456.6	.528	1.037D	108.5	1.214	3.1	9.2	135.8	.386
4-8678.8	4-8860	.386	156.2	7.3	2.2	1.338	73.9	.400	1.038	60.0	187.1	.623D	1.454	85.3	.648	-.5	2.1	8.1	.237
4-8860	4-9180	.115	33.8	2.3	-1.7	.741	85.8	.220	1.198	164.6	416.4	.935	1.461	99.3	1.065	-.4	-20.1	312.9	.186
		12.51	7.36	4.88	5.15	8.53	2.48	12.39	2/1/2	120.3	21.2	20.3	.403	5.674	9.8	55.3	5.1	96.3D	1.882
4-8550	4-8680.9	.248	246.6	-18.0	1.1	.864	103.5	.342	.792	209.5	456.5	.521	1.063D	109.5	1.220	2.8	8.0	139.2	.407
4-8680.9	4-8860	.407	157.2	6.7	2.1	1.336	72.8	.409	1.032	63.5	187.3	.610D	1.454	85.0	.644	-.4	2.4	7.8	.242
4-8860	4-9190	.119	42.0	5.2	-1.7	.738	84.4	.234	1.192	161.0	422.3	.913	1.470	100.6	1.063	-.4	-18.2	318.2	.209
		13.29	8.00	5.45	5.29	8.67	2.55	12.71	2/1/2	120.5	17.0	18.0	.364	6.409	8.6	57.6	4.4	95.4D	1.967
4-8560	4-8683.4	.290	250.1	-18.1	1.4	.879	106.7	.364	.805	215.3	456.4	.511	1.098D	110.7	1.228	2.5	6.7	143.3	.433
4-8683.4	4-8860	.433	158.6	5.9	2.0	1.332	71.4	.421	1.024	67.9	187.6	.593D	1.456	84.5	.638	-.2	2.8	7.5	.250
4-8860	4-9200	.126	50.9	8.2	-1.8	.735	82.8	.252	1.186	157.2	428.1	.887	1.484	102.1	1.062	-.4	-16.2	323.9	.235
		14.37	8.89	6.19	5.49	8.87	2.70	13.11	2/1/2	120.7	13.2	15.2	.321	7.556	6.9	60.7	2.8	94.4D	2.103

MARS ARRIVAL DATE = 2448870 (4 SEP 1992)

4-8510	4-8680.7	.181	273.1	-18.8	1.0	.822	87.6	.324	.762	174.9	461.0	.515	1.009	108.7	1.200	3.5	10.4	136.6	.388
4-8680.7	4-8870	.388	159.7	7.2	2.2	1.341	73.9	.404	1.048	59.4	189.2	.624D	1.471	83.9	.646	-.4	3.0	9.3	.244
4-8870	4-9150	.125	12.0	-4.9	-1.6	.743	90.1	.196	1.219	180.4	397.8	.981	1.458D	95.9	1.073	-.3	-23.3	300.9	.133
		12.43	7.09	4.42	5.34	8.72	2.67	11.77	2/1/2	124.7	38.1	23.0	.399	5.007	12.0	56.9	7.9	94.9D	1.599
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9160	.122	16.7	-3.6	-1.6	.740	89.3	.202	1.213	177.1	404.1	.968	1.459	97.0	1.070	-.3	-21.9	303.9	.149
		12.12	6.88	4.27	5.23	8.62	2.61	11.93	2/1/2	124.6	31.6	23.7	.432	4.869	11.1	56.1	6.0	96.7D	1.672
4-8530	4-8679.3	.181	251.9	-18.5	.8	.838	96.1	.314	.772	193.6	458.0	.529	1.014D	108.0	1.207	3.2	9.9	135.9	.375
4-8679.3	4-8870	.375	159.1	7.8	2.2	1.342	74.6	.398	1.051	57.1	189.0	.633D	1.470	84.1	.649	-.5	2.7	9.5	.241
4-8870	4-9170	.119	22.5	-1.8	-1.7	.737	88.3	.210	1.207	173.6	410.1	.953	1.460	98.1	1.068	-.3	-20.5	308.1	.166
		12.24	7.00	4.43	5.25	8.63	2.56	12.14	2/1/2	124.6	26.2	23.0	.428	5.025	10.4	56.7	5.2	96.9D	1.722
4-8540	4-8680.6	.207	248.5	-18.0	1.0	.848	99.5	.325	.778	201.1	457.5	.526	1.031D	108.6	1.211	3.0	9.0	138.1	.386
4-8680.6	4-8870	.386	159.6	7.3	2.2	1.341	74.0	.403	1.048	59.1	189.2	.625D	1.471	83.9	.647	-.4	2.9	9.3	.244
4-8870	4-9180	.118	29.3	.6	-1.7	.734	87.2	.220	1.200	169.8	415.9	.936	1.465	99.2	1.066	-.2	-19.0	313.0	.185
		12.66	7.33	4.80	5.33	8.71	2.53	12.38	2/1/2	124.7	21.5	21.3	.403	5.405	9.5	58.2	4.7	96.5D	1.773
4-8550	4-8682.5	.242	248.9	-17.8	1.2	.860	102.8	.341	.787	207.8	457.3	.519	1.055D	109.5	1.217	2.8	7.9	141.3	.405
4-8682.5	4-8870	.405	160.5	6.6	2.1	1.339	73.0	.411	1.043	62.4	189.3	.614D	1.472	83.6	.643	-.3	3.3	9.1	.249
4-8870	4-9190	.118	37.3	3.4	-1.8	.731	85.8	.233	1.194	165.9	421.5	.916	1.471	100.4	1.064	-.2	-17.2	318.4	.207
		13.34	7.88	5.34	5.46	8.84	2.54	12.67	2/1/2	124.8	17.4	19.1	.366	6.034	8.3	60.4	3.9	95.7D	1.843
4-8560	4-8685.0	.283	251.9	-17.9	1.5	.874	106.0	.362	.799	213.7	457.3	.510	1.088D	110.6	1.224	2.4	6.5	145.3	.430
4-8685.0	4-8870	.430	161.8	5.9	2.0	1.338	71.6	.423	1.035	66.5	189.6	.597D	1.473	83.1	.637	-.1	3.7	8.8	.257
4-8870	4-9200	.122	46.4	6.5	-1.8	.728	84.2	.249	1.187	161.9	427.0	.892	1.482	101.8	1.063	-.2	-15.3	324.2	.231
		14.31	8.66	6.05	5.65	9.03	2.61	13.04	2/1/2	124.8	13.7	16.4	.325	7.003	6.7	63.3	2.3	94.7D	1.949

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2448880
14 SEP 1992

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2448880 (14 SEP 1992)																			
4-8510	4-8684.1	.195	280.2	-17.4	1.4	.817	85.8	.336	.758	171.5	463.0	.504	1.013	109.5	1.197	3.6	10.2	141.0	.404
4-8684.1	4-8880	.404	163.9	6.5	2.0	1.343	73.2	.414	1.054	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9150	.138	10.0	-6.2	-1.8	.738	91.6	.201	1.226	186.4	398.1	.979	1.473D	96.1	1.075	-.1	-21.0	299.9	.137
		13.17	7.54	4.62	5.63	9.01	2.91	11.81	2/1/2	128.4	37.6	23.0	.369	5.019	12.7	61.1	9.3	93.7D	1.482
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9160	.133	14.1	-4.8	-1.8	.735	90.8	.207	1.219	182.9	404.2	.967	1.471D	97.2	1.072	-.0	-20.2	303.3	.152
		12.58	7.13	4.31	5.45	8.84	2.82	11.97	2/1/2	128.3	31.3	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	138.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9170	.128	19.1	-3.1	-1.8	.732	89.8	.214	1.212	179.2	410.0	.953	1.470	98.2	1.069	-.0	-19.2	307.7	.169
		12.58	7.14	4.40	5.44	8.83	2.73	12.17	2/1/2	128.3	26.1	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623
4-8540	4-8682.4	.202	251.9	-17.7	1.1	.844	98.7	.325	.774	199.2	458.5	.523	1.025D	108.6	1.208	3.0	8.9	140.6	.387
4-8682.4	4-8880	.387	163.1	7.1	2.1	1.344	74.1	.407	1.058	58.3	191.1	.628D	1.489	82.6	.645	-.3	4.0	11.0	.251
4-8880	4-9180	.124	25.3	-.9	-1.8	.728	88.6	.222	1.204	175.2	415.6	.936	1.472	99.3	1.067	-.0	-17.8	312.9	.187
		12.89	7.38	4.73	5.51	8.89	2.66	12.40	2/1/2	128.4	21.6	22.4	.402	5.157	9.3	61.2	4.5	96.6D	1.670
4-8550	4-8684.2	.235	251.4	-17.5	1.3	.855	102.1	.339	.782	206.0	458.2	.517	1.047D	109.4	1.214	2.7	7.8	143.6	.404
4-8684.2	4-8880	.404	163.9	6.5	2.0	1.343	73.1	.414	1.053	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9190	.122	32.8	1.8	-1.8	.725	87.3	.234	1.196	171.1	421.0	.917	1.476	100.4	1.065	-.0	-16.2	318.4	.207
		13.47	7.84	5.23	5.63	9.01	2.61	12.67	2/1/2	128.4	17.7	20.2	.368	5.691	8.1	63.3	3.6	95.9D	1.727
4-8560	4-8686.5	.275	253.9	-17.7	1.6	.868	105.3	.359	.793	212.1	458.1	.508	1.078D	110.5	1.221	2.4	6.4	147.4	.428
4-8686.5	4-8880	.428	165.2	5.8	1.9	1.340	71.9	.425	1.047	65.2	191.4	.602D	1.492	81.8	.637	.0	4.7	10.7	.263
4-8880	4-9200	.122	41.6	5.0	-1.8	.721	85.8	.248	1.189	166.9	426.3	.895	1.483	101.7	1.063	-.0	-14.5	324.3	.229
		14.33	8.52	5.91	5.81	9.19	2.61	13.01	2/1/2	128.4	14.1	17.7	.328	6.513	6.5	66.1	2.1	94.9D	1.810
MARS ARRIVAL DATE = 2448890 (24 SEP 1992)																			
4-8510	4-8688.5	.220	288.1	-15.5	1.9	.812	83.2	.355	.753	167.3	465.6	.486	1.021	110.7	1.193	3.9	10.1	146.5	.429
4-8688.5	4-8890	.429	168.8	5.5	1.9	1.344	72.0	.429	1.058	64.3	193.0	.604D	1.512	80.6	.635	.1	6.0	12.9	.270
4-8890	4-9150	.154	9.0	-7.3	-2.1	.734	93.3	.209	1.235	192.5	398.7	.977	1.492D	96.4	1.078	.3	-18.3	298.5	.143
		14.21	8.22	4.99	5.99	9.36	3.23	11.87	2/1/2	131.4	37.0	22.5	.327	5.125	14.2	66.1	11.7	91.8D	1.350
4-8520	4-8684.2	.177	272.5	-17.3	1.3	.822	89.9	.323	.759	179.7	461.6	.514	1.004	108.7	1.197	3.4	10.0	141.9	.387
4-8684.2	4-8890	.387	166.7	6.9	2.1	1.348	74.2	.411	1.069	57.4	192.8	.630D	1.509	81.4	.643	-.2	5.3	13.1	.256
4-8890	4-9160	.147	12.5	-5.7	-2.1	.731	92.4	.213	1.226	188.9	404.6	.965	1.488D	97.4	1.074	.3	-18.3	302.4	.157
		13.15	7.47	4.37	5.68	9.06	3.10	12.03	2/1/2	131.5	31.0	24.7	.401	4.674	11.4	63.2	7.3	95.6D	1.474
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9170	.141	16.8	-3.9	-2.0	.727	91.4	.219	1.218	184.9	410.2	.951	1.485D	98.4	1.071	.2	-17.7	307.1	.173
		12.99	7.36	4.39	5.64	9.02	2.97	12.22	2/1/2	131.5	26.0	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8540	4-8684.3	.198	255.6	-17.3	1.3	.839	97.9	.325	.770	197.1	459.5	.520	1.020D	108.7	1.205	3.0	8.8	143.1	.388
4-8684.3	4-8890	.388	166.7	6.9	2.1	1.348	74.1	.411	1.069	57.5	192.8	.629D	1.509	81.4	.643	-.2	5.3	13.1	.256
4-8890	4-9180	.134	22.2	-1.8	-1.9	.723	90.2	.227	1.209	180.7	415.6	.935	1.483D	99.4	1.068	.2	-16.7	312.5	.190
		13.20	7.51	4.66	5.69	9.07	2.85	12.44	2/1/2	131.5	21.6	23.4	.400	4.932	9.2	64.3	4.6	96.6D	1.572
4-8550	4-8685.9	.229	254.2	-17.2	1.5	.850	101.3	.338	.777	204.1	459.2	.514	1.040D	109.4	1.210	2.7	7.7	145.9	.403
4-8685.9	4-8890	.403	167.5	6.3	2.0	1.346	73.3	.418	1.065	60.1	192.9	.620D	1.510	81.1	.640	-.0	5.6	13.0	.263
4-8890	4-9190	.129	28.9	.7	-1.9	.718	88.9	.236	1.200	176.4	420.8	.917	1.484	100.5	1.066	.2	-15.2	318.3	.208
		13.67	7.88	5.13	5.80	9.18	2.75	12.70	2/1/2	131.5	17.8	21.4	.370	5.382	8.0	66.3	3.6	96.0D	1.620
4-8560	4-8688.2	.267	256.0	-17.4	1.7	.863	104.6	.357	.788	210.4	459.0	.506	1.069D	110.5	1.217	2.4	6.3	149.6	.426
4-8688.2	4-8890	.426	168.6	5.6	1.9	1.344	72.1	.428	1.059	63.8	193.0	.606D	1.511	80.6	.636	.1	6.0	12.9	.269
4-8890	4-9200	.126	37.1	3.6	-1.9	.714	87.4	.248	1.192	172.0	425.9	.896	1.488	101.6	1.064	.2	-13.5	324.3	.229
		14.42	8.46	5.77	5.96	9.34	2.68	13.01	2/1/2	131.4	14.4	18.9	.332	6.084	6.4	68.9	2.1	95.1D	1.687
MARS ARRIVAL DATE = 2448900 (4 OCT 1992)																			
4-8520	4-8687.2	.185	279.4	-16.1	1.6	.817	88.3	.331	.755	176.6	463.3	.505	1.005	109.2	1.194	3.5	9.9	145.8	.398
4-8687.2	4-8900	.398	170.8	6.2	1.9	1.350	73.7	.419	1.078	58.3	194.4	.626D	1.530	80.0	.640	.1	6.9	15.4	.267
4-8900	4-9160	.164	11.9	-6.3	-2.4	.727	94.2	.222	1.236	194.9	405.2	.962	1.510D	97.7	1.077	.6	-16.1	301.2	.164
		13.86	7.94	4.49	5.92	9.30	3.45	12.12	2/1/2	134.2	30.6	25.0	.380	4.619	11.9	67.1	8.6	94.8D	1.374
4-8530	4-8685.9	.178	267.0	-16.8	1.4	.826	93.1	.322	.760	186.6	461.4	.516	1.005D	108.6	1.198	3.2	9.5	144.7	.385
4-8685.9	4-8900	.385	170.2	6.7	2.0	1.351	74.4	.414	1.081	56.1	194.3	.633D	1.529	80.3	.642	-.0	6.7	15.5	.264
4-8900	4-9170	.156	15.5	-4.4	-2.2	.722	93.1	.227	1.226	190.7	410.6	.948	1.504D	98.7	1.074	.5	-16.2	306.4	.179
		13.49	7.66	4.39	5.83	9.21	3.27	12.30	2/1/2	134.2	25.7	25.4	.405	4.550	10.4	66.6	6.5	96.4D	1.436
4-8540	4-8686.3	.194	259.7	-16.8	1.5	.835	97.0	.326	.766	194.9	460.5	.516	1.015D	108.8	1.202	3.0	8.7	145.9	.389
4-8686.3	4-8900	.389	170.4	6.5	1.9	1.351	74.2	.416	1.080	56.8	194.3	.631D	1.529	80.2	.642	-.0	6.7	15.5	.265
4-8900	4-9180	.147	20.2	-2.4	-2.1	.718	91.9	.233	1.216	186.4	415.7	.933	1.499D	99.6	1.071	.4	-15.5	312.0	.195
		13.57	7.71	4.61	5.86	9.24	3.10	12.51	2/1/2	134.2	21.6	24.4	.397	4.730	9.3	67.5	5.0	96.6D	1.480
4-8550	4-8687.8	.223	257.2	-16.9	1.6	.846	100.5	.337	.773	202.2	460.1	.512	1.033D	109.4	1.207	2.7	7.5	148.4	.403
4-8687.8	4-8900	.403	171.1	6.0	1.9	1.350	73.4	.422	1.076	59.1	194.4	.623D	1.530	79.9	.639	.1	7.0	15.4	.269
4-8900	4-9190	.140	26.0	-.1	-2.0	.713	90.6	.241	1.206	181.8	420.7	.915	1.496D	100.6	1.068	.4	-14.2	318.0	.212
		13.94	7.99	5.04	5.95	9.33	2.95	12.76	2/1/2	134.2	17.9	22.6	.370	5.108	7.9	69.3	3.9	96.2D	1.522
4-8560	4-8689.9	.260	258.3	-17.0	1.9	.858	103.8	.355	.782	208.6	459.9	.505	1.060D	110.4	1.213	2.3	6.2	151.9	.424
4-8689.9	4-8900	.424	172.1	5.4	1.8	1.348	72.3	.431	1.071	62.5	194.5	.610D	1.532	79.5	.635	.2	7.3	15.4	.275
4-8900	4-9200	.133	35.3	2.6	-1.9	.708	89.0	.251	1.196	177.2	425.6	.895	1.497	101.7	1.066	.3	-12.6	324.1	.231
		14.56	8.47	5.64	6.11	9.49	2.83	13.04	2/1/2	134.1	14.6	20.2	.335	5.707	6.4	71.8	2.4	95.3D	1.576
MARS ARRIVAL DATE = 2448910 (14 OCT 1992)																			
4-8520	4-8690.7	.199	286.8	-14.5	2.0	.813	86.4	.343	.751	173.1	465.2	.493	1.008	110.0	1.191	3.6	9.8	150.3	.413
4-8690.7	4-8910	.413	175.2	5.3	1.7	1.352	73.0	.430	1.086	59.8	195.9	.619D	1.552	78.7	.636	.3	8.7	16.1	.277
4-8910	4-9160	.183	12.2	-6.9	-2.8	.725	96.1	.233	1.249	201.0	405.9	.958	1.539D	98.2	1.081	1.2	-13.2	299.9	.174
		14.74	8.56	4.68	6.18	9.56	3.88	12.23	2/1/2	136.4	30.4	25.1	.352	4.609	13.0	71.4	10.3	93.6D	1.272
4-8530	4-8688.4	.180	273.0	-15.6	1.7	.822	91.9	.326	.756	184.0	462.7	.510	1.003D	108.9	1.195	3.2	9.4	148.0	.391
4-8688.4	4-8910	.391	174.1	6.1	1.8	1.354	74.2	.421	1.091	56.2	195.8	.632D	1.550	79.1	.640	.2	8.3	16.1	.271
4-8910	4-9170	.173	15.2	-4.7	-2.5	.719	95.0	.236	1.236	196.6	411.1	.945	1.528D	99.1	1.077	.9	-14.4	305.4	.186
		14.09	8.07	4.42	6.02	9.40	3.65	12.41	2/1/2	136.5	25.6	26.1	.393	4.435	10.8	70.1	7.3	95.9D	1.350
4-8540	4-8686.5	.191	264.3	-16.2	1.6	.831	96.0	.327	.761	192.7	461.6	.512	1.010D	108.9	1.199	2.9	8.5	148.7	.391
4-8686.5	4-8910	.391	174.2	6.0	1.8	1.354	74.2	.421	1.091	56.2	195.8	.632D	1.550	79.1	.640	.2	8.3	16.1	.271
4-8910	4-9180	.163	19.1	-2.6	-2.3	.714	93.8	.241	1.225	192.0	416.0	.930	1.519D	100.0	1.073	.7	-14.2	311.3	.202
		14.02	8.00	4.57	6.02	9.40	3.43	12.61	2/1/2	136.5	21.5	25.4	.392	4.552	9.4	70.7	5.7	96.5D	1.394
4-8550	4-8689.6	.217	260.5	-16.4	1.8	.841	99.6	.337	.768	200.2	461.1	.509	1.027D	109.5	1.203	2.6	7.5	150.9	.403
4-8689.6	4-8910	.403	174.7	5.6	1.7	1.353	73.6	.425	1.088	58.2	195.8	.625D	1.551	78.9	.638	.3	8.5	16.1	.274
4-8910	4-9190	.153	24.1	-.4	-2.1	.708	92.4	.247	1.213	187.3	420.8	.913	1.513D	100.9	1.070	.6	-13.2	317.5	.218
		14.28	8.17	4.95	6.10	9.48	3.23	12.84	2/1/2	136.5	17.9	23.7	.371	4.865	8.0	72.3	4.4	96.2D	1.432
4-8560	4-8691.6	.252	260.7	-16.7	2.0	.853	103.1	.353	.777	206.7	460.8	.503	1.051D	110.4	1.209	2.3	6.1	154.2	.422
4-8691.6	4-8910	.422	175.7	5.0	1.8	1.352	72.5	.434	1.083	61.3	195.9	.613D	1.553	78.5	.635	.4	8.8	16.1	.280
4-8910	4-9200	.144	30.4	2.1	-2.0	.703	90.8	.256	1.202	182.5	425.5	.894	1.509D	101.9	1.068	.6	-11.8	323.9	.235
		14.80	8.56	5.52	6.24	9.62	3.04	13.11	2/1/2	136.4	14.7	21.4	.338	5.376	6.4	74.7	2.9	95.5D	1.477
MARS ARRIVAL DATE = 2448920 (24 OCT 1992)																			
4-8530	4-8691.1	.184	279.4	-14.7	1.9	.817	90.5	.332	.752	181.1	464.1	.502	1.002D	109.3	1.191	3.3	9.3	151.7	.399
4-8691.1	4-8920	.399	178.2	5.3	1.6	1.357	73.9	.428	1.101	56.5	197.1	.630D	1.573	78.0	.636	.4	10.0	21.0	.279
4-8920	4-9170	.193	15.6	-4.9	-2.9	.717	97.0	.248	1.250	202.5	411.7	.940	1.560D	99.6	1.081	1.3	-12.3	304.3	.198
		14.79	8.58	4.47	6.21	9.59	4.11	12.55	2/1/2	136.5	25.5	26.6	.378	4.345	11.4	73.8	8.8	95.4D	1.268

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2448920
24 OCT 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8540	4-8690.7	.189	269.2	-15.5	1.8	.826	95.0	.329	.757	190.3	462.7	.508	1.006D	109.1	1.195	2.9	8.5	151.7	.394
4-8690.7	4-8920	.394	178.0	5.5	1.6	1.358	74.1	.426	1.102	55.8	197.1	.633D	1.572	78.0	.638	.4	9.9	21.0	.277
4-8920	4-9180	.181	18.9	-2.7	-2.5	.711	95.7	.251	1.236	197.7	416.4	.925	1.546D	100.4	1.077	1.0	-12.8	310.6	.211
		14.55	8.37	4.54	6.18	9.56	3.83	12.74	2/1/2	138.6	21.4	26.3	.386	4.398	9.7	74.0	6.6	96.3D	1.313
4-8550	4-8691.6	.212	264.2	-15.9	1.9	.836	98.7	.337	.763	198.1	462.0	.506	1.021D	109.5	1.200	2.6	7.4	153.5	.403
4-8691.6	4-8920	.403	178.4	5.2	1.6	1.357	73.6	.430	1.100	57.3	197.1	.627D	1.573	77.9	.637	.4	10.1	21.0	.280
4-8920	4-9190	.169	23.1	-.5	-2.3	.705	94.3	.256	1.222	192.8	421.1	.909	1.535D	101.3	1.073	.9	-12.2	317.0	.226
		14.68	8.44	4.87	6.24	9.62	3.57	12.96	2/1/2	138.5	17.9	24.8	.370	4.649	8.2	75.4	5.1	96.2D	1.349
4-8560	4-8693.4	.245	263.4	-16.3	2.1	.848	102.2	.352	.772	204.8	461.7	.500	1.043D	110.3	1.205	2.2	6.1	156.6	.421
4-8693.4	4-8920	.421	179.3	4.6	1.5	1.355	72.7	.437	1.096	60.1	197.2	.617D	1.575	77.5	.634	.5	10.3	21.0	.285
4-8920	4-9200	.158	28.6	1.8	-2.1	.698	92.8	.263	1.209	187.8	425.6	.891	1.527D	102.2	1.070	.8	-10.9	323.5	.241
		15.09	8.72	5.40	6.37	9.75	3.33	13.21	2/1/2	138.4	14.8	22.7	.340	5.087	8.5	77.6	3.6	95.6D	1.388
MARS ARRIVAL DATE = 2448930 (3 NOV 1992)																			
4-8540	4-8693.0	.188	274.5	-14.6	2.0	.822	93.8	.332	.753	187.7	463.9	.503	1.003D	109.3	1.192	3.0	8.4	154.8	.398
4-8693.0	4-8930	.398	181.9	4.8	1.4	1.361	74.0	.432	1.113	55.6	198.4	.633D	1.594	77.0	.637	.6	11.6	24.1	.283
4-8930	4-9180	.202	19.4	-2.6	-2.9	.710	97.9	.264	1.250	203.4	416.9	.920	1.560D	100.9	1.081	1.5	-11.2	309.7	.223
		15.16	8.83	4.53	6.33	9.71	4.30	12.91	2/1/2	140.3	21.5	27.1	.379	4.264	10.3	77.5	7.7	96.0D	1.236
4-8550	4-8693.6	.207	268.1	-15.3	2.0	.832	97.8	.337	.759	195.9	463.1	.503	1.015D	109.6	1.196	2.6	7.3	156.2	.404
4-8693.6	4-8930	.404	182.2	4.6	1.4	1.360	73.7	.434	1.112	56.5	198.4	.629D	1.595	76.9	.636	.6	11.7	24.1	.285
4-8930	4-9190	.188	23.0	-.3	-2.5	.702	96.4	.267	1.234	198.3	421.4	.904	1.563D	101.7	1.077	1.2	-11.1	316.3	.235
		15.16	8.78	4.80	6.37	9.75	3.98	13.11	2/1/2	140.3	18.0	25.9	.368	4.460	8.6	78.6	8.0	96.2D	1.273

STOPOVER TIME = 0 DAYS

1993 OUTBOUND SWINGBY

MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2448780
6 JUN 1992

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2448780 (6 JUN 1992)																			
4-8480	4-8669.0	.214	265.5	-23.9	-.1	.828	81.5	.337	.776	162.6	459.0	.514	1.037	109.4	1.211	3.3	9.5	118.8	.402
4-8669.0	4-8780	.402	139.1	5.7	1.8	1.340	73.0	.411	1.040	62.4	156.2	.613D	1.467A	104.9	.695	-.9	8.4	25.4	.270
4-8780	4-9160	.178	38.2	9.8	-1.2	.787	78.9	.238	1.210	137.4	418.9	.922	1.498	100.3	1.069	-1.7	-30.6	292.3	.201
		14.66	8.66	4.90	6.00	9.38	3.76	12.60	2/1/2	55.3	21.4	20.5	.372	5.630	13.3	37.5	10.8	94.1D	1.723
4-8490	4-8664.8	.164	253.1	-25.2	-.5	.834	87.5	.301	.780	174.1	454.3	.545	1.014	107.1	1.215	3.3	10.7	114.5	.356
4-8664.8	4-8780	.356	138.4	6.6	1.8	1.347	75.6	.393	1.058	53.7	154.2	.642D	1.474A	104.8	.707	-1.1	8.5	27.5	.263
4-8780	4-9170	.200	41.2	10.2	-1.5	.785	77.2	.264	1.207	135.7	426.7	.888	1.525	102.4	1.068	-1.7	-28.9	296.9	.236
		14.29	8.48	4.21	5.81	9.19	4.27	13.15	2/1/2	51.3	16.2	24.0	.476	4.809	13.2	35.0	9.8	98.2D	1.811
4-8500	4-8663.5	.152	241.1	-24.3	-.6	.840	91.5	.290	.783	183.8	452.3	.556	1.010D	106.4	1.217	3.4	11.5	115.4	.343
4-8663.5	4-8780	.343	138.3	7.0	1.8	1.349	76.3	.389	1.063	51.1	153.6	.650D	1.476A	104.8	.710	-1.2	8.5	28.1	.261
4-8780	4-9180	.231	44.0	10.8	-1.9	.784	74.9	.298	1.204	134.2	434.7	.845	1.563	104.9	1.067	-1.9	-27.3	301.8	.283
		14.83	9.07	4.07	5.76	9.14	4.99	13.91	2/1/2	50.8	11.6	25.0	.512	4.626	14.1	34.2	10.4	99.4D	1.856
MARS ARRIVAL DATE = 2448790 (16 JUN 1992)																			
4-8480	4-8672.4	.238	270.1	-22.6	.2	.825	79.5	.357	.773	159.8	461.6	.497	1.048	110.6	1.209	3.5	9.3	122.9	.427
4-8672.4	4-8790	.427	140.6	5.5	1.9	1.329	71.5	.415	1.010	68.6	163.3	.591D	1.429A	101.2	.672	-.7	8.6	20.1	.250
4-8790	4-9160	.159	39.4	9.6	-1.2	.783	80.1	.226	1.208	140.4	415.6	.935	1.481	99.4	1.068	-1.5	-30.2	295.1	.186
		14.12	8.64	5.28	5.48	8.87	3.35	12.39	2/1/2	65.1	23.6	17.9	.329	6.414	14.5	40.2	12.4	91.4D	1.782
4-8490	4-8666.6	.170	257.1	-24.6	-.4	.832	86.7	.306	.777	172.4	455.5	.539	1.016	107.4	1.213	3.5	10.6	116.6	.363
4-8666.6	4-8790	.363	138.9	6.8	1.9	1.339	75.0	.368	1.035	56.9	160.9	.634D	1.437A	101.4	.690	-1.0	8.7	23.2	.238
4-8790	4-9170	.178	42.9	10.2	-1.5	.782	78.6	.248	1.205	138.4	423.1	.906	1.503	101.2	1.067	-1.6	-28.4	299.4	.218
		13.21	8.04	4.26	5.18	8.56	3.75	12.84	2/1/2	62.2	18.2	22.2	.456	5.195	13.2	36.4	9.7	96.7D	1.914
4-8500	4-8665.0	.154	244.7	-24.1	-.5	.838	91.0	.293	.781	182.3	453.1	.552	1.010D	106.6	1.216	3.4	11.3	115.3	.346
4-8665.0	4-8790	.346	138.6	7.3	1.9	1.341	75.9	.382	1.041	53.7	160.2	.644D	1.438A	101.4	.694	-1.1	8.7	24.0	.235
4-8790	4-9180	.202	46.3	11.0	-1.7	.781	76.6	.277	1.201	136.5	430.8	.869	1.533	103.5	1.068	-1.7	-26.6	304.3	.257
		13.52	8.41	4.09	5.11	8.49	4.32	13.47	2/1/2	61.5	13.5	23.4	.501	4.936	13.8	35.4	10.0	98.3D	1.973
4-8510	4-8664.9	.160	253.2	-22.3	-.5	.845	94.5	.293	.785	191.1	452.1	.555	1.015D	106.5	1.218	3.4	11.7	115.7	.346
4-8664.9	4-8790	.346	138.6	7.3	1.9	1.341	76.0	.381	1.041	53.5	160.2	.644D	1.439A	101.4	.694	-1.1	8.7	24.0	.235
4-8790	4-9190	.236	49.5	11.8	-2.1	.779	74.0	.315	1.198	135.0	436.7	.820	1.575	106.2	1.065	-1.8	-24.8	309.3	.307
		14.41	9.30	4.17	5.10	8.49	5.14	14.36	2/1/2	61.5	9.3	23.0	.504	5.007	14.7	35.3	11.0	98.4D	2.018
MARS ARRIVAL DATE = 2448800 (26 JUN 1992)																			
4-8490	4-8668.6	.178	261.3	-23.9	-.2	.829	85.7	.313	.775	170.5	456.8	.532	1.018	107.9	1.211	3.3	10.4	119.4	.372
4-8668.6	4-8800	.372	140.3	6.9	2.0	1.333	74.4	.387	1.021	59.7	166.6	.626D	1.417A	98.2	.676	-1.0	4.9	16.6	.225
4-8800	4-9170	.156	43.7	9.6	-1.4	.778	79.8	.235	1.203	141.6	420.0	.920	1.486	100.3	1.066	-1.4	-27.7	301.7	.203
		12.54	7.72	4.39	4.82	8.20	3.35	12.62	2/1/2	73.5	20.1	20.9	.434	5.501	13.1	38.4	9.7	95.5D	1.953
4-8500	4-8666.5	.156	248.5	-23.9	-.4	.836	90.3	.296	.779	180.8	454.1	.548	1.009D	106.8	1.214	3.4	11.2	117.3	.351
4-8666.5	4-8800	.351	139.7	7.5	2.0	1.336	75.6	.379	1.029	55.5	165.9	.639D	1.419A	98.3	.681	-1.1	4.9	19.6	.219
4-8800	4-9180	.179	47.8	10.8	-1.7	.776	78.1	.260	1.199	139.4	427.4	.888	1.511	102.3	1.065	-1.5	-25.8	306.5	.257
		12.61	7.69	4.11	4.72	8.11	3.78	13.14	2/1/2	72.5	15.2	22.4	.489	5.143	13.4	37.0	9.4	97.5D	2.027
4-8510	4-8666.2	.159	256.3	-22.3	-.4	.842	94.0	.294	.783	189.7	452.8	.553	1.013D	106.6	1.217	3.4	11.5	117.4	.348
4-8666.2	4-8800	.348	139.7	7.6	2.0	1.337	75.7	.378	1.030	55.0	165.8	.641D	1.419A	98.3	.682	-1.1	4.9	19.7	.218
4-8800	4-9190	.207	51.6	11.9	-1.9	.775	75.9	.292	1.195	137.4	434.9	.846	1.545	104.7	1.065	-1.6	-24.0	311.5	.280
		13.27	8.57	4.16	4.70	8.09	4.42	13.86	2/1/2	72.4	10.9	22.3	.497	5.178	14.1	36.9	10.1	97.6D	2.076
4-8520	4-8667.0	.178	232.7	-20.6	-.3	.851	97.3	.300	.788	197.8	452.3	.551	1.025D	106.9	1.220	3.5	11.5	118.9	.355
4-8667.0	4-8800	.355	139.8	7.4	2.0	1.336	75.3	.380	1.027	56.4	166.1	.636D	1.418A	98.3	.680	-1.1	4.9	19.4	.220
4-8800	4-9200	.245	55.1	13.0	-2.3	.773	72.9	.336	1.192	135.8	442.9	.791	1.592	107.7	1.064	-1.7	-22.1	316.6	.334
		14.48	9.74	4.39	4.73	8.12	5.35	14.89	2/1/2	72.8	7.1	21.1	.477	5.472	14.8	37.5	11.1	97.3D	2.134
MARS ARRIVAL DATE = 2448810 (6 JUL 1992)																			
4-8490	4-8671.1	.189	266.0	-23.0	.1	.827	84.5	.323	.773	168.2	458.3	.523	1.022	108.5	1.209	3.4	10.3	122.5	.384
4-8671.1	4-8810	.384	142.4	6.8	2.0	1.330	73.7	.391	1.013	62.3	171.7	.617D	1.409A	95.3	.665	-.8	3.4	14.1	.218
4-8810	4-9170	.142	43.4	9.0	-1.4	.773	81.0	.225	1.201	145.2	417.4	.930	1.472	99.6	1.066	-1.2	-26.9	303.6	.191
		12.23	7.55	4.54	4.68	8.07	3.00	12.45	2/1/2	84.3	21.7	20.0	.407	5.758	13.2	41.0	9.8	94.3D	1.935
4-8500	4-8668.2	.159	252.7	-23.5	-.2	.833	89.6	.300	.777	179.1	455.1	.544	1.009	107.1	1.212	3.4	11.0	119.6	.356
4-8668.2	4-8810	.356	141.5	7.7	2.1	1.334	75.3	.379	1.023	56.9	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.5	.212
4-8810	4-9180	.159	48.2	10.3	-1.6	.771	79.5	.247	1.197	142.7	424.5	.902	1.493	101.4	1.065	-1.5	-25.0	308.5	.221
		12.03	7.50	4.15	4.53	7.93	3.35	12.89	2/1/2	83.2	16.8	21.9	.475	5.269	13.0	39.1	8.8	96.9D	2.028
4-8510	4-8667.7	.159	241.8	-22.2	-.2	.840	93.4	.296	.780	188.3	453.6	.550	1.011D	106.7	1.215	3.4	11.4	119.4	.350
4-8667.7	4-8810	.350	141.5	7.9	2.1	1.335	75.6	.377	1.025	55.9	170.6	.639D	1.410A	95.6	.674	-1.1	3.2	15.7	.210
4-8810	4-9190	.182	52.9	11.6	-1.9	.770	77.5	.274	1.194	140.4	431.6	.866	1.521	103.5	1.064	-1.5	-23.1	313.4	.258
		12.50	7.99	4.15	4.51	7.90	3.84	13.49	2/1/2	83.0	12.3	21.9	.490	5.255	13.4	38.8	9.1	97.5D	2.085
4-8520	4-8668.3	.176	235.3	-20.6	-.2	.848	96.8	.301	.786	196.4	453.0	.549	1.022D	107.0	1.218	3.4	11.3	120.6	.356
4-8668.3	4-8810	.356	141.5	7.7	2.1	1.334	75.2	.379	1.023	57.0	170.8	.635D	1.410A	95.5	.672	-1.0	3.2	15.4	.212
4-8810	4-9200	.213	57.2	12.9	-2.1	.768	74.9	.311	1.190	138.3	439.1	.820	1.559	106.1	1.064	-1.4	-21.1	318.6	.305
		13.47	8.93	4.36	4.53	7.93	4.57	14.33	2/1/2	83.2	8.3	20.9	.474	5.515	13.9	39.4	9.9	97.1D	2.142
4-8530	4-8669.8	.203	233.2	-19.4	-.1	.858	100.0	.313	.793	203.8	452.8	.545	1.040D	107.6	1.223	3.4	10.8	122.9	.370
4-8669.8	4-8810	.370	141.9	7.2	2.1	1.332	74.5	.385	1.018	59.6	171.2	.627D	1.409A	95.4	.669	-.9	3.3	14.8	.214
4-8810	4-9210	.257	60.9	14.2	-2.4	.766	71.5	.361	1.186	136.8	447.2	.758	1.613	109.5	1.064	-1.6	-19.1	323.7	.366
		15.00	10.39	4.74	4.61	8.00	5.65	15.54	2/1/2	83.7	5.1	19.1	.440	6.040	14.2	40.7	10.8	96.3D	2.218
MARS ARRIVAL DATE = 2448820 (16 JUL 1992)																			
4-8490	4-8674.1	.206	271.2	-21.9	.4	.824	82.9	.336	.770	165.4	460.4	.511	1.028	109.4	1.206	3.5	10.1	126.3	.402
4-8674.1	4-8820	.402	145.3	6.5	2.1	1.327	72.7	.399	1.007	65.4	176.0	.606D	1.409A	92.8	.655	-.7	2.3	10.4	.220
4-8820	4-9170	.129	42.0	7.8	-1.4	.768	82.2	.218	1.200	149.1	415.2	.939	1.462	99.0	1.066	-1.1	-26.1	305.2	.161
		12.28	7.54	4.79	4.75	8.13	2.75	12.32	2/1/2	94.3	23.1	19.1	.372	6.022	13.6	44.3	10.6	92.8D	1.867
4-8500	4-8670.2	.164	257.4	-22.9	.0	.831	88.7	.305	.774	177.1	456.2	.538	1.010	107.4	1.210	3.4	10.9	122.1	.362
4-8670.2	4-8820	.362	143.8	7.7	2.2	1.333	74.9	.381	1.021	58.1	175.0	.632D	1.410A	93.1	.665	-.9	2.0	12.0	.211
4-8820	4-9180	.143	47.5	9.3	-1.6	.766	80.7	.237	1.196	146.4	422.0	.913	1.479	100.7	1.064	-1.1	-24.1	309.8	.209
		11.73	7.22	4.21	4.51	7.90	3.01	12.71	2/1/2	93.0	18.1	21.6	.458	5.341	12.6	41.6	8.3	96.3D	1.988
4-8510	4-8669.3	.159	245.6	-22.1	-.1	.838	92.8	.298	.778	186.6	454.5	.546	1.010D	106.9	1.213	3.4	11.2	121.5	.353
4-8669.3	4-8820	.353	143.5	8.1	2.2	1.334	75.4	.378	1.024	56.4	174.8	.637D	1.410A	93.2	.667	-1.0	1.9	12.4	.208
4-8820	4-9190	.161	53.0	11.0	-1.8	.764	79.0	.260	1.192	143.8	428.9	.882	1.502	102.5	1.063	-1.1	-22.1	314.9	.242
		12.01	7.55	4.15	4.46	7.85	3.39	13.22	2/1/2	92.7	13.6	21.9	.481	5.263	12.8	41.1	8.2	97.3D	2.052
4-8520	4-8669.7	.173	238.3	-20.5	-.1	.846	96.3	.302	.783	195.0	453.8	.547	1.019D	107.1	1.216	3.4	11.1	122.5	.357
4-8669.7	4-8820	.357	143.6	7.9	2.2	1.334	75.2	.379	1.022	57.2	174.9	.635D	1.410A	93.1	.667	-1.0	2.0	12.2	.209
4-8820	4-9200	.187	58.3	12.6	-2.0	.762	76.7	.291	1.188	141.3	435.9	.842	1.534	104.8	1.063	-1.2	-20.1	320.2	.283
		12.77	8.29	4.53	4.48	7.88	3.96	13.91	2/1/2	92.8	9.6	21.0	.471	5.479	13.1	41.6	8.7	97.1D	2.108
4-8530	4-8670.9	.200	235.5	-19.4	.1	.855	99.5	.312	.789	202.5	453.5	.543	1.036D	107.6	1.220	3.4	10.7	124.7	.370
4-8670.9	4-8820	.370	144.0	7.5	2.2	1.332	74.5	.384	1.018	59.5	175.2	.627D	1.410A	93.0	.664	-.9	2.1	11.7	.212
4-8820	4-9210	.222	63.0	14.1	-2.2	.760	73.8	.333	1.184	139.1	443.4	.789	1.578	107.7	1.063	-1.3	-16.0	325.5	.334
		14.03	9.48	4.69	4.55	7.94	4.79	14.89	2/1/2	93.3	5.9	19.3	.440	5.955	13.2	42.9	9.4	96.4D	2.180
MARS ARRIVAL DATE = 2448830 (26 JUL 1992)																			
4-8490	4-8678.4	.237	277.7	-20.2	.6	.819	80.2	.360	.765	161.6	463.4	.490	1.041	110.9	1.203	3.8	9.9	131.7	.433
4-8678.4	4-8830	.433	149.3	5.9	2.0	1.324	71.1	.414	1.001	70.2	180.0	.586D	1.415	90.0	.644	-.5	2.0	7.5	.231
4-8830	4-9170	.120	39.3	6.1	-1.4	.762	85.3	.213	1.200	153.4	413.4	.945	1.456	98.6	1.066	-.9	-25.1	306.5	.174
		12.84	7.63	5.26	5.02	8.40	2.57	12.24	2/1/2	103.2	24.2	17.9	.321	6.430	15.0	48.7	12.6	90.4D	1.741
4-8500	4-8672.5	.170	262.6	-22.2	.2	.828	87.7	.311	.771	174.9	457.6	.531	1.011	107.8	1.208	3.4	10.7	125.1	.371
4-8672.5	4-8830	.371	146.5	7.7	2.2	1.333	74.5	.386	1.021	59.4	178.7	.627D	1.415A	90.8	.659	-.8	1.4	9.4	.214
4-8830	4-9180	.130	45.6	8.0	-1.6	.760	82.0	.229	1.196	150.5	420.0	.922	1.470	100.1	1.064	-.9	-23.2	311.1	.200
		11.66	7.06	4.29	4.61	8.00	2.76	12.57	2/1/2	101.7	19.2	21.4	.437	5.383	12.4	44.5	8.1	95.6D	1.916

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2448830
26 JUL 1992

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-8510	4-8671.1	.160	250.1	-21.8	.1	.835	92.1	.301	.775	184.8	455.6	.542	1.008D	107.1	1.211	3.4	11.1	123.9	.357
4-8671.1	4-8830	.357	146.0	8.2	2.3	1.335	75.2	.380	1.026	56.8	178.4	.636D	1.415A	91.0	.662	-.9	1.2	9.9	.211
4-8830	4-9190	.145	52.0	10.0	-1.7	.758	80.4	.250	1.191	147.6	426.6	.894	1.469	101.8	1.063	-.9	-21.2	316.2	.229
		11.74	7.21	4.16	4.53	7.92	3.05	13.02	2/1/2	101.3	14.8	22.1	.471	5.226	12.3	43.7	7.4	97.0D	1.989
4-8520	4-8671.2	.171	241.7	-20.4	.1	.843	95.6	.303	.780	193.3	454.7	.544	1.016D	107.2	1.214	3.4	11.0	124.6	.359
4-8671.2	4-8830	.359	146.1	8.1	2.3	1.334	75.1	.381	1.025	57.2	178.5	.635D	1.415A	90.9	.662	-.9	1.2	9.9	.212
4-8830	4-9200	.165	58.3	11.9	-1.9	.756	78.3	.277	1.186	144.7	433.3	.858	1.515	103.8	1.063	-1.0	-19.1	321.5	.265
		12.32	7.78	4.30	4.54	7.93	3.48	13.61	2/1/2	101.4	10.7	21.4	.466	5.388	12.4	44.1	7.6	97.1D	2.045
4-8530	4-8672.4	.196	238.0	-19.3	.2	.852	99.0	.312	.786	200.9	454.3	.541	1.031D	107.7	1.218	3.3	10.5	126.6	.370
4-8672.4	4-8830	.370	146.5	7.7	2.2	1.333	74.5	.386	1.022	59.2	178.7	.628D	1.415A	90.8	.659	-.8	1.3	9.5	.214
4-8830	4-9210	.194	64.0	13.8	-2.1	.754	75.7	.312	1.182	142.1	440.3	.813	1.550	106.3	1.062	-1.1	-17.0	326.9	.310
		13.36	8.76	4.63	4.60	7.99	4.13	14.41	2/1/2	101.7	6.9	19.8	.439	5.804	12.3	45.3	8.0	96.5D	2.110
4-8540	4-8674.2	.228	238.1	-18.7	.4	.863	102.1	.327	.795	207.8	454.1	.534	1.055D	108.5	1.223	3.2	9.6	129.6	.388
4-8674.2	4-8830	.388	147.2	7.1	2.2	1.331	73.6	.393	1.016	62.4	179.1	.616D	1.415A	90.6	.655	-.7	1.6	8.9	.219
4-8830	4-9220	.235	69.0	15.4	-2.3	.751	72.3	.359	1.177	140.0	447.8	.754	1.600	109.5	1.063	-1.2	-14.8	332.2	.367
		14.94	10.23	5.12	4.71	8.10	5.10	15.57	2/1/2	102.1	3.7	17.7	.400	6.517	11.9	47.2	8.2	95.6D	2.206
MARS ARRIVAL DATE = 2448840 (5 AUG 1992)																			
4-8500	4-8675.1	.180	268.3	-21.3	.5	.825	86.4	.320	.768	172.3	459.2	.523	1.014	108.4	1.205	3.5	10.5	128.5	.382
4-8675.1	4-8840	.382	149.8	7.4	2.2	1.333	73.9	.393	1.023	60.8	182.0	.622D	1.425	88.7	.654	-.7	1.3	7.9	.222
4-8840	4-9180	.121	42.5	6.3	-1.6	.754	83.2	.224	1.196	154.9	418.5	.928	1.463	99.7	1.064	-.8	-22.2	312.0	.193
		11.81	7.02	4.42	4.79	8.18	2.60	12.48	2/1/2	109.1	20.1	21.2	.412	5.425	12.4	47.8	8.4	94.7D	1.822
4-8510	4-8673.0	.162	255.0	-21.4	.3	.832	91.2	.304	.772	182.7	456.7	.537	1.007D	107.4	1.208	3.4	10.9	126.5	.362
4-8673.0	4-8840	.362	149.0	8.2	2.3	1.336	75.0	.384	1.030	57.2	181.6	.634D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9190	.132	49.8	8.6	-1.7	.751	81.7	.242	1.191	151.7	424.8	.902	1.479	101.2	1.063	-.8	-20.2	317.1	.220 *
		11.65	6.99	4.18	4.67	8.05	2.80	12.87	2/1/2	108.7	15.7	22.3	.456	5.165	12.0	46.6	8.9	96.8D	1.907
4-8520	4-8673.0	.169	245.5	-20.3	.3	.840	95.0	.304	.777	191.5	455.6	.541	1.013D	107.3	1.211	3.4	10.8	128.9	.361
4-8673.0	4-8840	.361	148.9	8.2	2.3	1.336	75.1	.384	1.030	57.0	181.6	.635D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9200	.148	57.0	10.9	-1.9	.749	79.8	.265	1.186	148.6	431.2	.871	1.500	103.0	1.062	-.8	-18.1	322.5	.252
		12.06	7.40	4.28	4.66	8.05	3.12	13.38	2/1/2	108.7	11.7	21.9	.460	5.267	11.8	46.8	8.7	97.1D	1.964
4-8530	4-8673.9	.192	240.9	-19.2	.4	.849	98.3	.312	.783	199.3	455.1	.538	1.027D	107.7	1.215	3.3	10.3	128.7	.371
4-8673.9	4-8840	.371	149.3	7.8	2.3	1.335	74.6	.388	1.027	58.7	181.8	.629D	1.425	88.9	.656	-.8	1.1	8.2	.219
4-8840	4-9210	.172	63.9	13.1	-2.0	.747	77.5	.296	1.181	145.5	437.7	.831	1.530	105.2	1.062	-.8	-16.0	328.1	.291
		12.91	8.19	4.57	4.72	8.11	3.62	14.07	2/1/2	108.9	7.9	20.5	.458	5.620	11.6	47.9	8.9	96.7D	2.022
4-8540	4-8675.8	.223	240.3	-18.8	.5	.860	101.8	.326	.791	206.3	454.9	.533	1.049D	108.3	1.220	3.2	9.5	131.5	.387
4-8675.8	4-8840	.387	150.0	7.2	2.2	1.333	73.7	.395	1.022	61.7	182.1	.618D	1.425	88.8	.653	-.7	1.3	7.8	.224
4-8840	4-9220	.205	70.1	15.0	-2.2	.744	74.5	.336	1.176	142.9	444.7	.761	1.570	108.0	1.062	-.9	-13.7	333.6	.340
		14.23	9.41	5.04	4.82	8.21	4.37	15.01	2/1/2	109.2	4.4	18.4	.401	6.243	11.0	49.8	8.9	95.9D	2.104
MARS ARRIVAL DATE = 2448850 (15 AUG 1992)																			
4-8500	4-8678.3	.196	274.7	-20.0	.8	.821	84.7	.332	.765	169.2	461.2	.511	1.018	109.2	1.202	3.6	10.4	132.7	.398
4-8678.3	4-8850	.398	153.6	6.9	2.2	1.334	73.2	.402	1.026	62.9	184.9	.613D	1.439	86.7	.648	-.5	1.7	7.3	.233
4-8850	4-9180	.116	38.4	4.3	-1.6	.747	84.5	.221	1.196	159.7	417.3	.932	1.460	99.4	1.064	-.6	-21.1	312.6	.188
		12.19	7.13	4.63	5.05	8.44	2.50	12.42	2/1/2	115.4	20.7	20.9	.379	5.501	12.9	51.7	9.3	93.5D	1.706
4-8510	4-8675.3	.165	260.5	-20.8	.5	.829	90.2	.309	.769	180.4	457.9	.531	1.007D	107.7	1.206	3.4	10.7	129.5	.369
4-8675.3	4-8850	.369	152.2	8.0	2.3	1.337	74.8	.389	1.035	57.7	184.4	.632D	1.438	87.2	.654	-.7	1.2	8.0	.225
4-8850	4-9190	.123	46.3	7.0	-1.7	.745	83.0	.237	1.191	156.2	423.5	.909	1.473	100.8	1.063	-.6	-19.2	317.8	.213
		11.72	6.87	4.23	4.86	8.24	2.64	12.77	2/1/2	115.0	16.4	22.6	.442	5.098	11.8	49.8	8.8	96.3D	1.811
4-8520	4-8674.8	.168	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.5	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	8.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.438	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9200	.135	54.5	9.7	-1.8	.742	81.3	.257	1.185	152.7	429.4	.880	1.490	102.5	1.062	-.6	-17.1	323.5	.242
		11.96	7.13	4.26	4.83	8.22	2.86	13.22	2/1/2	114.9	12.5	22.5	.453	5.131	11.4	49.7	8.1	97.1D	1.870
4-8530	4-8675.8	.188	244.2	-19.0	.5	.845	97.6	.313	.779	197.6	456.0	.536	1.023D	107.8	1.213	3.3	10.2	131.0	.372
4-8675.8	4-8850	.372	152.4	7.9	2.3	1.337	74.6	.391	1.034	58.2	184.5	.630D	1.438	87.1	.654	-.7	1.3	7.9	.226
4-8850	4-9210	.153	62.6	12.2	-1.9	.739	79.2	.284	1.180	149.4	435.6	.845	1.514	104.4	1.062	-.8	-15.0	329.0	.277
		12.63	7.75	4.52	4.87	8.26	3.23	13.81	2/1/2	115.0	8.8	21.3	.435	5.419	11.0	50.7	8.0	96.8D	1.924
4-8540	4-8677.2	.218	242.8	-18.4	.7	.856	100.9	.326	.787	204.7	455.8	.530	1.043D	108.5	1.217	3.1	9.3	133.6	.387
4-8677.2	4-8850	.387	153.0	7.3	2.2	1.335	73.8	.397	1.030	60.9	184.7	.621D	1.438	86.9	.650	-.6	1.5	7.6	.230
4-8850	4-9220	.180	70.1	14.5	-2.0	.737	76.5	.318	1.174	146.3	442.1	.801	1.548	106.8	1.061	-.6	-12.7	334.6	.320
		13.74	8.76	4.96	4.97	8.36	3.80	14.61	2/1/2	115.2	5.3	19.3	.402	5.956	10.3	52.5	5.9	96.1D	1.994
MARS ARRIVAL DATE = 2448860 (25 AUG 1992)																			
4-8500	4-8682.6	.222	282.0	-18.2	1.3	.816	82.2	.352	.760	165.2	463.9	.492	1.028	110.5	1.198	3.8	10.2	136.1	.424
4-8682.6	4-8860	.424	158.1	6.1	2.1	1.333	71.9	.417	1.027	66.5	187.5	.599D	1.455	84.7	.640	-.2	2.7	7.6	.248
4-8860	4-9180	.115	33.8	2.3	-1.7	.741	85.8	.220	1.198	164.6	416.4	.935	1.461	99.3	1.065	-.4	-20.1	312.8	.186
		12.92	7.50	5.02	5.42	8.80	2.48	12.39	2/1/2	120.6	21.2	20.3	.334	5.684	14.1	56.5	11.4	91.5D	1.964
4-8510	4-8677.8	.171	266.6	-19.9	.7	.825	89.0	.315	.766	177.8	459.4	.524	1.007	108.2	1.203	3.5	10.6	132.8	.377
4-8677.8	4-8860	.377	155.8	7.7	2.2	1.339	74.4	.396	1.041	58.4	186.9	.629D	1.453	85.5	.650	-.6	1.9	8.3	.234
4-8860	4-9190	.119	42.0	5.2	-1.7	.738	84.4	.234	1.192	161.0	422.3	.913	1.470	100.6	1.063	-.4	-18.2	318.2	.209 o
		11.94	6.86	4.30	5.08	8.47	2.55	12.71	2/1/2	120.3	17.0	22.9	.423	5.040	11.7	53.2	7.1	95.8D	1.708
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.006D	107.7	1.206	3.3	10.5	132.1	.368
4-8676.9	4-8860	.368	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.3	.232
4-8860	4-9200	.126	50.9	8.2	-1.8	.735	82.8	.252	1.186	157.2	428.1	.887	1.484	102.1	1.062	-.4	-16.2	323.9	.255
		11.98	6.96	4.26	5.02	8.41	2.70	13.11	2/1/2	120.2	13.2	23.1	.444	4.995	11.2	52.6	5.9	96.9D	1.772
4-8530	4-8677.4	.184	247.8	-18.8	.7	.842	96.9	.313	.775	195.7	457.0	.532	1.018D	107.9	1.210	3.2	10.0	133.4	.373
4-8677.4	4-8860	.373	155.6	7.9	2.3	1.340	74.6	.394	1.042	57.6	186.9	.631D	1.453	85.6	.651	-.6	1.8	8.4	.233
4-8860	4-9210	.140	60.0	11.1	-1.9	.732	80.8	.275	1.180	153.5	434.0	.856	1.504	103.8	1.062	-.4	-14.0	329.6	.286
		12.48	7.43	4.47	5.06	8.44	2.95	13.63	2/1/2	120.2	9.6	22.1	.432	5.218	10.6	53.6	5.4	96.9D	1.823
4-8540	4-8678.8	.213	245.5	-18.2	.8	.852	100.3	.325	.782	203.0	456.6	.528	1.037D	108.5	1.214	3.1	9.2	135.8	.388
4-8678.8	4-8860	.386	156.2	7.5	2.2	1.338	73.9	.400	1.038	60.0	187.1	.623D	1.454	85.3	.648	-.5	2.1	8.1	.237
4-8860	4-9220	.161	68.8	13.7	-2.0	.729	78.3	.304	1.174	150.0	440.1	.816	1.531	105.9	1.061	-.4	-11.7	335.5	.304
		13.40	8.26	4.88	5.15	8.53	3.38	14.31	2/1/2	120.3	6.1	20.3	.403	5.674	9.8	55.3	5.1	98.3D	1.882
4-8550	4-8680.9	.248	246.6	-18.0	1.1	.864	103.5	.342	.792	209.5	456.5	.521	1.063D	109.5	1.220	2.8	8.0	139.2	.407
4-8680.9	4-8860	.407	157.2	6.7	2.1	1.336	72.8	.409	1.032	63.5	187.5	.610D	1.454	85.0	.644	-.4	2.4	7.6	.242
4-8860	4-9230	.191	76.7	15.9	-2.0	.726	75.2	.343	1.168	146.9	446.6	.767	1.569	108.6	1.061	-.5	-9.4	341.2	.392
		14.80	9.51	5.45	5.29	8.67	4.06	15.25	2/1/2	120.5	2.8	18.0	.364	6.409	8.6	57.6	4.4	95.4D	1.967
MARS ARRIVAL DATE = 2448870 (4 SEP 1992)																			
4-8510	4-8680.7	.181	273.1	-18.8	1.0	.822	87.6	.324	.762	174.9	461.0	.515	1.009	108.7	1.200	3.5	10.4	136.8	.388
4-8680.7	4-8870	.388	159.7	7.2	2.2	1.341	73.9	.404	1.048	59.4	189.2	.624D	1.471	83.9	.646	-.4	3.0	9.3	.244
4-8870	4-9190	.118	37.3	3.4	-1.8	.731	85.8	.233	1.194	165.9	421.5	.916	1.471	100.4	1.064	-.2	-17.2	318.4	.207
		12.31	6.97	4.42	5.34	8.72	2.54	12.67	2/1/2	124.7	17.4	23.0	.399	5.007	12.0	58.9	7.9	94.9D	1.599
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9200	.122	46.4	6.5	-1.8	.728	84.2	.249	1.187	161.9	427.0	.892	1.482	101.8	1.063	-.2	-15.3	324.2	.231
		12.12	6.88	4.27	5.23	8.62	2.61	13.04	2/1/2	124.6	13.7	23.7	.432	4.869	11.1	58.1	6.0	96.7D	1.672
4-8530	4-8679.3	.181	251.9	-18.5	.8	.838	98.1	.314	.772	193.6	458.0	.529	1.014D	108.0	1.207	3.2	9.9	135.9	.375
4-8679.3	4-8870	.375	159.1	7.8	2.2	1.342	74.6	.398	1.051	57.1	189.0	.633D	1.470	84.1	.649	-.5	2.7	9.5	.241
4-8870	4-9210	.131	56.2	9.8	-1.9	.725	82.4	.269	1.180	156.0	432.6	.863	1.497	103.4	1.062	-.2	-13.1	330.1	.259
		12.46	7.21	4.43	5.25	8.63	2.77	13.50	2/1/2	124.6	10.2	23.0	.428	5.025	10.4	58.7	5.2	96.9D	1.722
4-8540	4-8680.6	.207	248.5	-18.0	1.0	.848	99.5	.325	.778	201.1	457.5	.526	1.031D	108.6	1.211	3.0	9.0	138.1	.398
4-8680.6	4-8870	.386	159.6	7.3	2.2	1.341	74.0	.403	1.048	59.1	189.2	.625D	1.471	83.9	.647	-.4	2.9	9.3	.244
4-8870	4-9220	.146	66.2	12.6	-1.9	.721	80.1	.295	1.173	154.1	438.4	.828	1.519	105.2	1.061	-.2	-10.8	336.0	.293
		13.20	7.87	4.80	5.33	8.71	3.07	14.10	2/1/2	124.7	6.9	21.3	.403	5.405	9.5	58.2	4.7	96.5D	1.773

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS | MARS ARRIVAL DATE = 2448870 | 4 SEP 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8550	4-8682.5	.242	248.9	-17.8	1.2	.860	102.8	.341	.787	207.8	457.3	.519	1.055D	109.5	1.217	2.8	7.9	141.3	.405
4-8682.5	4-8870	.405	160.5	6.6	2.1	1.339	73.0	.411	1.043	62.4	189.3	.614D	1.472	83.6	.643	-.3	3.3	9.1	.249
4-8870	4-9230	.170	75.6	15.3	-1.9	.718	77.3	.328	1.167	150.5	444.5	.784	1.550	107.6	1.061	-.2	-8.4	342.0	.335
		14.56	6.92	5.34	5.46	8.84	3.58	14.90	2/1/2	124.8	3.6	19.1	.366	6.034	8.3	60.4	3.9	95.7D	1.843
MARS ARRIVAL DATE = 2448880 (14 SEP 1992)																			
4-8510	4-8684.1	.195	280.2	-17.4	1.4	.817	85.8	.336	.758	171.5	463.0	.504	1.013	109.5	1.197	3.6	10.2	141.0	.404
4-8684.1	4-8880	.404	163.9	6.5	2.0	1.343	73.2	.414	1.054	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9190	.122	32.8	1.8	-1.8	.725	87.3	.234	1.196	171.1	421.0	.917	1.476	100.4	1.065	-.0	-16.2	318.4	.207
		12.86	7.23	4.62	5.63	9.01	2.61	12.67	2/1/2	128.4	17.7	23.0	.369	5.019	12.7	61.1	9.3	93.7D	1.482
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9200	.122	41.6	5.0	-1.8	.721	85.8	.248	1.189	166.9	426.3	.895	1.483	101.7	1.063	-.0	-14.3	324.3	.229
		12.37	6.92	4.31	5.45	8.84	2.61	13.01	2/1/2	128.3	14.1	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	138.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9210	.126	51.7	8.3	-1.8	.717	83.9	.265	1.181	162.6	431.7	.868	1.495	103.1	1.062	-.0	-12.2	330.4	.255
		12.53	7.09	4.40	5.44	8.83	2.68	13.42	2/1/2	128.3	10.7	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623
4-8540	4-8682.4	.202	251.9	-17.7	1.1	.844	98.7	.325	.774	199.2	458.5	.523	1.025D	108.6	1.208	3.0	8.9	140.6	.387
4-8682.4	4-8880	.387	163.1	7.1	2.1	1.344	74.1	.407	1.058	58.3	191.1	.628D	1.489	82.6	.645	-.3	4.0	11.0	.251
4-8880	4-9220	.136	62.4	11.7	-1.9	.713	81.8	.288	1.174	158.5	437.1	.836	1.512	104.8	1.061	-.0	-9.9	336.4	.285
		13.11	7.60	4.73	5.51	8.89	2.87	13.95	2/1/2	128.4	7.5	22.4	.402	5.157	9.5	61.2	4.5	96.6D	1.670
4-8550	4-8684.2	.235	251.4	-17.5	1.3	.855	102.1	.339	.782	206.0	458.2	.517	1.047D	109.4	1.214	2.7	7.8	143.6	.404
4-8684.2	4-8880	.404	163.9	6.5	2.0	1.343	73.1	.414	1.053	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9230	.154	73.1	14.5	-1.9	.710	79.2	.317	1.167	154.5	442.8	.797	1.537	106.8	1.061	-.0	-7.5	342.5	.322
		14.10	8.47	5.23	5.63	9.01	3.24	14.65	2/1/2	128.4	4.4	20.2	.368	5.691	8.1	63.3	3.6	95.9D	1.727
MARS ARRIVAL DATE = 2448890 (24 SEP 1992)																			
4-8510	4-8688.5	.220	288.1	-15.5	1.9	.812	83.2	.355	.753	167.3	465.6	.486	1.021	110.7	1.193	3.9	10.1	146.5	.429
4-8688.5	4-8890	.429	168.8	5.5	1.9	1.344	72.0	.429	1.058	64.3	193.0	.604D	1.512	80.6	.635	.1	6.0	12.9	.270
4-8890	4-9190	.129	28.9	.7	-1.9	.718	86.9	.236	1.200	176.4	420.8	.917	1.484	100.5	1.066	.2	-15.2	318.3	.208
		13.72	7.74	4.99	5.99	9.36	2.75	12.70	2/1/2	131.4	17.8	22.5	.327	5.125	14.2	66.1	11.7	91.8D	1.550
4-8520	4-8684.2	.177	272.5	-17.3	1.3	.822	89.9	.323	.759	179.7	461.6	.514	1.004	108.7	1.197	3.4	10.0	141.9	.387
4-8684.2	4-8890	.387	166.7	6.9	2.1	1.348	74.2	.411	1.069	57.4	192.8	.630D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9200	.126	37.1	3.6	-1.9	.714	87.4	.248	1.192	172.0	425.9	.896	1.488	101.6	1.064	.2	-13.5	324.3	.229
		12.73	7.05	4.37	5.68	9.06	2.68	13.01	2/1/2	131.5	14.4	24.7	.401	4.674	11.4	63.2	7.3	95.6D	1.474
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9210	.125	46.8	7.0	-1.9	.710	85.6	.264	1.183	167.5	431.0	.871	1.496	102.9	1.063	.2	-11.4	330.5	.252
		12.70	7.07	4.39	5.64	9.02	2.68	13.39	2/1/2	131.5	11.2	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8540	4-8684.3	.198	255.6	-17.3	1.3	.839	97.9	.325	.770	197.1	459.5	.520	1.020D	108.7	1.205	3.0	8.8	143.1	.388
4-8684.3	4-8890	.388	166.7	6.9	2.1	1.348	74.1	.411	1.069	57.5	192.8	.629D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9220	.130	57.9	10.5	-1.8	.706	83.5	.284	1.175	163.0	436.1	.842	1.509	104.5	1.062	.2	-9.1	336.7	.280
		13.12	7.43	4.66	5.69	9.07	2.77	13.86	2/1/2	131.5	8.1	23.4	.400	4.932	9.2	64.3	4.6	96.6D	1.572
4-8550	4-8685.9	.229	254.2	-17.2	1.5	.850	101.3	.338	.777	204.1	459.2	.514	1.040D	109.4	1.210	2.7	7.7	145.9	.403
4-8685.9	4-8890	.403	167.5	6.3	2.0	1.346	73.3	.418	1.065	60.1	192.9	.620D	1.510	81.1	.640	-.0	5.6	13.0	.263
4-8890	4-9230	.142	69.5	13.7	-1.8	.702	81.1	.309	1.167	158.7	441.5	.806	1.528	106.3	1.061	.2	-6.7	342.9	.313
		13.93	8.13	5.13	5.80	9.18	3.00	14.47	2/1/2	131.5	5.1	21.4	.370	5.382	8.0	66.3	3.6	96.0D	1.620
4-8560	4-8688.2	.267	256.0	-17.4	1.7	.863	104.6	.357	.788	210.4	459.0	.506	1.069D	110.5	1.217	2.4	6.3	149.6	.426
4-8688.2	4-8890	.426	168.6	5.6	1.9	1.344	72.1	.428	1.059	63.8	193.0	.606D	1.511	80.6	.636	.1	6.0	12.9	.269
4-8890	4-9240	.164	80.8	16.3	-1.8	.698	78.1	.342	1.160	154.7	447.2	.763	1.557	108.6	1.061	.2	-4.2	349.1	.353
		15.19	9.23	5.77	5.96	9.34	3.45	15.28	2/1/2	131.4	2.0	18.9	.332	6.084	6.4	68.9	2.1	95.1D	1.687
MARS ARRIVAL DATE = 2448900 (4 OCT 1992)																			
4-8520	4-8687.2	.185	279.4	-16.1	1.6	.817	88.3	.331	.755	176.6	463.3	.505	1.005	109.2	1.194	3.5	9.9	145.8	.398
4-8687.2	4-8900	.398	170.8	6.2	1.9	1.350	73.7	.419	1.078	58.3	194.4	.626D	1.530	80.0	.640	.1	6.9	15.4	.267
4-8900	4-9200	.133	33.3	2.6	-1.9	.708	89.0	.251	1.196	177.2	425.6	.895	1.497	101.7	1.066	.3	-12.6	324.1	.251
		13.23	7.31	4.49	5.92	9.50	2.83	13.04	2/1/2	134.2	14.6	25.0	.380	4.619	11.9	67.1	8.6	94.8D	1.374
4-8530	4-8685.9	.178	267.0	-16.8	1.4	.826	93.1	.322	.760	186.6	461.4	.516	1.005D	108.6	1.198	3.2	9.5	144.7	.385
4-8685.9	4-8900	.385	170.2	6.7	2.0	1.351	74.4	.414	1.081	56.1	194.3	.633D	1.529	80.3	.642	-.0	6.7	15.5	.264
4-8900	4-9210	.129	42.2	5.8	-1.9	.703	87.3	.265	1.186	172.5	430.5	.872	1.501	102.9	1.064	.3	-10.6	330.4	.252
		12.97	7.14	4.39	5.83	9.21	2.75	13.39	2/1/2	134.2	11.5	25.4	.405	4.550	10.4	66.6	6.3	96.4D	1.438
4-8540	4-8686.8	.194	259.7	-16.8	1.5	.835	97.0	.326	.766	194.9	460.5	.516	1.015D	108.6	1.202	3.0	8.7	145.9	.389
4-8686.8	4-8900	.389	170.4	6.5	1.9	1.351	74.2	.416	1.080	56.8	194.3	.631D	1.529	80.2	.642	-.0	6.7	15.5	.265
4-8900	4-9220	.129	52.9	9.3	-1.8	.699	85.3	.282	1.177	167.8	435.4	.845	1.509	104.3	1.062	.3	-8.4	336.8	.277
		13.22	7.36	4.61	5.86	9.24	2.75	13.82	2/1/2	134.2	8.5	24.4	.397	4.730	9.3	67.5	5.0	96.6D	1.480
4-8550	4-8687.8	.223	257.2	-16.9	1.6	.846	100.5	.337	.773	202.2	460.1	.512	1.033D	109.4	1.207	2.7	7.5	148.4	.403
4-8687.8	4-8900	.403	171.1	6.0	1.9	1.350	73.4	.422	1.076	59.1	194.4	.623D	1.530	79.9	.639	.1	7.0	15.4	.269
4-8900	4-9230	.136	65.0	12.7	-1.8	.694	82.9	.304	1.168	163.2	440.5	.813	1.524	105.9	1.061	.3	-6.0	343.2	.307
		13.66	7.91	5.04	5.93	9.33	2.87	14.36	2/1/2	134.2	5.7	22.6	.370	5.108	7.9	69.3	3.9	96.2D	1.522
4-8560	4-8689.9	.260	258.3	-17.0	1.9	.858	103.8	.355	.782	208.6	459.9	.505	1.060D	110.4	1.213	2.3	6.2	151.9	.424
4-8689.9	4-8900	.424	172.1	5.4	1.8	1.348	72.3	.431	1.071	62.5	194.5	.610D	1.532	79.5	.635	.2	7.3	15.4	.275
4-8900	4-9240	.151	77.4	15.6	-1.7	.690	80.1	.333	1.160	158.8	445.8	.774	1.546	108.0	1.061	.3	-3.4	349.5	.342
		14.92	8.81	5.64	6.11	9.49	3.17	15.06	2/1/2	134.1	2.8	20.2	.335	5.707	6.4	71.8	2.4	95.3D	1.576
MARS ARRIVAL DATE = 2448910 (14 OCT 1992)																			
4-8520	4-8690.7	.199	286.8	-14.5	2.0	.813	86.4	.343	.751	173.1	465.2	.493	1.008	110.0	1.191	3.6	9.8	150.3	.413
4-8690.7	4-8910	.413	175.2	5.3	1.7	1.352	73.0	.430	1.086	59.8	195.9	.619D	1.552	78.7	.636	.3	8.7	18.1	.277
4-8910	4-9200	.144	30.4	2.1	-2.0	.703	90.8	.256	1.202	182.5	425.5	.894	1.509D	101.9	1.068	.6	-11.8	323.9	.235
		13.90	7.72	4.68	6.18	9.56	3.04	13.11	2/1/2	136.4	14.7	25.1	.352	4.609	13.0	71.4	10.3	93.6D	1.272
4-8530	4-8688.4	.180	273.0	-15.8	1.7	.822	91.9	.326	.756	184.0	462.7	.510	1.003D	108.9	1.195	3.2	9.4	148.0	.391
4-8688.4	4-8910	.391	174.1	6.1	1.8	1.354	74.2	.421	1.091	56.2	195.8	.632D	1.550	79.1	.640	.2	8.3	18.1	.271
4-8910	4-9210	.137	38.4	5.0	-1.9	.697	89.1	.268	1.191	177.6	430.2	.872	1.509	103.0	1.065	.5	-9.9	330.3	.255
		13.33	7.31	4.42	6.02	9.40	2.90	13.43	2/1/2	136.5	11.7	26.1	.393	4.435	10.8	70.1	7.3	95.9D	1.350
4-8540	4-8688.5	.191	264.3	-16.2	1.6	.831	96.0	.327	.761	192.7	461.6	.512	1.010D	108.9	1.199	2.9	8.5	148.7	.391
4-8688.5	4-8910	.391	174.2	6.0	1.8	1.354	74.2	.421	1.091	56.2	195.8	.632D	1.550	79.1	.640	.2	8.3	18.1	.271
4-8910	4-9220	.133	48.2	8.3	-1.8	.692	87.1	.283	1.180	172.6	434.9	.847	1.514	104.3	1.064	.5	-7.7	336.8	.277
		13.40	7.36	4.57	6.02	9.40	2.82	13.81	2/1/2	136.5	8.9	25.4	.392	4.552	9.4	70.7	5.7	96.5D	1.394
4-8550	4-8689.6	.217	260.5	-16.4	1.8	.841	99.6	.337	.768	200.2	461.1	.509	1.027D	109.5	1.203	2.6	7.5	150.9	.403
4-8689.6	4-8910	.403	174.7	5.6	1.7	1.353	73.6	.425	1.088	58.2	195.8	.625D	1.551	78.9	.638	.3	8.5	18.1	.274
4-8910	4-9230	.134	60.0	11.8	-1.8	.687	84.8	.302	1.171	167.8	439.7	.817	1.524	105.7	1.062	.5	-5.3	343.3	.303
		13.89	7.78	4.95	6.10	9.48	2.84	14.30	2/1/2	136.5	6.2	23.7	.371	4.865	8.0	72.3	4.4	96.2D	1.432
4-8560	4-8691.6	.252	260.7	-16.7	2.0	.853	103.1	.353	.777	206.7	460.8	.503	1.051D	110.4	1.209	2.3	6.1	154.2	.422
4-8691.6	4-8910	.422	175.7	5.0	1.6	1.352	72.5	.434	1.083	61.3	195.9	.613D	1.553	78.5	.635	.4	8.8	18.1	.280
4-8910	4-9240	.142	73.0	15.0	-1.7	.682	82.1	.327	1.161	163.1	444.7	.782	1.541	107.5	1.061	.5	-2.8	349.8	.338
		14.76	8.52	5.52	6.24	9.62	3.00	14.91	2/1/2	136.4	3.5	21.4	.358	5.376	6.4	74.7	2.9	95.5D	1.477
MARS ARRIVAL DATE = 2448920 (24 OCT 1992)																			
4-8520	4-8695.0	.223	295.0	-12.5	2.5	.807	83.7	.361	.746	168.7	467.6	.476	1.015	111.1	1.187	3.8	9.7	155.9	.437
4-8695.0	4-8920	.437	180.2	4.2	1.4	1.354	71.8	.444	1.092	62.7	197.2	.607D	1.576	77.2	.631	.6	10.6	21.1	.299
4-8920	4-9200	.158	28.6	1.8	-2.1	.698	92.8	.263	1.209	187.8	425.6	.891	1.527D	102.2	1.070	.8	-10.9	323.5	.241
		14.87	8.37	5.04	6.49	9.87	3.33	13.21	2/1/2	138.2	14.8	24.7	.315	4.682	14.7	76.5	12.8	91.9D	1.188

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2448920
24 OCT 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8530	4-8691.1	.184	279.4	-14.7	1.9	.817	90.5	.332	.752	181.1	464.1	.502	1.002D	109.3	1.191	3.3	9.3	151.7	.399
4-8691.1	4-8920	.399	178.2	5.3	1.6	1.357	73.9	.428	1.101	56.5	197.1	.630D	1.573	78.0	.638	.4	10.0	21.0	.279
4-8920	4-9210	.148	35.5	4.5	-2.0	.692	91.0	.273	1.197	182.7	430.1	.870	1.523D	103.2	1.067	.7	-9.2	330.1	.259
		13.80	7.59	4.47	6.21	9.59	3.12	13.50	2/1/2	138.5	11.9	26.6	.378	4.345	11.4	73.8	8.6	95.4D	1.265
4-8540	4-8690.7	.189	269.2	-15.5	1.8	.826	95.0	.329	.757	190.3	462.7	.508	1.006D	109.1	1.195	2.9	8.5	151.7	.394
4-8690.7	4-8920	.394	178.0	5.5	1.6	1.358	74.1	.426	1.102	55.8	197.1	.633D	1.572	78.0	.638	.4	9.9	21.0	.277
4-8920	4-9220	.140	44.3	7.6	-1.9	.686	89.0	.285	1.185	177.6	434.6	.847	1.523	104.3	1.065	.7	-7.1	336.7	.279
		13.68	7.50	4.54	6.18	9.56	2.96	13.85	2/1/2	138.6	9.2	26.3	.386	4.398	9.7	74.0	6.6	96.3D	1.313
4-8550	4-8691.6	.212	264.2	-15.9	1.9	.836	98.7	.337	.763	198.1	462.0	.506	1.021D	109.5	1.200	2.6	7.4	153.5	.403
4-8691.6	4-8920	.403	178.4	5.2	1.6	1.357	73.6	.430	1.100	57.3	197.1	.627D	1.573	77.9	.637	.4	10.1	21.0	.280
4-8920	4-9230	.136	55.2	11.0	-1.8	.680	86.8	.302	1.174	172.5	439.2	.820	1.528	105.7	1.063	.7	-4.7	343.3	.303
		14.00	7.75	4.87	6.24	9.62	2.89	14.28	2/1/2	138.5	6.6	24.8	.370	4.649	8.2	75.4	5.1	96.2D	1.349
4-8560	4-8693.4	.245	263.4	-16.3	2.1	.848	102.2	.352	.772	204.8	461.7	.500	1.043D	110.3	1.205	2.2	6.1	156.6	.421
4-8693.4	4-8920	.421	179.3	4.6	1.5	1.355	72.7	.437	1.096	60.1	197.2	.617D	1.575	77.5	.634	.5	10.3	21.0	.285
4-8920	4-9240	.139	68.0	14.3	-1.7	.674	84.2	.323	1.163	167.6	443.9	.787	1.539	107.3	1.062	.7	-2.1	349.9	.331
		14.70	8.33	5.40	6.37	9.75	2.94	14.83	2/1/2	138.4	4.1	22.7	.340	5.087	6.5	77.6	3.6	95.6D	1.388
MARS ARRIVAL DATE = 2448930 (3 NOV 1992)																			
4-8530	4-8694.1	.192	286.3	-13.3	2.2	.813	88.9	.340	.748	177.9	465.6	.494	1.002	109.8	1.188	3.3	9.2	155.6	.409
4-8694.1	4-8930	.409	182.4	4.4	1.4	1.360	73.5	.436	1.111	57.3	198.4	.626D	1.596	76.8	.635	.6	11.8	24.1	.286
4-8930	4-9210	.162	33.6	4.4	-2.1	.688	93.0	.280	1.204	187.9	430.1	.867	1.541D	103.5	1.070	.9	-8.5	329.8	.265
		14.40	7.99	4.58	6.41	9.78	3.41	13.61	2/1/2	140.2	12.1	27.0	.360	4.285	12.4	77.8	10.1	94.6D	1.181
4-8540	4-8693.0	.188	274.5	-14.6	2.0	.822	93.8	.332	.753	187.7	463.9	.503	1.003D	109.3	1.192	3.0	8.4	154.8	.398
4-8693.0	4-8930	.398	181.9	4.8	1.4	1.361	74.0	.432	1.113	55.6	198.4	.633D	1.594	77.0	.637	.6	11.6	24.1	.283
4-8930	4-9220	.151	41.2	7.2	-1.9	.681	91.1	.290	1.190	182.6	434.4	.845	1.536D	104.5	1.067	.9	-6.5	336.5	.283
		14.04	7.71	4.53	6.33	9.71	3.18	13.92	2/1/2	140.3	9.4	27.1	.379	4.264	10.3	77.5	7.7	96.0D	1.236
4-8550	4-8693.6	.207	268.1	-15.3	2.0	.832	97.8	.337	.759	195.9	463.1	.503	1.015D	109.6	1.196	2.6	7.3	156.2	.404
4-8693.6	4-8930	.404	182.2	4.6	1.4	1.360	73.7	.434	1.112	56.5	198.4	.629D	1.595	76.9	.636	.6	11.7	24.1	.285
4-8930	4-9230	.143	51.0	10.3	-1.8	.674	88.8	.304	1.178	177.3	438.8	.820	1.536	105.7	1.065	.8	-4.1	343.3	.304
		14.19	7.82	4.80	6.37	9.75	3.02	14.31	2/1/2	140.3	6.9	25.9	.368	4.460	8.6	78.6	6.0	96.2D	1.273
4-8560	4-8695.2	.238	266.3	-15.8	2.2	.843	101.4	.350	.766	202.9	462.6	.498	1.035D	110.3	1.202	2.2	6.0	159.0	.420
4-8695.2	4-8930	.420	182.9	4.2	1.3	1.359	72.9	.441	1.108	59.0	198.4	.620D	1.597	76.6	.633	.7	11.9	24.1	.289
4-8930	4-9240	.140	63.1	13.6	-1.6	.668	86.3	.322	1.166	172.2	443.3	.790	1.542	107.1	1.063	.8	-1.6	350.0	.330
		14.73	8.24	5.28	6.49	9.86	2.96	14.80	2/1/2	140.1	4.6	23.9	.341	4.832	6.8	80.6	4.4	95.7D	1.308
MARS ARRIVAL DATE = 2448940 (13 NOV 1992)																			
4-8530	4-8697.5	.205	293.7	-11.6	2.5	.808	86.9	.351	.743	174.3	467.4	.482	1.004	110.5	1.185	3.5	9.1	160.1	.423
4-8697.5	4-8940	.423	186.8	3.5	1.1	1.362	72.8	.446	1.120	58.7	199.5	.620D	1.619	75.6	.632	.9	13.6	27.4	.294
4-8940	4-9210	.178	32.5	4.5	-2.2	.685	95.2	.289	1.214	193.1	430.2	.863	1.564D	103.9	1.073	1.1	-7.8	329.4	.274
		15.16	8.54	4.77	6.62	10.00	3.77	13.75	2/1/2	141.6	12.2	27.1	.335	4.265	13.7	82.1	12.0	93.5D	1.095
4-8540	4-8695.5	.190	280.3	-13.5	2.2	.818	92.6	.336	.749	185.1	465.1	.497	1.001D	109.6	1.189	3.0	8.3	158.1	.404
4-8695.5	4-8940	.404	185.8	4.0	1.2	1.364	73.9	.438	1.124	55.6	199.5	.632D	1.617	76.0	.635	.8	13.4	27.3	.289
4-8940	4-9220	.165	39.1	7.0	-2.0	.677	93.2	.297	1.198	187.7	434.4	.843	1.554D	104.8	1.069	1.0	-5.9	336.3	.289
		14.50	8.01	4.54	6.48	9.86	3.47	14.04	2/1/2	141.8	9.6	27.9	.369	4.153	11.0	81.0	9.0	95.6D	1.165
4-8550	4-8695.7	.204	272.4	-14.5	2.2	.827	96.8	.339	.755	193.6	464.1	.499	1.010D	109.7	1.193	2.6	7.2	159.1	.406
4-8695.7	4-8940	.406	185.9	3.9	1.2	1.364	73.7	.439	1.124	55.9	199.5	.630D	1.617	75.9	.635	.8	13.4	27.3	.290
4-8940	4-9230	.153	47.7	9.9	-1.8	.669	91.0	.308	1.184	182.2	438.6	.819	1.548D	105.9	1.067	1.0	-5.6	343.2	.308
		14.47	7.97	4.74	6.50	9.87	3.23	14.39	2/1/2	141.8	7.2	26.9	.365	4.293	9.1	81.8	7.1	96.1D	1.201
4-8560	4-8697.1	.232	269.5	-15.2	2.3	.838	100.5	.350	.762	200.8	463.6	.495	1.028D	110.3	1.198	2.2	5.9	161.5	.419
4-8697.1	4-8940	.419	186.6	3.6	1.2	1.363	73.0	.444	1.121	58.1	199.5	.623D	1.619	75.7	.633	.9	13.6	27.4	.293
4-8940	4-9240	.146	58.6	13.1	-1.7	.662	88.5	.324	1.170	176.8	442.9	.791	1.549	107.2	1.064	1.0	-1.1	350.0	.330
		14.84	8.25	5.18	6.59	9.97	3.07	14.82	2/1/2	141.7	5.0	25.1	.342	4.607	7.3	83.6	5.4	95.7D	1.234
MARS ARRIVAL DATE = 2448950 (23 NOV 1992)																			
4-8540	4-8698.1	.193	286.5	-12.2	2.4	.813	91.1	.341	.745	182.2	466.4	.490	.999D	109.9	1.186	3.0	8.3	161.7	.411
4-8698.1	4-8950	.411	189.8	3.1	1.0	1.367	73.6	.445	1.135	55.8	200.6	.630D	1.640	75.0	.634	1.1	15.1	30.7	.295
4-8950	4-9220	.181	38.0	7.2	-2.1	.674	95.5	.306	1.208	192.7	434.4	.838	1.577D	105.2	1.073	1.2	-5.4	336.1	.298
		15.06	8.43	4.59	6.63	10.01	3.83	14.19	2/1/2	143.1	9.8	28.5	.356	4.064	12.1	84.7	10.5	95.1D	1.092
4-8550	4-8697.9	.201	277.1	-13.6	2.4	.822	95.7	.340	.750	191.2	465.2	.495	1.006D	109.8	1.190	2.6	7.2	162.0	.408
4-8697.9	4-8950	.408	189.7	3.1	1.0	1.367	73.7	.444	1.136	55.4	200.6	.631D	1.640	75.0	.634	1.1	15.1	30.6	.294
4-8950	4-9230	.167	45.3	9.8	-1.9	.665	93.2	.315	1.191	187.1	438.5	.816	1.566D	106.2	1.069	1.1	-5.2	343.0	.314
		14.83	8.22	4.70	6.61	9.99	3.51	14.50	2/1/2	143.2	7.5	27.9	.360	4.147	9.9	85.1	8.4	95.9D	1.134
4-8560	4-8699.0	.226	272.9	-14.6	2.4	.833	99.5	.349	.757	198.8	464.5	.492	1.021D	110.3	1.195	2.2	5.9	164.1	.419
4-8699.0	4-8950	.419	190.2	2.9	.9	1.366	73.1	.448	1.133	57.2	200.6	.625D	1.641	74.8	.632	1.1	15.2	30.7	.297
4-8950	4-9240	.155	54.9	12.7	-1.7	.657	90.8	.327	1.176	181.6	442.6	.791	1.560D	107.3	1.066	1.1	-.7	350.0	.334
		15.05	8.35	5.09	6.69	10.06	3.27	14.88	2/1/2	143.1	5.4	26.2	.342	4.409	7.9	86.7	6.5	95.7D	1.166

STOPOVER TIME = 0 DAYS — 1993 OUTBOUND SWINGBY — MISSION DURATION = 720 DAYS

MARS ARRIVAL DATE = 2448810 6 JUL 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8490	4-8671.1	.189	266.0	-23.0	.1	.827	84.5	.323	.773	168.2	458.3	.523	1.022	108.5	1.209	3.4	10.3	122.5	.364
4-8671.1	4-8810	.384	142.4	6.8	2.0	1.330	73.7	.391	1.013	62.3	171.7	.617D	1.409A	95.3	.665	-.8	5.4	14.1	.218
4-8810	4-9210	.257	60.9	14.2	-2.4	.766	71.5	.361	1.186	136.8	447.2	.756	1.613	109.5	1.064	-1.6	-19.1	323.7	.366
		14.88	10.19	4.54	4.68	8.07	5.65	15.54	2/1/2	64.3	5.1	20.0	.407	5.758	13.2	41.0	9.8	94.3D	1.935
4-8490	4-8674.1	.206	271.2	-21.9	.4	.824	82.9	.336	.770	165.4	460.4	.511	1.028	109.4	1.206	3.5	10.1	126.3	.402
4-8674.1	4-8820	.402	145.3	6.5	2.1	1.327	72.7	.399	1.007	65.4	176.0	.606D	1.409A	92.6	.655	-.7	2.3	10.4	.220
4-8820	4-9210	.222	63.0	14.1	-2.2	.760	73.8	.333	1.184	139.1	443.4	.789	1.578	107.7	1.063	-1.3	-18.0	325.5	.334
		14.33	9.58	4.79	4.75	8.13	4.79	14.89	2/1/2	94.3	5.9	19.1	.372	6.022	13.6	44.3	10.6	92.8D	1.867
4-8500	4-8670.2	.164	257.4	-22.9	.0	.831	88.7	.305	.774	177.1	456.2	.538	1.010	107.4	1.210	3.4	10.9	122.1	.362
4-8670.2	4-8820	.362	143.8	7.7	2.2	1.333	74.9	.381	1.021	58.1	175.0	.632D	1.410A	93.1	.665	-.9	2.0	12.0	.211
4-8820	4-9220	.272	66.9	15.5	-2.5	.758	69.8	.390	1.180	137.8	451.7	.720	1.640	111.5	1.063	-1.5	-16.0	330.5	.403
		14.77	10.26	4.21	4.51	7.90	6.05	16.32	2/1/2	93.0	3.7	21.6	.458	5.341	12.6	41.6	8.3	96.3D	1.988
4-8490	4-8678.4	.237	277.7	-20.2	.9	.819	80.2	.360	.765	161.6	463.4	.490	1.041	110.9	1.203	3.8	9.9	131.7	.433
4-8678.4	4-8830	.433	149.3	5.9	2.0	1.324	71.1	.414	1.001	70.2	180.0	.586D	1.415	90.0	.644	-.5	2.0	7.5	.231
4-8830	4-9210	.194	64.0	13.8	-2.1	.754	75.7	.312	1.182	142.1	440.3	.813	1.550	106.3	1.062	-1.1	-17.0	326.9	.310
		14.40	9.39	5.26	5.02	8.40	4.13	14.41	2/1/2	103.2	6.9	17.9	.321	6.430	15.0	48.7	12.6	90.4D	1.741
4-8500	4-8672.5	.170	262.6	-22.2	.2	.828	87.7	.311	.771	174.9	457.6	.531	1.011	107.6	1.206	3.4	10.7	125.1	.371
4-8672.5	4-8830	.371	146.5	7.7	2.2	1.333	74.5	.386	1.021	59.4	178.7	.627D	1.415A	90.8	.659	-.8	1.4	9.4	.214
4-8830	4-9220	.235	69.0	15.4	-2.3	.751	72.3	.359	1.177	140.0	447.8	.754	1.600	109.5	1.063	-1.2	-14.8	332.2	.367
		14.00	9.39	4.29	4.61	8.00	5.10	15.57	2/1/2	101.7	3.7	21.4	.437	5.383	12.4	44.5	8.1	95.6D	1.916
4-8500	4-8675.1	.180	268.3	-21.3	.5	.825	86.4	.320	.768	172.3	459.2	.523	1.014	108.4	1.205	3.5	10.5	126.5	.382
4-8675.1	4-8840	.382	149.8	7.4	2.2	1.333	73.9	.393	1.023	60.8	182.0	.622D	1.425	88.7	.654	-.7	1.3	7.9	.222
4-8840	4-9220	.205	70.1	15.0	-2.2	.744	74.5	.336	1.176	142.9	444.7	.781	1.570	108.0	1.062	-.9	-13.7	333.6	.340
		13.58	8.79	4.42	4.79	8.18	4.37	15.01	2/1/2	109.1	4.4	21.2	.412	5.425	12.4	47.8	8.4	94.7D	1.822
4-8510	4-8673.0	.162	255.0	-21.4	.3	.832	91.2	.304	.772	182.7	456.7	.537	1.007D	107.4	1.208	3.4	10.9	126.5	.362
4-8673.0	4-8840	.362	149.0	8.2	2.3	1.336	75.0	.384	1.030	57.2	181.6	.634D	1.425	89.0	.658	-.9	.9	8.5	.217
4-8840	4-9230	.251	75.4	16.7	-2.4	.742	70.6	.390	1.171	141.0	452.4	.714	1.628	111.6	1.062	-1.0	-11.5	338.9	.403
		14.37	9.70	4.18	4.67	8.05	5.52	16.38	2/1/2	108.7	2.5	22.3	.458	5.165	12.0	46.6	6.9	96.8D	1.907
4-8500	4-8676.3	.196	274.7	-20.0	.8	.821	84.7	.332	.765	169.2	461.2	.511	1.018	109.2	1.202	3.6	10.4	132.7	.398
4-8676.3	4-8850	.398	153.6	6.9	2.2	1.334	73.2	.402	1.026	62.9	184.9	.613D	1.439	86.7	.648	-.5	1.7	7.3	.233
4-8850	4-9220	.180	70.1	14.5	-2.0	.737	76.5	.318	1.174	146.3	442.1	.801	1.548	106.6	1.061	-.6	-12.7	334.6	.320
		13.49	8.44	4.63	5.05	8.44	3.80	14.61	2/1/2	115.4	5.3	20.9	.379	5.501	12.9	51.7	9.3	93.5D	1.706
4-8510	4-8675.3	.165	260.5	-20.8	.5	.829	90.2	.309	.769	180.4	457.9	.531	1.007D	107.7	1.206	3.4	10.7	129.5	.369
4-8675.3	4-8850	.369	152.2	8.0	2.3	1.337	74.8	.389	1.035	57.7	184.4	.632D	1.438	87.2	.654	-.7	1.2	8.0	.225
4-8850	4-9230	.218	76.6	16.4	-2.2	.754	73.1	.364	1.169	143.7	449.2	.744	1.594	109.9	1.062	-.7	-10.4	340.2	.375
		13.78	8.92	4.23	4.86	8.24	4.69	15.73	2/1/2	115.0	2.2	22.6	.442	5.098	11.8	49.8	6.8	96.3D	1.811
4-8520	4-8674.8	.168	249.9	-20.0	.4	.836	94.2	.306	.774	189.6	456.6	.537	1.010D	107.5	1.209	3.3	10.6	129.4	.364
4-8674.8	4-8850	.364	152.1	8.2	2.3	1.338	75.0	.388	1.036	56.9	184.4	.635D	1.438	87.3	.655	-.8	1.1	8.1	.224
4-8850	4-9240	.273	81.8	17.9	-2.3	.732	68.4	.426	1.165	142.0	457.2	.668	1.661	114.1	1.062	-.8	-8.2	345.3	.449
		15.15	10.33	4.26	4.83	8.22	6.06	17.36	2/1/2	114.9	3.5	22.5	.453	5.131	11.4	49.7	6.1	97.1D	1.870
4-8500	4-8682.6	.222	282.0	-18.2	1.3	.816	82.2	.352	.760	165.2	463.9	.492	1.028	110.5	1.198	3.8	10.2	136.1	.424
4-8682.6	4-8860	.424	158.1	6.1	2.1	1.333	71.9	.417	1.027	66.5	187.5	.599D	1.455	84.7	.640	-.2	2.7	7.6	.246
4-8860	4-9220	.161	68.8	13.7	-2.0	.729	78.3	.304	1.174	150.0	440.1	.816	1.531	105.9	1.061	-.4	-11.7	335.5	.304
		13.82	8.40	5.02	5.42	8.80	3.38	14.31	2/1/2	120.6	6.1	20.3	.334	5.684	14.1	56.5	11.4	91.5D	1.564
4-8510	4-8677.8	.171	266.6	-19.9	.7	.825	89.0	.315	.766	177.8	459.4	.524	1.007	108.2	1.203	3.5	10.6	132.8	.377
4-8677.8	4-8860	.377	155.8	7.7	2.2	1.339	74.4	.396	1.041	58.4	186.9	.629D	1.453	85.5	.650	-.6	1.9	8.3	.234
4-8860	4-9230	.191	76.7	15.9	-2.0	.726	75.2	.343	1.168	146.9	446.6	.767	1.569	108.6	1.061	-.5	-9.4	341.2	.352
		13.45	8.36	4.30	5.08	8.47	4.06	15.25	2/1/2	120.3	2.8	22.9	.423	5.040	11.7	53.2	7.1	95.8D	1.708
4-8520	4-8676.9	.168	254.8	-19.6	.6	.833	93.3	.309	.770	187.4	457.7	.532	1.008D	107.7	1.206	3.3	10.5	132.1	.368
4-8676.9	4-8860	.368	155.4	8.1	2.3	1.340	74.9	.392	1.044	56.7	186.8	.634D	1.453	85.6	.652	-.7	1.7	8.5	.232
4-8860	4-9240	.236	83.4	17.6	-2.1	.724	71.2	.396	1.163	144.4	453.8	.702	1.623	112.1	1.062	-.5	-7.0	346.7	.414
		14.41	9.38	4.26	5.02	8.41	5.12	16.58	2/1/2	120.2	1.8	23.1	.444	4.995	11.2	52.8	5.9	96.9D	1.772
4-8510	4-8680.7	.181	273.1	-18.8	1.0	.822	87.6	.324	.762	174.9	461.0	.515	1.009	108.7	1.200	3.5	10.4	136.6	.388
4-8680.7	4-8870	.388	159.7	7.2	2.2	1.341	73.9	.404	1.048	59.4	189.2	.624D	1.471	83.9	.646	-.4	3.0	9.3	.244
4-8870	4-9230	.170	75.6	15.3	-1.9	.718	77.3	.328	1.167	150.5	444.5	.784	1.550	107.6	1.061	-.2	-8.4	342.0	.335*
		13.35	8.01	4.42	5.34	8.72	3.58	14.90	2/1/2	124.7	3.6	23.0	.399	5.007	12.0	56.9	7.9	94.9D	1.599
4-8520	4-8679.1	.169	260.2	-19.1	.8	.830	92.3	.312	.767	185.1	458.9	.527	1.006D	108.0	1.203	3.3	10.3	135.1	.373
4-8679.1	4-8870	.373	159.0	7.9	2.3	1.343	74.7	.397	1.052	56.7	189.0	.634D	1.470	84.1	.649	-.5	2.7	9.5	.240
4-8870	4-9240	.206	83.8	17.2	-2.0	.715	73.7	.373	1.161	147.5	451.1	.728	1.594	110.6	1.061	-.3	-6.0	347.7	.388
		13.91	8.67	4.27	5.23	8.62	4.40	16.01	2/1/2	124.6	.6	23.7	.432	4.869	11.1	56.1	6.0	96.7D	1.672
4-8510	4-8684.1	.195	280.2	-17.4	1.4	.817	85.8	.336	.758	171.5	463.0	.504	1.013	109.5	1.197	3.6	10.2	141.0	.404
4-8684.1	4-8880	.404	163.9	6.5	2.0	1.343	73.2	.414	1.054	61.2	191.2	.617D	1.490	82.3	.642	-.2	4.3	10.8	.256
4-8880	4-9230	.154	73.1	14.5	-1.9	.710	79.2	.317	1.167	154.5	442.8	.797	1.537	106.8	1.061	-.0	-7.5	342.5	.322
		13.49	7.86	4.62	5.63	9.01	3.24	14.65	2/1/2	128.4	4.4	23.0	.369	5.019	12.7	61.1	9.3	93.7D	1.482
4-8520	4-8681.6	.172	266.1	-18.3	1.1	.826	91.2	.317	.763	182.5	460.2	.521	1.005D	108.3	1.201	3.4	10.2	138.3	.379
4-8681.6	4-8880	.379	162.7	7.5	2.2	1.345	74.5	.404	1.060	56.9	191.0	.632D	1.489	82.7	.646	-.4	3.9	11.1	.249
4-8880	4-9240	.182	82.9	16.8	-1.9	.706	75.9	.355	1.160	150.9	448.9	.748	1.572	109.4	1.061	-.0	-5.0	348.5	.368
		13.61	8.16	4.31	5.45	8.84	3.85	15.58	2/1/2	128.3	1.1	24.3	.418	4.760	11.1	59.6	6.4	96.2D	1.573
4-8530	4-8681.4	.179	256.5	-18.1	1.0	.834	95.2	.316	.768	191.4	459.0	.525	1.011D	108.2	1.204	3.2	9.7	138.7	.377
4-8681.4	4-8880	.377	162.7	7.5	2.2	1.345	74.6	.403	1.061	56.6	191.0	.633D	1.489	82.8	.647	-.4	3.8	11.1	.249
4-8880	4-9250	.225	91.1	18.4	-1.9	.703	71.8	.406	1.154	148.0	455.7	.685	1.623	112.9	1.061	-.0	-2.6	354.2	.429
		14.70	9.26	4.40	5.44	8.83	4.85	16.90	2/1/2	128.3	2.4	23.8	.422	4.847	10.3	59.9	5.2	96.9D	1.623
4-8510	4-8686.5	.220	288.1	-15.5	1.9	.812	83.2	.355	.753	167.3	465.6	.486	1.021	110.7	1.193	3.9	10.1	146.5	.429
4-8686.5	4-8890	.429	168.8	5.5	1.9	1.344	72.0	.429	1.058	64.3	193.0	.604D	1.512	80.6	.635	.1	6.0	12.9	.270
4-8890	4-9230	.142	69.5	13.7	-1.8	.702	81.1	.309	1.167	158.7	441.5	.806	1.528	106.3	1.061	.2	-6.7	342.9	.313
		13.98	7.99	4.99	5.99	9.36	3.00	14.47	2/1/2	131.4	5.1	22.5	.327	5.125	14.2	66.1	11.7	91.8D	1.350
4-8520	4-8684.2	.177	272.5	-17.3	1.3	.822	89.9	.323	.759	179.7	461.6	.514	1.004	108.7	1.197	3.4	10.0	141.9	.387
4-8684.2	4-8890	.387	166.7	6.9	2.1	1.348	74.2	.411	1.069	57.4	192.8	.630D	1.509	81.4	.643	-.2	5.3	13.1	.258
4-8890	4-9240	.164	80.8	16.3	-1.8	.698	78.1	.342	1.160	154.7	447.2	.763	1.557	108.6	1.061	.2	-4.2	349.1	.353
		13.51	7.82	4.37	5.68	9.06	3.45	15.28	2/1/2	131.5	2.0	24.7	.401	4.674	11.4	63.2	7.3	95.6D	1.474
4-8530	4-8683.6	.178	261.5	-17.5	1.2	.830	94.2	.319	.764	189.1	460.2	.521	1.007D	108.4	1.201	3.2	9.6	141.6	.381
4-8683.6	4-8890	.381	166.4	7.2	2.1	1.348	74.5	.408	1.071	56.3	192.7	.634D	1.508	81.5	.644	-.2	5.2	13.1	.256
4-8890	4-9250	.198	90.7	18.1	-1.7	.694	74.3	.386	1.153	151.2	453.4	.708	1.598	111.5	1.061	.2	-1.7	355.0	.405
		14.24	8.60	4.39	5.64	9.02	4.21	16.38	2/1/2	131.5	1.4	24.6	.414	4.689	10.3	63.2	5.6	96.7D	1.529
4-8520	4-8687.2	.185	279.4	-16.1	1.6	.817	88.3	.331	.755	176.6	463.3	.505	1.005	109.2	1.194	3.5	9.9	145.8	.398
4-8687.2	4-8900	.398	170.8	6.2	1.9	1.350	73.7	.419	1.078	58.3	194.4	.626D	1.530	80.0	.640	.1	6.9	15.4	.267
4-8900	4-9240	.151	77.4	15.6	-1.7	.690	80.1	.333	1.160	156.8	445.8	.774	1.546	106.0	1.061	.3	-3.4	349.5	.342
		13.58	7.66	4.49	5.92	9.30	3.17	15.06	2/1/2	134.2	2.8	25.0	.380	4.619	11.9	67.1	8.6	94.8D	1.374

STOPOVER TIME = 0 DAYS | 1993 OUTBOUND SWINGBY | MISSION DURATION = 720 DAYS
MARS ARRIVAL DATE = 2448900
4 OCT 1992

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-8530	4-8685.9	.178	267.0	-16.8	1.4	.826	93.1	.322	.760	186.6	461.4	.516	1.005D	108.6	1.198	3.2	9.5	144.7	.365
4-8685.9	4-8900	.385	170.2	6.7	2.0	1.351	74.4	.414	1.081	56.1	194.3	.633D	1.529	80.3	.642	-.0	6.7	15.5	.264
4-8900	4-9250	.177	89.0	17.7	-1.7	.685	76.7	.371	1.152	154.9	451.6	.725	1.579	110.5	1.061	.4	-.9	355.7	.368
		13.96	8.13	4.39	5.83	9.21	3.74	16.00	2/1/2	134.2	1.0	25.4	.405	4.550	10.4	66.6	6.3	96.4D	1.438
MARS ARRIVAL DATE = 2448910 (14 OCT 1992)																			
4-8520	4-8690.7	.199	286.8	-14.5	2.0	.813	86.4	.343	.751	173.1	465.2	.493	1.008	110.0	1.191	3.6	9.8	150.3	.413
4-8690.7	4-8910	.413	175.2	5.3	1.7	1.352	73.0	.430	1.086	59.8	195.9	.619D	1.552	78.7	.636	.3	8.7	18.1	.277
4-8910	4-9240	.142	73.0	15.0	-1.7	.682	82.1	.327	1.161	163.1	444.7	.782	1.541	107.5	1.061	.5	-2.8	349.8	.335
		13.86	7.69	4.68	6.18	9.56	3.00	14.91	2/1/2	136.4	3.5	25.1	.352	4.609	13.0	71.4	10.3	93.6D	1.272
4-8530	4-8688.4	.180	273.0	-15.8	1.7	.822	91.9	.326	.756	184.0	462.7	.510	1.003D	108.9	1.195	3.2	9.4	148.0	.391
4-8688.4	4-8910	.391	174.1	6.1	1.8	1.354	74.2	.421	1.091	56.2	195.8	.632D	1.550	79.1	.640	.2	8.3	18.1	.271
4-8910	4-9250	.161	86.0	17.4	-1.6	.677	78.9	.359	1.152	158.7	450.1	.738	1.566	109.8	1.061	.5	-.1	356.1	.375
		13.83	7.81	4.42	6.02	9.40	3.40	15.73	2/1/2	136.5	1.4	26.1	.393	4.435	10.8	70.1	7.3	95.9D	1.350
MARS ARRIVAL DATE = 2448920 (24 OCT 1992)																			
4-8520	4-8695.0	.223	295.0	-12.5	2.5	.807	83.7	.361	.746	168.7	467.6	.476	1.015	111.1	1.187	3.8	9.7	155.9	.437
4-8695.0	4-8920	.437	180.2	4.2	1.4	1.354	71.8	.444	1.092	62.7	197.2	.607D	1.576	77.2	.631	.6	10.6	21.1	.289
4-8920	4-9240	.139	68.0	14.5	-1.7	.674	84.2	.323	1.163	167.6	443.9	.787	1.539	107.3	1.062	.7	-2.1	349.9	.331
		14.47	7.98	5.04	6.49	9.87	2.94	14.83	2/1/2	138.2	4.1	24.7	.315	4.682	14.7	76.5	12.8	91.9D	1.159
4-8530	4-8691.1	.184	279.4	-14.7	1.9	.817	90.5	.332	.752	181.1	464.1	.502	1.002D	109.3	1.191	3.3	9.3	151.7	.399
4-8691.1	4-8920	.399	178.2	5.3	1.6	1.357	73.9	.428	1.101	56.5	197.1	.630D	1.573	78.0	.638	.4	10.0	21.0	.279
4-8920	4-9250	.151	81.9	17.0	-1.5	.669	81.1	.351	1.153	162.9	449.0	.748	1.559	109.2	1.061	.7	.5	356.5	.366
		13.86	7.65	4.47	6.21	9.59	3.18	15.54	2/1/2	138.5	2.1	26.6	.378	4.345	11.4	73.8	8.6	95.4D	1.265
MARS ARRIVAL DATE = 2448930 (3 NOV 1992)																			
4-8530	4-8694.1	.192	286.3	-13.3	2.2	.813	88.9	.340	.748	177.9	465.6	.494	1.002	109.8	1.188	3.3	9.2	155.6	.409
4-8694.1	4-8930	.409	182.4	4.4	1.4	1.360	73.5	.436	1.111	57.3	198.4	.626D	1.596	76.8	.635	.6	11.8	24.1	.286
4-8930	4-9250	.145	77.0	16.6	-1.5	.662	83.4	.347	1.155	167.2	448.1	.755	1.555	108.9	1.062	.6	1.1	356.7	.360
		14.05	7.65	4.58	6.41	9.78	3.06	15.42	2/1/2	140.2	2.6	27.0	.360	4.285	12.4	77.8	10.1	94.6D	1.181
MARS ARRIVAL DATE = 2448940 (13 NOV 1992)																			
4-8530	4-8697.5	.205	293.7	-11.6	2.5	.808	86.9	.351	.743	174.3	467.4	.482	1.004	110.5	1.185	3.5	9.1	160.1	.423
4-8697.5	4-8940	.423	186.8	3.5	1.1	1.362	72.8	.446	1.120	58.7	199.5	.620D	1.619	75.6	.632	.9	13.8	27.4	.294
4-8940	4-9250	.145	72.0	16.1	-1.5	.655	85.6	.345	1.158	171.6	447.4	.759	1.556	108.7	1.062	1.0	1.6	356.6	.358
		14.44	7.82	4.77	6.62	10.00	3.05	15.37	2/1/2	141.6	3.1	27.1	.335	4.265	13.7	82.1	12.0	93.5D	1.095
MARS ARRIVAL DATE = 2448950 (23 NOV 1992)																			
4-8530	4-8701.7	.228	301.9	-9.5	3.0	.802	84.3	.369	.738	170.0	469.7	.466	1.010	111.6	1.180	3.7	9.1	165.5	.446
4-8701.7	4-8950	.446	191.7	2.5	.9	1.364	71.7	.460	1.127	61.3	200.5	.609D	1.644	74.2	.628	1.2	15.4	30.9	.304
4-8950	4-9250	.149	67.2	15.7	-1.5	.649	86.0	.345	1.161	176.1	446.9	.761	1.562	108.7	1.064	1.1	2.0	356.9	.358
		15.14	8.25	5.12	6.89	10.26	3.13	15.37	2/1/2	142.8	3.6	26.8	.302	4.317	15.5	87.2	14.3	92.0D	1.002

1995

INBOUND SWINGBY

4.13

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2449860
22 MAY 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2449860 (22 MAY 1995)																			
4-9660	4-9860	.136	137.2	36.5	2.2	1.138	90.6	.282	1.381	357.5	503.2	.992	1.771A	102.3	.703	-.5	-25.3	258.5	.199
4-9860	5- 37.6	.215	200.2	-9.2	-.2	.541	88.5	.520	1.081	178.6	279.2	.518A	1.643	64.6	1.351	2.0	4.1	330.7	.586
5- 37.6	5- 140	.586	339.8	8.4	4.4	1.268	116.9	.478	.876	261.5	491.6	.458	1.295A	117.6	.938	-2.2	12.9	134.8	.459
		12.73	8.50	3.89	4.23	7.63	4.61	17.60	1/1/2	18.2	23.5	10.0	.175	11.426	26.4	248.2	-25.6	87.7L	1.826
4-9670	4-9860	.140	127.6	34.4	1.8	1.140	88.5	.285	1.382	7.0	142.7	.988D	1.776A	102.6	.704	.1	-23.4	258.9	.202
4-9860	5- 41.2	.201	199.1	-9.3	-.4	.553	89.2	.498	1.096	179.2	285.4	.550A	1.642	67.0	1.356	2.0	4.7	332.9	.539
5- 41.2	5- 150	.539	345.5	8.8	4.2	1.250	115.0	.441	.843	261.3	495.7	.472	1.215A	114.2	.911	-2.5	9.9	141.1	.402
		12.54	8.22	3.93	4.32	7.71	4.29	16.30	1/1/2	17.9	26.8	13.2	.207	8.724	19.6	251.5	-18.3	89.9L	1.598
4-9680	4-9860	.156	119.3	32.4	1.6	1.141	86.1	.290	1.377	17.4	143.0	.977D	1.777A	102.8	.702	.4	-22.1	258.5	.205
4-9860	5- 44.5	.190	197.9	-9.6	-.6	.563	89.8	.480	1.110	179.8	291.3	.578A	1.642	69.2	1.360	2.1	5.3	334.8	.498
5- 44.5	5- 160	.498	350.8	8.9	3.9	1.236	113.3	.408	.819	261.1	500.3	.484	1.153A	110.8	.889	-2.6	6.9	146.4	.349
		12.53	8.15	4.11	4.38	7.77	4.03	15.20	1/1/2	18.4	30.9	16.2	.242	7.081	14.7	254.4	-12.7	92.1D	1.474
4-9690	4-9860	.183	113.9	30.4	1.4	1.139	83.5	.299	1.365	28.9	144.4	.957D	1.773A	102.9	.697	.7	-21.0	257.3	.207
4-9860	5- 47.5	.181	196.7	-9.8	-.7	.571	90.3	.465	1.121	180.3	296.5	.600A	1.642D	71.0	1.363	2.1	6.0	336.3	.463
5- 47.5	5- 170	.463	355.5	8.7	3.5	1.225	111.8	.381	.801	261.0	505.4	.496	1.107A	107.5	.870	-2.7	4.1	150.7	.303
		12.72	8.29	4.46	4.43	7.82	3.83	14.28	1/1/2	19.8	36.0	19.2	.281	5.991	11.0	256.9	-8.1	94.3D	1.401
MARS ARRIVAL DATE = 2449870 (1 JUN 1995)																			
4-9650	4-9870	.139	144.8	44.8	3.4	1.128	92.0	.266	1.351	350.5	510.7	.992	1.711A	99.6	.696	-1.8	-30.5	258.1	.175
4-9870	5- 34.4	.230	200.6	-8.9	-.0	.526	90.4	.549	1.056	180.3	271.4	.476A	1.635D	61.6	1.343	1.9	3.6	329.7	.645
5- 34.4	5- 130	.645	334.6	8.0	4.5	1.295	119.3	.525	.932	262.1	487.1	.443	1.421A	121.5	.976	-2.1	15.5	128.2	.531
		12.60	8.91	3.92	3.69	7.09	4.98	19.30	1/1/2	23.6	20.2	6.5	.145	17.618	42.8	247.4	-42.3	85.1L	2.405
4-9660	4-9870	.131	133.2	39.0	2.3	1.131	90.1	.268	1.355	359.4	509.6	.992	1.717A	100.0	.697	-.6	-25.9	259.4	.178
4-9870	5- 38.3	.213	199.3	-8.9	-.2	.541	91.1	.522	1.075	181.0	278.3	.514A	1.635D	64.4	1.349	2.0	4.0	332.5	.590
5- 38.3	5- 140	.590	340.8	8.5	4.4	1.272	117.1	.482	.883	261.9	490.8	.458	1.309A	118.0	.943	-2.4	12.6	135.5	.466
		12.17	8.42	3.84	3.75	7.15	4.58	17.76	1/1/2	21.9	23.0	9.5	.173	12.035	29.0	249.9	-28.1	87.3L	1.905
4-9670	4-9870	.136	123.0	35.6	1.8	1.133	88.1	.271	1.353	9.1	149.3	.987D	1.720A	100.2	.696	.1	-23.4	259.7	.180
4-9870	5- 41.9	.200	198.0	-9.0	-.4	.554	91.8	.499	1.092	181.8	284.7	.547A	1.636D	66.8	1.354	2.0	4.6	334.6	.542
5- 41.9	5- 150	.542	346.5	8.9	4.2	1.253	115.1	.444	.848	261.7	494.9	.472	1.225A	114.6	.915	-2.6	9.6	141.6	.408
		11.96	8.15	3.89	3.81	7.21	4.26	16.43	1/1/2	21.7	26.3	12.7	.204	9.074	21.1	253.0	-19.9	89.6L	1.650
4-9680	4-9870	.153	115.1	32.8	1.5	1.133	85.8	.276	1.347	19.8	149.9	.975D	1.719A	100.3	.694	.5	-21.8	259.0	.182
4-9870	5- 45.2	.189	196.6	-9.1	-.6	.565	92.3	.480	1.106	182.5	290.6	.575A	1.636D	69.0	1.358	2.0	5.2	336.4	.500
5- 45.2	5- 160	.500	351.8	9.0	3.9	1.238	113.4	.411	.823	261.6	499.5	.485	1.161A	111.2	.892	-2.7	6.5	147.0	.355
		11.94	8.09	4.09	3.85	7.25	4.00	15.31	1/1/2	22.5	30.3	15.8	.240	7.298	15.7	255.8	-13.9	91.9D	1.512
4-9690	4-9870	.181	110.5	30.5	1.3	1.132	83.2	.285	1.334	31.4	151.4	.954D	1.715A	100.3	.689	.8	-20.6	257.4	.183
4-9870	5- 48.2	.180	195.2	-9.3	-.8	.574	92.7	.464	1.118	183.1	296.1	.599A	1.637D	70.9	1.362	2.1	5.8	337.8	.464
5- 48.2	5- 170	.464	356.5	8.8	3.6	1.227	111.9	.383	.805	261.4	504.6	.497	1.112A	107.9	.873	-2.8	3.7	151.4	.307
		12.13	8.24	4.44	3.88	7.28	3.81	14.37	1/1/2	24.2	35.2	18.8	.279	6.132	11.7	256.3	-9.0	94.1D	1.430
4-9700	4-9870	.219	109.0	28.6	1.2	1.128	80.3	.299	1.314	43.9	153.8	.921D	1.707A	100.2	.680	1.0	-19.5	254.7	.185
4-9870	5- 50.9	.173	193.9	-9.5	-.9	.580	93.1	.452	1.128	183.7	300.8	.618A	1.638D	72.5	1.365	2.2	6.5	336.9	.434
5- 50.9	5- 180	.434	.7	8.3	3.1	1.218	110.6	.359	.791	261.4	510.2	.507	1.075A	104.6	.857	-2.8	1.1	154.3	.265
		12.55	8.63	4.98	3.91	7.31	3.66	13.61	1/1/2	26.9	41.5	21.7	.319	5.323	8.9	260.4	-4.6	96.3D	1.378
MARS ARRIVAL DATE = 2449880 (11 JUN 1995)																			
4-9650	4-9880	.139	143.9	50.3	3.9	1.123	91.6	.255	1.333	352.0	516.7	.993	1.673A	97.5	.692	-2.3	-33.5	258.3	.158
4-9880	5- 35.2	.231	199.4	-8.5	-.0	.527	93.4	.551	1.050	182.8	270.5	.471A	1.629D	61.3	1.341	1.9	3.5	331.4	.650
5- 35.2	5- 130	.650	335.5	8.1	4.6	1.300	119.4	.530	.942	262.6	486.3	.443	1.441A	121.9	.982	-2.2	15.2	128.6	.539
		12.25	8.92	3.92	3.33	6.73	5.00	19.49	1/1/2	28.4	19.8	6.2	.142	18.604	48.0	249.8	-47.5	84.7L	2.505
4-9660	4-9880	.127	129.5	41.3	2.4	1.126	89.8	.256	1.334	1.1	155.9	.992D	1.676A	97.8	.693	-.7	-26.6	259.9	.159
4-9880	5- 39.1	.214	197.9	-8.5	-.2	.544	94.0	.523	1.071	183.6	277.5	.511A	1.631D	64.1	1.348	1.9	4.0	333.9	.594
5- 39.1	5- 140	.594	341.8	8.7	4.5	1.276	117.2	.485	.891	262.3	490.1	.458	1.323A	118.4	.948	-2.5	12.3	135.7	.473
		11.74	8.39	3.81	3.34	6.75	4.59	17.92	1/1/2	26.1	22.5	9.1	.170	12.600	31.7	251.6	-30.9	86.9L	1.973
4-9670	4-9880	.134	118.9	36.4	1.8	1.128	87.7	.260	1.332	11.0	155.8	.986D	1.677A	98.0	.692	.1	-23.4	260.0	.161
4-9880	5- 42.7	.200	196.3	-8.4	-.4	.557	94.5	.500	1.088	184.5	284.1	.544A	1.632D	66.6	1.353	2.0	4.5	336.1	.546
5- 42.7	5- 150	.546	347.5	9.0	4.3	1.256	115.2	.447	.854	262.1	494.2	.473	1.235A	114.9	.919	-2.7	9.2	142.1	.414
		11.52	8.14	3.87	3.38	6.79	4.27	16.56	1/1/2	26.0	25.8	12.2	.202	9.390	22.7	254.5	-21.6	89.3L	1.695
4-9680	4-9880	.152	111.6	32.9	1.5	1.128	85.5	.266	1.324	21.8	156.5	.973D	1.676A	98.0	.689	.5	-21.5	259.1	.162
4-9880	5- 46.0	.189	194.7	-8.4	-.6	.569	94.9	.481	1.103	185.4	290.1	.573A	1.634D	68.8	1.357	2.0	5.0	337.8	.503
5- 46.0	5- 160	.503	352.8	9.1	4.0	1.241	113.5	.413	.827	262.0	498.8	.486	1.169A	111.5	.895	-2.8	6.2	147.6	.360
		11.50	8.09	4.07	3.41	6.82	4.02	15.41	1/1/2	27.1	29.7	15.3	.238	7.488	16.8	257.2	-15.1	91.7D	1.542
4-9690	4-9880	.180	107.9	30.3	1.3	1.126	83.0	.275	1.311	33.4	158.0	.950D	1.672A	97.9	.683	.8	-20.0	257.1	.163
4-9880	5- 49.0	.181	193.1	-8.5	-.8	.578	95.3	.465	1.116	186.1	295.7	.597A	1.635D	70.8	1.361	2.1	5.7	339.2	.466
5- 49.0	5- 170	.466	357.5	8.9	3.6	1.229	111.9	.384	.808	261.8	503.8	.497	1.118A	108.2	.876	-2.9	3.3	152.0	.312
		11.68	8.23	4.42	3.43	6.84	3.82	14.45	1/1/2	29.1	34.5	18.4	.277	6.252	12.4	259.6	-9.9	94.0D	1.453
4-9700	4-9880	.218	107.1	28.4	1.1	1.122	80.2	.290	1.292	45.9	160.3	.917D	1.666A	97.7	.675	1.1	-18.8	253.9	.164
4-9880	5- 51.7	.174	191.7	-8.6	-1.0	.585	95.6	.453	1.127	186.8	300.6	.617A	1.637D	72.4	1.364	2.1	6.3	340.3	.435
5- 51.7	5- 180	.435	1.7	8.4	3.2	1.220	110.6	.360	.794	261.8	509.4	.508	1.080A	104.9	.860	-2.9	.6	155.1	.269
		12.09	8.63	4.96	3.46	6.86	3.68	13.67	1/1/2	32.3	40.6	21.3	.317	5.399	9.2	261.7	-5.4	96.2D	1.396
MARS ARRIVAL DATE = 2449890 (21 JUN 1995)																			
4-9650	4-9890	.146	145.8	58.0	4.9	1.120	91.3	.246	1.318	353.3	522.6	.993	1.643A	95.5	.691	-3.2	-39.1	257.5	.145
4-9890	5- 35.9	.233	197.7	-7.9	-.1	.530	96.7	.554	1.047	185.4	269.7	.467A	1.627D	61.0	1.340	1.9	3.5	332.9	.655
5- 35.9	5- 130	.655	336.5	8.2	4.7	1.304	119.6	.535	.953	263.0	485.6	.443	1.462A	122.3	.988	-2.3	14.9	129.0	.547
		12.13	9.06	4.00	3.06	6.47	5.06	19.69	1/1/2	34.7	19.4	5.9	.140	19.338	53.3	252.4	-52.7	84.3L	2.567
4-9660	4-9890	.126	126.4	43.8	2.6	1.122	89.5	.248	1.316	2.5	161.9	.992D	1.645A	95.7	.691	-.8	-27.6	259.7	.142
4-9890	5- 39.8	.217	196.0	-7.7	-.3	.548	97.1	.525	1.069	186.5	276.9	.507A	1.630D	63.9	1.347	1.9	3.9	335.4	.599
5- 39.8	5- 140	.599	342.7	8.8	4.6	1.279	117.4	.489	.898	262.8	489.3	.459	1.338A	118.8	.953	-2.6	12.0	136.2	.480
		11.45	8.44	3.79	3.00	6.41	4.65	16.08	1/1/2	30.8	22.1	8.8	.168	13.070	34.4	253.3	-33.6	86.6L	2.024
4-9670	4-9890	.132	115.5	37.0	1.6	1.124	87.5	.251	1.315	12.6	162.0	.985D	1.645A	95.8	.690	.1	-23.3	259.7	.144
4-9890	5- 43.4	.203	194.1	-7.6	-.5	.563	97.4	.501	1.087	187.5	283.6	.542A	1.632D	66.4	1.353	1.9	4.4	337.5	.549
5- 43.4	5- 150	.549	348.5	9.1	4.4	1.259	115.3	.450	.859	262.5	493.5	.473	1.246A	115.3	.923	-2.8	8.9	142.6	.419
		11.22	8.19	3.85	3.03	6.44	4.34	16.69	1/1/2	30.8	25.3	11.9	.200	9.648	24.4	255.9	-23.3	89.1L	1.726
4-9680	4-9890	.151	108.8	32.8	1.4	1.123	85.3	.257	1.307	23.5	162.7	.971D	1.644A	95.8	.687	.6	-20.9	258.6	.145
4-9890	5- 46.7	.193	192.2	-7.5	-.6	.574	97.8	.482	1.103	188.5	289.8	.572A	1.635D	68.7	1.357	2.0	4.9	339.2	.505
5- 46.7	5- 160	.505	353.7	9.2	4.0	1.243	113.5	.415	.831	262.4	498.0	.486	1.176A	111.9	.899	-2.9	5.9	148.1	.365
		11.20	8.15	4.06	3.05	6.46	4.09	15.52	1/1/2	32.2	29.1	15.1	.235	7.633	17.8	258.5	-16.3	91.5D	1.562
4-9690	4-9890	.180	105.8	30.0	1.2	1.122	82.8	.268	1.294	35.1	164.2	.948D	1.641A	95.8	.681	.9	-19.3	256.2	.148
4-9890	5- 49.7	.184	190.5	-7.4	-.8	.584	98.0	.466	1.117	189.4	295.5	.596A	1.637D	70.7	1.361	2.0	5.5	340.5	.488
5- 49.7	5- 170	.468	358.5	8.9	3.6	1.231	112.0	.386	.811	262.2	503.1	.498	1.124A	108.5	.878	-3.0	2.9	152.7	.316
		11.38	8.31	4.41	3.07	6.48	3.90	14.54	1/1/2	34.7	33.8	18.2	.275	6.336	13.1	260.8	-10.8	93.9D	1.483
4-9700	4-9890	.217	105.6	28.0	1.0	1.118	80.1	.283	1.275	47.3	166.3	.914D	1.636A	95.3	.673	1.1	-17.9	252.5	.147
4-9890	5- 52.4	.178	188.9	-7.4	-1.0	.591	98.3	.454	1.128	190.2	300.5	.616A	1.640D	72.4	1.365	2.0	6.1	341.5	.436
5- 52.4	5- 180	.436	2.7	8.4	3.2	1.222	110.6	.361	.782	262.1	508.6	.508	1.084A	105.2	.862	-3.0	.2	155.9	.273
		11.79	8.70	4.94	3.09	6.50	3.76	13.74	1/1/2	38.4	39.8	21.2	.316	5.447	9.7	262.8	-6.2	96.2D	1.405
MARS ARRIVAL DATE = 2449900 (1 JUL 1995)																			
4-9650	4-9900	.177	160.2	70.4	7.4	1.117	91.1	.239	1.306	354.4	528.4	.994	1.619A	93.6	.692	-5.7	-51.7	253.6	.148
4-9900	5- 36.7	.239	195.5	-7.1	-.1	.537	100.2	.557	1.047	188.3	269.2	.483A	1.630D	60.7	1.340	1.9	3.4	334.4	.661
5- 36.7	5- 130	.661	337.5	8.3	4.8	1.309	119.8	.540	.964	263.5	484.9	.444	1.484A	122.6	.994	-2.5	14.7	129.4	.558
		12.65	9.58	4.37	3.05	6.46	5.20	19.89	1/1/2	45.8	19.0	5.8	.138	19.724	58.3	255.3	-57.6	84.1L	2.877

STOPOVER TIME = 0 DAYS 1995 INBOUND SWINGBY MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2449900
1 JUL 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / PSI 2 / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC	
4-9660	4-9900	.125	124.1	46.6	2.8	1.119	89.3	.241	1.306	3.8	167.8	.991D	1.620A	93.8	.691	-1.0	-29.2	258.8	.128	
4-9900	5- 40.5	.222	193.5	-6.8	-.3	.555	100.4	.528	1.069	189.6	276.5	.505A	1.634D	63.7	1.347	1.9	3.8	336.7	.603	
5- 40.5	5- 140	.603	343.7	8.9	4.7	1.283	117.5	.493	.906	263.2	488.6	.459	1.352A	119.1	.958	-2.7	11.7	136.6	.487	
		11.31	8.58	3.79	2.73	6.14	4.80	18.24	1/1/2	36.2	21.6	8.6	.165	13.394	37.0	254.9	-36.3	86.3L	2.049	
4-9670	4-9900	.131	112.8	37.3	1.8	1.120	87.3	.244	1.302	13.9	167.9	.984D	1.620A	93.8	.690	.1	-23.1	258.9	.129	
4-9900	5- 44.1	.209	191.4	-6.5	-.5	.570	100.6	.504	1.089	190.8	283.3	.540A	1.638D	66.3	1.353	1.9	4.3	338.7	.552	
5- 44.1	5- 150	.552	349.4	9.2	4.4	1.262	115.4	.453	.865	262.9	492.8	.473	1.256A	115.6	.927	-2.9	8.6	143.0	.425	
		11.06	8.32	3.84	2.74	6.15	4.48	16.82	1/1/2	36.3	24.8	11.7	.197	9.814	25.9	257.2	-24.9	88.9L	1.738	
4-9680	4-9900	.130	106.7	32.5	1.3	1.120	85.1	.251	1.294	24.8	168.7	.969D	1.619A	93.7	.686	.6	-20.2	257.4	.130	
4-9900	5- 47.4	.199	189.3	-6.2	-.7	.583	100.8	.484	1.106	192.0	289.7	.571A	1.642D	68.6	1.358	1.9	4.8	340.3	.508	
5- 47.4	5- 160	.508	354.6	9.2	4.1	1.246	113.6	.417	.835	262.7	497.3	.487	1.184A	112.2	.902	-3.0	5.5	148.6	.370	*
		11.04	8.29	4.05	2.76	6.17	4.24	15.62	1/1/2	38.0	28.6	14.9	.233	7.714	18.9	259.7	-17.4	91.4D	1.566	
4-9690	4-9900	.179	104.3	29.5	1.1	1.118	82.7	.262	1.282	36.3	170.1	.946D	1.617A	93.5	.681	.9	-18.3	254.6	.131	
4-9900	5- 50.4	.191	187.4	-6.1	-.6	.593	101.0	.468	1.120	193.0	295.5	.596A	1.645D	70.6	1.362	1.9	5.3	341.5	.469	
5- 50.4	5- 170	.469	359.4	9.0	3.7	1.233	112.0	.387	.814	262.6	502.4	.499	1.129A	108.8	.881	-3.0	2.6	153.3	.320	
		11.23	8.46	4.40	2.78	6.19	4.06	14.62	1/1/2	41.0	33.2	18.1	.273	6.370	13.8	261.9	-11.7	93.9D	1.465	
4-9700	4-9900	.215	104.7	27.6	.9	1.114	80.1	.278	1.264	48.3	172.0	.913D	1.615A	93.1	.673	1.2	-16.8	250.5	.132	
4-9900	5- 53.1	.185	185.7	-6.0	-1.0	.600	101.1	.456	1.132	193.9	300.6	.616A	1.648D	72.3	1.366	2.0	5.9	342.4	.457	
5- 53.1	5- 180	.437	3.6	8.5	3.2	1.223	110.7	.362	.799	262.5	507.9	.509	1.088A	105.5	.864	-3.1	-.1	156.6	.276	
		11.65	8.84	4.92	2.81	6.22	3.92	13.80	1/1/2	45.1	39.0	21.1	.315	5.455	10.1	263.9	-7.0	98.2D	1.402	

MARS ARRIVAL DATE = 2449910 (11 JUL 1995)

4-9640	4-9910	.137	121.6	-17.3	-4.2	1.111	92.6	.235	1.296	346.2	534.9	.992	1.601A	91.6	.693	5.9	8.7	257.9	.134	
4-9910	5- 33.4	.270	195.0	-6.4	-.1	.524	104.2	.597	1.024	190.1	260.9	.413A	1.635D	57.0	1.332	2.0	3.0	333.2	.734	
5- 33.4	5- 120	.734	331.9	7.7	4.9	1.347	122.4	.600	1.067	264.2	480.8	.427	1.707A	126.6	1.045	-2.3	17.1	122.0	.640	
		12.72	9.88	3.90	2.84	6.25	5.98	22.03	2/1/2	53.2	16.3	4.9	.112	23.553	105.4	241.5	74.6	85.8L	2.519	
4-9660	4-9910	.128	122.9	50.7	3.3	1.117	89.1	.235	1.297	4.7	173.5	.991D	1.602A	92.0	.693	-1.5	-32.2	257.0	.116	
4-9910	5- 41.2	.232	190.6	-5.6	-.4	.566	104.0	.532	1.074	193.0	276.5	.503A	1.645D	63.5	1.349	1.9	5.7	337.9	.607	
5- 41.2	5- 140	.607	344.6	9.0	4.8	1.286	117.6	.497	.913	263.6	487.9	.459	1.368A	119.5	.963	-2.9	11.4	137.0	.493	
		11.36	8.85	3.81	2.51	5.93	5.04	18.40	1/1/2	42.6	21.2	8.5	.163	13.511	39.2	256.3	-38.4	86.2L	2.039	
4-9670	4-9910	.130	110.8	37.5	1.8	1.118	87.1	.239	1.292	14.9	173.6	.983D	1.602A	92.0	.691	.1	-22.8	257.2	.116	
4-9910	5- 44.8	.220	188.3	-5.2	-.5	.582	104.0	.507	1.095	194.5	283.3	.540A	1.651D	66.2	1.355	1.9	4.1	339.6	.555	
5- 44.8	5- 150	.555	350.3	9.3	4.5	1.265	115.5	.456	.870	263.3	492.1	.474	1.267A	116.0	.931	-3.0	8.3	143.4	.431	
		11.07	8.56	3.83	2.51	5.92	4.73	16.95	1/1/2	42.5	24.3	11.6	.195	9.854	27.2	258.3	-26.2	88.8L	1.726	
4-9680	4-9910	.149	105.2	31.9	1.2	1.117	85.0	.246	1.285	25.7	174.4	.968D	1.601A	91.8	.688	.7	-19.2	255.5	.117	
4-9910	5- 48.0	.210	186.1	-4.8	-.7	.594	104.0	.487	1.113	195.8	289.8	.571A	1.656D	68.5	1.360	1.9	4.6	341.3	.510	
5- 48.0	5- 160	.510	355.5	9.3	4.2	1.248	113.7	.420	.839	263.1	496.7	.487	1.192A	112.5	.905	-3.1	5.2	149.1	.375	
		11.06	8.53	4.04	2.53	5.94	4.49	15.72	1/1/2	44.6	28.1	14.9	.231	7.707	19.7	260.7	-18.4	91.4D	1.550	
4-9690	4-9910	.178	103.3	28.9	1.0	1.116	82.6	.258	1.272	37.1	175.6	.945D	1.600A	91.5	.683	1.0	-17.1	252.4	.118	
4-9910	5- 51.0	.202	184.2	-4.6	-.9	.605	104.1	.472	1.129	197.0	295.8	.596A	1.661D	70.6	1.365	1.9	5.1	342.4	.471	
5- 51.0	5- 170	.471	.2	9.1	3.7	1.235	112.1	.389	.817	262.9	501.7	.499	1.135A	109.1	.884	-3.1	2.2	153.8	.324	
		11.26	8.70	4.39	2.55	5.97	4.32	14.70	1/1/2	48.0	32.6	18.2	.271	6.339	14.5	262.9	-12.5	94.0D	1.447	
4-9700	4-9910	.214	104.1	27.0	.8	1.112	80.1	.274	1.256	48.9	177.3	.912D	1.599A	91.0	.675	1.2	-15.4	247.9	.121	
4-9910	5- 53.7	.197	182.4	-4.4	-1.0	.613	104.2	.459	1.141	198.0	301.0	.617A	1.665D	72.4	1.368	1.9	5.7	343.2	.438	
5- 53.7	5- 180	.438	4.4	8.5	3.3	1.225	110.7	.363	.801	262.8	507.2	.510	1.092A	105.8	.866	-3.1	-.5	157.3	.280	
		11.67	9.08	4.89	2.59	6.01	4.18	13.86	1/1/2	52.6	38.3	21.3	.313	5.410	10.6	264.7	-7.7	96.4D	1.381	

MARS ARRIVAL DATE = 2449920 (21 JUL 1995)

4-9640	4-9920	.117	124.5	-1.3	-2.1	1.110	92.5	.231	1.290	346.7	540.1	.992	1.588	90.0	.696	3.8	1.2	255.9	.112	
4-9920	5- 34.1	.285	192.2	-5.3	-.0	.539	108.7	.603	1.032	193.4	260.8	.410A	1.654D	56.6	1.335	2.0	2.9	334.5	.741	
5- 34.1	5- 120	.741	332.9	7.8	5.1	1.353	122.6	.607	1.087	264.7	480.0	.427	1.746A	127.0	1.053	-2.5	16.8	122.4	.650	
		12.52	10.08	3.71	2.45	5.86	6.37	22.29	2/1/2	55.1	15.9	5.2	.109	22.183	107.9	243.8	72.1	86.0L	2.318	
4-9660	4-9920	.137	124.4	58.8	4.3	1.115	89.0	.231	1.289	5.4	178.9	.991D	1.588A	90.3	.696	-2.5	-39.6	253.3	.109	
4-9920	5- 41.9	.248	187.4	-4.2	-.4	.582	107.8	.537	1.085	196.9	276.5	.503A	1.667D	63.3	1.352	1.8	3.6	336.9	.612	
5- 41.9	5- 140	.612	345.5	9.2	4.9	1.290	117.8	.502	.922	264.0	487.2	.459	1.384A	119.8	.968	-3.0	11.1	137.4	.500	
		11.72	9.33	3.91	2.39	5.81	5.43	18.56	1/1/2	50.9	20.8	8.6	.161	13.362	40.6	257.6	-39.9	86.1L	1.985	
4-9670	4-9920	.129	109.4	37.5	1.7	1.116	87.0	.235	1.285	15.6	179.1	.983D	1.588A	90.3	.694	.1	-22.4	254.8	.105	
4-9920	5- 45.4	.235	185.1	-3.8	-.6	.597	107.6	.512	1.107	198.5	283.7	.540A	1.674D	66.1	1.359	1.8	4.0	340.6	.559	
5- 45.4	5- 150	.559	351.2	9.4	4.6	1.268	115.6	.459	.876	263.7	491.4	.474	1.278A	116.3	.935	-3.1	8.0	143.9	.437	
		11.26	8.94	3.82	2.33	5.74	5.11	17.08	1/1/2	49.6	23.9	11.8	.193	9.730	28.1	259.3	-27.1	88.9L	1.681	
4-9680	4-9920	.148	104.2	31.1	1.1	1.116	84.9	.243	1.278	26.4	179.8	.967D	1.588A	90.1	.691	.6	-17.8	253.0	.107	
4-9920	5- 48.7	.226	182.9	-3.4	-.7	.610	107.5	.493	1.127	200.1	290.4	.572A	1.681D	68.5	1.364	1.8	4.5	342.0	.512	
5- 48.7	5- 160	.512	356.4	9.4	4.2	1.250	113.8	.422	.843	263.5	496.0	.488	1.199A	112.8	.908	-3.2	4.9	149.6	.379	
		11.26	8.91	4.03	2.35	5.77	4.88	15.82	1/1/2	52.0	27.6	15.1	.229	7.586	20.4	261.6	-19.1	91.6D	1.508	
4-9690	4-9920	.177	102.2	28.1	.8	1.114	82.6	.254	1.266	37.6	180.9	.944D	1.588	89.7	.686	1.1	-15.4	249.6	.109	
4-9920	5- 51.7	.219	180.9	-3.0	-.9	.621	107.4	.477	1.143	201.4	296.5	.598A	1.688D	70.6	1.369	1.8	4.9	342.9	.473	
5- 51.7	5- 170	.473	1.1	9.2	3.8	1.237	112.1	.391	.820	263.3	501.0	.500	1.140A	109.4	.886	-3.2	1.9	154.3	.328	
		11.47	9.08	4.37	2.38	5.80	4.71	14.78	1/1/2	55.7	32.1	18.5	.269	6.224	15.0	263.6	-13.1	94.2D	1.406	
4-9700	4-9920	.211	103.8	26.3	.7	1.111	80.1	.270	1.250	49.1	182.2	.912D	1.588	89.2	.678	1.3	-13.8	244.8	.112	
4-9920	5- 54.3	.214	179.2	-2.8	-1.0	.629	107.4	.465	1.156	202.6	301.9	.619A	1.694D	72.4	1.373	1.8	5.4	343.6	.439	
5- 54.3	5- 180	.439	5.3	8.6	3.3	1.226	110.7	.364	.803	263.2	506.5	.511	1.096A	106.1	.868	-3.2	-.9	157.9	.283	
		11.88	9.45	4.86	2.44	5.86	4.58	13.92	1/1/2	60.6	37.6	21.8	.312	5.300	11.0	265.5	-8.3	96.6D	1.341	

MARS ARRIVAL DATE = 2449930 (31 JUL 1995)

4-9640	4-9930	.110	126.2	8.1	-1.1	1.109	92.4	.228	1.285	346.9	545.2	.993	1.578	88.5	.701	2.8	-2.6	253.0	.100	
4-9930	5- 35.0	.307	189.2	-4.1	-.0	.561	113.4	.610	1.048	197.3	261.0	.409A	1.687D	56.4	1.340	1.9	2.9	335.7	.749	
5- 35.0	5- 120	.749	334.0	8.0	5.3	1.360	122.8	.615	1.109	265.2	479.2	.427	1.790A	127.5	1.062	-2.7	16.5	122.8	.661	
		12.85	10.61	3.65	2.24	5.66	6.96	22.57	2/1/2	60.7	15.5	5.4	.107	21.099	108.0	245.6	72.0	85.9L	2.151	
4-9650	4-9930	.114	116.8	-2.6	-2.3	1.111	90.7	.227	1.286	356.1	544.4	.994	1.578	88.7	.701	4.1	4.5	255.1	.109	
4-9930	5- 38.9	.286	186.7	-3.5	-.2	.584	112.5	.573	1.078	199.3	269.4	.460A	1.695D	60.0	1.350	1.8	3.2	337.8	.679	
5- 38.9	5- 130	.679	340.4	8.8	5.2	1.323	120.3	.556	1.001	264.8	482.7	.444	1.558A	123.8	1.013	-3.0	13.8	130.6	.580	
		12.46	10.08	3.68	2.38	5.80	6.40	20.51	2/1/2	61.3	17.8	6.2	.131	18.550	65.5	261.9	-64.7	84.0L	2.290	
4-9670	4-9930	.128	108.6	37.2	1.7	1.114	87.0	.233	1.280	15.9	184.3	.982D	1.578	88.7	.699	.2	-21.6	251.7	.097	
4-9930	5- 46.1	.258	181.9	-2.3	-.6	.619	111.4	.519	1.128	203.2	284.7	.542A	1.714D	66.1	1.365	1.8	3.9	341.2	.562	
5- 46.1	5- 150	.562	352.1	9.5	4.7	1.271	115.8	.462	.882	264.1	490.7	.474	1.289A	116.6	.939	-3.2	7.7	144.3	.442	
		11.68	9.49	3.81	2.19	5.61	5.68	17.21	1/1/2	57.4	23.5	12.2	.190	9.404	28.4	260.1	-27.5	89.2L	1.598	
4-9680	4-9930	.147	103.6	29.8	.9	1.114	84.9	.240	1.273	26.6	184.9	.967D	1.578	88.5	.695	1.0	-15.8	249.9	.099	
4-9930	5- 49.4	.249	179.8	-1.9	-.8	.632	111.1	.500	1.149	204.9	291.5	.574A	1.723D	68.5	1.371	1.7	4.3	342.4	.515	
5- 49.4	5- 160	.515	357.3	9.5	4.3	1.252	113.8	.424	.848	263.8	495.3	.488	1.207A	113.1	.912	-3.3	4.6	150.0	.384	
		11.68	9.46	4.01	2.22	5.65	5.45	15.93	1/1/2	60.1	27.1	15.7	.227	7.328	20.7	262.2	-19.4	91.9D	1.435	
4-9690	4-9930	.175	102.5	27.0	.6	1.113	82.7	.252	1.262	37.7	185.8	.944D	1.579	88.1	.691	1.3	-13.4	246.3	.102	
4-9930	5- 52.3	.242	177.9	-1.5	-.9	.642	110.9	.485	1.166	206.4	297.7	.601A	1.731D	70.7	1.375	1.7	4.7	343.2	.474	
5- 52.3	5- 170	.474	1.9	9.2	3.8	1.238	112.2	.392	.823	263.6	500.4	.500	1.146A	109.7	.889	-3.3	1.6	154.8	.332	
		11.89	9.62	4.35	2.27	5.69	5.27	14.86	1/1/2	64.0	31.5	19.2	.267	6.009	15.3	264.2	-13.5	94.6D	1.338	
4-9700	4-9930	.209	103.8	25.5	.5	1.110	80.3	.268	1.247	49.0	186.9	.913D	1.581	87.5	.684	1.4	-11.8	241.4	.106	
4-9930	5- 55.0	.237	176.3	-1.3	-1.0	.650	110.7	.473	1.181	207.7	303.2	.622A	1.739D	72.5	1.379	1.7	5.2	343.7	.440	
5- 55.0	5- 180	.440	6.1	8.7	3.3	1.228	110.7	.366	.806	263.5	505.9	.511	1.100A	106.4	.871	-3.2	-1.2	156.5	.287	
		12.31	9.98	4.82	2.34	5.76	5.15	13.98	1/1/2	69.0	37.0	22.6	.310	5.111	11.3	266.0	-8.8	97.1D	1.276	

MARS ARRIVAL DATE = 2449940 (10 AUG 1995)

4-9650	4-9940	.105	119.5	12.2	-.8	1.110	90.7	.225	1.282	356.2	549.4	.994	1.571	87.3	.707	2.6	-2.9	251.2	.095	
4-9940	5- 39.8	.317	183.7	-2.2	-.3	.614	117.0	.583	1.109	204.1	270.6	.463A	1.756D	59.9	1.360	1.8	3.1	338.5	.686	
5- 39.8	5- 130	.686	341.5	9.0	5.4	1.329	120.5	.563	1.016	265.3	481.9	.444	1.588A	124.2	1.021	-3.2	13.4	131.0	.589	
		12.98	10.62	3.60	2.16	5.58	7.21	20.75	2/1/2	66.8	17.4	6.6	.128	17.375	63.5	261.9	-62.7	84.2L	2.095	

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2449940
10 AUG 1995

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-9660	4-9940	.124	108.3	-7.6	-3.2	1.112	88.9	.226	1.281	5.8	189.1	.991D	1.570	87.4	.706	5.0	11.0	253.0	.111
4-9940	5- 43.4	.300	181.3	-1.6	-.5	.632	116.0	.553	1.137	206.4	278.7	.508A	1.767D	63.2	1.368	1.7	3.4	340.2	.622
5- 43.4	5- 140	.622	347.5	9.5	5.1	1.298	118.1	.511	.940	264.9	485.7	.460	1.420A	120.6	.978	-3.3	10.5	138.2	.515
		12.97	10.56	3.77	2.41	5.83	6.78	18.92	2/1/2	69.8	20.0	9.5	.156	12.102	40.2	259.1	-39.4	86.7L	1.727
4-9670	4-9940	.126	108.3	36.2	1.5	1.113	87.0	.230	1.276	16.0	189.2	.982D	1.570	87.3	.704	.3	-20.0	248.0	.091
4-9940	5- 46.9	.288	179.0	-1.0	-.7	.647	115.4	.530	1.163	208.6	286.3	.547A	1.779D	66.1	1.374	1.7	3.8	341.4	.566
5- 46.9	5- 150	.566	353.1	9.7	4.8	1.274	115.9	.466	.888	264.5	490.0	.475	1.302A	117.0	.944	-3.4	7.4	144.7	.449
		12.36	10.26	3.80	2.10	5.52	6.47	17.36	1/1/2	66.0	23.0	13.0	.188	8.853	28.0	260.7	-27.1	89.7L	1.474
4-9680	4-9940	.145	103.4	27.7	.6	1.113	85.0	.238	1.269	26.6	189.7	.967D	1.571	87.0	.701	1.2	-12.8	246.5	.094
4-9940	5- 50.1	.280	177.0	-.6	-.8	.660	114.9	.511	1.185	210.5	293.3	.579A	1.791D	68.7	1.380	1.7	4.1	342.4	.518
5- 50.1	5- 160	.518	356.2	9.6	4.3	1.255	113.9	.427	.892	264.2	494.6	.488	1.216A	113.5	.915	-3.4	4.3	150.5	.390
		12.37	10.23	3.99	2.14	5.57	6.24	16.04	1/1/2	68.8	26.6	16.6	.224	8.916	20.6	262.7	-19.3	92.6D	1.327
4-9690	4-9940	.173	102.5	25.5	.4	1.112	82.8	.249	1.259	37.5	190.5	.945D	1.573	86.6	.696	1.5	-10.8	242.9	.097
4-9940	5- 53.0	.273	175.3	-.2	-.9	.670	114.5	.497	1.204	212.2	299.6	.606A	1.802D	70.9	1.385	1.7	4.5	343.0	.476
5- 53.0	5- 170	.476	2.9	9.3	3.9	1.240	112.2	.394	.827	264.0	499.6	.501	1.153A	110.0	.892	-3.4	1.3	155.4	.337
		12.58	10.39	4.32	2.20	5.62	6.07	14.95	1/1/2	72.8	30.9	20.3	.265	5.675	15.4	264.6	-15.6	95.3D	1.239
4-9700	4-9940	.206	104.0	24.4	.3	1.109	80.4	.265	1.245	48.5	191.4	.915D	1.576	85.9	.690	1.6	-9.6	238.0	.102
4-9940	5- 55.7	.268	173.9	.0	-1.1	.678	114.3	.485	1.219	213.6	305.2	.627A	1.811D	72.8	1.389	1.7	5.0	343.3	.441
5- 55.7	5- 180	.441	7.0	8.7	3.3	1.229	110.8	.367	.808	263.9	505.1	.512	1.105A	106.7	.873	-3.3	-1.6	159.1	.290
		13.00	10.72	4.78	2.28	5.70	5.94	14.05	1/1/2	77.7	36.3	23.9	.309	4.851	11.5	266.2	-9.1	97.9D	1.183

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2449850
12 MAY 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2449850 (12 MAY 1995)																			
4-9640	4-9850	.169	156.1	42.1	4.2	1.136	94.6	.295	1.394	339.5	500.6	.983	1.805A	103.6	.705	-2.8	-32.1	253.7	.212
4-9850	5- 43.7	.193	198.6	-9.7	-.5	.563	87.5	.480	1.115	177.3	292.0	.580A	1.650	69.3	1.361	2.1	5.4	333.1	.496
5- 43.7	5- 160	.496	349.7	8.8	3.8	1.234	113.2	.406	.815	260.7	501.2	.484	1.146A	110.4	.885	-2.5	7.3	145.8	.344
		12.90	8.36	4.27	4.54	7.93	4.09	15.09	1/1/2	19.4	31.6	16.8	.245	6.849	13.7	252.9	-11.7	92.4D	1.432
4-9650	4-9850	.150	149.0	36.2	2.8	1.141	92.9	.297	1.407	347.1	498.3	.989	1.825A	104.2	.709	-1.2	-27.3	256.0	.217
4-9850	5- 46.7	.184	197.6	-10.1	-.7	.571	88.1	.465	1.126	177.8	297.1	.602A	1.649	71.1	1.364	2.2	6.1	334.7	.461
5- 46.7	5- 170	.461	354.4	8.6	3.5	1.223	111.8	.379	.798	260.6	506.3	.495	1.101A	107.1	.867	-2.6	4.5	149.9	.298
		12.59	7.93	4.04	4.66	8.05	3.89	14.20	1/1/2	16.2	36.9	19.7	.283	5.836	10.5	255.5	-7.2	94.5D	1.367
4-9660	4-9850	.143	141.4	33.9	2.2	1.145	91.0	.300	1.416	355.5	496.7	.991	1.840A	104.7	.712	-.5	-24.9	257.2	.222
4-9850	5- 49.2	.177	196.7	-10.5	-.9	.577	88.5	.453	1.135	178.2	301.6	.620A	1.649	72.7	1.367	2.3	6.9	335.8	.433
5- 49.2	5- 180	.433	358.5	8.2	3.1	1.215	110.5	.357	.786	260.5	511.9	.505	1.066A	103.8	.852	-2.7	2.1	152.4	.257
		12.50	7.70	3.96	4.80	8.19	3.74	13.47	1/1/2	14.9	43.5	22.5	.321	5.118	8.3	257.6	-3.2	96.5D	1.323
4-9670	4-9850	.145	132.6	32.8	1.8	1.148	88.9	.304	1.420	4.7	135.9	.989D	1.851A	105.1	.714	.0	-23.4	257.8	.227
4-9850	5- 51.4	.172	195.8	-10.9	-1.1	.581	88.8	.445	1.141	178.5	305.4	.634A	1.649	73.9	1.368	2.4	7.7	336.6	.410
5- 51.4	5- 190	.410	1.9	7.4	2.7	1.209	109.6	.340	.777	260.4	518.2	.512	1.041A	100.5	.840	-2.7	.2	152.9	.223
		12.53	7.62	4.00	4.91	8.30	3.62	12.91	1/1/2	14.5	52.2	25.1	.358	4.603	7.7	259.2	.6	98.3D	1.289
4-9680	4-9850	.160	124.2	31.6	1.6	1.150	86.5	.309	1.418	14.8	136.0	.980D	1.856A	105.4	.713	.4	-22.2	257.6	.231
4-9850	5- 53.0	.168	195.2	-11.2	-1.2	.584	89.0	.439	1.146	178.7	308.1	.643A	1.649	74.8	1.370	2.5	8.3	337.1	.394
5- 53.0	5- 200	.394	4.5	6.4	2.2	1.204	108.9	.328	.770	260.1	525.2	.517	1.023A	97.0	.830	-2.6	-.5	150.5	.196
		12.72	7.71	4.16	5.01	8.39	3.55	12.52	1/1/2	14.8	63.8	27.2	.387	4.248	8.6	260.2	4.0	99.7D	1.256
MARS ARRIVAL DATE = 2449860 (22 MAY 1995)																			
4-9640	4-9860	.168	157.9	49.1	5.1	1.129	94.1	.279	1.366	340.9	506.5	.985	1.747A	101.3	.698	-3.6	-36.1	254.4	.193
4-9860	5- 44.5	.190	197.9	-9.6	-.6	.563	89.8	.480	1.110	179.8	291.3	.578A	1.642	69.2	1.360	2.1	5.3	334.8	.498
5- 44.5	5- 160	.498	350.8	8.9	3.9	1.236	113.3	.408	.819	261.1	500.3	.484	1.153A	110.8	.889	-2.6	6.9	146.4	.349
		12.39	8.30	4.26	4.09	7.49	4.03	15.20	1/1/2	24.1	30.9	16.2	.242	7.081	14.7	254.4	-12.7	92.1D	1.474
4-9650	4-9860	.143	146.6	40.2	3.1	1.134	92.4	.280	1.376	348.8	504.5	.990	1.761A	101.9	.701	-1.5	-28.6	257.2	.195
4-9860	5- 47.5	.181	196.7	-9.8	-.7	.571	90.3	.465	1.121	180.3	296.5	.600A	1.642D	71.0	1.363	2.1	6.0	336.3	.463
5- 47.5	5- 170	.463	355.5	8.7	3.5	1.225	111.8	.381	.801	261.0	505.4	.496	1.107A	107.5	.870	-2.7	4.1	150.7	.303
		11.93	7.80	3.97	4.13	7.53	3.83	14.28	1/1/2	19.6	36.0	19.2	.281	5.991	11.0	256.9	-8.1	94.3D	1.401
4-9660	4-9860	.136	137.2	36.5	2.2	1.138	90.6	.282	1.381	357.5	503.2	.992	1.771A	102.3	.703	-.5	-25.3	258.5	.199
4-9860	5- 50.1	.174	195.6	-10.2	-.9	.578	90.7	.453	1.131	180.8	301.2	.619A	1.642D	72.6	1.365	2.2	6.7	337.4	.435
5- 50.1	5- 180	.433	359.6	8.2	3.1	1.217	110.6	.358	.788	260.9	511.0	.506	1.071A	104.2	.855	-2.8	1.6	153.4	.261
		11.80	7.57	3.89	4.23	7.63	3.68	13.54	1/1/2	18.2	42.4	22.1	.320	5.227	8.6	259.0	-3.9	96.4D	1.353
4-9670	4-9860	.140	127.6	34.4	1.8	1.140	88.5	.285	1.382	7.0	142.7	.988D	1.776A	102.6	.704	.1	-23.4	258.9	.202
4-9860	5- 52.3	.169	194.6	-10.5	-1.1	.583	91.0	.444	1.138	181.3	305.1	.633A	1.642D	73.9	1.367	2.3	7.5	338.2	.410
5- 52.3	5- 190	.410	3.1	7.5	2.7	1.210	109.6	.341	.779	260.8	517.2	.514	1.044A	100.9	.842	-2.8	-.4	154.2	.226
		11.82	7.50	3.93	4.32	7.71	3.57	12.96	1/1/2	17.9	50.8	24.7	.358	4.679	7.6	260.6	-.0	98.3D	1.316
4-9680	4-9860	.156	119.3	32.4	1.6	1.141	86.1	.290	1.377	17.4	143.0	.977D	1.777A	102.8	.702	.4	-22.1	258.5	.205
4-9860	5- 53.9	.166	193.9	-10.8	-1.2	.586	91.2	.437	1.143	181.6	307.9	.643A	1.643D	74.8	1.369	2.4	8.1	338.7	.393
5- 53.9	5- 200	.393	5.7	6.4	2.2	1.205	108.9	.328	.772	260.5	524.1	.519	1.025A	97.5	.832	-2.8	-1.5	152.2	.198
		11.99	7.61	4.11	4.38	7.77	3.49	12.55	1/1/2	18.4	62.0	26.9	.389	4.299	8.2	261.8	3.5	99.7D	1.282
4-9690	4-9860	.183	113.9	30.4	1.4	1.139	83.5	.299	1.365	28.9	144.4	.957D	1.773A	102.9	.697	.7	-21.0	257.3	.207
4-9860	5- 54.7	.164	193.5	-11.0	-1.3	.587	91.3	.434	1.145	181.7	309.4	.648A	1.643D	75.3	1.369	2.4	8.4	338.9	.385
5- 54.7	5- 210	.385	7.3	5.1	1.7	1.202	108.6	.322	.767	259.9	531.9	.520	1.014A	93.8	.824	-2.9	-.6	146.7	.180
		12.34	7.92	4.46	4.43	7.82	3.46	12.31	1/1/2	19.8	76.9	28.4	.405	4.075	9.7	262.3	6.7	100.4D	1.248
MARS ARRIVAL DATE = 2449870 (1 JUN 1995)																			
4-9610	4-9870	.184	131.5	-3.7	-3.4	1.108	98.0	.271	1.314	320.9	520.6	.958	1.670A	96.9	.680	4.7	-2.3	251.3	.158
4-9870	5- 34.4	.230	200.6	-8.9	-.0	.526	90.4	.549	1.056	180.3	271.4	.476A	1.635D	61.6	1.343	1.9	3.6	329.7	.645
5- 34.4	5- 130	.645	334.6	8.0	4.5	1.295	119.3	.525	.932	262.1	487.1	.443	1.421A	121.5	.976	-2.1	15.5	128.2	.531
		12.79	9.46	4.47	3.33	6.74	4.98	19.30	2/1/2	37.5	20.2	6.5	.145	17.618	42.8	247.4	-42.3	85.1L	2.405
4-9640	4-9870	.181	164.6	58.6	6.7	1.124	93.7	.266	1.345	342.3	512.4	.987	1.702A	99.1	.693	-5.2	-43.4	253.9	.180
4-9870	5- 45.2	.189	196.6	-9.1	-.6	.565	92.3	.480	1.106	182.5	290.6	.575A	1.636D	69.0	1.358	2.0	5.2	336.4	.500
5- 45.2	5- 160	.500	351.8	9.0	3.9	1.238	113.4	.411	.823	261.6	499.5	.485	1.161A	111.2	.892	-2.7	6.5	147.0	.355
		12.25	8.43	4.43	3.81	7.21	4.00	15.31	1/1/2	31.4	30.3	15.8	.240	7.298	15.7	255.8	-13.9	91.9D	1.512
4-9650	4-9870	.139	144.8	44.8	3.4	1.128	92.0	.266	1.351	350.5	510.7	.992	1.711A	99.6	.696	-1.8	-30.5	256.1	.175
4-9870	5- 48.2	.180	195.2	-9.3	-.8	.574	92.7	.464	1.118	183.1	296.1	.599A	1.637D	70.9	1.362	2.1	5.8	337.8	.464
5- 48.2	5- 170	.464	356.5	8.8	3.6	1.227	111.9	.383	.805	261.4	504.6	.497	1.112A	107.9	.873	-2.8	3.7	151.4	.307
		11.42	7.73	3.92	3.69	7.09	3.81	14.37	1/1/2	23.6	35.2	18.8	.279	6.132	11.7	258.3	-9.0	94.1D	1.430
4-9660	4-9870	.131	133.2	39.0	2.3	1.131	90.1	.268	1.355	359.4	509.6	.992	1.717A	100.0	.697	-.6	-25.9	259.4	.178
4-9870	5- 50.9	.173	193.9	-9.5	-.9	.580	93.1	.452	1.128	183.7	300.8	.618A	1.638D	72.5	1.365	2.2	6.5	338.9	.434
5- 50.9	5- 180	.434	.7	8.3	3.1	1.218	110.6	.359	.791	261.4	510.2	.507	1.075A	104.6	.857	-2.8	1.1	154.3	.265
		11.24	7.49	3.84	3.75	7.15	3.66	13.61	1/1/2	21.9	41.5	21.7	.319	5.323	8.9	260.4	-4.6	96.3D	1.378
4-9670	4-9870	.136	123.0	35.6	1.8	1.133	88.1	.271	1.353	9.1	149.3	.987D	1.720A	100.2	.696	.1	-23.4	259.7	.180
4-9870	5- 53.1	.168	192.8	-9.8	-1.1	.586	93.3	.443	1.135	184.2	304.8	.632A	1.639D	73.8	1.367	2.3	7.2	339.7	.410
5- 53.1	5- 190	.410	4.2	7.5	2.7	1.212	109.6	.341	.781	261.2	516.3	.515	1.047A	101.3	.845	-2.9	-1.0	155.3	.229
		11.25	7.44	3.89	3.81	7.21	3.55	13.01	1/1/2	21.7	49.6	24.3	.357	4.745	7.6	262.0	-.7	98.2D	1.338
4-9680	4-9870	.153	115.1	32.8	1.5	1.133	85.8	.276	1.347	19.8	149.9	.975D	1.719A	100.3	.694	.5	-21.8	259.0	.182
4-9870	5- 54.8	.165	192.0	-10.0	-1.2	.589	93.5	.437	1.141	184.6	307.9	.643A	1.639D	74.8	1.368	2.3	7.8	340.1	.393
5- 54.8	5- 200	.393	6.9	6.5	2.2	1.207	108.8	.328	.774	261.0	523.2	.520	1.028A	97.9	.834	-2.9	-2.0	153.8	.200
		11.41	7.56	4.09	3.85	7.25	3.47	12.58	1/1/2	22.5	60.3	26.6	.390	4.341	7.9	263.2	2.9	99.7D	1.303
4-9690	4-9870	.181	110.5	30.5	1.3	1.132	83.2	.285	1.334	31.4	151.4	.954D	1.715A	100.3	.689	.8	-20.6	257.4	.183
4-9870	5- 55.8	.163	191.5	-10.2	-1.3	.591	93.6	.433	1.144	184.8	309.5	.648A	1.639D	75.3	1.369	2.4	8.2	340.3	.383
5- 55.8	5- 210	.383	8.6	5.1	1.7	1.203	108.5	.321	.769	260.5	530.8	.522	1.015A	94.3	.826	-2.9	-1.6	148.8	.181
		11.75	7.87	4.44	3.88	7.28	3.43	12.32	1/1/2	24.2	74.7	28.3	.409	4.095	9.3	263.8	6.2	100.6D	1.267
MARS ARRIVAL DATE = 2449880 (11 JUN 1995)																			
4-9600	4-9880	.187	130.0	7.2	-1.9	1.100	99.0	.268	1.292	315.1	529.0	.946	1.638A	94.0	.675	3.1	-6.0	246.5	.132
4-9880	5- 31.1	.251	200.7	-8.5	-.2	.507	92.8	.584	1.028	182.0	263.2	.427A	1.628D	58.0	1.334	2.0	3.1	328.5	.712
5- 31.1	5- 120	.713	328.9	7.3	4.6	1.330	121.8	.580	1.016	262.8	483.0	.427	1.606A	125.4	1.023	-1.8	17.9	120.8	.611
		12.82	10.02	4.52	2.79	6.20	5.51	21.30	2/1/2	43.6	17.5	4.2	.118	27.569	84.5	261.8	-82.4	84.5L	3.146
4-9610	4-9880	.173	131.9	1.1	-2.5	1.106	97.7	.263	1.303	321.5	525.8	.960	1.645A	95.0	.680	3.8	-4.0	251.2	.141
4-9880	5- 35.2	.231	199.4	-8.5	-.0	.527	93.4	.551	1.050	182.8	270.5	.471A	1.629D	61.3	1.341	1.9	3.5	331.4	.650
5- 35.2	5- 130	.650	335.5	8.1	4.6	1.300	119.4	.530	.942	262.6	486.3	.443	1.441A	121.9	.982	-2.2	15.2	126.6	.539
		12.31	9.32	4.33	2.99	6.40	5.00	19.49	2/1/2	40.6	19.8	6.2	.142	18.604	48.0	249.8	-47.5	84.7L	2.505
4-9620	4-9880	.169	130.7	-11.2	-4.2	1.111	96.4	.259	1.312	328.3	522.8	.972	1.653A	95.8	.684	5.6	1.9	254.8	.156
4-9880	5- 39.1	.214	197.9	-8.5	-.2	.544	94.0	.523	1.071	183.6	277.5	.511A	1.631D	64.1	1.348	1.9	4.0	333.9	.594
5- 39.1	5- 140	.594	341.8	8.7	4.5	1.276	117.2	.485	.891	262.3	490.1	.458	1.323A	118.4	.948	-2.5	12.3	135.7	.473
		12.15	8.86	4.27	3.29	6.69	4.59	17.92	2/1/2	41.0	22.5	9.1	.170	12.600	31.7	251.6	-30.9	86.9L	1.973
4-9650	4-9880	.139	143.9	50.3	3.9	1.123	91.6	.255	1.333	352.0	516.7	.993	1.673A	97.5	.692	-2.3	-33.5	258.3	.158
4-9880	5- 49.0	.181	193.1	-8.5	-.8	.578	95.3	.465	1.116	186.1	295.7	.597A	1.635D	70.8	1.361	2.1	5.7	339.2	.466
5- 49.0	5- 170	.466	357.5	8.9	3.6	1.229	111.9	.384	.808	261.8	503.8	.497	1.118A	108.2	.876	-2.9	3.3	152.0	.312
		11.08	7.75	3.92	3.33	6.73	3.82	14.45	1/1/2	28.4	34.5	18.4	.277	6.252	12.4	259.6	-9.9	94.0D	1.453
4-9660	4-9880	.127	129.5	41.3	2.4	1.126	89.8	.256	1.334	1.1	155.9	.992D	1.676A	97.8	.693	-.7	-26.6	259.9	.159
4-9880	5- 51.7	.174	191.7	-8.6	-1.0	.585	95.6	.453	1.127	186.8	300.6	.617A	1.637D	72.4	1.364	2.1	6.3	340.3	.435
5- 51.7	5- 180	.435	1.7	8.4	3.2	1.220	110.6	.360	.794	261.8	509.4	.508	1.080A	104.9	.860	-2.9	.8	155.1	.269
		10.83	7.48	3.81	3.34	6.75	3.68	13.67	1/1/2	26.1	40.6	21.3	.317	5.399	9.2	261.7	-5.4	96.2D	1.396
4-9670	4-9880	.134	116.9	36.4	1.8	1.128	87.7	.260	1.332	11.0	155.8	.986D	1.677A	98.0	.692	.1	-23.4	260.0	.161
4-9880	5- 53.9	.169	190.4	-8.8	-1.1	.590	95.8	.443	1.135	187.4	304.7	.632A	1.638D	73.8	1.367	2.2	7.0	341.0	.410
5- 53.9	5- 190	.410	5.3	7.6	2.7	1.213	109.6	.341	.783	261.6	515.5	.516	1.051A	101.6	.847	-2.9	-1.5	156.4	.232
		10.82	7.44	3.87	3.38	6.79	3.57	13.06	1/1/2	26.0	48.4	24.1	.357	4.793	7.6	263.3	-1.4	98.2D	1.354

STOPOVER TIME = 0 DAYS

1995 INBOUND SWINGBY

MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2449880
11 JUN 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	$SPEED1 / $SPEED3 / $SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-9680	4-9880	.152	111.6	32.9	1.5	1.128	85.5	.266	1.324	21.8	156.5	.973D	1.676A	98.0	.689	.5	-21.5	259.1	.162	
4-9880	5- 55.7	.166	189.4	-8.9	-1.2	.594	96.0	.437	1.141	187.8	307.9	.643A	1.639D	74.8	1.368	2.2	7.6	341.4	.392	
5- 55.7	5- 200	.392	8.0	6.5	2.2	1.208	108.8	.327	.776	261.4	522.3	.522	1.030A	98.2	.836	-2.9	-2.7	155.1	.202	
		10.98	7.56	4.07	3.41	6.82	3.50	12.61	1/1/2	27.1	58.8	26.5	.391	4.369	7.6	264.4	2.3	99.8D	1.318	
4-9690	4-9880	.180	107.9	30.3	1.3	1.126	83.0	.275	1.311	33.4	158.0	.950D	1.672A	97.9	.683	.8	-20.0	257.1	.163	
4-9880	5- 56.7	.164	188.9	-9.1	-1.3	.596	96.1	.433	1.144	186.1	309.8	.649A	1.639D	75.4	1.369	2.5	7.9	341.6	.382	
5- 56.7	5- 210	.382	9.9	5.2	1.7	1.204	108.4	.320	.770	260.9	529.8	.524	1.016A	94.7	.827	-3.0	-2.4	150.6	.181	
		11.31	7.88	4.42	3.43	6.84	3.46	12.33	1/1/2	29.1	72.7	28.2	.413	4.104	8.8	265.1	5.6	100.7D	1.282	
MARS ARRIVAL DATE = 2449890 (21 JUN 1995)																				
4-9600	4-9890	.182	130.2	9.3	-1.5	1.098	98.8	.262	1.285	315.4	533.9	.948	1.622A	92.1	.677	2.8	-6.0	245.3	.120	
4-9890	5- 31.8	.254	199.3	-8.0	-.2	.509	96.3	.588	1.023	184.4	262.2	.422A	1.625D	57.7	1.332	2.0	3.1	330.1	.719	
5- 31.8	5- 120	.719	329.9	7.4	4.7	1.335	122.0	.586	1.032	263.3	482.3	.427	1.638A	125.8	1.030	-2.0	17.7	121.2	.621	
		12.60	10.02	4.44	2.57	5.99	5.58	21.54	2/1/2	49.0	17.1	4.3	.116	26.57D	93.5	225.3	86.4	85.0L	2.971	
4-9610	4-9890	.165	132.2	4.7	-1.9	1.103	97.5	.256	1.294	322.0	530.9	.962	1.625A	93.1	.681	3.3	-4.9	250.4	.127	
4-9890	5- 35.9	.233	197.7	-7.9	-.1	.530	96.7	.554	1.047	185.4	269.7	.467A	1.627D	61.0	1.340	1.9	3.5	332.9	.655	
5- 35.9	5- 130	.655	336.5	8.2	4.7	1.304	119.6	.535	.953	263.0	485.6	.443	1.462A	122.3	.988	-2.3	14.9	129.0	.547	
		12.01	9.29	4.23	2.71	6.13	5.06	19.69	2/1/2	44.9	19.4	5.9	.140	19.338	53.3	252.4	-52.7	84.3L	2.567	
4-9620	4-9890	.154	131.7	-3.3	-2.8	1.108	96.1	.252	1.302	329.1	528.1	.974	1.630A	93.9	.684	4.2	-1.4	254.4	.137	
4-9890	5- 39.8	.217	196.0	-7.7	-.3	.548	97.1	.525	1.069	186.5	276.9	.507A	1.630D	63.9	1.347	1.9	3.9	335.4	.599	
5- 39.8	5- 140	.599	342.7	8.8	4.6	1.279	117.4	.489	.898	262.8	489.3	.459	1.338A	118.8	.953	-2.6	12.0	136.2	.480	
		11.65	8.74	4.09	2.90	6.31	4.65	18.08	2/1/2	43.1	22.1	8.8	.168	13.070	34.4	253.3	-33.6	86.6L	2.024	
4-9630	4-9890	.167	126.0	-23.1	-5.7	1.112	94.6	.249	1.309	336.5	525.7	.984	1.635A	94.6	.687	7.2	9.2	257.2	.160	
4-9890	5- 43.4	.203	194.1	-7.6	-.5	.563	97.4	.501	1.087	187.5	283.6	.542A	1.632D	66.4	1.353	1.9	4.4	337.5	.549	
5- 43.4	5- 150	.549	348.5	9.1	4.4	1.259	115.3	.450	.859	262.5	493.5	.473	1.246A	115.3	.923	-2.8	8.9	142.6	.419	
		11.95	8.59	4.25	3.37	6.77	4.34	16.69	2/1/2	47.3	25.3	11.9	.200	9.648	24.4	255.9	-25.3	89.1L	1.726	
4-9650	4-9890	.146	145.8	58.0	4.9	1.120	91.3	.246	1.318	353.3	522.6	.993	1.643A	95.5	.691	-3.2	-39.1	257.5	.145	
4-9890	5- 49.7	.184	190.5	-7.4	-.8	.584	98.0	.466	1.117	189.4	295.5	.596A	1.637D	70.7	1.361	2.0	5.5	340.5	.468	
5- 49.7	5- 170	.468	358.5	8.9	3.6	1.231	112.0	.386	.811	262.2	503.1	.498	1.124A	108.5	.878	-3.0	2.9	152.7	.316	
		10.96	7.90	4.00	3.06	6.47	3.90	14.54	1/1/2	34.7	33.8	18.2	.275	6.356	13.1	260.8	-10.8	93.9D	1.466	
4-9660	4-9890	.126	126.4	43.8	2.6	1.122	89.5	.248	1.318	2.5	161.9	.992D	1.645A	95.7	.691	-.8	-27.6	259.7	.142	
4-9890	5- 52.4	.178	188.9	-7.4	-1.0	.591	98.3	.454	1.128	190.2	300.5	.616A	1.640D	72.4	1.365	2.0	6.1	341.5	.436	
5- 52.4	5- 180	.436	2.7	8.4	3.2	1.222	110.6	.361	.796	262.1	508.6	.508	1.084A	105.2	.862	-3.0	.2	155.9	.273	
		10.55	7.55	3.79	3.00	6.41	3.76	13.74	1/1/2	30.8	39.8	21.2	.316	5.447	9.7	262.8	-6.2	96.2D	1.405	
4-9670	4-9890	.132	115.5	37.0	1.8	1.124	87.5	.251	1.315	12.6	162.0	.985D	1.645A	95.8	.690	.1	-23.3	259.7	.144	
4-9890	5- 54.7	.173	187.5	-7.5	-1.1	.597	98.4	.444	1.137	190.9	304.7	.632A	1.642D	73.8	1.367	2.1	6.7	342.1	.411	
5- 54.7	5- 190	.411	6.2	7.6	2.7	1.214	109.6	.342	.785	262.0	514.7	.517	1.054A	101.9	.849	-3.0	-2.0	157.4	.235	
		10.53	7.50	3.85	3.03	6.44	3.65	13.11	1/1/2	30.8	47.4	24.0	.357	4.817	7.6	264.4	-2.1	98.2D	1.361	
4-9680	4-9890	.151	108.8	32.8	1.4	1.123	85.3	.257	1.307	23.5	162.7	.971D	1.644A	95.8	.687	.6	-20.9	258.6	.145	
4-9890	5- 56.4	.170	186.5	-7.6	-1.2	.601	98.6	.437	1.143	191.4	308.1	.643A	1.643D	74.8	1.369	2.2	7.3	342.5	.392	
5- 56.4	5- 200	.392	9.1	6.5	2.2	1.209	108.8	.327	.778	261.8	521.4	.523	1.032A	98.6	.838	-3.0	-3.3	156.4	.204	
		10.69	7.64	4.06	3.05	6.46	3.58	12.64	1/1/2	32.2	57.5	26.4	.392	4.376	7.3	265.6	1.6	99.9D	1.324	
4-9690	4-9890	.180	105.8	30.0	1.2	1.122	82.8	.268	1.294	35.1	164.2	.948D	1.641A	95.6	.681	.9	-19.3	256.2	.146	
4-9890	5- 57.5	.168	185.8	-7.6	-1.3	.604	98.7	.433	1.147	191.7	310.1	.650A	1.644D	75.5	1.370	2.2	7.6	342.6	.380	
5- 57.5	5- 210	.380	11.0	5.2	1.7	1.205	108.3	.319	.772	261.4	528.9	.526	1.018A	95.1	.829	-3.0	-3.2	152.2	.182	
		11.02	7.95	4.41	3.07	6.48	3.54	12.34	1/1/2	34.7	70.9	28.3	.416	4.095	8.3	266.3	5.0	100.9D	1.288	
MARS ARRIVAL DATE = 2449900 (1 JUL 1995)																				
4-9600	4-9900	.178	130.4	11.1	-1.1	1.097	98.7	.258	1.279	315.6	538.8	.949	1.609A	90.4	.680	2.5	-5.7	243.2	.110	
4-9900	5- 32.6	.260	197.4	-7.3	-.1	.515	100.1	.592	1.022	187.1	261.5	.417A	1.627D	57.3	1.331	2.0	3.0	331.7	.726	
5- 32.6	5- 120	.726	330.9	7.5	4.8	1.341	122.2	.593	1.049	263.7	481.5	.427	1.671A	126.2	1.038	-2.1	17.4	121.6	.630	
		12.52	10.12	4.39	2.40	5.82	5.73	21.78	2/1/2	55.4	16.7	4.6	.114	25.100	100.5	237.9	79.5	85.5L	2.746	
4-9610	4-9900	.160	132.5	7.7	-1.4	1.101	97.3	.251	1.287	322.4	535.9	.964	1.610A	91.4	.683	2.9	-5.2	249.0	.116	
4-9900	5- 36.7	.239	195.5	-7.1	-.1	.537	100.2	.557	1.047	188.3	269.2	.463A	1.630D	60.7	1.340	1.9	3.4	334.4	.661	
5- 36.7	5- 130	.661	337.5	8.3	4.8	1.309	119.8	.540	.964	263.5	484.9	.444	1.484A	122.6	.994	-2.5	14.7	129.4	.555	
		11.87	9.37	4.16	2.50	5.92	5.20	19.89	2/1/2	50.3	19.0	5.8	.138	19.724	58.3	255.3	-57.6	84.1L	2.577	
4-9620	4-9900	.145	132.4	2.4	-1.9	1.106	95.9	.246	1.294	329.6	533.5	.976	1.612A	92.2	.686	3.5	-3.3	253.4	.123	
4-9900	5- 40.5	.222	193.5	-6.8	-.3	.555	100.4	.528	1.069	189.6	276.5	.505A	1.634D	63.7	1.347	1.9	3.8	336.7	.603	
5- 40.5	5- 140	.603	343.7	8.9	4.7	1.283	117.5	.493	.906	263.2	488.6	.459	1.352A	119.1	.958	-2.7	11.7	136.6	.487	
		11.41	8.79	3.99	2.63	6.04	4.80	18.24	2/1/2	47.1	21.6	8.6	.165	13.394	37.0	254.9	-36.3	86.3L	2.049	
4-9630	4-9900	.140	128.6	-8.8	-3.2	1.110	94.4	.242	1.300	337.3	531.1	.985	1.615A	92.8	.689	4.8	2.4	256.7	.134	
4-9900	5- 44.1	.209	191.4	-6.5	-.5	.570	100.6	.504	1.089	190.8	283.3	.540A	1.638D	66.3	1.353	1.9	4.3	338.7	.552	
5- 44.1	5- 150	.552	349.4	9.2	4.4	1.262	115.4	.453	.865	262.9	492.8	.473	1.256A	115.6	.927	-2.9	8.6	143.0	.425	
		11.25	8.41	3.93	2.83	6.25	4.48	16.82	2/1/2	47.0	24.6	11.7	.197	9.814	25.9	257.2	-24.9	88.9L	1.730	
4-9650	4-9900	.177	160.2	70.4	7.4	1.117	91.1	.239	1.306	354.4	528.4	.994	1.619A	93.6	.692	-5.7	-51.7	253.6	.145	
4-9900	5- 50.4	.191	187.4	-6.1	-.6	.593	101.0	.468	1.120	193.0	295.5	.596A	1.645D	70.6	1.362	1.9	5.3	341.5	.469	
5- 50.4	5- 170	.469	359.4	9.0	3.7	1.233	112.0	.387	.814	262.6	502.4	.499	1.129A	106.8	.881	-3.0	2.6	153.3	.320	
		11.48	8.43	4.37	3.05	6.46	4.06	14.62	1/1/2	45.8	33.2	18.1	.273	6.370	13.8	261.9	-11.7	93.9D	1.469	
4-9660	4-9900	.125	124.1	46.6	2.6	1.119	89.3	.241	1.306	3.8	167.6	.991D	1.620A	93.8	.691	-1.0	-29.2	258.8	.128	
4-9900	5- 53.1	.185	185.7	-6.0	-1.0	.600	101.1	.456	1.132	193.9	300.6	.616A	1.648D	72.3	1.366	2.0	5.9	342.4	.437	
5- 53.1	5- 160	.437	3.6	8.5	3.2	1.223	110.7	.362	.799	262.5	507.9	.509	1.088A	105.5	.864	-3.1	-.1	156.6	.276	
		10.43	7.71	3.79	2.73	6.14	3.92	13.80	1/1/2	36.2	39.0	21.1	.315	5.455	10.1	263.9	-7.0	96.2D	1.402	
4-9670	4-9900	.131	112.8	37.3	1.8	1.120	87.3	.244	1.302	13.9	167.9	.984D	1.620A	93.8	.690	.1	-23.1	258.9	.129	
4-9900	5- 55.3	.181	184.3	-5.9	-1.1	.606	101.2	.446	1.142	194.7	305.0	.632A	1.651D	73.8	1.369	2.0	6.5	343.0	.411	
5- 55.3	5- 190	.411	7.2	7.7	2.7	1.216	109.6	.342	.787	262.4	514.0	.518	1.057A	102.2	.850	-3.0	-2.4	158.3	.236	*
		10.40	7.66	3.84	2.74	6.15	3.82	13.15	1/1/2	36.3	46.4	24.0	.356	4.809	7.8	265.4	-2.8	98.3D	1.356	
4-9680	4-9900	.150	106.7	32.5	1.3	1.120	85.1	.251	1.294	24.8	168.7	.969D	1.619A	93.7	.686	.6	-20.2	257.4	.130	
4-9900	5- 57.2	.178	183.2	-6.0	-1.2	.611	101.4	.439	1.149	195.3	306.5	.644A	1.653D	74.9	1.371	2.1	7.0	343.3	.391	
5- 57.2	5- 200	.391	10.1	6.6	2.2	1.210	108.7	.327	.779	262.2	520.6	.524	1.034A	98.9	.839	-3.0	-3.8	157.6	.206	
		10.56	7.80	4.05	2.76	6.17	3.75	12.67	1/1/2	38.0	56.2	26.5	.393	4.355	7.0	266.6	.9	100.0D	1.319	
4-9690	[illegible]9900	.179	104.3	29.5	1.1	1.118	82.7	.262	1.282	36.3	170.1	.946D	1.617A	93.5	.681	.9	-18.3	254.6	.131	
4-9900	5- 58.3	.176	182.5	-6.0	-1.3	.613	101.4	.435	1.153	195.6	310.7	.651A	1.655D	75.6	1.372	2.1	7.3	343.5	.378	
5- 58.3	5- 210	.379	12.1	5.2	1.7	1.206	108.2	.318	.773	261.8	528.1	.527	1.019A	95.4	.831	-3.0	-3.9	153.7	.183	
		10.89	8.11	4.40	2.78	6.19	3.71	12.35	1/1/2	41.0	69.3	28.5	.419	4.063	7.8	267.3	4.3	101.1D	1.283	
MARS ARRIVAL DATE = 2449910 (11 JUL 1995)																				
4-9600	4-9910	.175	130.8	12.7	-.9	1.096	98.6	.255	1.275	315.7	543.5	.950	1.600	88.8	.684	2.3	-5.2	240.4	.102	
4-9910	5- 33.4	.270	195.0	-6.4	-.1	.524	104.2	.597	1.024	190.1	260.9	.413A	1.635D	57.0	1.332	2.0	3.0	333.2	.734	
5- 33.4	5- 120	.734	331.9	7.7	4.9	1.347	122.4	.600	1.067	264.2	480.6	.427	1.707A	126.6	1.045	-2.3	17.1	122.0	.640	
		12.61	10.34	4.35	2.27	5.69	5.98	22.03	2/1/2	62.6	16.3	4.9	.112	23.553	105.4	241.5	74.6	85.8L	2.519	
4-9610	4-9910	.156	132.9	10.1	-1.0	1.100	97.1	.247	1.282	322.6	540.8	.965	1.599	89.7	.687	2.5	-5.3	246.7	.106	
4-9910	5- 37.4	.249	192.8	-6.0	-.2	.547	104.0	.561	1.050	191.6	266.8	.461A	1.640D	60.4	1.341	1.9	3.3	335.7	.667	
5- 37.4	5- 130	.667	338.5	8.5	4.9	1.313	119.9	.545	.975	263.9	484.2	.444	1.507A	123.0	1.000	-2.6	14.4	129.8	.563	
		11.91	9.57	4.12	2.34	5.76	5.45	20.09	2/1/2	56.7	18.6	5.8	.135	19.715	62.4	258.1	-61.6	84.0L	2.532	
4-9620	4-9910	.140	132.9	6.6	-1.3	1.104	95.7	.241	1.286	330.0	538.4	.977	1.599A	90.5	.689	2.9	-4.3	251.6	.111	
4-9910	5- 41.2	.232	190.6	-5.6	-.4	.566	104.0	.532	1.074	193.0	276.3	.503A	1.645D	63.5	1.349	1.9	3.7	337.9	.607	
5- 41.2	5- 140	.607	344.6	9.0	4.8	1.286	117.6	.497	.913	263.6	487.9	.459	1.368A	119.5	.963	-2.9	11.4	137.0	.493	
		11.39	8.97	3.93	2.42	5.84	5.04	18.40	2/1/2	52.6	21.2	8.5	.163	13.511	30.2	256.3	-36.4	86.2L	2.039	
4-9630	4-9910	.128	129.9	.3	-2.0	1.108	94.2	.237	1.293	337.8	536.4	.986	1.600A	91.1	.692	3.6	-1.7	255.3	.117	
4-9910	5- 44.8	.220	188.3	-5.2	-.5	.582	104.0	.507	1.095	194.5	283.3	.540A	1.651D	66.2	1.355	1.9	4.1	339.6	.588	
5- 44.8	5- 150	.555	350.3	9.3	4.5	1.265	115.5	.456	.870	263.3	492.1	.474	1.267A	116.0	.931	-3.0	8.3	143.4	.431	
		11.08	8.55	3.81	2.53	5.95	4.73	16.95	2/1/2	50.5	24.3	11.6	.195	9.854	27.2	258.3	-26.2	88.8L	1.726	

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-9640	4-9910	.137	121.6	-17.3	-4.2	1.111	92.6	.235	1.296	346.2	534.9	.992	1.601A	91.6	.693	5.9	8.7	257.9	.134
4-9910	5- 48.0	.210	186.1	-4.8	-.7	.594	104.0	.487	1.113	195.8	289.8	.571A	1.656D	68.5	1.360	1.9	4.6	341.3	.510
5- 48.0	5- 160	.510	355.5	9.3	4.2	1.248	113.7	.420	.839	263.1	496.7	.487	1.192A	112.5	.905	-3.1	5.2	149.1	.375
		11.23	8.39	3.90	2.84	6.25	4.49	15.72	2/1/2	53.2	28.1	14.9	.231	7.707	19.7	260.7	-18.4	91.4D	1.550
4-9660	4-9910	.128	122.9	50.7	3.3	1.117	89.1	.235	1.297	4.7	173.5	.991D	1.602A	92.0	.693	-1.5	-32.2	257.0	.116
4-9910	5- 53.7	.197	182.4	-4.4	-1.0	.613	104.2	.459	1.141	198.0	301.0	.617A	1.665D	72.4	1.368	1.9	5.7	343.2	.438
5- 53.7	5- 180	.438	4.4	8.5	3.3	1.225	110.7	.363	.801	262.8	507.2	.510	1.092A	105.8	.866	-3.1	-.5	157.3	.280
		10.51	7.99	3.81	2.51	5.93	4.18	13.86	1/1/2	42.6	38.3	21.3	.313	5.410	10.6	264.7	-7.7	96.4D	1.381
4-9670	4-9910	.130	110.8	37.5	1.8	1.118	87.1	.239	1.292	14.9	173.6	.983D	1.602A	92.0	.691	.1	-22.8	257.2	.116
4-9910	5- 56.0	.193	181.0	-4.3	-1.1	.619	104.2	.450	1.151	198.9	305.5	.634A	1.669D	73.8	1.371	1.9	6.2	343.6	.411
5- 56.0	5- 190	.411	6.1	7.7	2.8	1.217	109.6	.343	.789	262.7	513.2	.519	1.060A	102.5	.852	-3.1	-2.8	159.1	.241
		10.43	7.92	3.83	2.51	5.92	4.09	13.20	1/1/2	42.5	45.5	24.3	.355	4.756	8.0	266.3	-3.6	98.5D	1.335
4-9680	4-9910	.149	105.2	31.9	1.2	1.117	85.0	.246	1.285	25.7	174.4	.968D	1.601A	91.8	.688	.7	-19.2	255.5	.117
4-9910	5- 57.9	.190	179.9	-4.2	-1.2	.623	104.3	.443	1.159	199.6	309.1	.646A	1.672D	75.0	1.373	2.0	6.7	343.9	.391
5- 57.9	5- 200	.391	11.0	6.6	2.2	1.212	108.7	.327	.781	262.6	519.9	.525	1.036A	99.2	.841	-3.1	-4.3	158.6	.209
		10.59	8.06	4.04	2.53	5.94	4.03	12.70	1/1/2	44.6	55.1	26.9	.394	4.297	6.8	267.4	.2	100.3D	1.298
4-9690	4-9910	.178	103.3	28.9	1.0	1.116	82.6	.258	1.272	37.1	175.6	.945D	1.600A	91.5	.683	1.0	-17.1	252.4	.118
4-9910	5- 59.1	.188	179.2	-4.2	-1.3	.626	104.3	.439	1.163	199.9	311.5	.653A	1.674D	75.7	1.375	2.0	7.0	344.0	.378
5- 59.1	5- 210	.378	13.0	5.3	1.7	1.207	108.2	.317	.775	262.2	527.3	.529	1.021A	95.8	.832	-3.1	-4.6	155.1	.185
		10.92	8.37	4.39	2.55	5.97	3.98	12.37	1/1/2	48.0	67.8	29.0	.421	3.999	7.3	268.1	3.5	101.5D	1.263

MARS ARRIVAL DATE = 2449920 (21 JUL 1995)

4-9600	4-9920	.174	131.2	14.1	-.6	1.095	98.5	.253	1.272	315.5	548.2	.950	1.593	87.3	.688	2.2	-4.5	236.9	.097
4-9920	5- 34.1	.285	192.2	-5.3	-.0	.539	108.7	.603	1.032	193.4	260.8	.410A	1.654D	56.6	1.335	2.0	2.9	334.5	.741
5- 34.1	5- 120	.741	332.9	7.8	5.1	1.353	122.6	.607	1.087	264.7	480.0	.427	1.746A	127.0	1.053	-2.5	16.8	122.4	.650
		12.90	10.71	4.34	2.19	5.61	6.37	22.29	2/1/2	70.7	15.9	5.2	.109	22.183	107.9	243.8	72.1	86.0L	2.318
4-9610	4-9920	.154	133.5	12.2	-.7	1.099	97.1	.244	1.278	322.7	545.6	.965	1.590	88.2	.691	2.3	-5.1	243.7	.099
4-9920	5- 38.2	.264	189.9	-4.8	-.2	.562	108.1	.567	1.060	195.2	268.8	.459A	1.660D	60.2	1.344	1.9	3.3	336.9	.672
5- 38.2	5- 130	.672	339.4	8.6	5.1	1.318	120.1	.551	.988	264.3	483.4	.444	1.532A	123.4	1.007	-2.8	14.1	130.2	.571
		12.14	9.93	4.09	2.22	5.64	5.83	20.29	2/1/2	64.1	18.2	5.9	.133	19.320	64.9	260.6	-64.1	84.0L	2.436
4-9620	4-9920	.136	133.5	9.9	-.9	1.103	95.6	.238	1.283	330.2	543.4	.978	1.589	88.9	.693	2.5	-4.8	249.0	.102
4-9920	5- 41.9	.248	187.4	-4.2	-.4	.582	107.8	.537	1.085	196.9	276.5	.503A	1.667D	63.3	1.352	1.8	3.6	338.9	.612
5- 41.9	5- 140	.612	345.5	9.2	4.9	1.290	117.8	.502	.922	264.0	487.2	.459	1.384A	119.6	.968	-3.0	11.1	137.4	.500
		11.59	9.32	3.90	2.27	5.69	5.43	18.56	2/1/2	59.2	20.8	8.6	.161	13.362	40.6	257.6	-39.9	86.1L	1.985
4-9630	4-9920	.123	130.9	6.5	-1.2	1.106	94.1	.234	1.287	338.2	541.5	.987	1.588	89.5	.695	2.9	-3.3	253.0	.106
4-9920	5- 45.4	.235	185.1	-3.8	-.6	.597	107.6	.512	1.107	198.5	283.7	.540A	1.674D	66.1	1.359	1.8	4.0	340.6	.559
5- 45.4	5- 150	.559	351.2	9.4	4.6	1.268	115.6	.459	.876	263.7	491.4	.474	1.278A	116.3	.935	-3.1	8.0	143.9	.437
		11.21	8.87	3.76	2.33	5.75	5.11	17.08	2/1/2	56.0	23.9	11.8	.193	9.730	28.1	259.3	-27.1	88.9L	1.681
4-9640	4-9920	.117	124.5	-1.3	-2.1	1.110	92.5	.231	1.290	346.7	540.1	.992	1.588	90.0	.696	3.8	1.2	255.9	.112
4-9920	5- 48.7	.226	182.9	-3.4	-.7	.610	107.5	.493	1.127	200.1	290.4	.572A	1.681D	68.5	1.364	1.8	4.5	342.0	.512
5- 48.7	5- 160	.512	356.4	9.4	4.2	1.250	113.8	.422	.843	263.5	496.0	.486	1.199A	112.8	.908	-3.2	4.9	149.6	.379
		11.04	8.59	3.71	2.45	5.86	4.88	15.82	2/1/2	55.1	27.6	15.1	.229	7.586	20.4	261.6	-19.1	91.6D	1.508
4-9650	4-9920	.181	109.4	-36.6	-7.9	1.113	90.8	.230	1.291	355.7	539.2	.994	1.588A	90.2	.697	9.7	23.5	257.5	.161
4-9920	5- 51.7	.219	180.9	-3.0	-.9	.621	107.4	.477	1.143	201.4	296.5	.598A	1.668D	70.6	1.369	1.8	4.9	342.9	.473
5- 51.7	5- 170	.473	1.1	9.2	3.8	1.237	112.1	.391	.820	263.3	501.0	.500	1.140A	109.4	.886	-3.2	1.9	154.3	.328
		12.54	9.14	4.43	3.40	6.80	4.71	14.78	2/1/2	65.2	32.1	18.5	.269	6.224	15.0	263.6	-13.1	94.2D	1.406
4-9660	4-9920	.137	124.4	58.8	4.3	1.115	89.0	.231	1.289	5.4	178.9	.991D	1.588A	90.3	.696	-2.5	-39.6	253.3	.109
4-9920	5- 54.3	.214	179.2	-2.8	-1.0	.629	107.4	.465	1.156	202.6	301.9	.619A	1.694D	72.4	1.373	1.8	5.4	343.6	.439
5- 54.3	5- 180	.439	5.3	8.6	3.3	1.226	110.7	.364	.803	263.2	506.5	.511	1.096A	106.1	.868	-3.2	-.9	157.9	.283
		10.88	8.49	3.91	2.39	5.81	4.58	13.92	1/1/2	50.9	37.6	21.8	.312	5.300	11.0	265.5	-8.3	96.6D	1.341
4-9670	4-9920	.129	109.4	37.5	1.7	1.116	87.0	.235	1.285	15.6	179.1	.983D	1.588A	90.3	.694	.1	-22.4	254.8	.105
4-9920	5- 56.7	.210	177.9	-2.6	-1.1	.635	107.3	.455	1.167	203.6	306.5	.636A	1.698D	73.9	1.375	1.8	5.9	344.0	.412
5- 56.7	5- 190	.412	8.9	7.8	2.8	1.218	109.6	.343	.791	263.1	512.6	.520	1.063A	102.8	.854	-3.2	-3.2	159.9	.244
		10.64	8.31	3.82	2.33	5.74	4.49	13.24	1/1/2	49.6	44.7	24.8	.355	4.651	8.2	266.9	-4.2	98.9D	1.296
4-9680	4-9920	.148	104.2	31.1	1.1	1.116	84.9	.243	1.278	26.4	179.6	.967D	1.588A	90.1	.691	.8	-17.8	253.0	.107
4-9920	5- 58.5	.207	176.6	-2.5	-1.2	.640	107.3	.448	1.175	204.3	310.2	.648A	1.702D	75.1	1.378	1.9	6.4	344.1	.391
5- 58.5	5- 200	.391	11.9	6.7	2.3	1.213	108.7	.327	.782	262.9	519.2	.526	1.038A	99.5	.843	-3.1	-4.8	159.6	.211
		10.81	8.46	4.03	2.35	5.77	4.43	12.73	1/1/2	52.0	54.0	27.6	.394	4.194	6.7	268.1	-.6	100.7D	1.259
4-9690	4-9920	.177	102.7	28.1	.8	1.114	82.6	.254	1.266	37.6	180.9	.944D	1.588	89.7	.686	1.1	-15.4	249.6	.109
4-9920	5- 59.8	.205	176.1	-2.5	-1.3	.643	107.3	.444	1.180	204.8	312.7	.656A	1.704D	75.9	1.379	1.9	6.7	344.1	.377
5- 59.8	5- 210	.377	14.0	5.3	1.7	1.208	108.1	.317	.776	262.5	526.5	.530	1.022A	96.1	.833	-3.1	-5.2	156.4	.186
		11.14	8.76	4.37	2.38	5.80	4.39	12.38	1/1/2	55.7	66.3	29.8	.423	3.894	6.8	268.8	2.8	102.0D	1.226

MARS ARRIVAL DATE = 2449930 (31 JUL 1995)

4-9610	4-9930	.155	134.0	13.9	-.5	1.098	97.1	.243	1.275	322.5	550.3	.965	1.584	86.7	.696	2.1	-4.7	240.0	.094
4-9930	5- 38.9	.286	186.7	-3.5	-.2	.584	112.5	.573	1.078	199.3	269.4	.460A	1.695D	60.0	1.350	1.8	3.2	337.8	.679
5- 38.9	5- 130	.679	340.4	8.8	5.2	1.323	120.3	.556	1.001	264.8	482.7	.444	1.558A	123.8	1.013	-3.0	13.8	130.6	.580
		12.62	10.48	4.08	2.14	5.56	6.40	20.51	2/1/2	72.4	17.8	6.2	.131	18.550	65.5	261.9	-64.7	84.0L	2.290
4-9620	4-9930	.134	134.2	12.6	-.5	1.102	95.6	.236	1.280	330.2	548.2	.978	1.581	87.5	.698	2.3	-5.0	245.7	.095
4-9930	5- 42.7	.270	184.3	-2.9	-.4	.603	111.8	.544	1.104	201.3	277.3	.504A	1.704D	63.2	1.358	1.8	3.5	339.7	.617
5- 42.7	5- 140	.617	346.5	9.3	5.0	1.294	117.9	.506	.930	264.4	486.5	.460	1.401A	120.2	.973	-3.1	10.8	137.8	.507
		12.02	9.86	3.88	2.16	5.58	5.99	18.73	2/1/2	66.9	20.4	8.9	.158	12.909	41.1	256.5	-40.3	86.3L	1.883
4-9630	4-9930	.120	131.8	11.1	-.7	1.105	94.0	.231	1.283	338.3	546.5	.987	1.579	88.1	.700	2.5	-4.6	250.0	.097
4-9930	5- 46.1	.258	181.9	-2.3	-.6	.619	111.4	.519	1.128	203.2	284.7	.542A	1.714D	66.1	1.365	1.8	3.9	341.2	.562
5- 46.1	5- 150	.562	352.1	9.5	4.7	1.271	115.8	.462	.882	264.1	490.7	.474	1.269A	116.6	.939	-3.2	7.7	144.5	.442
		11.60	9.41	3.73	2.19	5.61	5.68	17.21	2/1/2	62.9	23.5	12.2	.190	9.404	28.4	260.1	-27.5	89.2L	1.598
4-9640	4-9930	.110	126.2	8.1	-1.1	1.109	92.4	.228	1.285	346.9	545.2	.993	1.578	88.5	.701	2.8	-2.6	253.0	.100
4-9930	5- 49.4	.249	179.8	-1.9	-.8	.632	111.1	.500	1.149	204.9	291.5	.574A	1.723D	68.5	1.371	1.7	4.3	342.4	.515
5- 49.4	5- 160	.515	357.3	9.5	4.3	1.252	113.8	.424	.848	263.8	495.3	.488	1.207A	113.1	.912	-3.3	4.6	150.0	.384
		11.34	9.10	3.68	2.24	5.66	5.45	15.93	2/1/2	60.7	27.1	15.7	.227	7.328	20.7	262.2	-19.4	91.9D	1.435
4-9650	4-9930	.114	116.8	-2.6	-2.3	1.111	90.7	.227	1.286	356.1	544.4	.994	1.578	88.7	.701	4.1	4.5	255.1	.109
4-9930	5- 52.3	.242	177.9	-1.5	-.9	.642	110.9	.485	1.168	206.4	297.7	.601A	1.731D	70.7	1.375	1.7	4.7	343.2	.474
5- 52.3	5- 170	.474	1.9	9.2	3.8	1.238	112.2	.392	.823	263.6	500.4	.500	1.146A	109.7	.869	-3.3	1.6	154.8	.332
		11.33	8.95	3.68	2.38	5.80	5.27	14.86	2/1/2	61.3	31.5	19.2	.267	6.009	15.3	264.2	-13.3	94.6D	1.338
4-9670	4-9930	.128	108.6	37.2	1.7	1.114	87.0	.233	1.280	15.9	184.3	.982D	1.578	88.7	.699	.2	-21.6	251.7	.097
4-9930	5- 57.3	.233	175.0	-1.1	-1.1	.656	110.6	.464	1.192	208.8	307.9	.639A	1.745D	74.1	1.382	1.8	5.7	343.9	.412
5- 57.3	5- 190	.412	9.8	7.8	2.8	1.220	109.6	.344	.793	263.4	511.9	.520	1.066A	103.1	.856	-3.2	-3.6	160.6	.246
		11.07	8.88	3.81	2.19	5.61	5.07	13.29	1/1/2	57.4	43.9	25.8	.354	4.479	8.4	267.4	-4.8	99.4D	1.232
4-9680	4-9930	.147	103.6	29.8	.9	1.114	84.9	.240	1.273	26.6	184.9	.967D	1.578	88.5	.695	1.0	-15.8	249.9	.099
4-9930	5- 59.2	.231	174.0	-1.0	-1.2	.661	110.6	.457	1.201	209.7	311.7	.652A	1.750D	75.3	1.384	1.8	6.1	343.8	.390
5- 59.2	5- 200	.390	12.8	6.7	2.3	1.214	108.7	.327	.784	263.2	518.5	.528	1.041A	99.8	.844	-3.2	-5.3	160.6	.213
		11.24	9.02	4.01	2.22	5.65	5.00	12.76	1/1/2	60.1	52.9	28.7	.394	4.034	6.7	268.5	-1.2	101.4D	1.197
4-9690	4-9930	.175	102.5	27.0	.6	1.113	82.7	.252	1.262	37.7	185.8	.944D	1.579	88.1	.691	1.3	-13.4	246.3	.102
4-9930	5- 60.5	.229	173.4	-.9	-1.3	.664	110.5	.453	1.207	210.2	314.4	.660A	1.754D	76.2	1.386	1.8	6.4	343.6	.376
5- 60.5	5- 210	.376	15.0	5.3	1.7	1.209	108.1	.316	.776	262.9	525.7	.532	1.023A	96.4	.835	-3.1	-5.8	157.7	.187
		11.58	9.32	4.35	2.27	5.69	4.97	12.40	1/1/2	64.0	64.9	31.0	.426	3.738	6.4	269.2	2.0	102.8D	1.168

MARS ARRIVAL DATE = 2449940 (10 AUG 1995)

4-9620	4-9940	.134	135.1	14.8	-.3	1.101	95.6	.235	1.277	330.0	552.9	.978	1.577	86.1	.704	2.0	-5.1	241.7	.090
4-9940	5- 43.4	.300	181.3	-1.6	-.5	.632	116.0	.553	1.137	206.4	278.7	.508A	1.787D	63.2	1.368	1.7	3.4	340.2	.622
5- 43.4	5- 140	.622	347.5	9.5	5.1	1.298	118.1	.511	.940	264.9	485.7	.460	1.420A	120.6	.978	-3.3	10.5	138.2	.515
		12.74	10.65	3.87	2.09	5.52	6.78	18.92	2/1/2	75.4	20.0	9.5	.156	12.102	40.2	259.1	-39.4	86.7L	1.727

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2449940
10 AUG 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-9630	4-9940	.118	132.8	14.4	-.3	1.105	94.0	.229	1.280	338.3	551.3	.987	1.573	86.7	.706	2.1	-5.3	246.2	.091
4-9940	5- 46.9	.288	179.0	-1.0	-.7	.647	115.4	.530	1.163	208.6	286.3	.547A	1.779D	66.1	1.374	1.7	3.8	341.4	.566
5- 46.9	5- 150	.566	353.1	9.7	4.8	1.274	115.9	.466	.888	264.5	490.0	.475	1.302A	117.0	.944	-3.4	7.4	144.7	.449
		12.29	10.19	3.72	2.10	5.53	6.47	17.36	2/1/2	71.0	23.0	13.0	.188	8.853	28.0	260.7	-27.1	89.7L	1.474
4-9640	4-9940	.108	127.6	14.1	-.5	1.108	92.4	.226	1.282	347.0	550.2	.993	1.572	87.1	.706	2.3	-4.9	249.3	.092
4-9940	5- 50.1	.280	177.0	-.6	-.8	.660	114.9	.511	1.185	210.5	293.3	.579A	1.791D	68.7	1.380	1.7	4.1	342.4	.518
5- 50.1	5- 160	.518	358.2	9.6	4.3	1.255	113.9	.427	.852	264.2	494.6	.488	1.216A	113.5	.915	-3.4	4.3	150.5	.390
		11.98	9.86	3.63	2.12	5.54	6.24	16.04	2/1/2	68.1	26.6	16.6	.224	6.916	20.6	262.7	-19.3	92.6D	1.327
4-9650	4-9940	.105	119.5	12.2	-.8	1.110	90.7	.225	1.282	356.2	549.4	.994	1.571	87.3	.707	2.6	-2.9	251.2	.095
4-9940	5- 53.0	.273	175.3	-.2	-.9	.670	114.5	.497	1.204	212.2	299.6	.606A	1.802D	70.9	1.385	1.7	4.5	343.0	.476
5- 53.0	5- 170	.476	2.9	9.3	3.9	1.240	112.2	.394	.827	264.0	499.6	.501	1.153A	110.0	.892	-3.4	1.3	155.4	.337
		11.83	9.67	3.60	2.16	5.58	6.07	14.95	2/1/2	66.8	30.9	20.3	.265	5.675	15.4	264.6	-13.6	95.3D	1.239
4-9660	4-9940	.124	108.3	-7.6	-3.2	1.112	88.9	.226	1.281	5.8	189.1	.991D	1.570	87.4	.706	5.0	11.0	253.0	.111
4-9940	5- 55.7	.268	173.9	.0	-1.1	.678	114.3	.485	1.219	213.6	305.2	.627A	1.811D	72.8	1.389	1.7	5.0	343.3	.441
5- 55.7	5- 180	.441	7.0	8.7	3.3	1.229	110.8	.367	.808	263.9	505.1	.512	1.105A	106.7	.873	-3.3	-1.6	159.1	.290
		12.13	9.71	3.77	2.41	5.83	5.94	14.05	2/1/2	69.8	36.3	23.9	.309	4.831	11.5	266.2	-9.1	97.9D	1.183
4-9670	4-9940	.126	108.3	36.2	1.5	1.113	87.0	.230	1.276	16.0	189.2	.982D	1.570	87.3	.704	.3	-20.0	248.0	.091
4-9940	5- 58.0	.264	172.7	.2	-1.2	.683	114.1	.477	1.231	214.7	310.0	.644A	1.818D	74.4	1.392	1.7	5.4	343.3	.413
5- 58.0	5- 190	.413	10.7	7.9	2.8	1.221	109.6	.344	.795	263.8	511.2	.521	1.069A	103.4	.858	-3.3	-4.0	161.4	.250
		11.73	9.63	3.80	2.10	5.52	5.84	13.34	1/1/2	66.0	43.0	27.3	.353	4.236	8.6	267.6	-5.2	100.3D	1.143
4-9680	4-9940	.145	103.4	27.7	.6	1.113	85.0	.238	1.269	26.6	189.7	.967D	1.571	87.0	.701	1.2	-12.8	246.5	.094
4-9940	5- 59.9	.262	171.8	.3	-1.3	.688	114.0	.471	1.241	215.7	314.0	.657A	1.825D	75.7	1.394	1.7	5.8	343.1	.390
5- 59.9	5- 200	.390	13.7	6.7	2.3	1.215	108.7	.327	.786	263.6	517.7	.529	1.043A	100.1	.846	-3.2	-5.8	161.7	.215
		11.92	9.77	3.99	2.14	5.57	5.78	12.80	1/1/2	68.8	51.8	30.4	.395	3.810	6.7	268.6	-1.8	102.4D	1.109
4-9690	4-9940	.173	102.5	25.5	.4	1.112	82.8	.249	1.259	37.5	190.5	.945D	1.573	86.6	.696	1.5	-10.8	242.9	.097
4-9940	5- 61.3	.260	171.3	.4	-1.3	.691	113.8	.466	1.247	216.2	316.8	.665A	1.828D	76.6	1.395	1.7	6.1	342.9	.375
5- 61.3	5- 210	.375	16.0	5.4	1.7	1.210	108.0	.316	.779	263.3	524.9	.533	1.025A	96.8	.836	-3.2	-6.5	159.1	.189
		12.25	10.05	4.32	2.20	5.62	5.73	12.42	1/1/2	72.8	63.4	32.9	.428	3.528	6.1	269.4	1.3	103.9D	1.081
MARS ARRIVAL DATE = 2449950 (20 AUG 1995)																			
4-9640	4-9950	.107	129.1	18.2	-.0	1.107	92.4	.225	1.280	346.7	554.9	.992	1.567	85.8	.713	1.9	-6.2	245.1	.088
4-9950	5- 50.8	.320	174.7	.6	-.9	.697	118.8	.529	1.245	217.0	296.0	.587A	1.902D	68.9	1.395	1.6	4.0	341.9	.521
5- 50.8	5- 160	.521	359.2	9.8	4.4	1.258	114.0	.430	.858	264.7	493.8	.489	1.226A	113.8	.919	-3.5	3.9	151.0	.396
		12.97	10.92	3.62	2.05	5.48	7.30	16.17	2/1/2	76.6	26.1	18.1	.222	6.343	20.0	262.9	-18.8	93.6D	1.184
4-9650	4-9950	.104	121.5	19.6	-.1	1.110	90.7	.223	1.280	356.0	554.2	.994	1.566	86.0	.713	1.9	-6.4	246.8	.088
4-9950	5- 53.8	.313	173.2	.9	-1.0	.706	118.3	.515	1.264	218.7	302.4	.613A	1.914D	71.2	1.399	1.6	4.3	342.3	.478
5- 53.8	5- 170	.478	3.9	9.4	3.9	1.243	112.3	.396	.831	264.4	498.9	.502	1.160A	110.4	.895	-3.5	.9	155.9	.342
		12.75	10.70	3.59	2.06	5.48	7.11	15.05	2/1/2	74.9	30.3	22.0	.263	5.230	15.2	264.7	-13.4	96.4D	1.111
4-9660	4-9950	.108	113.1	20.3	-.1	1.112	89.0	.225	1.278	5.7	193.9	.991D	1.565	86.0	.712	2.0	-6.1	247.2	.089
4-9950	5- 56.4	.308	171.9	1.1	-1.1	.713	117.9	.504	1.281	220.3	308.1	.635A	1.927D	73.2	1.403	1.6	4.7	342.3	.443
5- 56.4	5- 180	.443	8.1	8.8	3.4	1.231	110.8	.368	.812	264.3	504.3	.513	1.110A	107.0	.876	-3.4	-2.0	159.8	.295
		12.69	10.61	3.63	2.08	5.50	6.98	14.13	2/1/2	74.6	35.5	25.9	.307	4.458	11.5	266.2	-9.1	99.1D	1.061
4-9670	4-9950	.123	107.6	28.5	.7	1.113	87.1	.229	1.274	15.8	194.0	.983D	1.566	85.9	.710	1.2	-12.2	245.0	.088
4-9950	5- 58.8	.304	170.9	1.3	-1.2	.718	117.6	.496	1.294	221.5	313.1	.652A	1.936D	74.8	1.406	1.6	5.1	342.1	.413
5- 58.8	5- 190	.413	11.8	8.0	2.8	1.223	109.6	.345	.798	264.2	510.3	.522	1.073A	103.7	.860	-3.3	-4.5	162.3	.253
		12.69	10.63	3.76	2.06	5.48	6.87	13.40	1/1/2	75.2	42.1	29.6	.352	3.913	8.7	267.5	-5.5	101.6D	1.026
4-9680	4-9950	.143	103.4	23.7	.1	1.113	85.1	.236	1.268	26.2	194.3	.968D	1.567	85.7	.707	1.8	-7.9	243.3	.092
4-9950	5- 60.8	.301	170.2	1.4	-1.3	.723	117.4	.491	1.304	222.4	317.1	.664A	1.943D	76.2	1.408	1.6	5.5	341.7	.390
5- 60.8	5- 200	.390	14.9	6.8	2.3	1.216	108.6	.328	.788	264.1	516.8	.530	1.046A	100.5	.848	-3.3	-6.4	162.8	.218
		12.88	10.76	3.97	2.12	5.54	6.80	12.85	1/1/2	77.9	50.5	33.0	.395	3.521	6.8	268.5	-2.3	103.8D	.996

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2449850
12 MAY 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2449850 (12 MAY 1995)																				
4-9590	4-9850	.227	126.3	5.8	-2.7	1.103	101.2	.297	1.310	308.0	518.0	.922	1.699A	98.7	.671	3.6	-6.5	242.3	.164
4-9850	5- 40.4	.204	199.6	-9.4	-.3	.554	86.9	.498	1.102	176.8	286.3	.554A	1.651	67.3	1.357	2.0	4.7	331.2	.536
5- 40.4	5- 150	.536	344.5	8.7	4.1	1.247	114.9	.438	.838	260.9	496.5	.471	1.204A	113.8	.907	-2.3	10.2	140.5	.395
		12.91	9.44	5.10	3.46	6.86	4.35	16.16	2/1/2	34.7	27.4	13.7	.209	8.360	18.1	249.9	-16.7	90.2D	1.542
4-9600	4-9850	.216	129.5	-2.3	-3.9	1.110	100.1	.294	1.328	313.5	514.0	.937	1.718A	100.0	.679	4.9	-3.4	246.7	.180
4-9850	5- 43.7	.193	198.6	-9.7	-.5	.563	87.5	.480	1.115	177.3	292.0	.580A	1.650	69.3	1.361	2.1	5.4	333.1	.496
5- 43.7	5- 160	.496	349.7	8.8	3.8	1.234	113.2	.406	.815	260.7	501.2	.484	1.146A	110.4	.885	-2.5	7.3	145.8	.344
		12.86	9.05	4.96	3.81	7.21	4.09	15.09	2/1/2	33.1	31.6	16.8	.245	6.849	13.7	252.9	-11.7	92.4D	1.432
4-9640	4-9850	.169	156.1	42.1	4.2	1.136	94.6	.295	1.394	339.5	500.6	.983	1.805A	103.6	.705	-2.8	-32.1	253.7	.212
4-9850	5- 53.0	.168	195.2	-11.2	-1.2	.584	89.0	.439	1.146	178.7	308.1	.643A	1.649	74.8	1.370	2.5	8.3	337.1	.394
5- 53.0	5- 200	.394	4.5	6.4	2.2	1.204	108.9	.328	.770	260.1	525.2	.517	1.023A	97.0	.830	-2.8	-.5	150.5	.196
		12.36	7.82	4.27	4.54	7.93	3.55	12.52	1/1/2	19.4	63.8	27.2	.387	4.248	8.6	260.2	4.0	99.7D	1.256
4-9650	4-9850	.150	149.0	36.2	2.8	1.141	92.9	.297	1.407	347.1	498.3	.989	1.825A	104.2	.709	-1.2	-27.3	256.0	.217
4-9850	5- 53.6	.167	194.9	-11.4	-1.3	.585	89.1	.436	1.148	178.8	309.3	.647A	1.649	75.2	1.370	2.5	8.6	337.2	.387
5- 53.6	5- 210	.387	5.8	5.1	1.7	1.200	108.7	.324	.765	259.4	533.1	.517	1.013A	93.3	.822	-2.8	.4	144.5	.180
		12.22	7.56	4.04	4.66	8.05	3.52	12.30	1/1/2	16.2	79.3	28.6	.401	4.048	10.0	260.7	7.1	100.3D	1.221
4-9670	4-9850	.145	132.6	32.8	1.8	1.148	88.9	.304	1.420	4.7	135.9	.989D	1.851A	105.1	.714	.0	-23.4	257.6	.227
4-9850	5- 48.0	.180	197.1	-10.3	-.8	.574	88.3	.459	1.131	178.0	299.5	.612A	1.649	72.0	1.365	2.2	6.5	335.3	.446
5- 48.0	5- 230	.446	360.0	1.9	.8	1.193	111.7	.371	.754	253.3	555.1	.475	1.034	81.4	.806	-2.9	10.3	120.9	.235
		12.72	7.80	4.00	4.91	8.30	3.81	13.11	1/1/2	14.5	123.6	25.0	.303	4.617	11.5	256.9	10.6	95.3D	1.094
MARS ARRIVAL DATE = 2449860 (22 MAY 1995)																				
4-9580	4-9860	.234	121.6	11.8	-1.8	1.094	102.0	.293	1.284	302.9	527.0	.908	1.659A	95.2	.663	2.7	-7.1	236.5	.157
4-9860	5- 37.6	.215	200.2	-9.2	-.2	.541	88.5	.520	1.081	178.6	279.2	.518A	1.643	64.6	1.351	2.0	4.1	330.7	.586
5- 37.6	5- 140	.586	339.8	8.4	4.4	1.268	116.9	.478	.876	261.5	491.6	.458	1.295A	117.6	.938	-2.2	12.9	134.6	.459
		12.72	9.82	5.21	2.90	6.31	4.61	17.60	2/1/2	43.5	23.5	10.0	.175	11.426	26.4	248.2	-25.6	87.7L	1.826
4-9590	4-9860	.218	126.3	7.8	-2.2	1.100	100.8	.287	1.298	308.4	522.9	.925	1.671A	96.6	.669	3.2	-6.8	242.4	.149
4-9860	5- 41.2	.201	199.1	-9.3	-.4	.553	89.2	.498	1.096	179.2	285.4	.550A	1.642	67.0	1.356	2.0	4.7	332.9	.539
5- 41.2	5- 150	.539	345.5	8.8	4.2	1.250	115.0	.441	.843	261.3	495.7	.472	1.215A	114.2	.911	-2.5	9.9	141.1	.402
		12.37	9.24	4.96	3.13	6.54	4.29	16.30	2/1/2	38.5	26.8	13.2	.207	8.724	19.6	251.5	-18.3	89.9L	1.598
4-9600	4-9860	.205	129.7	1.6	-3.0	1.106	99.6	.283	1.313	314.1	519.0	.941	1.685A	97.9	.676	4.1	-4.9	247.1	.161
4-9860	5- 44.5	.190	197.9	-9.6	-.6	.563	89.8	.480	1.110	179.8	291.3	.578A	1.642	69.2	1.360	2.1	5.3	334.8	.498
5- 44.5	5- 160	.498	350.8	8.9	3.9	1.236	113.3	.408	.819	261.1	500.3	.484	1.153A	110.8	.889	-2.6	6.9	146.4	.349
		12.19	8.79	4.76	3.40	6.80	4.03	15.20	2/1/2	35.6	30.9	16.2	.242	7.081	14.7	254.4	-12.7	92.1D	1.474
4-9610	4-9860	.201	130.8	-10.3	-4.8	1.112	98.4	.281	1.328	320.2	515.4	.955	1.701A	98.9	.682	6.0	.6	251.0	.179
4-9860	5- 47.5	.181	196.7	-9.8	-.7	.571	90.3	.465	1.121	180.3	296.5	.600A	1.642D	71.0	1.363	2.1	6.0	336.3	.463
5- 47.5	5- 170	.463	355.5	8.7	3.5	1.225	111.8	.381	.801	261.0	505.4	.496	1.107A	107.5	.870	-2.7	4.1	150.7	.303
		12.34	8.55	4.71	3.79	7.19	3.83	14.28	2/1/2	36.1	36.0	19.2	.281	5.991	11.0	256.9	-8.1	94.3D	1.401
4-9640	4-9860	.168	157.9	49.1	5.1	1.129	94.1	.279	1.366	340.9	506.5	.985	1.747A	101.3	.698	-3.6	-36.1	254.4	.193
4-9860	5- 53.9	.166	193.9	-10.8	-1.2	.586	91.2	.437	1.143	181.6	307.9	.643A	1.643D	74.8	1.369	2.4	8.1	338.7	.393
5- 53.9	5- 200	.393	5.7	6.4	2.2	1.205	108.9	.328	.772	260.5	524.1	.519	1.025A	97.5	.832	-2.8	-1.3	152.2	.198
		11.85	7.76	4.26	4.09	7.49	3.49	12.55	1/1/2	24.1	62.0	26.9	.389	4.299	8.2	261.8	3.5	99.7D	1.282
4-9650	4-9860	.143	146.6	40.2	3.1	1.134	92.4	.280	1.376	346.8	504.5	.990	1.761A	101.9	.701	-1.5	-28.6	257.2	.195
4-9860	5- 54.7	.164	193.5	-11.0	-1.3	.587	91.3	.434	1.145	181.7	309.4	.648A	1.643D	75.3	1.369	2.4	8.4	338.9	.385
5- 54.7	5- 210	.385	7.3	5.1	1.7	1.202	108.6	.322	.767	259.9	531.9	.520	1.014A	93.8	.824	-2.9	-.6	146.7	.180
		11.56	7.42	3.97	4.13	7.53	3.46	12.31	1/1/2	19.6	76.9	26.4	.405	4.075	9.7	262.3	6.7	100.4D	1.246
4-9670	4-9860	.140	127.6	34.4	1.8	1.140	88.5	.285	1.382	7.0	142.7	.988D	1.776A	102.6	.704	.1	-23.4	258.9	.202
4-9860	5- 50.7	.173	195.3	-10.2	-1.0	.579	90.8	.450	1.133	181.0	302.2	.623A	1.642D	72.9	1.366	2.3	6.9	337.7	.427
5- 50.7	5- 230	.427	3.3	2.0	.8	1.195	110.7	.356	.757	255.0	552.6	.488	1.027	83.2	.809	-3.0	8.2	124.9	.218
		11.90	7.58	3.93	4.32	7.71	3.65	12.84	1/1/2	17.9	119.2	26.0	.330	4.441	11.9	259.6	11.0	96.6D	1.134
MARS ARRIVAL DATE = 2449870 (1 JUN 1995)																				
4-9570	4-9870	.248	116.1	15.4	-1.4	1.087	103.0	.296	1.263	297.6	535.8	.890	1.637A	91.8	.657	2.2	-5.4	227.1	.118
4-9870	5- 34.4	.230	200.6	-8.9	-.0	.526	90.4	.549	1.056	180.3	271.4	.476A	1.635D	61.6	1.345	1.9	3.6	329.7	.645
5- 34.4	5- 130	.645	334.6	8.0	4.5	1.295	119.3	.525	.932	262.1	487.1	.443	1.421A	121.5	.976	-2.1	15.5	128.2	.531
		12.96	10.43	5.44	2.53	5.95	4.98	19.30	2/1/2	57.0	20.2	6.5	.145	17.618	42.8	247.4	-42.3	85.1L	2.405
4-9580	4-9870	.228	121.6	12.9	-1.5	1.092	101.7	.287	1.276	303.1	531.7	.910	1.642A	93.3	.663	2.5	-6.6	235.3	.125
4-9870	5- 38.3	.213	199.3	-8.9	-.2	.541	91.1	.522	1.075	181.0	278.3	.514A	1.635D	64.4	1.349	2.0	4.0	332.3	.590
5- 38.3	5- 140	.590	340.8	8.5	4.4	1.272	117.1	.482	.883	261.9	490.8	.458	1.309A	118.0	.943	-2.4	12.6	135.3	.466
		12.38	9.70	5.12	2.68	6.09	4.58	17.76	2/1/2	49.1	23.0	9.5	.173	12.035	29.0	249.9	-28.1	87.3L	1.905
4-9590	4-9870	.210	126.3	9.5	-1.8	1.097	100.5	.280	1.289	308.7	527.8	.928	1.649A	94.7	.669	2.9	-6.8	241.9	.135
4-9870	5- 41.9	.200	198.0	-9.0	-.4	.554	91.8	.499	1.092	181.8	284.7	.547A	1.636D	66.8	1.354	2.0	4.6	334.6	.542
5- 41.9	5- 150	.542	346.5	8.9	4.2	1.253	115.1	.444	.848	261.7	494.9	.472	1.225A	114.6	.915	-2.6	9.8	141.6	.408
		11.96	9.10	4.85	2.86	6.27	4.26	16.43	2/1/2	43.2	26.3	12.7	.204	9.074	21.1	253.0	-19.9	89.6L	1.650
4-9600	4-9870	.195	129.9	4.7	-2.4	1.103	99.3	.275	1.301	314.7	524.0	.944	1.659A	95.9	.675	3.5	-5.7	247.1	.145
4-9870	5- 45.2	.189	196.6	-9.1	-.6	.565	92.3	.480	1.106	182.5	290.6	.575A	1.636D	69.0	1.358	2.0	5.2	336.4	.500
5- 45.2	5- 160	.500	351.8	9.0	3.9	1.238	113.4	.411	.823	261.6	499.5	.485	1.161A	111.2	.892	-2.7	8.5	147.0	.355
		11.69	8.62	4.62	3.06	6.47	4.00	15.31	2/1/2	39.1	30.3	15.8	.240	7.298	15.7	255.8	-13.9	91.9D	1.512
4-9610	4-9870	.184	131.5	-3.7	-3.4	1.108	98.0	.271	1.314	320.9	520.6	.958	1.670A	96.9	.680	4.7	-2.3	251.3	.158
4-9870	5- 48.2	.180	195.2	-9.3	-.8	.574	92.7	.464	1.118	183.1	296.1	.599A	1.637D	70.9	1.362	2.1	5.8	337.8	.464
5- 48.2	5- 170	.464	356.5	8.8	3.6	1.227	111.9	.383	.805	261.4	504.6	.497	1.112A	107.9	.873	-2.8	3.7	151.4	.307
		11.61	8.28	4.47	3.33	6.74	3.81	14.37	2/1/2	37.5	35.2	18.8	.279	6.132	11.7	258.3	-9.0	94.1D	1.430
4-9620	4-9870	.200	128.8	-23.2	-6.7	1.114	96.7	.268	1.325	327.5	517.4	.970	1.681A	97.8	.685	8.1	8.0	254.4	.185
4-9870	5- 50.9	.173	193.9	-9.5	-.9	.580	93.1	.452	1.128	183.7	300.8	.618A	1.638D	72.5	1.365	2.2	6.5	338.9	.434
5- 50.9	5- 180	.434	.7	8.3	3.1	1.218	110.6	.359	.791	261.4	510.2	.507	1.075A	104.6	.837	-2.8	1.1	154.3	.265
		12.26	8.35	4.69	3.91	7.31	3.66	13.61	2/1/2	42.3	41.5	21.7	.319	5.323	8.9	260.4	-4.6	96.3D	1.378
4-9640	4-9870	.181	164.6	58.6	6.7	1.124	93.7	.266	1.345	342.3	512.4	.987	1.702A	99.1	.693	-5.2	-43.4	253.9	.180
4-9870	5- 54.8	.165	192.0	-10.0	-1.2	.589	93.5	.437	1.141	184.6	307.9	.643A	1.639D	74.8	1.368	2.3	7.8	340.1	.393
5- 54.8	5- 200	.393	6.9	6.5	2.2	1.207	108.8	.328	.774	261.0	523.2	.520	1.028A	97.9	.834	-2.9	-2.0	153.8	.200
		11.71	7.90	4.43	3.81	7.21	3.47	12.58	1/1/2	31.4	60.3	26.6	.390	4.341	7.9	263.2	2.9	99.7D	1.303
4-9650	4-9870	.139	144.6	44.8	3.4	1.128	92.0	.266	1.351	350.5	510.7	.992	1.711A	99.6	.696	-1.8	-30.5	258.1	.175
4-9870	5- 55.8	.163	191.5	-10.2	-1.3	.591	93.6	.433	1.144	184.8	309.5	.648A	1.639D	75.3	1.369	2.4	8.2	340.3	.383
5- 55.8	5- 210	.383	8.6	5.1	1.7	1.203	108.5	.321	.769	260.5	530.8	.522	1.015A	94.3	.826	-2.9	-1.6	148.8	.181
		11.05	7.36	3.92	3.69	7.09	3.43	12.32	1/1/2	23.6	74.7	28.3	.409	4.095	9.3	263.8	6.2	100.6D	1.267
4-9670	4-9870	.136	123.0	35.6	1.8	1.133	88.1	.271	1.353	9.1	149.3	.987D	1.720A	100.2	.696	.1	-23.4	259.7	.180
4-9870	5- 52.7	.169	193.0	-9.7	-1.1	.585	93.3	.445	1.134	184.1	304.1	.630A	1.638D	73.6	1.366	2.2	7.1	339.6	.415
5- 52.7	5- 230	.415	5.9	2.0	.7	1.196	110.1	.346	.759	256.3	550.7	.496	1.023	84.4	.811	-3.0	6.5	128.2	.208
		11.27	7.46	3.89	3.81	7.21	3.57	12.67	1/1/2	21.7	115.5	26.7	.350	4.328	12.0	261.8	11.1	97.6D	1.164
MARS ARRIVAL DATE = 2449880 (11 JUN 1995)																				
4-9570	4-9880	.245	116.3	16.1	-1.2	1.086	102.9	.292	1.259	297.5	540.3	.891	1.627	89.9	.660	2.1	-4.2	224.3	.110
4-9880	5- 35.2	.231	199.4	-8.5	-.0	.527	93.4	.551	1.050	182.8	270.5	.471A	1.629D	61.3	1.341	1.9	3.5	331.4	.650
5- 35.2	5- 130	.650	335.5	8.1	4.6	1.300	119.4	.530	.942	262.6	486.3	.443	1.441A	121.9	.982	-2.2	15.2	126.6	.539
		12.80	10.40	5.40	2.40	5.82	5.00	19.49	2/1/2	64.5	19.8	6.2	.142	18.604	48.0	249.8	-47.5	84.7L	2.505
4-9580	4-9880	.224	121.7	13.9	-1.3	1.090	101.6	.282	1.270	303.1	536.3	.912	1.628A	91.4	.665	2.3	-5.8	233.4	.116
4-9880	5- 39.1	.214	197.9	-8.5	-.2	.544	94.0	.523	1.071	183.6	277.5	.511A	1.631D	64.1	1.348	1.9	4.0	333.9	.594
5- 39.1	5- 140	.594	341.8	8.7	4.5	1.276	117.2	.485	.891	262.3	490.1	.458	1.323A	118.4	.948	-2.5	12.3	135.7	.473
		12.15	9.65	5.06	2.90	5.92	4.59	17.92	2/1/2	55.5	22.5	9.1	.170	12.600	31.7	251.6	-30.9	86.9L	1.973
4-9590	4-9880	.205	126.4	11.1	-1.5	1.095	100.3	.274	1.281	309.0	532.6	.930	1.632A	92.8	.670	2.6	-6.5	240.7	.123
4-9880	5- 42.7	.200	198.3	-8.4	-.4	.557	94.5	.500	1.088	184.5	284.1	.544A	1.632D	66.6	1.353	2.0	4.5	336.1	.546
5- 42.7	5- 150	.546	347.5	9.0	4.3	1.256	115.2	.447	.854	262.1	494.2	.473	1.235A	114.9	.919	-2.7	9.2	142.1	.414
		11.66	9.03	4.76	2.63	6.05	4.27	16.56	2/1/2	48.6	25.8	12.2	.202	9.390	22.7	254.5	-21.6	89.3L	1.695

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2449880
11 JUN 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
4-9600	4-9880	.187	130.0	7.2	-1.9	1.100	99.0	.268	1.292	315.1	529.0	.946	1.638A	94.0	.675	3.1	-6.0	246.5	.132
4-9880	5- 46.0	.189	194.7	-8.4	-.6	.569	94.9	.481	1.103	185.4	290.1	.573A	1.634D	68.8	1.357	2.0	5.0	337.8	.503
5- 46.0	5- 160	.503	352.8	9.1	4.0	1.241	113.5	.413	.827	262.0	498.8	.466	1.169A	111.5	.895	-2.8	6.2	147.6	.360
		11.33	8.53	4.52	2.79	6.20	4.02	15.41	2/1/2	43.6	29.7	15.3	.238	7.488	16.8	257.2	-15.1	91.7D	1.542
4-9610	4-9880	.173	131.9	1.1	-2.5	1.106	97.7	.263	1.303	321.5	525.8	.960	1.645A	95.0	.680	3.8	-4.0	251.2	.141
4-9880	5- 49.0	.181	193.1	-8.5	-.8	.578	95.3	.465	1.116	186.1	295.7	.597A	1.635D	70.8	1.361	2.1	5.7	339.2	.466
5- 49.0	5- 170	.466	357.5	8.9	3.6	1.229	111.9	.384	.808	261.8	503.8	.497	1.118A	108.2	.876	-2.9	3.3	152.0	.312
		11.14	8.15	4.33	2.99	6.40	3.82	14.45	2/1/2	40.6	34.5	18.4	.277	6.252	12.4	259.6	-9.9	94.0D	1.453
4-9620	4-9880	.169	130.7	-11.2	-4.2	1.111	96.4	.259	1.312	328.3	522.8	.972	1.653A	95.8	.684	5.6	1.9	254.8	.156
4-9880	5- 51.7	.174	191.7	-8.6	-1.0	.585	95.6	.453	1.127	186.8	300.6	.617A	1.637D	72.4	1.364	2.1	6.3	340.3	.435
5- 51.7	5- 180	.435	1.7	8.4	3.2	1.220	110.6	.360	.794	261.8	509.4	.508	1.080A	104.9	.860	-2.9	.6	155.1	.269
		11.24	7.95	4.27	3.29	6.69	3.68	13.67	2/1/2	41.0	40.6	21.3	.317	5.399	9.2	261.7	-5.4	96.2D	1.396
4-9640	4-9880	.240	195.0	70.4	11.1	1.120	93.3	.255	1.328	343.6	518.2	.989	1.667A	97.1	.690	-9.6	-59.0	247.5	.193
4-9880	5- 55.7	.166	189.4	-8.9	-1.2	.594	96.0	.457	1.141	187.8	307.9	.643A	1.639D	74.8	1.368	2.2	7.6	341.4	.392
5- 55.7	5- 200	.392	8.0	6.5	2.2	1.208	108.8	.327	.776	261.4	522.3	.522	1.030A	98.2	.836	-2.9	-2.7	155.1	.202
		12.91	8.81	5.32	4.10	7.49	3.50	12.61	1/1/2	46.2	58.8	26.5	.391	4.369	7.6	264.4	2.3	99.8D	1.318
4-9650	4-9880	.139	143.9	50.3	3.9	1.123	91.6	.255	1.333	352.0	516.7	.993	1.673A	97.5	.692	-2.3	-33.5	258.3	.158
4-9880	5- 56.7	.164	188.9	-9.1	-1.3	.596	96.1	.433	1.144	188.1	309.8	.649A	1.639D	75.4	1.369	2.3	7.9	341.6	.382
5- 56.7	5- 210	.382	9.9	5.2	1.7	1.204	108.4	.320	.770	260.9	529.8	.524	1.016A	94.7	.827	-3.0	-2.4	150.6	.181
		10.71	7.58	3.92	3.33	6.73	3.46	12.33	1/1/2	28.4	72.7	28.2	.413	4.104	8.8	265.1	5.6	100.7D	1.282
4-9670	4-9880	.134	118.9	36.4	1.8	1.128	87.7	.260	1.332	11.0	155.8	.986D	1.677A	98.0	.692	.1	-23.4	260.0	.161
4-9880	5- 54.4	.168	190.2	-8.8	-1.1	.591	95.9	.441	1.137	187.5	305.6	.635A	1.638D	74.1	1.367	2.2	7.1	341.1	.405
5- 54.4	5- 230	.405	8.0	2.0	.7	1.198	109.7	.339	.761	257.3	549.1	.503	1.020	85.4	.813	-3.1	5.0	151.0	.198
		10.80	7.42	3.87	3.38	6.79	3.55	12.55	1/1/2	26.0	112.3	27.3	.366	4.239	11.9	263.7	10.9	98.4D	1.185

MARS ARRIVAL DATE = 2449890 (21 JUN 1995)

4-9570	4-9890	.244	116.5	16.9	-1.0	1.085	102.9	.291	1.255	297.2	544.6	.890	1.620	88.1	.663	2.0	-2.9	220.8	.105
4-9890	5- 35.9	.233	197.7	-7.9	-.1	.530	96.7	.554	1.047	185.4	269.7	.467A	1.627D	61.0	1.340	1.9	3.5	332.9	.655
5- 35.9	5- 130	.655	336.5	8.2	4.7	1.304	119.6	.535	.953	263.0	485.6	.443	1.462A	122.3	.988	-2.3	14.9	129.0	.547
		12.76	10.44	5.38	2.32	5.74	5.06	19.69	2/1/2	72.6	19.4	5.9	.140	19.338	53.3	252.4	-52.7	84.3L	2.567
4-9580	4-9890	.221	121.9	14.9	-1.1	1.089	101.5	.279	1.265	303.1	540.9	.912	1.618	89.7	.668	2.2	-4.8	230.7	.108
4-9890	5- 39.8	.217	196.0	-7.7	-.3	.548	97.1	.525	1.069	186.5	276.9	.507A	1.630D	63.9	1.347	1.9	3.9	335.4	.599
5- 39.8	5- 140	.599	342.7	8.8	4.6	1.279	117.4	.489	.898	262.8	489.3	.459	1.338A	118.8	.953	-2.6	12.0	136.2	.480
		12.03	9.67	5.01	2.37	5.78	4.65	18.08	2/1/2	62.8	22.1	8.8	.168	13.070	34.4	253.3	-33.6	86.6L	2.024
4-9590	4-9890	.201	126.6	12.4	-1.2	1.094	100.1	.270	1.275	309.1	537.3	.932	1.619A	91.0	.673	2.4	-5.9	238.8	.113
4-9890	5- 43.4	.203	191.1	-7.6	-.5	.563	97.4	.501	1.087	187.5	283.6	.542A	1.632D	66.4	1.353	1.9	4.4	337.5	.549
5- 43.4	5- 150	.549	348.5	9.1	4.4	1.259	115.3	.450	.859	262.5	493.5	.473	1.246A	115.3	.923	-2.8	8.9	142.6	.419
		11.50	9.04	4.70	2.46	5.67	4.34	16.69	2/1/2	55.0	25.3	11.9	.200	9.648	24.4	255.9	-23.3	89.1L	1.726
4-9600	4-9890	.182	130.2	9.3	-1.5	1.098	98.8	.262	1.285	315.4	533.9	.948	1.622A	92.1	.677	2.8	-6.0	245.3	.120
4-9890	5- 46.7	.193	192.2	-7.5	-.6	.574	97.8	.482	1.103	188.5	289.8	.572A	1.635D	68.7	1.357	2.0	4.9	339.2	.505
5- 46.7	5- 160	.505	353.7	9.2	4.0	1.243	113.5	.415	.831	262.4	498.0	.486	1.176A	111.9	.899	-2.9	5.9	148.1	.365
		11.10	8.53	4.44	2.57	5.99	4.09	15.52	2/1/2	49.0	29.1	15.1	.235	7.633	17.8	258.5	-16.3	91.5D	1.562
4-9610	4-9890	.165	132.2	4.7	-1.9	1.103	97.5	.256	1.294	322.0	530.9	.962	1.625A	93.1	.681	3.3	-4.9	250.4	.127
4-9890	5- 49.7	.184	190.5	-7.4	-.8	.584	98.0	.466	1.117	189.4	295.5	.596A	1.637D	70.7	1.361	2.0	5.5	340.5	.468
5- 49.7	5- 170	.468	358.5	8.9	3.6	1.231	112.0	.386	.811	262.2	503.1	.498	1.124A	108.5	.878	-3.0	2.9	152.7	.316
		10.84	8.13	4.23	2.71	6.13	3.90	14.54	2/1/2	44.9	33.8	18.2	.275	6.336	13.1	260.8	-10.8	93.9D	1.466
4-9620	4-9890	.154	131.7	-3.3	-2.8	1.108	96.1	.252	1.302	329.1	528.1	.974	1.630A	93.9	.684	4.2	-1.4	254.4	.137
4-9890	5- 52.4	.178	188.9	-7.4	-1.0	.591	98.3	.454	1.128	190.2	300.5	.616A	1.640D	72.4	1.365	2.0	6.1	341.5	.436
5- 52.4	5- 180	.436	2.7	8.4	3.2	1.222	110.6	.361	.796	262.1	508.6	.508	1.084A	105.2	.862	-3.0	.2	155.9	.273
		10.75	7.85	4.09	2.90	6.31	3.76	13.74	2/1/2	43.1	39.8	21.2	.316	5.447	9.7	262.8	-6.2	96.2D	1.405
4-9630	4-9890	.167	126.0	-23.1	-5.7	1.112	94.6	.249	1.309	336.5	525.7	.984	1.635A	94.6	.687	7.2	9.2	257.2	.160
4-9890	5- 54.7	.173	187.5	-7.5	-1.1	.597	98.4	.444	1.137	190.9	304.7	.632A	1.642D	73.8	1.367	2.1	6.7	342.1	.411
5- 54.7	5- 190	.411	6.2	7.6	2.7	1.214	109.6	.342	.785	262.0	514.7	.517	1.054A	101.9	.849	-3.0	-2.0	157.4	.235
		11.27	7.90	4.25	3.37	6.77	3.65	13.11	2/1/2	47.3	47.4	24.0	.357	4.817	7.6	264.4	-2.1	98.2D	1.361
4-9650	4-9890	.146	145.8	58.0	4.9	1.120	91.3	.246	1.318	353.3	522.6	.993	1.643A	95.5	.691	-3.2	-39.1	257.5	.145
4-9890	5- 57.5	.168	185.8	-7.6	-1.3	.604	98.7	.433	1.147	191.7	310.1	.650A	1.644D	75.5	1.370	2.2	7.6	342.6	.380
5- 57.5	5- 210	.380	11.0	5.2	1.7	1.205	108.3	.319	.772	261.4	528.9	.526	1.018A	95.1	.829	-3.0	-3.2	152.2	.182
		10.61	7.54	4.00	3.06	6.47	3.54	12.34	1/1/2	34.7	70.9	28.3	.416	4.095	8.3	266.3	5.0	100.9D	1.288
4-9670	4-9890	.132	115.5	37.0	1.8	1.124	87.5	.251	1.315	12.6	162.0	.985D	1.645A	95.8	.690	.1	-23.3	259.7	.144
4-9890	5- 55.8	.171	186.8	-7.5	-1.2	.600	98.5	.440	1.141	191.2	306.9	.639A	1.645D	74.5	1.368	2.1	7.1	342.4	.398
5- 55.8	5- 230	.398	9.8	2.0	.7	1.199	109.3	.334	.763	258.1	547.6	.508	1.018	86.2	.815	-3.1	3.7	153.6	.192
		10.49	7.46	3.85	3.05	6.44	3.61	12.47	1/1/2	30.8	109.5	27.9	.379	4.155	11.6	265.3	10.6	99.1D	1.197

MARS ARRIVAL DATE = 2449900 (1 JUL 1995)

4-9570	4-9900	.244	116.9	17.6	-.8	1.084	102.9	.290	1.253	296.9	548.9	.889	1.617	86.4	.668	1.9	-1.5	216.9	.102
4-9900	5- 36.7	.239	195.5	-7.1	-.1	.537	100.2	.557	1.047	188.3	269.2	.463A	1.630D	60.7	1.340	1.9	3.4	334.4	.661
5- 36.7	5- 130	.661	337.5	8.3	4.8	1.309	119.8	.540	.964	263.5	484.9	.444	1.484A	122.6	.994	-2.5	14.7	129.4	.555
		12.86	10.59	5.38	2.27	5.69	5.20	19.89	2/1/2	81.3	19.0	5.8	.138	19.724	58.3	255.3	-57.6	84.1L	2.577
4-9580	4-9900	.220	122.3	15.8	-.9	1.088	101.4	.277	1.262	302.9	545.4	.912	1.612	88.0	.672	2.1	-3.7	227.3	.102
4-9900	5- 40.5	.222	193.5	-6.8	-.3	.555	100.4	.528	1.069	189.6	276.5	.505A	1.634D	63.7	1.347	1.9	3.8	336.7	.603
5- 40.5	5- 140	.603	343.7	8.9	4.7	1.283	117.5	.493	.906	263.2	488.6	.459	1.352A	119.1	.958	-2.7	11.7	136.6	.487
		12.06	9.79	4.99	2.27	5.70	4.80	18.24	2/1/2	70.9	21.6	8.6	.165	13.394	37.0	254.9	-36.3	86.3L	2.049
4-9590	4-9900	.198	126.8	13.7	-1.0	1.092	100.0	.266	1.271	309.1	542.0	.932	1.609	89.3	.676	2.3	-5.1	236.1	.105
4-9900	5- 44.1	.209	191.4	-6.5	-.5	.570	100.6	.504	1.089	190.8	283.3	.540A	1.638D	66.3	1.353	1.9	4.3	338.7	.552
5- 44.1	5- 150	.552	349.4	9.2	4.4	1.262	115.4	.453	.865	262.9	492.8	.473	1.256A	115.6	.927	-2.9	8.6	143.0	.425
		11.47	9.14	4.66	2.32	5.74	4.48	16.82	2/1/2	62.2	24.8	11.7	.197	9.814	25.9	257.2	-24.9	88.9L	1.738
4-9600	4-9900	.178	130.4	11.1	-1.1	1.097	98.7	.258	1.279	315.6	538.8	.949	1.609A	90.4	.680	2.5	-5.7	243.2	.110
4-9900	5- 47.4	.199	189.3	-6.2	-.7	.583	100.8	.484	1.106	192.0	289.7	.571A	1.642D	68.6	1.358	1.9	4.8	340.3	.508
5- 47.4	5- 160	.508	354.6	9.2	4.1	1.246	113.6	.417	.835	262.7	497.3	.487	1.184A	112.2	.902	-3.0	5.5	148.6	.370
		11.03	8.63	4.39	2.40	5.82	4.24	15.62	2/1/2	55.4	28.6	14.9	.233	7.714	18.9	259.7	-17.4	91.4D	1.566
4-9610	4-9900	.160	132.5	7.7	-1.4	1.101	97.3	.251	1.287	322.4	535.9	.964	1.610A	91.4	.683	2.9	-5.2	249.0	.116
4-9900	5- 50.4	.191	187.4	-6.1	-.8	.593	101.0	.468	1.120	193.0	295.5	.596A	1.645D	70.6	1.362	1.9	5.3	341.5	.469
5- 50.4	5- 170	.469	359.4	9.0	3.7	1.233	112.0	.387	.814	262.6	502.4	.499	1.129A	108.8	.861	-3.0	2.6	155.5	.320
		10.72	8.22	4.16	2.50	5.92	4.06	14.62	2/1/2	50.3	33.2	18.1	.273	6.370	13.8	261.9	-11.7	93.9D	1.465
4-9620	4-9900	.145	132.4	2.4	-1.9	1.106	95.9	.246	1.294	329.6	533.3	.976	1.612A	92.2	.686	3.5	-3.3	253.4	.123
4-9900	5- 53.1	.185	185.7	-6.0	-1.0	.600	101.1	.456	1.132	193.9	300.6	.616A	1.648D	72.3	1.366	2.0	5.9	342.4	.437
5- 53.1	5- 180	.437	3.6	8.5	3.2	1.223	110.7	.362	.799	262.5	507.9	.509	1.088A	105.5	.864	-3.1	-.1	156.6	.276
		10.54	7.91	3.99	2.63	6.04	3.92	13.80	2/1/2	47.1	39.0	21.1	.315	5.455	10.1	263.9	-7.0	96.2D	1.402
4-9630	4-9900	.140	128.6	-8.8	-3.2	1.110	94.4	.242	1.300	337.3	531.1	.985	1.615A	92.8	.689	4.8	2.4	256.7	.134
4-9900	5- 55.3	.181	184.3	-5.9	-1.1	.606	101.2	.446	1.142	194.7	305.0	.632A	1.651D	73.8	1.369	2.0	6.5	343.0	.411
5- 55.3	5- 190	.411	7.2	7.7	2.7	1.216	109.6	.342	.787	262.4	514.0	.518	1.057A	102.2	.850	-3.0	-2.4	158.3	.238
		10.59	7.75	3.93	2.83	6.25	3.82	13.15	2/1/2	47.0	46.4	24.0	.356	4.809	7.8	265.4	-2.8	98.3D	1.356
4-9650	4-9900	.177	160.2	70.4	7.4	1.117	91.1	.239	1.306	354.4	528.4	.994	1.619A	93.6	.692	-5.7	-51.7	253.6	.145
4-9900	5- 58.3	.176	182.5	-6.0	-1.3	.613	101.4	.435	1.153	195.6	310.7	.651A	1.655D	75.6	1.372	2.1	7.3	343.5	.379
5- 58.3	5- 210	.379	12.1	5.2	1.7	1.206	108.2	.318	.773	261.8	528.1	.527	1.019A	95.4	.831	-3.0	-3.9	153.7	.183
		11.14	8.08	4.37	3.05	6.46	3.71	12.35	1/1/2	45.8	69.3	28.5	.419	4.063	7.8	267.3	4.3	101.1D	1.283
4-9670	4-9900	.131	112.8	37.3	1.8	1.120	87.3	.244	1.302	13.9	167.9	.984D	1.620A	93.8	.690	.1	-23.1	258.9	.129
4-9900	5- 57.1	.178	183.3	-6.0	-1.2	.611	101.3	.440	1.148	195.2	306.3	.644A	1.653D	74.8	1.370	2.1	7.0	343.3	.392
5- 57.1	5- 230	.392	11.5	2.0	.7	1.200	109.0	.329	.765	258.8	546.4	.513	1.016	86.9	.817	-3.1	2.5	155.9	.187 *
		10.33	7.98	3.84	2.74	6.15	3.75	12.40	1/1/2	36.5	106.9	28.5	.391	4.063	11.1	266.6	10.0	99.7D	1.198

LAUNCH DEPART SWNGBY	ARRIVE SWNGBY RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
4-9680	4-9900	.150	106.7	32.5	1.3	1.120	85.1	.251	1.294	24.8	168.7	.969D	1.619A	93.7	.686	.6	-20.2	257.4	.130
4-9900	5- 40.9	.221	193.3	-6.7	-.3	.557	100.4	.526	1.071	189.7	277.1	.508A	1.634D	63.9	1.348	1.9	3.8	336.9	.598
5- 40.9	5- 240	.598	353.4	.3	.2	1.190	119.2	.489	.751	243.9	566.6	.384	1.117	68.8	.800	-3.3	15.2	114.5	.386
		11.57	8.81	4.05	2.76	6.17	4.76	15.96	1/1/2	38.0	140.5	16.9	.168	6.825	12.4	254.7	12.2	86.2L	.980
4-9680	4-9900	.150	106.7	32.5	1.3	1.120	85.1	.251	1.294	24.8	168.7	.969D	1.619A	93.7	.686	.6	+20.2	257.4	.130
4-9900	5- 49.9	.192	187.8	-6.1	-.8	.591	100.9	.471	1.118	192.8	294.5	.592A	1.645D	70.3	1.362	1.9	5.2	341.3	.476
5- 49.9	5- 240	.476	3.5	.3	.1	1.195	113.2	.395	.758	252.0	560.5	.458	1.057	77.6	.807	-3.3	10.3	122.3	.273
		10.89	8.13	4.05	2.76	6.17	4.08	13.74	1/1/2	38.0	131.6	22.7	.266	5.087	12.9	261.8	12.6	93.2D	1.085
MARS ARRIVAL DATE = 2449910 (11 JUL 1995)																			
4-9580	4-9910	.220	122.7	16.6	-.7	1.087	101.5	.276	1.259	302.6	549.7	.912	1.607	86.3	.677	2.0	-2.5	223.3	.099
4-9910	5- 41.2	.232	190.6	-5.6	-.4	.566	104.0	.532	1.074	193.0	276.3	.503A	1.645D	63.5	1.349	1.9	3.7	337.9	.607
5- 41.2	5- 140	.607	344.6	9.0	4.8	1.286	117.6	.497	.913	263.6	487.9	.459	1.368A	119.5	.963	-2.9	11.4	137.0	.493
		12.25	10.03	4.99	2.22	5.65	5.04	18.40	2/1/2	79.5	21.2	8.5	.163	13.511	39.2	256.3	-38.4	86.2L	2.039
4-9590	4-9910	.197	127.2	14.8	-.8	1.091	100.0	.264	1.267	309.0	546.5	.932	1.602	87.7	.680	2.1	-4.2	232.7	.100
4-9910	5- 44.8	.220	188.3	-5.2	-.5	.582	104.0	.507	1.095	194.5	283.3	.540A	1.651D	66.2	1.355	1.9	4.1	339.8	.555
5- 44.8	5- 150	.555	350.3	9.3	4.5	1.265	115.5	.456	.870	263.3	492.1	.474	1.267A	116.0	.931	-3.0	8.3	143.4	.431
		11.60	9.37	4.64	2.23	5.65	4.73	16.95	2/1/2	70.2	24.3	11.6	.195	9.854	27.2	258.3	-26.2	88.8L	1.726
4-9600	4-9910	.175	130.8	12.7	-.9	1.096	98.6	.255	1.275	315.7	543.5	.950	1.600	88.8	.684	2.3	-5.2	240.4	.102
4-9910	5- 48.0	.210	186.1	-4.8	-.7	.594	104.0	.487	1.113	195.8	289.8	.571A	1.656D	68.5	1.360	1.9	4.6	341 *	.510
5- 48.0	5- 160	.510	355.5	9.3	4.2	1.248	113.7	.420	.839	263.1	496.7	.487	1.192A	112.5	.905	-3.1	5.2	149.1	.375
		11.12	8.85	4.35	2.27	5.69	4.49	15.72	2/1/2	62.6	28.1	14.9	.231	7.707	19.7	260.7	-18.4	91.4D	1.550
4-9610	4-9910	.156	132.9	10.1	-1.0	1.100	97.1	.247	1.282	322.6	540.8	.965	1.599	89.7	.687	2.5	-5.3	246.7	.106
4-9910	5- 51.0	.202	184.2	-4.6	-.9	.605	104.1	.472	1.129	197.0	295.8	.596A	1.661D	70.6	1.365	1.9	5.1	342.4	.471
5- 51.0	5- 170	.471	.2	9.1	3.7	1.235	112.1	.389	.817	262.9	501.7	.499	1.135A	109.1	.884	-3.1	2.2	153.8	.324
		10.77	8.43	4.12	2.34	5.76	4.32	14.70	2/1/2	56.7	32.6	18.2	.271	6.339	14.5	262.9	-12.5	94.0D	1.447
4-9620	4-9910	.140	132.9	6.6	-1.3	1.104	95.7	.241	1.288	330.0	538.4	.977	1.599A	90.5	.689	2.9	-4.3	251.6	.111
4-9910	5- 53.7	.197	182.4	-4.4	-1.0	.613	104.2	.459	1.141	198.0	301.0	.617A	1.665D	72.4	1.368	1.9	5.7	343.2	.438
5- 53.7	5- 180	.438	4.4	8.5	3.3	1.225	110.7	.363	.801	262.8	507.2	.510	1.092A	105.8	.866	-3.1	-.5	157.3	.280
		10.54	8.12	3.93	2.42	5.84	4.18	13.86	2/1/2	52.6	38.3	21.3	.313	5.410	10.6	264.7	-7.7	96.4D	1.381
4-9630	4-9910	.128	129.9	.3	-2.0	1.108	94.2	.237	1.293	337.8	536.4	.986	1.600A	91.1	.692	3.6	-1.3	255.3	.117
4-9910	5- 56.0	.193	181.0	-4.3	-1.1	.619	104.2	.450	1.151	198.9	305.5	.634A	1.669D	73.8	1.371	1.9	6.2	343.6	.411
5- 56.0	5- 190	.411	8.1	7.7	2.8	1.217	109.6	.343	.789	262.7	513.2	.519	1.060A	102.5	.852	-3.1	-2.8	159.1	.241
		10.44	7.91	3.81	2.53	5.95	4.09	13.20	2/1/2	50.5	45.5	24.3	.355	4.756	8.0	266.3	-3.6	98.5D	1.335
4-9640	4-9910	.137	121.6	-17.3	-4.2	1.111	92.6	.235	1.296	346.2	534.9	.992	1.601A	91.6	.693	5.9	8.7	257.9	.134
4-9910	5- 57.9	.190	179.9	-4.2	-1.2	.623	104.3	.443	1.159	199.6	309.1	.646A	1.672D	75.0	1.373	2.0	6.7	343.9	.391
5- 57.9	5- 200	.391	11.0	6.6	2.2	1.212	108.7	.327	.781	262.6	519.9	.525	1.036A	99.2	.841	-3.1	-4.3	158.6	.209
		10.77	7.93	3.90	2.84	6.25	4.03	12.70	2/1/2	53.2	55.1	26.9	.394	4.297	6.8	267.4	.2	100.3D	1.298
4-9670	4-9910	.130	110.8	37.5	1.8	1.118	87.1	.239	1.292	14.9	173.6	.983D	1.602A	92.0	.691	.1	-22.8	257.2	.116
4-9910	5- 58.2	.189	179.7	-4.2	-1.2	.624	104.3	.442	1.160	199.7	309.8	.648A	1.672D	75.2	1.374	2.0	6.8	343.9	.387
5- 58.2	5- 230	.387	12.9	2.0	.7	1.201	108.8	.325	.766	259.5	545.2	.517	1.015	87.5	.818	-3.1	1.4	138.0	.183
		10.35	7.84	3.83	2.51	5.92	4.01	12.35	1/1/2	42.5	104.6	29.3	.401	3.952	10.5	267.7	9.4	100.4D	1.185
4-9680	4-9910	.149	105.2	31.9	1.2	1.117	85.0	.246	1.285	25.7	174.4	.968D	1.601A	91.8	.688	.7	-19.2	255.5	.117
4-9910	5- 52.9	.198	183.0	-4.4	-1.0	.610	104.1	.463	1.137	197.7	299.4	.611A	1.664D	71.8	1.367	1.9	5.5	342.9	.448
5- 52.9	5- 240	.448	7.2	.3	.1	1.197	111.8	.373	.760	254.3	558.0	.477	1.044	79.9	.810	-3.3	8.2	125.9	.246
		10.79	8.26	4.04	2.53	5.94	4.22	13.29	1/1/2	44.6	127.6	24.7	.300	4.669	12.6	264.4	12.2	95.3D	1.099
MARS ARRIVAL DATE = 2449920 (21 JUL 1995)																			
4-9580	4-9920	.221	123.2	17.4	- .5	1.087	101.6	.277	1.258	302.1	554.0	.910	1.606	84.8	.682	1.9	-1.4	219.2	.098
4-9920	5- 41.9	.248	187.4	-4.2	-.4	.582	107.8	.537	1.085	196.9	276.5	.503A	1.667D	63.3	1.352	1.8	3.6	338.9	.612
5- 41.9	5- 140	.612	345.5	9.2	4.9	1.290	117.8	.502	.922	264.0	487.2	.459	1.384A	119.8	.968	-3.0	11.1	137.4	.500
		12.65	10.43	5.01	2.21	5.64	5.43	18.56	2/1/2	88.4	20.8	8.6	.161	13.362	40.6	257.6	-39.9	86.1L	1.985
4-9590	4-9920	.196	127.7	15.8	-.6	1.091	100.0	.263	1.265	308.7	551.0	.932	1.598	86.1	.685	2.0	-3.2	228.7	.096
4-9920	5- 45.4	.235	185.1	-3.8	-.6	.597	107.6	.512	1.107	198.5	283.7	.540A	1.674D	66.1	1.359	1.8	4.0	340.6	.559
5- 45.4	5- 150	.559	351.2	9.4	4.6	1.268	115.6	.459	.876	263.7	491.4	.474	1.278A	116.3	.935	-3.1	8.0	143.9	.437
		11.93	9.75	4.64	2.16	5.60	5.11	17.08	2/1/2	78.9	23.9	11.8	.193	9.730	28.1	259.3	-27.1	88.9L	1.681
4-9600	4-9920	.174	131.2	14.1	-.6	1.095	98.5	.253	1.272	315.5	548.2	.950	1.593	87.3	.688	2.2	-4.5	236.9	.097
4-9920	5- 48.7	.226	182.9	-3.4	-.7	.610	107.5	.493	1.127	200.1	290.4	.572A	1.681D	68.5	1.364	1.8	4.5	342.0	.512
5- 48.7	5- 160	.512	356.4	9.4	4.2	1.250	113.8	.422	.843	263.5	496.0	.488	1.199A	112.6	.908	-3.2	4.9	149.6	.379
		11.41	9.22	4.34	2.19	5.61	4.88	15.82	2/1/2	70.7	27.6	15.1	.229	7.586	20.4	261.6	-19.1	91.6D	1.508
4-9610	4-9920	.154	133.3	12.2	-.7	1.099	97.1	.244	1.278	322.7	545.6	.965	1.590	88.2	.691	2.3	-5.1	243.7	.099
4-9920	5- 51.7	.219	180.9	-3.0	-.9	.621	107.4	.477	1.143	201.4	296.5	.598A	1.688D	70.6	1.369	1.8	4.9	342.9	.473
5- 51.7	5- 170	.473	1.1	9.2	3.8	1.237	112.1	.391	.820	263.5	501.0	.500	1.140A	109.4	.886	-3.2	1.9	154.5	.328
		11.02	8.80	4.09	2.22	5.64	4.71	14.78	2/1/2	64.1	32.1	18.5	.269	6.224	15.0	263.6	-13.1	94.2D	1.406
4-9620	4-9920	.136	133.5	9.9	-.9	1.103	95.6	.238	1.283	330.2	543.4	.978	1.589	88.9	.693	2.5	-4.8	249.0	.102
4-9920	5- 54.3	.214	179.2	-2.8	-1.0	.629	107.4	.465	1.156	202.6	301.9	.619A	1.694D	72.4	1.373	1.8	5.4	343.6	.439
5- 54.3	5- 180	.439	5.3	8.6	3.3	1.226	110.7	.364	.803	263.2	506.5	.511	1.096A	106.1	.868	-3.2	-.9	157.9	.283
		10.75	8.48	3.90	2.27	5.69	4.58	13.92	2/1/2	59.2	37.6	21.8	.312	5.300	11.0	265.5	-8.3	96.6D	1.341
4-9630	4-9920	.123	130.9	6.5	-1.2	1.106	94.1	.234	1.287	338.2	541.5	.987	1.588	89.5	.695	2.9	-3.3	253.0	.106
4-9920	5- 56.7	.210	177.9	-2.6	-1.1	.635	107.3	.455	1.167	203.6	306.5	.636A	1.698D	73.9	1.375	1.8	5.9	344.0	.412
5- 56.7	5- 190	.412	8.9	7.8	2.8	1.218	109.6	.343	.791	263.1	512.6	.520	1.063A	102.8	.854	-3.2	-3.2	159.9	.244
		10.56	8.25	3.76	2.33	5.75	4.49	13.24	2/1/2	56.0	44.7	24.8	.355	4.651	8.2	266.9	-4.2	98.9D	1.296
4-9640	4-9920	.117	124.5	-1.3	-2.1	1.110	92.5	.231	1.290	346.7	540.1	.992	1.588	90.0	.696	3.8	1.2	255.9	.112
4-9920	5- 58.5	.207	176.8	-2.5	-1.2	.640	107.3	.448	1.175	204.3	310.2	.648A	1.702D	75.1	1.378	1.9	6.4	344.1	.391
5- 58.5	5- 200	.391	11.9	6.7	2.3	1.213	108.7	.327	.782	262.9	519.2	.526	1.038A	99.5	.843	-3.1	-4.8	159.6	.211
		10.56	8.14	3.71	2.45	5.86	4.43	12.73	2/1/2	55.1	54.0	27.6	.394	4.194	6.7	268.1	-.6	100.7D	1.259
4-9650	4-9920	.181	109.4	-36.6	-7.9	1.113	90.8	.230	1.291	355.7	539.2	.994	1.588A	90.2	.697	9.7	23.5	257.5	.161
4-9920	5- 59.8	.205	176.1	-2.5	-1.3	.643	107.3	.444	1.180	204.8	312.7	.656A	1.704D	75.9	1.379	1.9	6.7	344.1	.377
5- 59.8	5- 210	.377	14.0	5.3	1.7	1.208	108.1	.317	.776	262.5	526.5	.530	1.022A	96.1	.833	-3.1	-5.2	156.4	.166
		12.22	8.62	4.43	3.40	6.80	4.39	12.38	2/1/2	65.2	66.3	29.8	.423	3.894	6.8	268.8	2.8	102.0D	1.226
4-9670	4-9920	.129	109.4	37.5	1.7	1.116	87.0	.235	1.285	15.6	179.1	.983D	1.588A	90.3	.694	.1	-22.4	254.8	.105
4-9920	5- 59.3	.206	176.4	-2.5	-1.3	.641	107.3	.446	1.178	204.6	311.6	.653A	1.704D	75.6	1.378	1.9	6.8	344.1	.363
5- 59.3	5- 230	.363	14.3	2.0	.7	1.202	108.6	.322	.767	260.1	544.2	.520	1.014	88.0	.820	-3.2	.3	139.9	.180
		10.55	8.23	3.82	2.33	5.74	4.41	12.31	1/1/2	49.6	102.3	30.4	.410	3.811	9.7	268.6	8.6	101.2D	1.154
4-9660	4-9920	.148	104.2	31.1	1.1	1.116	84.9	.243	1.278	26.4	179.8	.967D	1.588A	90.1	.691	.8	-17.8	253.0	.107
4-9920	5- 55.0	.212	178.9	-2.7	-1.0	.630	107.3	.462	1.159	202.8	303.1	.624A	1.695D	72.8	1.373	1.8	5.8	343.7	.431
5- 55.0	5- 240	.431	9.7	.3	.1	1.199	111.0	.360	.762	255.7	556.1	.488	1.037	81.3	.813	-3.3	6.7	128.5	.231
		10.93	8.58	4.03	2.35	5.77	4.56	13.04	1/1/2	52.0	124.6	26.5	.323	4.362	11.9	266.1	11.5	96.9D	1.086
MARS ARRIVAL DATE = 2449930 (31 JUL 1995)																			
4-9590	4-9930	.197	128.4	16.7	-.4	1.090	100.1	.264	1.263	308.2	555.3	.930	1.596	84.7	.691	2.0	-2.4	224.5	.095
4-9930	5- 46.1	.258	181.9	-2.3	-.6	.619	111.4	.519	1.128	203.2	284.7	.542A	1.714D	66.1	1.365	1.8	3.9	341.2	.562
5- 46.1	5- 150	.562	352.1	9.5	4.7	1.271	115.8	.462	.882	264.1	490.7	.474	1.289A	116.8	.939	-3.2	7.7	144.3	.442
		12.50	10.33	4.65	2.17	5.59	5.68	17.21	2/1/2	87.8	23.5	12.2	.190	9.404	28.4	260.1	-27.5	89.2L	1.598
4-9600	4-9930	.174	131.9	15.3	-.4	1.094	98.6	.252	1.269	315.2	552.7	.949	1.589	85.8	.694	2.0	-3.8	232.9	.093
4-9930	5- 49.4	.249	179.8	-1.9	-.8	.632	111.1	.500	1.149	204.9	291.5	.574A	1.723D	68.5	1.371	1.7	4.3	342.4	.515
5- 49.4	5- 160	.515	357.3	9.5	4.5	1.252	113.8	.424	.848	263.6	495.3	.486	1.207A	113.1	.912	-3.3	4.6	150.0	.364
		11.92	9.76	4.35	2.14	5.56	5.45	15.93	2/1/2	79.4	27.1	15.7	.227	7.328	20.7	262.2	-19.4	91.9D	1.435
4-9610	4-9930	.153	134.0	13.9	-.5	1.098	97.1	.243	1.275	322.5	550.3	.965	1.584	86.7	.696	2.1	-4.7	240.0	.094
4-9930	5- 52.8	.242	177.9	-1.6	-.9	.642	110.9	.485	1.166	206.4	297.7	.601A	1.731D	70.7	1.375	1.7	4.7	343.2	.474
5- 52.8	5- 170	.474	1.9	9.2	3.8	1.238	112.2	.392	.823	263.6	500.4	.500	1.148A	109.7	.889	-3.3	1.8	154.8	.332
		11.49	9.35	4.08	2.14	5.56	5.27	14.86	2/1/2	72.4	31.5	19.2	.267	6.009	16.3	264.2	-13.8	94.6D	1.336

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2449930
31 JUL 1995

LAUNCH / DEPART	ARRIVE / SWNGBY	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-9620	4-9930	.134	134.2	12.6	-.5	1.102	95.6	.236	1.280	330.2	548.2	.978	1.581	87.5	.698	2.3	-5.0	245.7	.095
4-9930	5- 55.0	.237	176.3	-1.3	-1.0	.650	110.7	.473	1.181	207.7	303.2	.622A	1.739D	72.5	1.379	1.7	5.2	343.7	.440
5- 55.0	5- 180	.440	6.1	6.7	3.3	1.228	110.7	.366	.806	263.5	505.9	.511	1.100A	106.4	.871	-3.2	-1.2	158.5	.287
		11.19	9.03	3.88	2.16	5.58	5.15	13.98	2/1/2	66.9	37.0	22.6	.310	5.111	11.3	266.0	-8.8	97.1D	1.276
4-9630	4-9930	.120	131.8	11.1	-.7	1.105	94.0	.231	1.283	338.3	546.5	.987	1.579	88.1	.700	2.5	-4.6	250.0	.097
4-9930	5- 57.3	.233	175.0	-1.1	-1.1	.656	110.6	.464	1.192	208.8	307.9	.639A	1.745D	74.1	1.382	1.8	5.7	343.9	.412
5- 57.3	5- 190	.412	9.8	7.8	2.8	1.220	109.6	.344	.793	263.4	511.9	.520	1.066A	103.1	.856	-3.2	-3.6	160.6	.246
		10.99	8.80	3.73	2.19	5.61	5.07	13.29	2/1/2	62.9	43.9	25.8	.354	4.479	8.4	267.4	-4.8	99.4D	1.232
4-9640	4-9930	.110	126.2	8.1	-1.1	1.109	92.4	.228	1.285	346.9	545.2	.993	1.578	88.5	.701	2.8	-2.6	253.0	.100
4-9930	5- 59.2	.231	174.0	-1.0	-1.2	.661	110.6	.457	1.201	209.7	311.7	.652A	1.750D	75.3	1.384	1.8	6.1	343.9	.390
5- 59.2	5- 200	.390	12.8	6.7	2.3	1.214	108.7	.327	.784	263.2	518.5	.528	1.041A	99.8	.844	-3.2	-5.3	160.6	.213
		10.90	8.65	3.65	2.24	5.66	5.00	12.76	2/1/2	60.7	52.9	28.7	.394	4.034	6.7	268.5	-1.2	101.4D	1.197
4-9650	4-9930	.114	116.8	-2.6	-2.3	1.111	90.7	.227	1.286	356.1	544.4	.994	1.578	88.7	.701	4.1	4.5	255.1	.105
4-9930	5- 60.5	.229	173.4	-.9	-1.3	.664	110.5	.453	1.207	210.2	314.4	.660A	1.754D	76.2	1.386	1.8	6.4	343.8	.376
5- 60.5	5- 210	.376	15.0	5.3	1.7	1.209	108.1	.316	.778	262.9	525.7	.532	1.023A	96.4	.835	-3.1	-5.8	157.7	.187
		11.02	8.64	3.68	2.38	5.80	4.97	12.40	2/1/2	61.3	64.9	31.0	.426	3.738	6.4	269.2	2.0	102.8D	1.165
4-9670	4-9930	.128	108.6	37.2	1.7	1.114	87.0	.233	1.280	15.9	184.3	.982D	1.578	88.7	.699	.2	-21.6	251.7	.097
4-9930	5- 60.3	.229	173.6	-1.0	-1.3	.663	110.5	.454	1.205	210.0	313.8	.658A	1.752D	76.0	1.385	1.8	6.3	343.8	.379
5- 60.3	5- 230	.379	15.6	2.1	.7	1.203	108.4	.319	.769	260.7	543.1	.523	1.014	88.5	.821	-3.2	-.7	141.9	.177
		10.96	8.77	3.81	2.19	5.61	4.96	12.27	1/1/2	57.4	100.1	32.0	.419	3.631	8.9	269.2	7.8	102.2D	1.103
4-9680	4-9930	.147	103.6	29.8	.9	1.114	84.9	.240	1.273	26.6	184.9	.967D	1.578	88.5	.695	1.0	-15.8	249.9	.099
4-9930	5- 56.7	.234	175.3	-1.1	-1.1	.655	110.7	.466	1.189	208.6	306.7	.635A	1.744D	73.7	1.381	1.8	5.5	343.8	.419
5- 56.7	5- 240	.419	11.9	.3	.1	1.200	110.4	.351	.764	256.9	554.5	.496	1.032	82.4	.814	-3.3	5.3	131.0	.219
		11.32	9.10	4.01	2.22	5.65	5.09	12.86	1/1/2	60.1	121.8	28.5	.343	4.062	11.1	267.3	10.7	98.4D	1.049

MARS ARRIVAL DATE = 2449940 (10 AUG 1995)

4-9600	4-9940	.175	132.7	16.4	-.2	1.094	98.7	.252	1.268	314.7	557.1	.948	1.588	84.4	.700	1.9	-3.2	228.6	.093
4-9940	5- 50.1	.280	177.0	-.5	-.8	.660	114.9	.511	1.185	210.5	293.3	.579A	1.791D	68.7	1.380	1.7	4.1	342.4	.518
5- 50.1	5- 160	.518	358.2	9.6	4.3	1.255	113.9	.427	.852	264.2	494.6	.488	1.216A	113.5	.915	-3.4	4.3	150.5	.390
		12.71	10.58	4.35	2.12	5.55	6.24	16.04	2/1/2	88.4	26.6	16.6	.224	6.916	20.6	262.7	-19.3	92.6D	1.327
4-9610	4-9940	.153	134.8	15.4	-.2	1.097	97.1	.242	1.273	322.2	554.9	.965	1.581	85.4	.702	2.0	-4.3	235.8	.091
4-9940	5- 53.0	.273	175.3	-.2	-.9	.670	114.5	.497	1.204	212.2	299.6	.606A	1.802D	70.9	1.385	1.7	4.5	343.0	.476
5- 53.0	5- 170	.476	2.9	9.3	3.9	1.240	112.2	.394	.827	264.0	499.6	.501	1.153A	110.0	.892	-3.4	1.3	155.4	.337
		12.24	10.14	4.08	2.10	5.52	6.07	14.95	2/1/2	81.2	30.9	20.3	.265	5.675	15.4	264.6	-13.6	95.3D	1.239
4-9620	4-9940	.134	135.1	14.8	-.3	1.101	95.6	.235	1.277	330.0	552.9	.978	1.577	86.1	.704	2.0	-5.1	241.7	.090
4-9940	5- 55.7	.268	173.9	.0	-1.1	.678	114.3	.485	1.219	213.6	305.2	.627A	1.811D	72.8	1.389	1.7	5.0	343.3	.441
5- 55.7	5- 180	.441	7.0	8.7	3.3	1.229	110.8	.367	.808	263.9	505.1	.512	1.105A	106.7	.873	-3.5	-1.6	159.1	.290
		11.90	9.81	3.87	2.09	5.52	5.94	14.05	2/1/2	75.4	36.3	23.9	.309	4.831	11.5	266.2	-9.1	97.9D	1.183
4-9630	4-9940	.118	132.8	14.4	-.3	1.105	94.0	.229	1.280	338.3	551.3	.987	1.573	86.7	.706	2.1	-5.3	246.2	.091
4-9940	5- 58.0	.264	172.7	.2	-1.2	.683	114.1	.477	1.231	214.7	310.0	.644A	1.818D	74.4	1.392	1.7	5.4	343.5	.413
5- 58.0	5- 190	.413	10.7	7.9	2.8	1.221	109.6	.344	.795	263.8	511.2	.521	1.069A	103.4	.858	-3.3	-4.0	161.4	.250
		11.66	9.56	3.72	2.10	5.53	5.84	13.34	2/1/2	71.0	43.0	27.3	.353	4.256	8.6	267.6	-5.2	100.3D	1.143
4-9640	4-9940	.108	127.6	14.1	-.5	1.108	92.4	.226	1.282	347.0	550.2	.993	1.572	87.1	.706	2.3	-4.9	249.3	.092
4-9940	5- 59.9	.262	171.8	.3	-1.3	.688	114.0	.471	1.241	215.7	314.0	.657A	1.825D	75.7	1.394	1.7	5.8	343.1	.390
5- 59.9	5- 200	.390	13.7	6.7	2.3	1.215	108.7	.327	.786	263.6	517.7	.529	1.043A	100.1	.846	-3.2	-5.8	161.7	.215
		11.53	9.41	3.63	2.12	5.54	5.78	12.80	2/1/2	68.1	51.8	30.4	.395	3.810	6.7	268.6	-1.8	102.4D	1.109
4-9650	4-9940	.105	119.5	12.2	-.8	1.110	90.7	.225	1.282	356.2	549.4	.994	1.571	87.3	.707	2.6	-2.9	251.2	.095
4-9940	5- 61.3	.260	171.3	.4	-1.3	.691	113.8	.466	1.247	216.2	316.8	.665A	1.828D	76.6	1.395	1.7	6.1	342.9	.375
5- 61.3	5- 210	.375	16.0	5.4	1.7	1.210	108.0	.316	.779	263.3	524.9	.533	1.025A	96.8	.836	-3.2	-6.5	159.1	.189
		11.49	9.33	3.60	2.16	5.58	5.73	12.42	2/1/2	66.8	63.4	32.9	.428	3.528	6.1	269.4	1.3	103.9D	1.081
4-9670	4-9940	.126	108.3	36.2	1.5	1.113	87.0	.230	1.276	16.0	189.2	.982D	1.570	87.3	.704	.3	-20.0	248.0	.091
4-9940	5- 61.4	.260	171.2	.4	-1.3	.691	113.8	.466	1.247	216.2	316.8	.665A	1.828D	76.6	1.395	1.7	6.1	342.9	.375
5- 61.4	5- 230	.375	17.0	2.1	.7	1.204	108.2	.316	.770	261.3	542.0	.527	1.014	89.1	.822	-3.2	-1.9	144.0	.174
		11.62	9.52	3.80	2.10	5.52	5.73	12.24	1/1/2	66.0	97.8	34.2	.428	3.396	8.1	269.5	6.8	103.6D	1.027
4-9680	4-9940	.145	103.4	27.7	.6	1.113	85.0	.238	1.269	26.6	189.7	.967D	1.571	87.0	.701	1.2	-12.8	246.5	.094
4-9940	5- 58.4	.264	172.5	.2	-1.2	.684	114.1	.476	1.234	215.0	310.8	.647A	1.821D	74.6	1.392	1.7	5.5	343.3	.408
5- 58.4	5- 240	.408	14.0	.3	.1	1.201	109.8	.342	.766	258.0	553.0	.504	1.028	83.4	.816	-3.3	5.9	133.5	.209
		11.97	9.83	3.99	2.14	5.57	5.83	12.71	1/1/2	68.8	119.1	31.1	.361	3.733	10.1	268.2	9.6	100.2D	.986

MARS ARRIVAL DATE = 2449950 (20 AUG 1995)

4-9620	4-9950	.134	136.2	16.5	-.0	1.101	95.6	.234	1.275	329.6	557.5	.977	1.574	84.8	.711	1.9	-5.0	237.4	.088
4-9950	5- 56.4	.308	171.9	1.1	-1.1	.713	117.9	.504	1.281	220.3	308.1	.635A	1.927D	73.2	1.403	1.6	4.7	342.3	.443
5- 56.4	5- 180	.443	8.1	8.8	3.4	1.231	110.8	.368	.812	264.3	504.3	.513	1.110A	107.0	.876	-3.4	-2.0	159.8	.295
		12.91	10.85	3.87	2.06	5.49	6.98	14.13	2/1/2	84.3	35.5	25.9	.307	4.458	11.5	266.2	-9.1	99.1D	1.061
4-9630	4-9950	.118	134.1	17.0	-.0	1.104	94.0	.228	1.278	337.9	556.0	.987	1.570	85.4	.712	1.9	-5.8	241.9	.088
4-9950	5- 58.8	.304	170.9	1.3	-1.2	.718	117.8	.496	1.294	221.5	313.1	.652A	1.936D	74.8	1.406	1.6	5.1	342.1	.413
5- 58.8	5- 190	.413	11.8	8.0	2.8	1.223	109.6	.345	.798	264.2	510.3	.522	1.073A	103.7	.860	-3.3	-4.5	162.3	.253
		12.63	10.58	3.72	2.05	5.47	6.87	13.40	2/1/2	79.7	42.1	29.6	.352	3.913	8.7	267.5	-5.5	101.6D	1.026
4-9640	4-9950	.107	129.1	18.2	-.0	1.107	92.4	.225	1.280	346.7	554.9	.992	1.567	85.8	.713	1.9	-6.2	245.1	.088
4-9950	5- 60.8	.301	170.2	1.4	-1.3	.723	117.4	.491	1.304	222.4	317.1	.664A	1.943D	76.2	1.408	1.6	5.5	341.7	.390
5- 60.8	5- 200	.390	14.9	6.8	2.3	1.216	108.6	.328	.788	264.1	516.8	.530	1.046A	100.5	.848	-3.3	-6.4	162.8	.210
		12.47	10.42	3.62	2.05	5.48	6.80	12.85	2/1/2	76.6	50.5	33.0	.395	3.521	6.8	268.5	-2.3	103.8D	.996
4-9650	4-9950	.104	121.5	19.6	-.1	1.110	90.7	.223	1.280	356.0	554.2	.994	1.566	86.0	.713	1.9	-6.4	246.8	.088
4-9950	5- 62.3	.299	169.7	1.4	-1.3	.725	117.3	.487	1.310	223.0	320.1	.673A	1.948D	77.2	1.409	1.6	5.8	341.5	.374
5- 62.3	5- 210	.374	17.3	5.4	1.8	1.212	108.0	.315	.781	263.8	523.9	.535	1.027A	97.2	.838	-3.2	-7.2	160.7	.191
		12.39	10.33	3.59	2.06	5.48	6.74	12.45	2/1/2	74.9	61.7	35.8	.430	3.253	5.9	269.2	.6	105.5D	.969

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2449840
2 MAY 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERTH / PERTH / PERTH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERTC
MARS ARRIVAL DATE = 2449840 (2 MAY 1995)																			
4-9570	4-9840	.264	116.0	12.8	-2.1	1.094	103.7	.313	1.287	297.3	322.1	.883	1.690A	97.8	.658	2.8	-7.5	231.1	.152
4-9840	5- 45.8	.187	198.0	-10.1	-.7	.571	85.9	.466	1.131	175.3	297.7	.604A	1.659	71.3	1.366	2.2	8.3	352.9	.460
5- 45.8	5- 170	.460	353.3	8.6	3.5	1.221	111.7	.378	.795	260.2	307.2	.494	1.095A	106.7	.864	-2.5	5.0	149.0	.293
		12.90	9.69	5.72	3.21	6.62	3.97	14.11	2/1/2	39.6	37.8	20.3	.285	5.672	10.0	293.9	-6.5	94.7D	1.330
4-9580	4-9840	.250	121.6	9.1	-2.5	1.100	102.7	.310	1.306	302.3	317.6	.901	1.710A	99.4	.666	3.2	-7.4	237.0	.167
4-9840	5- 48.4	.181	197.2	-10.6	-.9	.577	86.4	.455	1.140	175.6	302.1	.622A	1.658	72.8	1.368	2.3	7.1	334.1	.432
5- 48.4	5- 180	.432	357.3	8.1	3.1	1.213	110.5	.357	.783	260.0	312.9	.504	1.062A	103.4	.849	-2.6	2.6	151.4	.253
		12.80	9.29	5.47	3.51	6.91	3.82	13.40	2/1/2	34.6	44.7	23.1	.322	5.001	8.2	256.0	-2.6	96.7D	1.290
4-9590	4-9840	.236	126.2	3.3	-3.4	1.107	101.6	.308	1.325	307.5	313.1	.916	1.733A	100.8	.675	4.2	-5.8	241.8	.182
4-9840	5- 50.5	.176	196.5	-11.0	-1.1	.581	86.7	.446	1.146	175.9	305.7	.635A	1.657	74.0	1.370	2.4	7.9	334.8	.410
5- 50.5	5- 190	.410	.6	7.4	2.6	1.207	109.6	.340	.774	259.9	319.2	.511	1.036A	100.0	.638	-2.7	.9	151.5	.219
		12.85	8.99	5.29	3.86	7.26	3.70	12.86	2/1/2	31.6	53.7	25.6	.358	4.520	7.9	257.6	1.1	98.4D	1.258
MARS ARRIVAL DATE = 2449850 (12 MAY 1995)																			
4-9560	4-9850	.276	109.7	16.1	-1.6	1.085	104.5	.314	1.261	292.5	331.3	.866	1.657A	93.9	.649	2.1	-5.7	222.3	.128
4-9850	5- 43.7	.193	198.6	-9.7	-.5	.563	87.5	.480	1.115	177.3	292.0	.580A	1.650	69.3	1.361	2.1	5.4	333.1	.496
5- 43.7	5- 160	.496	349.7	8.8	3.8	1.234	113.2	.406	.815	260.7	301.2	.484	1.146A	110.4	.885	-2.5	7.3	145.8	.344
		12.75	10.01	5.92	2.73	6.15	4.09	15.09	2/1/2	52.5	31.6	16.8	.245	6.849	13.7	252.9	-11.7	92.4D	1.432
4-9570	4-9850	.257	115.9	13.7	-1.8	1.091	103.4	.306	1.277	297.5	326.7	.886	1.668A	95.7	.656	2.4	-7.1	230.5	.139
4-9850	5- 46.7	.184	197.6	-10.1	-.7	.571	88.1	.465	1.126	177.8	297.1	.602A	1.649	71.1	1.364	2.2	6.1	334.7	.461
5- 46.7	5- 170	.461	354.4	8.6	3.5	1.223	111.8	.379	.798	260.8	306.3	.495	1.101A	107.1	.867	-2.6	4.5	149.9	.298
		12.43	9.49	5.60	2.94	6.34	3.89	14.20	2/1/2	44.6	36.9	19.7	.283	5.836	10.5	255.5	-7.2	94.5D	1.367
4-9580	4-9850	.241	121.6	10.5	-2.1	1.097	102.3	.300	1.293	302.6	322.3	.905	1.662A	97.3	.664	2.9	-7.4	237.0	.151
4-9850	5- 49.2	.177	196.7	-10.5	-.9	.577	88.5	.453	1.135	178.2	301.6	.620A	1.649	72.7	1.367	2.3	6.9	335.8	.433
5- 49.2	5- 180	.433	358.5	8.2	3.1	1.215	110.5	.357	.786	260.5	311.9	.505	1.066A	103.8	.852	-2.7	2.1	152.4	.257
		12.24	9.06	5.33	3.18	6.59	3.74	13.47	2/1/2	38.7	43.5	22.5	.321	5.118	8.3	257.6	-3.2	96.5D	1.323
4-9590	4-9850	.227	126.3	5.8	-2.7	1.103	101.2	.297	1.310	308.0	318.0	.922	1.699A	98.7	.671	3.6	-6.5	242.3	.164
4-9850	5- 51.4	.172	195.8	-10.9	-1.1	.581	88.8	.445	1.141	178.5	305.4	.634A	1.649	73.9	1.368	2.4	7.7	336.6	.410
5- 51.4	5- 190	.410	1.9	7.4	2.7	1.209	109.6	.340	.777	260.4	316.2	.512	1.041A	100.5	.840	-2.7	.2	152.9	.223
		12.18	8.72	5.10	3.46	6.86	3.62	12.91	2/1/2	34.7	52.2	25.1	.358	4.603	7.7	259.2	.6	98.3D	1.289
4-9600	4-9850	.218	129.5	-2.3	-3.9	1.110	100.1	.294	1.328	313.5	314.0	.937	1.716A	100.0	.679	4.9	-5.4	246.7	.180
4-9850	5- 53.0	.168	195.2	-11.2	-1.2	.584	89.0	.439	1.146	178.7	308.1	.643A	1.649	74.8	1.370	2.5	8.3	337.1	.394
5- 53.0	5- 200	.394	4.5	6.4	2.2	1.204	108.9	.328	.770	260.1	325.2	.517	1.023A	97.0	.630	-2.8	-.5	150.5	.196
		12.32	8.51	4.96	3.81	7.21	3.55	12.52	2/1/2	33.1	63.6	27.2	.387	4.248	8.6	260.2	4.0	99.7D	1.256
MARS ARRIVAL DATE = 2449860 (22 MAY 1995)																			
4-9550	4-9860	.294	103.2	18.2	-1.3	1.079	105.7	.322	1.242	287.3	340.1	.843	1.642	89.9	.643	1.7	-1.7	209.0	.114
4-9860	5- 41.2	.201	199.1	-9.3	-.4	.553	89.2	.498	1.096	179.2	285.4	.550A	1.642	67.0	1.356	2.0	4.7	332.9	.539
5- 41.2	5- 150	.539	345.5	8.8	4.2	1.250	115.0	.441	.843	261.3	495.7	.472	1.215A	114.2	.911	-2.5	9.9	141.1	.402
		13.03	10.55	6.27	2.46	5.90	4.29	16.30	2/1/2	70.6	26.8	13.2	.207	8.724	19.6	251.5	-18.3	89.9L	1.598
4-9560	4-9860	.272	109.8	16.7	-1.4	1.084	104.4	.310	1.256	292.4	335.7	.867	1.644A	91.9	.650	2.0	-4.5	220.1	.119
4-9860	5- 44.5	.190	197.9	-9.6	-.6	.563	89.6	.480	1.110	179.8	291.3	.578A	1.642	69.2	1.360	2.1	5.3	334.8	.498
5- 44.5	5- 160	.498	350.8	8.9	3.9	1.236	113.5	.408	.819	261.1	500.3	.484	1.153A	110.8	.869	-2.6	6.9	146.4	.349
		12.45	9.89	5.86	2.56	5.98	4.03	15.20	2/1/2	59.4	30.9	16.2	.242	7.081	14.7	254.4	-12.7	92.1D	1.474
4-9570	4-9860	.252	116.0	14.6	-1.6	1.089	103.1	.300	1.269	297.6	331.3	.889	1.650A	93.7	.656	2.3	-6.3	229.2	.127
4-9860	5- 47.5	.181	196.7	-9.8	-.7	.571	90.3	.465	1.121	180.3	296.5	.600A	1.642D	71.0	1.363	2.1	6.0	336.3	.463
5- 47.5	5- 170	.463	355.5	8.7	3.5	1.225	111.6	.361	.801	261.0	505.4	.496	1.107A	107.5	.870	-2.7	4.1	150.7	.303
		12.05	9.34	5.51	2.71	6.12	3.83	14.28	2/1/2	50.4	36.0	19.2	.281	5.991	11.0	256.9	-8.1	94.3D	1.401
4-9580	4-9860	.234	121.6	11.8	-1.8	1.094	102.0	.293	1.284	302.9	327.0	.908	1.659A	95.2	.683	2.7	-7.1	236.5	.137
4-9860	5- 50.1	.174	195.6	-10.2	-.9	.578	90.7	.453	1.131	180.8	301.2	.619A	1.642D	72.6	1.365	2.2	6.7	337.4	.433
5- 50.1	5- 180	.433	359.6	8.2	3.1	1.217	110.6	.358	.788	260.9	311.0	.506	1.071A	104.2	.855	-2.8	1.6	153.4	.261
		11.79	8.89	5.21	2.90	6.31	3.68	13.54	2/1/2	43.5	42.4	22.1	.320	5.227	8.6	259.0	-3.9	96.4D	1.353
4-9590	4-9860	.218	126.3	7.8	-2.2	1.100	100.8	.287	1.298	308.4	322.9	.925	1.671A	96.6	.669	3.2	-6.6	242.4	.149
4-9860	5- 52.3	.169	194.6	-10.5	-1.1	.583	91.0	.444	1.138	181.3	305.1	.635A	1.642D	73.9	1.367	2.3	7.5	338.2	.410
5- 52.3	5- 190	.410	3.1	7.5	2.7	1.210	109.6	.341	.779	260.8	317.2	.514	1.044A	100.9	.842	-2.8	-.4	154.2	.226
		11.65	8.52	4.96	3.13	6.54	3.57	12.96	2/1/2	36.5	50.8	24.7	.358	4.679	7.6	260.6	-.0	98.3D	1.316
4-9600	4-9860	.205	129.7	1.6	-3.0	1.106	99.6	.283	1.313	314.1	319.0	.941	1.685A	97.9	.676	4.1	-4.9	247.1	.161
4-9860	5- 53.9	.166	193.9	-10.8	-1.2	.586	91.2	.437	1.143	181.6	307.9	.643A	1.643D	74.8	1.369	2.4	8.1	338.7	.393
5- 53.9	5- 200	.393	5.7	6.4	2.2	1.205	108.9	.328	.772	260.5	324.1	.519	1.025A	97.5	.832	-2.8	-1.3	152.2	.198
		11.65	8.25	4.76	3.40	6.80	3.49	12.55	2/1/2	35.6	62.0	26.9	.389	4.299	8.2	261.8	3.5	99.7D	1.282
4-9610	4-9860	.201	130.8	-10.3	-4.8	1.112	98.4	.281	1.328	320.2	315.4	.955	1.701A	98.9	.682	6.0	.6	251.0	.179
4-9860	5- 54.7	.164	193.5	-11.0	-1.3	.587	91.3	.434	1.145	181.7	309.4	.648A	1.643D	75.3	1.369	2.4	8.4	338.9	.385
5- 54.7	5- 210	.385	7.3	5.1	1.7	1.202	108.6	.322	.767	259.9	331.9	.520	1.014A	93.8	.824	-2.9	-.6	146.7	.180
		11.96	8.17	4.71	3.79	7.19	3.46	12.31	2/1/2	36.1	76.9	28.4	.405	4.075	9.7	262.3	6.7	100.4D	1.246
MARS ARRIVAL DATE = 2449870 (1 JUN 1995)																			
4-9550	4-9870	.294	103.4	18.7	-1.2	1.078	105.7	.321	1.239	286.9	344.3	.841	1.637	88.0	.646	1.7	-.1	205.3	.111
4-9870	5- 41.9	.200	198.0	-9.0	-.4	.554	91.8	.499	1.092	181.8	284.7	.547A	1.636D	66.8	1.354	2.0	4.6	334.6	.542
5- 41.9	5- 150	.542	346.5	8.9	4.2	1.253	115.1	.444	.848	261.7	494.9	.472	1.225A	114.6	.915	-2.8	9.6	141.6	.408
		12.94	10.52	6.26	2.42	5.84	4.26	16.43	2/1/2	79.1	26.3	12.7	.204	9.074	21.1	253.0	-19.9	89.6L	1.650
4-9560	4-9870	.270	110.0	17.3	-1.2	1.082	104.3	.307	1.251	292.2	340.0	.867	1.635	90.0	.652	1.9	-3.2	217.1	.112
4-9870	5- 45.2	.189	196.6	-9.1	-.6	.565	92.3	.480	1.106	182.5	290.6	.575A	1.636D	69.0	1.358	2.0	5.2	336.4	.500
5- 45.2	5- 160	.500	351.8	9.0	3.9	1.238	113.4	.411	.823	261.6	499.5	.485	1.161A	111.2	.892	-2.7	6.5	147.0	.355
		12.26	9.82	5.82	2.44	5.86	4.00	15.31	2/1/2	67.0	30.3	15.8	.240	7.298	15.7	255.8	-13.9	91.9D	1.512
4-9570	4-9870	.248	116.1	15.4	-1.4	1.087	103.0	.296	1.263	297.6	335.8	.890	1.637A	91.8	.657	2.2	-5.4	227.1	.118
4-9870	5- 48.2	.180	195.2	-9.3	-.8	.574	92.7	.464	1.118	183.1	296.1	.599A	1.637D	70.9	1.362	2.1	5.8	337.8	.464
5- 48.2	5- 170	.464	356.5	8.8	3.6	1.227	111.9	.383	.805	261.4	504.6	.497	1.112A	107.9	.873	-2.8	3.7	151.4	.307
		11.78	9.25	5.44	2.53	5.95	3.81	14.37	2/1/2	57.0	35.2	18.8	.279	6.132	11.7	258.3	-9.0	94.1D	1.430
4-9580	4-9870	.226	121.6	12.9	-1.5	1.092	101.7	.287	1.276	303.1	331.7	.910	1.642A	93.3	.663	2.5	-6.6	235.3	.125
4-9870	5- 50.9	.173	193.9	-9.5	-.9	.580	93.1	.452	1.128	183.7	300.8	.618A	1.638D	72.5	1.365	2.2	6.5	338.9	.434
5- 50.9	5- 180	.434	.7	8.3	3.1	1.218	110.6	.359	.791	261.4	510.2	.507	1.075A	104.6	.857	-2.8	1.1	154.3	.265
		11.46	8.78	5.12	2.68	6.09	3.66	13.61	2/1/2	49.1	41.5	21.7	.319	5.323	8.9	260.4	-4.6	96.3D	1.378
4-9590	4-9870	.210	126.3	9.5	-1.8	1.097	100.5	.280	1.289	308.7	327.8	.928	1.649A	94.7	.669	2.9	-6.8	241.9	.135
4-9870	5- 53.1	.166	192.8	-9.8	-1.1	.586	93.3	.443	1.135	184.2	304.8	.632A	1.639D	73.8	1.367	2.3	7.2	339.7	.410
5- 53.1	5- 190	.410	4.2	7.5	2.7	1.212	109.6	.341	.781	261.2	516.3	.515	1.047A	101.5	.845	-2.9	-1.0	155.3	.229
		11.25	8.39	4.85	2.86	6.27	3.55	13.01	2/1/2	43.2	49.6	24.3	.357	4.745	7.6	262.0	-.7	98.2D	1.338
4-9600	4-9870	.195	129.9	4.7	-2.4	1.103	99.3	.275	1.301	314.7	324.0	.944	1.659A	95.9	.675	3.5	-5.7	247.1	.145
4-9870	5- 54.8	.165	192.0	-10.0	-1.2	.589	93.5	.437	1.141	184.6	307.9	.643A	1.639D	74.6	1.368	2.3	7.8	340.1	.393
5- 54.8	5- 200	.393	6.9	6.5	2.2	1.207	108.8	.328	.774	261.0	523.2	.520	1.028A	97.9	.834	-2.9	-2.0	153.8	.200
		11.15	8.09	4.62	3.06	6.47	3.47	12.58	2/1/2	39.1	60.3	26.6	.390	4.341	7.9	263.2	2.9	99.7D	1.350
4-9610	4-9870	.184	131.5	-3.7	-3.4	1.108	98.0	.271	1.314	320.9	320.6	.958	1.670A	96.9	.680	4.7	-2.3	251.3	.158
4-9870	5- 55.8	.163	191.5	-10.2	-1.3	.591	93.6	.433	1.144	184.8	309.5	.648A	1.639D	75.3	1.369	2.4	8.2	340.3	.383
5- 55.8	5- 210	.383	8.6	5.1	1.7	1.203	108.5	.321	.769	260.5	530.8	.522	1.015A	94.3	.826	-2.9	-1.6	148.6	.181
		11.24	7.91	4.47	3.33	6.74	3.43	12.52	2/1/2	37.5	74.7	28.3	.409	4.095	9.3	263.8	6.2	100.6D	1.267
MARS ARRIVAL DATE = 2449880 (11 JUN 1995)																			
4-9550	4-9880	.295	103.8	19.1	-1.0	1.077	105.8	.322	1.237	286.5	348.4	.839	1.635	86.1	.649	1.7	1.5	201.3	.110
4-9880	5- 42.7	.200	196.3	-8.4	-.4	.557	94.5	.500	1.088	184.5	284.1	.544A	1.632D	66.6	1.353	2.0	4.5	336.1	.546
5- 42.7	5- 150	.546	347.5	9.0	4.3	1.256	115.2	.447	.854	262.1	494.2	.473	1.233A	114.9	.919	-2.7	9.2	142.1	.414
		12.96	10.56	6.29	2.41	5.82	4.27	16.56	2/1/2	87.8	25.8	12.2	.202	9.390	22.7	254.5	-21.6	89.3L	1.698

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2449880
11 JUN 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
4-9560	4-9880	.269	110.2	17.9	-1.1	1.081	104.3	.305	1.248	291.9	544.3	.867	1.629	88.1	.655	1.9	-1.7	213.5	.108	
4-9880	5- 46.0	.189	194.7	-8.4	-.6	.569	94.9	.481	1.103	185.4	290.1	.573A	1.634D	68.8	1.357	2.0	5.0	337.8	.503	
5- 46.0	5- 160	.503	352.8	9.1	4.0	1.241	113.5	.413	.827	262.0	498.8	.486	1.169A	111.5	.895	-2.8	6.2	147.6	.360	
		12.19	9.82	5.80	2.36	5.78	4.02	15.41	2/1/2	75.4	29.7	15.3	.238	7.488	16.8	257.2	-15.1	91.7D	1.542	
4-9570	4-9880	.245	116.3	16.1	-1.2	1.086	102.9	.292	1.259	297.5	540.3	.891	1.627	89.9	.660	2.1	-4.2	224.3	.110	
4-9880	5- 49.0	.181	193.1	-8.5	-.8	.578	95.3	.465	1.116	186.1	295.7	.597A	1.635D	70.8	1.361	2.1	5.7	339.2	.466	
5- 49.0	5- 170	.466	357.5	8.9	3.6	1.229	111.9	.384	.808	261.8	503.8	.497	1.118A	108.2	.876	-2.9	3.3	152.0	.312	
		11.63	9.22	5.40	2.40	5.82	3.82	14.45	2/1/2	64.5	34.5	16.4	.277	6.252	12.4	259.6	-9.9	94.0D	1.453	
4-9580	4-9880	.224	121.7	13.9	-1.3	1.090	101.6	.282	1.270	303.1	536.3	.912	1.628A	91.4	.665	2.3	-5.8	233.4	.116	
4-9880	5- 51.7	.174	191.7	-8.6	-1.0	.585	95.6	.453	1.127	186.8	300.6	.617A	1.637D	72.4	1.364	2.1	6.3	340.3	.435	
5- 51.7	5- 180	.435	1.7	8.4	3.2	1.220	110.6	.360	.794	261.8	509.4	.508	1.080A	104.9	.860	-2.9	.6	155.1	.269	
		11.23	8.73	5.06	2.50	5.92	3.68	13.67	2/1/2	55.5	40.6	21.3	.317	5.399	9.2	261.7	-5.4	96.2D	1.396	
4-9590	4-9880	.205	126.4	11.1	-1.5	1.095	100.3	.274	1.281	309.0	532.6	.930	1.632A	92.8	.670	2.6	-6.5	240.7	.123	
4-9880	5- 53.9	.169	190.4	-8.8	-1.1	.590	95.8	.443	1.135	187.4	304.7	.632A	1.638D	73.8	1.367	2.2	7.0	341.0	.410	
5- 53.9	5- 190	.410	5.3	7.6	2.7	1.213	109.6	.341	.783	261.6	515.5	.516	1.051A	101.6	.847	-2.9	-1.5	156.4	.232	
		10.96	8.33	4.76	2.63	6.05	3.57	13.06	2/1/2	48.6	48.4	24.1	.357	4.793	7.6	263.3	-1.4	98.2D	1.354	
4-9600	4-9880	.187	130.0	7.2	-1.9	1.100	99.0	.268	1.292	315.1	529.0	.946	1.638A	94.0	.675	3.1	-6.0	246.5	.132	
4-9880	5- 55.7	.166	189.4	-8.9	-1.2	.594	96.0	.437	1.141	187.8	307.9	.643A	1.639D	74.8	1.368	2.2	7.6	341.4	.392	
5- 55.7	5- 200	.392	8.0	6.5	2.2	1.208	108.8	.327	.776	261.4	522.3	.522	1.030A	98.2	.836	-2.9	-2.7	155.1	.202	
		10.80	8.01	4.52	2.79	6.20	3.50	12.61	2/1/2	43.6	58.8	26.5	.391	4.389	7.6	264.4	2.3	99.8D	1.318	
4-9610	4-9880	.173	131.9	1.1	-2.5	1.106	97.7	.263	1.303	321.5	525.8	.960	1.645A	95.0	.680	3.8	-4.0	251.2	.141	
4-9880	5- 56.7	.164	188.9	-9.1	-1.3	.596	96.1	.433	1.144	188.1	309.8	.649A	1.639D	75.4	1.369	2.3	7.9	341.6	.382	
5- 56.7	5- 210	.382	9.9	5.2	1.7	1.204	108.4	.320	.770	260.9	529.8	.524	1.016A	94.7	.827	-3.0	-2.4	150.6	.181	
		10.77	7.78	4.33	2.99	6.40	3.46	12.33	2/1/2	40.6	72.7	28.2	.413	4.104	8.8	265.1	5.6	100.7D	1.282	
MARS ARRIVAL DATE = 2449890 (21 JUN 1995)																				
4-9560	4-9890	.269	110.6	18.4	-.9	1.081	104.3	.305	1.246	291.5	548.5	.865	1.626	86.3	.658	1.8	-.2	209.5	.106	
4-9890	5- 46.7	.193	192.2	-7.5	-.6	.574	97.8	.482	1.103	188.5	289.8	.572A	1.635D	68.7	1.357	2.0	4.9	339.2	.505	
5- 46.7	5- 160	.505	353.7	9.2	4.0	1.243	113.5	.415	.831	262.4	498.0	.486	1.176A	111.9	.899	-2.9	5.9	148.1	.365	
		12.24	9.90	5.81	2.33	5.75	4.09	15.52	2/1/2	84.1	29.1	15.1	.235	7.653	17.8	258.5	-16.3	91.5D	1.562	
4-9570	4-9890	.244	116.5	16.9	-1.0	1.085	102.9	.291	1.255	297.2	544.6	.890	1.620	88.1	.663	2.0	-2.9	220.8	.105	
4-9890	5- 49.7	.184	190.5	-7.4	-.8	.584	98.0	.466	1.117	189.4	295.5	.596A	1.637D	70.7	1.361	2.0	5.5	340.5	.468	
5- 49.7	5- 170	.468	358.5	8.9	3.6	1.231	112.0	.386	.811	262.2	503.1	.498	1.124A	108.5	.878	-3.0	2.9	152.7	.316	
		11.60	9.28	5.38	2.32	5.74	3.90	14.54	2/1/2	72.6	33.8	18.2	.275	6.356	13.1	260.8	-10.8	93.9D	1.466	
4-9580	4-9890	.221	121.9	14.9	-1.1	1.089	101.5	.279	1.265	303.1	540.9	.912	1.618	89.7	.668	2.2	-4.8	230.7	.108	
4-9890	5- 52.4	.178	188.9	-7.4	-1.0	.591	98.3	.454	1.128	190.2	300.5	.616A	1.640D	72.4	1.365	2.0	6.1	341.5	.436	
5- 52.4	5- 180	.436	2.7	8.4	3.2	1.222	110.6	.361	.796	262.1	508.6	.508	1.084A	105.2	.862	-3.0	.2	155.9	.273	
		11.14	8.77	5.01	2.37	5.78	3.76	13.74	2/1/2	62.8	39.8	21.2	.316	5.447	9.7	262.8	-6.2	96.2D	1.405	
4-9590	4-9890	.201	126.6	12.4	-1.2	1.094	100.1	.270	1.275	309.1	537.3	.932	1.619A	91.0	.673	2.4	-5.9	238.8	.113	
4-9890	5- 54.7	.173	187.5	-7.5	-1.1	.597	98.4	.444	1.137	190.9	304.7	.632A	1.642D	73.8	1.367	2.1	6.7	342.1	.411	
5- 54.7	5- 190	.411	6.2	7.6	2.7	1.214	109.6	.342	.785	262.0	514.7	.517	1.054A	101.9	.849	-3.0	-2.0	157.4	.235	
		10.81	8.36	4.70	2.46	5.87	3.65	13.11	2/1/2	55.0	47.4	24.0	.357	4.817	7.6	264.4	-2.1	98.2D	1.361	
4-9600	4-9890	.182	130.2	9.3	-1.5	1.098	98.8	.262	1.285	315.4	533.9	.948	1.622A	92.1	.677	2.8	-6.0	245.3	.120	
4-9890	5- 56.4	.170	186.5	-7.6	-1.2	.601	98.6	.437	1.143	191.4	308.1	.643A	1.643D	74.8	1.369	2.2	7.3	342.5	.392	
5- 56.4	5- 200	.392	9.1	6.5	2.2	1.209	108.8	.327	.778	261.8	521.4	.523	1.032A	98.6	.838	-3.0	-3.3	156.4	.204	
		10.60	8.02	4.44	2.57	5.99	3.58	12.64	2/1/2	49.0	57.5	26.4	.392	4.376	7.3	265.6	1.6	99.9D	1.324	
4-9610	4-9890	.165	132.2	4.7	-1.9	1.103	97.5	.256	1.294	322.0	530.9	.962	1.625A	93.1	.681	3.3	-4.9	250.4	.127	
4-9890	5- 57.5	.168	185.8	-7.6	-1.3	.604	98.7	.433	1.147	191.7	310.1	.650A	1.644D	75.5	1.370	2.2	7.6	342.6	.380	
5- 57.5	5- 210	.380	11.0	5.2	1.7	1.205	108.3	.319	.772	261.4	528.9	.526	1.018A	95.1	.829	-3.0	-3.2	152.2	.182	
		10.49	7.77	4.23	2.71	6.13	3.54	12.34	2/1/2	44.9	70.9	28.3	.416	4.095	8.3	266.3	5.0	100.9D	1.286	
4-9630	4-9890	.167	126.0	-23.1	-5.7	1.112	94.6	.249	1.309	336.5	525.7	.984	1.635A	94.6	.687	7.2	9.2	257.2	.160	
4-9890	5- 55.8	.171	186.8	-7.5	-1.2	.600	98.5	.440	1.141	191.2	306.9	.639A	1.643D	74.5	1.368	2.1	7.1	342.4	.398	
5- 55.8	5- 230	.398	9.8	2.0	.7	1.199	109.3	.334	.763	258.1	547.6	.508	1.018	86.2	.815	-3.1	3.7	133.6	.192	
		11.22	7.86	4.25	3.37	6.77	3.61	12.47	2/1/2	47.3	109.5	27.9	.379	4.155	11.6	265.3	10.6	99.1D	1.197	
MARS ARRIVAL DATE = 2449900 (1 JUL 1995)																				
4-9560	4-9900	.272	111.0	19.0	-.8	1.080	104.5	.307	1.244	290.9	552.5	.862	1.626	84.6	.663	1.8	1.2	205.5	.107	
4-9900	5- 47.4	.199	189.3	-6.2	-.7	.583	100.8	.484	1.106	192.0	289.7	.571A	1.642D	68.6	1.358	1.9	4.8	340.3	.508	
5- 47.4	5- 160	.508	354.8	9.2	4.1	1.246	113.6	.417	.835	262.7	497.3	.487	1.184A	112.2	.902	-3.0	5.5	148.6	.370	
		12.44	10.09	5.85	2.35	5.77	4.24	15.62	2/1/2	92.9	28.6	14.9	.233	7.714	18.9	259.7	-17.4	91.4D	1.566	
4-9570	4-9900	.244	116.9	17.6	-.8	1.084	102.9	.290	1.253	296.9	548.9	.889	1.617	86.4	.668	1.9	-1.5	216.9	.102	
4-9900	5- 50.4	.191	187.4	-6.1	-.8	.593	101.0	.468	1.120	193.0	295.5	.596A	1.645D	70.6	1.362	1.9	5.3	341.5	.469	
5- 50.4	5- 170	.469	359.4	9.0	3.7	1.233	112.0	.387	.814	262.6	502.4	.499	1.129A	108.8	.881	-3.0	2.6	153.3	.320	
		11.71	9.44	5.38	2.27	5.69	4.06	14.62	2/1/2	81.3	33.2	18.1	.273	6.370	13.8	261.9	-11.7	93.9D	1.465	
4-9580	4-9900	.220	122.3	15.8	-.9	1.088	101.4	.277	1.262	302.9	545.4	.912	1.612	88.0	.672	2.1	-3.7	227.5	.102	
4-9900	5- 53.1	.185	185.7	-6.0	-1.0	.600	101.1	.456	1.132	193.9	300.6	.616A	1.648D	72.3	1.366	2.0	5.9	342.4	.437	
5- 53.1	5- 180	.437	3.6	8.5	3.2	1.223	110.7	.362	.799	262.5	507.9	.509	1.088A	105.5	.864	-3.1	-.1	156.6	.276	
		11.19	8.91	4.99	2.27	5.70	3.92	13.80	2/1/2	70.9	39.0	21.1	.315	5.455	10.1	263.9	-7.0	96.2D	1.402	
4-9590	4-9900	.198	126.8	13.7	-1.0	1.092	100.0	.266	1.271	309.1	542.0	.932	1.609	89.3	.676	2.3	-5.1	236.1	.105	
4-9900	5- 55.3	.181	184.3	-5.9	-1.1	.606	101.2	.446	1.142	194.7	305.0	.632A	1.651D	73.8	1.369	2.0	6.5	343.0	.411	
5- 55.3	5- 190	.411	7.2	7.7	2.7	1.216	109.6	.342	.787	262.4	514.0	.518	1.057A	102.2	.850	-3.0	-2.4	158.3	.236	
		10.81	8.48	4.66	2.32	5.74	3.82	13.15	2/1/2	62.2	46.4	24.0	.356	4.809	7.8	265.4	-2.8	98.3D	1.356	
4-9600	4-9900	.178	130.4	11.1	-1.1	1.097	98.7	.258	1.279	315.6	538.8	.949	1.609A	90.4	.680	2.5	-5.7	243.2	.110	
4-9900	5- 57.2	.178	183.2	-6.0	-1.2	.611	101.4	.439	1.149	195.3	308.5	.644A	1.653D	74.9	1.371	2.1	7.0	343.3	.391	
5- 57.2	5- 200	.391	10.1	6.6	2.2	1.210	108.7	.327	.779	262.2	520.6	.524	1.034A	98.9	.839	-3.0	-3.8	157.6	.206	
		10.54	8.14	4.39	2.40	5.82	3.75	12.67	2/1/2	55.4	56.2	26.5	.393	4.355	7.0	266.6	.9	100.0D	1.319	
4-9610	4-9900	.160	132.5	7.7	-1.4	1.101	97.3	.251	1.287	322.4	535.9	.964	1.610A	91.4	.683	2.9	-5.2	249.0	.116	
4-9900	5- 58.3	.176	182.5	-6.0	-1.3	.613	101.4	.435	1.153	195.6	310.7	.651A	1.655D	75.6	1.372	2.1	7.3	343.5	.379	
5- 58.3	5- 210	.379	12.1	5.2	1.7	1.206	108.2	.318	.773	261.8	528.1	.527	1.019A	95.4	.831	-3.0	-3.9	153.7	.163	
		10.37	7.87	4.16	2.50	5.92	3.71	12.35	2/1/2	50.3	69.3	28.5	.419	4.063	7.8	267.3	4.3	101.1D	1.283	
4-9630	4-9900	.140	128.6	-8.8	-3.2	1.110	94.4	.242	1.300	337.3	531.1	.985	1.615A	92.8	.689	4.8	2.4	256.7	.134	
4-9900	5- 57.1	.178	183.3	-6.0	-1.2	.611	101.3	.440	1.148	195.2	308.3	.644A	1.653D	74.8	1.370	2.1	7.0	343.3	.392	
5- 57.1	5- 230	.392	11.5	2.0	.7	1.200	109.0	.329	.765	258.8	546.4	.513	1.016	86.9	.817	-3.1	2.5	135.9	.187	
		10.52	7.68	3.93	2.83	6.25	3.75	12.40	2/1/2	47.0	106.9	28.5	.391	4.063	11.1	266.6	10.0	99.7D	1.198	
MARS ARRIVAL DATE = 2449910 (11 JUL 1995)																				
4-9560	4-9910	.275	111.6	19.5	-.6	1.080	104.7	.310	1.243	290.2	556.5	.858	1.628	82.9	.669	1.8	2.3	201.8	.110	
4-9910	5- 48.0	.210	186.1	-4.8	-.7	.594	104.0	.487	1.113	195.8	289.8	.571A	1.656D	68.5	1.360	1.9	4.6	341.3	.510	
5- 48.0	5- 160	.510	355.5	9.3	4.2	1.248	113.7	.420	.839	263.1	496.7	.487	1.192A	112.5	.905	-3.1	5.2	149.1	.375	
		12.81	10.41	5.92	2.40	5.82	4.49	15.72	2/1/2	101.4	28.1	14.9	.231	7.707	19.7	260.7	-18.4	91.4D	1.550	
4-9570	4-9910	.246	117.4	18.2	-.7	1.084	103.0	.291	1.251	296.3	553.1	.887	1.616	84.7	.673	1.9	-.3	212.8	.102	
4-9910	5- 51.0	.202	184.2	-4.6	-.9	.605	104.1	.472	1.129	197.0	295.8	.596A	1.661D	70.6	1.365	1.9	5.1	342.4	.471	
5- 51.0	5- 170	.471	.2	9.1	3.7	1.235	112.1	.389	.817	262.9	501.7	.499	1.135A	109.1	.884	-3.1	2.2	153.8	.324	
		12.00	9.72	5.41	2.27	5.69	4.32	14.70	2/1/2	90.2	32.6	18.2	.271	6.339	14.5	262.9	-12.5	94.0D	1.447	
4-9580	4-9910	.220	122.7	16.6	-.7	1.087	101.5	.276	1.259	302.6	549.7	.912	1.607	86.3	.677	2.0	-2.5	223.3	.099	
4-9910	5- 53.7	.197	182.4	-4.4	-1.0	.613	104.2	.459	1.141	198.0	301.0	.617A	1.665D	72.4	1.368	1.9	5.7	343.2	.438	
5- 53.7	5- 180	.438	4.4	8.5	3.3	1.225	110.7	.383	.801	262.8	507.2	.510	1.088A	105.6	.866	-3.1	-.5	157.3	.280	
		11.40	9.17	4.99	2.82	5.68	4.18	13.86	2/1/2	78.8	38.5	21.3	.313	5.410	10.6	264.7	-7.7	96.4D	1.381	
4-9600	4-9910	.197	127.8	14.8	-.8	1.091	100.0	.264	1.287	319.0	540.8	.938	1.598	87.7	.680	2.1	-4.8	238.7	.100	
4-9910	5- 58.0	.193	181.0	-4.8	-1.1	.619	104.8	.450	1.161	198.9	301.1	.634A	1.669D	73.8	1.371	1.9	6.0	343.8	.411	
5- 58.0	5- 190	.411	8.1	7.7	3.8	1.217	109.6	.343	.780	263.7	513.6	.519	1.092A	106.1	.868	-3.1	-2.0	159.1	.241	
		10.86	8.73	4.84	2.83	5.68	4.09	13.80	2/1/2	70.8	48.8	24.3	.358	4.788	8.8	266.8	-5.6	98.5D	1.388	

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2449910
11 JUL 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RAE / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC	
4-9600	4-9910	.175	130.8	12.7	-.9	1.096	98.6	.255	1.275	315.7	543.5	.950	1.600	88.8	.684	2.3	-5.2	240.4	.102	
4-9910	5- 57.9	.190	179.9	-4.2	-1.2	.623	104.3	.443	1.159	199.6	309.1	.646A	1.672D	75.0	1.373	2.0	6.7	343.9	.391	
5- 57.9	5- 200	.391	11.0	6.6	2.2	1.212	108.7	.327	.781	262.6	519.9	.525	1.036A	99.2	.841	-3.1	-4.3	158.6	.209	
		10.65	8.38	4.35	2.27	5.69	4.03	12.70	2/1/2	62.6	55.1	26.9	.394	4.297	6.8	267.4	.2	100.3D	1.298	
4-9610	4-9910	.156	132.9	10.1	-1.0	1.100	97.1	.247	1.282	322.6	540.8	.965	1.599	89.7	.687	2.5	-5.3	246.7	.106	
4-9910	5- 59.1	.188	179.2	-4.2	-1.3	.626	104.3	.439	1.163	199.9	311.5	.653A	1.674D	75.7	1.375	2.0	7.0	344.0	.378	
5- 59.1	5- 210	.378	13.0	5.3	1.7	1.207	108.2	.317	.775	262.2	527.3	.529	1.021A	95.8	.832	-3.1	-4.6	155.1	.185	
		10.44	8.10	4.12	2.34	5.76	3.98	12.37	2/1/2	56.7	67.8	29.0	.421	3.999	7.3	268.1	3.5	101.5D	1.263	
4-9630	4-9910	.128	129.9	.3	-2.0	1.108	94.2	.237	1.293	337.8	536.4	.986	1.600A	91.1	.692	3.6	-1.3	255.3	.117	
4-9910	5- 58.2	.189	179.7	-4.2	-1.2	.624	104.3	.442	1.160	199.7	309.8	.648A	1.672D	75.2	1.374	2.0	6.8	343.9	.387	*
5- 58.2	5- 230	.387	12.9	2.0	.7	1.201	108.8	.325	.766	259.5	545.2	.517	1.015	87.5	.818	-3.1	1.4	138.0	.183	*
		10.56	7.83	3.81	2.53	5.95	4.01	12.35	2/1/2	50.5	104.6	29.3	.401	3.952	10.5	267.7	9.4	100.4D	1.185	
4-9640	4-9910	.137	121.6	-17.3	-4.2	1.111	92.6	.235	1.296	346.2	534.9	.992	1.601A	91.6	.693	5.9	8.7	257.9	.134	
4-9910	5- 52.9	.198	183.0	-4.4	-1.0	.610	104.1	.463	1.137	197.7	299.4	.611A	1.664D	71.8	1.367	1.9	5.5	342.9	.448	
5- 52.9	5- 240	.448	7.2	.3	.1	1.197	111.8	.373	.760	254.3	558.0	.477	1.044	79.9	.810	-3.3	8.2	125.9	.246	
		10.96	8.12	3.90	2.84	6.25	4.22	13.29	2/1/2	53.2	127.6	24.7	.300	4.669	12.6	264.4	12.2	95.3D	1.099	
MARS ARRIVAL DATE = 2449920 (21 JUL 1995)																				
4-9570	4-9920	.249	118.0	18.8	-.5	1.083	103.2	.293	1.250	295.6	557.2	.884	1.617	83.2	.679	1.9	.7	208.9	.105	
4-9920	5- 51.7	.219	180.9	-3.0	-.9	.621	107.4	.477	1.143	201.4	296.5	.598A	1.688D	70.6	1.369	1.8	4.9	[illegible]	.473	
5- 51.7	5- 170	.473	1.1	9.2	3.8	1.237	112.1	.391	.820	263.3	501.0	.500	1.140A	109.4	.886	-3.2	1.9	154.3	.328	
		12.48	10.17	5.46	2.31	5.73	4.71	14.78	2/1/2	98.8	32.1	18.5	.269	6.224	15.0	263.6	-13.1	94.2D	1.406	
4-9580	4-9920	.221	123.2	17.4	-.5	1.087	101.6	.277	1.258	302.1	554.0	.910	1.606	84.8	.682	1.9	-1.4	219.2	.098	
4-9920	5- 54.3	.214	179.2	-2.8	-1.0	.629	107.4	.465	1.156	202.6	301.9	.619A	1.694D	72.4	1.373	1.8	5.4	343.6	.439	
5- 54.3	5- 180	.439	5.3	8.6	3.3	1.226	110.7	.364	.803	263.2	506.5	.511	1.096A	106.1	.868	-3.2	-.9	157.9	.283	
		11.81	9.59	5.01	2.21	5.64	4.58	13.92	2/1/2	88.4	37.6	21.8	.312	5.300	11.0	265.5	-8.3	96.6D	1.341	
4-9590	4-9920	.196	127.7	15.8	-.6	1.091	100.0	.263	1.265	308.7	551.0	.932	1.598	86.1	.685	2.0	-3.2	228.7	.096	
4-9920	5- 56.7	.210	177.9	-2.6	-1.1	.635	107.3	.455	1.167	203.6	306.5	.636A	1.698D	73.9	1.375	1.8	5.9	344.0	.412	
5- 56.7	5- 190	.412	8.9	7.8	2.8	1.218	109.6	.343	.791	263.1	512.6	.520	1.063A	102.8	.854	-3.2	-5.2	159.9	.244	
		11.31	9.13	4.64	2.18	5.60	4.49	13.24	2/1/2	78.9	44.7	24.8	.355	4.651	8.2	266.9	-4.2	98.9D	1.296	
4-9600	4-9920	.174	131.2	14.1	-.6	1.095	98.5	.253	1.272	315.5	548.2	.950	1.593	87.3	.688	2.2	-4.5	236.9	.097	
4-9920	5- 58.5	.207	176.8	-2.5	-1.2	.640	107.3	.448	1.175	204.3	310.2	.648A	1.702D	75.1	1.378	1.9	6.4	344.1	.391	
5- 58.5	5- 200	.391	11.9	6.7	2.5	1.213	108.7	.327	.782	262.9	519.2	.526	1.038A	99.5	.843	-3.1	-4.8	159.6	.211	
		10.95	8.77	4.34	2.19	5.61	4.43	12.73	2/1/2	70.7	54.0	27.6	.394	4.194	6.7	268.1	-.6	100.7D	1.259	
4-9610	4-9920	.154	133.3	12.2	-.7	1.099	97.1	.244	1.278	322.7	545.6	.965	1.590	88.2	.691	2.3	-5.1	243.7	.099	
4-9920	5- 59.8	.205	176.1	-2.5	-1.3	.643	107.3	.444	1.180	204.8	312.7	.656A	1.704D	75.9	1.379	1.9	6.7	344.1	.377	
5- 59.8	5- 210	.377	14.0	5.3	1.7	1.208	108.1	.317	.776	262.5	526.5	.530	1.022A	96.1	.833	-3.1	-5.2	156.4	.186	
		10.70	8.48	4.09	2.22	5.64	4.39	12.38	2/1/2	64.1	66.3	29.8	.423	3.894	6.8	268.8	2.8	102.0D	1.226	
4-9630	4-9920	.123	130.9	6.5	-1.2	1.106	94.1	.234	1.287	338.2	541.5	.987	1.588	89.5	.695	2.9	-3.3	253.0	.106	
4-9920	5- 59.3	.206	176.4	-2.5	-1.3	.641	107.3	.446	1.178	204.6	311.6	.653A	1.704D	75.6	1.378	1.9	6.6	344.1	.383	
5- 59.3	5- 230	.383	14.3	2.0	.7	1.202	108.6	.322	.767	260.1	544.2	.520	1.014	88.0	.820	-3.2	.3	139.9	.180	
		10.50	8.17	3.76	2.33	5.75	4.41	12.31	2/1/2	56.0	102.3	30.4	.410	3.811	9.7	268.6	8.6	101.2D	1.154	
4-9640	4-9920	.117	124.5	-1.3	-2.1	1.110	92.5	.231	1.290	346.7	540.1	.992	1.588	90.0	.696	3.6	1.2	255.9	.112	
4-9920	5- 55.0	.212	178.9	-2.7	-1.0	.630	107.3	.462	1.159	202.8	303.1	.624A	1.695D	72.8	1.373	1.8	5.6	343.7	.431	
5- 55.0	5- 240	.431	9.7	.3	.1	1.199	111.0	.360	.762	255.7	556.1	.488	1.037	81.3	.813	-3.3	6.7	128.5	.231	
		10.71	8.26	3.71	2.45	5.86	4.56	13.04	2/1/2	55.1	124.6	26.5	.323	4.362	11.9	266.1	11.5	96.9D	1.086	
MARS ARRIVAL DATE = 2449930 (31 JUL 1995)																				
4-9560	4-9930	.223	123.9	18.1	-.3	1.087	101.7	.278	1.257	301.4	558.2	.907	1.607	83.3	.688	1.9	-.5	215.2	.100	
4-9930	5- 55.0	.237	176.3	-1.3	-1.0	.650	110.7	.473	1.181	207.7	303.2	.622A	1.739D	72.5	1.379	1.7	5.2	343.7	.440	
5- 55.0	5- 180	.440	6.1	8.7	3.3	1.228	110.7	.366	.806	263.5	505.9	.511	1.100A	106.4	.871	-3.2	-1.2	158.5	.287	
		12.44	10.20	5.05	2.24	5.67	5.15	15.98	2/1/2	97.2	37.0	22.6	.310	5.111	11.3	266.0	-8.8	97.1D	1.276	
4-9590	4-9930	.197	126.4	16.7	-.4	1.090	100.1	.264	1.263	308.2	555.3	.930	1.596	84.7	.691	2.0	-2.4	224.5	.095	
4-9930	5- 57.3	.233	175.0	-1.1	-1.1	.656	110.6	.464	1.192	208.8	307.9	.639A	1.745D	74.1	1.382	1.8	5.7	343.9	.412	
5- 57.3	5- 190	.412	9.8	7.8	2.8	1.220	109.6	.344	.793	263.4	511.9	.520	1.066A	103.1	.856	-3.2	-3.6	160.6	.246	
		11.88	9.72	4.65	2.17	5.59	5.07	13.29	2/1/2	87.8	43.9	25.8	.354	4.479	8.4	267.4	-4.8	99.4D	1.232	
4-9600	4-9930	.174	131.9	15.3	-.4	1.094	98.6	.252	1.269	315.2	552.7	.949	1.589	85.8	.694	2.0	-3.8	232.9	.093	
4-9930	5- 59.2	.231	174.0	-1.0	-1.2	.661	110.6	.457	1.201	209.7	311.7	.652A	1.750D	75.3	1.384	1.8	6.1	343.9	.390	
5- 59.2	5- 200	.390	12.8	6.7	2.3	1.214	108.7	.327	.784	263.2	518.5	.528	1.041A	99.8	.844	-3.2	-5.3	160.6	.213	
		11.47	9.34	4.33	2.14	5.56	5.00	12.76	2/1/2	79.4	52.9	28.7	.394	4.034	6.7	268.5	-1.2	101.4D	1.197	
4-9610	4-9930	.153	134.0	13.9	-.5	1.098	97.1	.243	1.275	322.5	550.3	.965	1.584	86.7	.696	2.1	-4.7	240.0	.094	
4-9930	5- 60.5	.229	173.4	-.9	-1.3	.664	110.5	.453	1.207	210.2	314.4	.660A	1.754D	76.2	1.386	1.8	6.4	343.8	.376	
5- 60.5	5- 210	.376	15.0	5.3	1.7	1.209	108.1	.316	.778	262.9	525.7	.532	1.023A	96.4	.835	-3.1	-5.8	157.7	.187	
		11.18	9.04	4.08	2.14	5.56	4.97	12.40	2/1/2	72.4	64.9	31.0	.426	3.738	6.4	269.2	2.0	102.8D	1.165	
4-9630	4-9930	.120	131.6	11.1	-.7	1.105	94.0	.231	1.283	338.3	546.5	.987	1.579	88.1	.700	2.5	-4.6	250.0	.097	
4-9930	5- 60.3	.229	173.6	-1.0	-1.3	.663	110.5	.454	1.205	210.0	313.8	.658A	1.752D	76.0	1.385	1.8	6.3	343.8	.379	
5- 60.3	5- 230	.379	15.6	2.1	.7	1.203	108.4	.319	.769	260.7	543.1	.523	1.014	88.5	.821	-3.2	-.7	141.9	.177	
		10.89	8.69	3.73	2.19	5.61	4.96	12.27	2/1/2	62.9	100.1	32.0	.419	3.631	8.9	269.2	7.8	102.2D	1.103	
4-9640	4-9930	.110	126.2	8.1	-1.1	1.109	92.4	.228	1.285	346.9	545.2	.993	1.578	88.5	.701	2.8	-2.6	253.0	.100	
4-9930	5- 56.7	.234	175.3	-1.1	-1.1	.655	110.7	.466	1.189	208.6	306.7	.635A	1.744D	73.7	1.381	1.8	5.5	343.8	.419	
5- 56.7	5- 240	.419	11.9	.3	.1	1.200	110.4	.351	.764	256.9	554.5	.496	1.032	82.4	.814	-3.3	5.3	131.0	.219	
		10.98	8.73	3.65	2.24	5.66	5.09	12.86	2/1/2	60.7	121.8	28.5	.343	4.062	11.1	267.3	10.7	98.4D	1.049	
MARS ARRIVAL DATE = 2449940 (10 AUG 1995)																				
4-9590	4-9940	.199	129.2	17.5	-.2	1.090	100.5	.265	1.262	307.5	559.5	.928	1.597	83.3	.698	1.9	-1.7	220.4	.097	
4-9940	5- 58.0	.264	172.7	.2	-1.2	.683	114.1	.477	1.231	214.7	310.0	.644A	1.818D	74.4	1.392	1.7	5.4	343.3	.413	
5- 58.0	5- 190	.413	10.7	7.9	2.8	1.221	109.6	.344	.795	263.8	511.2	.521	1.069A	103.4	.858	-3.3	-4.0	161.4	.250	
		12.71	10.52	4.68	2.19	5.61	5.84	13.34	2/1/2	96.7	43.0	27.3	.353	4.236	8.6	267.6	-5.2	100.3D	1.143	
4-9600	4-9940	.175	132.7	16.4	-.2	1.094	98.7	.252	1.268	314.7	557.1	.948	1.588	84.4	.700	1.9	-3.2	226.6	.093	
4-9940	5- 59.9	.262	171.8	.3	-1.3	.688	114.0	.471	1.241	215.7	314.0	.657A	1.825D	75.7	1.394	1.7	5.8	343.1	.390	
5- 59.9	5- 200	.390	13.7	6.7	2.3	1.215	108.7	.327	.786	263.6	517.7	.529	1.043A	100.1	.846	-3.2	-5.6	161.7	.215	
		12.25	10.13	4.35	2.12	5.55	5.78	12.80	2/1/2	88.4	51.8	30.4	.395	3.810	6.7	268.6	-1.6	102.4D	1.109	
4-9610	4-9940	.153	134.8	15.4	-.2	1.097	97.1	.242	1.273	322.2	554.9	.965	1.581	85.4	.702	2.0	-4.3	235.8	.091	
4-9940	5- 61.3	.260	171.3	.4	-1.3	.691	113.8	.466	1.247	216.2	316.8	.665A	1.828D	76.6	1.395	1.7	6.1	342.9	.375	
5- 61.3	5- 210	.375	16.0	5.4	1.7	1.210	108.0	.316	.779	263.3	524.9	.533	1.025A	96.8	.836	-3.2	-6.5	159.1	.189	
		11.90	9.81	4.08	2.10	5.52	5.73	12.42	2/1/2	81.2	63.4	32.9	.428	3.528	6.1	269.4	1.3	103.9D	1.081	
4-9630	4-9940	.118	132.8	14.4	-.3	1.105	94.0	.229	1.280	338.3	551.3	.987	1.573	86.7	.706	2.1	-5.3	246.2	.091	
4-9940	5- 61.4	.260	171.2	.4	-1.3	.691	113.8	.466	1.247	216.2	316.8	.665A	1.828D	76.6	1.395	1.7	6.1	342.9	.375	
5- 61.4	5- 230	.375	17.0	2.1	.7	1.204	108.2	.316	.770	261.3	542.0	.527	1.014	89.1	.822	-3.2	-1.9	144.0	.174	
		11.55	9.45	3.72	2.10	5.55	5.73	12.24	2/1/2	71.0	97.8	34.2	.428	3.396	8.1	269.5	6.6	105.6D	1.027	
4-9640	4-9940	.108	127.6	14.1	-.5	1.108	92.4	.226	1.282	347.0	550.2	.993	1.572	87.1	.708	2.3	-4.9	249.3	.092	
4-9940	5- 58.4	.264	172.5	.2	-1.2	.684	114.1	.476	1.234	215.0	310.8	.647A	1.821D	74.6	1.392	1.7	5.5	343.3	.408	
5- 58.4	5- 240	.408	14.0	.3	.1	1.201	109.8	.342	.766	258.0	553.0	.504	1.028	83.4	.816	-3.3	3.9	133.3	.209	
		11.58	9.46	3.63	2.12	5.54	5.83	12.71	2/1/2	68.1	119.1	31.1	.361	3.733	10.1	268.2	9.6	100.2D	.986	
MARS ARRIVAL DATE = 2449950 (20 AUG 1995)																				
4-9610	4-9950	.154	135.9	16.6	-.0	1.097	97.2	.242	1.272	321.6	559.3	.963	1.580	84.1	.709	1.9	-4.0	231.5	.090	
4-9950	5- 62.3	.299	169.7	1.4	-1.3	.725	117.3	.487	1.310	223.0	320.1	.673A	1.948D	77.2	1.409	1.6	5.8	341.3	.374	
5- 62.3	5- 210	.374	17.3	5.4	1.6	1.212	108.0	.315	.781	263.8	523.9	.535	1.027A	97.2	.838	-3.2	-7.2	160.7	.191	
		12.92	10.83	4.09	2.09	5.51	6.74	12.45	2/1/2	90.2	61.7	35.8	.430	3.253	5.9	269.2	.6	105.5D	.969	

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 640 DAYS | MARS ARRIVAL DATE = 2449840 | 2 MAY 1995

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2449840 (2 MAY 1995)																			
4-9550	4-9840	.299	102.9	17.2	-1.6	1.082	105.8	.328	1.252	287.7	531.6	.842	1.662A	94.0	.641	1.9	-4.5	214.8	.129
4-9840	5- 50.5	.176	196.5	-11.0	-1.1	.581	86.7	.446	1.146	175.9	305.7	.635A	1.657	74.0	1.370	2.4	7.9	334.8	.410
5- 50.5	5- 190	.410	.6	7.4	2.6	1.207	109.6	.340	.774	259.9	519.2	.511	1.038A	100.0	.838	-2.7	.9	151.5	.219
		12.81	10.06	6.56	2.75	6.16	3.70	12.86	2/1/2	55.4	53.7	25.6	.358	4.520	7.9	257.6	1.1	98.4D	1.258
4-9560	4-9840	.281	109.7	15.4	-1.8	1.087	104.7	.319	1.269	292.5	526.8	.864	1.674A	96.0	.649	2.2	-6.5	223.9	.140
4-9840	5- 51.9	.172	195.9	-11.4	-1.2	.583	86.9	.441	1.150	176.1	308.2	.643A	1.657	74.8	1.371	2.5	8.5	335.3	.395
5- 51.9	5- 200	.395	3.1	6.3	2.2	1.202	109.0	.329	.768	259.5	526.3	.515	1.021A	96.5	.828	-2.7	.4	148.7	.194
		12.60	9.85	6.02	2.95	6.36	3.63	12.49	2/1/2	46.4	65.9	27.6	.385	4.191	8.9	256.6	4.5	99.7D	1.227
4-9570	4-9840	.264	116.0	12.8	-2.1	1.094	103.7	.313	1.287	297.3	522.1	.883	1.690A	97.8	.658	2.6	-7.5	231.1	.152
4-9840	5- 52.5	.171	195.7	-11.5	-1.3	.584	87.0	.439	1.152	176.2	309.2	.646A	1.657	75.1	1.371	2.6	8.7	335.5	.390
5- 52.5	5- 210	.390	4.3	5.1	1.7	1.199	108.8	.326	.763	258.8	534.3	.515	1.011A	92.7	.820	-2.8	1.6	142.1	.180
		12.54	9.33	5.72	3.21	6.62	3.61	12.30	2/1/2	39.6	82.0	28.8	.395	4.020	10.3	259.0	7.4	100.1D	1.193
MARS ARRIVAL DATE = 2449850 (12 MAY 1995)																			
4-9540	4-9850	.319	96.0	18.8	-1.4	1.076	107.0	.338	1.232	282.7	540.6	.816	1.648	89.7	.634	1.5	.3	200.2	.117
4-9850	5- 49.2	.177	196.7	-10.5	-.9	.577	88.5	.453	1.135	178.2	301.6	.620A	1.649	72.7	1.367	2.3	6.9	335.8	.433
5- 49.2	5- 180	.433	358.5	8.2	3.1	1.215	110.5	.357	.786	260.5	511.9	.505	1.066A	103.8	.852	-2.7	2.1	152.4	.257
		13.01	10.48	6.74	2.53	5.95	3.74	13.47	2/1/2	75.0	43.5	22.5	.321	5.118	8.3	257.6	-3.2	96.5D	1.323
4-9550	4-9850	.296	103.0	17.7	-1.5	1.080	105.7	.324	1.247	287.5	535.9	.843	1.650A	92.0	.642	1.8	-3.2	212.3	.121
4-9850	5- 51.4	.172	195.8	-10.9	-1.1	.581	88.8	.445	1.141	178.5	305.4	.634A	1.649	73.9	1.368	2.4	7.7	336.6	.410
5- 51.4	5- 190	.410	1.9	7.4	2.7	1.209	109.6	.340	.777	260.4	518.2	.512	1.041A	100.5	.840	-2.7	.2	152.9	.223
		12.51	9.92	6.30	2.59	6.00	3.62	12.91	2/1/2	62.6	52.2	25.1	.358	4.603	7.7	259.2	.6	98.3D	1.289
4-9560	4-9850	.276	109.7	16.1	-1.6	1.085	104.5	.314	1.261	292.5	531.3	.866	1.657A	93.9	.649	2.1	-5.7	222.3	.128
4-9850	5- 53.0	.168	195.2	-11.2	-1.2	.584	89.0	.439	1.146	178.7	308.1	.643A	1.649	74.8	1.370	2.5	8.3	337.1	.394
5- 53.0	5- 200	.394	4.5	6.4	2.2	1.204	108.9	.328	.770	260.1	525.2	.517	1.023A	97.0	.830	-2.8	-.5	150.5	.196
		12.21	9.47	5.92	2.73	6.15	3.55	12.52	2/1/2	52.5	63.8	27.2	.387	4.248	8.6	260.2	4.0	99.7D	1.256
4-9570	4-9850	.257	115.9	13.7	-1.8	1.091	103.4	.306	1.277	297.5	526.7	.886	1.668A	95.7	.656	2.4	-7.1	230.5	.139
4-9850	5- 53.6	.167	194.9	-11.4	-1.3	.585	89.1	.436	1.148	178.8	309.3	.647A	1.649	75.2	1.370	2.5	8.6	337.2	.387
5- 53.6	5- 210	.387	5.8	5.1	1.7	1.200	108.7	.324	.765	259.4	533.1	.517	1.013A	93.3	.822	-2.8	.4	144.5	.180
		12.06	9.12	5.60	2.94	6.34	3.52	12.30	2/1/2	44.6	79.3	28.6	.401	4.048	10.0	260.7	7.1	100.3D	1.221
4-9590	4-9850	.227	126.3	5.8	-2.7	1.103	101.2	.297	1.310	308.0	518.0	.922	1.699A	98.7	.671	3.6	-8.5	242.3	.164
4-9850	5- 48.0	.160	197.1	-10.3	-.8	.574	88.3	.459	1.131	178.0	299.5	.612A	1.649	72.0	1.365	2.2	6.5	335.3	.446
5- 48.0	5- 230	.446	360.0	1.9	.8	1.193	111.7	.371	.754	253.3	555.1	.475	1.034	81.4	.806	-2.9	10.3	120.9	.235
		12.37	8.90	5.10	3.46	6.86	3.81	13.11	2/1/2	34.7	123.6	25.0	.303	4.617	11.5	256.9	10.6	95.3D	1.094
MARS ARRIVAL DATE = 2449860 (22 MAY 1995)																			
4-9540	4-9860	.320	96.3	19.2	-1.3	1.075	107.1	.338	1.230	282.2	544.6	.814	1.645	87.7	.637	1.5	2.0	196.4	.115
4-9860	5- 50.1	.174	195.6	-10.2	-.9	.578	90.7	.453	1.131	180.8	301.2	.619A	1.642D	72.6	1.365	2.2	6.7	337.4	.433
5- 50.1	5- 180	.433	359.6	8.2	3.1	1.217	110.6	.358	.788	260.9	511.0	.506	1.071A	104.2	.855	-2.8	1.6	153.4	.261
		12.93	10.44	6.76	2.49	5.91	3.68	13.54	2/1/2	83.6	42.4	22.1	.320	5.227	8.6	259.0	-3.9	98.4D	1.353
4-9550	4-9860	.294	103.2	18.2	-1.3	1.079	105.7	.322	1.242	287.3	540.1	.843	1.642	89.9	.643	1.7	-1.7	209.0	.114
4-9860	5- 52.3	.169	194.6	-10.5	-1.1	.583	91.0	.444	1.138	181.3	305.1	.633A	1.642D	73.9	1.367	2.3	7.5	338.2	.410
5- 52.3	5- 190	.410	3.1	7.5	2.7	1.210	109.6	.341	.779	260.8	517.2	.514	1.044A	100.9	.842	-2.8	-.4	154.2	.226
		12.31	9.83	6.27	2.48	5.90	3.57	12.96	2/1/2	70.6	50.8	24.7	.356	4.679	7.6	260.6	-.0	98.3D	1.316
4-9560	4-9860	.272	109.8	16.7	-1.4	1.084	104.4	.310	1.256	292.4	535.7	.867	1.644A	91.9	.650	2.0	-4.5	220.1	.119
4-9860	5- 53.9	.166	193.9	-10.8	-1.2	.586	91.2	.437	1.143	181.6	307.9	.643A	1.643D	74.8	1.369	2.4	8.1	338.7	.393
5- 53.9	5- 200	.393	5.7	6.4	2.2	1.205	108.9	.328	.772	260.5	524.1	.519	1.025A	97.5	.832	-2.8	-1.3	152.2	.198
		11.91	9.35	5.86	2.56	5.98	3.49	12.55	2/1/2	59.4	62.0	26.9	.389	4.299	8.2	261.8	3.5	99.7D	1.282
4-9570	4-9860	.252	116.0	14.6	-1.6	1.089	103.1	.300	1.269	297.6	531.3	.889	1.650A	93.7	.656	2.3	-6.3	229.2	.127
4-9860	5- 54.7	.164	193.5	-11.0	-1.3	.587	91.3	.434	1.145	181.7	309.4	.648A	1.643D	75.3	1.369	2.4	8.4	338.9	.385
5- 54.7	5- 210	.385	7.3	5.1	1.7	1.202	108.6	.322	.767	259.9	531.9	.520	1.014A	93.8	.824	-2.9	-.6	146.7	.180
		11.68	8.97	5.51	2.71	6.12	3.46	12.31	2/1/2	50.4	76.9	28.4	.405	4.075	9.7	262.3	6.7	100.4D	1.246
4-9590	4-9860	.218	126.3	7.8	-2.2	1.100	100.8	.287	1.298	308.4	522.9	.925	1.671A	96.6	.669	3.2	-6.8	242.4	.149
4-9860	5- 50.7	.173	195.5	-10.2	-1.0	.579	90.8	.450	1.133	181.0	302.2	.623A	1.642D	72.9	1.366	2.3	6.9	337.7	.427
5- 50.7	5- 230	.427	3.3	2.0	.8	1.195	110.7	.356	.757	255.0	552.6	.488	1.027	83.2	.809	-3.0	8.2	124.9	.218
		11.73	8.60	4.96	3.13	6.54	3.65	12.84	2/1/2	38.5	119.2	26.0	.330	4.441	11.9	259.6	11.0	96.6D	1.134
MARS ARRIVAL DATE = 2449870 (1 JUN 1995)																			
4-9540	4-9870	.322	96.6	19.6	-1.2	1.074	107.3	.339	1.228	281.7	548.6	.811	1.644	85.7	.640	1.5	3.6	192.5	.116
4-9870	5- 50.9	.173	193.9	-9.5	-.9	.580	93.1	.452	1.128	183.7	300.8	.618A	1.638D	72.5	1.365	2.2	6.5	338.9	.434
5- 50.9	5- 180	.434	.7	8.3	3.1	1.218	110.6	.359	.791	261.4	510.2	.507	1.075A	104.6	.857	-2.8	1.1	154.3	.265
		12.96	10.46	6.80	2.50	5.92	3.66	13.61	2/1/2	92.3	41.5	21.7	.319	5.323	8.9	260.4	-4.6	96.3D	1.378
4-9550	4-9870	.294	103.4	18.7	-1.2	1.078	105.7	.321	1.239	286.9	544.3	.841	1.637	88.0	.646	1.7	-.1	205.3	.111
4-9870	5- 53.1	.168	192.8	-9.8	-1.1	.586	93.3	.443	1.135	184.2	304.8	.632A	1.639D	73.8	1.367	2.3	7.2	339.7	.410
5- 53.1	5- 190	.410	4.2	7.5	2.7	1.212	109.6	.341	.781	261.2	516.3	.515	1.047A	101.3	.845	-2.9	-1.0	155.3	.229
		12.23	9.81	6.26	2.42	5.84	3.55	13.01	2/1/2	79.1	49.6	24.3	.357	4.745	7.6	262.0	-.7	98.2D	1.338
4-9560	4-9870	.270	110.0	17.3	-1.2	1.082	104.3	.307	1.251	292.2	540.0	.867	1.635	90.0	.652	1.9	-3.2	217.1	.112
4-9870	5- 54.8	.165	192.0	-10.0	-1.2	.589	93.5	.437	1.141	184.6	307.9	.643A	1.639D	74.8	1.368	2.3	7.8	340.1	.393
5- 54.8	5- 200	.393	6.9	6.5	2.2	1.207	108.8	.328	.774	261.0	523.2	.520	1.028A	97.9	.834	-2.9	-2.0	153.8	.200
		11.73	9.29	5.82	2.44	5.86	3.47	12.58	2/1/2	67.0	60.3	26.6	.390	4.341	7.9	263.2	2.9	99.7D	1.303
4-9570	4-9870	.248	116.1	15.4	-1.4	1.087	103.0	.296	1.263	297.6	535.8	.890	1.637A	91.8	.657	2.2	-5.4	227.1	.118
4-9870	5- 55.8	.163	191.5	-10.2	-1.3	.591	93.6	.433	1.144	184.8	309.5	.648A	1.639D	75.3	1.369	2.4	8.2	340.3	.383
5- 55.8	5- 210	.383	8.6	5.1	1.7	1.203	108.5	.321	.769	260.5	530.8	.522	1.015A	94.3	.826	-2.9	-1.6	148.8	.181
		11.41	8.88	5.44	2.53	5.95	3.43	12.32	2/1/2	57.0	74.7	28.3	.409	4.095	9.3	263.8	6.2	100.6D	1.267
4-9590	4-9870	.210	126.3	9.5	-1.8	1.097	100.5	.280	1.289	308.7	527.8	.928	1.649A	94.7	.669	2.9	-6.8	241.9	.135
4-9870	5- 52.7	.169	193.0	-9.7	-1.1	.585	93.3	.445	1.134	184.1	304.1	.630A	1.638D	73.6	1.366	2.2	7.1	339.6	.415
5- 52.7	5- 230	.415	5.9	2.0	.7	1.196	110.1	.346	.759	256.3	550.7	.496	1.023	84.4	.811	-3.0	6.5	126.2	.206
		11.27	8.41	4.85	2.86	6.27	3.57	12.67	2/1/2	43.2	115.5	26.7	.350	4.328	12.0	261.8	11.1	97.6D	1.164
MARS ARRIVAL DATE = 2449880 (11 JUN 1995)																			
4-9550	4-9880	.295	103.8	19.1	-1.0	1.077	105.8	.322	1.237	286.5	548.4	.839	1.635	86.1	.649	1.7	1.5	201.3	.110
4-9880	5- 53.9	.169	190.4	-8.8	-1.1	.590	95.8	.443	1.135	187.4	304.7	.632A	1.638D	73.8	1.367	2.2	7.0	341.0	.410
5- 53.9	5- 190	.410	5.3	7.6	2.7	1.213	109.6	.341	.783	261.6	515.5	.516	1.051A	101.6	.847	-2.9	-1.5	156.4	.232
		12.26	9.86	6.29	2.41	5.82	3.57	13.06	2/1/2	87.8	48.4	24.1	.357	4.793	7.6	263.3	-1.4	98.2D	1.354
4-9560	4-9880	.269	110.2	17.9	-1.1	1.081	104.5	.305	1.248	291.9	544.3	.867	1.629	88.1	.655	1.9	-1.7	213.5	.108
4-9880	5- 55.7	.166	189.4	-8.9	-1.2	.594	96.0	.437	1.141	187.8	307.9	.643A	1.639D	74.8	1.368	2.2	7.6	341.4	.392
5- 55.7	5- 200	.392	8.0	6.5	2.2	1.208	108.8	.327	.776	261.4	522.3	.522	1.030A	98.2	.836	-2.9	-2.7	155.1	.202
		11.66	9.30	5.80	2.36	5.78	3.50	12.61	2/1/2	75.4	56.8	26.5	.391	4.369	7.6	264.4	2.3	99.8D	1.318
4-9570	4-9880	.245	116.3	16.1	-1.2	1.086	102.9	.292	1.259	297.5	540.3	.891	1.627	89.9	.660	2.1	-4.2	224.3	.110
4-9880	5- 56.7	.164	188.9	-9.1	-1.3	.596	96.1	.433	1.144	188.1	309.8	.649A	1.639D	75.4	1.369	2.3	7.9	341.6	.382
5- 56.7	5- 210	.382	9.9	5.2	1.7	1.204	108.4	.320	.770	260.9	529.8	.524	1.016A	94.7	.827	-3.0	-2.4	150.8	.181
		11.26	8.86	5.40	2.40	5.82	3.46	12.33	2/1/2	64.5	72.7	28.2	.413	4.104	8.8	265.1	5.8	100.7D	1.282
4-9590	4-9880	.205	126.4	11.1	-1.5	1.095	100.3	.274	1.281	309.0	532.8	.930	1.632A	92.8	.670	2.6	-6.5	240.7	.123
4-9880	5- 54.4	.168	190.2	-8.8	-1.1	.591	95.9	.441	1.137	187.5	305.8	.635A	1.638D	74.1	1.367	2.2	7.1	341.1	.405
5- 54.4	5- 230	.405	8.0	2.0	.7	1.198	109.7	.339	.761	257.3	549.1	.503	1.020	85.4	.813	-3.1	5.0	131.0	.198
		10.94	8.31	4.76	2.65	6.05	3.55	12.55	2/1/2	48.6	112.3	27.3	.366	4.239	11.9	263.7	10.9	98.4D	1.185
MARS ARRIVAL DATE = 2449890 (21 JUN 1995)																			
4-9550	4-9890	.298	104.2	19.6	-.9	1.077	106.0	.324	1.236	285.8	552.3	.836	1.636	84.2	.654	1.7	2.9	197.5	.112
4-9890	5- 54.7	.173	187.5	-7.5	-1.1	.597	98.4	.444	1.137	190.9	304.7	.632A	1.642D	73.8	1.367	2.1	6.7	342.1	.411
5- 54.7	5- 190	.411	6.2	7.6	2.7	1.214	109.6	.342	.785	262.0	514.7	.517	1.054A	101.9	.849	-3.0	-2.0	157.4	.235
		12.44	9.99	6.34	2.44	5.86	3.65	13.11	2/1/2	98.4	47.4	24.0	.357	4.817	7.8	264.4	-2.1	98.2D	1.361

STOPOVER TIME = 0 DAYS | 1995 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2449890
21 JUN 1995

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / APHEL KAPPA	APHEL / APHEL / PSI 6 -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC	
4-9560	4-9890	.269	110.6	18.4	-.9	1.081	104.3	.305	1.246	291.5	548.5	.865	1.626	86.3	.658	1.8	-.2	209.5	.106	
4-9890	5- 56.4	.170	186.5	-7.6	-1.2	.601	98.6	.437	1.143	191.4	308.1	.643A	1.643D	74.8	1.369	2.2	7.3	342.5	.392	
5- 56.4	5- 200	.392	9.1	6.5	2.2	1.209	108.8	.327	.778	261.8	521.4	.523	1.032A	98.6	.838	-3.0	-3.3	156.4	.204	
		11.73	9.40	5.81	2.33	5.75	3.58	12.64	2/1/2	84.1	57.5	26.4	.392	4.376	7.3	265.6	1.6	99.9D	1.324	
4-9570	4-9890	.244	116.5	16.9	-1.0	1.085	102.9	.291	1.255	297.2	544.6	.890	1.620	88.1	.663	2.0	-2.9	220.8	.105	
4-9890	5- 57.5	.168	185.8	-7.6	-1.3	.604	98.7	.433	1.147	191.7	310.1	.650A	1.644D	75.5	1.370	2.2	7.6	342.6	.380	
5- 57.5	5- 210	.380	11.0	5.2	1.7	1.205	108.3	.319	.772	261.4	528.9	.526	1.018A	95.1	.829	-3.0	-3.2	152.2	.182	
		11.24	8.92	5.38	2.32	5.74	3.54	12.34	2/1/2	72.6	70.9	28.3	.416	4.095	8.3	266.3	5.0	100.9D	1.288	
4-9590	4-9890	.201	126.6	12.4	-1.2	1.094	100.1	.270	1.275	309.1	537.3	.932	1.619A	91.0	.675	2.4	-5.9	238.8	.113	
4-9890	5- 55.8	.171	186.8	-7.5	-1.2	.600	98.5	.440	1.141	191.2	306.9	.639A	1.643D	74.5	1.368	2.1	7.1	342.4	.398	
5- 55.8	5- 230	.390	9.8	2.0	.7	1.199	109.3	.334	.763	258.1	547.6	.508	1.018	86.2	.815	-3.1	3.7	133.6	.192	O
		10.77	8.31	4.70	2.46	5.87	3.61	12.47	2/1/2	55.0	109.5	27.9	.379	4.155	11.6	265.3	10.6	99.1D	1.197	
MARS ARRIVAL DATE = 2449900 (1 JUL 1995)																				
4-9550	4-9900	.303	104.7	20.1	-.8	1.077	106.3	.328	1.235	285.0	556.2	.831	1.640	82.4	.659	1.7	4.0	194.0	.117	
4-9900	5- 55.3	.181	184.3	-5.9	-1.1	.606	101.2	.446	1.142	194.7	305.0	.632A	1.651D	73.8	1.369	2.0	6.5	343.0	.411	
5- 55.3	5- 190	.411	7.2	7.7	2.7	1.216	109.6	.342	.787	262.4	514.0	.518	1.057A	102.2	.850	-3.0	-2.4	158.3	.238	
		12.77	10.25	6.43	2.52	5.94	3.82	13.15	2/1/2	104.6	46.4	24.0	.356	4.809	7.8	265.4	-2.8	98.3D	1.356	
4-9560	4-9900	.272	111.0	19.0	-.8	1.080	104.5	.307	1.244	290.9	552.5	.862	1.626	84.6	.663	1.8	1.2	205.5	.107	
4-9900	5- 57.2	.178	183.2	-6.0	-1.2	.611	101.4	.439	1.149	195.3	308.5	.644A	1.653D	74.9	1.371	2.1	7.0	343.3	.391	
5- 57.2	5- 200	.391	10.1	6.6	2.2	1.210	108.7	.327	.779	262.2	520.6	.524	1.034A	98.9	.839	-3.0	-3.8	157.6	.208	
		11.95	9.60	5.85	2.35	5.77	3.75	12.67	2/1/2	92.9	56.2	26.5	.393	4.355	7.0	266.6	.9	100.0D	1.319	
4-9570	4-9900	.244	116.9	17.6	-.8	1.084	102.9	.290	1.253	296.9	548.9	.889	1.617	86.4	.668	1.9	-1.5	216.9	.102	
4-9900	5- 58.3	.176	182.5	-6.0	-1.3	.613	101.4	.435	1.153	195.6	310.7	.651A	1.655D	75.6	1.372	2.1	7.3	343.5	.379	
5- 58.3	5- 210	.379	12.1	5.2	1.7	1.206	108.2	.318	.773	261.8	528.1	.527	1.019A	95.4	.831	-3.0	-3.9	153.7	.183	
		11.37	9.09	5.58	2.27	5.69	3.71	12.35	2/1/2	81.3	69.3	28.5	.419	4.063	7.8	267.3	4.3	101.1D	1.283	
4-9590	4-9900	.198	126.8	13.7	-1.0	1.092	100.0	.266	1.271	309.1	542.0	.932	1.609	89.3	.676	2.3	-5.1	236.1	.105	
4-9900	5- 57.1	.178	183.3	-6.0	-1.2	.611	101.3	.440	1.148	195.2	308.5	.644A	1.653D	74.8	1.370	2.1	7.0	343.3	.392	
5- 57.1	5- 230	.392	11.5	2.0	.7	1.200	109.0	.329	.765	258.8	546.4	.513	1.016	86.9	.817	-3.1	2.5	135.9	.187	*
		10.74	8.42	4.66	2.32	5.74	3.75	12.40	2/1/2	62.2	106.9	28.5	.391	4.063	11.1	266.6	10.0	99.7D	1.198	
4-9600	4-9900	.178	130.4	11.1	-1.1	1.097	98.7	.258	1.279	315.6	538.8	.949	1.609A	90.4	.680	2.5	-5.7	243.2	.110	
4-9900	5- 40.9	.221	193.3	-6.7	-.3	.557	100.4	.526	1.071	189.7	277.1	.508A	1.634D	63.9	1.348	1.9	3.8	336.9	.598	
5- 40.9	5- 240	.598	353.4	.3	.2	1.190	119.2	.489	.751	243.9	566.6	.384	1.117	68.8	.800	-3.3	15.2	114.5	.386	
		11.55	9.15	4.39	2.40	5.82	4.76	15.96	2/1/2	55.4	140.5	16.9	.168	6.825	12.4	254.7	12.2	86.2L	.960	
4-9600	4-9900	.178	130.4	11.1	-1.1	1.097	98.7	.258	1.279	315.6	538.8	.949	1.609A	90.4	.680	2.5	-5.7	243.2	.110	
4-9900	5- 49.9	.192	187.8	-6.1	-.8	.591	100.9	.471	1.118	192.8	294.5	.592A	1.645D	70.3	1.362	1.9	5.2	341.3	.476	
5- 49.9	5- 240	.476	3.5	.3	.1	1.195	113.2	.395	.758	252.0	560.5	.458	1.057	77.6	.807	-3.3	10.3	122.3	.273	
		10.87	8.47	4.39	2.40	5.82	4.08	13.74	2/1/2	55.4	131.6	22.7	.266	5.087	12.9	261.8	12.6	93.2D	1.085	
MARS ARRIVAL DATE = 2449910 (11 JUL 1995)																				
4-9560	4-9910	.275	111.6	19.5	-.6	1.080	104.7	.310	1.243	290.2	556.5	.858	1.628	82.9	.669	1.8	2.3	201.8	.110	
4-9910	5- 57.9	.190	179.9	-4.2	-1.2	.623	104.3	.443	1.159	199.6	309.1	.646A	1.672D	75.0	1.373	2.0	6.7	343.9	.391	
5- 57.9	5- 200	.391	11.0	6.6	2.2	1.212	108.7	.327	.781	262.6	519.9	.525	1.036A	99.2	.841	-3.1	-4.3	158.6	.209	
		12.35	9.94	5.92	2.40	5.82	4.03	12.70	2/1/2	101.4	55.1	26.9	.394	4.297	6.8	267.4	.2	100.3D	1.298	
4-9570	4-9910	.246	117.4	18.2	-.7	1.084	103.0	.291	1.251	296.3	553.1	.887	1.616	84.7	.673	1.9	-.3	212.8	.102	
4-9910	5- 59.1	.188	179.2	-4.2	-1.3	.626	104.3	.439	1.163	199.9	311.5	.653A	1.674D	75.7	1.375	2.0	7.0	344.0	.378	
5- 59.1	5- 210	.378	13.0	5.3	1.7	1.207	108.2	.317	.775	262.2	527.3	.529	1.021A	95.8	.832	-3.1	-4.6	155.1	.185	
		11.66	9.39	5.41	2.27	5.69	3.98	12.37	2/1/2	90.2	67.8	29.0	.421	3.999	7.5	268.1	3.5	101.5D	1.263	
4-9590	4-9910	.197	127.2	14.8	-.6	1.091	100.0	.264	1.267	309.0	546.5	.932	1.602	87.7	.680	2.1	-4.2	232.7	.100	
4-9910	5- 58.2	.189	179.7	-4.2	-1.2	.624	104.3	.442	1.160	199.7	309.8	.648A	1.672D	75.2	1.374	2.0	6.8	343.9	.387	
5- 58.2	5- 230	.387	12.9	2.0	.7	1.201	108.8	.325	.766	259.5	545.2	.517	1.015	87.5	.818	-3.1	1.4	138.0	.185	
		10.89	8.65	4.64	2.25	5.65	4.01	12.35	2/1/2	70.2	104.6	29.3	.401	3.952	10.5	267.7	9.4	100.4D	1.185	
4-9600	4-9910	.175	130.8	12.7	-.9	1.096	98.6	.255	1.275	315.7	543.5	.950	1.600	88.6	.684	2.3	-5.2	240.4	.102	
4-9910	5- 52.9	.198	183.0	-4.4	-1.0	.610	104.1	.463	1.137	197.7	299.4	.611A	1.664D	71.8	1.367	1.9	5.5	342.9	.448	
5- 52.9	5- 240	.448	7.2	.3	.1	1.197	111.8	.373	.760	254.3	558.0	.477	1.044	79.9	.810	-3.3	8.2	125.9	.246	
		10.85	8.58	4.35	2.27	5.69	4.22	13.29	2/1/2	62.6	127.6	24.7	.300	4.669	12.6	264.4	12.2	95.3D	1.099	
MARS ARRIVAL DATE = 2449920 (21 JUL 1995)																				
4-9560	4-9920	.280	112.3	20.0	-.5	1.080	105.0	.314	1.243	289.3	560.3	.853	1.633	81.2	.675	1.8	3.0	198.7	.116	
4-9920	5- 58.5	.207	176.8	-2.5	-1.2	.640	107.3	.448	1.175	204.3	310.2	.648A	1.702D	75.1	1.378	1.9	6.4	344.1	.391	
5- 58.5	5- 200	.391	11.9	6.7	2.3	1.213	108.7	.327	.782	262.9	519.2	.526	1.038A	99.5	.843	-3.1	-4.8	159.6	.211	
		12.95	10.44	6.01	2.51	5.93	4.43	12.73	2/1/2	109.2	54.0	27.6	.394	4.194	6.7	268.1	-.6	100.7D	1.259	
4-9570	4-9920	.249	118.0	18.8	-.5	1.083	103.2	.293	1.250	295.6	557.2	.884	1.617	83.2	.679	1.9	.7	208.9	.105	
4-9920	5- 59.8	.205	176.1	-2.5	-1.3	.643	107.3	.444	1.180	204.8	312.7	.656A	1.704D	75.9	1.379	1.9	6.7	344.1	.377	
5- 59.8	5- 210	.377	14.0	5.3	1.7	1.208	108.1	.317	.776	262.5	526.5	.530	1.022A	96.1	.833	-3.1	-5.2	156.4	.186	
		12.16	9.84	5.46	2.31	5.73	4.39	12.38	2/1/2	98.8	66.3	29.8	.423	3.894	6.8	268.8	2.8	102.0D	1.226	
4-9590	4-9920	.196	127.7	15.8	-.6	1.091	100.0	.263	1.265	308.7	551.0	.932	1.598	86.1	.685	2.0	-3.2	228.7	.096	
4-9920	5- 59.3	.206	176.4	-2.5	-1.3	.641	107.3	.446	1.178	204.6	311.6	.653A	1.704D	75.6	1.378	1.9	6.6	344.1	.383	
5- 59.3	5- 230	.383	14.3	2.0	.7	1.202	108.6	.322	.767	260.1	544.2	.520	1.014	88.0	.820	-3.2	.3	139.9	.180	
		11.23	9.05	4.64	2.18	5.60	4.41	12.31	2/1/2	78.9	102.3	30.4	.410	3.811	9.7	268.6	8.6	101.2D	1.154	
4-9600	4-9920	.174	131.2	14.1	-.6	1.095	98.5	.253	1.272	315.5	548.2	.950	1.593	87.3	.688	2.2	-4.5	236.9	.097	
4-9920	5- 55.0	.212	178.9	-2.7	-1.0	.630	107.3	.462	1.159	202.8	303.1	.624A	1.695D	72.8	1.373	1.8	5.6	343.7	.431	
5- 55.0	5- 240	.431	9.7	.3	.1	1.199	111.0	.360	.762	255.7	556.1	.488	1.037	81.3	.813	-3.3	6.7	128.5	.231	
		11.08	8.89	4.34	2.19	5.61	4.56	13.04	2/1/2	70.7	124.6	26.5	.323	4.362	11.9	266.1	11.5	96.9D	1.086	
MARS ARRIVAL DATE = 2449930 (31 JUL 1995)																				
4-9570	4-9930	.253	118.8	19.4	-.3	1.083	103.5	.297	1.250	294.7	561.1	.879	1.621	81.6	.685	1.8	1.4	205.6	.110	
4-9930	5- 60.5	.229	173.4	-.9	-1.3	.664	110.5	.453	1.207	210.2	314.4	.660A	1.754D	76.2	1.386	1.8	6.4	343.8	.376	
5- 60.5	5- 210	.376	15.0	5.3	1.7	1.209	108.1	.316	.778	262.9	525.7	.532	1.023A	96.4	.835	-3.1	-5.8	157.7	.187	
		12.89	10.50	5.55	2.40	5.82	4.97	12.40	2/1/2	107.0	64.9	31.0	.426	3.738	6.4	269.2	2.0	102.8D	1.165	
4-9590	4-9930	.197	128.4	16.7	-.4	1.090	100.1	.264	1.263	308.2	555.3	.930	1.596	84.7	.691	2.0	-2.4	224.5	.095	
4-9930	5- 60.3	.229	173.6	-1.0	-1.3	.663	110.5	.454	1.205	210.0	313.8	.658A	1.752D	76.0	1.385	1.8	6.3	343.8	.379	
5- 60.3	5- 230	.379	15.6	2.1	.7	1.203	108.4	.319	.769	260.7	543.1	.523	1.014	88.5	.821	-3.2	-.7	141.9	.177	
		11.78	9.62	4.65	2.17	5.59	4.96	12.27	2/1/2	87.8	100.1	32.0	.419	3.631	8.9	269.2	7.8	102.2D	1.103	
4-9600	4-9930	.174	131.9	15.3	-.4	1.094	98.6	.252	1.269	315.2	552.7	.949	1.589	85.8	.694	2.0	-3.8	232.9	.093	
4-9930	5- 56.7	.234	175.3	-1.1	-1.1	.655	110.7	.466	1.189	208.6	306.7	.635A	1.744D	73.7	1.381	1.8	5.5	343.8	.419	
5- 56.7	5- 240	.419	11.9	.3	.1	1.200	110.4	.351	.764	256.9	554.5	.496	1.032	82.4	.814	-3.3	5.3	131.0	.219	
		11.56	9.42	4.33	2.14	5.56	5.09	12.86	2/1/2	79.4	121.8	28.5	.343	4.062	11.1	267.3	10.7	98.4D	1.049	
MARS ARRIVAL DATE = 2449940 (10 AUG 1995)																				
4-9590	4-9940	.199	129.2	17.5	-.2	1.090	100.3	.265	1.262	307.5	559.5	.928	1.597	83.3	.698	1.9	-1.7	220.4	.097	
4-9940	5- 61.4	.260	171.2	.4	-1.3	.691	113.8	.466	1.247	216.2	316.8	.665A	1.828D	76.6	1.395	1.7	6.1	342.9	.375	
5- 61.4	5- 230	.375	17.0	2.1	.7	1.204	108.2	.316	.770	261.3	542.0	.527	1.014	89.1	.822	-3.2	-1.9	144.0	.174	
		12.60	10.41	4.68	2.19	5.61	5.73	12.24	2/1/2	96.7	97.8	34.2	.428	3.396	8.1	269.5	6.8	103.6D	1.027	
4-9600	4-9940	.175	132.7	16.4	-.2	1.094	98.7	.252	1.268	314.7	557.1	.948	1.586	84.4	.700	1.9	-3.2	228.6	.093	
4-9940	5- 58.4	.264	172.5	.2	-1.2	.684	114.1	.476	1.234	215.0	310.8	.647A	1.821D	74.6	1.392	1.7	5.5	343.3	.408	
5- 58.4	5- 240	.408	14.0	.3	.1	1.201	109.8	.342	.766	258.0	553.0	.504	1.028	83.4	.816	-3.3	3.9	133.3	.209	
		12.31	10.18	4.35	2.12	5.55	5.83	12.71	2/1/2	88.4	119.1	31.1	.361	3.733	10.1	268.2	9.8	100.2D	.986	

1997

OUTBOUND SWINGBY

4.14

STOPOVER TIME = 0 DAYS — 1997 OUTBOUND SWINGBY — MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2450430
12 DEC 1996

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
MARS ARRIVAL DATE = 2450430 (12 DEC 1996)																			
5- 220	5- 253.0	.466	74.5	19.9	1.5	.933	117.1	.468	.902	229.5	266.1	.479A	1.324D	64.2	1.282	2.0	4.2	322.6	.564
5- 253.0	5- 430	.564	310.1	3.5	1.5	1.389	113.2	.540	1.216	289.9	512.6	.559	1.873A	115.5	.622	.5	-2.9	188.9	.302
5- 430	5- 660	.235	60.6	63.3	13.1	.694	100.9	.276	1.374	212.4	384.4	.996	1.753D	95.2	1.115	-13.3	-37.1	28.0	.294
		21.87	15.04	9.94	6.83	10.21	5.10	14.12	1/2/1	37.1	68.4	12.5	.189	9.158	175.0	239.1	-2.2	85.6L	1.541
MARS ARRIVAL DATE = 2450440 (22 DEC 1996)																			
5- 220	5- 253.9	.454	73.9	19.6	1.6	.936	116.4	.456	.907	230.6	268.5	.494A	1.320D	65.2	1.284	2.0	4.2	322.8	.544
5- 253.9	5- 440	.544	311.0	3.8	1.6	1.382	112.4	.524	1.188	290.8	516.5	.566	1.810A	111.9	.603	.4	-2.9	188.6	.273
5- 440	5- 660	.216	63.4	50.0	8.5	.700	103.0	.290	1.398	218.0	385.7	.993	1.803D	95.7	1.121	-8.7	-45.9	15.2	.237
		20.37	14.31	9.67	6.05	9.43	4.64	13.13	1/2/1	41.7	60.1	11.8	.203	9.713	175.5	238.8	-1.1	84.7L	1.768
MARS ARRIVAL DATE = 2450450 (1 JAN 1997)																			
5- 210	5- 248.9	.375	79.8	21.4	.8	.831	110.7	.453	.774	210.5	250.2	.423A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 450	.560	305.7	3.4	1.5	1.370	113.5	.519	1.139	286.2	524.3	.548	1.729A	105.7	.570	.7	.9	181.7	.236
5- 450	5- 650	.226	64.7	34.0	3.9	.717	106.1	.311	1.451	227.2	380.9	1.000	1.902D	94.9	1.132	-4.2	-26.6	3.0	.191
		17.90	12.77	7.89	5.13	8.51	4.88	12.46	1/2/1	54.0	58.0	18.3	.192	6.298	172.8	243.5	-4.1	90.8D	1.018
5- 220	5- 254.6	.445	73.4	19.4	1.7	.939	115.8	.446	.911	231.4	270.5	.505A	1.318D	66.0	1.286	1.9	4.3	322.9	.529
5- 254.6	5- 450	.529	311.7	4.1	1.7	1.377	111.8	.510	1.167	291.4	520.5	.571	1.762A	108.2	.589	.3	-2.6	187.7	.247
5- 450	5- 660	.224	66.3	42.0	6.3	.709	105.2	.307	1.428	223.7	387.0	.989	1.866D	96.2	1.128	-6.4	-34.7	6.0	.221
		19.70	14.30	9.47	5.40	8.78	4.83	12.89	1/2/1	47.0	54.2	11.2	.215	10.240	175.7	238.6	-.0	83.9L	1.987
MARS ARRIVAL DATE = 2450460 (11 JAN 1997)																			
5- 210	5- 249.2	.371	79.5	21.2	.9	.834	110.4	.447	.777	210.8	251.1	.429A	1.125D	63.7	1.211	2.7	5.3	324.1	.552
5- 249.2	5- 460	.552	306.2	3.6	1.6	1.366	113.2	.512	1.126	286.3	528.1	.550	1.702A	101.9	.560	.6	2.0	179.2	.216
5- 460	5- 650	.249	67.2	31.8	3.4	.731	108.5	.334	1.497	233.0	382.4	.997	1.996D	95.6	1.141	-3.6	-25.1	359.2	.201
		17.95	13.26	7.80	4.69	8.08	5.46	12.59	1/2/1	61.1	55.2	17.8	.197	6.447	173.0	243.4	-3.8	90.6D	1.074
5- 220	5- 255.1	.439	73.0	19.2	1.7	.941	115.4	.439	.915	232.1	272.0	.513A	1.317D	66.6	1.288	1.9	4.3	323.0	.517
5- 255.1	5- 460	.517	312.3	4.3	1.8	1.372	111.4	.500	1.150	291.9	524.4	.575	1.726A	104.6	.577	.3	-1.9	186.1	.225
5- 460	5- 660	.241	69.0	37.2	5.0	.721	107.5	.328	1.466	229.3	388.2	.985	1.947D	96.9	1.136	-5.1	-28.1	3.2	.222
		19.45	14.58	9.32	4.87	8.26	5.26	12.90	1/2/1	53.2	50.0	10.7	.225	10.733	175.7	238.3	.6	85.4L	2.185
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																			
5- 210	5- 249.4	.369	79.4	21.2	.9	.835	110.3	.445	.778	211.0	251.4	.432A	1.125D	63.8	1.212	2.7	5.3	324.1	.549
5- 249.4	5- 470	.549	306.6	3.7	1.6	1.363	113.2	.508	1.116	286.0	532.0	.549	1.683A	98.1	.552	.6	3.5	176.0	.205
5- 470	5- 650	.276	69.7	30.3	3.0	.748	110.9	.362	1.557	238.7	383.8	.993	2.121D	96.3	1.152	-3.1	-20.3	356.0	.215
		18.30	13.91	7.77	4.39	7.78	6.14	12.79	1/2/1	69.0	52.8	17.5	.199	6.576	173.2	243.2	-3.5	90.6D	1.111
5- 220	5- 255.4	.435	72.8	19.1	-1.7	.942	115.1	.435	.917	232.5	272.9	.518A	1.316D	67.0	1.289	1.9	4.3	323.1	.510
5- 255.4	5- 470	.510	312.8	4.5	1.8	1.369	111.1	.493	1.138	292.0	528.3	.577	1.699A	100.9	.568	.3	-.9	183.6	.208
5- 470	5- 660	.264	71.6	34.1	4.2	.736	109.9	.353	1.516	234.8	389.4	.981	2.051D	97.5	1.145	-4.2	-23.3	359.5	.231
		19.53	15.07	9.23	4.46	7.85	5.84	13.04	1/2/1	60.2	47.0	10.3	.231	11.176	175.5	238.1	1.5	83.0L	2.348
5- 230	5- 263.1	.526	68.2	17.2	-2.6	1.080	118.3	.501	1.237	260.2	303.2	.618A	1.857D	71.8	1.394	1.0	2.8	317.5	.466
5- 263.1	5- 470	.466	320.2	6.0	2.1	1.376	108.7	.479	1.168	299.5	523.7	.608	1.727A	104.0	.587	-.3	-6.0	191.7	.217
5- 470	5- 670	.258	74.1	41.5	6.8	.724	108.8	.345	1.476	230.6	394.7	.968	1.985D	98.7	1.139	-6.6	-30.3	6.2	.259
		21.74	17.06	11.39	4.68	8.07	5.67	13.50	1/2/1	50.8	45.5	4.1	.277	27.779	51.1	234.2	-50.7	98.0D	7.429
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																			
5- 140	5- 303.1	.239	58.4	84.5	13.1	.928	87.1	.157	.662	164.0	359.0	.727A	.997	89.9	1.262	-13.0	-78.2	308.1	.290
5- 303.1	5- 480	.290	336.8	-31.3	-6.2	1.405	94.7	.439	1.282	344.5	509.6	.719	1.845A	109.7	.649	7.1	1.2	220.2	.267
5- 480	5- 580	.412	68.3	22.5	.0	.835	119.7	.514	1.983	256.0	329.8	.963A	3.002D	79.8	1.216	-1.8	-3.3	10.4	.309
		21.02	15.10	5.29	5.92	9.30	9.81	14.40	2/1/1	34.6	137.4	48.5	.717	2.435	83.5	165.1	-33.9	118.3D	1.029
5- 150	5- 311.5	.194	72.3	81.9	10.3	.924	88.1	.157	.860	169.9	368.2	.725	.995	91.1	1.262	-10.9	-72.7	299.2	.250
5- 311.5	5- 480	.250	329.6	-19.3	-3.4	1.409	91.3	.440	1.297	355.9	507.8	.726	1.868A	110.5	.656	4.1	-6.1	220.3	.267
5- 480	5- 590	.395	67.3	23.0	.3	.832	118.4	.495	1.966	257.3	340.7	.993A	2.938D	83.6	1.212	-1.8	-5.9	6.9	.263
		19.85	13.94	4.60	5.91	9.29	9.35	13.56	2/1/1	29.9	123.8	56.2	.964	2.125	80.1	162.0	-41.6	103.6D	1.084
5- 160	5- 317.9	.181	69.4	80.2	9.5	.920	89.3	.159	.859	176.4	374.7	.722	.996	92.0	1.263	-10.7	-70.1	296.3	.249
5- 317.9	5- 480	.249	322.4	-14.6	-2.6	1.411	88.4	.443	1.302	5.3	147.1	.725D	1.879A	111.0	.658	3.1	-8.5	220.3	.270
5- 480	5- 600	.380	67.0	23.5	.6	.827	117.5	.477	1.930	257.3	350.2	1.009A	2.850D	86.9	1.207	-1.8	-9.0	2.4	.233
		19.35	13.36	4.43	6.00	9.38	8.92	13.08	2/1/1	28.6	108.8	57.8	.972	2.069	80.1	155.2	-45.4	91.0D	1.039
5- 210	5- 249.3	.370	79.5	21.2	.9	.835	110.4	.447	.777	210.9	251.2	.430A	1.125D	63.7	1.211	2.7	5.3	324.1	.551
5- 249.3	5- 480	.551	306.9	3.8	1.7	1.361	113.3	.507	1.109	285.3	535.8	.547	1.671A	94.3	.547	.6	5.2	172.1	.198
5- 480	5- 650	.306	72.3	29.3	2.7	.769	113.3	.396	1.638	244.4	385.1	.989	2.287D	97.1	1.166	-2.8	-18.2	353.3	.233
		18.94	14.73	7.79	4.21	7.60	6.94	13.07	1/2/1	77.5	50.7	17.2	.198	6.682	173.3	243.0	-3.3	90.8D	1.123
5- 220	5- 255.6	.434	72.7	19.0	-1.8	.943	115.0	.433	.918	232.7	273.3	.520A	1.315D	67.1	1.289	1.9	4.4	323.1	.508
5- 255.6	5- 480	.508	313.1	4.6	1.8	1.366	111.0	.489	1.129	291.7	532.2	.577	1.681A	97.3	.561	.2	.5	180.4	.196
5- 480	5- 660	.291	74.3	32.0	3.6	.754	112.3	.383	1.582	240.3	390.5	.976	2.188D	98.3	1.157	-3.6	-19.8	356.7	.246
		19.90	15.74	9.20	4.16	7.56	6.54	13.28	1/2/1	68.1	44.7	9.9	.233	11.566	175.4	237.9	1.9	83.0L	2.466
5- 230	5- 263.5	.522	68.0	17.0	-2.6	1.080	118.1	.497	1.237	260.6	304.2	.622A	1.851D	72.2	1.393	1.0	2.8	317.5	.458
5- 263.5	5- 480	.458	320.6	6.1	2.1	1.373	108.3	.472	1.155	299.8	527.7	.610	1.700A	100.5	.579	-.3	-5.1	189.4	.200
5- 480	5- 670	.278	76.8	36.8	5.4	.740	111.2	.371	1.530	235.9	395.7	.962	2.098D	99.4	1.149	-5.1	-23.7	2.3	.264
		21.75	17.49	11.28	4.27	7.66	6.21	13.58	1/2/1	57.6	41.4	4.5	.287	25.315	46.3	233.6	-46.0	99.7D	8.982
MARS ARRIVAL DATE = 2450490 (10 FEB 1997)																			
5- 150	5- 311.7	.192	73.1	81.6	10.2	.924	88.1	.157	.860	169.9	368.4	.725	.995	91.1	1.262	-10.7	-72.3	299.1	.247
5- 311.7	5- 490	.247	327.2	-23.8	-4.1	1.401	90.8	.424	1.261	357.3	513.3	.726	1.796A	107.1	.639	4.7	-3.3	220.5	.240
5- 490	5- 590	.454	68.8	23.1	.3	.884	121.4	.581	2.381	264.8	343.8	.997A	3.764D	84.1	1.248	-1.8	-7.2	2.1	.291
		20.78	15.56	4.57	5.22	8.60	10.99	14.07	2/1/1	35.5	118.8	51.0	.985	2.324	80.3	159.7	-39.7	102.1D	1.304
5- 160	5- 318.1	.178	70.4	79.8	9.3	.920	89.3	.159	.859	176.3	375.0	.722	.996	92.0	1.263	-10.5	-69.6	296.5	.245
5- 318.1	5- 490	.245	319.7	-17.2	-3.0	1.403	87.9	.427	1.263	7.0	152.8	.724D	1.803A	107.5	.640	3.4	-6.7	220.1	.240 *
5- 490	5- 600	.433	68.8	23.7	.6	.873	120.5	.555	2.271	264.2	352.9	1.011A	3.531D	87.3	1.239	-1.7	-9.9	357.7	.261 O
		20.05	14.81	4.39	5.24	8.63	10.41	13.53	2/1/1	33.9	104.2	54.3	1.001	2.190	80.7	151.9	-44.7	88.5L	1.191
5- 170	5- 323.2	.181	64.4	78.4	9.4	.917	90.7	.163	.858	183.4	380.2	.719	.998D	92.8	1.264	-11.1	-68.6	295.1	.260
5- 323.2	5- 490	.260	314.1	-13.4	-2.5	1.403	85.5	.431	1.261	15.1	152.9	.717D	1.804A	107.7	.639	2.8	-8.3	219.5	.242
5- 490	5- 610	.415	69.3	24.3	.9	.859	119.4	.529	2.158	262.7	360.9	1.015	3.300D	90.3	1.228	-1.7	-12.3	353.5	.245
		19.60	14.32	4.43	5.28	8.66	9.89	13.27	2/1/1	33.6	90.0	56.6	.890	2.110	82.1	144.8	-47.6	78.4L	.988
5- 210	5- 248.9	.374	79.8	21.4	.8	.832	110.6	.452	.774	210.6	250.3	.424A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 490	.559	307.0	3.8	1.7	1.359	113.7	.509	1.103	284.1	539.5	.541	1.665A	90.5	.543	.6	7.1	167.9	.196
5- 490	5- 650	.341	74.9	28.5	2.5	.794	115.8	.438	1.752	250.0	386.3	.984	2.519D	97.9	1.183	-2.5	-16.4	351.0	.255
		19.91	15.75	7.88	4.17	7.56	7.87	13.44	1/2/1	86.5	49.0	17.0	.193	6.767	173.4	242.8	-3.2	91.4D	1.111
5- 220	5- 255.5	.435	72.7	19.0	-1.8	.943	115.1	.434	.917	232.6	273.1	.519A	1.315D	67.0	1.289	1.9	4.4	323.1	.509
5- 255.5	5- 490	.509	313.4	4.6	1.8	1.364	111.2	.488	1.122	291.1	536.1	.575	1.669A	93.7	.557	.2	2.2	176.6	.188
5- 490	5- 660	.323	77.0	30.5	3.2	.777	114.8	.419	1.672	245.7	391.6	.971	2.373D	99.2	1.172	-3.1	-17.1	354.4	.265
		20.58	16.59	9.22	5.99	7.38	7.37	13.61	1/2/1	76.6	42.9	9.6	.232	11.894	175.3	237.8	2.1	83.2L	2.527
5- 240	5- 313.1	.404	74.9	14.3	-3.4	1.058	111.8	.391	1.174	267.0	379.5	.714	1.633D	95.5	1.380	.1	.6	291.8	.244
5- 313.1	5- 490	.244	325.6	-22.1	-3.8	1.402	90.2	.425	1.262	359.3	513.1	.726	1.798A	107.2	.640	4.4	-4.3	220.4	.240
5- 490	5- 680	.294	82.7	40.7	7.1	.743	112.4	.388	1.539	236.3	401.3	.941	2.136D	101.2	1.152	-6.7	-25.2	7.0	.301
		20.36	15.15	8.54	5.22	8.60	6.61	14.26	1/1/1	35.0	38.5	40.0	1.006	2.921	36.7	225.8	34.4	144.3D	1.932
5- 240	5- 318	.386	76.7	14.1	-3.5	1.041	111.0	.371	1.126	263.4	383.7	.709	1.544D	96.4	1.368	.1	.7	293.5	.245
5- 318	5- 490	.245	319.8	-17.2	-3.0	1.403	88.0	.427	1.263	6.8	152.8	.724D	1.802A	107.5	.640	3.5	-6.7	220.1	.240
5- 490	5- 680	.294	82.7	40.7	7.1	.743	112.4	.388	1.539	236.3	401.3	.941	2.136D	101.2	1.152	-6.7	-25.2	7.0	.301
		19.99	14.75	8.14	5.24	8.63	6.61	14.26	1/1/1	33.9	38.5	31.5	1.002	3.687	35.9	222.3	34.6	139.9D	2.693
MARS ARRIVAL DATE = 2450500 (20 FEB 1997)																			
5- 160	5- 318.2	.177	70.7	79.7	9.3	.920	89.3	.159	.859	176.3	375.1	.722	.996	92.1	1.263	-10.4	-69.4	296.5	.244
5- 318.2	5- 500	.244	317.7	-20.3	-3.5	1.396	87.6	.415	1.236	8.1	158.2	.723D	1.748A	104.1	.627	3.9	-4.2	219.5	.218
5- 500	5- 600	.497	70.6	23.8	.6	.931	123.1	.659	2.966	270.8	355.1	1.013A	4.919D	88.1	1.280	-1.7	-10.6	353.5	.299
		21.23	16.59	4.38	4.64	8.03	12.20	14.21	2/1/1	39.9	100.1	50.8	1.010	2.332	81.1	149.5	-43.4	86.6L	1.345

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2450500
20 FEB 1997

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / PSI 2 / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 170	5- 323.3	.180	64.8	78.3	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.4	295.3	.258
5- 323.3	5- 500	.258	312.3	-15.3	-2.8	1.397	85.2	.419	1.232	16.3	158.3	.716D	1.748A	104.2	.626	3.1	-6.4	218.6	.216
5- 500	5- 610	.472	71.4	24.4	.9	.911	122.1	.620	2.672	268.9	362.8	1.015	4.329D	91.1	1.264	-1.7	-12.6	349.8	.281
		20.56	15.91	4.42	4.65	8.04	11.49	13.88	2/1/1	39.5	86.6	54.2	.901	2.195	82.6	142.3	-46.9	76.5L	1.077
5- 210	5- 248.3	.382	80.3	21.6	.8	.827	111.1	.462	.770	210.1	248.8	.414A	1.126D	62.6	1.206	2.8	5.2	323.7	.572
5- 248.3	5- 500	.572	306.9	3.8	1.8	1.358	114.4	.516	1.099	282.4	343.2	.533	1.666	86.6	.541	.6	8.9	163.6	.200
5- 500	5- 650	.381	77.6	27.9	2.3	.826	118.4	.489	1.917	255.4	387.3	.979	2.855D	98.9	1.204	-2.2	-14.9	349.2	.283
		21.25	16.99	8.04	4.26	7.65	8.95	13.91	1/2/1	95.5	47.6	16.8	.184	6.838	173.5	242.5	-3.2	92.2D	1.074
5- 220	5- 255.2	.438	72.9	19.1	1.7	.942	115.3	.438	.916	232.3	272.3	.515A	1.317D	66.7	1.288	1.9	4.3	323.0	.515
5- 255.2	5- 500	.515	313.6	4.5	1.8	1.363	111.5	.490	1.117	290.0	339.8	.570	1.663A	90.2	.554	.2	4.1	172.6	.186
5- 500	5- 660	.359	79.8	29.5	2.9	.805	117.3	.464	1.799	251.0	392.5	.965	2.632D	100.1	1.190	-2.7	-15.0	352.6	.290
		21.57	17.64	9.30	3.93	7.33	8.34	14.04	1/2/1	85.4	41.6	9.4	.227	12.181	175.4	237.6	2.0	83.7L	2.534
5- 240	5- 314.1	.401	75.3	14.3	-3.4	1.005	111.6	.387	1.164	266.3	380.4	.713	1.614D	95.6	1.378	.1	.6	292.1	.244
5- 314.1	5- 500	.245	322.6	-25.7	-4.4	1.396	89.5	.413	1.236	1.8	158.3	.726D	1.746A	103.9	.627	4.9	-1.4	220.1	.217
5- 500	5- 660	.319	85.2	36.1	5.6	.764	114.8	.421	1.614	241.4	402.1	.935	2.294D	102.1	1.166	-5.0	-18.7	3.8	.312
		20.38	15.72	8.45	4.66	8.05	7.27	14.45	1/1/1	41.0	34.7	39.5	1.006	2.956	44.0	228.1	41.1	136.0D	1.968
5- 240	5- 318.8	.383	77.0	14.1	-3.5	1.039	110.9	.367	1.119	262.8	384.4	.708	1.530D	96.5	1.366	.1	.7	293.9	.245
5- 318.8	5- 500	.245	317.0	-19.5	-3.4	1.397	87.3	.415	1.235	9.1	158.1	.723D	1.748A	104.1	.627	3.8	-4.6	219.4	.216
5- 500	5- 680	.319	85.2	36.1	5.6	.764	114.8	.421	1.614	241.4	402.1	.935	2.294D	102.1	1.166	-5.0	-18.7	3.8	.312
		19.99	15.34	8.08	4.64	8.03	7.27	14.45	1/1/1	39.8	34.7	30.3	1.001	3.820	43.0	223.7	41.4	134.3D	2.024
5- 250	5- 330.9	.419	86.5	16.6	-3.0	1.052	113.0	.407	1.157	263.1	394.5	.687	1.628D	99.8	1.379	-.6	-2.8	301.6	.304
5- 330.9	5- 500	.304	306.9	-10.3	-2.3	1.395	81.2	.430	1.220	29.6	159.3	.695D	1.744A	104.2	.619	2.3	-6.1	216.5	.218
5- 500	5- 690	.316	90.5	47.2	10.5	.745	113.4	.404	1.542	236.3	406.5	.919	2.165D	102.9	1.155	-9.8	-30.3	13.6	.353
		20.77	16.08	8.87	4.69	8.08	7.20	15.28	1/1/1	40.7	39.7	9.2	.650	12.515	55.2	223.4	54.4	116.0D	7.481
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																			
5- 250	5- 331.2	.418	86.6	16.6	-2.9	1.051	112.9	.405	1.154	262.9	394.7	.687	1.622D	99.8	1.378	-.6	-2.8	301.8	.304
5- 331.2	5- 510	.304	306.0	-11.3	-2.5	1.390	81.0	.422	1.199	30.7	164.4	.694D	1.705A	100.8	.609	2.5	-6.2	214.6	.197
5- 510	5- 690	.333	91.8	39.2	7.3	.767	115.9	.437	1.621	241.2	407.1	.912	2.329D	103.9	1.168	-6.6	-19.7	9.6	.348
		20.68	16.49	8.85	4.19	7.58	7.64	15.18	1/1/1	47.4	32.6	9.5	.650	12.121	64.1	227.9	63.0	111.2D	7.230
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																			
5- 250	5- 331.4	.417	86.7	16.6	-2.9	1.050	112.9	.404	1.151	262.7	394.9	.686	1.617D	99.8	1.378	-.6	-2.8	302.0	.304
5- 331.4	5- 520	.304	305.6	-12.4	-2.7	1.387	80.9	.416	1.185	31.4	169.1	.693D	1.678A	97.6	.603	2.6	-4.1	212.3	.180
5- 520	5- 690	.363	94.1	34.8	5.6	.793	118.4	.477	1.729	246.0	407.5	.904	2.554D	104.9	1.185	-4.8	-13.6	7.0	.365
		21.09	17.27	8.82	5.81	7.21	8.45	15.51	1/1/1	54.8	29.3	10.3	.651	11.162	70.1	233.7	68.6	108.1D	8.613
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																			
5- 250	5- 331.7	.416	86.8	16.6	-2.9	1.049	112.9	.403	1.149	262.5	395.1	.686	1.611D	99.9	1.377	-.6	-2.8	302.2	.304
5- 331.7	5- 530	.304	305.5	-13.6	-3.0	1.384	80.9	.411	1.176	31.7	173.4	.692D	1.660A	94.5	.601	2.8	-1.6	209.7	.168
5- 530	5- 690	.400	96.8	31.9	4.6	.825	120.9	.525	1.885	250.7	407.8	.896	2.875D	106.0	1.205	-3.7	-9.6	5.4	.391
		21.85	18.28	8.79	5.55	6.95	9.49	16.07	1/1/1	62.6	27.8	11.5	.651	9.980	73.8	239.7	71.5	106.8D	8.849

STOPOVER TIME = 0 DAYS — 1997 OUTBOUND SWINGBY — MISSION DURATION = 460 DAYS

MARS ARRIVAL DATE = 2450410 (22 NOV 1996)

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 220	5- 250.8	.499	76.1	20.7	1.3	.924	119.3	.503	.889	226.9	260.0	.441A	1.336D	61.5	1.276	2.2	4.0	322.2	.618
5- 250.8	5- 410	.618	307.9	2.7	1.3	1.409	115.4	.586	1.303	287.7	504.9	.540	2.066A	122.9	.671	.8	-2.2	187.7	.375
5- 410	5- 700	.113	87.1	8.5	-2.6	.666	92.9	.275	1.293	187.6	407.3	.936	1.665D	99.7	1.102	2.8	16.5	3.6	.226
		22.00	13.20	10.73	8.80	12.17	2.46	12.97	1/2/2	29.5	27.9	14.3	.157	8.035	173.5	239.7	-4.5	87.9L	1.107
MARS ARRIVAL DATE = 2450420 (2 DEC 1996)																			
5- 220	5- 252.0	.481	75.2	20.3	1.4	.928	118.1	.484	.895	228.3	263.2	.462A	1.329D	63.0	1.279	2.1	4.1	322.4	.589
5- 252.0	5- 420	.589	309.1	3.1	1.4	1.398	114.2	.561	1.253	288.8	508.7	.550	1.956A	119.2	.644	.6	-2.7	188.5	.337
5- 420	5- 700	.124	85.5	8.3	-2.9	.666	94.7	.280	1.300	192.3	407.5	.936	1.665D	99.8	1.104	3.2	17.7	2.8	.232
		20.69	12.95	10.29	7.74	11.11	2.65	13.05	1/2/2	33.0	28.4	13.4	.173	8.597	174.4	239.4	-3.4	86.7L	1.316
MARS ARRIVAL DATE = 2450430 (12 DEC 1996)																			
5- 220	5- 253.0	.466	74.5	19.9	1.5	.933	117.1	.468	.902	229.5	266.1	.479A	1.324D	64.2	1.282	2.0	4.2	322.6	.564
5- 253.0	5- 430	.564	310.1	3.5	1.5	1.389	113.2	.540	1.216	289.9	512.6	.559	1.873A	115.5	.622	.5	-2.9	188.9	.302
5- 430	5- 700	.137	84.7	7.9	-3.2	.667	96.6	.287	1.309	197.0	407.8	.934	1.664D	100.1	1.106	3.6	19.0	1.8	.239
		19.67	12.84	9.94	6.83	10.21	2.89	13.16	1/2/2	37.1	29.0	12.5	.189	9.158	175.0	239.1	-2.2	85.6L	1.541
MARS ARRIVAL DATE = 2450440 (22 DEC 1996)																			
5- 220	5- 253.9	.454	73.9	19.6	1.6	.936	116.4	.456	.907	230.6	268.5	.494A	1.320D	65.2	1.284	2.0	4.2	322.8	.544
5- 253.9	5- 440	.544	311.0	3.8	1.6	1.382	112.4	.524	1.188	290.8	516.5	.566	1.810A	111.9	.603	.4	-2.9	188.6	.273
5- 440	5- 700	.152	84.6	7.3	-3.7	.670	98.6	.295	1.320	201.8	408.1	.931	1.709D	100.4	1.109	4.2	20.7	.6	.248
		18.92	12.86	9.67	6.05	9.43	3.19	13.31	1/2/2	41.7	29.9	11.8	.203	9.713	175.5	238.8	-1.1	84.7L	1.768
5- 230	5- 260.8	.554	69.2	17.8	-2.5	1.083	119.9	.524	1.245	258.0	297.4	.593A	1.898D	69.4	1.396	1.1	2.7	317.8	.513
5- 260.8	5- 440	.513	318.2	5.2	2.0	1.393	110.6	.520	1.233	296.9	511.7	.592	1.875A	114.5	.629	-.1	-6.5	194.1	.293
5- 440	5- 710	.137	90.5	11.7	-2.5	.661	97.1	.299	1.301	197.2	413.3	.912	1.691D	101.5	1.106	3.1	18.2	8.6	.259
		21.56	14.97	12.08	6.59	9.96	2.89	13.50	1/2/2	35.3	23.9	2.6	.229	44.679	82.2	254.5	-81.2	88.3L	9.981
MARS ARRIVAL DATE = 2450450 (1 JAN 1997)																			
5- 210	5- 248.9	.375	79.8	21.4	.8	.831	110.7	.453	.774	210.5	250.2	.423A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 450	.560	305.7	3.4	1.5	1.370	113.5	.519	1.139	286.2	524.3	.548	1.729A	105.7	.570	.7	.9	181.7	.236
5- 450	5- 690	.201	82.7	-5.0	-8.3	.683	102.0	.303	1.356	211.3	403.6	.945	1.767D	99.7	1.116	8.7	33.5	344.6	.278
		17.30	12.17	7.89	5.13	8.51	4.28	13.84	1/2/2	54.0	43.5	18.3	.192	6.298	172.8	243.5	-4.1	90.8D	1.018
5- 220	5- 254.6	.445	73.4	19.4	1.7	.939	115.8	.446	.911	231.4	270.5	.505A	1.316D	66.0	1.286	1.9	4.3	322.9	.529
5- 254.6	5- 450	.529	311.7	4.1	1.7	1.377	111.8	.510	1.167	291.4	520.5	.571	1.762A	108.2	.589	.3	-2.6	187.7	.247
5- 450	5- 700	.169	85.0	6.2	-4.4	.674	100.6	.304	1.334	206.6	408.6	.928	1.739D	100.8	1.112	4.9	22.8	359.0	.260
		18.42	13.02	9.47	5.40	8.78	3.56	13.51	1/2/2	47.0	31.0	11.2	.215	10.240	175.7	238.6	-.0	83.9L	1.987
5- 230	5- 261.7	.542	68.8	17.5	-2.6	1.082	119.2	.514	1.242	259.0	299.7	.603A	1.880D	70.4	1.395	1.0	2.7	317.7	.493
5- 261.7	5- 450	.493	318.9	5.6	2.1	1.386	109.8	.503	1.205	298.0	515.7	.599	1.812A	110.9	.611	-.2	-6.6	193.9	.264
5- 450	5- 710	.151	90.1	11.5	-2.9	.665	99.1	.307	1.312	201.8	413.5	.909	1.715D	101.8	1.109	3.5	19.2	7.9	.267
		20.79	14.96	11.78	5.83	9.21	3.18	13.63	1/2/2	39.7	24.4	3.1	.247	37.090	67.0	237.9	-66.6	92.7D	8.925
5- 250	5- 326.4	.441	84.6	16.6	-3.0	1.072	113.8	.431	1.218	266.8	391.1	.693	1.742D	99.2	1.394	-.6	-2.5	298.3	.307
5- 326.4	5- 450	.307	324.2	-6.7	-1.4	1.460	85.6	.545	1.578	12.5	127.6	.718D	2.438A	122.9	.755	2.1	-12.2	218.6	.409
5- 450	5- 730	.125	106.8	16.1	-1.3	.646	95.5	.320	1.273	192.0	423.3	.866	1.679D	104.0	1.103	2.4	18.8	23.0	.296
		21.76	12.03	9.36	9.73	13.10	2.67	14.15	1/1/2	15.4	15.9	26.1	.639	4.428	10.5	222.0	9.4	143.5D	2.192
MARS ARRIVAL DATE = 2450460 (11 JAN 1997)																			
5- 210	5- 249.2	.371	79.5	21.2	.9	.834	110.4	.447	.777	210.8	251.1	.429A	1.125D	63.7	1.211	2.7	5.3	324.1	.552
5- 249.2	5- 460	.552	306.2	3.6	1.6	1.366	113.2	.512	1.126	286.3	528.1	.550	1.702A	101.9	.580	.6	2.0	179.2	.218
5- 460	5- 690	.248	86.1	-12.8	-12.8	.690	104.2	.317	1.378	216.3	404.3	.940	1.815D	100.2	1.121	13.2	41.7	334.0	.340
		17.91	13.22	7.80	4.69	8.08	5.42	15.00	1/2/2	61.1	51.2	17.8	.197	6.447	173.0	243.4	-3.8	90.6D	1.074
5- 220	5- 255.1	.439	73.0	19.2	1.7	.941	115.4	.439	.915	232.1	272.0	.513A	1.317D	66.6	1.288	1.9	4.3	323.0	.517
5- 255.1	5- 460	.517	312.5	4.3	1.8	1.372	111.4	.500	1.150	291.9	524.4	.575	1.726A	104.6	.577	.3	-1.9	186.1	.225
5- 460	5- 700	.189	86.0	4.3	-5.5	.680	102.7	.316	1.351	211.5	409.1	.924	1.778D	101.2	1.117	6.1	25.6	356.6	.276
		18.21	13.34	9.32	4.87	8.26	4.01	13.80	1/2/2	53.2	32.9	10.7	.225	10.733	175.7	238.3	.8	83.4L	2.185
5- 230	5- 262.5	.533	68.4	17.3	-2.6	1.081	118.7	.506	1.239	259.7	301.7	.612A	1.867D	71.2	1.394	1.0	2.8	317.6	.477
5- 262.5	5- 460	.477	319.6	5.8	2.1	1.380	109.1	.490	1.184	298.9	519.7	.604	1.764A	107.4	.598	-.3	-6.4	193.1	.239
5- 460	5- 710	.167	90.3	11.0	-3.3	.669	101.2	.317	1.326	206.6	413.9	.905	1.746D	102.2	1.113	4.0	20.3	7.0	.277
		20.27	15.07	11.55	5.20	8.58	3.52	13.81	1/2/2	44.9	25.0	3.6	.264	31.492	57.5	235.3	-57.1	95.8D	8.046
5- 250	5- 328.5	.431	85.5	16.6	-3.0	1.062	113.4	.419	1.188	265.1	392.7	.690	1.686D	99.5	1.387	-.6	-2.6	299.8	.305
5- 328.5	5- 460	.305	317.9	-7.3	-1.5	1.439	83.8	.506	1.441	18.6	134.7	.711D	2.170A	119.2	.713	2.0	-11.9	219.0	.358
5- 460	5- 730	.137	105.0	16.4	-1.4	.649	97.6	.325	1.280	196.4	423.3	.864	1.697D	104.2	1.106	2.5	19.2	22.8	.301
		20.34	12.01	9.12	8.33	11.70	2.89	14.24	1/1/2	19.4	16.1	18.6	.645	6.178	15.4	220.1	14.5	137.3D	5.339
5- 260	5- 336.5	.487	94.2	18.6	-2.4	1.094	116.2	.482	1.297	267.6	398.4	.672	1.921D	102.2	1.413	-1.3	-5.0	306.9	.370
5- 336.5	5- 460	.370	312.5	-5.4	-1.4	1.437	78.8	.519	1.421	33.1	136.5	.683D	2.159A	119.8	.706	1.7	-12.2	217.6	.365
5- 460	5- 740	.126	115.7	17.1	-.9	.639	95.5	.334	1.260	191.3	428.1	.840	1.681D	105.4	1.103	2.2	20.2	30.3	.317
		21.82	13.12	10.43	8.51	11.87	2.68	14.55	1/1/2	20.5	12.9	5.5	.438	20.795	7.0	220.1	4.7	126.6D	8.671
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																			
5- 210	5- 249.4	.369	79.4	21.2	.9	.835	110.3	.445	.778	211.0	251.4	.432A	1.125D	63.8	1.212	2.7	5.3	324.1	.549
5- 249.4	5- 470	.549	306.6	3.7	1.6	1.363	113.2	.508	1.116	286.0	532.0	.549	1.683A	98.1	.552	.6	3.5	176.0	.205
5- 470	5- 690	.392	96.1	-27.3	-27.0	.700	106.4	.334	1.405	221.4	405.3	.935	1.874D	100.9	1.127	27.5	50.0	304.4	.559
		21.41	17.02	7.77	4.39	7.78	9.25	19.98	1/2/2	69.0	66.1	17.5	.199	6.576	173.2	243.2	-3.5	90.6D	1.111
5- 220	5- 255.4	.435	72.8	19.1	-1.7	.942	115.1	.435	.917	232.5	272.9	.518A	1.316D	67.0	1.289	1.9	4.3	323.1	.510
5- 255.4	5- 470	.510	312.8	4.5	1.8	1.369	111.1	.493	1.138	292.0	528.3	.577	1.699A	100.9	.568	.3	-.9	183.6	.208
5- 470	5- 700	.215	87.7	1.0	-7.3	.688	104.9	.330	1.373	216.4	409.7	.919	1.826D	101.7	1.122	7.9	29.9	352.9	.301
		18.31	13.85	9.23	4.46	7.85	4.62	14.25	1/2/2	60.2	36.2	10.3	.231	11.176	175.5	236.1	1.5	83.0L	2.348
5- 230	5- 263.1	.526	68.2	17.2	-2.6	1.080	118.3	.501	1.237	260.2	303.2	.618A	1.857D	71.8	1.394	1.0	2.8	317.5	.466
5- 263.1	5- 470	.466	320.2	6.0	2.1	1.376	108.7	.479	1.168	299.5	523.7	.608	1.727A	104.0	.587	-.3	-6.0	191.7	.217
5- 470	5- 710	.186	91.0	10.2	-3.8	.676	103.4	.329	1.343	211.3	414.3	.901	1.785D	102.6	1.117	4.6	21.9	5.9	.289
		20.00	15.32	11.39	4.68	8.07	3.93	14.03	1/2/2	50.8	25.9	4.1	.277	27.779	51.1	234.2	-50.7	98.0D	7.429
5- 250	5- 329.6	.426	85.9	16.6	-3.0	1.058	113.2	.413	1.174	264.2	393.5	.689	1.659D	99.6	1.383	-.6	-2.7	300.6	.305
5- 329.6	5- 470	.305	315.6	-7.9	-1.7	1.423	82.7	.478	1.351	22.8	141.6	.706D	1.996A	115.4	.679	2.1	-11.4	219.1	.314
5- 470	5- 730	.150	104.0	16.7	-1.6	.653	99.8	.333	1.291	200.9	423.4	.861	1.720D	104.5	1.108	2.7	19.5	22.6	.307
		19.30	12.17	9.01	7.13	10.51	3.16	14.37	1/1/2	23.9	16.3	14.0	.647	8.234	22.6	219.2	21.9	132.5D	4.681
5- 260	5- 337.0	.483	94.4	18.6	-2.3	1.091	116.0	.477	1.284	267.1	398.8	.671	1.697D	102.3	1.411	-1.4	-5.1	307.4	.369
5- 337.0	5- 470	.369	309.6	-5.9	-1.6	1.420	78.1	.491	1.329	36.6	143.5	.675D	1.982A	115.8	.670	1.7	-11.7	217.2	.318
5- 470	5- 740	.136	113.5	17.6	-1.0	.642	97.7	.339	1.268	195.6	428.0	.838	1.697D	105.6	1.105	2.3	20.4	30.3	.321
		20.48	13.23	10.34	7.25	10.62	2.89	14.64	1/1/2	25.4	13.0	2.3	.441	50.558	21.3	220.6	20.5	123.6D	21.840
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																			
5- 140	5- 303.1	.239	58.4	84.5	13.1	.928	87.1	.157	.862	164.0	359.0	.727A	.997	89.9	1.262	-13.0	-78.2	308.1	.290
5- 303.1	5- 480	.290	336.8	-31.3	-6.2	1.405	94.7	.439	1.282	344.5	509.6	.719	1.845A	109.7	.649	7.1	1.2	220.2	.267
5- 480	5- 620	.351	68.0	25.1	1.3	.808	115.9	.443	1.821	254.1	366.2	1.014	2.629D	91.9	1.192	-1.9	-14.3	354.0	.213
		19.36	13.44	5.29	5.92	9.30	8.15	12.77	2/1/1	34.6	80.3	48.5	.717	2.435	83.5	165.1	-33.9	118.3D	1.029
5- 150	5- 311.5	.194	72.3	81.9	10.3	.924	88.1	.157	.860	169.9	366.2	.725	.995	91.1	1.262	-10.9	-72.7	299.2	.250
5- 311.5	5- 480	.250	329.6	-19.3	-3.4	1.409	91.3	.440	1.297	355.9	507.8	.726	1.868A	110.5	.656	4.1	-6.1	220.3	.267
5- 480	5- 630	.337	69.1	26.1	1.6	.796	115.1	.427	1.760	251.4	373.0	1.009	2.511D	93.9	1.164	-2.1	-16.0	351.9	.216
		16.27	12.56	4.60	5.91	9.29	7.75	12.81	2/1/1	29.9	68.5	56.2	.964	2.125	80.1	162.0	-41.6	103.6D	1.084
5- 160	5- 317.9	.181	69.4	80.2	9.5	.920	89.3	.159	.859	176.4	374.7	.722	.996	92.0	1.263	-10.7	-70.1	296.5	.249
5- 317.9	5- 480	.249	322.4	-14.6	-2.6	1.411	88.4	.443	1.302	5.3	147.1	.725D	1.879A	111.0	.656	3.1	-8.5	220.3	.270
5- 480	5- 640	.322	70.5	27.4	2.1	.783	114.2	.411	1.698	248.1	379.3	1.000	2.396D	95.6	1.175	-2.3	-17.1	351.7	.223
		17.78	11.78	4.43	6.00	9.38	7.35	12.92	2/1/1	28.6	58.6	57.8	.972	2.069	80.1	155.2	-45.4	91.0D	1.039

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 220	5- 255.6	.434	72.7	19.0	-1.8	.943	115.0	.433	.918	232.7	273.3	.520A	1.315D	67.1	1.289	1.9	4.4	323.1	.508
5- 255.6	5- 480	.508	313.1	4.6	1.8	1.366	111.0	.489	1.129	291.7	532.2	.577	1.681A	97.3	.561	.2	.5	180.4	.196
5- 480	5- 700	.254	90.3	-5.3	-10.7	.698	107.2	.347	1.400	221.3	410.2	.914	1.886D	102.3	1.128	11.4	36.8	345.7	.347
		18.94	14.77	9.20	4.16	7.56	5.57	15.15	1/2/2	68.1	42.6	9.9	.233	11.566	175.4	237.9	1.9	83.0L	2.466
5- 230	5- 263.5	.522	68.0	17.0	-2.6	1.080	118.1	.497	1.237	260.6	304.2	.622A	1.851D	72.2	1.393	1.0	2.8	317.5	.458
5- 263.5	5- 480	.458	320.6	6.1	2.1	1.373	108.3	.472	1.155	299.8	527.7	.610	1.700A	100.5	.579	-.3	-5.1	189.4	.200
5- 480	5- 710	.207	92.2	8.8	-4.7	.684	105.6	.343	1.365	216.1	414.7	.896	1.833D	103.1	1.122	5.5	24.0	4.2	.305
		19.97	15.71	11.28	4.27	7.66	4.43	14.33	1/2/2	57.6	27.3	4.5	.287	25.315	46.3	233.6	-46.0	99.7D	6.982
5- 240	5- 276.1	.596	66.8	15.8	-3.3	1.208	118.7	.638	1.947	282.4	336.4	.705A	3.189D	80.9	1.495	.1	.5	305.3	.389
5- 276.1	5- 480	.389	331.0	11.7	3.4	1.384	104.2	.453	1.199	312.9	520.9	.656	1.742A	104.5	.606	-1.8	-13.9	199.7	.217
5- 480	5- 720	.184	97.0	14.1	-2.7	.671	103.9	.341	1.333	210.8	419.1	.878	1.787D	104.0	1.117	3.7	20.4	14.1	.307
		21.69	17.03	13.13	4.67	8.06	3.90	14.36	1/2/2	45.0	20.7	27.9	.398	4.153	24.7	230.8	-23.8	123.3D	1.254
5- 250	5- 330.2	.423	86.2	16.6	-3.0	1.055	113.1	.410	1.166	263.7	394.0	.688	1.644D	99.7	1.381	-.6	-2.7	301.1	.305
5- 330.2	5- 480	.305	310.5	-8.6	-1.9	1.411	82.0	.457	1.290	25.9	148.0	.701D	1.879A	111.6	.653	2.1	-10.6	218.7	.276
5- 480	5- 730	.166	103.6	16.7	-1.7	.659	102.0	.342	1.304	205.4	423.6	.858	1.749D	104.9	1.112	2.9	19.9	22.4	.315
		18.58	12.43	8.95	6.14	9.52	3.49	14.52	1/1/2	28.9	16.5	11.1	.648	10.361	32.5	219.3	31.9	127.6D	6.067
5- 260	5- 337.5	.480	94.6	18.7	-2.3	1.089	115.9	.474	1.276	266.7	399.1	.671	1.881D	102.3	1.409	-1.4	-5.1	307.8	.369
5- 337.5	5- 480	.369	307.5	-6.3	-1.7	1.407	77.6	.472	1.268	39.3	149.9	.670D	1.867A	111.8	.642	1.7	-10.9	216.4	.279
5- 480	5- 740	.150	112.1	17.9	-1.0	.647	99.9	.345	1.277	199.9	428.0	.836	1.719D	105.8	1.107	2.4	20.6	30.3	.327
		19.67	13.44	10.29	6.23	9.61	3.15	14.75	1/1/2	30.8	13.2	1.2	.442	94.396	103.6	199.9	-75.7	87.4L	41.302
5- 270	5- 343.8	.549	103.3	20.0	-1.6	1.133	119.0	.553	1.461	269.8	402.8	.654	2.269D	104.9	1.445	-2.1	-6.7	314.8	.441
5- 343.8	5- 480	.441	307.2	-4.9	-1.6	1.402	73.5	.491	1.240	51.9	152.4	.631D	1.850A	112.0	.628	1.4	-10.7	213.5	.284
5- 480	5- 750	.137	122.8	17.9	-.6	.635	97.6	.352	1.254	194.5	432.5	.812	1.695D	106.9	1.103	2.1	21.8	38.1	.342
		21.20	14.85	11.96	6.35	9.72	2.89	15.04	1/1/2	33.4	10.3	7.8	.310	14.794	165.7	230.2	12.1	63.5L	4.270

MARS ARRIVAL DATE = 2450490 (10 FEB 1997)

5- 150	5- 311.7	.192	73.1	81.6	10.2	.924	88.1	.157	.860	169.9	368.4	.725	.995	91.1	1.262	-10.7	-72.3	299.1	.247
5- 311.7	5- 490	.247	327.2	-23.8	-4.1	1.401	90.8	.424	1.261	357.3	513.3	.726	1.796A	107.1	.639	4.7	-3.3	220.5	.240
5- 490	5- 630	.378	71.5	25.9	1.6	.828	117.7	.481	1.939	257.4	374.6	1.006	2.872D	94.7	1.206	-1.9	-15.3	348.9	.241
		18.67	13.45	4.57	5.22	8.60	8.88	13.21	2/1/1	35.5	65.9	51.0	.985	2.324	80.3	159.7	-39.7	102.1D	1.304
5- 160	5- 318.1	.178	70.4	79.8	9.3	.920	89.3	.159	.859	176.3	375.0	.722	.996	92.0	1.263	-10.5	-69.6	296.5	.245
5- 318.1	5- 490	.245	319.7	-17.2	-3.0	1.403	87.9	.427	1.263	7.0	152.8	.724D	1.803A	107.5	.640	3.4	-6.7	220.1	.240
5- 490	5- 640	.360	73.1	27.1	2.0	.812	116.8	.459	1.841	253.9	380.7	.996	2.685D	96.5	1.194	-2.1	-16.0	349.1	.247
		18.01	12.77	4.39	5.24	8.63	8.37	13.30	2/1/1	33.9	56.6	54.3	1.001	2.190	80.7	151.9	-44.7	88.5L	1.191
5- 170	5- 323.2	.181	64.4	78.4	9.4	.917	90.7	.163	.858	183.4	380.2	.719	.998D	92.8	1.264	-11.1	-68.6	295.1	.260
5- 323.2	5- 490	.260	314.1	-13.4	-2.5	1.403	85.5	.431	1.261	15.1	152.9	.717D	1.804A	107.7	.639	2.8	-8.5	219.5	.242
5- 490	5- 650	.341	74.9	28.5	2.5	.794	115.8	.438	1.752	250.0	386.3	.984	2.519D	97.9	1.183	-2.5	-16.4	351.0	.255
		17.58	12.30	4.43	5.28	8.66	7.87	13.44	2/1/1	33.6	49.0	56.6	.890	2.110	82.1	144.8	-47.6	78.4L	.988
5- 210	5- 248.9	.374	79.8	21.4	.8	.832	110.6	.452	.774	210.6	250.3	.424A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 490	.559	307.0	3.8	1.7	1.359	113.7	.509	1.103	284.1	539.5	.541	1.665A	90.5	.543	.6	7.1	167.9	.196
5- 490	5- 690	.347	95.8	62.8	18.7	.726	111.0	.376	1.484	231.3	405.8	.926	2.041D	102.0	1.144	-18.1	-50.1	21.7	.436
		20.07	15.91	7.88	4.17	7.56	8.03	17.06	1/2/1	86.5	54.6	17.0	.193	6.767	173.4	242.8	-3.2	91.4D	1.111
5- 220	5- 255.5	.435	72.7	19.0	-1.8	.943	115.1	.434	.917	232.6	273.1	.519A	1.315D	67.0	1.289	1.9	4.4	323.1	.509
5- 255.5	5- 490	.509	313.4	4.6	1.8	1.364	111.2	.488	1.122	291.1	536.1	.575	1.669A	93.7	.557	.2	2.2	176.6	.188
5- 490	5- 700	.348	96.5	-18.7	-20.5	.711	109.6	.368	1.435	226.2	410.9	.907	1.963D	103.0	1.136	21.3	47.0	325.2	.486
		21.25	17.26	9.22	3.99	7.38	8.04	18.22	1/2/2	76.6	56.1	9.6	.232	11.894	175.3	237.8	2.1	83.2L	2.527
5- 230	5- 263.7	.519	67.9	17.0	-2.6	1.080	117.9	.495	1.236	260.8	304.7	.624A	1.847D	72.4	1.393	1.0	2.8	317.4	.454
5- 263.7	5- 490	.454	321.0	6.1	2.1	1.370	108.2	.467	1.146	299.7	531.7	.611	1.680A	97.1	.573	-.3	-3.8	186.5	.187
5- 490	5- 710	.233	93.8	6.4	-6.1	.695	107.9	.360	1.392	220.8	415.1	.891	1.893D	103.8	1.129	7.0	27.1	1.7	.327
		20.23	16.27	11.22	3.96	7.36	5.05	14.76	1/2/2	65.2	29.7	4.8	.292	23.869	42.7	233.3	-42.3	100.8D	6.682
5- 240	5- 277.2	.586	66.9	15.7	-3.3	1.202	118.3	.627	1.898	282.5	338.2	.708A	3.088D	81.6	1.491	.1	.5	304.7	.375
5- 277.2	5- 490	.375	331.6	11.7	3.3	1.380	103.6	.443	1.186	314.2	524.8	.661	1.711A	101.4	.599	-1.8	-13.8	198.4	.198
5- 490	5- 720	.204	98.0	13.5	-3.2	.680	106.2	.355	1.354	215.4	419.4	.873	1.835D	104.5	1.122	4.2	21.5	13.4	.320
		21.47	17.25	12.88	4.23	7.62	4.37	14.61	1/2/2	50.5	21.4	29.0	.427	3.987	23.8	230.7	-22.8	125.2D	1.274
5- 240	5- 313.1	.404	74.9	14.3	-3.4	1.058	111.8	.391	1.174	267.0	379.5	.714	1.633D	95.5	1.380	.1	.6	291.8	.244
5- 313.1	5- 490	.244	325.6	-22.1	-3.8	1.402	90.2	.425	1.262	359.3	513.1	.726	1.798A	107.2	.640	4.4	-4.3	220.4	.240
5- 490	5- 720	.204	98.0	13.5	-3.2	.680	106.2	.355	1.354	215.4	419.4	.873	1.835D	104.5	1.122	4.2	21.5	13.4	.320
		18.12	12.90	8.54	5.22	8.60	4.37	14.61	1/1/2	35.0	21.4	40.0	1.006	2.921	36.7	225.8	34.4	144.3D	1.932
5- 240	5- 318	.386	76.7	14.1	-3.5	1.041	111.0	.371	1.126	263.4	383.7	.709	1.544D	96.4	1.368	.1	.7	293.5	.245
5- 318	5- 490	.245	319.8	-17.2	-3.0	1.403	88.0	.427	1.263	6.8	152.8	.724D	1.802A	107.5	.640	3.5	-6.7	220.1	.240
5- 490	5- 720	.204	98.0	13.5	-3.2	.680	106.2	.355	1.354	215.4	419.4	.873	1.835D	104.5	1.122	4.2	21.5	13.4	.320
		17.75	12.51	8.14	5.24	8.63	4.37	14.61	1/1/2	33.9	21.4	31.5	1.002	3.687	35.9	222.3	34.6	139.9D	2.693
5- 250	5- 330.6	.421	86.4	16.6	-3.0	1.053	113.0	.408	1.161	263.3	394.3	.687	1.635D	99.8	1.380	-.6	-2.7	301.4	.304
5- 330.6	5- 490	.304	308.4	-9.4	-2.0	1.402	81.5	.441	1.249	28.1	153.9	.698D	1.800A	107.8	.633	2.2	-9.5	217.8	.244
5- 490	5- 730	.183	103.8	16.7	-1.9	.666	104.2	.353	1.320	209.9	423.7	.854	1.786D	105.3	1.116	3.1	20.3	22.1	.325
		18.12	12.78	8.90	5.34	8.72	3.88	14.72	1/1/2	34.5	16.7	9.6	.649	11.949	44.0	220.6	43.4	121.8D	7.105
5- 260	5- 337.8	.479	94.8	18.7	-2.3	1.087	115.9	.472	1.269	266.4	399.3	.670	1.868D	102.4	1.408	-1.4	-5.2	308.1	.368
5- 337.8	5- 490	.368	306.1	-6.8	-1.8	1.398	77.3	.457	1.228	41.4	155.7	.666D	1.789A	107.9	.622	1.8	-9.9	215.1	.247
5- 490	5- 740	.165	111.3	18.1	-1.1	.653	102.2	.354	1.290	204.3	428.1	.833	1.746D	106.2	1.111	2.5	20.8	30.2	.335
		19.12	13.71	10.24	5.41	8.79	3.47	14.90	1/1/2	36.7	13.3	2.5	.443	45.075	140.7	215.5	-39.0	69.4L	19.534
5- 270	5- 344.1	.547	103.5	20.0	-1.6	1.131	118.9	.549	1.448	269.5	403.0	.653	2.243D	105.0	1.443	-2.1	-6.7	315.1	.440
5- 344.1	5- 490	.440	306.4	-5.2	-1.7	1.393	73.2	.479	1.201	53.9	158.0	.626D	1.776A	107.8	.607	1.4	-9.7	211.8	.252
5- 490	5- 750	.149	120.9	18.4	-.6	.640	99.9	.358	1.263	198.8	432.4	.811	1.714D	107.1	1.106	2.1	21.9	38.2	.347
		20.56	15.03	11.89	5.53	8.91	3.14	15.14	1/1/2	39.8	10.4	8.9	.311	12.933	168.4	230.7	8.8	64.4L	3.712

MARS ARRIVAL DATE = 2450500 (20 FEB 1997)

5- 150	5- 292.5	.270	85.9	-40.4	-15.2	.922	88.3	.160	.858	170.8	338.0	.721A	.995	87.0	1.259	15.6	77.4	349.7	.345
5- 292.5	5- 500	.345	339.5	38.9	9.1	1.387	98.2	.419	1.209	332.0	523.1	.703	1.715A	101.5	.613	-8.0	-33.0	198.3	.215
5- 500	5- 630	.426	74.0	25.8	1.5	.868	120.3	.550	2.227	263.1	376.0	1.003	3.451D	95.7	1.233	-1.8	-14.7	346.3	.273
		20.63	16.01	5.82	4.62	8.01	10.19	13.75	1/2/1	51.0	63.8	38.8	.504	3.010	92.7	337.6	7.1	124.9D	1.014
5- 150	5- 311.4	.196	71.4	82.2	10.5	.924	88.1	.157	.860	169.9	367.9	.725	.995	91.1	1.262	-11.1	-73.1	299.2	.253
5- 311.4	5- 500	.253	325.9	-30.6	-5.3	1.395	90.7	.412	1.235	357.7	518.6	.726	1.744A	103.7	.627	5.9	1.4	220.4	.219
5- 500	5- 630	.426	74.0	25.8	1.5	.868	120.3	.550	2.227	263.1	376.0	1.003	3.451D	95.7	1.233	-1.8	-14.7	346.3	.273
		19.54	14.83	4.64	4.71	8.10	10.19	13.75	2/1/1	42.3	63.8	44.7	.941	2.628	80.8	158.2	-36.0	102.0D	1.531
5- 160	5- 318.2	.177	70.7	79.7	9.3	.920	89.3	.159	.859	176.3	375.1	.722	.996	92.1	1.263	-10.4	-69.4	296.5	.244
5- 318.2	5- 500	.244	317.7	-20.3	-3.5	1.396	87.6	.415	1.236	8.1	158.2	.723D	1.748A	104.1	.627	3.9	-4.2	219.5	.216
5- 500	5- 640	.403	75.7	26.8	1.9	.847	119.4	.518	2.058	259.4	381.9	.992	3.124D	97.4	1.218	-2.0	-14.9	347.0	.277
		18.59	13.95	4.38	4.64	8.03	9.56	13.81	2/1/1	39.9	54.9	50.8	1.010	2.332	81.1	149.5	-43.4	86.6L	1.345
5- 170	5- 323.3	.180	64.8	78.3	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.4	295.3	.258
5- 323.3	5- 500	.258	312.3	-15.3	-2.8	1.397	85.2	.419	1.232	16.3	156.3	.716D	1.748A	104.2	.626	3.1	-6.4	218.6	.216
5- 500	5- 650	.381	77.6	27.9	2.3	.826	118.4	.489	1.917	255.4	387.3	.979	2.855D	98.9	1.204	-2.2	-14.9	349.2	.283
		18.01	13.36	4.42	4.65	8.04	8.95	13.91	2/1/1	39.5	47.6	54.2	.901	2.195	82.6	142.3	-46.9	76.5L	1.077
5- 210	5- 248.8	.382	80.3	21.6	.8	.827	111.1	.462	.770	210.1	248.8	.414A	1.126D	62.6	1.206	2.8	5.2	323.7	.572
5- 248.8	5- 500	.572	306.9	3.8	1.8	1.358	114.4	.516	1.099	282.4	543.2	.533	1.666	86.6	.541	.6	8.9	163.6	.200
5- 500	5- 690	.316	90.5	47.2	10.5	.745	113.4	.404	1.542	236.3	406.5	.919	2.165D	102.9	1.155	-9.8	-30.3	13.8	.353
		19.51	15.25	8.04	4.26	7.65	7.20	15.26	1/2/1	95.5	39.7	16.8	.184	6.838	173.5	242.5	-3.2	92.2D	1.074
5- 230	5- 263.7	.519	67.9	17.0	-2.6	1.080	117.9	.495	1.236	260.8	304.7	.624A	1.847D	72.4	1.393	1.0	2.8	317.4	.454
5- 263.7	5- 500	.454	321.3	6.0	2.1	1.368	108.3	.465	1.139	299.2	535.6	.610	1.668A	93.8	.570	-.3	-2.2	182.9	.178
5- 500	5- 710	.267	96.0	1.6	-8.7	.709	110.3	.360	1.427	225.6	415.5	.885	1.970D	104.5	1.136	9.7	32.4	357.0	.363
		20.89	17.12	11.22	5.77	7.16	5.91	15.49	1/2/2	73.4	34.4	5.0	.292	23.036	39.6	233.0	-39.2	101.5D	6.440

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 240	5- 278.1	.578	66.9	15.6	-3.3	1.198	118.0	.618	1.860	282.4	339.5	.711A	3.010D	82.2	1.487	.1	.5	304.2	.366
5- 278.1	5- 500	.366	332.2	11.5	3.1	1.378	103.2	.435	1.176	315.1	528.8	.664	1.688A	98.4	.594	-1.7	-13.2	196.4	.183
5- 500	5- 720	.227	99.3	12.5	-3.9	.692	108.5	.372	1.381	220.1	419.7	.867	1.695D	105.1	1.129	4.9	22.9	12.3	.336
		21.48	17.61	12.69	3.87	7.27	4.92	14.94	1/2/2	56.9	22.3	29.9	.450	3.872	22.7	230.5	-21.7	126.8D	1.292
5- 240	5- 314.1	.401	75.3	14.3	-3.4	1.055	111.6	.387	1.164	266.3	380.4	.713	1.614D	95.6	1.378	.1	.6	292.1	.244
5- 314.1	5- 500	.245	322.6	-25.7	-4.4	1.396	89.5	.413	1.236	1.8	158.3	.726D	1.746A	103.9	.627	4.9	-1.4	220.1	.217
5- 500	5- 720	.227	99.3	12.5	-3.9	.692	108.5	.372	1.381	220.1	419.7	.867	1.695D	105.1	1.129	4.9	22.9	12.3	.336
		18.03	13.37	8.45	4.66	8.05	4.92	14.94	1/1/2	41.0	22.3	39.5	1.006	2.956	44.0	228.1	41.1	138.0D	1.968
5- 240	5- 318.6	.383	77.0	14.1	-3.5	1.039	110.9	.367	1.119	262.8	384.4	.708	1.530D	96.5	1.366	.1	.7	293.9	.245
5- 318.6	5- 500	.245	317.0	-19.5	-3.4	1.397	87.3	.415	1.235	9.1	158.1	.723D	1.748A	104.1	.627	3.8	-4.6	219.4	.216
5- 500	5- 720	.227	99.3	12.5	-3.9	.692	108.5	.372	1.381	220.1	419.7	.867	1.695D	105.1	1.129	4.9	22.9	12.3	.336
		17.64	12.99	8.08	4.64	8.03	4.92	14.94	1/1/2	39.8	22.5	30.3	1.001	3.820	43.0	223.7	41.4	134.3D	2.824
5- 250	5- 330.9	.419	86.5	16.6	-3.0	1.052	113.0	.407	1.157	263.1	394.5	.687	1.628D	99.8	1.379	-.6	-2.8	301.6	.304
5- 330.9	5- 500	.304	306.9	-10.3	-2.3	1.395	81.2	.430	1.220	29.6	159.3	.695D	1.744A	104.2	.619	2.3	-8.1	216.5	.218
5- 500	5- 730	.203	104.6	16.4	-2.1	.676	106.6	.367	1.341	214.4	423.9	.849	1.832D	105.8	1.121	3.4	20.8	21.8	.336
		17.90	13.21	8.87	4.69	8.08	4.34	14.96	1/1/2	40.7	17.0	9.2	.650	12.515	55.2	223.4	54.4	116.0D	7.481
5- 260	5- 338.1	.477	94.9	18.7	-2.3	1.085	115.8	.470	1.264	266.2	399.5	.670	1.857D	102.4	1.406	-1.4	-5.2	306.4	.368
5- 338.1	5- 500	.368	305.2	-7.3	-2.0	1.391	77.1	.447	1.200	42.8	161.1	.663D	1.736A	104.1	.608	1.8	-8.6	213.3	.221
5- 500	5- 740	.182	111.2	18.2	-1.2	.661	104.5	.365	1.305	208.8	428.1	.829	1.781D	106.6	1.115	2.6	21.0	30.1	.344
		18.82	14.06	10.20	4.76	8.15	3.86	15.09	1/1/2	43.2	13.4	3.7	.444	30.733	146.0	217.1	-33.7	68.0L	13.210
5- 270	5- 344.5	.544	103.6	20.0	-1.5	1.128	118.8	.546	1.436	269.2	403.3	.653	2.219D	105.0	1.441	-2.1	-6.8	313.3	.439
5- 344.5	5- 500	.439	305.9	-5.5	-1.8	1.386	73.1	.470	1.175	55.2	163.2	.623D	1.726A	103.9	.593	1.4	-8.5	209.5	.226
5- 500	5- 750	.164	119.7	18.7	-.6	.647	102.2	.366	1.274	203.1	432.4	.808	1.740D	107.4	1.109	2.2	21.9	36.2	.354
		20.17	15.28	11.83	4.89	8.28	3.45	15.29	1/1/2	46.7	10.5	9.6	.313	11.980	170.1	231.1	6.6	65.0L	3.431
5- 280	5- 350.6	.620	112.6	20.6	-.8	1.180	121.8	.634	1.733	271.8	406.3	.655	2.832D	107.7	1.483	-2.8	-7.7	323.0	.517
5- 350.6	5- 500	.517	308.0	-4.4	-1.7	1.379	68.8	.499	1.145	67.4	165.5	.573D	1.716A	103.6	.574	1.1	-7.8	205.1	.235
5- 500	5- 760	.149	130.3	18.0	-.2	.633	99.7	.370	1.246	197.4	436.7	.785	1.708D	108.4	1.103	1.9	23.2	46.4	.366
		21.98	16.88	13.75	5.10	8.48	3.13	15.53	1/1/2	50.9	8.0	15.3	.225	7.518	165.8	242.4	10.7	69.9L	1.485

MARS ARRIVAL DATE = 2450510 (2 MAR 1997)

5- 150	5- 309.3	.233	55.0	84.9	12.9	.924	88.2	.156	.861	170.4	365.2	.726	.995	90.7	1.262	-13.5	-78.2	299.1	.297
5- 309.3	5- 510	.297	327.5	-46.9	-9.0	1.390	91.3	.403	1.215	355.4	523.8	.726	1.705A	100.4	.618	9.6	12.9	221.2	.217
5- 510	5- 630	.481	76.5	25.8	1.5	.917	122.9	.637	2.750	268.6	377.1	.999	4.500D	96.7	1.267	-1.7	-14.0	344.4	.312
		21.59	16.93	5.19	4.66	8.05	11.74	14.47	2/1/1	53.1	62.2	33.1	.680	3.511	83.0	158.4	-25.9	106.4D	1.708
5- 160	5- 318.0	.179	70.2	79.9	9.4	.920	89.3	.159	.859	176.3	374.9	.722	.996	92.0	1.263	-10.5	-69.7	296.4	.246
5- 318.0	5- 510	.246	316.5	-24.4	-4.2	1.392	87.5	.405	1.216	8.6	163.2	.723D	1.709A	100.8	.618	4.5	-.7	218.6	.197
5- 510	5- 640	.453	78.5	26.5	1.8	.890	121.9	.592	2.421	264.8	362.8	.987	3.854D	98.5	1.247	-1.8	-14.0	345.4	.315
		19.55	15.36	4.40	4.19	7.58	10.96	14.48	2/1/1	46.7	53.7	46.8	.994	2.516	81.4	148.1	-41.3	85.6L	1.508
5- 170	5- 323.3	.180	64.8	78.2	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.3	295.3	.258
5- 323.3	5- 510	.258	311.1	-17.7	-3.2	1.392	85.1	.410	1.212	17.1	163.4	.716D	1.709A	100.9	.616	3.4	-3.8	217.3	.196
5- 510	5- 650	.426	80.3	27.5	2.2	.863	120.9	.553	2.175	260.6	388.2	.973	3.377D	100.0	1.229	-2.0	-13.7	347.7	.315
		18.78	14.61	4.41	4.16	7.56	10.20	14.53	2/1/1	46.2	46.6	51.7	.903	2.295	83.0	140.6	-45.9	75.1L	1.170
5- 210	5- 247.4	.393	80.9	21.9	.7	.820	111.8	.477	.763	209.3	246.6	.399A	1.127D	61.6	1.202	2.8	5.1	323.4	.591
5- 247.4	5- 510	.591	306.7	3.7	1.8	1.358	115.3	.526	1.097	280.1	546.7	.520	1.673	82.6	.541	.6	10.5	159.8	.210
5- 510	5- 690	.333	91.8	39.2	7.3	.767	115.9	.437	1.621	241.2	407.1	.912	2.329D	103.9	1.168	-6.6	-19.7	9.6	.348
		20.44	15.94	8.29	4.50	7.89	7.64	15.18	1/2/1	103.9	32.6	16.7	.172	6.894	173.5	242.0	-3.2	93.3D	1.015
5- 240	5- 278.7	.574	66.9	15.5	-3.3	1.195	117.8	.612	1.837	282.4	340.5	.712A	2.963D	82.6	1.485	.1	.5	303.8	.359
5- 278.7	5- 510	.359	332.7	11.2	3.0	1.376	103.0	.430	1.168	315.6	532.7	.666	1.671A	95.4	.591	-1.6	-12.2	193.8	.171
5- 510	5- 720	.254	100.9	10.7	-4.9	.706	110.9	.392	1.416	224.7	420.0	.861	1.970D	105.8	1.136	6.1	25.2	10.8	.358
		21.75	18.15	12.57	5.60	7.00	5.58	15.37	1/2/2	64.1	24.0	30.6	.466	3.784	21.5	230.4	-20.5	128.2D	1.299
5- 250	5- 331.2	.416	86.6	16.6	-2.9	1.051	112.9	.405	1.154	262.9	394.7	.687	1.622D	99.8	1.378	-.6	-2.8	301.8	.304
5- 331.2	5- 510	.304	306.0	-11.3	-2.5	1.390	81.0	.422	1.199	30.7	164.4	.694D	1.705A	100.8	.609	2.5	-8.2	214.6	.197
5- 510	5- 730	.226	105.7	16.0	-2.5	.688	109.0	.383	1.367	219.0	424.1	.843	1.891D	106.5	1.128	3.8	21.5	21.3	.352
		17.91	13.72	8.65	4.19	7.58	4.87	15.26	1/1/2	47.4	17.4	9.5	.650	12.121	64.1	227.9	63.0	111.2D	7.230
5- 260	5- 338.4	.475	95.0	18.7	-2.3	1.083	115.8	.468	1.257	265.9	399.8	.669	1.845D	102.4	1.405	-1.4	-5.3	308.6	.367
5- 338.4	5- 510	.367	304.8	-7.8	-2.1	1.386	77.0	.440	1.180	43.9	166.0	.661D	1.699A	100.5	.598	1.9	-7.0	211.0	.200
5- 510	5- 740	.202	111.7	18.1	-1.3	.671	106.9	.378	1.325	213.3	428.2	.824	1.826D	107.1	1.120	2.8	21.2	30.0	.356
		18.73	14.46	10.15	4.27	7.66	4.31	15.33	1/1/2	50.3	13.5	4.6	.446	24.962	145.6	217.8	-34.2	68.7L	10.679
5- 270	5- 344.9	.541	103.8	20.1	-1.5	1.125	119.7	.542	1.423	268.8	403.5	.652	2.195D	105.0	1.439	-2.2	-6.9	315.8	.438
5- 344.9	5- 510	.438	305.9	-5.8	-1.9	1.381	73.0	.463	1.157	56.1	167.9	.621D	1.693A	100.1	.585	1.5	-7.0	206.8	.206
5- 510	5- 750	.181	119.2	18.9	-.7	.655	104.6	.376	1.289	207.5	432.4	.804	1.773D	107.8	1.113	2.3	22.0	38.2	.362
		19.99	15.56	11.76	4.41	7.60	5.83	15.47	1/1/2	54.1	10.6	10.0	.314	11.527	171.2	231.4	4.8	65.5L	3.306
5- 280	5- 351.1	.616	112.8	20.6	-.7	1.176	121.7	.628	1.705	271.4	406.6	.634	2.776D	107.7	1.480	-2.9	-7.9	323.5	.515
5- 351.1	5- 510	.515	308.3	-4.6	-1.8	1.375	68.8	.494	1.129	68.2	169.9	.571D	1.686A	99.6	.564	1.1	-6.4	202.1	.216
5- 510	5- 760	.163	128.8	18.5	-.2	.640	102.1	.378	1.257	201.6	436.6	.782	1.732D	108.7	1.107	1.9	23.2	46.5	.372
		21.71	17.07	13.64	4.64	8.03	3.43	15.66	1/1/2	58.6	8.1	15.4	.226	7.450	166.2	242.8	10.1	70.2L	1.460

MARS ARRIVAL DATE = 2450520 (12 MAR 1997)

5- 160	5- 317.6	.185	68.2	80.7	9.8	.920	89.3	.159	.859	176.4	374.4	.722	.996	92.0	1.263	-10.9	-70.6	296.0	.253
5- 317.6	5- 520	.253	316.2	-30.7	-5.3	1.388	87.7	.398	1.202	8.2	168.0	.723D	1.681A	97.7	.613	5.6	4.7	217.7	.184
5- 520	5- 640	.511	80.9	26.3	1.7	.943	124.5	.686	3.126	269.9	383.6	.982	5.270D	99.6	1.284	-1.7	-13.1	344.2	.356
		20.97	17.07	4.48	3.90	7.30	12.59	15.34	2/1/1	54.5	52.9	41.7	.939	2.811	81.6	147.8	-37.7	85.7L	1.700
5- 170	5- 323.2	.180	64.7	78.3	9.4	.917	90.6	.163	.858	183.3	380.3	.719	.998D	92.8	1.264	-11.0	-68.5	295.2	.259
5- 323.2	5- 520	.259	310.5	-20.6	-3.8	1.388	85.0	.403	1.198	17.3	168.1	.715D	1.681A	97.8	.611	3.9	-.5	215.7	.180
5- 520	5- 650	.478	83.1	27.1	2.0	.909	123.5	.631	2.623	265.7	388.9	.967	4.279D	101.1	1.261	-1.8	-12.6	346.7	.355
		19.89	16.09	4.42	3.81	7.20	11.66	15.31	2/1/1	53.4	45.9	48.8	.898	2.422	83.1	139.9	-44.4	74.2L	1.277
5- 250	5- 331.4	.417	86.7	16.6	-2.9	1.050	112.9	.404	1.151	262.7	394.9	.686	1.617D	99.8	1.378	-.6	-2.8	302.0	.304
5- 331.4	5- 520	.304	305.6	-12.4	-2.7	1.387	80.9	.416	1.185	31.4	169.1	.693D	1.678A	97.6	.603	2.6	-4.1	212.3	.180
5- 520	5- 730	.251	107.2	15.2	-3.0	.703	111.4	.403	1.401	223.6	424.3	.837	1.965D	107.2	1.136	4.3	22.4	20.7	.370
		18.15	14.32	8.82	3.81	7.21	5.50	15.62	1/1/2	54.8	18.0	10.3	.651	11.162	70.1	233.7	66.6	108.1D	6.613
5- 260	5- 338.7	.475	95.2	18.7	-2.2	1.081	115.7	.465	1.251	265.6	400.0	.669	1.833D	102.4	1.404	-1.4	-5.3	308.9	.367
5- 338.7	5- 520	.367	304.7	-8.4	-2.3	1.383	76.9	.435	1.167	44.5	170.5	.660D	1.674A	97.1	.592	1.9	-5.2	208.2	.164
5- 520	5- 740	.224	112.7	17.9	-1.5	.683	109.3	.394	1.350	217.7	428.3	.819	1.882D	107.7	1.126	3.0	21.5	29.6	.370
		18.85	14.95	10.11	3.90	7.30	4.84	15.61	1/1/2	57.9	13.7	5.2	.447	22.025	142.9	216.2	-56.9	70.3L	9.397
5- 270	5- 345.3	.538	104.0	20.1	-1.5	1.122	118.6	.538	1.410	268.4	403.8	.651	2.169D	105.0	1.437	-2.2	-7.0	316.2	.436
5- 345.3	5- 520	.436	306.1	-6.2	-2.0	1.378	73.0	.459	1.145	56.7	172.2	.619D	1.670A	96.5	.578	1.5	-5.4	203.7	.191
5- 520	5- 750	.201	119.3	18.9	-.7	.665	107.0	.388	1.508	211.9	432.4	.800	1.815D	108.3	1.118	2.3	22.0	38.2	.373
		20.02	15.96	11.68	4.06	7.46	4.28	15.70	1/1/2	61.9	10.6	10.1	.316	11.404	172.0	237.1	5.2	66.0L	3.265
5- 280	5- 351.6	.611	113.1	20.7	-.6	1.172	121.6	.622	1.676	271.0	407.0	.633	2.718D	107.7	1.476	-2.9	-8.0	323.9	.513
5- 351.6	5- 520	.513	308.8	-4.9	-1.9	1.372	68.9	.490	1.118	68.6	173.9	.571D	1.666A	95.8	.560	1.1	-4.9	198.9	.203
5- 520	5- 760	.180	127.6	18.7	-.2	.649	104.6	.387	1.271	205.9	436.5	.779	1.762D	109.0	1.110	2.0	23.1	46.6	.380
		21.65	17.32	13.53	4.32	7.72	3.80	15.83	1/1/2	66.5	8.1	15.3	.228	7.493	166.3	243.2	9.8	70.5L	1.482

MARS ARRIVAL DATE = 2450530 (22 MAR 1997)

5- 170	5- 323.1	.183	64.0	78.6	9.5	.917	90.7	.163	.859	183.4	380.1	.719	.998D	92.8	1.264	-11.2	-68.9	294.9	.262
5- 323.1	5- 530	.262	310.3	-24.7	-4.5	1.386	85.1	.398	1.189	17.1	172.6	.716D	1.661A	94.9	.608	4.6	5.7	214.0	.169
5- 530	5- 650	.536	85.9	26.8	2.0	.965	126.0	.730	3.563	270.5	389.3	.961	6.164D	102.3	1.300	-1.6	-11.6	346.0	.402
		21.41	17.84	4.45	3.57	6.97	13.38	16.31	2/1/1	61.3	45.6	45.2	.878	2.602	83.0	140.0	-42.1	73.9L	1.407
5- 180	5- 327.9	.191	61.7	78.6	9.8	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.6	1.265	-11.9	-67.8	294.5	.280
5- 327.9	5- 530	.280	307.1	-17.6	-3.5	1.385	82.8	.404	1.183	29.1	173.0	.704D	1.661A	94.7	.604	3.5	.2	211.7	.168
5- 530	5- 660	.501	66.3	27.5	2.3	.926	124.9	.666	2.827	265.9	394.2	.945	4.709D	103.6	1.272	-1.8	-10.7	349.5	.397
		20.42	16.66	4.57	3.53	6.94	12.31	16.20	2/1/1	61.6	39.7	50.8	.766	2.330	84.2	135.0	-46.5	67.0L	1.020

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2450530
22 MAR 1997

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 250	5- 331.7	.416	86.8	16.6	-2.9	1.049	112.9	.403	1.149	262.5	395.1	.686	1.611D	99.9	1.377	-.6	-2.8	302.2	.304
5- 331.7	5- 530	.304	305.5	-13.8	-3.0	1.384	80.9	.411	1.176	31.7	173.4	.692D	1.660A	94.5	.601	2.8	-1.6	209.7	.168
5- 530	5- 730	.279	108.9	13.9	-3.7	.720	113.9	.426	1.445	228.1	424.4	.830	2.060D	108.0	1.145	5.1	23.9	19.9	.392
		18.57	15.02	8.79	3.55	6.95	6.23	16.08	1/1/2	62.6	19.1	11.5	.651	9.980	73.6	239.7	71.5	106.6D	5.849
5- 260	5- 339.1	.471	95.4	18.7	-2.2	1.079	115.6	.463	1.244	265.3	400.3	.668	1.820D	102.5	1.402	-1.4	-5.4	309.3	.366
5- 339.1	5- 530	.366	305.0	-9.0	-2.5	1.381	76.9	.431	1.158	44.9	174.7	.659D	1.657A	94.0	.590	2.0	-3.3	205.2	.173
5- 530	5- 740	.249	114.0	17.5	-1.7	.699	111.8	.413	1.383	222.2	428.4	.812	1.953D	108.4	1.134	3.3	21.8	29.6	.386
		19.16	15.51	10.06	3.65	7.05	5.46	15.96	1/1/2	65.9	13.9	5.6	.448	20.305	138.8	218.4	-41.0	72.4L	8.649
5- 270	5- 345.7	.535	104.2	20.2	-1.4	1.119	118.5	.534	1.396	268.0	404.2	.651	2.142D	105.1	1.434	-2.2	-7.1	316.7	.435
5- 345.7	5- 530	.435	306.6	-6.5	-2.2	1.376	73.0	.456	1.137	57.0	176.2	.619D	1.655A	93.2	.576	1.5	-3.7	200.5	.181
5- 530	5- 750	.223	120.0	18.7	-.8	.678	109.5	.404	1.332	216.3	432.4	.794	1.869D	108.9	1.124	2.4	22.1	38.2	.387
		20.24	16.41	11.60	3.83	7.23	4.81	15.98	1/1/2	70.0	10.7	10.0	.317	11.515	172.5	231.9	1.8	66.3L	5.337
5- 280	5- 352.1	.607	113.3	20.8	-.6	1.167	121.5	.616	1.646	270.5	407.3	.632	2.659D	107.7	1.473	-2.9	-8.1	324.4	.511
5- 352.1	5- 530	.511	309.6	-5.0	-2.0	1.370	68.9	.487	1.112	68.7	177.6	.571D	1.654A	92.3	.558	1.1	-3.4	195.7	.194
5- 530	5- 760	.199	127.4	18.8	-.2	.659	107.0	.398	1.288	210.3	436.4	.775	1.802D	109.5	1.115	2.0	23.1	46.7	.390
		21.77	17.65	13.41	4.12	7.52	4.24	16.05	1/1/2	74.4	8.1	15.1	.230	7.624	166.3	243.6	9.7	70.6L	1.525
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																			
5- 250	5- 331.9	.415	86.9	16.6	-2.9	1.048	112.8	.402	1.146	262.3	395.2	.686	1.606D	99.9	1.376	-.6	-2.8	302.4	.304
5- 331.9	5- 540	.304	305.8	-15.5	-3.4	1.383	81.0	.408	1.170	31.7	177.5	.692D	1.648A	91.7	.600	3.1	1.2	207.0	.160
5- 540	5- 730	.312	110.9	11.5	-5.1	.741	116.4	.453	1.502	232.7	424.5	.822	2.183D	108.9	1.157	6.5	26.5	18.3	.419
		19.25	15.87	8.77	3.38	6.78	7.10	16.69	1/1/2	70.6	21.1	13.1	.652	8.746	75.3	245.0	72.6	106.2D	5.048
5- 260	5- 339.5	.468	95.6	18.8	-2.2	1.077	115.5	.460	1.236	264.9	400.6	.668	1.805D	102.5	1.401	-1.4	-5.4	309.7	.366
5- 339.5	5- 540	.366	305.5	-9.8	-2.6	1.379	76.9	.428	1.153	45.1	178.6	.659D	1.647A	91.0	.590	2.1	-1.3	202.0	.166
5- 540	5- 740	.277	115.6	16.9	-2.1	.717	114.3	.435	1.425	226.7	428.4	.805	2.045D	109.2	1.144	3.6	22.4	29.4	.405
		19.66	16.17	10.00	3.49	6.89	6.17	16.38	1/1/2	74.0	14.3	6.0	.450	19.149	133.2	218.3	-46.6	75.3L	8.159
5- 270	5- 346.3	.531	104.5	20.2	-1.4	1.116	118.4	.529	1.381	267.6	404.5	.650	2.112D	105.1	1.432	-2.2	-7.2	317.1	.434
5- 346.3	5- 540	.434	307.4	-6.9	-2.3	1.375	73.0	.454	1.133	57.0	179.9	.619D	1.647A	90.1	.576	1.5	-2.0	197.3	.175
5- 540	5- 750	.248	121.1	18.5	-.9	.694	112.0	.422	1.363	220.7	432.4	.788	1.937D	109.6	1.132	2.5	22.2	38.3	.402
		20.63	16.93	11.51	3.70	7.10	5.42	16.32	1/1/2	78.0	10.7	9.7	.319	11.853	172.8	232.1	.5	66.7L	5.466
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																			
5- 250	5- 332.1	.414	87.0	16.6	-2.9	1.047	112.8	.401	1.144	262.1	395.4	.685	1.602D	99.9	1.376	-.6	-2.6	302.5	.304
5- 332.1	5- 550	.304	306.4	-17.7	-3.9	1.382	81.1	.406	1.167	31.5	181.3	.693D	1.640	89.1	.602	3.5	4.3	204.4	.156
5- 550	5- 730	.355	112.9	6.5	-8.2	.767	119.0	.486	1.581	237.1	424.5	.813	2.349D	109.9	1.171	9.7	31.8	14.4	.463
		20.29	17.00	8.75	3.29	6.69	8.25	17.68	1/1/2	78.6	26.0	15.3	.652	7.507	76.0	249.4	72.5	106.7D	4.244
5- 260	5- 340.0	.466	95.8	18.8	-2.2	1.074	115.4	.457	1.228	264.5	400.9	.667	1.788D	102.5	1.399	-1.5	-5.5	310.1	.365
5- 340.0	5- 550	.365	306.2	-10.5	-2.9	1.379	76.9	.427	1.150	45.0	182.3	.659D	1.641	88.3	.592	2.3	.7	199.1	.162
5- 550	5- 740	.309	117.5	15.9	-2.6	.738	116.9	.462	1.481	231.2	428.4	.797	2.165D	110.2	1.155	4.2	23.2	29.1	.429
		20.34	16.93	9.93	3.41	6.81	7.00	16.90	1/1/2	81.9	14.9	6.3	.451	18.158	126.6	218.0	-53.3	78.8L	7.744
5- 270	5- 346.8	.527	104.7	20.3	-1.3	1.112	118.3	.524	1.365	267.1	404.9	.649	2.080D	105.1	1.429	-2.3	-7.3	317.7	.432
5- 346.8	5- 550	.432	308.4	-7.3	-2.4	1.375	73.1	.452	1.131	56.9	183.3	.620D	1.642	87.3	.579	1.6	-.5	194.4	.173
5- 550	5- 750	.276	122.7	18.1	-1.0	.712	114.6	.443	1.403	225.1	432.3	.781	2.025D	110.4	1.141	2.7	22.3	38.3	.421
		21.18	17.55	11.41	3.64	7.04	6.14	16.73	1/1/2	85.7	10.8	9.2	.322	12.415	172.7	232.2	-1.2	67.0L	5.671
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																			
5- 260	5- 340.5	.462	96.0	18.8	-2.1	1.072	115.3	.453	1.218	264.0	401.3	.666	1.770D	102.6	1.396	-1.5	-5.6	310.6	.364
5- 340.5	5- 560	.364	307.2	-11.4	-3.1	1.379	77.0	.426	1.149	44.8	185.8	.660D	1.639	85.8	.596	2.4	2.5	196.5	.161
5- 560	5- 740	.344	119.8	14.2	-3.5	.764	119.5	.493	1.557	235.6	428.3	.769	2.325D	111.2	1.169	5.1	24.7	28.4	.457
		21.21	17.62	9.86	3.39	6.80	7.96	17.55	1/1/2	89.5	16.1	6.7	.453	17.092	119.1	217.4	-60.8	82.8L	7.297
5- 270	5- 347.4	.522	105.0	20.3	-1.3	1.107	118.1	.519	1.347	266.5	405.3	.648	2.047D	105.1	1.426	-2.3	-7.5	318.3	.431
5- 347.4	5- 560	.431	309.5	-7.7	-2.5	1.375	73.2	.451	1.131	56.6	186.5	.621D	1.641	84.7	.584	1.6	.7	192.0	.173
5- 560	5- 750	.307	124.5	17.5	-1.2	.734	117.2	.469	1.457	229.6	432.2	.773	2.140D	111.3	1.153	2.9	22.5	38.3	.443
		21.90	18.26	11.30	3.64	7.05	6.96	17.23	1/1/2	92.9	11.0	8.7	.324	13.210	172.2	232.3	-2.9	67.4L	5.957

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450410
22 NOV 1996

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450410 (22 NOV 1996)																				
5- 220	5- 250.8	.499	76.1	20.7	1.3	.924	119.3	.503	.889	226.9	260.0	.441A	1.336D	61.5	1.276	2.2	4.0	322.2	.618
5- 250.8	5- 410	.618	307.9	2.7	1.3	1.409	115.4	.586	1.303	287.7	504.9	.540	2.066A	122.9	.671	.8	-2.2	187.7	.375
5- 410	5- 740	.108	134.6	12.7	-.8	.643	85.7	.330	1.244	171.1	430.0	.834	1.654	105.5	1.098	1.8	18.7	29.8	.317
		21.91	13.11	10.73	8.80	12.17	2.37	14.55	1/2/2	29.5	11.4	14.3	.157	8.035	173.5	239.7	-4.5	87.9L	1.107
MARS ARRIVAL DATE = 2450420 (2 DEC 1996)																				
5- 220	5- 252.0	.481	75.2	20.3	1.4	.928	116.1	.484	.895	228.3	263.2	.462A	1.329D	63.0	1.279	2.1	4.1	322.4	.589
5- 252.0	5- 420	.589	309.1	3.1	1.4	1.398	114.2	.561	1.253	288.8	508.7	.550	1.956A	119.2	.644	.6	-2.7	188.5	.337
5- 420	5- 740	.107	130.6	13.7	-.8	.640	87.5	.328	1.245	174.9	429.3	.837	1.653	105.4	1.098	1.9	19.1	30.0	.314
		20.38	12.64	10.29	7.74	11.11	2.35	14.50	1/2/2	33.0	11.8	13.4	.173	8.597	174.4	239.4	-3.4	86.7L	1.318
MARS ARRIVAL DATE = 2450430 (12 DEC 1996)																				
5- 220	5- 253.0	.466	74.5	19.9	1.5	.933	117.1	.468	.902	229.5	266.1	.479A	1.324D	64.2	1.282	2.0	4.2	322.6	.564
5- 253.0	5- 430	.564	310.1	3.5	1.5	1.389	113.2	.540	1.216	289.9	512.6	.559	1.873A	115.5	.622	.5	-2.9	188.9	.302
5- 430	5- 740	.107	126.4	14.7	-.8	.638	89.4	.327	1.247	178.9	428.9	.839	1.655	105.3	1.099	2.0	19.4	30.2	.313
		19.13	12.30	9.94	6.83	10.21	2.36	14.47	1/2/2	37.1	12.2	12.5	.189	9.158	175.0	239.1	-2.2	85.8L	1.541
MARS ARRIVAL DATE = 2450440 (22 DEC 1996)																				
5- 220	5- 253.9	.454	73.9	19.6	1.6	.936	116.4	.456	.907	230.6	268.5	.494A	1.320D	65.2	1.284	2.0	4.2	322.8	.544
5- 253.9	5- 440	.544	311.0	3.8	1.6	1.382	112.4	.524	1.188	290.8	516.5	.566	1.810A	111.9	.603	.4	-2.9	188.6	.273
5- 440	5- 740	.111	122.3	15.6	-.8	.637	91.4	.328	1.250	182.9	428.5	.840	1.660D	105.2	1.100	2.0	19.7	30.3	.313
		18.15	12.09	9.67	6.05	9.43	2.42	14.47	1/2/2	41.7	12.5	11.8	.203	9.713	175.5	238.8	-1.1	84.7L	1.768
5- 230	5- 260.8	.554	69.2	17.8	-2.5	1.083	119.9	.524	1.245	258.0	297.4	.593A	1.898D	69.4	1.396	1.1	2.7	317.8	.513
5- 260.8	5- 440	.513	318.2	5.2	2.0	1.393	110.6	.520	1.233	296.9	511.7	.592	1.875A	114.5	.629	-.1	-6.5	194.1	.293
5- 440	5- 750	.112	136.9	14.1	-.5	.630	89.0	.344	1.235	178.2	433.7	.811	1.660	106.7	1.098	1.9	21.1	37.6	.337
		21.11	14.52	12.08	6.59	9.96	2.45	14.94	1/2/2	35.3	9.6	2.6	.229	44.679	82.2	254.5	-81.2	88.3L	9.981
MARS ARRIVAL DATE = 2450450 (1 JAN 1997)																				
5- 210	5- 248.9	.375	79.8	21.4	.8	.831	110.7	.453	.774	210.5	250.2	.423A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 450	.560	305.7	3.4	1.5	1.370	113.5	.519	1.139	286.2	524.3	.548	1.729A	105.7	.570	.7	-.9	181.7	.236
5- 450	5- 730	.125	106.8	16.1	-1.3	.646	95.5	.320	1.273	192.0	423.3	.866	1.679D	104.0	1.103	2.4	18.8	23.0	.296
		15.69	10.56	7.89	5.13	8.51	2.67	14.15	1/2/2	54.0	15.9	18.3	.192	6.298	172.8	243.5	-4.1	90.8D	1.018
5- 220	5- 254.6	.445	73.4	19.4	1.7	.939	115.8	.446	.911	231.4	270.5	.505A	1.318D	66.0	1.286	1.9	4.3	322.9	.529
5- 254.6	5- 450	.529	311.7	4.1	1.7	1.377	111.8	.510	1.167	291.4	520.5	.571	1.762A	108.2	.589	.3	-2.6	187.7	.247
5- 450	5- 740	.117	118.7	16.4	-.9	.638	93.5	.330	1.255	187.1	428.3	.841	1.668D	105.3	1.101	2.1	20.0	30.3	.314
		17.39	11.99	9.47	5.40	8.78	2.53	14.50	1/2/2	47.0	12.7	11.2	.215	10.240	175.7	238.6	-.0	83.9L	1.987
5- 230	5- 261.7	.542	68.8	17.5	-2.6	1.082	119.2	.514	1.242	259.0	299.7	.603A	1.880D	70.4	1.395	1.0	2.7	317.7	.493
5- 261.7	5- 450	.493	318.9	5.6	2.1	1.386	109.8	.503	1.205	298.0	515.7	.599	1.812A	110.9	.611	-.2	-6.6	193.9	.264
5- 450	5- 750	.114	132.8	15.2	-.5	.629	91.1	.344	1.238	182.1	433.3	.812	1.663D	106.7	1.099	1.9	21.3	37.8	.336
		20.10	14.26	11.78	5.63	9.21	2.48	14.92	1/2/2	39.7	9.8	3.1	.247	37.090	67.0	237.9	-66.6	92.7D	8.925
5- 250	5- 326.4	.441	84.6	16.6	-3.0	1.072	113.8	.431	1.218	266.8	391.1	.693	1.742D	99.2	1.394	-.6	-2.5	298.3	.307
5- 326.4	5- 450	.307	324.2	-6.7	-1.4	1.460	85.6	.545	1.578	12.5	127.6	.718D	2.438A	122.9	.755	2.1	-12.2	218.6	.409
5- 450	5- 770	.133	161.5	8.9	.2	.613	85.4	.384	1.207	172.6	443.8	.744	1.671	110.1	1.094	1.8	24.2	53.2	.390
		21.92	12.18	9.36	9.73	13.10	2.83	16.06	1/1/2	15.4	5.5	26.1	.639	4.428	10.5	222.0	9.4	143.5D	2.192
MARS ARRIVAL DATE = 2450460 (11 JAN 1997)																				
5- 80	5- 330.7	.281	70.5	30.6	2.6	.946	74.4	.293	.877	129.1	428.5	.620	1.134	103.8	1.275	-1.3	-5.0	275.4	.320
5- 330.7	5- 460	.320	316.0	-6.7	-1.5	1.439	82.5	.509	1.437	22.5	135.1	.705D	2.169A	119.4	.712	1.9	-12.0	218.7	.360
5- 460	5- 600	.294	63.7	23.3	.7	.760	111.8	.373	1.602	242.6	344.3	1.004A	2.200D	85.8	1.162	-1.9	-6.6	12.2	.200
		21.02	12.64	6.02	8.38	11.74	6.62	12.57	2/1/1	19.6	118.4	40.5	.586	2.890	6.7	205.9	2.4	121.7D	1.108
5- 210	5- 249.2	.371	79.5	21.2	.9	.834	110.4	.447	.777	210.8	251.1	.429A	1.125D	63.7	1.211	2.7	5.3	324.1	.552
5- 249.2	5- 460	.552	306.2	3.6	1.6	1.366	113.2	.512	1.126	286.3	528.1	.550	1.702A	101.9	.560	.6	2.0	179.2	.218
5- 460	5- 730	.137	105.0	16.4	-1.4	.649	97.6	.325	1.280	196.4	423.3	.864	1.697D	104.2	1.106	2.5	19.2	22.8	.301
		15.38	10.69	7.80	4.69	8.08	2.89	14.24	1/2/2	61.1	16.1	17.8	.197	6.447	173.0	243.4	-3.8	90.6D	1.074
5- 220	5- 255.1	.439	73.0	19.2	1.7	.941	115.4	.439	.915	232.1	272.0	.513A	1.317D	66.6	1.288	1.9	4.3	323.0	.517
5- 255.1	5- 460	.517	312.3	4.3	1.6	1.372	111.4	.500	1.150	291.9	524.4	.575	1.726A	104.6	.577	.3	-1.9	186.1	.225
5- 460	5- 740	.126	115.7	17.1	-.9	.639	95.5	.334	1.260	191.3	428.1	.840	1.681D	105.4	1.103	2.2	20.2	30.3	.317
		16.87	12.00	9.32	4.87	8.26	2.68	14.55	1/2/2	53.2	12.9	10.7	.225	10.735	175.7	238.3	.8	83.4L	2.185
5- 230	5- 262.5	.533	68.4	17.3	-2.6	1.081	118.7	.506	1.239	259.7	301.7	.612A	1.867D	71.2	1.394	1.0	2.8	317.6	.477
5- 262.5	5- 460	.477	319.6	5.8	2.1	1.380	109.1	.490	1.184	298.9	519.7	.604	1.764A	107.4	.598	-.3	-6.4	193.1	.239
5- 460	5- 750	.119	128.9	16.3	-.5	.630	93.2	.345	1.241	186.2	432.9	.813	1.670D	106.7	1.100	2.0	21.5	38.0	.336
		19.52	14.12	11.55	5.20	8.58	2.56	14.93	1/2/2	44.9	10.0	3.6	.264	31.492	57.5	235.3	-57.1	95.8D	8.046
5- 250	5- 328.5	.431	85.5	16.6	-3.0	1.062	113.4	.419	1.188	265.1	392.7	.690	1.686D	99.5	1.367	-.6	-2.6	299.8	.305
5- 328.5	5- 460	.305	317.9	-7.3	-1.5	1.439	83.8	.506	1.441	18.6	134.7	.711D	2.170A	119.2	.713	2.0	-11.9	219.0	.358
5- 460	5- 770	.128	158.3	10.2	.2	.612	87.7	.380	1.208	176.2	443.0	.749	1.667	109.8	1.094	1.8	24.3	53.6	.385
		20.19	11.86	9.12	8.33	11.70	2.73	15.94	1/1/2	19.4	5.5	18.6	.645	6.178	15.4	220.1	14.5	137.3D	3.339
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																				
5- 80	5- 327.7	.262	69.8	31.7	2.7	.947	75.6	.275	.878	129.4	424.0	.636	1.120	102.4	1.275	-1.2	-5.3	273.1	.292
5- 327.7	5- 470	.292	315.2	-8.5	-1.8	1.423	83.8	.475	1.354	19.4	141.3	.711D	1.997A	115.3	.680	2.2	-11.3	219.4	.313
5- 470	5- 600	.334	65.3	23.4	.6	.790	114.6	.418	1.730	250.0	347.4	1.007A	2.453D	86.3	1.182	-1.8	-7.8	7.3	.213
		20.47	13.36	5.69	7.10	10.47	7.67	12.77	2/1/1	23.7	113.7	41.8	.704	2.802	8.7	204.7	4.5	125.2D	1.269
5- 210	5- 249.4	.369	79.4	21.2	.9	.835	110.3	.445	.778	211.0	251.4	.432A	1.125D	63.8	1.212	2.7	5.3	324.1	.549
5- 249.4	5- 470	.549	306.6	3.7	1.6	1.363	113.2	.508	1.116	286.0	532.0	.549	1.683A	98.1	.552	.6	3.5	176.0	.205
5- 470	5- 730	.150	104.0	16.7	-1.6	.653	99.8	.333	1.291	200.9	423.4	.861	1.720D	104.5	1.108	2.7	19.5	22.6	.307
		15.32	10.93	7.77	4.39	7.78	3.16	14.37	1/2/2	69.0	16.3	17.5	.199	6.576	173.2	243.2	-3.5	90.6D	1.111
5- 220	5- 255.4	.435	72.8	19.1	-1.7	.942	115.1	.435	.917	232.5	272.9	.518A	1.316D	67.0	1.289	1.9	4.3	323.1	.510
5- 255.4	5- 470	.510	312.8	4.5	1.8	1.369	111.1	.493	1.138	292.0	528.3	.577	1.699A	100.9	.568	.3	-.9	185.6	.208
5- 470	5- 740	.136	113.5	17.6	-1.0	.642	97.7	.339	1.268	195.6	428.0	.838	1.697D	105.6	1.105	2.3	20.4	30.3	.321
		16.58	12.12	9.23	4.46	7.85	2.89	14.64	1/2/2	60.2	13.0	10.3	.231	11.176	175.5	238.1	1.5	83.0L	2.348
5- 230	5- 263.1	.526	68.2	17.2	-2.6	1.080	118.3	.501	1.237	260.2	303.2	.618A	1.857D	71.8	1.394	1.0	2.8	317.5	.466
5- 263.1	5- 470	.466	320.2	6.0	2.1	1.376	108.7	.479	1.168	299.5	523.7	.608	1.727A	104.0	.587	-.3	-6.0	191.7	.217
5- 470	5- 750	.127	125.5	17.2	-.5	.632	95.4	.348	1.247	190.3	432.7	.813	1.680D	106.7	1.101	2.0	21.7	38.1	.338
		18.76	14.09	11.39	4.68	8.07	2.70	14.97	1/2/2	50.8	10.2	4.1	.277	27.779	51.1	234.2	-50.7	98.0D	7.429
5- 240	5- 274.9	.608	66.9	15.9	-3.3	1.215	119.2	.652	2.009	282.4	334.4	.700A	3.319D	80.0	1.501	.1	.5	306.0	.405
5- 274.9	5- 470	.405	330.3	11.5	3.5	1.388	105.0	.466	1.216	311.3	516.9	.650	1.782A	107.7	.615	-1.9	-13.8	200.4	.239
5- 470	5- 760	.122	139.6	15.2	-.2	.622	92.8	.360	1.227	185.1	437.5	.785	1.669D	108.1	1.098	1.9	23.1	45.9	.358
		21.26	16.05	13.43	5.20	8.59	2.62	15.37	1/2/2	40.0	7.7	26.8	.366	4.352	25.4	230.8	-24.5	121.3D	1.227
5- 250	5- 329.6	.426	65.9	16.6	-3.0	1.058	113.2	.413	1.174	264.2	393.5	.689	1.659D	99.6	1.383	-.6	-2.7	300.6	.305
5- 329.6	5- 470	.305	313.6	-7.9	-1.7	1.423	82.7	.478	1.351	22.8	141.6	.706D	1.996A	115.4	.679	2.1	-11.4	219.1	.314
5- 470	5- 770	.126	154.6	11.7	.2	.612	90.0	.377	1.210	179.9	442.4	.754	1.666	109.6	1.095	1.8	24.4	54.0	.381
		18.84	11.71	9.01	7.13	10.51	2.70	15.86	1/1/2	23.9	5.7	14.0	.647	8.234	22.8	219.2	21.9	132.5D	4.681
5- 260	5- 337.0	.483	94.4	18.6	-2.3	1.091	116.0	.477	1.284	267.1	396.8	.671	1.697D	102.3	1.411	-1.4	-5.1	307.4	.369
5- 337.0	5- 470	.369	309.6	-5.9	-1.6	1.420	78.1	.491	1.329	36.6	143.5	.676D	1.982A	115.6	.670	1.7	-11.7	217.2	.318
5- 470	5- 780	.140	168.5	7.4	.5	.603	86.7	.399	1.194	175.0	447.6	.717	1.670	111.4	1.091	1.8	25.5	62.1	.410
		20.56	13.30	10.34	7.25	10.62	2.96	16.48	1/1/2	25.4	4.5	2.3	.441	50.568	21.3	220.6	20.5	123.6D	21.840
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																				
5- 80	5- 325.6	.252	69.3	32.3	2.8	.947	76.2	.264	.879	129.7	421.0	.646	1.111	101.6	1.275	-1.2	-5.5	271.7	.275
5- 325.6	5- 480	.275	314.1	-10.3	-2.0	1.412	84.5	.450	1.298	17.8	147.3	.714D	1.882A	111.4	.656	2.4	-10.1	219.6	.274
5- 480	5- 600	.380	67.0	23.5	.6	.827	117.5	.477	1.930	257.3	350.2	1.009A	2.850D	86.9	1.207	-1.8	-9.0	2.4	.233
		20.52	14.42	5.50	6.09	9.47	8.92	13.08	2/1/1	28.4	108.8	42.3	.794	2.773	11.0	203.8	6.9	127.4D	1.408

STOPOVER TIME = 0 DAYS 1997 OUTBOUND SWINGBY MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450480
31 JAN 1997

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
S- 140	S- 303.1	.239	58.4	84.5	13.1	.928	87.1	.157	.862	164.0	359.0	.727A	.997	89.9	1.262	-13.0	-78.2	308.1	.290
S- 303.1	S- 480	.290	336.8	-31.3	-6.2	1.405	94.7	.439	1.282	344.5	509.6	.719	1.845A	109.7	.649	7.1	1.2	220.2	.267
S- 480	S- 660	.291	74.3	32.0	3.6	.754	112.3	.383	1.582	240.3	390.5	.976	2.188D	98.3	1.157	-3.6	-19.8	356.7	.246
		17.75	11.83	5.29	5.92	9.30	6.54	13.28	2/1/1	34.6	44.7	48.5	.717	2.435	83.5	165.1	-33.9	118.3D	1.029
S- 150	S- 311.5	.194	72.3	81.9	10.3	.924	88.1	.157	.860	169.9	368.2	.725	.995	91.1	1.262	-10.9	-72.7	299.2	.250
S- 311.5	S- 480	.250	329.6	-19.3	-3.4	1.409	91.3	.440	1.297	355.9	507.6	.726	1.868A	110.5	.656	4.1	-6.1	220.3	.267
S- 480	S- 670	.278	76.8	36.8	5.4	.740	111.2	.371	1.530	235.9	395.7	.962	2.098D	99.4	1.149	-5.1	-23.7	2.3	.264
		16.73	10.81	4.60	5.91	9.29	6.21	13.58	2/1/1	29.9	41.4	56.2	.964	2.125	80.1	162.0	-41.6	103.6D	1.084
S- 160	S- 317.9	.181	69.4	80.2	9.5	.920	89.3	.159	.859	176.4	374.7	.722	.996	92.0	1.263	-10.7	-70.1	296.3	.249
S- 317.9	S- 480	.249	322.4	-14.6	-2.6	1.411	88.4	.443	1.302	5.3	147.1	.725D	1.879A	111.0	.658	3.1	-8.5	220.3	.270
S- 480	S- 680	.281	80.8	48.6	10.0	.726	110.0	.361	1.482	231.2	400.5	.948	2.017D	100.4	1.142	-9.6	-35.6	12.0	.311
		16.70	10.71	4.43	6.00	9.38	6.27	14.43	2/1/1	28.6	45.4	57.8	.972	2.069	80.1	155.2	-45.4	91.0D	1.039
S- 210	S- 249.3	.370	79.5	21.2	.9	.835	110.4	.447	.777	210.9	251.2	.430A	1.125D	63.7	1.211	2.7	5.3	324.1	.551
S- 249.3	S- 480	.551	306.9	3.6	1.7	1.361	113.3	.507	1.109	285.3	535.8	.547	1.671A	94.3	.547	.6	5.2	172.1	.198
S- 480	S- 730	.166	103.6	16.7	-1.7	.659	102.0	.342	1.304	205.4	423.6	.858	1.749D	104.9	1.112	2.9	19.9	22.4	.315
		15.49	11.28	7.79	4.21	7.60	3.49	14.52	1/2/2	77.5	16.5	17.2	.198	6.682	173.3	243.0	-3.3	90.8D	1.123
S- 220	S- 255.6	.434	72.7	19.0	-1.8	.943	115.0	.433	.918	232.7	273.3	.520A	1.315D	67.1	1.289	1.9	4.4	323.1	.508
S- 255.6	S- 480	.508	313.1	4.6	1.8	1.366	111.0	.489	1.129	291.7	532.2	.577	1.681A	97.3	.561	.2	.5	180.4	.196
S- 480	S- 740	.150	112.1	17.9	-1.0	.647	99.9	.345	1.277	199.9	428.0	.836	1.719D	105.8	1.107	2.4	20.6	30.3	.327
		16.51	12.35	9.20	4.16	7.56	3.15	14.75	1/2/2	68.1	13.2	9.9	.233	11.566	175.4	257.9	1.9	83.0L	2.466
S- 230	S- 263.5	.522	68.0	17.0	-2.6	1.080	118.1	.497	1.237	260.6	304.2	.622A	1.851D	72.2	1.393	1.0	2.6	317.5	.458
S- 263.5	S- 480	.458	320.6	6.1	2.1	1.373	108.3	.472	1.155	299.8	527.7	.610	1.700A	100.5	.579	-.3	-5.1	189.4	.200
S- 480	S- 750	.137	122.8	17.9	-.6	.635	97.6	.352	1.254	194.5	432.5	.812	1.695D	106.9	1.103	2.1	21.8	38.1	.342
		18.43	14.17	11.28	4.27	7.66	2.89	15.04	1/2/2	57.6	10.3	4.5	.287	25.315	46.3	233.6	-46.0	99.7D	6.982
S- 240	S- 276.1	.596	66.8	15.8	-3.3	1.208	118.7	.638	1.947	282.4	336.4	.705A	3.189D	80.9	1.495	.1	.5	305.3	.389
S- 276.1	S- 480	.389	331.0	11.7	3.4	1.384	104.2	.453	1.199	312.9	520.9	.656	1.742A	104.5	.606	-1.8	-13.9	199.7	.217
S- 480	S- 760	.128	135.9	16.4	-.2	.624	95.1	.362	1.232	189.1	437.1	.786	1.678D	108.1	1.099	1.9	23.1	46.1	.359
		20.53	15.86	13.13	4.67	8.06	2.73	15.39	1/2/2	45.0	7.9	27.9	.398	4.153	24.7	230.8	-23.8	123.3D	1.254
S- 250	S- 330.2	.423	86.2	16.6	-3.0	1.055	113.1	.410	1.166	263.7	394.0	.688	1.644D	99.7	1.381	-.6	-2.7	301.1	.305
S- 330.2	S- 480	.305	310.5	-8.6	-1.9	1.411	82.0	.457	1.290	25.9	148.0	.701D	1.879A	111.6	.653	2.1	-10.6	218.7	.276
S- 480	S- 770	.127	150.6	13.2	.2	.613	92.3	.376	1.212	183.8	441.9	.757	1.668D	109.5	1.095	1.8	24.4	54.2	.379
		17.80	11.66	8.95	6.14	9.52	2.71	15.82	1/1/2	28.9	5.8	11.1	.648	10.361	32.5	219.3	31.9	127.6D	6.067
S- 260	S- 337.5	.480	94.6	18.7	-2.3	1.089	115.9	.474	1.276	266.7	399.1	.671	1.881D	102.3	1.409	-1.4	-5.1	307.8	.369
S- 337.5	S- 480	.369	307.5	-6.3	-1.7	1.407	77.6	.472	1.268	39.3	149.9	.670D	1.867A	111.8	.642	1.7	-10.9	216.4	.279
S- 480	S- 780	.136	165.2	8.9	.5	.603	89.1	.395	1.195	178.6	446.8	.723	1.666	111.1	1.092	1.8	25.6	62.5	.404
		19.39	13.16	10.29	6.23	9.61	2.87	16.36	1/1/2	30.8	4.5	1.2	.442	94.396	103.6	199.9	-75.7	87.4L	41.302
S- 270	S- 343.8	.549	103.3	20.0	-1.6	1.133	119.0	.553	1.461	269.8	402.8	.654	2.269D	104.9	1.445	-2.1	-6.7	314.8	.441
S- 343.8	S- 480	.441	307.2	-4.9	-1.6	1.402	73.5	.491	1.240	51.9	152.4	.631D	1.850A	112.0	.628	1.4	-10.7	213.5	.284
S- 480	S- 790	.155	178.1	4.2	.8	.594	85.5	.420	1.178	173.7	452.0	.683	1.673	113.1	1.088	1.8	26.4	70.8	.435
		21.56	15.22	11.96	6.35	9.72	3.25	17.05	1/1/2	33.4	4.6	7.8	.310	14.794	165.7	230.2	12.1	63.5L	4.270

MARS ARRIVAL DATE = 2450490 (10 FEB 1997)

S- 80	S- 324.4	.246	69.0	32.7	2.8	.947	76.6	.258	.879	129.9	419.2	.652	1.106	101.1	1.275	-1.2	-5.7	270.9	.266
S- 324.4	S- 490	.266	312.9	-12.6	-2.4	1.403	84.8	.432	1.259	17.2	153.0	.715D	1.804A	107.7	.638	2.7	-8.6	219.3	.242
S- 490	S- 600	.433	68.8	23.7	.6	.873	120.3	.555	2.271	264.2	352.9	1.011A	3.531D	87.5	1.239	-1.7	-9.9	357.7	.261
		21.10	15.81	5.40	5.29	8.67	10.41	13.53	2/1/1	33.6	104.2	42.0	.853	2.788	13.8	203.4	9.6	128.6D	1.524
S- 150	S- 311.7	.192	73.1	81.6	10.2	.924	88.1	.157	.860	169.9	368.4	.725	.995	91.1	1.262	-10.7	-72.3	299.1	.247
S- 311.7	S- 490	.247	327.2	-23.8	-4.1	1.401	90.8	.424	1.261	357.3	513.3	.726	1.796A	107.1	.639	4.7	-3.3	220.5	.240
S- 490	S- 670	.305	79.5	33.8	4.4	.760	113.6	.403	1.601	241.2	396.6	.956	2.246D	100.3	1.162	-4.1	-19.1	359.5	.278
		16.71	11.49	4.57	5.22	8.60	6.91	13.83	2/1/1	35.5	38.8	51.0	.985	2.324	80.3	159.7	-39.7	102.1D	1.304
S- 160	S- 318.1	.178	70.4	79.8	9.3	.920	89.3	.159	.859	176.3	375.0	.722	.996	92.0	1.263	-10.5	-69.6	296.5	.245
S- 318.1	S- 490	.245	319.7	-17.2	-3.0	1.403	87.9	.427	1.263	7.0	152.8	.724D	1.803A	107.5	.640	3.4	-6.7	220.1	.240
S- 490	S- 680	.294	82.7	40.7	7.1	.743	112.4	.388	1.539	236.3	401.3	.941	2.136D	101.2	1.152	-6.7	-25.2	7.0	.301
		16.24	11.00	4.39	5.24	8.63	6.61	14.26	2/1/1	33.9	38.5	54.3	1.001	2.190	80.7	151.9	-44.7	88.5L	1.191
S- 170	S- 323.2	.181	64.4	78.4	9.4	.917	90.7	.163	.858	183.4	380.2	.719	.998D	92.8	1.264	-11.1	-68.6	295.1	.260
S- 323.2	S- 490	.260	314.1	-13.4	-2.5	1.403	85.5	.431	1.261	15.1	152.9	.717D	1.804A	107.7	.639	2.8	-8.3	219.5	.242
S- 490	S- 690	.347	95.8	62.8	10.7	.726	111.0	.376	1.484	231.3	405.8	.926	2.041D	102.0	1.144	-18.1	-50.1	21.7	.436
		17.74	12.46	4.43	5.28	8.66	8.03	17.06	2/1/1	33.6	54.6	56.6	.890	2.110	82.1	144.8	-47.6	78.4L	.988
S- 210	S- 248.9	.374	79.8	21.4	.8	.832	110.6	.452	.774	210.6	250.3	.424A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
S- 248.9	S- 490	.559	307.0	3.8	1.7	1.359	113.7	.509	1.103	284.1	539.5	.541	1.665A	90.5	.543	.6	7.1	167.9	.196
S- 490	S- 730	.183	103.8	16.7	-1.9	.666	104.2	.353	1.320	209.9	423.7	.854	1.786D	105.3	1.116	3.1	20.3	22.1	.325
		15.92	11.76	7.88	4.17	7.56	3.88	14.72	1/2/2	86.5	16.7	17.0	.193	6.767	173.4	242.8	-3.2	91.4D	1.111
S- 220	S- 255.5	.435	72.7	19.0	-1.8	.943	115.1	.434	.917	232.6	273.1	.519A	1.315D	67.0	1.289	1.9	4.4	323.1	.509
S- 255.5	S- 490	.509	313.4	4.6	1.8	1.364	111.2	.488	1.122	291.1	536.1	.575	1.669A	93.7	.557	.2	2.2	176.6	.188
S- 490	S- 740	.165	111.3	18.1	-1.1	.653	102.2	.354	1.290	204.3	428.1	.833	1.746D	106.2	1.111	2.5	20.8	30.2	.335
		16.67	12.69	9.22	3.99	7.38	3.47	14.90	1/2/2	76.6	13.3	9.6	.232	11.894	175.3	237.8	2.1	83.2L	2.527
S- 230	S- 263.7	.519	67.9	17.0	-2.6	1.080	117.9	.495	1.236	260.8	304.7	.624A	1.847D	72.4	1.393	1.0	2.8	317.4	.454
S- 263.7	S- 490	.454	321.0	6.1	2.1	1.370	108.2	.467	1.146	299.7	531.7	.611	1.680A	97.1	.573	-.3	-3.8	186.5	.187
S- 490	S- 750	.149	120.9	18.4	-.6	.640	99.9	.358	1.263	198.8	432.4	.811	1.714D	107.1	1.106	2.1	21.9	38.2	.347
		18.32	14.36	11.22	3.96	7.36	3.14	15.14	1/2/2	65.2	10.4	4.8	.292	23.869	42.7	233.3	-42.3	100.8D	6.682
S- 240	S- 277.2	.586	66.9	15.7	-3.3	1.202	118.3	.627	1.898	282.5	338.2	.708A	3.088D	81.6	1.491	.1	.5	304.7	.375
S- 277.2	S- 490	.375	331.6	11.7	3.3	1.380	103.6	.443	1.186	314.2	524.8	.661	1.711A	101.4	.599	-1.8	-13.8	198.4	.198
S- 490	S- 760	.137	132.7	17.3	-.2	.628	97.4	.365	1.238	193.2	436.9	.786	1.690D	108.2	1.101	1.9	23.2	46.2	.361
		20.01	15.78	12.88	4.23	7.62	2.90	15.44	1/2/2	50.5	8.0	29.0	.427	3.987	23.8	230.7	-22.8	125.2D	1.274
S- 240	S- 313.1	.404	74.9	14.3	-3.4	1.058	111.8	.391	1.174	267.0	379.5	.714	1.633D	95.5	1.380	.1	.6	291.8	.244
S- 313.1	S- 490	.244	325.6	-22.1	-3.8	1.402	90.2	.425	1.262	359.3	513.1	.726	1.798A	107.2	.640	4.4	-4.3	220.4	.240
S- 490	S- 760	.137	132.7	17.3	-.2	.628	97.4	.365	1.238	193.2	436.9	.786	1.690D	108.2	1.101	1.9	23.2	46.2	.361
		16.66	11.44	8.54	5.22	8.60	2.90	15.44	1/1/2	35.0	8.0	40.0	1.006	2.921	36.7	225.8	34.4	144.3D	1.932
S- 240	S- 318	.386	76.7	14.1	-3.5	1.041	111.0	.371	1.126	263.4	383.7	.709	1.544D	96.4	1.368	.1	.7	293.5	.245
S- 318	S- 490	.245	319.8	-17.2	-3.0	1.403	88.0	.427	1.263	6.8	152.8	.724D	1.802A	107.5	.640	3.5	-6.7	220.1	.240
S- 490	S- 760	.137	132.7	17.3	-.2	.628	97.4	.365	1.238	193.2	436.9	.786	1.690D	108.2	1.101	1.9	23.2	46.2	.361
		16.29	11.04	8.14	5.24	8.63	2.90	15.44	1/1/2	33.9	8.0	31.5	1.002	3.667	35.9	222.3	34.6	139.9D	2.693
S- 250	S- 330.6	.421	86.4	16.6	-3.0	1.053	113.0	.408	1.161	263.3	394.3	.687	1.635D	99.8	1.380	-.6	-2.7	301.4	.304
S- 330.6	S- 490	.304	308.4	-9.4	-2.0	1.402	81.5	.441	1.249	28.1	153.9	.698D	1.800A	107.8	.633	2.2	-9.5	217.8	.244
S- 490	S- 770	.132	146.6	14.6	.2	.616	94.6	.377	1.216	187.7	441.5	.758	1.674D	109.4	1.097	1.8	24.5	54.5	.379
		17.03	11.70	8.90	5.34	8.72	2.79	15.61	1/1/2	34.5	5.9	9.6	.649	11.949	44.0	220.6	43.4	121.8D	7.105
S- 260	S- 337.8	.479	94.8	18.7	-2.3	1.087	115.9	.472	1.269	266.4	399.3	.670	1.868D	102.4	1.408	-1.4	-5.2	306.1	.368
S- 337.8	S- 490	.368	306.1	-6.8	-1.8	1.398	77.3	.457	1.228	41.4	155.7	.666D	1.789A	107.9	.622	1.8	-9.9	215.1	.247
S- 490	S- 780	.134	161.5	10.5	.5	.605	91.5	.392	1.197	182.4	446.2	.727	1.666D	110.9	1.092	1.7	25.6	62.6	.401
		18.50	13.09	10.24	5.41	8.79	2.85	16.26	1/1/2	36.7	4.5	2.5	.443	45.075	140.7	215.5	-39.0	69.4L	19.534
S- 270	S- 344.1	.547	103.5	20.0	-1.6	1.131	118.9	.549	1.448	269.5	403.0	.653	2.243D	105.0	1.443	-2.1	-6.7	315.1	.440
S- 344.1	S- 490	.440	306.4	-5.2	-1.7	1.393	73.2	.479	1.201	53.9	156.0	.626D	1.776A	107.8	.607	1.4	-9.7	211.8	.252
S- 490	S- 790	.148	175.4	5.6	.8	.594	88.0	.414	1.179	177.2	451.2	.691	1.667	112.6	1.088	1.7	26.4	71.3	.428
		20.53	15.00	11.89	5.53	8.91	3.11	16.88	1/1/2	39.8	4.4	8.9	.311	12.933	168.4	230.7	8.8	64.4L	3.712

MARS ARRIVAL DATE = 2450500 (20 FEB 1997)

S- 150	S- 292.5	.270	85.9	-40.4	-15.2	.922	88.3	.160	.838	170.8	338.0	.721A	.995	87.0	1.259	15.6	77.4	349.7	.345
S- 292.5	S- 500	.345	339.5	38.9	9.1	1.387	98.2	.419	1.209	352.0	523.1	.703	1.715A	101.5	.618	-8.0	-33.0	198.3	.215
S- 500	S- 670	.337	62.2	31.8	3.8	.784	116.1	.441	1.699	246.3	397.4	.950	2.448D	101.2	1.177	-3.4	-15.8	357.4	.298
		18.21	13.58	5.82	4.62	8.01	7.77	14.20	1/2/1	51.0	37.0	38.8	.504	3.010	92.7	337.6	7.1	124.9D	1.014

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
5- 150	5- 311.4	.196	71.4	82.2	10.5	.924	88.1	.157	.860	169.9	367.9	.725	.995	91.1	1.262	-11.1	-73.1	299.2	.253
5- 311.4	5- 500	.253	325.9	-30.6	-5.3	1.395	90.7	.412	1.235	357.7	518.6	.726	1.744A	103.7	.627	5.9	1.4	220.4	.219
5- 500	5- 670	.337	82.2	31.8	3.8	.784	116.1	.441	1.699	246.3	397.4	.950	2.448D	101.2	1.177	-3.4	-13.8	357.4	.298
		17.12	12.41	4.64	4.71	8.10	7.77	14.20	2/1/1	42.3	37.0	44.7	.941	2.628	80.8	158.2	-36.0	102.0D	1.531
5- 160	5- 318.2	.177	70.7	79.7	9.3	.920	89.3	.159	.859	176.3	375.1	.722	.996	92.1	1.263	-10.4	-69.4	296.5	.244
5- 318.2	5- 500	.244	317.7	-20.3	-3.5	1.396	87.6	.415	1.236	8.1	158.2	.723D	1.748A	104.1	.627	3.9	-4.2	219.5	.216
5- 500	5- 680	.319	65.2	36.1	5.6	.764	114.8	.421	1.614	241.4	402.1	.935	2.294D	102.1	1.166	-5.0	-18.7	3.8	.312
		16.29	11.65	4.38	4.64	8.03	7.27	14.45	2/1/1	39.9	34.7	50.8	1.010	2.332	81.1	149.5	-43.4	86.6L	1.345
5- 170	5- 323.3	.180	64.8	78.3	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.4	295.3	.256
5 323.3	5- 500	.258	312.3	-15.3	-2.8	1.397	85.2	.419	1.232	16.3	158.3	.716D	1.748A	104.2	.626	3.1	-6.4	218.6	.216
5- 500	5- 690	.316	90.5	47.2	10.5	.745	113.4	.404	1.542	236.3	406.5	.919	2.165D	102.9	1.155	-9.8	-30.3	13.8	.353
		16.27	11.62	4.42	4.65	8.04	7.20	15.28	2/1/1	39.5	39.7	54.2	.901	2.195	82.6	142.3	-46.9	76.5L	1.077
5- 210	5- 248.5	.382	80.3	21.6	.8	.827	111.1	.462	.770	210.1	248.8	.414A	1.126D	62.6	1.206	2.8	5.2	323.7	.572
5- 248.5	5- 500	.572	306.9	3.8	1.8	1.358	114.4	.516	1.099	282.4	543.2	.533	1.666	86.6	.541	.6	8.9	163.6	.200
5- 500	5- 730	.203	104.6	16.4	-2.1	.676	106.6	.367	1.341	214.4	423.9	.849	1.832D	105.8	1.121	3.4	20.8	21.8	.336
		16.64	12.38	8.04	4.26	7.65	4.34	14.96	1/2/2	95.5	17.0	16.8	.184	6.838	173.5	242.5	-3.2	92.2D	1.074
5- 220	5- 255.2	.438	72.9	19.1	1.7	.942	115.3	.438	.916	232.3	272.3	.515A	1.317D	66.7	1.288	1.9	4.3	323.0	.515
5- 255.2	5- 500	.515	313.6	4.5	1.8	1.363	111.5	.490	1.117	290.0	539.8	.570	1.663A	90.2	.554	.2	4.1	172.6	.186
5- 500	5- 740	.182	111.2	18.2	-1.2	.661	104.5	.365	1.305	208.8	428.1	.829	1.781D	106.6	1.115	2.6	21.0	30.1	.344
		17.08	13.15	9.30	3.93	7.33	3.86	15.09	1/2/2	85.4	13.4	9.4	.227	12.181	175.4	237.6	2.0	63.7L	2.534
5- 230	5- 263.7	.519	67.9	17.0	-2.6	1.080	117.9	.495	1.236	260.8	304.7	.624A	1.647D	72.4	1.393	1.0	2.8	317.4	.454
5- 263.7	5- 500	.454	321.3	6.0	2.1	1.368	108.3	.465	1.139	299.2	535.6	.610	1.668A	95.8	.570	-.5	-2.2	182.9	.178
5- 500	5- 750	.164	119.7	18.7	-.6	.647	102.2	.366	1.274	203.1	432.4	.808	1.740D	107.4	1.109	2.2	21.9	38.2	.354
		18.43	14.67	11.22	3.77	7.16	3.45	15.29	1/2/2	73.4	10.5	5.0	.292	23.036	39.6	233.0	-39.2	101.5D	6.440
5- 240	5- 278.1	.578	66.9	15.6	-3.3	1.198	118.0	.618	1.860	282.4	339.5	.711A	3.010D	82.2	1.487	.1	.5	304.2	.366
5- 278.1	5- 500	.366	332.2	11.5	3.1	1.378	103.2	.435	1.176	315.1	528.8	.664	1.688A	98.4	.594	-1.7	-13.2	196.4	.183
5- 500	5- 760	.149	130.3	18.0	-.2	.633	99.7	.370	1.246	197.4	436.7	.785	1.708D	108.4	1.103	1.9	23.2	46.4	.366
		19.70	15.82	12.69	3.87	7.27	3.13	15.53	1/2/2	56.9	8.0	29.9	.450	3.872	22.7	230.5	-21.7	126.8D	1.292
5- 240	5- 314.1	.401	75.3	14.3	-3.4	1.055	111.6	.387	1.164	266.3	380.4	.713	1.614D	95.6	1.378	.1	.6	292.1	.244
5- 314.1	5- 500	.245	322.6	-25.7	-4.4	1.396	89.5	.413	1.236	1.8	158.3	.726D	1.746A	103.9	.627	4.9	-1.4	220.1	.217
5- 500	5- 760	.149	130.3	18.0	-.2	.633	99.7	.370	1.246	197.4	436.7	.785	1.708D	108.4	1.103	1.9	23.2	46.4	.366
		16.25	11.59	8.45	4.66	8.05	3.13	15.53	1/1/2	41.0	8.0	39.5	1.006	2.956	44.0	228.1	41.1	138.0D	1.968
5- 240	5- 318.8	.383	77.0	14.1	-3.5	1.039	110.9	.367	1.119	262.8	384.4	.708	1.530D	96.5	1.366	.1	.7	293.9	.245
5- 318.8	5- 500	.245	317.0	-19.5	-3.4	1.397	87.3	.415	1.235	9.1	158.1	.723D	1.748A	104.1	.627	3.8	-4.6	219.4	.216
5- 500	5- 760	.149	130.3	18.0	-.2	.633	99.7	.370	1.246	197.4	436.7	.785	1.708D	108.4	1.103	1.9	23.2	46.4	.366
		15.85	11.21	8.08	4.64	8.03	3.13	15.53	1/1/2	39.8	8.0	30.3	1.001	3.820	43.0	223.7	41.4	134.3D	2.824
5- 250	5- 330.9	.419	86.5	16.6	-3.0	1.052	113.0	.407	1.157	263.1	394.5	.687	1.628D	99.8	1.379	-.6	-2.8	301.6	.304
5- 330.9	5- 500	.304	306.9	-10.3	-2.3	1.395	81.2	.430	1.220	29.6	159.3	.695D	1.744A	104.2	.619	2.3	-8.1	216.5	.218
5- 500	5- 770	.139	143.1	15.8	.2	.620	97.0	.379	1.222	191.8	441.1	.759	1.685D	109.5	1.098	1.8	24.5	54.7	.381
		16.50	11.80	8.87	4.69	8.08	2.93	15.85	1/1/2	40.7	5.9	9.2	.650	12.515	55.2	223.4	54.4	116.0D	7.481
5- 260	5- 338.1	.477	94.9	18.7	-2.3	1.085	115.8	.470	1.264	266.2	399.5	.670	1.857D	102.4	1.406	-1.4	-5.2	308.4	.368
5- 338.1	5- 500	.368	305.2	-7.3	-2.0	1.391	77.1	.447	1.200	42.8	161.1	.663D	1.736A	104.1	.608	1.8	-8.6	213.3	.221
5- 500	5- 780	.136	157.5	12.1	.5	.608	94.0	.392	1.200	186.2	445.7	.730	1.670D	110.8	1.093	1.7	25.6	63.1	.399
		17.85	13.08	10.20	4.76	8.15	2.88	16.25	1/1/2	43.2	4.5	3.7	.444	30.735	146.0	217.1	-33.7	68.0L	13.210
5- 270	5- 344.5	.544	103.6	20.0	-1.5	1.128	118.8	.546	1.436	269.2	403.3	.653	2.219D	105.0	1.441	-2.1	-6.8	315.5	.439
5- 344.5	5- 500	.439	305.9	-5.5	-1.8	1.386	73.1	.470	1.175	55.2	163.2	.623D	1.726A	103.9	.593	1.4	-8.5	209.5	.226
5- 500	5- 790	.144	172.1	7.1	.8	.596	90.6	.410	1.180	180.8	450.4	.697	1.663D	112.3	1.088	1.7	26.4	71.7	.422
		19.74	14.86	11.83	4.89	8.28	3.03	16.76	1/1/2	46.7	4.2	9.6	.313	11.980	170.1	231.1	6.6	65.0L	3.431

MARS ARRIVAL DATE = 2450510 (2 MAR 1997)

5- 150	5- 309.3	.233	55.0	84.9	12.9	.924	88.2	.156	.861	170.4	365.2	.726	.995	90.7	1.262	-13.3	-78.2	299.1	.297
5- 309.3	5- 510	.297	327.5	-46.9	-9.0	1.390	91.3	.403	1.215	355.4	523.8	.726	1.705A	100.4	.618	9.6	12.9	221.2	.217
5- 510	5- 670	.374	85.1	30.3	3.4	.813	118.6	.487	1.838	251.4	398.0	.943	2.732D	102.2	1.196	-2.9	-13.3	355.9	.324
		18.62	13.96	5.19	4.66	8.05	8.77	14.70	2/1/1	53.1	35.8	33.1	.680	3.511	83.0	158.4	-25.9	106.4D	1.708
5- 160	5- 318.0	.179	70.2	79.9	9.4	.920	89.3	.159	.859	176.3	374.9	.722	.996	92.0	1.263	-10.5	-69.7	296.4	.246
5- 318.0	5- 510	.246	316.5	-24.4	-4.2	1.392	87.5	.405	1.216	8.6	163.2	.723D	1.709A	100.8	.618	4.5	-.7	218.6	.197
5- 510	5- 680	.351	87.9	33.1	4.6	.789	117.3	.460	1.718	246.4	402.6	.928	2.508D	103.1	1.182	-4.0	-14.4	1.7	.331
		16.72	12.53	4.40	4.19	7.58	8.12	14.84	2/1/1	46.7	32.5	46.8	.994	2.516	81.4	148.1	-41.3	85.6L	1.508
5- 170	5- 323.3	.180	64.8	78.2	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.3	295.3	.258
5- 323.3	5- 510	.258	311.1	-17.7	-3.2	1.392	85.1	.410	1.212	17.1	163.4	.716D	1.709A	100.9	.616	3.4	-3.8	217.3	.196
5- 510	5- 690	.333	91.8	39.2	7.3	.767	115.9	.437	1.621	241.2	407.1	.912	2.329D	103.9	1.168	-6.6	-19.7	9.6	.348 *
		16.22	12.06	4.41	4.16	7.56	7.64	15.18	2/1/1	46.2	32.6	51.7	.903	2.295	83.0	140.6	-45.9	75.1L	1.170
5- 210	5- 247.4	.393	80.9	21.9	.7	.820	111.8	.477	.763	209.3	246.6	.399A	1.127D	61.6	1.202	2.8	5.1	323.4	.591
5- 247.4	5- 510	.591	306.7	3.7	1.8	1.358	115.3	.526	1.097	280.1	546.7	.520	1.673	82.6	.541	.6	10.5	159.8	.210
5- 510	5- 730	.226	105.7	16.0	-2.5	.688	109.0	.383	1.367	219.0	424.1	.843	1.891D	106.5	1.128	3.8	21.5	21.3	.352
		17.66	13.17	8.29	4.50	7.89	4.87	15.26	1/2/2	103.9	17.4	16.7	.172	6.894	173.5	242.0	-3.2	93.3D	1.015
5- 220	5- 254.7	.444	73.3	19.3	1.7	.939	115.7	.444	.912	231.6	270.8	.507A	1.318D	66.2	1.287	1.9	4.3	323.0	.526
5- 254.7	5- 510	.526	313.7	4.5	1.9	1.362	112.1	.494	1.113	288.5	543.5	.563	1.664	86.6	.554	.3	5.9	168.5	.188
5- 510	5- 740	.202	111.7	18.1	-1.3	.671	106.9	.378	1.325	213.3	428.2	.824	1.826D	107.1	1.120	2.8	21.2	30.0	.356
		17.74	13.74	9.43	4.00	7.39	4.31	15.33	1/2/2	94.3	13.5	9.3	.217	12.369	175.5	237.5	1.7	84.6L	2.470
5- 230	5- 263.5	.521	68.0	17.0	-2.6	1.080	118.1	.497	1.236	260.6	304.2	.622A	1.850D	72.2	1.393	1.0	2.8	317.5	.458
5- 263.5	5- 510	.458	321.5	5.8	2.0	1.367	108.5	.465	1.134	298.3	539.4	.606	1.661A	90.5	.568	-.3	-.4	178.9	.174
5- 510	5- 750	.181	119.2	18.9	-.7	.655	104.6	.376	1.289	207.5	432.4	.804	1.773D	107.8	1.113	2.3	22.0	38.2	.362
		18.78	15.10	11.27	3.68	7.08	3.83	15.47	1/2/2	82.2	10.6	5.0	.287	22.703	36.8	232.7	-36.5	101.9D	6.231
5- 240	5- 278.7	.574	66.9	15.5	-3.3	1.195	117.8	.612	1.837	282.4	340.5	.712A	2.963D	82.6	1.485	.1	.5	303.8	.359
5- 278.7	5- 510	.359	332.7	11.2	3.0	1.376	103.0	.430	1.168	315.6	532.7	.666	1.671A	95.4	.591	-1.6	-12.2	193.8	.171
5- 510	5- 760	.163	128.6	18.5	-.2	.640	102.1	.378	1.257	201.6	436.6	.782	1.732D	108.7	1.107	1.9	23.2	46.5	.372
		19.60	16.00	12.57	3.60	7.00	3.43	15.66	1/2/2	64.1	8.1	30.6	.466	3.784	21.5	230.4	-20.5	128.2D	1.299
5- 250	5- 331.2	.418	86.6	16.6	-2.9	1.051	112.9	.405	1.154	262.9	394.7	.687	1.622D	99.8	1.378	-.6	-2.8	301.8	.304
5- 331.2	5- 510	.304	306.0	-11.3	-2.5	1.390	81.0	.422	1.199	30.7	164.4	.694D	1.705A	100.8	.609	2.5	-6.2	214.6	.197
5- 510	5- 770	.149	140.1	16.8	.2	.626	99.4	.383	1.229	195.9	440.8	.758	1.700D	109.6	1.100	1.8	24.4	54.8	.384
		16.17	11.98	8.85	4.19	7.58	3.14	15.92	1/1/2	47.4	6.0	9.5	.650	12.121	64.1	227.9	63.0	111.2D	7.230
5- 260	5- 338.4	.475	95.0	18.7	-2.3	1.083	115.8	.468	1.257	265.9	399.8	.669	1.845D	102.4	1.405	-1.4	-5.3	308.6	.367
5- 338.4	5- 510	.367	304.8	-7.8	-2.1	1.386	77.0	.440	1.180	43.9	166.0	.661D	1.699A	100.5	.598	1.9	-7.0	211.0	.200
5- 510	5- 780	.142	153.7	13.5	.5	.612	96.4	.393	1.204	190.2	445.2	.731	1.677D	110.8	1.095	1.7	25.5	63.4	.399
		17.41	13.14	10.15	4.27	7.66	2.99	16.25	1/1/2	50.5	4.4	4.6	.446	24.962	145.6	217.8	-34.2	68.7L	10.679
5- 270	5- 344.9	.541	103.8	20.1	-1.5	1.125	118.7	.542	1.423	268.8	403.5	.652	2.195D	105.0	1.439	-2.2	-6.9	315.8	.438
5- 344.9	5- 510	.438	305.9	-5.8	-1.9	1.381	73.0	.463	1.157	56.1	167.9	.621D	1.693A	100.1	.583	1.5	-7.0	206.8	.206
5- 510	5- 790	.143	168.3	8.8	.8	.599	93.1	.407	1.183	184.6	449.8	.701	1.664D	112.1	1.089	1.6	26.3	72.0	.419
		19.18	14.77	11.76	4.41	7.80	3.02	16.68	1/1/2	54.1	4.0	10.0	.314	11.527	171.2	231.4	4.8	65.5L	3.306
5- 280	5- 351.1	.616	112.8	20.6	-.7	1.176	121.7	.628	1.705	271.4	406.6	.634	2.776D	107.7	1.480	-2.9	-7.9	323.5	.515
5- 351.1	5- 510	.515	308.5	-4.6	-1.8	1.375	68.8	.494	1.129	68.2	169.9	.571D	1.686A	99.6	.564	1.1	-6.4	202.1	.216
5- 510	5- 800	.156	182.2	3.5	1.1	.587	89.4	.428	1.163	179.2	454.6	.666	1.661	113.8	1.084	1.6	26.8	80.8	.444
		21.56	16.92	13.64	4.64	8.03	3.28	17.25	1/1/2	58.6	4.9	15.4	.226	7.450	166.2	242.8	10.1	70.2L	1.460

MARS ARRIVAL DATE = 2450520 (12 MAR 1997)

5- 160	5- 299.1	.285	84.7	-41.4	-16.2	.921	89.8	.157	.860	178.8	346.6	.725A	.995	88.2	1.260	16.0	81.1	344.5	.351
5- 299.1	5- 520	.351	339.0	51.2	11.4	1.384	95.4	.401	1.194	340.9	530.2	.716	1.673A	96.4	.609	-10.7	-40.8	190.5	.208
5- 520	5- 680	.388	90.7	31.1	3.9	.820	119.8	.507	1.867	251.2	403.1	.920	2.813D	104.2	1.201	-3.2	-11.4	.2	.358
		19.69	15.25	6.10	4.44	7.83	9.15	15.38	1/2/1	63.5	31.2	30.0	.488	3.883	91.1	337.8	6.2	120.2D	1.396

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450520
12 MAR 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / APHEL / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 160	5- 317.6	.185	68.2	80.7	9.8	.920	89.3	.159	.859	176.4	374.4	.722	.996	92.0	1.263	-10.9	-70.8	296.0	.253
5- 317.6	5- 520	.253	316.2	-30.7	-5.3	1.388	87.7	.398	1.202	8.2	168.0	.723D	1.681A	97.7	.613	5.6	4.7	217.7	.184
5- 520	5- 680	.388	90.7	31.1	3.9	.820	119.8	.507	1.867	251.2	403.1	.920	2.813D	104.2	1.201	-3.2	-11.4	.2	.358
		17.53	13.63	4.48	3.90	7.30	9.15	15.38	2/1/1	54.5	31.2	41.7	.939	2.811	81.6	147.8	-37.7	85.7L	1.700
5- 170	5- 323.2	.180	64.7	78.3	9.4	.917	90.6	.163	.858	183.3	380.3	.719	.998D	92.8	1.264	-11.0	-68.5	295.2	.259
5- 323.2	5- 520	.259	310.5	-20.6	-3.8	1.388	85.0	.403	1.198	17.3	168.1	.715D	1.681A	97.8	.611	3.9	-.5	215.7	.180
5- 520	5- 690	.363	94.1	34.8	5.6	.793	118.4	.477	1.729	246.0	407.5	.904	2.554D	104.9	1.185	-4.6	-13.6	7.0	.365
		16.68	12.88	4.42	3.81	7.20	8.45	15.51	2/1/1	53.4	29.3	40.8	.898	2.422	83.1	139.9	-44.4	74.2L	1.277
5- 220	5- 254.0	.453	73.8	19.6	1.6	.936	116.3	.455	.908	230.7	268.8	.495A	1.320D	65.3	1.285	2.0	4.2	322.8	.542
5- 254.0	5- 520	.542	313.6	4.3	1.9	1.361	112.9	.503	1.111	286.4	547.0	.553	1.669	83.0	.554	.3	7.5	164.8	.197
5- 520	5- 740	.224	112.7	17.9	-1.5	.683	109.3	.394	1.350	217.7	428.3	.819	1.882D	107.7	1.126	3.0	21.5	29.8	.370
		16.67	14.49	9.64	4.18	7.58	4.84	15.61	1/2/2	102.6	13.7	9.2	.204	12.532	175.7	237.3	1.2	85.7L	2.358
5- 230	5- 283.1	.526	68.2	17.2	-2.6	1.080	118.3	.501	1.237	260.2	303.1	.618A	1.857D	71.8	1.394	1.0	2.8	317.5	.466
5- 283.1	5- 520	.466	321.7	5.6	2.0	1.366	109.0	.468	1.130	297.0	543.2	.601	1.659	87.2	.568	-.2	1.5	174.9	.175
5- 520	5- 750	.201	119.3	18.9	-.7	.665	107.0	.388	1.308	211.9	432.4	.800	1.815D	108.3	1.118	2.3	22.0	38.2	.373
		19.36	15.67	11.39	3.69	7.09	4.28	15.70	1/2/2	91.0	10.6	5.0	.277	22.780	34.3	232.5	-33.9	101.9D	6.031
5- 240	5- 278.9	.572	66.9	15.5	-3.3	1.194	117.8	.610	1.830	282.4	340.8	.713A	2.947D	82.7	1.484	.1	.5	303.6	.357
5- 278.9	5- 520	.357	333.1	10.6	2.8	1.374	102.9	.427	1.162	315.5	536.6	.666	1.659A	92.5	.589	-1.5	-10.6	190.4	.162
5- 520	5- 760	.180	127.6	18.7	-.2	.649	104.6	.387	1.271	205.9	436.5	.779	1.762D	109.0	1.110	2.0	23.1	46.6	.380
		19.75	16.33	12.53	3.42	6.82	3.80	15.83	1/2/2	72.0	8.1	31.0	.472	3.744	20.0	230.2	-19.1	128.9D	1.295
5- 250	5- 331.4	.417	86.7	16.6	-2.9	1.050	112.9	.404	1.151	262.7	394.9	.686	1.617D	99.8	1.378	-.8	-2.8	302.0	.304
5- 331.4	5- 520	.304	305.6	-12.4	-2.7	1.387	80.9	.416	1.185	31.4	169.1	.693D	1.678A	97.6	.603	2.8	-4.1	212.3	.180
5- 520	5- 770	.162	137.9	17.4	.2	.633	101.9	.389	1.239	200.1	440.6	.757	1.721D	109.9	1.103	1.7	24.3	55.0	.389
		16.05	12.24	8.82	3.81	7.21	3.42	16.03	1/1/2	54.8	6.0	10.3	.651	11.162	70.1	233.7	68.6	106.1D	6.613
5- 260	5- 336.7	.473	95.2	18.7	-2.2	1.081	115.7	.465	1.251	265.8	400.0	.669	1.833D	102.4	1.404	-1.4	-5.3	308.9	.367
5- 336.7	5- 520	.367	304.7	-8.4	-2.3	1.383	76.9	.435	1.167	44.5	170.5	.660D	1.674A	97.1	.592	1.9	-5.2	208.2	.184
5- 520	5- 780	.150	150.3	14.7	.5	.618	99.0	.396	1.211	194.2	444.9	.732	1.690D	110.8	1.097	1.8	25.4	63.6	.402
		17.17	13.27	10.11	3.90	7.30	3.16	16.30	1/1/2	57.9	4.4	5.2	.447	22.025	142.9	218.2	-36.9	70.3L	9.397
5- 270	5- 345.3	.538	104.0	20.1	-1.5	1.122	118.6	.538	1.410	268.4	403.8	.651	2.169D	105.0	1.437	-2.2	-7.0	316.2	.436
5- 345.3	5- 520	.436	306.1	-6.2	-2.0	1.378	73.0	.459	1.145	56.7	172.2	.619D	1.670A	96.5	.578	1.5	-5.4	203.7	.191
5- 520	5- 790	.146	164.4	10.5	.8	.604	95.7	.407	1.187	188.5	449.3	.704	1.669D	112.0	1.090	1.5	26.2	72.3	.418
		18.82	14.76	11.68	4.06	7.46	3.08	16.66	1/1/2	61.9	3.8	10.1	.316	11.404	172.0	231.7	3.2	66.0L	3.285
5- 280	5- 351.6	.611	113.1	20.7	-.6	1.172	121.6	.622	1.676	271.0	407.0	.633	2.718D	107.7	1.476	-2.9	-8.0	323.9	.513
5- 351.6	5- 520	.513	308.8	-4.8	-1.9	1.372	68.9	.490	1.118	68.6	173.9	.571D	1.666A	95.8	.560	1.1	-4.9	198.9	.203
5- 520	5- 800	.152	178.8	5.1	1.1	.591	92.1	.424	1.165	182.9	453.9	.672	1.658D	113.5	1.084	1.5	26.6	81.1	.439
		21.06	16.73	13.53	4.32	7.72	3.21	17.13	1/1/2	66.5	4.6	15.3	.228	7.493	166.3	243.2	9.8	70.5L	1.482

MARS ARRIVAL DATE = 2450530 (22 MAR 1997)

5- 160	5- 297.2	.234	83.9	-38.9	-13.0	.920	89.8	.158	.859	179.0	343.7	.724A	.995	87.8	1.260	12.8	75.3	338.2	.288
5- 297.2	5- 530	.288	337.4	32.8	6.5	1.361	96.2	.398	1.185	338.2	535.0	.713	1.656A	93.3	.606	-5.8	-29.3	193.8	.168
5- 530	5- 680	.431	93.6	29.7	3.4	.856	122.4	.564	2.093	256.0	403.5	.912	3.273D	105.4	1.225	-2.7	-9.2	359.2	.391
		19.11	15.56	5.21	3.55	6.95	10.36	16.07	1/2/1	67.3	30.6	42.5	.724	2.759	90.2	337.3	6.8	118.7D	1.273
5- 160	5- 316.2	.209	59.5	83.0	11.4	.920	89.4	.158	.859	176.9	372.6	.723	.996	91.7	1.263	-12.4	-74.6	294.2	.281
5- 316.2	5- 530	.281	317.3	-43.3	-8.0	1.386	88.3	.393	1.193	6.1	172.5	.725D	1.661A	94.8	.611	8.2	14.5	217.8	.186
5- 530	5- 680	.431	93.6	29.7	3.4	.856	122.4	.564	2.093	256.0	403.5	.912	3.273D	105.4	1.225	-2.7	-9.2	359.2	.391
		19.10	15.17	4.82	3.93	7.33	10.36	16.07	2/1/1	64.1	30.6	32.9	.759	3.531	82.0	149.5	-29.3	88.6L	1.920
5- 170	5- 323.1	.183	64.0	78.6	9.5	.917	90.7	.163	.859	183.4	380.1	.719	.998D	92.8	1.264	-11.2	-68.9	294.9	.262
5- 323.1	5- 530	.262	310.3	-24.7	-4.5	1.386	85.1	.398	1.189	17.1	172.6	.716D	1.661A	94.9	.608	4.6	3.7	214.0	.169
5- 530	5- 690	.400	96.8	31.9	4.6	.825	120.9	.525	1.885	250.7	407.8	.896	2.875D	106.0	1.205	-3.7	-9.6	5.4	.391
		17.51	13.94	4.45	3.57	6.97	9.49	16.07	2/1/1	61.3	27.6	45.2	.878	2.602	83.0	140.0	-42.1	73.9L	1.407
5- 180	5- 327.9	.191	61.7	76.6	9.8	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.6	1.265	-11.9	-67.8	294.5	.280
5- 327.9	5- 530	.280	307.1	-17.6	-3.5	1.385	82.8	.404	1.183	25.1	173.0	.704D	1.661A	94.7	.604	3.5	.2	211.7	.168
5- 530	5- 700	.375	101.0	37.2	7.3	.796	119.4	.492	1.731	245.3	412.0	.680	2.583D	106.6	1.187	-6.3	-14.0	13.4	.399
		16.90	13.37	4.57	3.53	6.94	8.80	16.25	2/1/1	61.6	27.7	50.8	.766	2.330	84.2	135.0	-46.5	67.0L	1.020
5- 220	5- 253.0	.466	74.5	19.9	1.5	.933	117.1	.469	.902	229.5	266.0	.479A	1.324D	64.2	1.282	2.0	4.2	322.6	.564
5- 253.0	5- 530	.564	313.5	4.2	1.9	1.361	114.0	.514	1.110	283.8	550.4	.539	1.681	79.4	.557	.3	8.8	161.9	.210
5- 530	5- 740	.249	114.0	17.5	-1.7	.699	111.8	.413	1.383	222.2	428.4	.812	1.953D	108.4	1.134	3.3	21.8	29.6	.386
		19.91	15.40	9.95	4.50	7.89	5.46	15.96	1/2/2	110.3	13.9	9.1	.189	12.655	175.8	237.1	.6	87.2L	2.200
5- 230	5- 262.5	.534	68.4	17.3	-2.6	1.082	118.8	.508	1.242	259.8	301.7	.611A	1.873D	71.2	1.395	1.0	2.7	317.6	.478
5- 262.5	5- 530	.478	321.9	5.3	2.0	1.365	109.6	.474	1.128	295.2	546.7	.593	1.663	84.0	.570	-.2	3.3	171.5	.180
5- 530	5- 750	.223	120.0	18.7	-.8	.678	109.5	.404	1.332	216.3	432.4	.794	1.869D	108.9	1.124	2.4	22.1	38.2	.387
		20.20	16.39	11.58	3.81	7.21	4.81	15.98	1/2/2	99.5	10.7	5.0	.263	22.806	31.5	232.2	-31.2	101.7D	5.727
5- 240	5- 278.6	.574	66.9	15.5	-3.3	1.196	117.9	.613	1.841	282.4	340.3	.712A	2.969D	82.5	1.485	.1	.5	303.8	.360
5- 278.6	5- 530	.360	333.4	9.8	2.6	1.373	103.2	.427	1.158	314.5	540.6	.663	1.652	89.6	.589	-1.4	-8.5	186.6	.158
5- 530	5- 760	.199	127.4	18.8	-.2	.659	107.0	.398	1.288	210.3	436.4	.775	1.802D	109.5	1.115	2.0	23.1	46.7	.390
		20.15	16.83	12.59	3.33	6.73	4.24	16.05	1/2/2	80.7	8.1	30.9	.464	3.754	18.4	230.2	-17.6	129.0D	1.279
5- 250	5- 331.7	.416	86.8	16.6	-2.9	1.049	112.9	.403	1.149	262.5	395.1	.686	1.611D	99.9	1.377	-.6	-2.8	302.2	.304
5- 331.7	5- 530	.304	305.5	-13.8	-3.0	1.384	80.9	.411	1.176	31.7	173.4	.692D	1.660A	94.5	.601	2.8	-1.6	209.7	.168
5- 530	5- 770	.178	136.4	17.8	.2	.642	104.4	.397	1.251	204.3	440.5	.754	1.749D	110.2	1.107	1.7	24.2	55.2	.397
		16.11	12.56	8.79	3.55	6.95	3.77	16.19	1/1/2	62.6	5.9	11.5	.651	9.980	73.6	239.7	71.5	106.6D	5.849
5- 260	5- 339.1	.471	95.4	18.7	-2.2	1.079	115.6	.463	1.244	265.3	400.3	.668	1.820D	102.5	1.402	-1.4	-5.4	309.3	.366
5- 339.1	5- 530	.366	305.0	-9.0	-2.5	1.381	76.9	.431	1.158	44.9	174.7	.659D	1.657A	94.0	.590	2.0	-3.3	205.2	.173
5- 530	5- 780	.162	147.5	15.6	.5	.625	101.5	.401	1.220	198.3	444.6	.731	1.708D	111.0	1.099	1.6	25.3	63.8	.406
		17.12	13.47	10.06	3.65	7.05	3.42	16.39	1/1/2	65.9	4.3	5.6	.448	20.305	136.8	218.4	-41.0	72.4L	8.649
5- 270	5- 345.7	.535	104.2	20.2	-1.4	1.119	118.5	.534	1.396	268.0	404.2	.651	2.142D	105.1	1.434	-2.2	-7.1	316.7	.435
5- 345.7	5- 530	.435	306.6	-6.5	-2.2	1.376	73.0	.456	1.137	57.0	176.2	.619D	1.655A	93.2	.576	1.5	-3.7	200.5	.181
5- 530	5- 790	.153	160.6	11.9	.8	.610	98.3	.408	1.192	192.5	448.8	.705	1.679D	112.1	1.092	1.5	26.1	72.6	.419
		18.65	14.82	11.60	3.83	7.23	3.22	16.67	1/1/2	70.0	3.6	10.0	.317	11.515	172.5	231.9	1.8	66.3L	3.337
5- 280	5- 352.1	.607	113.3	20.8	-.6	1.167	121.5	.616	1.646	270.5	407.3	.632	2.659D	107.7	1.473	-2.9	-8.1	324.4	.511
5- 352.1	5- 530	.511	309.6	-5.0	-2.0	1.370	68.9	.487	1.112	66.7	177.6	.571D	1.654A	92.3	.558	1.1	-3.4	195.7	.194
5- 530	5- 800	.153	174.9	6.9	1.1	.596	94.8	.422	1.168	186.7	453.2	.676	1.660D	113.3	1.085	1.4	26.5	81.5	.436
		20.74	16.62	13.41	4.12	7.52	3.21	17.06	1/1/2	74.4	4.2	15.1	.230	7.624	166.3	243.6	9.7	70.6L	1.525

MARS ARRIVAL DATE = 2450540 (1 APR 1997)

5- 160	5- 296.6	.223	83.7	-38.1	-12.3	.920	89.8	.158	.859	179.0	342.9	.723A	.995	87.7	1.260	12.1	73.8	337.5	.276
5- 296.6	5- 540	.276	337.7	26.2	5.1	1.380	96.5	.397	1.179	337.0	539.1	.711	1.647A	90.6	.606	-4.4	-24.3	191.9	.156
5- 540	5- 680	.482	96.6	28.5	3.1	.900	124.9	.634	2.468	260.6	403.6	.903	4.033D	106.7	1.254	-2.2	-7.4	358.5	.431
		20.09	16.81	5.04	3.28	6.69	11.77	16.94	1/2/1	74.6	30.3	47.6	.791	2.478	89.9	157.8	40.0	118.0D	1.168
5- 170	5- 322.7	.189	62.2	79.4	9.9	.917	90.7	.163	.859	183.6	379.7	.719	.998D	92.7	1.264	-11.6	-70.0	294.2	.269
5- 322.7	5- 540	.269	310.7	-30.8	-5.7	1.384	85.4	.394	1.183	16.3	176.7	.717D	1.646A	92.1	.608	5.7	9.5	212.6	.165
5- 540	5- 690	.444	99.6	30.0	3.9	.863	123.5	.583	2.125	255.5	408.0	.887	3.363D	107.3	1.230	-2.9	-6.9	4.4	.425
		18.74	15.26	4.54	3.48	6.88	10.72	16.81	2/1/1	69.5	26.8	40.3	.830	2.904	82.6	141.1	-38.4	74.2L	1.580
5- 180	5- 327.8	.192	61.6	76.7	9.6	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.8	1.265	-11.9	-67.9	294.4	.281
5- 327.8	5- 540	.281	307.3	-20.6	-4.1	1.384	83.0	.401	1.177	24.8	177.1	.705D	1.648A	92.0	.604	4.0	3.8	209.4	.160
5- 540	5- 700	.411	103.2	32.9	5.5	.829	121.9	.540	1.892	249.9	412.2	.871	2.914D	107.8	1.208	-4.4	-8.3	11.4	.423
		17.74	14.37	4.58	3.37	6.78	9.79	16.76	2/1/1	69.6	24.8	48.0	.762	2.457	83.9	135.7	-45.0	66.7L	1.111
5- 220	5- 251.8	.484	75.4	20.4	1.4	.928	118.2	.487	.894	228.1	262.7	.459A	1.330D	62.7	1.279	2.1	4.1	322.4	.593
5- 251.8	5- 540	.593	313.4	4.0	1.9	1.361	115.4	.530	1.110	280.6	553.5	.522	1.698	75.6	.560	.4	9.8	159.8	.229
5- 540	5- 740	.277	115.6	16.9	-2.1	.717	114.3	.435	1.425	226.7	428.4	.805	2.045D	109.2	1.144	3.8	22.4	29.4	.405
		21.49	16.53	10.36	4.96	8.34	6.17	16.38	1/2/2	116.9	14.3	9.0	.171	12.769	175.9	238.9	-.1	88.9L	2.011

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450540
1 APR 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
5- 230	5- 261.6	.544	68.8	17.6	-2.5	1.082	119.4	.516	1.243	258.8	299.3	.601A	1.884D	70.2	1.395	1.0	2.7	317.7	.497
5- 261.6	5- 540	.497	321.9	5.1	2.0	1.365	110.6	.483	1.127	292.8	550.2	.582	1.671	80.7	.572	-.1	4.8	168.2	.191
5- 540	5- 750	.248	121.1	18.5	-.9	.694	112.0	.422	1.563	220.7	432.4	.788	1.937D	109.6	1.132	2.5	22.2	38.3	.402
		21.31	17.26	11.84	4.05	7.44	5.42	16.32	1/2/2	107.4	10.7	4.8	.244	23.918	29.5	232.0	-29.2	100.9D	5.583
5- 240	5- 277.8	.581	66.9	15.6	-3.3	1.199	118.1	.621	1.872	282.5	339.1	.710A	3.034D	82.0	1.488	.1	.5	304.3	.369
5- 277.8	5- 540	.369	333.7	8.8	2.4	1.372	103.7	.430	1.154	312.7	544.5	.658	1.650	86.6	.590	-1.2	-6.1	162.6	.156
5- 540	5- 760	.221	127.7	18.7	-.2	.673	109.6	.413	1.311	214.7	436.3	.770	1.852D	110.1	1.121	2.0	23.0	46.8	.403
		20.84	17.52	12.75	3.33	6.73	4.77	16.33	1/2/2	89.8	8.1	30.4	.442	3.816	16.8	230.3	-16.1	128.1D	1.246
5- 250	5- 331.9	.415	86.9	16.6	-2.9	1.048	112.8	.402	1.146	262.3	395.2	.686	1.606D	99.9	1.376	-.6	-2.8	302.4	.304
5- 331.9	5- 540	.304	305.8	-15.5	-3.4	1.383	81.0	.406	1.170	31.7	177.5	.692D	1.648A	91.7	.600	3.1	1.2	207.0	.160
5- 540	5- 770	.197	135.7	18.0	.2	.653	106.9	.408	1.268	208.6	440.3	.750	1.785D	110.6	1.112	1.7	24.1	55.3	.406
		16.35	12.97	8.77	3.38	6.78	4.20	16.40	1/1/2	70.6	5.9	13.1	.652	8.746	75.3	245.0	72.6	106.2D	5.048
5- 260	5- 339.5	.468	95.6	18.8	-2.2	1.077	115.5	.460	1.236	264.9	400.6	.668	1.805D	102.5	1.401	-1.4	-5.4	309.7	.366
5- 339.5	5- 540	.366	305.5	-9.8	-2.6	1.379	76.9	.428	1.153	47.1	178.6	.659D	1.647A	91.0	.590	2.1	-1.3	202.0	.166
5- 540	5- 780	.177	145.5	16.2	.6	.635	104.1	.408	1.231	202.5	444.3	.729	1.733D	111.3	1.103	1.5	25.1	64.0	.412
		17.23	13.74	10.00	3.49	6.89	3.75	16.53	1/1/2	74.0	4.2	6.0	.450	19.149	133.2	218.3	-46.6	75.3L	8.159
5- 270	5- 346.3	.531	104.5	20.2	-1.4	1.116	118.4	.529	1.381	267.6	404.5	.650	2.112D	105.1	1.432	-2.2	-7.2	317.1	.434
5- 346.3	5- 540	.434	307.4	-6.9	-2.3	1.375	73.0	.454	1.133	57.0	179.9	.619D	1.647A	90.1	.576	1.5	-2.0	197.3	.175
5- 540	5- 790	.163	157.4	13.1	.8	.618	101.0	.412	1.200	196.5	448.5	.705	1.694D	112.2	1.095	1.4	25.9	72.9	.422
		16.64	14.94	11.51	3.70	7.10	3.43	16.74	1/1/2	78.0	3.4	9.7	.319	11.853	172.8	232.1	.3	66.7L	3.466
5- 280	5- 352.7	.602	113.6	20.8	-.5	1.162	121.3	.609	1.615	270.0	407.7	.632	2.599D	107.7	1.469	-3.0	-8.3	325.0	.509
5- 352.7	5- 540	.509	310.6	-5.2	-2.1	1.369	69.0	.485	1.109	68.6	181.0	.571D	1.647	89.0	.560	1.1	-2.1	192.7	.189
5- 540	5- 800	.157	171.0	8.5	1.1	.602	97.6	.422	1.173	190.6	452.7	.678	1.667D	113.3	1.087	1.4	26.3	81.8	.435
		20.59	16.58	13.28	4.01	7.41	3.30	17.04	1/1/2	82.2	3.9	14.7	.232	7.835	166.2	244.0	9.8	70.7L	1.586

MARS ARRIVAL DATE = 2450550 (11 APR 1997)

5- 160	5- 296.4	.219	83.6	-37.8	-12.0	.920	89.8	.158	.859	179.0	342.6	.723A	.995	87.6	1.260	11.9	73.2	337.3	.271
5- 296.4	5- 550	.271	338.4	22.1	4.3	1.379	96.7	.396	1.176	336.1	543.0	.710	1.642	88.0	.608	-3.7	-20.5	189.2	.150
5- 550	5- 680	.540	99.5	27.6	2.8	.953	127.4	.720	3.198	265.1	403.7	.895	5.501D	108.1	1.291	-1.9	-6.0	358.2	.478
		21.56	18.40	4.98	3.16	6.57	13.42	18.03	1/2/1	82.6	30.3	51.1	.818	2.319	89.6	158.9	42.3	117.9D	1.080
5- 170	5- 303.4	.236	81.3	-38.1	-13.0	.920	91.5	.159	.863	187.9	352.7	.726A	1.000D	89.0	1.263	12.2	76.2	325.5	.275
5- 303.4	5- 550	.275	335.2	38.3	7.1	1.381	93.9	.389	1.181	345.9	541.8	.721	1.641	88.9	.611	-6.7	-31.8	187.3	.162
5- 550	5- 690	.496	102.5	28.5	3.4	.908	126.0	.653	2.530	259.8	408.0	.878	4.183D	108.7	1.260	-2.3	-4.9	3.8	.466
		20.83	17.41	5.24	3.42	6.82	12.17	17.75	1/2/1	70.9	26.5	38.2	.796	3.057	87.1	159.4	32.5	113.9D	1.637
5- 170	5- 321.5	.212	55.5	81.7	11.5	.917	90.8	.162	.859	184.1	378.3	.720	.999D	92.5	1.264	-13.0	-73.5	291.1	.297
5- 321.5	5- 550	.297	311.6	-43.3	-8.5	1.383	86.1	.390	1.180	13.9	180.7	.719D	1.640	89.6	.610	6.4	19.3	212.9	.175
5- 550	5- 690	.496	102.5	28.5	3.4	.908	126.0	.653	2.530	259.8	408.0	.878	4.183D	108.7	1.260	-2.3	-4.9	3.8	.466
		20.73	17.03	4.87	3.70	7.10	12.17	17.75	2/1/1	78.2	26.5	31.7	.682	3.666	82.0	143.9	-30.1	76.5L	1.817
5- 180	5- 327.7	.194	61.2	77.0	10.0	.914	92.2	.169	.859	190.8	385.1	.714	1.005D	93.5	1.265	-12.0	-68.3	294.1	.283
5- 327.7	5- 550	.283	307.9	-24.7	-4.9	1.383	83.2	.398	1.173	24.0	180.9	.706D	1.640	89.4	.606	4.7	8.2	207.4	.158
5- 550	5- 700	.456	105.8	30.2	4.4	.868	124.5	.598	2.142	254.4	412.2	.861	3.422D	109.1	1.233	-3.3	-4.7	10.2	.456
		18.96	15.64	4.61	3.32	6.72	11.03	17.53	2/1/1	77.6	23.6	44.4	.748	2.647	83.4	137.0	-42.6	66.8L	1.233
5- 240	5- 276.6	.591	66.8	15.7	-3.3	1.206	118.6	.633	1.925	282.4	337.2	.706A	3.145D	81.2	1.493	.1	.5	305.0	.383
5- 276.6	5- 550	.383	333.8	7.9	2.3	1.371	104.6	.436	1.152	310.2	548.3	.650	1.653	83.7	.593	-1.0	-3.6	178.7	.163
5- 550	5- 760	.246	128.6	18.5	-.2	.688	112.1	.430	1.340	219.1	436.2	.764	1.917D	110.7	1.129	2.0	22.9	46.9	.418
		21.83	18.40	13.02	3.43	6.83	5.38	16.67	1/2/2	98.8	8.1	29.6	.410	3.917	15.3	230.5	-14.6	126.4D	1.195
5- 250	5- 332.1	.414	87.0	16.6	-2.9	1.047	112.8	.401	1.144	262.1	395.4	.685	1.602D	99.9	1.376	-.6	-2.8	302.5	.304
5- 332.1	5- 550	.304	306.4	-17.7	-3.9	1.382	81.1	.406	1.167	31.3	181.3	.693D	1.640	89.1	.602	3.5	4.3	204.4	.156
5- 550	5- 770	.219	135.6	18.0	.2	.666	109.5	.421	1.289	212.9	440.1	.746	1.832D	111.2	1.118	1.7	24.0	55.5	.418
		16.76	13.47	8.75	3.29	6.69	4.72	16.66	1/1/2	78.6	5.8	15.3	.652	7.507	76.0	249.4	72.5	106.7D	4.244
5- 260	5- 340.0	.466	95.8	18.8	-2.2	1.074	115.4	.457	1.228	264.5	400.9	.667	1.788D	102.5	1.399	-1.5	-5.5	310.1	.365
5- 340.0	5- 550	.365	306.2	-10.5	-2.9	1.379	76.9	.427	1.150	45.0	182.3	.659D	1.641	88.3	.592	2.3	.7	199.1	.162
5- 550	5- 780	.196	144.3	16.5	.6	.646	106.7	.417	1.246	206.8	444.1	.726	1.766D	111.7	1.107	1.5	25.0	64.2	.421
		17.50	14.09	9.93	3.41	6.81	4.16	16.73	1/1/2	81.9	4.1	6.3	.451	18.158	126.6	218.0	-53.3	78.8L	7.744
5- 270	5- 346.8	.527	104.7	20.3	-1.3	1.112	118.3	.524	1.365	267.1	404.9	.649	2.080D	105.1	1.429	-2.3	-7.3	317.7	.432
5- 346.8	5- 550	.432	308.4	-7.3	-2.4	1.375	73.1	.452	1.131	56.9	183.3	.620D	1.642	87.3	.579	1.6	-.5	194.4	.173
5- 550	5- 790	.177	154.9	13.9	.9	.627	103.6	.418	1.210	200.7	448.1	.704	1.716D	112.4	1.098	1.3	25.7	73.1	.427
		18.78	15.15	11.41	3.64	7.04	3.74	16.86	1/1/2	85.7	3.2	9.2	.322	12.415	172.7	232.2	-1.2	67.0L	5.671
5- 280	5- 353.3	.596	113.9	20.9	-.4	1.157	121.2	.602	1.584	269.4	408.2	.631	2.538D	107.7	1.465	-3.1	-8.5	325.6	.506
5- 353.3	5- 550	.506	311.7	-5.4	-2.1	1.369	69.1	.483	1.109	68.3	184.2	.573D	1.644	86.1	.564	1.1	-.9	190.1	.188
5- 550	5- 800	.165	167.4	9.9	1.1	.610	100.3	.424	1.179	194.6	452.5	.680	1.679D	113.3	1.089	1.3	26.1	82.1	.437
		20.60	16.62	13.14	3.98	7.38	3.48	17.08	1/1/2	89.5	3.6	14.1	.235	8.129	165.8	244.4	10.1	70.8L	1.672

MARS ARRIVAL DATE = 2450560 (21 APR 1997)

5- 180	5- 327.4	.200	59.9	77.8	10.4	.914	92.2	.169	.860	191.0	384.7	.715	1.005D	93.5	1.265	-12.5	-69.3	293.1	.291
5- 327.4	5- 560	.291	308.7	-31.0	-6.3	1.382	83.6	.396	1.172	22.6	184.6	.708D	1.636	87.0	.610	6.0	13.9	206.4	.161
5- 560	5- 700	.508	108.6	28.2	3.7	.915	127.0	.668	2.568	258.8	412.1	.851	4.285D	110.5	1.264	-2.5	-2.4	9.5	.498
		20.59	17.21	4.70	3.36	6.79	12.51	18.52	2/1/1	85.2	23.2	39.3	.709	2.975	82.6	139.1	-38.7	67.2L	1.400
5- 190	5- 332.3	.208	63.3	74.7	10.4	.913	93.8	.177	.862	198.3	390.1	.709	1.015D	94.4	1.267	-12.8	-67.0	294.7	.305
5- 332.3	5- 560	.305	307.1	-20.3	-4.4	1.381	81.3	.404	1.165	30.8	184.9	.694D	1.637	86.7	.606	4.0	7.5	202.2	.156
5- 560	5- 710	.465	112.3	30.4	5.2	.871	125.3	.610	2.142	253.2	416.3	.835	3.449D	110.8	1.235	-3.9	-2.9	16.5	.486
		19.39	16.11	4.81	3.28	6.68	11.30	18.23	2/1/1	86.3	21.1	47.4	.646	2.490	83.8	135.8	-45.6	62.6L	.963
5- 250	5- 324.0	.453	83.7	16.6	-3.1	1.083	114.2	.446	1.256	266.8	389.2	.696	1.815D	98.9	1.402	-.5	-2.4	296.7	.308
5- 324.0	5- 560	.308	310.1	-43.4	-8.8	1.383	85.2	.391	1.176	17.2	184.5	.716D	1.636	87.1	.612	8.6	21.3	210.3	.175
5- 560	5- 770	.244	136.2	17.8	.3	.682	112.1	.438	1.316	217.3	440.0	.740	1.892D	111.8	1.125	1.7	23.8	55.7	.433
		18.66	14.96	9.63	3.70	7.10	5.33	16.99	1/1/2	85.2	5.8	42.6	.632	2.751	75.7	266.8	62.4	116.8D	1.107
5- 250	5- 332.1	.414	87.0	16.6	-2.9	1.047	112.8	.401	1.144	262.1	395.4	.685	1.602D	99.9	1.375	-.6	-2.8	302.5	.304
5- 332.1	5- 560	.304	307.2	-20.7	-4.5	1.382	81.4	.404	1.166	30.4	184.9	.695D	1.637	86.7	.606	4.1	7.7	202.4	.156
5- 560	5- 770	.244	136.2	17.8	.3	.682	112.1	.438	1.316	217.3	440.0	.740	1.892D	111.8	1.125	1.7	23.8	55.7	.433
		17.36	14.08	8.75	3.28	6.68	5.33	16.99	1/1/2	86.2	5.8	18.5	.652	6.234	76.1	253.6	71.6	107.9D	3.413
5- 260	5- 340.5	.462	96.0	18.8	-2.1	1.072	115.3	.453	1.218	264.0	401.3	.666	1.770D	102.6	1.396	-1.5	-5.6	310.6	.364
5- 340.5	5- 560	.364	307.2	-11.4	-3.1	1.379	77.0	.426	1.149	44.8	185.8	.660D	1.639	85.8	.596	2.4	2.5	196.5	.161
5- 560	5- 780	.217	143.8	16.6	.6	.660	109.3	.430	1.266	211.1	443.9	.722	1.809D	112.2	1.113	1.4	24.8	64.4	.432
		17.92	14.53	9.86	3.39	6.80	4.67	16.98	1/1/2	89.5	4.0	6.7	.453	17.092	119.1	217.4	-60.8	82.6L	7.297
5- 270	5- 347.4	.522	105.0	20.3	-1.3	1.107	118.1	.519	1.347	266.5	405.3	.648	2.047D	105.1	1.426	-2.3	-7.5	318.3	.431
5- 347.4	5- 560	.431	309.5	-7.7	-2.5	1.375	73.2	.451	1.131	56.6	186.5	.621D	1.641	84.7	.584	1.6	.7	192.0	.173
5- 560	5- 790	.194	153.1	14.4	.9	.639	106.3	.427	1.224	204.9	447.8	.702	1.746D	112.8	1.102	1.3	25.5	73.3	.435
		19.08	15.43	11.30	3.64	7.05	4.13	17.04	1/1/2	92.9	2.9	8.7	.324	13.210	172.2	232.3	-2.9	67.4L	3.957
5- 280	5- 354.0	.590	114.3	21.0	-.3	1.151	121.0	.594	1.552	268.8	408.6	.630	2.474D	107.8	1.461	-3.1	-8.7	326.3	.504
5- 354.0	5- 560	.504	313.0	-5.7	-2.2	1.370	69.3	.482	1.110	67.9	187.3	.575D	1.645	83.3	.569	1.1	.0	188.1	.189
5- 560	5- 800	.177	164.4	11.0	1.1	.620	103.1	.428	1.189	198.8	451.9	.679	1.698D	113.5	1.092	1.2	25.9	82.3	.441
		20.75	16.74	12.99	4.01	7.41	3.75	17.17	1/1/2	96.3	3.3	13.5	.237	8.515	165.3	244.9	10.7	70.8L	1.781

MARS ARRIVAL DATE = 2450570 (1 MAY 1997)

5- 190	5- 332.3	.209	63.1	74.9	10.5	.913	93.8	.177	.862	198.4	390.1	.709	1.015D	94.4	1.267	-12.9	-67.2	294.4	.307
5- 332.3	5- 570	.307	308.2	-24.5	-5.3	1.382	81.6	.403	1.166	29.6	188.3	.696D	1.636	86.5	.612	4.8	11.3	201.0	.159
5- 570	5- 710	.518	114.9	27.8	4.1	.919	127.9	.680	2.580	257.5	416.1	.825	4.335D	112.2	1.267	-2.7	.1	15.8	.529
		20.98	17.63	4.83	3.35	6.75	12.80	19.25	2/1/1	93.3	20.4	43.6	.638	2.695	83.0	138.0	-43.1	62.8L	1.082
5- 250	5- 328.6	.431	85.5	16.6	-3.0	1.062	113.4	.419	1.188	265.1	392.7	.690	1.686D	99.5	1.367	-.6	-2.6	299.8	.305
5- 328.6	5- 570	.308	309.0	-35.0	-7.3	1.382	83.4	.396	1.171	23.5	186.1	.707D	1.635	84.7	.615	6.9	17.8	205.0	.167
5- 570	5- 770	.272	137.2	17.5	.3	.702	114.8	.458	1.352	221.6	439.8	.733	1.971D	112.6	1.134	1.6	25.6	95.9	.451
		18.66	15.17	9.13	3.51	6.91	6.05	17.40	1/1/2	92.2	5.7	33.5	.644	3.473	76.4	265.4	66.4	113.5D	1.593

STOPOVER TIME = 0 DAYS

1997 OUTBOUND SWINGBY

MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450570
1 MAY 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
5- 250	5- 331.2	.418	86.6	16.6	-2.9	1.051	112.9	.405	1.154	262.8	394.7	.687	1.621D	99.8	1.378	-.6	-2.8	301.8	.304
5- 331.2	5- 570	.304	308.4	-26.9	-5.8	1.382	82.1	.401	1.168	27.9	188.3	.700D	1.636	84.5	.613	5.3	12.8	202.0	.160
5- 570	5- 770	.272	137.2	17.5	.3	.702	114.8	.458	1.352	221.6	439.8	.733	1.971D	112.6	1.134	1.6	23.6	55.9	.451
		18.26	14.89	8.84	3.37	6.78	6.05	17.40	1/1/2	93.0	5.7	24.9	.650	4.630	76.1	260.0	69.5	110.5D	2.359
5- 260	5- 341.1	.459	96.3	18.9	-2.1	1.068	115.2	.449	1.209	263.5	401.7	.666	1.752D	102.6	1.394	-1.5	-5.7	311.1	.363
5- 341.1	5- 570	.363	308.4	-12.4	-3.3	1.379	77.1	.425	1.150	44.4	189.0	.661D	1.639	83.4	.602	2.6	4.0	194.4	.163
5- 570	5- 780	.242	143.9	16.5	.7	.676	112.0	.445	1.291	215.4	443.6	.716	1.866D	112.9	1.120	1.3	24.5	64.6	.446
		18.49	15.06	9.78	3.43	6.84	5.27	17.30	1/1/2	96.6	3.8	7.2	.455	15.824	111.2	216.5	-68.7	87.2L	6.750
5- 270	5- 348.1	.518	105.3	20.4	-1.2	1.103	118.0	.513	1.330	265.9	405.8	.647	2.012D	105.2	1.422	-2.4	-7.6	318.9	.429
5- 348.1	5- 570	.429	310.9	-8.2	-2.7	1.375	73.3	.451	1.133	56.2	189.6	.622D	1.643	82.3	.590	1.7	1.7	190.1	.175
5- 570	5- 790	.215	152.1	14.7	.9	.653	109.1	.438	1.242	209.2	447.5	.698	1.785D	113.2	1.107	1.2	25.3	73.5	.445
		19.51	15.81	11.18	3.70	7.10	4.62	17.27	1/1/2	99.6	2.7	8.0	.327	14.310	171.1	232.3	-5.0	67.6L	4.347
5- 280	5- 354.7	.584	114.6	21.1	-.2	1.145	120.8	.586	1.519	268.1	409.1	.629	2.410D	107.8	1.456	-3.2	-8.9	327.0	.501
5- 354.7	5- 570	.501	314.5	-5.9	-2.3	1.371	69.5	.482	1.112	67.3	190.1	.577D	1.648	80.9	.577	1.1	.6	186.6	.193
5- 570	5- 800	.194	162.1	11.8	1.2	.632	105.8	.436	1.201	203.0	451.5	.678	1.724D	113.8	1.096	1.1	25.7	82.5	.447
		21.04	16.95	12.83	4.09	7.48	4.11	17.32	1/1/2	102.4	3.0	12.8	.240	8.995	164.5	245.4	11.5	70.8L	1.917
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 240	5- 303.4	.442	71.8	14.6	-3.4	1.094	113.1	.438	1.288	273.3	370.4	.723	1.853D	93.2	1.406	.1	.6	291.1	.248
5- 303.4	5- 580	.248	339.2	22.1	3.9	1.380	94.8	.391	1.179	343.0	552.5	.718	1.640	82.2	.625	-3.7	-18.3	183.7	.152
5- 580	5- 760	.341	133.5	17.1	-.4	.756	120.1	.506	1.498	232.2	435.7	.741	2.255D	113.5	1.163	2.2	22.7	47.4	.483
		20.45	17.25	9.38	3.20	6.60	7.88	18.16	1/2/2	101.5	8.2	51.5	.979	2.303	28.2	230.0	-24.9	153.5D	1.276
5- 240	5- 308.1	.423	73.2	14.4	-3.4	1.076	112.5	.414	1.228	270.4	375.0	.719	1.737D	94.4	1.393	.1	.6	290.9	.245
5- 308.1	5- 580	.245	335.1	30.1	5.1	1.381	92.8	.387	1.181	349.9	552.0	.723	1.638	82.6	.626	-5.0	-23.8	182.8	.155
5- 580	5- 760	.341	133.5	17.1	-.4	.756	120.1	.506	1.498	232.2	435.7	.741	2.255D	113.5	1.163	2.2	22.7	47.4	.483
		20.10	16.83	8.95	3.27	6.67	7.88	18.16	1/2/2	99.6	8.2	51.2	1.001	2.313	39.3	233.1	-34.5	145.2D	1.315
5- 260	5- 341.7	.456	96.5	18.9	-2.1	1.065	115.1	.445	1.199	262.9	402.1	.665	1.733D	102.7	1.392	-1.5	-5.8	311.7	.363
5- 341.7	5- 580	.363	309.8	-13.6	-3.6	1.380	77.3	.425	1.152	43.9	192.1	.662D	1.642	81.3	.609	2.8	5.3	192.9	.167
5- 580	5- 780	.270	144.6	16.2	.7	.695	114.8	.464	1.324	219.8	443.4	.710	1.939D	113.6	1.129	1.3	24.8	64.9	.463
		19.21	15.69	9.70	3.52	6.92	5.99	17.69	1/1/2	102.9	3.7	8.0	.457	14.269	103.2	214.6	-76.6	91.8D	6.070
5- 270	5- 348.8	.513	105.7	20.5	-1.1	1.098	117.8	.507	1.311	265.2	406.3	.646	1.975D	105.2	1.419	-2.4	-7.9	319.7	.427
5- 348.8	5- 580	.427	312.4	-8.7	-2.8	1.376	73.5	.451	1.135	55.7	192.5	.624D	1.647	80.1	.598	1.7	2.3	188.8	.180
5- 580	5- 790	.240	151.8	14.6	1.0	.669	111.8	.452	1.265	213.5	447.2	.693	1.837D	113.8	1.114	1.1	25.0	73.8	.458
		20.08	16.28	11.06	3.80	7.20	5.22	17.58	1/1/2	105.6	2.4	7.3	.329	15.795	169.5	232.3	-7.4	68.4L	4.873
5- 280	5- 355.5	.578	115.0	21.2	-.1	1.139	120.7	.578	1.487	267.4	409.7	.627	2.346D	107.8	1.451	-3.3	-9.2	327.8	.498
5- 355.5	5- 580	.498	316.1	-6.1	-2.4	1.372	69.6	.481	1.116	66.7	192.8	.579D	1.653	78.6	.585	1.1	.9	185.7	.198
5- 580	5- 800	.214	160.5	12.2	1.2	.646	108.6	.446	1.217	207.2	451.1	.675	1.759D	114.2	1.101	1.0	25.4	82.8	.457
		21.46	17.25	12.67	4.21	7.60	4.58	17.54	1/1/2	108.0	2.7	12.0	.242	9.586	163.4	246.1	12.6	70.7L	2.082
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																			
5- 240	5- 303.5	.441	71.8	14.6	-3.4	1.093	113.1	.438	1.287	273.3	370.6	.723	1.850D	93.2	1.406	.1	.6	291.1	.248
5- 303.5	5- 590	.248	341.1	19.0	3.4	1.381	95.1	.393	1.181	341.7	555.7	.717	1.645	80.3	.632	-3.3	-15.6	182.8	.156
5- 590	5- 760	.382	135.7	16.4	-.5	.787	122.8	.541	1.594	236.5	435.3	.731	2.456D	114.7	1.180	2.3	22.7	47.7	.513
		21.63	18.34	9.37	3.29	6.69	8.98	18.87	1/2/2	108.0	8.4	52.4	.979	2.264	23.8	229.5	-21.0	157.4D	1.238
5- 240	5- 312.2	.407	74.6	14.3	-3.4	1.061	111.9	.395	1.182	267.6	378.7	.715	1.648D	95.3	1.382	.1	.6	291.6	.244
5- 312.2	5- 590	.244	332.8	32.6	5.5	1.382	91.5	.387	1.183	354.7	554.9	.725	1.640	81.0	.633	-5.6	-24.8	181.1	.161
5- 590	5- 760	.382	135.7	16.4	-.5	.787	122.8	.541	1.594	236.5	435.3	.731	2.456D	114.7	1.180	2.3	22.7	47.7	.513
		20.97	17.57	8.60	3.40	6.80	8.98	18.87	1/2/2	104.7	8.4	50.2	1.009	2.357	43.7	234.9	-38.4	141.6D	1.368
5- 260	5- 342.4	.452	96.8	19.0	-2.0	1.062	114.9	.441	1.188	262.4	402.6	.664	1.713D	102.7	1.389	-1.6	-5.9	312.3	.362
5- 342.4	5- 590	.362	311.3	-15.1	-4.0	1.381	77.5	.425	1.155	43.2	195.1	.664D	1.647	79.4	.617	3.1	6.4	192.2	.175
5- 590	5- 780	.302	145.8	15.8	.8	.718	117.5	.487	1.369	224.1	443.1	.703	2.035D	114.5	1.139	1.2	24.0	65.2	.484
		20.08	16.44	9.61	3.64	7.04	6.82	18.18	1/1/2	108.6	3.6	9.2	.460	12.513	95.9	209.6	-83.9	96.2D	5.293
5- 270	5- 349.6	.507	106.1	20.6	-1.0	1.093	117.6	.500	1.291	264.5	406.9	.645	1.938D	105.2	1.415	-2.5	-8.1	320.5	.425
5- 349.6	5- 590	.425	314.0	-9.2	-2.9	1.377	73.6	.451	1.139	55.1	195.3	.625D	1.653	78.1	.607	1.8	2.7	188.2	.186
5- 590	5- 790	.268	152.1	14.4	1.1	.689	114.6	.470	1.296	217.8	446.9	.687	1.904D	114.6	1.123	1.0	24.7	74.0	.475
		20.79	16.85	10.92	3.94	7.33	5.93	17.96	1/1/2	111.0	2.2	6.4	.332	17.823	167.0	232.3	-10.5	69.1L	5.391
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																			
5- 260	5- 343.0	.448	97.1	19.0	-2.0	1.059	114.8	.438	1.179	261.8	403.0	.663	1.694D	102.8	1.387	-1.6	-6.1	312.9	.361
5- 343.0	5- 600	.361	312.9	-16.9	-4.5	1.382	77.7	.426	1.159	42.3	197.9	.666D	1.653	77.6	.626	3.4	7.5	192.2	.180
5- 600	5- 780	.338	147.4	15.2	.9	.745	120.3	.514	1.429	228.4	442.7	.694	2.164D	115.6	1.153	1.1	23.7	65.5	.509
		21.12	17.32	9.53	3.80	7.20	7.79	18.77	1/1/2	113.5	3.6	10.8	.462	10.618	89.6	311.1	78.5	100.2D	4.443
5- 270	5- 350.5	.501	106.5	20.8	-.9	1.087	117.4	.494	1.271	263.7	407.5	.644	1.699D	105.3	1.410	-2.6	-8.4	321.3	.423
5- 350.5	5- 600	.423	315.9	-9.7	-3.1	1.379	73.8	.451	1.143	54.4	198.0	.627D	1.660	76.3	.616	1.9	2.7	188.2	.193
5- 600	5- 790	.300	153.0	14.0	1.1	.712	117.4	.491	1.337	222.2	446.5	.680	1.994D	115.5	1.133	.8	24.4	74.3	.495
		21.63	17.54	10.78	4.10	7.49	6.76	18.44	1/1/2	115.7	2.0	5.5	.336	20.668	163.3	232.0	-14.7	70.2L	6.602

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2450430
12 DEC 1996

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC

MARS ARRIVAL DATE = 2450430 (12 DEC 1996)

5- 220	5- 253.0	.466	74.5	19.9	1.5	.933	117.1	.468	.902	229.5	266.1	.479A	1.324D	64.2	1.282	2.0	4.2	322.6	.564
5- 253.0	5- 430	.564	310.1	3.5	1.5	1.389	113.2	.540	1.216	289.9	512.6	.559	1.873A	115.5	.622	.5	-2.9	188.9	.302
5- 430	5- 780	.184	174.2	4.4	.5	.611	77.1	.435	1.197	162.0	452.1	.676	1.717	113.8	1.092	2.0	25.0	59.6	.453
		20.66	13.83	9.94	6.83	10.21	3.89	17.45	1/2/2	37.1	4.8	12.5	.189	9.158	175.0	239.1	-2.2	85.6L	1.541

MARS ARRIVAL DATE = 2450440 (22 DEC 1996)

5- 220	5- 253.9	.454	73.9	19.6	1.6	.936	116.4	.456	.907	230.6	268.5	.494A	1.320D	65.2	1.284	2.0	4.2	322.8	.544
5- 253.9	5- 440	.544	311.0	3.8	1.6	1.382	112.4	.524	1.188	290.8	516.5	.566	1.810A	111.9	.603	.4	-2.9	188.6	.273
5- 440	5- 780	.169	173.9	4.7	.5	.608	79.5	.423	1.195	165.0	450.7	.690	1.700	113.0	1.092	1.9	25.2	60.5	.439
		19.29	13.24	9.67	6.05	9.43	3.57	17.13	1/2/2	41.7	4.6	11.8	.203	9.713	175.5	238.8	-1.1	84.7L	1.766

MARS ARRIVAL DATE = 2450450 (1 JAN 1997)

5- 210	5- 248.9	.375	79.8	21.4	.8	.831	110.7	.453	.774	210.5	250.2	.423A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 450	.560	305.7	3.4	1.5	1.370	113.5	.519	1.139	286.2	524.3	.548	1.729A	105.7	.570	.7	.9	181.7	.256
5- 450	5- 770	.133	161.5	8.9	.2	.613	85.4	.384	1.207	172.6	443.8	.744	1.671	110.1	1.094	1.8	24.2	53.2	.390
		15.84	10.71	7.89	5.13	8.51	2.83	16.06	1/2/2	54.0	5.3	18.3	.192	6.298	172.8	243.5	-4.1	90.8D	1.018
5- 220	5- 254.6	.445	73.4	19.4	1.7	.939	115.8	.446	.911	231.4	270.5	.505A	1.318D	66.0	1.286	1.9	4.3	322.9	.529
5- 254.6	5- 450	.529	311.7	4.1	1.7	1.377	111.8	.510	1.167	291.4	520.5	.571	1.762A	108.2	.589	.3	-2.6	187.7	.247
5- 450	5- 780	.157	172.9	5.3	.5	.605	81.9	.413	1.194	168.2	449.5	.701	1.687	112.4	1.091	1.9	25.3	61.1	.427
		16.17	12.77	9.47	5.40	8.78	3.31	16.86	1/2/2	47.0	4.5	11.2	.215	10.240	175.7	238.6	-.0	83.9L	1.987
5- 230	5- 261.7	.542	68.8	17.5	-2.6	1.082	119.2	.514	1.242	259.0	299.7	.603A	1.880D	70.4	1.395	1.0	2.7	317.7	.493
5- 261.7	5- 450	.493	318.9	5.6	2.1	1.386	109.8	.503	1.205	298.0	515.7	.599	1.812A	110.9	.611	-.2	-6.6	193.9	.264
5- 450	5- 790	.192	181.6	2.1	.9	.598	77.8	.451	1.182	164.2	455.6	.649	1.714	115.1	1.089	2.0	26.2	69.0	.472
		21.68	15.85	11.78	5.83	9.21	4.07	17.90	1/2/2	39.7	5.6	3.1	.247	37.090	67.0	237.9	-66.6	92.7D	8.925

MARS ARRIVAL DATE = 2450460 (11 JAN 1997)

5- 80	5- 330.7	.281	70.5	30.6	2.6	.946	74.4	.293	.877	129.1	428.5	.620	1.134	103.8	1.275	-1.5	-5.0	275.4	.320
5- 330.7	5- 460	.320	316.0	-6.7	-1.5	1.439	82.5	.509	1.437	22.5	135.1	.705D	2.169A	119.4	.712	1.9	-12.0	218.7	.360
5- 460	5- 640	.259	65.7	28.8	2.4	.740	109.3	.341	1.527	236.3	376.1	1.006	2.047D	94.1	1.146	-2.8	-20.1	358.0	.187
		20.11	11.73	6.02	6.38	11.74	5.71	12.40	2/1/1	19.6	63.6	40.5	.586	2.890	6.7	205.9	2.4	121.7D	1.108
5- 210	5- 249.2	.371	79.5	21.2	.9	.834	110.4	.447	.777	210.8	251.1	.429A	1.125D	63.7	1.211	2.7	5.3	324.1	.552
5- 249.2	5- 460	.552	306.2	3.6	1.6	1.366	113.2	.512	1.126	286.3	528.1	.550	1.702A	101.9	.560	.6	2.0	179.2	.218
5- 460	5- 770	.128	158.3	10.2	.2	.612	87.7	.380	1.208	176.2	443.0	.749	1.667	109.8	1.094	1.8	24.3	53.6	.385
		15.23	10.53	7.80	4.69	8.08	2.73	15.94	1/2/2	61.1	5.5	17.8	.197	6.447	173.0	243.4	-3.8	90.6D	1.074
5- 220	5- 255.1	.439	73.0	19.2	1.7	.941	115.4	.439	.915	232.1	272.0	.513A	1.317D	66.6	1.288	1.9	4.3	323.0	.517
5- 255.1	5- 460	.517	312.3	4.3	1.8	1.372	111.4	.500	1.150	291.9	524.4	.575	1.726A	104.6	.577	.3	-1.9	186.1	.225
5- 460	5- 780	.147	171.1	6.2	.5	.603	84.3	.405	1.193	171.5	448.5	.710	1.677	111.8	1.091	1.8	25.5	61.6	.417
		17.30	12.43	9.32	4.87	8.26	3.10	16.65	1/2/2	53.2	4.5	10.7	.225	10.735	175.7	238.3	.8	83.4L	2.165
5- 230	5- 262.5	.533	68.4	17.3	-2.6	1.081	118.7	.506	1.239	259.7	301.7	.612A	1.867D	71.2	1.394	1.0	2.8	317.6	.477
5- 262.5	5- 460	.477	319.6	5.8	2.1	1.380	109.1	.490	1.184	298.9	519.7	.604	1.764A	107.4	.598	-.3	-6.4	193.1	.239
5- 460	5- 790	.177	181.2	2.5	.8	.595	80.3	.438	1.180	167.2	454.2	.663	1.697	114.3	1.088	1.9	26.3	69.7	.457
		20.48	15.28	11.55	5.20	8.58	3.73	17.56	1/2/2	44.9	5.2	3.6	.264	31.492	57.5	235.3	-57.1	95.8D	8.046

MARS ARRIVAL DATE = 2450470 (21 JAN 1997)

5- 80	5- 327.7	.262	69.8	31.7	2.7	.947	75.6	.275	.878	129.4	424.0	.636	1.120	102.4	1.275	-1.2	-5.3	273.1	.292
5- 327.7	5- 470	.292	315.2	-8.5	-1.8	1.423	83.8	.475	1.354	19.4	141.3	.711D	1.997A	115.3	.680	2.2	-11.3	219.4	.313
5- 470	5- 640	.268	68.1	28.0	2.3	.759	111.7	.372	1.599	242.3	377.8	1.003	2.194D	94.8	1.159	-2.6	-18.5	354.6	.203
		19.26	12.16	5.69	7.10	10.47	6.47	12.62	2/1/1	23.7	61.0	41.8	.704	2.802	8.7	204.7	4.5	125.2D	1.269
5- 210	5- 249.4	.369	79.4	21.2	.9	.835	110.3	.445	.778	211.0	251.4	.432A	1.125D	63.8	1.212	2.7	5.3	324.1	.549
5- 249.4	5- 470	.549	306.6	3.7	1.6	1.363	113.2	.508	1.116	286.0	532.0	.549	1.683A	98.1	.552	.6	3.5	176.0	.205
5- 470	5- 770	.126	154.6	11.7	.2	.612	90.0	.377	1.210	179.9	442.4	.754	1.666	109.6	1.095	1.8	24.4	54.0	.381
		14.85	10.46	7.77	4.39	7.78	2.70	15.86	1/2/2	69.0	5.7	17.5	.199	6.576	173.2	243.2	-3.5	90.6D	1.111
5- 220	5- 255.4	.435	72.8	19.1	-1.7	.942	115.1	.435	.917	232.5	272.9	.518A	1.316D	67.0	1.289	1.9	4.3	323.1	.510
5- 255.4	5- 470	.510	312.8	4.5	1.8	1.369	111.1	.493	1.138	292.0	528.3	.577	1.699A	100.9	.568	.3	-.9	183.6	.208
5- 470	5- 780	.140	168.5	7.4	.5	.603	86.7	.399	1.194	175.0	447.6	.717	1.670	111.4	1.091	1.8	25.5	62.1	.410
		16.65	12.19	9.23	4.46	7.85	2.96	16.48	1/2/2	60.2	4.5	10.3	.231	11.176	175.5	238.1	1.5	85.0L	2.348
5- 230	5- 263.1	.526	68.2	17.2	-2.6	1.080	118.3	.501	1.237	260.2	303.2	.618A	1.857D	71.6	1.394	1.0	2.8	317.5	.466
5- 263.1	5- 470	.466	320.2	6.0	2.1	1.376	108.7	.479	1.168	299.5	523.7	.608	1.727A	104.0	.587	-.3	-6.0	191.7	.217
5- 470	5- 790	.164	180.1	3.2	.8	.594	82.9	.428	1.179	170.3	453.0	.674	1.683	113.6	1.088	1.8	26.4	70.3	.445
		19.53	14.85	11.39	4.68	8.07	3.46	17.28	1/2/2	50.8	4.6	4.1	.277	27.779	51.1	234.2	-50.7	98.0D	7.429

MARS ARRIVAL DATE = 2450480 (31 JAN 1997)

5- 80	5- 325.6	.252	69.3	32.3	2.8	.947	76.2	.264	.879	129.7	421.0	.646	1.111	101.6	1.275	-1.2	-5.5	271.7	.275
5- 325.6	5- 480	.275	314.1	-10.5	-2.0	1.412	84.5	.450	1.298	17.8	147.3	.714D	1.882A	111.4	.656	2.4	-10.1	219.6	.274
5- 480	5- 640	.322	70.5	27.4	2.1	.783	114.2	.411	1.698	248.1	379.3	1.000	2.396D	95.6	1.175	-2.3	-17.1	351.7	.223
		18.94	12.85	5.50	6.09	9.47	7.35	12.92	2/1/1	28.4	58.6	42.3	.794	2.773	11.0	203.8	6.9	127.4D	1.408
5- 140	5- 303.1	.239	56.4	64.5	13.1	.928	87.1	.157	.862	164.0	359.0	.727A	.997	89.9	1.262	-13.0	-78.2	306.1	.290
5- 303.1	5- 480	.290	336.8	-31.3	-6.2	1.405	94.7	.439	1.282	344.5	509.6	.719	1.845A	109.7	.649	7.1	1.2	220.2	.267
5- 480	5- 700	.254	90.3	-5.3	-10.7	.698	107.2	.347	1.400	221.3	410.2	.914	1.886D	102.3	1.128	11.4	36.8	345.7	.347
		16.78	10.86	5.29	5.92	9.30	5.57	15.15	2/1/2	34.6	42.6	48.5	.717	2.435	83.5	165.1	-33.9	118.3D	1.029
5- 150	5- 311.5	.194	72.3	81.9	10.3	.924	88.1	.157	.860	169.9	368.2	.725	.995	91.1	1.262	-10.9	-72.7	299.2	.250
5- 311.5	5- 480	.250	329.6	-19.3	-3.4	1.409	91.3	.440	1.297	355.9	507.8	.726	1.868A	110.5	.656	4.1	-6.1	220.5	.267
5- 480	5- 710	.207	92.2	8.8	-4.7	.684	105.6	.343	1.365	216.1	414.7	.896	1.833D	103.1	1.122	5.5	24.0	4.2	.305
		14.95	9.03	4.60	5.91	9.29	4.43	14.33	2/1/2	29.9	27.3	56.2	.964	2.125	80.1	162.0	-41.6	103.6D	1.084
5- 160	5- 317.9	.181	69.4	80.2	9.5	.920	89.3	.159	.859	176.4	374.7	.722	.996	92.0	1.263	-10.7	-70.1	296.3	.249
5- 317.9	5- 480	.249	322.4	-14.6	-2.6	1.411	88.4	.443	1.302	5.3	147.1	.725D	1.879A	111.0	.658	3.1	-8.5	220.3	.270
5- 480	5- 720	.184	97.0	14.1	-2.7	.671	103.9	.341	1.333	210.8	419.1	.878	1.787D	104.0	1.117	3.7	20.4	14.1	.307
		14.33	8.33	4.43	6.00	9.38	3.90	14.36	2/1/2	28.6	20.7	57.8	.972	2.069	80.1	155.2	-45.4	91.0D	1.039
5- 210	5- 249.3	.370	79.5	21.2	.9	.835	110.4	.447	.777	210.9	251.2	.430A	1.125D	63.7	1.211	2.7	5.3	324.1	.551
5- 249.3	5- 480	.551	306.9	3.8	1.7	1.361	113.3	.507	1.109	285.3	535.8	.547	1.671A	94.3	.547	.6	5.2	172.1	.198
5- 480	5- 770	.127	150.6	13.2	.2	.613	92.3	.376	1.212	183.8	441.9	.757	1.668D	109.5	1.095	1.8	24.4	54.2	.379
		14.72	10.51	7.79	4.21	7.60	2.71	15.82	1/2/2	77.5	5.8	17.2	.198	6.682	173.5	243.0	-3.3	90.8D	1.123
5- 220	5- 255.6	.434	72.7	19.0	-1.8	.943	115.0	.433	.918	232.7	273.5	.520A	1.315D	67.1	1.289	1.9	4.4	323.1	.508
5- 255.6	5- 480	.508	313.1	4.6	1.8	1.366	111.0	.489	1.129	291.7	532.2	.577	1.681A	97.3	.561	.2	.5	180.4	.196
5- 480	5- 760	.136	165.2	8.9	.5	.603	89.1	.395	1.195	178.6	446.8	.723	1.666	111.1	1.092	1.8	25.6	62.5	.404
		16.23	12.07	9.20	4.16	7.56	2.87	16.36	1/2/2	68.1	4.5	9.9	.233	11.566	175.4	237.9	1.9	83.0L	2.466
5- 230	5- 263.5	.522	68.0	17.0	-2.6	1.080	118.1	.497	1.237	260.6	304.2	.622A	1.851D	72.2	1.393	1.0	2.8	317.5	.458
5- 263.5	5- 480	.458	320.6	6.1	2.1	1.373	108.3	.472	1.155	299.8	527.7	.610	1.700A	100.5	.579	-.3	-5.1	189.4	.200
5- 480	5- 790	.155	178.1	4.2	.8	.594	85.5	.420	1.178	173.7	452.0	.683	1.673	113.1	1.088	1.8	26.4	70.8	.455
		18.80	14.53	11.28	4.27	7.66	3.25	17.05	1/2/2	57.6	4.6	4.5	.287	25.315	46.3	233.6	-46.0	99.7D	8.982
5- 240	5- 276.1	.596	66.6	15.8	-3.3	1.208	118.7	.638	1.947	282.4	336.4	.705A	3.189D	80.9	1.495	.1	.5	305.3	.389
5- 276.1	5- 480	.389	331.0	11.7	5.4	1.384	104.2	.453	1.199	312.9	520.9	.656	1.742A	104.5	.606	-1.8	-13.9	199.7	.217
5- 480	5- 800	.185	188.5	.1	1.1	.585	81.2	.453	1.164	169.1	457.6	.637	1.691	115.5	1.084	1.9	26.9	79.2	.475
		21.71	17.04	13.13	4.67	8.06	3.91	17.96	1/2/2	45.0	6.1	27.9	.398	4.153	24.7	230.8	-25.8	125.3D	1.254

MARS ARRIVAL DATE = 2450490 (10 FEB 1997)

5- 80	5- 324.4	.246	69.0	32.7	2.8	.947	76.6	.258	.879	129.9	419.2	.652	1.106	101.1	1.275	-1.2	-5.7	270.9	.266
5- 324.4	5- 490	.266	312.9	-12.8	-2.4	1.403	84.8	.432	1.259	17.2	153.0	.715D	1.804A	107.7	.638	2.7	-8.6	219.3	.242
5- 490	5- 640	.360	73.1	27.1	2.0	.812	116.8	.459	1.841	253.9	380.7	.996	2.685D	96.5	1.194	-2.1	-16.0	349.1	.247
		19.06	13.77	5.40	5.29	8.67	8.37	13.30	2/1/1	33.8	36.8	42.0	.853	2.788	13.8	203.4	9.6	128.6D	1.824
5- 150	5- 311.7	.192	73.1	81.6	10.2	.924	88.1	.157	.860	169.9	368.4	.725	.995	91.1	1.262	-10.7	-72.3	299.1	.247
5- 311.7	5- 490	.247	327.2	-23.8	-4.1	1.401	90.6	.424	1.261	357.3	513.3	.726	1.796A	107.1	.639	4.7	-3.3	220.5	.240
5- 490	5- 710	.233	93.6	6.4	-6.1	.695	107.9	.360	1.392	220.8	415.1	.891	1.893D	103.6	1.129	7.0	27.1	1.7	.327
		14.84	9.62	4.57	5.22	8.60	5.05	14.76	2/1/2	35.5	29.7	51.0	.985	2.324	80.3	159.7	-39.7	102.1D	1.304

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 160	5- 318.1	.178	70.4	79.8	9.3	.920	89.3	.159	.859	176.3	375.0	.722	.996	92.0	1.263	-10.5	-69.6	296.5	.245
5- 318.1	5- 490	.245	319.7	-17.2	-3.0	1.403	87.9	.427	1.263	7.0	152.8	.724D	1.803A	107.5	.640	3.4	-6.7	220.1	.240
5- 490	5- 720	.204	98.0	13.5	-3.2	.680	106.2	.355	1.354	215.4	419.4	.873	1.835D	104.5	1.122	4.2	21.5	13.4	.320
		14.00	8.76	4.39	5.24	8.63	4.37	14.61	2/1/2	33.9	21.4	54.3	1.001	2.190	80.7	151.9	-44.7	88.5L	1.191
5- 170	5- 323.2	.181	64.4	78.4	9.4	.917	90.7	.163	.858	183.4	380.2	.719	.998D	92.8	1.264	-11.1	-68.6	295.1	.260
5- 323.2	5- 490	.260	314.1	-13.4	-2.5	1.403	85.5	.431	1.261	15.1	152.9	.717D	1.804A	107.7	.639	2.8	-8.3	219.5	.242
5- 490	5- 730	.183	103.8	16.7	-1.9	.666	104.2	.355	1.320	209.9	423.7	.854	1.786D	105.3	1.116	3.1	20.3	22.1	.325
		13.59	8.31	4.43	5.28	8.66	3.88	14.72	2/1/2	33.6	16.7	56.6	.890	2.110	82.1	144.8	-47.6	78.4L	.988
5- 210	5- 248.9	.374	79.8	21.4	.8	.832	110.6	.452	.774	210.6	250.3	.424A	1.125D	63.3	1.209	2.7	5.2	323.9	.559
5- 248.9	5- 490	.559	307.0	3.8	1.7	1.359	113.7	.509	1.103	284.1	539.5	.541	1.665A	90.5	.543	.6	7.1	167.9	.196
5- 490	5- 770	.132	146.6	14.6	.2	.616	94.6	.377	1.216	187.7	441.5	.758	1.674D	109.4	1.097	1.6	24.5	54.5	.379
		14.84	10.67	7.88	4.17	7.56	2.79	15.81	1/2/2	86.5	5.9	17.0	.193	6.767	173.4	242.8	-3.2	91.4D	1.111
5- 220	5- 255.5	.435	72.7	19.0	-1.8	.943	115.1	.434	.917	232.6	273.1	.519A	1.315D	67.0	1.289	1.9	4.4	323.1	.509
5- 255.5	5- 490	.509	313.4	4.6	1.8	1.364	111.2	.488	1.122	291.1	536.1	.575	1.669A	93.7	.557	.2	2.2	176.6	.188
5- 490	5- 760	.134	161.5	10.5	.5	.605	91.5	.392	1.197	182.4	446.2	.727	1.666D	110.9	1.092	1.7	25.6	62.8	.401
		16.05	12.06	9.22	3.99	7.38	2.85	16.28	1/2/2	76.6	4.5	9.6	.232	11.894	175.3	237.8	2.1	83.2L	2.527
5- 230	5- 263.7	.519	67.9	17.0	-2.6	1.080	117.9	.495	1.236	260.8	304.7	.624A	1.847D	72.4	1.393	1.0	2.8	317.4	.454
5- 263.7	5- 490	.454	321.0	6.1	2.1	1.370	108.2	.467	1.146	299.7	531.7	.611	1.680A	97.1	.573	-.3	-3.8	186.5	.187
5- 490	5- 790	.148	175.4	5.6	.8	.594	88.0	.414	1.179	177.2	451.2	.691	1.667	112.6	1.088	1.7	26.4	71.3	.428
		18.29	14.33	11.22	3.96	7.36	3.11	16.88	1/2/2	65.2	4.4	4.8	.292	23.869	42.7	233.3	-42.3	100.8D	6.682
5- 240	5- 277.2	.586	66.9	15.7	-3.3	1.202	116.3	.627	1.898	282.5	338.2	.708A	3.088D	81.6	1.491	.1	.5	304.7	.375
5- 277.2	5- 490	.375	331.6	11.7	3.3	1.380	103.6	.443	1.186	314.2	524.8	.661	1.711A	101.4	.599	-1.8	-13.8	198.4	.198
5- 490	5- 800	.172	187.2	.9	1.1	.584	84.0	.442	1.163	172.3	456.4	.648	1.677	114.8	1.084	1.8	26.9	79.8	.462
		20.74	16.51	12.88	4.23	7.62	3.63	17.66	1/2/2	50.5	5.6	29.0	.427	3.987	23.8	230.7	-22.8	125.2D	1.274
5- 240	5- 313.1	.404	74.9	14.3	-3.4	1.058	111.8	.391	1.174	267.0	379.5	.714	1.633D	95.5	1.380	.1	.6	291.8	.244
5- 313.1	5- 490	.244	325.6	-22.1	-3.8	1.402	90.2	.425	1.262	359.3	513.1	.726	1.798A	107.2	.640	4.4	-4.3	220.4	.240
5- 490	5- 800	.172	187.2	.9	1.1	.584	84.0	.442	1.163	172.3	456.4	.648	1.677	114.8	1.084	1.8	26.9	79.8	.462
		17.59	12.17	8.54	5.22	8.60	3.63	17.66	1/1/2	35.0	5.6	40.0	1.006	2.921	36.7	225.8	34.4	144.3D	1.932
5- 240	5- 318	.386	76.7	14.1	-3.5	1.041	111.0	.371	1.126	263.4	383.7	.709	1.544D	96.4	1.366	.1	.7	293.5	.245
5- 318	5- 490	.245	319.8	-17.2	-3.0	1.403	88.0	.427	1.263	6.8	152.8	.724D	1.802A	107.5	.640	3.5	-6.7	220.1	.240
5- 490	5- 800	.172	187.2	.9	1.1	.584	84.0	.442	1.163	172.3	456.4	.648	1.677	114.8	1.084	1.8	26.9	79.8	.462
		17.01	11.77	8.14	5.24	8.63	3.63	17.66	1/1/2	33.9	5.6	31.5	1.002	3.687	35.9	222.3	34.6	139.9D	2.693

MARS ARRIVAL DATE = 2450500 (20 FEB 1997)

5- 70	5- 315.6	.242	58.2	32.9	3.2	.952	77.0	.248	.887	128.5	413.9	.666	1.107	99.9	1.277	-.6	-2.9	260.5	.243
5- 315.6	5- 500	.243	320.8	-23.5	-4.0	1.396	88.6	.413	1.236	4.0	156.2	.725D	1.747A	104.0	.628	4.5	-2.6	219.9	.216
5- 500	5- 630	.426	74.0	25.8	1.5	.868	120.3	.550	2.227	263.1	376.0	1.003	3.451D	95.7	1.233	-1.8	-14.7	346.3	.273
		20.18	15.53	5.34	4.65	8.04	10.19	13.75	2/1/1	40.5	63.8	61.7	1.019	1.951	25.4	204.9	19.8	140.3D	.968
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.2	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.260
5- 323.7	5- 500	.260	311.9	-15.0	-2.8	1.397	85.0	.419	1.232	17.1	158.3	.715D	1.748A	104.2	.625	3.0	-6.5	218.5	.216
5- 500	5- 640	.403	75.7	26.8	1.9	.847	119.4	.518	2.058	259.4	381.9	.992	3.124D	97.4	1.218	-2.0	-14.9	347.0	.277
		19.56	14.91	5.35	4.65	8.04	9.56	13.81	2/1/1	39.6	54.9	41.8	.888	2.805	17.0	203.4	12.8	129.2D	1.603
5- 150	5- 292.5	.270	85.9	-40.4	-15.2	.922	88.3	.160	.858	170.8	338.0	.721A	.995	87.0	1.259	15.6	77.4	349.7	.345
5- 292.5	5- 500	.345	339.5	38.9	9.1	1.387	98.2	.419	1.209	332.0	523.1	.703	1.715A	101.5	.615	-8.0	-33.0	198.3	.215
5- 500	5- 710	.267	96.0	1.6	-8.7	.709	110.3	.380	1.427	225.6	415.5	.885	1.970D	104.5	1.136	9.7	32.4	357.0	.363
		16.35	11.72	5.82	4.62	8.01	5.91	15.49	1/2/2	51.0	34.4	38.8	.504	3.010	92.7	337.6	7.1	124.9D	1.014
5- 150	5- 311.4	.196	71.4	82.2	10.5	.924	88.1	.157	.860	169.9	367.9	.725	.995	91.1	1.262	-11.1	-73.1	299.2	.253
5- 311.4	5- 500	.253	325.9	-30.6	-5.5	1.395	90.7	.412	1.235	357.7	518.6	.726	1.744A	103.7	.627	5.9	1.4	220.4	.219
5- 500	5- 710	.267	96.0	1.6	-8.7	.709	110.3	.380	1.427	225.6	415.5	.885	1.970D	104.5	1.136	9.7	32.4	357.0	.363
		15.25	10.55	4.64	4.71	8.10	5.91	15.49	2/1/2	42.3	34.4	44.7	.941	2.628	80.8	158.2	-36.0	102.0D	1.531
5- 160	5- 318.2	.177	70.7	79.7	9.3	.920	89.3	.159	.859	176.3	375.1	.722	.996	92.1	1.263	-10.4	-69.4	296.5	.244
5- 318.2	5- 500	.244	317.7	-20.3	-3.5	1.396	87.6	.415	1.236	8.1	158.2	.723D	1.748A	104.1	.627	3.9	-4.2	219.5	.216
5- 500	5- 720	.227	99.3	12.5	-3.9	.692	108.5	.372	1.381	220.1	419.7	.867	1.895D	105.1	1.129	4.9	22.9	12.3	.336
		13.94	9.30	4.38	4.64	8.03	4.92	14.94	2/1/2	39.9	22.3	50.8	1.010	2.332	81.1	149.5	-45.4	86.6L	1.345
5- 170	5- 323.3	.180	64.8	78.3	9.3	.917	90.6	.163	.858	183.3	380.3	.716	.998D	92.8	1.264	-11.0	-68.4	295.5	.258
5- 323.3	5- 500	.258	312.3	-15.3	-2.8	1.397	85.2	.419	1.232	16.3	158.3	.716D	1.748A	104.2	.626	3.1	-6.4	218.6	.216
5- 500	5- 730	.203	104.6	16.4	-2.1	.676	106.6	.367	1.341	214.4	423.9	.849	1.832D	105.8	1.121	3.4	20.8	21.8	.338
		13.40	8.75	4.42	4.65	8.04	4.34	14.96	2/1/2	39.5	17.0	54.2	.901	2.195	82.6	142.3	-46.9	76.5L	1.077
5- 210	5- 248.3	.382	80.3	21.6	.8	.827	111.1	.462	.770	210.1	248.8	.414A	1.126D	62.6	1.206	2.8	5.2	323.7	.572
5- 248.3	5- 500	.572	306.9	3.8	1.8	1.358	114.4	.516	1.099	282.4	543.2	.533	1.666	86.6	.541	.6	8.9	163.6	.200
5- 500	5- 770	.139	143.1	15.8	.2	.620	97.0	.379	1.222	191.8	441.1	.759	1.685D	109.5	1.098	1.8	24.5	54.7	.381
		15.24	10.98	8.04	4.26	7.65	2.93	15.85	1/2/2	95.5	5.9	16.8	.184	6.838	173.5	242.5	-3.2	92.2D	1.074
5- 220	5- 255.2	.438	72.9	19.1	1.7	.942	115.3	.438	.916	232.3	272.3	.515A	1.317D	66.7	1.288	1.9	4.3	323.0	.515
5- 255.2	5- 500	.515	313.6	4.5	1.8	1.363	111.5	.490	1.117	290.0	539.8	.570	1.663A	90.2	.554	.2	4.1	172.6	.186
5- 500	5- 780	.136	157.5	12.1	.5	.608	94.0	.392	1.200	186.2	445.7	.730	1.670D	110.8	1.093	1.7	25.6	63.1	.399
		16.11	12.18	9.30	3.93	7.33	2.88	16.25	1/2/2	85.4	4.5	9.4	.227	12.181	175.4	237.6	2.0	83.7L	2.534
5- 230	5- 263.7	.519	67.9	17.0	-2.6	1.080	117.9	.495	1.236	260.8	304.7	.624A	1.847D	72.4	1.393	1.0	2.8	317.4	.454
5- 263.7	5- 500	.454	321.3	6.0	2.1	1.368	108.3	.465	1.139	299.2	535.6	.610	1.668A	93.8	.570	-.3	-2.2	182.9	.178
5- 500	5- 790	.144	172.1	7.1	.8	.596	90.6	.410	1.180	180.8	450.4	.697	1.663D	112.3	1.088	1.7	26.4	71.7	.422
		18.01	14.25	11.22	3.77	7.16	3.03	16.76	1/2/2	73.4	4.2	5.0	.292	23.036	39.6	233.0	-39.2	101.5D	6.440
5- 240	5- 278.1	.578	66.9	15.6	-3.3	1.198	118.0	.618	1.860	282.4	339.5	.711A	3.010D	82.2	1.487	.1	.5	304.2	.366
5- 278.1	5- 500	.366	332.2	11.5	3.1	1.378	103.2	.435	1.176	315.1	528.8	.664	1.688A	98.4	.594	-1.7	-13.2	196.4	.183
5- 500	5- 800	.162	185.1	2.1	1.1	.585	86.7	.434	1.163	175.7	455.4	.658	1.667	114.3	1.083	1.7	26.8	80.3	.452
		19.98	16.11	12.69	3.87	7.27	3.42	17.43	1/2/2	56.9	5.2	29.9	.450	3.872	22.7	230.5	-21.7	126.8D	1.292
5- 240	5- 314.1	.401	75.3	14.3	-3.4	1.055	111.6	.387	1.164	266.3	380.4	.713	1.614D	95.6	1.378	.1	.6	292.1	.244
5- 314.1	5- 500	.245	322.6	-25.7	-4.4	1.396	89.5	.413	1.236	1.8	158.3	.726D	1.746A	103.9	.627	4.9	-1.4	220.1	.217
5- 500	5- 800	.162	185.1	2.1	1.1	.585	86.7	.434	1.163	175.7	455.4	.658	1.667	114.3	1.083	1.7	26.8	80.3	.452
		16.53	11.87	8.45	4.66	8.05	3.42	17.43	1/1/2	41.0	5.2	39.5	1.006	2.956	44.0	228.1	41.1	138.0D	1.968
5- 240	5- 318.8	.383	77.0	14.1	-3.5	1.039	110.9	.367	1.119	262.8	384.4	.708	1.530D	96.5	1.366	.1	.7	293.9	.245
5- 318.8	5- 500	.245	317.0	-19.5	-3.4	1.397	87.3	.415	1.235	9.1	158.1	.723D	1.748A	104.1	.627	3.8	-4.6	219.4	.216
5- 500	5- 800	.162	185.1	2.1	1.1	.585	86.7	.434	1.163	175.7	455.4	.658	1.667	114.3	1.083	1.7	26.8	80.3	.452
		16.14	11.49	8.08	4.64	8.03	3.42	17.43	1/1/2	39.8	5.2	30.3	1.001	3.820	43.0	223.7	41.4	134.3D	2.824

MARS ARRIVAL DATE = 2450510 (2 MAR 1997)

5- 70	5- 316.1	.244	58.3	32.7	3.2	.952	76.9	.251	.886	128.4	414.7	.664	1.109	100.1	1.277	-.6	-2.9	260.8	.247
5- 316.1	5- 510	.247	318.8	-27.7	-4.7	1.392	88.4	.404	1.217	5.5	163.3	.725D	1.708A	100.8	.619	5.1	1.1	219.1	.198
5- 510	5- 630	.481	76.5	25.8	1.5	.917	122.9	.637	2.750	268.6	377.1	.999	4.500D	96.7	1.267	-1.7	-14.0	344.4	.312
		21.33	17.11	5.38	4.22	7.61	11.74	14.47	2/1/1	47.3	62.2	60.5	.988	1.984	30.6	206.0	24.3	138.4D	.972
5- 80	5- 323.5	.241	68.8	33.0	2.8	.948	76.9	.254	.880	130.0	417.9	.656	1.103	100.8	1.275	-1.2	-5.8	270.3	.259
5- 323.5	5- 510	.259	310.9	-17.4	-3.2	1.392	84.9	.410	1.212	17.5	163.4	.715D	1.709A	100.9	.616	3.4	-3.9	217.3	.196
5- 510	5- 640	.453	78.3	26.5	1.6	.890	121.9	.592	2.421	264.8	382.8	.987	3.854D	98.5	1.247	-1.8	-14.0	345.4	.313
		20.45	16.29	5.33	4.16	7.56	10.96	14.48	2/1/1	46.2	53.7	41.4	.897	2.832	20.7	203.8	16.4	129.1D	1.644
5- 150	5- 309.3	.233	55.0	84.9	12.9	.924	88.2	.156	.861	170.4	365.2	.726	.995	90.7	1.262	-13.3	-78.2	299.1	.297
5- 309.3	5- 510	.297	327.5	-46.9	-9.0	1.390	91.5	.403	1.215	355.4	523.6	.726	1.705A	100.4	.618	9.6	12.9	221.2	.217
5- 510	5- 710	.331	99.8	-9.1	-15.5	.725	112.7	.404	1.473	230.3	415.9	.877	2.068D	105.3	1.146	16.5	42.1	344.2	.451
		17.44	12.78	5.19	4.66	8.05	7.59	17.41	2/1/2	53.1	45.2	33.1	.680	3.511	83.0	158.4	-25.9	106.4D	1.708
5- 160	5- 318.0	.179	70.2	79.9	9.4	.920	89.3	.159	.859	176.3	374.9	.722	.996	92.0	1.263	-10.5	-69.7	296.4	.246
5- 318.0	5- 510	.246	316.5	-24.4	-4.2	1.392	87.5	.405	1.216	8.6	163.2	.723D	1.709A	100.8	.618	4.5	-.7	218.6	.197
5- 510	5- 720	.254	100.9	10.7	-4.9	.706	110.9	.392	1.416	224.7	420.0	.861	1.970D	105.8	1.136	6.1	25.2	10.8	.358
		14.17	9.98	4.40	4.19	7.58	5.56	15.37	2/1/2	46.7	24.0	46.8	.994	2.516	81.4	148.1	-41.3	85.6L	1.508

STOPOVER TIME = 0 DAYS — 1997 OUTBOUND SWINGBY — MISSION DURATION = 560 DAYS

MARS ARRIVAL DATE = 2450510
2 MAR 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC	
5- 170	5- 323.3	.180	64.8	78.2	9.3	.917	90.6	.163	.858	183.3	360.3	.718	.998D	92.8	1.264	-11.0	-68.3	295.3	.258	
5- 323.3	5- 510	.258	311.1	-17.7	-3.2	1.392	85.1	.410	1.212	17.1	163.4	.716D	1.709A	100.9	.616	3.4	-3.8	217.3	.196	
5- 510	5- 730	.226	105.7	16.0	-2.5	.688	109.0	.383	1.367	219.0	424.1	.843	1.891D	106.5	1.128	3.8	21.5	21.3	.352	*
		13.45	9.29	4.41	4.16	7.56	4.87	15.26	2/1/2	46.2	17.4	51.7	.903	2.295	83.0	140.6	-45.9	75.1L	1.170	
5- 210	5- 247.4	.393	80.9	21.9	.7	.820	111.8	.477	.763	209.5	246.6	.399A	1.127D	61.6	1.202	2.8	5.1	323.4	.591	
5- 247.4	5- 510	.591	306.7	3.7	1.8	1.358	115.3	.526	1.097	280.1	546.7	.520	1.673	82.6	.541	.6	10.5	159.8	.210	
5- 510	5- 770	.149	140.1	16.8	.2	.626	99.4	.383	1.229	195.9	440.8	.758	1.700D	109.6	1.100	1.8	24.4	54.8	.384	
		15.93	11.43	8.29	4.50	7.89	3.14	15.92	1/2/2	103.9	6.0	16.7	.172	6.894	173.5	242.0	-3.2	93.3D	1.015	
5- 220	5- 254.7	.444	73.3	19.3	1.7	.939	115.7	.444	.912	231.6	270.8	.507A	1.318D	66.2	1.287	1.9	4.3	323.0	.526	
5- 254.7	5- 510	.526	313.7	4.5	1.9	1.362	112.1	.494	1.113	288.5	543.5	.563	1.664	86.6	.554	.3	5.9	168.5	.188	
5- 510	5- 780	.142	153.7	13.5	.5	.612	96.4	.393	1.204	190.2	445.2	.731	1.677D	110.8	1.095	1.7	25.5	63.4	.399	
		16.42	12.42	9.43	4.00	7.39	2.99	16.25	1/2/2	94.3	4.4	9.3	.217	12.369	175.5	237.5	1.7	84.6L	2.470	
5- 230	5- 263.5	.521	68.0	17.0	-2.6	1.080	118.1	.497	1.236	260.6	304.2	.622A	1.850D	72.2	1.393	1.0	2.8	317.5	.458	
5- 263.5	5- 510	.458	321.5	5.8	2.0	1.367	108.5	.465	1.134	298.3	539.4	.606	1.661A	90.5	.568	-.3	-.4	178.9	.174	
5- 510	5- 790	.143	168.3	8.8	.8	.599	93.1	.407	1.183	184.6	449.8	.701	1.664D	112.1	1.089	1.6	26.3	72.0	.419	
		17.97	14.29	11.27	3.68	7.08	3.02	16.68	1/2/2	82.2	4.0	5.0	.287	22.703	36.8	232.7	-36.5	101.9D	6.231	
5- 240	5- 278.7	.574	66.9	15.5	-3.3	1.195	117.8	.618	1.837	282.4	340.5	.712A	2.963D	82.6	1.485	.1	.5	303.8	.359	
5- 278.7	5- 510	.359	332.7	11.2	3.0	1.376	103.0	.430	1.168	315.6	532.7	.666	1.671A	95.4	.591	-1.6	-12.2	193.8	.171	
5- 510	5- 800	.156	182.2	3.5	1.1	.587	89.4	.428	1.163	179.2	454.6	.666	1.661	113.8	1.084	1.6	26.8	80.8	.444	
		19.45	15.84	12.57	3.60	7.00	3.28	17.25	1/2/2	64.1	4.9	30.6	.466	3.784	21.5	230.4	-20.5	128.2D	1.299	

MARS ARRIVAL DATE = 2450520 (12 MAR 1997)

5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.3	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.261	
5- 323.7	5- 520	.261	310.0	-19.9	-3.7	1.388	84.8	.404	1.198	18.2	168.2	.714D	1.681A	97.8	.610	3.8	-.9	215.5	.180	
5- 520	5- 640	.511	80.9	26.3	1.7	.943	124.5	.686	3.126	269.9	383.6	.982	5.270D	99.6	1.284	-1.7	-13.1	344.2	.356	
		21.74	17.94	5.35	3.80	7.20	12.59	15.34	2/1/1	53.4	52.9	41.0	.886	2.855	24.7	204.7	20.2	128.6D	1.643	
5- 160	5- 299.1	.285	84.7	-41.4	-16.2	.921	89.8	.157	.860	178.8	346.6	.725A	.995	88.2	1.260	16.0	81.1	344.5	.351	
5- 299.1	5- 520	.351	339.0	51.2	11.4	1.384	95.4	.401	1.194	340.9	530.2	.716	1.673A	96.4	.609	-10.7	-40.8	190.5	.208	
5- 520	5- 720	.286	102.9	7.3	-6.9	.723	113.4	.415	1.460	229.3	420.2	.854	2.067D	106.6	1.146	8.1	29.0	7.9	.388	
		16.95	12.51	6.10	4.44	7.83	6.41	16.00	1/2/2	63.5	27.2	30.0	.488	3.863	91.1	337.8	6.2	120.2D	1.396	
5- 160	5- 301.9	.424	86.1	-43.0	-24.9	.921	89.7	.157	.861	178.4	350.3	.726A	.995	88.7	1.261	24.5	86.4	82.6	.524	
5- 301.9	5- 520	.524	349.4	72.9	21.3	1.385	94.4	.399	1.197	344.5	529.6	.720	1.675A	96.8	.610	-20.6	-51.5	176.7	.292	
5- 520	5- 720	.286	102.9	7.3	-6.9	.723	113.4	.415	1.460	229.3	420.2	.854	2.067D	106.6	1.146	8.1	29.0	7.9	.388	
		21.95	15.38	8.97	6.57	9.94	6.41	16.00	1/2/2	70.7	27.2	17.7	.219	6.505	93.5	338.5	9.7	118.8D	1.204	
5- 160	5- 317.6	.185	68.2	80.7	9.8	.920	89.3	.159	.859	176.4	374.4	.722	.996	92.0	1.263	-10.9	-70.8	296.0	.255	
5- 317.6	5- 520	.253	316.2	-30.7	-5.3	1.388	87.7	.398	1.202	8.2	168.0	.723D	1.681A	97.7	.613	5.6	4.7	217.7	.184	
5- 520	5- 720	.286	102.9	7.3	-6.9	.723	113.4	.415	1.460	229.3	420.2	.854	2.067D	106.6	1.146	8.1	29.0	7.9	.388	
		14.80	10.90	4.48	3.90	7.30	6.41	16.00	2/1/2	54.5	27.2	41.7	.939	2.811	81.6	147.6	-37.7	85.7L	1.700	
5- 170	5- 323.2	.180	64.7	78.3	9.4	.917	90.6	.163	.858	183.3	360.3	.719	.998D	92.8	1.264	-11.0	-68.5	295.2	.259	
5- 323.2	5- 520	.259	310.5	-20.6	-3.8	1.388	85.0	.403	1.198	17.3	168.1	.715D	1.681A	97.8	.611	3.9	-.5	215.7	.180	
5- 520	5- 730	.251	107.2	15.2	-3.0	.703	111.4	.403	1.401	223.6	424.3	.837	1.965D	107.2	1.136	4.3	22.4	20.7	.370	
		13.72	9.92	4.42	3.81	7.20	5.50	15.62	2/1/2	53.4	18.0	48.8	.898	2.422	83.1	139.9	-44.4	74.2L	1.277	
5- 220	5- 254.0	.453	73.8	19.6	1.6	.936	116.3	.455	.908	230.7	268.8	.495A	1.320D	65.3	1.285	2.0	4.2	322.8	.542	
5- 254.0	5- 520	.542	313.6	4.3	1.9	1.361	112.9	.503	1.111	286.4	547.0	.553	1.669	83.0	.554	.3	7.5	164.8	.197	
5- 520	5- 780	.150	150.3	14.7	.5	.618	99.0	.396	1.211	194.2	444.9	.732	1.690D	110.8	1.097	1.6	25.4	63.6	.402	
		16.99	12.81	9.64	4.18	7.58	3.16	16.30	1/2/2	102.6	4.4	9.2	.204	12.532	175.7	237.3	1.2	85.7L	2.358	
5- 230	5- 263.1	.526	68.2	17.2	-2.6	1.080	118.3	.501	1.237	260.2	303.1	.618A	1.857D	71.8	1.394	1.0	2.8	317.5	.466	
5- 263.1	5- 520	.466	321.7	5.6	2.0	1.366	109.0	.468	1.130	297.0	543.2	.601	1.659	87.2	.568	-.2	1.5	174.9	.175	
5- 520	5- 790	.146	164.4	10.5	.8	.604	95.7	.407	1.187	188.5	449.3	.704	1.669D	112.0	1.090	1.5	26.2	72.3	.418	
		16.16	14.47	11.59	3.69	7.09	3.08	16.66	1/2/2	91.0	3.8	5.0	.277	22.780	34.3	232.5	-33.9	101.9D	6.031	
5- 240	5- 278.9	.572	66.9	15.5	-3.3	1.194	117.8	.610	1.830	282.4	340.8	.713A	2.947D	82.7	1.484	.1	.5	303.6	.357	
5- 278.9	5- 520	.357	333.1	10.6	2.8	1.374	102.9	.427	1.162	315.5	536.6	.666	1.659A	92.5	.589	-1.5	-10.6	190.4	.162	
5- 520	5- 800	.152	178.8	5.1	1.1	.591	92.1	.424	1.165	182.9	453.9	.672	1.658D	113.5	1.084	1.5	26.6	81.1	.439	
		19.15	15.73	12.53	3.42	6.82	3.21	17.13	1/2/2	72.0	4.6	31.0	.472	3.744	20.0	230.2	-19.1	128.9D	1.295	

MARS ARRIVAL DATE = 2450530 (22 MAR 1997)

5- 160	5- 297.2	.234	83.9	-38.9	-13.0	.920	89.8	.158	.859	179.0	343.7	.724A	.995	87.8	1.260	12.8	75.3	338.2	.288	
5- 297.2	5- 530	.288	337.4	32.8	6.5	1.381	96.2	.398	1.185	338.2	535.0	.713	1\656A	93.3	.606	-5.8	-29.3	195.8	.168	
5- 530	5- 720	.335	105.5	-.3	-11.5	.744	115.9	.443	1.520	233.9	420.5	.846	2.194D	107.6	1.158	12.7	36.6	.5	.446	
		16.46	12.92	5.21	3.55	6.95	7.71	17.30	1/2/2	67.3	34.9	42.5	.724	2.759	90.2	337.3	6.6	118.7D	1.273	
5- 160	5- 316.2	.209	59.5	83.0	11.4	.920	89.4	.158	.859	176.9	372.6	.723	.996	91.7	1.263	-12.4	-74.6	294.2	.281	
5- 316.2	5- 530	.281	317.3	-43.3	-8.0	1.386	88.3	.393	1.193	6.1	172.5	.725D	1.661A	94.8	.611	8.2	14.5	217.8	.186	
5- 530	5- 720	.335	105.5	-.3	-11.5	.744	115.9	.443	1.520	233.9	420.5	.846	2.194D	107.6	1.158	12.7	36.6	.5	.446	
		16.46	12.53	4.82	3.93	7.33	7.71	17.30	2/1/2	64.1	34.9	32.9	.759	3.531	82.0	149.5	-29.3	88.6L	1.920	
5- 170	5- 323.1	.183	64.0	78.6	9.5	.917	90.7	.163	.859	183.4	380.1	.719	.998D	92.8	1.264	-11.2	-68.9	294.9	.262	
5- 323.1	5- 530	.262	310.3	-24.7	-4.5	1.386	85.1	.398	1.189	17.1	172.6	.716D	1.661A	94.9	.608	4.6	3.7	214.0	.169	
5- 530	5- 730	.279	106.9	13.9	-3.7	.720	113.9	.426	1.445	228.1	424.4	.830	2.060D	108.0	1.145	5.1	23.9	19.9	.392	
		14.25	10.68	4.45	3.57	6.97	6.23	16.08	2/1/2	61.3	19.1	45.2	.878	2.602	83.0	140.0	-42.1	73.9L	1.407	
5- 160	5- 327.9	.191	61.7	76.6	9.8	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.6	1.265	-11.9	-67.8	294.5	.280	
5- 327.9	5- 530	.280	307.1	-17.6	-3.5	1.385	82.8	.404	1.183	25.1	173.0	.704D	1.661A	94.7	.604	3.5	.2	211.7	.168	
5- 530	5- 740	.249	114.0	17.5	-1.7	.699	111.8	.413	1.383	222.2	428.4	.812	1.953D	108.4	1.134	3.3	21.8	29.6	.386	
		13.56	10.03	4.57	3.53	6.94	5.46	15.96	2/1/2	61.6	13.9	50.8	.766	2.330	84.2	135.0	-46.5	67.0L	1.020	
5- 220	5- 253.0	.466	74.5	19.9	1.5	.933	117.1	.469	.902	229.5	266.0	.479A	1.324D	64.2	1.282	2.0	4.2	322.6	.564	
5- 253.0	5- 530	.564	313.5	4.2	1.9	1.361	114.0	.514	1.110	283.8	550.4	.539	1.681	79.4	.557	.3	8.8	161.9	.210	
5- 530	5- 780	.162	147.5	15.6	.5	.625	101.5	.401	1.220	198.3	444.6	.731	1.708D	111.0	1.099	1.6	25.3	63.8	.406	
		17.86	13.36	9.95	4.50	7.89	3.42	16.39	1/2/2	110.3	4.3	9.1	.189	12.655	175.8	237.1	.6	87.2L	2.200	
5- 230	5- 262.5	.534	68.4	17.3	-2.6	1.082	118.8	.508	1.242	259.8	301.7	.611A	1.873D	71.2	1.395	1.0	2.7	317.6	.478	
5- 262.5	5- 530	.478	321.9	5.3	2.0	1.365	109.6	.474	1.128	295.2	546.7	.593	1.663	84.0	.570	-.2	3.3	171.3	.180	
5- 530	5- 790	.153	160.6	11.9	.8	.610	98.3	.408	1.192	192.5	448.8	.705	1.679D	112.1	1.092	1.5	26.1	72.6	.419	
		18.61	14.80	11.58	3.81	7.21	3.22	16.67	1/2/2	99.5	3.6	5.0	.263	22.806	31.5	232.2	-31.2	101.7D	5.727	
5- 240	5- 278.6	.574	66.9	15.5	-3.3	1.196	117.9	.613	1.841	282.4	340.3	.712A	2.969D	82.5	1.485	.1	.5	303.8	.360	
5- 278.6	5- 530	.360	333.4	9.8	2.6	1.373	103.2	.427	1.158	314.5	540.6	.663	1.652	89.6	.589	-1.4	-8.5	186.6	.158	
5- 530	5- 800	.153	174.9	6.9	1.1	.596	94.8	.422	1.168	186.7	453.2	.676	1.660D	113.3	1.085	1.4	26.5	81.5	.436	
		19.12	15.80	12.59	3.33	6.73	3.21	17.06	1/2/2	80.7	4.2	30.9	.464	3.754	18.4	230.2	-17.6	129.0D	1.279	

MARS ARRIVAL DATE = 2450540 (1 APR 1997)

5- 160	5- 296.6	.223	83.7	-38.1	-12.3	.920	89.8	.158	.859	179.0	342.9	.723A	.995	87.7	1.260	12.1	73.8	337.5	.276	
5- 296.6	5- 540	.276	337.7	26.2	5.1	1.380	96.5	.397	1.179	337.0	539.1	.711	1.647A	90.6	.606	-4.4	-24.3	191.9	.156	
5- 540	5- 720	.533	115.6	-23.7	-33.7	.768	118.5	.477	1.600	238.4	420.8	.836	2.363D	108.7	1.172	35.0	48.3	322.5	.753	
		21.56	18.28	5.04	3.28	6.69	13.23	25.01	1/2/2	74.6	58.7	47.6	.791	2.478	89.9	157.8	40.0	118.0D	1.168	
5- 170	5- 322.7	.189	62.2	79.4	9.9	.917	90.7	.163	.859	183.6	379.7	.719	.998D	92.7	1.264	-11.6	-70.0	294.2	.269	
5- 322.7	5- 540	.269	310.7	-30.8	-5.7	1.384	85.4	.394	1.183	16.3	176.7	.717D	1.648A	92.1	.608	5.7	9.5	212.6	.165	
5- 540	5- 730	.312	110.9	11.5	-5.1	.741	116.4	.453	1.502	232.7	424.5	.822	2.183D	108.9	1.157	6.5	26.5	18.3	.419	
		15.12	11.64	4.54	3.48	6.88	7.10	16.69	2/1/2	69.5	21.1	40.3	.830	2.904	82.6	141.1	-38.4	74.2L	1.580	
5- 160	5- 327.6	.192	61.6	76.7	9.8	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.6	1.265	-11.9	-67.9	294.4	.281	
5- 327.6	5- 540	.281	307.3	-20.6	-4.1	1.384	83.0	.401	1.177	24.8	177.1	.705D	1.648A	92.0	.604	4.0	3.8	209.4	.160	
5- 540	5- 740	.277	115.6	16.9	-2.1	.717	114.3	.435	1.425	226.7	428.4	.805	2.045D	109.2	1.144	3.6	22.4	29.4	.405	
		14.12	10.75	4.58	3.37	6.78	6.17	16.38	2/1/2	69.6	14.3	48.0	.762	2.457	83.9	135.7	-45.0	66.7L	1.111	
5- 220	5- 251.8	.484	75.4	20.4	1.4	.928	118.2	.487	.894	228.1	262.7	.459A	1.330D	62.7	1.279	2.1	4.1	322.4	.593	
5- 251.8	5- 540	.593	313.4	4.0	1.9	1.361	115.4	.530	1.110	280.6	553.5	.522	1.698	75.6	.560	.4	9.8	159.8	.229	
5- 540	5- 780	.177	145.5	16.2	.6	.635	104.1	.408	1.231	202.5	444.3	.729	1.733D	111.3	1.103	1.5	25.1	64.0	.412	
		19.06	14.10	10.36	4.96	8.34	3.75	16.53	1/2/2	116.9	4.2	9.0	.171	12.769	175.9	236.9	-.1	88.9L	2.011	

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2450540
1 APR 1997

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 230	5- 261.6	.544	68.8	17.6	-2.5	1.082	119.4	.516	1.243	258.8	299.3	.601A	1.884D	70.2	1.395	1.0	2.7	317.7	.497
5- 261.6	5- 540	.497	321.9	5.1	2.0	1.365	110.6	.483	1.127	292.8	550.2	.582	1.671	80.7	.572	-.1	4.8	166.2	.191
5- 540	5- 790	.163	157.4	13.1	.8	.618	101.0	.412	1.200	196.5	448.5	.705	1.694D	112.2	1.095	1.4	25.9	72.9	.422
		19.32	15.27	11.84	4.05	7.44	3.43	16.74	1/2/2	107.4	3.4	4.8	.244	23.918	29.5	232.0	-29.2	100.9D	5.583
5- 240	5- 277.8	.581	66.9	15.6	-3.3	1.199	118.1	.621	1.872	282.5	339.1	.710A	3.034D	82.0	1.488	.1	.5	304.3	.369
5- 277.8	5- 540	.369	333.7	8.8	2.4	1.372	103.7	.430	1.154	312.7	544.5	.658	1.650	86.6	.590	-1.2	-6.1	182.6	.158
5- 540	5- 800	.157	171.0	8.5	1.1	.602	97.6	.422	1.173	190.6	452.7	.678	1.667D	113.3	1.087	1.4	26.3	81.8	.435
		19.38	16.05	12.75	3.33	6.73	3.30	17.04	1/2/2	89.8	3.9	30.4	.442	3.816	16.8	230.3	-16.1	128.1D	1.246

MARS ARRIVAL DATE = 2450550 (11 APR 1997)

5- 160	5- 296.4	.219	83.6	-37.8	-12.0	.920	89.8	.158	.859	179.0	342.6	.723A	.995	87.6	1.260	11.9	73.2	337.3	.271
5- 296.4	5- 550	.271	338.4	22.1	4.3	1.379	96.7	.396	1.176	336.1	543.0	.710	1.642	88.0	.608	-3.7	-20.5	189.2	.150
5- 550	5- 720	.502	136.5	57.3	26.9	.797	120.9	.515	1.711	243.1	420.2	.831	2.592D	109.6	1.189	-25.6	-41.8	29.7	.638
		20.48	17.32	4.98	3.16	6.57	12.34	21.98	1/2/1	82.6	49.4	51.1	.818	2.319	89.6	158.9	42.3	117.9D	1.080
5- 170	5- 303.4	.236	81.3	-38.1	-13.0	.920	91.5	.159	.863	187.9	352.7	.726A	1.000D	89.0	1.263	12.2	76.2	325.5	.275
5- 303.4	5- 550	.275	335.2	38.3	7.1	1.381	93.9	.389	1.181	345.9	541.8	.721	1.641	88.9	.611	-6.7	-31.8	187.3	.162
5- 550	5- 730	.355	112.9	6.5	-8.2	.767	119.0	.486	1.581	237.1	424.5	.813	2.349D	109.9	1.171	9.7	31.8	14.4	.463
		16.91	13.49	5.24	3.42	6.82	8.25	17.68	1/2/2	79.9	26.0	38.2	.796	3.057	87.1	159.4	32.5	113.9D	1.637
5- 170	5- 321.5	.212	55.5	81.7	11.5	.917	90.8	.162	.859	184.1	378.3	.720	.999D	92.5	1.264	-13.0	-73.5	291.1	.297
5- 321.5	5- 550	.297	311.6	-43.3	-8.5	1.383	86.1	.390	1.180	13.9	180.7	.719D	1.640	89.6	.610	8.4	19.3	212.9	.175
5- 550	5- 730	.355	112.9	6.5	-8.2	.767	119.0	.486	1.581	237.1	424.5	.813	2.349D	109.9	1.171	9.7	31.8	14.4	.463
		16.81	13.12	4.87	3.70	7.10	8.25	17.68	2/1/2	78.2	26.0	31.7	.682	3.666	82.0	143.9	-30.1	76.5L	1.817
5- 180	5- 327.7	.194	61.2	77.0	10.0	.914	92.2	.169	.859	190.8	385.1	.714	1.005D	93.5	1.265	-12.0	-68.3	294.1	.283
5- 327.7	5- 550	.283	307.9	-24.7	-4.9	1.383	83.2	.398	1.173	24.0	180.9	.706D	1.640	89.4	.606	4.7	8.2	207.4	.158
5- 550	5- 740	.309	117.5	15.9	-2.6	.738	116.9	.462	1.481	231.2	428.4	.797	2.165D	110.2	1.155	4.2	23.2	29.1	.429
		14.92	11.60	4.61	3.32	6.72	7.00	16.90	2/1/2	77.6	14.9	44.4	.748	2.647	83.4	137.0	-42.6	66.8L	1.233
5- 220	5- 250.4	.507	76.4	20.9	1.3	.922	119.8	.511	.886	226.4	258.8	.433A	1.339D	60.9	1.275	2.3	4.0	322.1	.630
5- 250.4	5- 550	.630	313.2	3.8	2.0	1.361	117.2	.550	1.111	276.8	556.4	.499	1.722	71.8	.565	.5	10.3	158.7	.253
5- 550	5- 780	.196	144.3	16.5	.6	.646	106.7	.417	1.246	206.8	444.1	.726	1.766D	111.7	1.107	1.5	25.0	64.2	.421
		20.63	15.08	10.92	5.56	8.94	4.16	16.73	1/2/2	122.6	4.1	8.9	.152	12.905	175.8	236.6	-.9	90.9D	1.804
5- 230	5- 260.5	.558	69.4	17.9	-2.5	1.083	120.2	.528	1.247	257.7	296.6	.589A	1.905D	69.1	1.396	1.1	2.7	317.9	.520
5- 260.5	5- 550	.520	322.0	4.7	1.9	1.365	111.7	.495	1.127	289.9	553.5	.569	1.685	77.4	.576	-.1	6.0	165.9	.206
5- 550	5- 790	.177	154.9	13.9	.9	.627	103.6	.418	1.210	200.7	448.1	.704	1.716D	112.4	1.098	1.3	25.7	73.1	.427
		20.52	15.92	12.18	4.39	7.79	3.74	16.86	1/2/2	114.4	3.2	4.6	.222	24.861	27.1	231.8	-26.8	99.9D	5.302
5- 240	5- 276.6	.591	66.8	15.7	-3.3	1.206	118.6	.633	1.925	282.4	337.2	.706A	3.145D	81.2	1.493	.1	.5	305.0	.383
5- 276.6	5- 550	.383	333.8	7.9	2.3	1.371	104.6	.436	1.152	310.2	548.3	.650	1.653	83.7	.593	-1.0	-3.6	178.7	.163
5- 550	5- 800	.165	167.4	9.9	1.1	.610	100.3	.424	1.179	194.6	452.3	.680	1.679D	113.3	1.089	1.3	26.1	82.1	.437
		19.93	16.50	13.02	3.43	6.83	3.48	17.08	1/2/2	98.8	3.6	29.6	.410	3.917	15.3	230.5	-14.6	126.4D	1.195

MARS ARRIVAL DATE = 2450560 (21 APR 1997)

5- 160	5- 296.3	.218	83.6	-37.7	-12.0	.920	89.8	.158	.859	179.0	342.5	.723A	.995	87.6	1.260	11.8	73.0	337.2	.270
5- 296.3	5- 560	.270	339.4	19.2	3.7	1.378	97.0	.397	1.174	335.2	546.7	.709	1.640	85.6	.611	-3.2	-17.3	186.7	.148
5- 560	5- 720	.438	118.9	38.2	10.4	.832	123.5	.562	1.874	247.5	420.3	.820	2.927D	110.9	1.210	-9.0	-11.7	26.0	.496
		18.64	15.51	4.96	3.13	6.53	10.55	18.47	1/2/1	90.5	25.4	53.9	.826	2.206	89.3	160.4	43.9	118.1D	.996
5- 170	5- 302.7	.222	80.7	-37.0	-12.0	.920	91.5	.159	.863	188.1	351.6	.726A	1.000D	88.9	1.262	11.3	74.2	326.2	.258
5- 302.7	5- 560	.258	336.5	29.5	5.3	1.380	94.4	.390	1.179	344.1	545.6	.719	1.638	86.4	.614	-4.9	-25.1	186.6	.152
5- 560	5- 730	.458	116.8	-10.5	-20.7	.796	121.6	.525	1.690	241.6	424.5	.803	2.577D	111.1	1.188	22.2	45.8	354.5	.612
		19.33	16.12	5.02	3.21	6.61	11.10	21.31	1/2/2	87.3	43.3	45.0	.907	2.615	86.5	161.2	37.9	114.5D	1.464
5- 180	5- 327.4	.200	59.9	77.8	10.4	.914	92.2	.169	.860	191.0	384.7	.715	1.005D	93.5	1.265	-12.5	-69.3	293.1	.291
5- 327.4	5- 560	.291	308.7	-31.0	-6.3	1.382	83.6	.396	1.172	22.6	184.6	.708D	1.636	87.0	.610	6.0	13.9	206.4	.161
5- 560	5- 740	.344	119.6	14.2	-3.5	.764	119.5	.493	1.557	235.6	428.3	.789	2.325D	111.2	1.169	5.1	24.7	28.4	.457
		16.04	12.66	4.70	3.38	6.79	7.96	17.55	2/1/2	85.2	16.1	39.3	.709	2.975	82.6	139.1	-38.7	67.2L	1.400
5- 190	5- 332.3	.208	63.3	74.7	10.4	.913	93.8	.177	.862	198.3	390.1	.709	1.015D	94.4	1.267	-12.8	-67.0	294.7	.305
5- 332.3	5- 560	.305	307.1	-20.3	-4.4	1.381	81.3	.404	1.165	30.8	184.9	.694D	1.637	86.7	.606	4.0	7.5	202.2	.156
5- 560	5- 750	.307	124.5	17.5	-1.2	.734	117.2	.469	1.457	229.6	432.2	.773	2.140D	111.3	1.153	2.9	22.5	38.3	.443
		15.04	11.76	4.81	3.28	6.68	6.96	17.23	2/1/2	86.3	11.0	47.4	.646	2.490	83.8	135.8	-45.6	62.6L	.963
5- 230	5- 259.3	.577	70.0	18.2	-2.4	1.085	121.2	.543	1.254	256.4	293.3	.573A	1.934D	67.7	1.398	1.1	2.6	317.9	.550
5- 259.3	5- 560	.550	322.0	4.4	1.9	1.365	113.2	.511	1.127	286.4	556.5	.551	1.703	74.1	.582	.0	6.8	164.6	.225
5- 560	5- 790	.194	153.1	14.4	.9	.639	106.3	.427	1.224	204.9	447.8	.702	1.746D	112.8	1.102	1.3	25.5	73.3	.435
		21.63	16.77	12.64	4.86	8.25	4.13	17.04	1/2/2	120.5	2.9	4.4	.199	25.859	24.5	231.5	-24.2	98.9D	4.949
5- 240	5- 275.1	.606	66.9	15.9	-3.3	1.214	119.1	.650	2.002	282.4	334.7	.701A	3.303D	80.1	1.500	.1	.5	305.9	.403
5- 275.1	5- 560	.403	333.8	7.0	2.1	1.371	105.7	.444	1.150	307.0	552.0	.639	1.661	80.7	.597	-.9	-1.4	175.5	.172
5- 560	5- 800	.177	164.4	11.0	1.1	.620	103.1	.428	1.189	198.8	451.9	.679	1.698D	113.5	1.092	1.2	25.9	82.3	.441
		20.77	17.14	13.39	3.64	7.04	3.75	17.17	1/2/2	107.2	3.3	28.6	.370	4.042	13.9	230.7	-13.3	124.1D	1.127

MARS ARRIVAL DATE = 2450570 (1 MAY 1997)

5- 180	5- 310.5	.252	79.9	-36.8	-13.7	.920	93.2	.163	.868	196.9	363.1	.726	1.009D	90.4	1.266	12.3	76.0	308.3	.278
5- 310.5	5- 570	.278	330.7	44.7	8.2	1.382	91.5	.385	1.180	354.6	548.3	.725	1.635	84.8	.620	-8.1	-34.3	180.6	.170
5- 570	5- 740	.387	121.8	11.0	-5.4	.794	122.1	.531	1.663	240.0	428.2	.779	2.546D	112.4	1.187	7.1	28.0	26.6	.495
		18.20	14.62	5.50	3.57	6.98	9.12	18.43	1/2/2	91.9	18.8	32.7	.776	3.553	83.1	161.3	28.3	107.0D	1.981
5- 180	5- 326.3	.226	55.0	80.5	12.2	.915	92.3	.168	.860	191.6	383.7	.716	1.005D	93.3	1.265	-14.2	-72.8	288.6	.324
5- 326.3	5- 570	.324	309.3	-44.4	-9.5	1.382	84.4	.393	1.174	19.9	188.1	.712D	1.635	84.8	.616	9.1	23.5	208.3	.180
5- 570	5- 740	.387	121.6	11.0	-5.4	.794	122.1	.531	1.663	240.0	428.2	.779	2.546D	112.4	1.187	7.1	28.0	26.6	.495
		18.01	14.21	5.09	3.80	7.20	9.12	18.43	2/1/2	91.7	18.8	30.0	.574	3.863	81.4	142.7	-29.6	68.8L	1.643
5- 190	5- 332.3	.209	63.1	74.9	10.5	.913	93.8	.177	.862	198.4	390.1	.709	1.015D	94.4	1.267	-12.9	-67.2	294.4	.307
5- 332.3	5- 570	.307	308.2	-24.5	-5.3	1.382	81.6	.403	1.166	29.6	188.3	.696D	1.636	84.5	.612	4.8	11.3	201.0	.159
5- 570	5- 750	.343	126.5	16.7	-1.5	.760	119.8	.500	1.529	234.0	432.0	.764	2.294D	112.4	1.167	3.2	22.9	38.3	.469
		16.08	12.73	4.83	3.35	6.75	7.91	17.83	2/1/2	93.3	11.4	43.6	.638	2.695	83.0	138.0	-43.1	62.8L	1.082
5- 240	5- 273.4	.624	67.0	16.1	-3.3	1.224	119.9	.670	2.104	282.2	331.8	.694A	3.514D	78.7	1.508	.1	.5	306.8	.428
5- 273.4	5- 570	.428	333.8	6.2	2.0	1.371	107.0	.456	1.149	303.1	555.5	.625	1.674	77.7	.601	-.8	.4	173.1	.187
5- 570	5- 800	.194	162.1	11.8	1.2	.632	105.8	.436	1.201	203.0	451.5	.678	1.724D	113.8	1.096	1.1	25.7	82.5	.447
		21.93	17.97	13.86	3.96	7.35	4.11	17.32	1/2/2	114.7	3.0	27.6	.327	4.195	12.6	231.0	-12.1	121.4D	1.046

MARS ARRIVAL DATE = 2450580 (11 MAY 1997)

5- 170	5- 302.5	.216	80.4	-36.5	-11.7	.920	91.5	.159	.863	188.1	351.1	.726A	1.000D	88.8	1.262	11.0	73.3	326.5	.251
5- 302.5	5- 580	.251	339.9	20.7	3.7	1.380	95.2	.392	1.179	341.4	552.6	.716	1.641	82.1	.625	-3.5	-17.2	183.7	.152
5- 580	5- 730	.487	127.4	33.3	9.3	.873	126.8	.626	2.098	250.3	423.8	.784	3.412D	113.8	1.236	-7.7	-4.3	31.5	.550
		20.04	16.85	4.93	3.20	6.60	11.92	19.77	1/2/1	102.0	20.6	53.1	.958	2.236	85.5	165.7	42.6	116.1D	1.184
5- 180	5- 309.1	.228	78.2	-34.7	-12.0	.920	93.3	.163	.868	197.3	361.4	.726	1.010D	90.2	1.266	10.7	72.8	311.7	.247
5- 309.1	5- 580	.247	334.0	32.3	5.5	1.381	92.4	.387	1.181	351.5	551.9	.724	1.637	82.7	.626	-5.5	-25.3	182.3	.157
5- 580	5- 740	.453	123.5	.9	-12.4	.830	124.7	.577	1.817	244.3	427.9	.769	2.865D	113.7	1.208	14.1	38.2	18.3	.574
		19.38	16.08	5.11	3.30	6.71	10.97	20.37	1/2/2	99.2	29.0	42.1	.984	2.785	81.8	165.2	35.8	110.3D	1.757
5- 190	5- 332.0	.216	62.4	75.8	10.9	.913	93.9	.177	.862	198.5	389.8	.709	1.015D	94.4	1.267	-13.4	-68.1	293.3	.315
5- 332.0	5- 580	.315	309.2	-31.2	-6.8	1.382	82.1	.401	1.169	27.9	191.6	.700D	1.638	82.4	.619	6.3	16.4	201.2	.168
5- 580	5- 750	.383	128.7	15.5	-2.0	.791	122.5	.537	1.630	238.3	431.8	.755	2.505D	113.6	1.184	3.7	23.6	36.2	.500
		17.46	13.92	4.92	3.54	6.94	9.00	18.56	2/1/2	99.2	11.9	38.1	.606	3.066	81.9	140.8	-38.9	63.1L	1.251
5- 240	5- 303.4	.442	71.8	14.6	-3.4	1.094	113.1	.438	1.288	273.3	370.4	.723	1.853D	93.2	1.406	.1	.6	291.1	.248
5- 303.4	5- 580	.248	339.2	22.1	3.9	1.380	94.8	.391	1.179	343.0	552.5	.718	1.640	82.2	.625	-3.7	-18.3	183.7	.152
5- 580	5- 800	.214	160.5	12.2	1.2	.646	108.6	.446	1.217	207.2	451.1	.675	1.759D	114.2	1.101	1.0	25.4	82.8	.457
		17.16	13.96	9.38	3.20	6.60	4.58	17.54	1/2/2	101.5	2.7	51.5	.979	2.303	28.2	230.0	-24.9	153.5D	1.276
5- 240	5- 308.1	.423	73.2	14.4	-3.4	1.076	112.5	.414	1.228	270.4	375.0	.719	1.737D	94.4	1.393	.1	.6	290.9	.245
5- 308.1	5- 580	.245	335.1	30.1	5.1	1.381	92.8	.387	1.181	349.9	552.0	.723	1.638	82.6	.626	-5.0	-23.8	182.8	.155
5- 580	5- 800	.214	160.5	12.2	1.2	.646	108.6	.446	1.217	207.2	451.1	.675	1.759D	114.2	1.101	1.0	25.4	82.8	.457
		16.81	13.54	8.95	3.27	6.67	4.58	17.54	1/2/2	99.6	2.7	51.2	1.001	2.313	39.3	233.1	-34.5	145.2D	1.315

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2450590
21 MAY 1997

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / PSI 2 / APHEL / -A	PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																				
5- 170	5- 302.3	.217	80.4	-36.6	-11.7	.920	91.5	.159	.863	188.1	351.2	.726A	1.000D	88.8	1.262	11.0	73.4	326.5	.252
5- 302.3	5- 590	.252	341.9	17.8	3.2	1.380	95.6	.394	1.180	340.0	555.9	.715	1.646	80.1	.631	-3.1	-14.7	182.8	.156
5- 590	5- 730	.534	127.9	26.8	5.4	.923	129.4	.695	2.529	254.6	423.5	.773	4.286D	115.4	1.268	-3.8	4.1	29.6	.583
		21.50	18.20	4.94	3.29	6.70	13.26	20.59	1/2/1	108.5	16.1	56.3	.949	2.121	85.0	168.3	43.8	117.2D	1.064
5- 190	5- 318.7	.297	81.8	-36.6	-16.2	.921	94.9	.173	.873	205.0	374.4	.722	1.023D	92.1	1.270	14.3	76.0	291.5	.323
5- 318.7	5- 590	.323	323.3	54.3	10.9	1.383	88.7	.387	1.182	4.6	194.6	.725D	1.639	81.1	.632	-11.2	-39.2	173.9	.199
5- 590	5- 750	.429	131.0	13.6	-3.1	.827	125.2	.581	1.777	242.7	431.4	.744	2.810D	114.9	1.205	4.8	25.2	37.8	.538
		20.86	16.61	6.33	4.25	7.64	10.28	19.47	1/2/2	101.2	13.2	24.7	.576	4.669	79.8	161.9	21.6	96.4D	2.112
5- 190	5- 331.0	.249	59.6	79.4	13.2	.914	94.0	.177	.863	199.2	388.9	.710	1.016D	94.2	1.268	-15.6	-72.2	286.9	.358
5- 331.0	5- 590	.358	309.1	-46.5	-10.9	1.383	83.0	.399	1.173	24.7	194.7	.705D	1.641	80.6	.627	10.3	26.3	205.5	.197
5- 590	5- 750	.429	131.0	13.6	-3.1	.827	125.2	.581	1.777	242.7	431.4	.744	2.810D	114.9	1.205	4.8	25.2	37.8	.538
		19.93	15.74	5.46	4.19	7.58	10.28	19.47	2/1/2	102.7	13.2	27.6	.469	4.191	80.1	145.0	-28.3	64.2L	1.497
5- 200	5- 336.9	.227	68.6	72.4	11.0	.913	95.7	.189	.866	205.7	395.0	.702	1.030D	95.4	1.270	-13.7	-65.5	296.2	.330
5- 336.9	5- 590	.330	310.4	-24.2	-5.7	1.382	80.2	.411	1.165	34.2	194.9	.687D	1.643	80.1	.623	4.9	12.3	196.6	.171
5- 590	5- 760	.382	135.7	16.4	-.5	.787	122.8	.541	1.594	236.5	435.3	.731	2.456D	114.7	1.180	2.3	22.7	47.7	.513
		17.67	14.07	5.10	3.59	7.00	8.98	18.87	2/1/2	106.5	8.4	42.3	.552	2.770	82.1	141.7	-43.9	60.9L	.977
5- 240	5- 303.5	.441	71.8	14.6	-3.4	1.093	113.1	.438	1.287	273.3	370.6	.723	1.850D	93.2	1.406	.1	.6	291.1	.248
5- 303.5	5- 590	.248	341.1	19.0	3.4	1.381	95.1	.393	1.181	341.7	555.7	.717	1.645	80.3	.632	-3.3	-15.6	[illegible]	.156
5- 590	5- 800	.237	159.8	12.3	1.3	.662	111.5	.459	1.238	211.5	450.8	.671	1.806D	114.8	1.108	.9	25.1	83.0	.469
		17.82	14.53	9.37	3.29	6.69	5.17	17.83	1/2/2	108.0	2.3	52.4	.979	2.264	23.8	229.5	-21.0	157.4D	1.238
5- 240	5- 312.2	.407	74.6	14.3	-3.4	1.061	111.9	.395	1.182	267.6	378.7	.715	1.648D	95.3	1.382	.1	.6	291.6	.244
5- 312.2	5- 590	.244	332.8	32.6	5.5	1.382	91.5	.387	1.183	354.7	554.9	.725	1.640	81.0	.633	-5.6	-24.8	181.1	.161
5- 590	5- 800	.237	159.8	12.3	1.3	.662	111.5	.459	1.238	211.5	450.8	.671	1.806D	114.8	1.108	.9	25.1	83.0	.469
		17.16	13.76	8.60	3.40	6.80	5.17	17.83	1/2/2	104.7	2.3	50.2	1.009	2.357	43.7	234.9	-38.4	141.6D	1.368
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																				
5- 180	5- 308.6	.219	77.6	-33.8	-11.5	.921	93.3	.163	.868	197.5	360.6	.727	1.010D	90.1	1.266	10.2	71.4	312.8	.236
5- 308.6	5- 600	.236	339.5	21.5	3.6	1.382	93.5	.391	1.185	347.7	558.4	.722	1.647	78.9	.640	-3.7	-17.2	182.5	.161
5- 600	5- 740	.543	135.3	27.5	7.5	.922	130.0	.698	2.472	252.9	427.0	.747	4.197D	116.8	1.267	-5.7	3.5	37.5	.610
		21.88	18.48	4.98	3.39	6.80	13.50	21.27	1/2/1	112.0	15.8	52.2	1.076	2.272	80.3	172.0	41.3	114.2D	1.369
5- 190	5- 316.2	.241	77.5	-31.7	-12.3	.922	95.1	.173	.874	206.1	371.6	.723	1.025D	91.7	1.271	10.5	69.0	300.6	.247
5- 316.2	5- 600	.247	330.5	34.3	5.8	1.384	90.2	.388	1.185	359.3	557.9	.726	1.644	79.3	.640	-6.1	-25.6	180.0	.169
5- 600	5- 750	.486	132.7	8.4	-6.6	.870	127.8	.634	2.006	246.9	431.0	.733	3.279D	116.4	1.232	8.4	30.7	35.1	.592
		20.77	17.21	5.32	3.57	6.97	11.88	20.82	1/2/2	109.4	17.8	38.5	.987	3.036	76.3	169.6	34.1	105.2D	2.009
5- 200	5- 336.7	.233	68.4	73.4	11.5	.913	95.7	.189	.866	205.9	394.8	.702	1.030D	95.3	1.270	-14.2	-66.4	295.0	.339
5- 336.7	5- 600	.339	311.5	-31.5	-7.5	1.383	80.6	.409	1.170	32.1	197.8	.691D	1.648	78.4	.632	6.6	16.9	198.4	.183
5- 600	5- 760	.427	136.1	15.5	-.6	.823	125.5	.584	1.733	240.9	434.9	.721	2.745D	116.1	1.201	2.4	22.9	46.0	.549
		19.32	15.45	5.20	3.88	7.27	10.25	19.73	2/1/2	110.5	8.6	36.3	.523	3.208	80.6	145.2	-39.2	61.1L	1.155
5- 240	5- 304.4	.438	72.1	14.5	-3.4	1.090	113.0	.433	1.275	272.7	371.5	.723	1.827D	93.5	1.403	.1	.6	291.0	.247
5- 304.4	5- 600	.247	342.9	17.2	3.0	1.382	95.2	.395	1.183	341.5	556.8	.716	1.651	78.5	.640	-3.0	-14.1	182.6	.162
5- 600	5- 800	.265	159.7	12.2	1.3	.682	114.3	.475	1.267	215.8	450.4	.665	1.868D	115.5	1.116	.7	24.8	83.3	.485
		18.56	15.15	9.28	5.41	6.81	5.67	18.20	1/2/2	113.5	1.9	53.7	.985	2.214	21.0	229.6	-18.4	160.3D	1.196
5- 240	5- 315.7	.394	75.8	14.2	-3.4	1.049	111.4	.380	1.147	265.1	381.6	.712	1.562D	95.9	1.373	.1	.7	292.8	.244
5- 315.7	5- 600	.244	331.2	33.2	5.5	1.384	90.4	.388	1.185	358.5	557.9	.726	1.644	79.3	.640	-5.8	-24.8	180.4	.168
5- 600	5- 800	.265	159.7	12.2	1.3	.682	114.3	.475	1.267	215.8	450.4	.665	1.868D	115.5	1.116	.7	24.8	83.3	.485
		17.72	14.18	8.31	3.54	6.94	5.67	18.20	1/2/2	109.6	1.9	48.6	1.008	2.429	48.0	236.1	-40.6	139.3D	1.440

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2450470
21 JAN 1997

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																			
5- 60	5- 327.7	.262	69.8	31.7	2.7	.947	75.6	.275	.878	129.4	424.0	.636	1.120	102.4	1.275	-1.2	-5.3	273.1	.292
5- 327.7	5- 470	.292	315.2	-8.5	-1.8	1.423	83.8	.475	1.354	19.4	141.3	.711D	1.997A	115.3	.680	2.2	-11.3	219.4	.315
5- 470	5- 680	.306	82.7	63.2	16.6	.712	107.6	.338	1.439	226.0	399.6	.953	1.925D	99.7	1.133	-16.3	-53.0	21.5	.382
		19.72	12.62	5.69	7.10	10.47	6.93	15.89	2/1/1	23.7	58.1	41.8	.704	2.802	8.7	204.7	4.5	125.2D	1.269
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																			
5- 80	5- 325.6	.252	69.3	32.3	2.8	.947	76.2	.264	.879	129.7	421.0	.646	1.111	101.6	1.275	-1.2	-5.5	271.7	.275
5- 325.6	5- 480	.275	314.1	-10.5	-2.0	1.412	84.5	.450	1.298	17.8	147.3	.714D	1.882A	111.4	.656	2.4	-10.1	219.6	.274
5- 480	5- 680	.281	80.8	48.6	10.0	.726	110.0	.361	1.482	231.2	400.5	.948	2.017D	100.4	1.142	-9.6	-35.6	12.0	.311
		17.87	11.76	5.50	6.09	9.47	6.27	14.43	2/1/1	28.4	45.4	42.3	.794	2.773	11.0	203.8	6.9	127.4D	1.408
5- 140	5- 303.1	.239	58.4	84.5	13.1	.928	87.1	.157	.862	164.0	359.0	.727A	.997	89.9	1.262	-13.0	-78.2	308.1	.290
5- 303.1	5- 480	.290	336.8	-31.3	-6.2	1.405	94.7	.439	1.282	344.5	509.6	.719	1.845A	109.7	.649	7.1	1.2	220.2	.267
5- 480	5- 740	.150	112.1	17.9	-1.0	.647	99.9	.345	1.277	199.9	428.0	.836	1.719D	105.8	1.107	2.4	20.6	30.3	.327
		14.36	8.44	5.29	5.92	9.30	3.15	14.75	2/1/2	34.6	13.2	48.5	.717	2.435	83.5	165.1	-33.9	118.3D	1.029
5- 150	5- 311.5	.194	72.3	81.9	10.3	.924	88.1	.157	.860	169.9	368.2	.725	.995	91.1	1.262	-10.9	-72.7	299.2	.250
5- 311.5	5- 480	.250	329.6	-19.3	-3.4	1.409	91.3	.440	1.297	355.9	507.8	.726	1.868A	110.5	.656	4.1	-6.1	220.3	.267
5- 480	5- 750	.137	122.8	17.9	-.6	.635	97.6	.352	1.254	194.5	432.5	.812	1.695D	106.9	1.103	2.1	21.8	36.1	.342
		13.41	7.49	4.60	5.91	9.29	2.69	15.04	2/1/2	29.9	10.3	56.2	.964	2.125	80.1	162.0	-41.6	103.6D	1.084
5- 160	5- 317.9	.181	69.4	80.2	9.5	.920	89.3	.159	.859	176.4	374.7	.722	.996	92.0	1.263	-10.7	-70.1	296.3	.249
5- 317.9	5- 480	.249	322.4	-14.6	-2.6	1.411	88.4	.443	1.302	5.3	147.1	.725D	1.879A	111.0	.658	3.1	-8.5	220.5	.270
5- 480	5- 760	.128	135.9	16.4	-.2	.624	95.1	.362	1.252	189.1	437.1	.786	1.678D	108.1	1.099	1.9	23.1	46.1	.359
		13.17	7.17	4.43	6.00	9.38	2.73	15.39	2/1/2	28.6	7.9	57.8	.972	2.069	80.1	155.2	-45.4	91.0D	1.039
MARS ARRIVAL DATE = 2450490 (10 FEB 1997)																			
5- 80	5- 324.4	.246	69.0	32.7	2.8	.947	76.6	.258	.879	129.9	419.2	.652	1.106	101.1	1.275	-1.2	-5.7	270.9	.266
5- 324.4	5- 490	.266	312.9	-12.6	-2.4	1.403	84.8	.432	1.259	17.2	153.0	.715D	1.804A	107.7	.638	2.7	-8.6	219.3	.242
5- 490	5- 680	.294	82.7	40.7	7.1	.743	112.4	.388	1.539	236.3	401.3	.941	2.136D	101.2	1.152	-6.7	-25.2	7.0	.301
		17.30	12.01	5.40	5.29	8.67	6.61	14.26	2/1/1	33.6	38.5	42.0	.853	2.788	13.8	203.4	9.6	128.6D	1.524
5- 150	5- 311.7	.192	73.1	81.6	10.2	.924	88.1	.157	.860	169.9	368.4	.725	.995	91.1	1.262	-10.7	-72.3	299.1	.247
5- 311.7	5- 490	.247	327.2	-23.8	-4.1	1.401	90.8	.424	1.261	357.3	513.3	.726	1.796A	107.1	.639	4.7	-3.3	220.5	.240
5- 490	5- 750	.149	120.9	18.4	-.6	.640	99.9	.358	1.263	198.8	432.4	.811	1.714D	107.1	1.106	2.1	21.9	38.2	.347
		12.93	7.71	4.57	5.22	8.60	3.14	15.14	2/1/2	35.5	10.4	51.0	.985	2.324	80.3	159.7	-39.7	102.1D	1.304
5- 160	5- 318.1	.178	70.4	79.8	9.3	.920	89.3	.159	.859	176.3	375.0	.722	.996	92.0	1.263	-10.5	-69.6	296.5	.245
5- 318.1	5- 490	.245	319.7	-17.2	-3.0	1.403	87.9	.427	1.263	7.0	152.8	.724D	1.803A	107.5	.640	3.4	-6.7	220.1	.240
5- 490	5- 760	.137	132.7	17.3	-.2	.628	97.4	.365	1.238	193.2	436.9	.786	1.690D	106.2	1.101	1.9	23.2	46.2	.361
		12.54	7.30	4.39	5.24	8.63	2.90	15.44	2/1/2	33.9	8.0	54.3	1.001	2.190	80.7	151.9	-44.7	88.5L	1.191
5- 170	5- 323.2	.181	64.4	78.4	9.4	.917	90.7	.163	.858	183.4	380.2	.719	.998D	92.8	1.264	-11.1	-68.6	295.1	.260
5- 323.2	5- 490	.260	314.1	-13.4	-2.5	1.403	85.5	.431	1.261	15.1	152.9	.717D	1.804A	107.7	.639	2.8	-8.3	219.5	.242
5- 490	5- 770	.132	146.6	14.6	.2	.616	94.6	.377	1.216	187.7	441.5	.758	1.674D	109.4	1.097	1.8	24.5	54.5	.379
		12.50	7.23	4.43	5.28	8.66	2.79	15.81	2/1/2	33.6	5.9	56.6	.890	2.110	82.1	144.8	-47.6	78.4L	.988
MARS ARRIVAL DATE = 2450500 (20 FEB 1997)																			
5- 70	5- 315.6	.242	58.2	32.9	3.2	.952	77.0	.248	.887	128.5	413.9	.666	1.107	99.9	1.277	-.6	-2.9	260.5	.243
5- 315.6	5- 500	.243	320.8	-23.5	-4.0	1.396	88.8	.413	1.236	4.0	158.2	.725D	1.747A	104.0	.628	4.5	-2.6	219.9	.216
5- 500	5- 670	.337	62.2	31.8	3.8	.784	116.1	.441	1.699	246.3	397.4	.950	2.448D	101.2	1.177	-5.4	-15.8	357.4	.298
		17.76	13.11	5.34	4.65	8.04	7.77	14.20	2/1/1	40.5	37.0	61.7	1.019	1.951	25.4	204.9	19.8	140.3D	.968
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.2	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.260
5- 323.7	5- 500	.260	311.9	-15.0	-2.8	1.397	85.0	.419	1.232	17.1	158.3	.715D	1.748A	104.2	.625	3.0	-6.5	218.5	.216
5- 500	5- 680	.319	85.2	36.1	5.6	.764	114.8	.421	1.614	241.4	402.1	.935	2.294D	102.1	1.166	-5.0	-18.7	3.8	.312
		17.27	12.62	5.35	4.65	8.04	7.27	14.45	2/1/1	39.6	34.7	41.8	.888	2.805	17.0	203.4	12.8	129.2D	1.603
5- 90	5- 350.9	.418	82.3	24.9	-.8	.938	65.7	.430	.866	131.1	452.8	.494	1.238	113.7	1.273	-2.7	-6.1	295.0	.521
5- 350.9	5- 500	.521	308.2	-4.3	-1.7	1.379	68.6	.501	1.143	68.0	165.6	.570D	1.716A	103.6	.573	1.1	-7.8	204.9	.235
5- 500	5- 690	.316	90.5	47.2	10.5	.745	113.4	.404	1.542	236.3	406.5	.919	2.165D	102.9	1.155	-9.8	-30.3	13.8	.353
		21.15	16.04	8.84	5.11	8.50	7.20	15.28	2/1/1	51.1	39.7	13.2	.221	8.670	9.3	210.9	-7.6	94.1D	1.696
5- 150	5- 292.5	.270	85.9	-40.4	-15.2	.922	86.3	.160	.858	170.8	338.0	.721A	.995	87.0	1.259	15.6	77.4	349.7	.345
5- 292.5	5- 500	.345	339.5	38.9	9.1	1.387	98.2	.419	1.209	332.0	523.1	.703	1.715A	101.5	.613	-8.0	-35.0	198.3	.215
5- 500	5- 750	.164	119.7	18.7	-.6	.647	102.2	.366	1.274	203.1	432.4	.808	1.740D	107.4	1.109	2.2	21.9	38.2	.354
		13.89	9.27	5.82	4.62	8.01	3.45	15.29	1/2/2	51.0	10.5	38.8	.504	3.010	92.7	337.6	7.1	124.9D	1.014
5- 150	5- 311.4	.196	71.4	82.2	10.5	.924	88.1	.157	.860	169.9	367.9	.725	.995	91.1	1.262	-11.1	-73.1	299.2	.253
5- 311.4	5- 500	.253	325.9	-30.6	-5.5	1.395	90.7	.412	1.235	357.7	518.6	.726	1.744A	103.7	.627	5.9	1.4	220.4	.219
5- 500	5- 750	.164	119.7	18.7	-.6	.647	102.2	.366	1.274	203.1	432.4	.808	1.740D	107.4	1.109	2.2	21.9	38.2	.354
		12.80	8.09	4.64	4.71	8.10	3.45	15.29	2/1/2	42.3	10.5	44.7	.941	2.628	80.8	158.2	-36.0	102.0D	1.531
5- 160	5- 318.2	.177	70.7	79.7	9.3	.920	89.3	.159	.859	176.3	375.1	.722	.996	92.1	1.263	-10.4	-69.4	296.5	.244
5- 318.2	5- 500	.244	317.7	-20.3	-3.5	1.396	87.6	.415	1.236	8.1	158.2	.723D	1.748A	104.1	.627	3.9	-4.2	219.5	.216
5- 500	5- 760	.149	130.3	18.0	-.2	.633	99.7	.370	1.246	197.4	436.7	.785	1.708D	108.4	1.103	1.9	23.2	46.4	.366
		12.16	7.52	4.38	4.64	8.03	3.13	15.53	2/1/2	39.9	8.0	50.8	1.010	2.352	81.1	149.5	-43.4	86.6L	1.345
5- 170	5- 323.3	.180	64.8	78.3	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.4	295.3	.258
5- 323.3	5- 500	.258	312.3	-15.3	-2.8	1.397	85.2	.419	1.232	16.3	158.3	.716D	1.748A	104.2	.626	3.1	-6.4	218.6	.216
5- 500	5- 770	.139	143.1	15.8	.2	.620	97.0	.379	1.222	191.8	441.1	.759	1.685D	109.5	1.098	1.8	24.5	54.7	.381
		12.00	7.35	4.42	4.65	8.04	2.93	15.85	2/1/2	39.5	5.9	54.2	.901	2.195	82.6	142.3	-46.9	76.5L	1.077
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																			
5- 70	5- 316.1	.244	58.3	32.7	3.2	.952	76.9	.251	.886	128.4	414.7	.664	1.109	100.1	1.277	-.6	-2.9	260.8	.247
5- 316.1	5- 510	.247	318.8	-27.7	-4.7	1.392	88.4	.404	1.217	5.5	163.3	.725D	1.708A	100.8	.619	5.1	1.1	219.1	.198
5- 510	5- 670	.374	85.1	30.3	3.4	.613	118.6	.487	1.838	251.4	398.0	.943	2.732D	102.2	1.196	-2.9	-13.3	355.9	.324
		18.37	14.15	5.38	4.22	7.61	8.77	14.70	2/1/1	47.3	35.8	60.5	.988	1.984	30.6	206.0	24.3	138.4D	.972
5- 80	5- 323.5	.241	68.8	33.0	2.8	.948	76.9	.254	.880	130.0	417.9	.656	1.103	100.8	1.275	-1.2	-5.8	270.3	.259
5- 323.5	5- 510	.259	310.9	-17.4	-3.2	1.392	84.9	.410	1.212	17.5	163.4	.715D	1.709A	100.9	.616	3.4	-3.9	217.3	.196
5- 510	5- 680	.351	87.9	33.1	4.6	.789	117.3	.460	1.718	246.4	402.6	.928	2.508D	103.1	1.182	-4.0	-14.4	1.7	.331
		17.62	13.46	5.33	4.16	7.56	8.12	14.84	2/1/1	46.2	32.5	41.4	.897	2.832	20.7	203.8	16.4	129.1D	1.644
5- 90	5- 349.7	.400	82.4	25.3	-1.0	.938	66.8	.413	.866	130.7	450.5	.509	1.223	112.5	1.273	-2.6	-6.2	294.1	.497
5- 349.7	5- 510	.497	307.7	-4.8	-1.8	1.376	69.8	.486	1.135	65.5	169.5	.583D	1.687A	99.7	.569	1.2	-6.6	203.2	.213
5- 510	5- 690	.333	91.8	39.2	7.3	.767	115.9	.437	1.621	241.2	407.1	.912	2.329D	103.9	1.168	-6.6	-19.7	9.6	.348
		20.66	16.08	8.43	4.58	7.97	7.64	15.18	2/1/1	57.5	32.6	13.5	.243	8.485	8.0	210.4	-5.7	95.6D	1.819
5- 150	5- 305.2	.400	357.9	86.1	23.4	.924	88.4	.156	.861	171.5	360.0	.727A	.995	90.0	1.262	-23.7	-88.2	153.0	.506
5- 305.2	5- 510	.506	340.8	-73.4	-20.5	1.389	93.0	.403	1.212	349.6	524.5	.723	1.701A	100.0	.617	21.1	31.5	223.1	.307
5- 510	5- 750	.181	119.2	18.9	-.7	.655	104.6	.376	1.289	207.5	432.4	.804	1.773D	107.8	1.113	2.3	22.0	38.2	.362
		19.23	12.28	8.45	6.95	10.32	3.83	15.47	2/1/2	65.8	10.6	16.4	.234	6.248	90.2	340.1	-11.0	116.3D	1.230
5- 150	5- 309.3	.233	55.0	84.9	12.9	.924	88.2	.156	.861	170.4	365.2	.726	.995	90.7	1.262	-13.3	-78.2	299.1	.297
5- 309.3	5- 510	.297	327.5	-46.9	-9.0	1.390	91.3	.403	1.215	355.4	523.6	.726	1.705A	100.4	.618	9.6	12.9	221.2	.217
5- 510	5- 750	.181	119.2	18.9	-.7	.655	104.6	.376	1.289	207.5	432.4	.804	1.773D	107.8	1.113	2.3	22.0	38.2	.362
		13.66	9.02	5.19	4.66	8.05	3.83	15.47	2/1/2	53.1	10.6	33.1	.880	3.511	83.0	158.4	-25.9	106.4D	1.708
5- 160	5- 318.0	.179	70.2	79.9	9.4	.920	89.3	.159	.859	176.3	374.9	.722	.996	92.0	1.263	-10.5	-69.7	296.4	.246
5- 318.0	5- 510	.246	316.5	-24.4	-4.2	1.392	87.5	.405	1.216	8.6	163.2	.723D	1.709A	100.8	.618	4.5	-.7	218.8	.197
5- 510	5- 760	.163	128.6	18.5	-.2	.640	102.1	.378	1.257	201.6	436.6	.782	1.732D	108.7	1.107	1.9	23.2	46.5	.372
		12.02	7.83	4.40	4.19	7.58	3.43	15.66	2/1/2	46.7	8.1	48.8	.994	2.516	81.4	148.1	-41.3	85.6L	1.508
5- 170	5- 323.3	.180	64.8	78.2	9.3	.917	90.6	.163	.858	183.3	380.3	.718	.998D	92.8	1.264	-11.0	-68.3	295.3	.258
5- 323.3	5- 510	.258	311.1	-17.7	-3.2	1.392	85.1	.410	1.212	17.1	163.4	.716D	1.709A	100.9	.616	3.4	-5.8	217.3	.196
5- 510	5- 770	.149	140.1	16.8	.2	.626	99.4	.383	1.229	195.9	440.8	.756	1.700D	109.6	1.100	1.8	24.4	54.8	.384
		11.72	7.55	4.41	4.16	7.56	3.14	15.92	2/1/2	46.2	8.0	51.7	.903	2.295	83.0	140.8	-45.9	75.1L	1.170

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS | MARS ARRIVAL DATE = 2450520 | 12 MAR 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																				
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.3	.655	1.104	100.6	1.275	-1.2	-5.7	270.4		.261
5- 323.7	5- 520	.261	310.0	-19.9	-3.7	1.388	84.8	.404	1.198	18.2	168.2	.714D	1.661A	97.8	.610	3.8	-.9	215.5		.180
5- 520	5- 680	.388	90.7	31.1	3.9	.820	119.8	.507	1.867	251.2	403.1	.920	2.813D	104.2	1.201	-3.2	-11.4	.2		.356
		18.30	14.50	5.35	3.80	7.20	9.15	15.38	2/1/1	53.4	31.2	41.0	.886	2.855	24.7	204.7	20.2	128.6D	1.643	
5- 90	5- 348.4	.382	82.4	25.8	-1.1	.939	67.9	.396	.866	130.5	446.1	.523	1.209	111.3	1.273	-2.5	-6.3	293.2		.473
5- 348.4	5- 520	.473	307.3	-5.4	-2.0	1.375	71.0	.473	1.132	62.6	173.0	.596D	1.668A	96.2	.569	1.3	-5.2	201.4		.196
5- 520	5- 690	.363	94.1	34.8	5.6	.793	118.4	.477	1.729	246.0	407.5	.904	2.554D	104.9	1.185	-4.8	-13.6	7.0		.365
		20.67	16.49	8.04	4.18	7.57	8.45	15.51	2/1/1	64.1	29.3	14.1	.268	8.157	6.8	209.9	-3.4	97.3D	1.921	
5- 160	5- 299.1	.285	84.7	-41.4	-16.2	.921	89.8	.157	.860	178.8	346.6	.725A	.995	88.2	1.260	16.0	81.1	344.5		.351
5- 299.1	5- 520	.351	339.0	51.2	11.4	1.384	95.4	.401	1.194	340.9	530.2	.716	1.673A	96.4	.609	-10.7	-40.8	190.5		.208
5- 520	5- 760	.180	127.6	18.7	-.2	.649	104.6	.387	1.271	205.9	436.5	.779	1.762D	109.0	1.110	2.0	23.1	46.6		.380
		14.33	9.89	6.10	4.44	7.83	3.80	15.83	1/2/2	63.5	8.1	30.0	.488	3.863	91.1	337.8	6.2	120.2D	1.396	
5- 160	5- 301.9	.424	86.1	-43.0	-24.9	.921	89.7	.157	.861	178.4	350.3	.726A	.995	88.7	1.261	24.5	86.4	82.6		.524
5- 301.9	5- 520	.524	349.4	72.9	21.3	1.385	94.4	.399	1.197	344.5	529.6	.720	1.675A	96.8	.610	-20.6	-51.5	176.7		.292
5- 520	5- 760	.180	127.6	18.7	-.2	.649	104.6	.387	1.271	205.9	436.5	.779	1.762D	109.0	1.110	2.0	23.1	46.6		.380
		19.33	12.77	8.97	6.57	9.94	3.80	15.83	1/2/2	70.7	8.1	17.7	.219	6.505	93.5	338.5	9.7	118.8D	1.204	
5- 160	5- 317.6	.185	68.2	80.7	9.8	.920	89.3	.159	.859	176.4	374.4	.722	.996	92.0	1.263	-10.9	-70.8	296.0		.253
5- 317.6	5- 520	.253	316.2	-30.7	-5.3	1.388	87.7	.398	1.202	8.2	168.0	.723D	1.661A	97.7	.613	5.6	4.7	217.7		.184
5- 520	5- 760	.180	127.6	18.7	-.2	.649	104.6	.387	1.271	205.9	436.5	.779	1.762D	109.0	1.110	2.0	23.1	46.6		.380
		12.18	8.28	4.48	3.90	7.30	3.80	15.83	2/1/2	54.5	8.1	41.7	.939	2.811	81.6	147.8	-37.7	85.7L	1.700	
5- 170	5- 323.2	.180	64.7	78.3	9.4	.917	90.6	.163	.858	183.3	380.3	.719	.998D	92.8	1.264	-11.0	-68.5	295.2		.259
5- 323.2	5- 520	.259	310.5	-20.6	-3.8	1.388	85.0	.403	1.198	17.3	168.1	.715D	1.661A	97.8	.611	3.9	-.5	215.7		.180
5- 520	5- 770	.162	137.9	17.4	.2	.633	101.9	.389	1.239	200.1	440.6	.757	1.721D	109.9	1.103	1.7	24.3	55.0		.389 *
		11.64	7.84	4.42	3.81	7.20	3.42	16.03	2/1/2	53.4	6.0	48.8	.898	2.422	83.1	139.9	-44.4	74.2L	1.277	
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																				
5- 80	5- 324.3	.245	69.0	32.8	2.8	.947	76.6	.258	.879	129.9	419.1	.652	1.106	101.1	1.275	-1.2	-5.7	270.8		.265
5- 324.3	5- 530	.265	309.4	-22.6	-4.2	1.386	84.6	.399	1.187	19.2	172.6	.713D	1.661A	94.8	.607	4.2	2.6	213.4		.169
5- 530	5- 680	.431	93.6	29.7	3.4	.856	122.4	.564	2.093	256.0	403.5	.912	3.273D	105.4	1.225	-2.7	-9.2	359.2		.391
		19.31	15.75	5.40	3.55	6.96	10.36	16.07	2/1/1	61.2	30.6	40.8	.857	2.866	28.9	206.2	24.1	127.8D	1.599	
5- 90	5- 346.9	.363	82.3	26.3	-1.3	.939	69.1	.379	.867	130.3	445.6	.539	1.195	110.1	1.273	-2.4	-6.4	292.1		.449
5- 346.9	5- 530	449	307.1	-6.2	-2.1	1.375	72.2	.461	1.133	59.2	176.4	.611D	1.655A	93.0	.573	1.4	-3.7	199.6		.183
5- 530	5- 690	.400	96.8	31.9	4.6	.825	120.9	.525	1.685	250.7	407.8	.896	2.875D	106.0	1.205	-3.7	-9.6	5.4		.391
		21.01	17.13	7.65	3.88	7.28	9.49	16.07	2/1/1	70.8	27.6	14.9	.298	7.715	6.4	209.5	-.6	99.3D	2.004	
5- 160	5- 297.2	.234	83.9	-38.9	-13.0	.920	89.6	.158	.859	179.0	343.7	.724A	.995	87.8	1.260	12.8	75.3	338.2		.288
5- 297.2	5- 530	.288	337.4	32.8	6.5	1.381	96.2	.398	1.185	338.2	535.0	.713	1.656A	93.3	.606	-5.8	-29.3	193.8		.168
5- 530	5- 760	.199	127.4	18.8	-.2	.659	107.0	.398	1.288	210.3	436.4	.775	1.802D	109.5	1.115	2.0	23.1	46.7		.390
		13.00	9.45	5.21	3.55	6.95	4.24	16.05	1/2/2	67.3	8.1	42.5	.724	2.759	90.2	337.3	6.6	118.7D	1.273	
5- 160	5- 316.2	.209	59.5	83.0	11.4	.920	89.4	.158	.859	176.9	372.6	.723	.996	91.7	1.263	-12.4	-74.6	294.2		.281
5- 316.2	5- 530	.281	317.3	-43.3	-8.0	1.386	88.3	.393	1.193	6.1	172.5	.725D	1.661A	94.8	.611	8.2	14.5	217.8		.186
5- 530	5- 760	.199	127.4	18.8	-.2	.659	107.0	.398	1.288	210.3	436.4	.775	1.802D	109.5	1.115	2.0	23.1	46.7		.390
		12.99	9.06	4.82	3.93	7.33	4.24	16.05	2/1/2	64.1	8.1	32.9	.759	3.531	82.0	149.5	-29.3	88.6L	1.920	
5- 170	5- 323.1	.183	64.0	78.6	9.5	.917	90.7	.163	.859	183.4	380.1	.719	.998D	92.8	1.264	-11.2	-68.9	294.9		.262
5- 323.1	5- 530	.262	310.3	-24.7	-4.5	1.386	85.1	.398	1.189	17.1	172.6	.716D	1.661A	94.9	.608	4.6	3.7	214.0		.169
5- 530	5- 770	.178	136.4	17.8	.2	.642	104.4	.397	1.251	204.3	440.5	.754	1.749D	110.2	1.107	1.7	24.2	55.2		.397
		11.79	8.22	4.45	3.57	6.97	3.77	16.19	2/1/2	61.3	5.9	45.2	.878	2.602	83.0	140.0	-42.1	75.9L	1.407	
5- 180	5- 327.9	.191	61.7	76.6	9.8	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.6	1.265	-11.9	-67.8	294.5		.280
5- 327.9	5- 530	.280	307.1	-17.6	-3.5	1.385	82.8	.404	1.183	25.1	173.0	.704D	1.661A	94.7	.604	3.5	.2	211.7		.168
5- 530	5- 780	.162	147.5	15.6	.5	.625	101.5	.401	1.220	198.3	444.6	.731	1.708D	111.0	1.099	1.6	25.3	63.8		.406
		11.52	7.99	4.57	3.53	6.94	3.42	16.39	2/1/2	61.6	4.3	50.8	.766	2.330	84.2	133.0	-46.5	67.0L	1.020	
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																				
5- 80	5- 325.2	.249	69.2	32.5	2.8	.947	76.4	.262	.879	129.7	420.3	.648	1.109	101.4	1.275	-1.2	-5.6	271.4		.272
5- 325.2	5- 540	.272	308.9	-25.2	-4.6	1.384	84.3	.397	1.180	20.5	176.9	.712D	1.648A	92.1	.606	4.7	6.3	211.0		.162
5- 540	5- 680	.482	96.6	28.5	3.1	.900	124.9	.634	2.468	260.6	403.6	.903	4.033D	106.7	1.254	-2.2	-7.4	358.5		.431
		20.64	17.23	5.46	3.41	6.81	11.77	16.94	2/1/1	69.4	30.3	40.9	.815	2.862	33.1	208.1	28.1	126.8D	1.518	
5- 90	5- 345.2	.344	82.2	26.9	-1.4	.939	70.3	.360	.867	130.2	442.7	.555	1.180	108.9	1.273	-2.3	-6.5	290.8		.423
5- 345.2	5- 540	.423	307.0	-7.3	-2.3	1.376	73.6	.449	1.136	55.2	179.7	.626D	1.647A	90.3	.579	1.6	-2.0	198.0		.173
5- 540	5- 690	.444	99.6	30.0	3.9	.863	123.5	.583	2.125	255.3	408.0	.887	3.363D	107.3	1.230	-2.9	-6.9	4.4		.425
		21.62	17.97	7.25	3.66	7.06	10.72	16.81	2/1/1	77.3	26.8	16.1	.336	7.156	7.5	209.2	2.7	101.7D	2.069	
5- 160	5- 296.6	.223	83.7	-36.1	-12.3	.920	89.6	.158	.859	179.0	342.9	.725A	.995	87.7	1.260	12.1	73.8	337.5		.276
5- 296.6	5- 540	.276	337.7	26.2	5.1	1.380	96.5	.397	1.179	337.0	539.1	.711	1.647A	90.6	.606	-4.4	-24.3	191.9		.156
5- 540	5- 760	.221	127.7	18.7	-.2	.673	109.6	.413	1.311	214.7	436.3	.770	1.852D	110.1	1.121	2.0	23.0	46.8		.403
		13.09	9.81	5.04	3.28	6.69	4.77	16.33	1/2/2	74.6	8.1	47.6	.791	2.478	89.9	157.8	40.0	118.0D	1.168	
5- 170	5- 322.7	.189	62.2	79.4	9.9	.917	90.7	.163	.859	183.6	379.7	.719	.998D	92.7	1.264	-11.6	-70.0	294.2		.269
5- 322.7	5- 540	.269	310.7	-30.8	-5.7	1.384	85.4	.394	1.183	16.3	176.7	.717D	1.648A	92.1	.608	5.7	9.5	212.6		.165
5- 540	5- 770	.197	135.7	16.0	.2	.653	106.9	.408	1.268	208.6	440.3	.750	1.785D	110.6	1.112	1.7	24.1	55.3		.406
		12.22	8.74	4.54	3.48	6.88	4.20	16.40	2/1/2	69.5	5.9	40.3	.830	2.904	82.6	141.1	-38.4	74.2L	1.580	
5- 180	5- 327.8	.192	61.6	76.7	9.8	.914	92.2	.169	.859	190.8	385.2	.714	1.005D	93.6	1.265	-11.9	-67.9	294.4		.281
5- 327.8	5- 540	.281	307.3	-20.6	-4.1	1.384	83.0	.401	1.177	24.8	177.1	.705D	1.648A	92.0	.604	4.0	3.8	209.4		.160
5- 540	5- 780	.177	145.5	16.2	.6	.635	104.1	.408	1.231	202.5	444.5	.729	1.733D	111.3	1.103	1.5	25.1	64.0		.412
		11.70	8.32	4.58	3.37	6.78	3.75	16.53	2/1/2	69.6	4.2	48.0	.762	2.457	83.9	135.7	-45.0	66.7L	1.111	
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																				
5- 160	5- 296.4	.219	83.6	-37.8	-12.0	.920	89.8	.158	.859	179.0	342.6	.723A	.995	87.6	1.260	11.9	73.2	337.3		.271
5- 296.4	5- 550	.271	338.4	22.1	4.3	1.379	96.7	.396	1.176	336.1	543.0	.710	1.642	88.0	.608	-3.7	-20.5	189.2		.150
5- 550	5- 760	.246	128.6	18.5	-.2	.688	112.1	.430	1.340	219.1	436.2	.764	1.917D	110.7	1.129	2.0	22.9	46.9		.418
		13.52	10.36	4.98	3.16	6.57	5.38	16.67	1/2/2	82.6	8.1	51.1	.818	2.319	89.6	156.9	42.3	117.9D	1.080	
5- 170	5- 303.4	.236	81.3	-38.1	-13.0	.920	91.5	.159	.863	187.9	352.7	.726A	1.000D	89.0	1.263	12.2	76.2	325.5		.275
5- 303.4	5- 550	.275	335.2	36.3	7.1	1.381	93.9	.389	1.181	345.9	541.8	.721	1.641	88.9	.611	-6.7	-31.8	187.3		.162
5- 550	5- 770	.219	135.6	18.0	.2	.666	109.5	.421	1.289	212.9	440.1	.746	1.832D	111.2	1.118	1.7	24.0	55.5		.418
		13.38	9.96	5.24	3.42	6.82	4.72	16.66	1/2/2	79.9	5.8	38.2	.796	3.057	87.1	159.4	32.5	113.9D	1.637	
5- 170	5- 321.8	.212	55.5	81.7	11.5	.917	90.8	.162	.859	184.1	378.3	.720	.999D	92.5	1.264	-13.0	-73.5	291.1		.297
5- 321.8	5- 550	.297	311.6	-43.3	-8.5	1.383	86.1	.390	1.180	13.9	180.7	.719D	1.640	89.6	.610	8.4	19.3	212.9		.175
5- 550	5- 770	.219	135.6	18.0	.2	.666	109.5	.421	1.289	212.9	440.1	.746	1.832D	111.2	1.118	1.7	24.0	55.5		.418
		13.28	9.58	4.87	3.70	7.10	4.72	16.66	2/1/2	78.2	5.8	31.7	.682	3.666	82.0	143.9	-30.1	76.5L	1.617	
5- 180	5- 327.7	.194	61.2	77.0	10.0	.914	92.2	.169	.859	190.8	385.1	.714	1.005D	93.5	1.265	-12.0	-68.3	294.1		.283
5- 327.7	5- 550	.283	307.9	-24.7	-4.9	1.383	83.2	.398	1.173	24.0	180.9	.706D	1.640	89.4	.606	4.7	8.2	207.4		.158
5- 550	5- 780	.196	144.3	16.5	.6	.646	106.7	.417	1.246	206.8	444.1	.726	1.766D	111.7	1.107	1.5	25.0	64.2		.421
		12.09	8.77	4.61	3.32	6.72	4.16	16.73	2/1/2	77.6	4.1	44.4	.748	2.647	83.4	137.0	-42.6	66.8L	1.233	
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																				
5- 160	5- 296.3	.218	83.6	-37.7	-12.0	.920	89.8	.158	.859	179.0	342.5	.723A	.995	87.6	1.260	11.8	73.0	337.2		.270
5- 296.3	5- 560	.270	339.4	19.2	3.7	1.378	97.0	.397	1.174	335.2	546.7	.709	1.640	85.6	.611	-3.2	-17.3	186.7		.146
5- 560	5- 760	.274	129.9	18.2	-.3	.707	114.7	.451	1.379	223.4	436.1	.757	2.000D	111.5	1.138	2.1	22.9	47.0		.436
		14.19	11.06	4.96	3.13	6.53	6.10	17.07	1/2/2	90.5	8.1	53.9	.826	2.206	89.3	160.4	45.9	118.1D	.996	
5- 170	5- 302.7	.222	80.7	-37.0	-12.0	.920	91.5	.159	.863	188.1	351.6	.726A	1.000D	88.9	1.262	11.3	74.2	326.2		.258
5- 302.7	5- 560	.258	336.5	29.5	5.3	1.380	94.4	.390	1.179	344.1	545.6	.719	1.638	86.4	.614	-4.9	-25.1	186.6		.152
5- 560	5- 770	.244	136.2	17.8	.3	.682	112.1	.438	1.316	217.3	440.0	.740	1.892D	111.8	1.125	1.7	23.8	55.7		.433
		13.55	10.35	5.02	3.21	6.61	5.33	16.99	1/2/2	87.3	5.8	45.0	.907	2.615	86.5	161.2	37.9	114.5D	1.464	

LAUNCH / SWNGDY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 PROP	RA1 / RA3 / RA5 AERO	DECL1 / DECL3 / DECL5 DVL	I 1 / I 3 / I 5 DVA	V 1 / V 3 / V 5 EVA	PSI 1 / PSI 3 / PSI 5 DVD	ECCEN / ECCEN / ECCEN EVR	SMA / SMA / SMA TYPE	THET1 / THET3 / THET5 SUN A	THET2 / THET4 / THET6 SUN R	PERIH / PERIH / PERIH KAPPA	APHEL / APHEL / APHEL -A	PSI 2 / PSI 4 / PSI 6 E	V 2 / V 4 / V 6 INC	I 2 / I 4 / I 6 RAP	DECL2 / DECL4 / DECL6 DECLP	RA2 / RA4 / RA6 ETA	SPEED2 / SPEED4 / SPEED6 PERIC
5- 180	5- 327.4	.200	59.9	77.8	10.4	.914	92.2	.169	.860	191.0	384.7	.715	1.005D	93.5	1.265	-12.5	-69.3	293.1	.291
5- 327.4	5- 560	.291	308.7	-31.0	-6.3	1.382	83.6	.396	1.172	22.6	184.6	.708D	1.636	87.0	.610	6.0	13.9	206.4	.161
5- 560	5- 780	.217	143.8	16.6	.6	.660	109.3	.430	1.266	211.1	443.9	.722	1.809D	112.2	1.113	1.4	24.8	64.4	.432
		12.75	9.37	4.70	3.38	6.79	4.67	16.98	2/1/2	85.2	4.0	39.3	.709	2.975	82.6	139.1	-38.7	67.2L	1.400
5- 180	5- 332.3	.206	63.3	74.7	10.4	.913	93.8	.177	.862	198.3	390.1	.709	1.015D	94.4	1.267	-12.8	-67.0	294.7	.305
5- 332.3	5- 560	.305	307.1	-20.3	-4.4	1.381	81.3	.404	1.165	30.8	184.9	.694D	1.637	86.7	.606	4.0	7.5	202.2	.156
5- 560	5- 790	.194	153.1	14.4	.9	.639	106.3	.427	1.224	204.9	447.8	.702	1.746D	112.8	1.102	1.3	25.5	73.3	.435
		12.21	8.94	4.81	3.28	6.68	4.13	17.04	2/1/2	86.3	2.9	47.4	.646	2.490	83.8	135.8	-45.6	62.6L	.963
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																			
5- 170	5- 302.3	.217	80.4	-36.6	-11.7	.920	91.5	.159	.863	188.1	351.2	.726A	1.000D	88.8	1.262	11.0	73.4	326.5	.252
5- 302.3	5- 570	.252	338.1	24.3	4.3	1.380	94.8	.391	1.178	342.7	549.2	.718	1.638	84.2	.619	-4.0	-20.6	185.0	.150
5- 570	5- 770	.272	137.2	17.5	.3	.702	114.8	.458	1.352	221.6	439.8	.733	1.971D	112.6	1.134	1.6	23.6	55.9	.451
		14.15	10.99	4.95	3.16	6.57	6.05	17.40	1/2/2	94.9	5.7	49.5	.948	2.387	86.1	163.3	40.7	115.2D	1.315
5- 180	5- 310.5	.252	79.9	-36.8	-13.7	.920	93.2	.163	.868	196.9	363.1	.726	1.009D	90.4	1.266	12.3	76.0	308.3	.278
5- 310.5	5- 570	.278	330.7	44.7	8.2	1.382	91.5	.385	1.180	354.6	548.3	.725	1.635	84.8	.620	-8.1	-34.3	180.6	.170
5- 570	5- 780	.242	143.9	16.5	.7	.676	112.0	.445	1.291	215.4	443.6	.716	1.866D	112.9	1.120	1.3	24.5	64.6	.446
		14.35	10.78	5.50	3.57	6.98	5.27	17.30	1/2/2	91.9	3.8	32.7	.776	3.553	83.1	161.3	28.3	107.0D	1.981
5- 180	5- 326.3	.226	55.0	80.5	12.2	.915	92.3	.168	.860	191.6	383.7	.716	1.005D	93.3	1.265	-14.2	-72.8	288.6	.324
5- 326.3	5- 570	.324	309.3	-44.4	-9.5	1.382	84.4	.393	1.174	19.9	188.1	.712D	1.635	84.8	.616	9.1	23.5	208.3	.180
5- 570	5- 780	.242	143.9	16.5	.7	.676	112.0	.445	1.291	215.4	443.6	.716	1.866D	112.9	1.120	1.3	24.5	64.6	.446
		14.17	10.36	5.09	3.80	7.20	5.27	17.30	2/1/2	91.7	3.8	30.0	.574	3.863	81.4	142.7	-29.6	68.8L	1.643
5- 190	5- 332.3	.209	63.1	74.9	10.5	.913	93.8	.177	.862	198.4	390.1	.709	1.015D	94.4	1.267	-12.9	-67.2	294.4	.307
5- 332.3	5- 570	.307	308.2	-24.5	-5.3	1.382	81.6	.403	1.166	29.6	188.3	.696D	1.636	84.5	.612	4.8	11.3	201.0	.159
5- 570	5- 790	.215	152.1	14.7	.9	.653	109.1	.438	1.242	209.2	447.5	.698	1.785D	113.2	1.107	1.2	25.3	73.5	.445
		12.80	9.45	4.83	3.35	6.75	4.62	17.27	2/1/2	93.3	2.7	43.6	.638	2.695	83.0	138.0	-43.1	62.8L	1.082
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 170	5- 302.3	.216	80.4	-36.5	-11.7	.920	91.5	.159	.863	188.1	351.1	.726A	1.000D	88.8	1.262	11.0	73.3	326.5	.251
5- 302.3	5- 580	.251	339.9	20.7	3.7	1.380	95.2	.392	1.179	341.4	552.6	.716	1.641	82.1	.625	-3.5	-17.2	183.7	.152
5- 580	5- 770	.304	138.7	17.1	.3	.724	117.5	.482	1.400	226.0	439.5	.726	2.074D	113.5	1.145	1.6	23.4	56.1	.472
		15.00	11.81	4.93	3.20	6.60	6.88	17.89	1/2/2	102.0	5.7	53.1	.958	2.236	85.5	165.7	42.6	116.1D	1.184
5- 180	5- 309.1	.228	78.2	-34.7	-12.0	.920	93.3	.163	.868	197.3	361.4	.726	1.010D	90.2	1.266	10.7	72.8	311.7	.247
5- 309.1	5- 580	.247	334.0	32.3	5.5	1.381	92.4	.387	1.181	351.5	551.9	.724	1.637	82.7	.626	-5.5	-25.3	182.3	.157
5- 580	5- 780	.270	144.6	16.2	.7	.695	114.8	.464	1.324	219.8	443.4	.710	1.939D	113.6	1.129	1.3	24.3	64.9	.463
		14.40	11.10	5.11	3.30	6.71	5.99	17.69	1/2/2	99.2	3.7	42.1	.984	2.765	81.8	165.2	35.8	110.3D	1.757
5- 190	5- 332.0	.216	62.4	75.8	10.9	.913	93.9	.177	.862	198.5	389.8	.709	1.015D	94.4	1.267	-13.4	-68.1	293.3	.315
5- 332.0	5- 580	.315	309.2	-31.2	-6.8	1.382	82.1	.401	1.169	27.9	191.6	.700D	1.638	82.4	.619	6.3	16.4	201.2	.168
5- 580	5- 790	.240	151.8	14.6	1.0	.669	111.8	.452	1.265	213.5	447.2	.693	1.837D	113.8	1.114	1.1	25.0	73.8	.458
		13.68	10.14	4.92	3.54	6.94	5.22	17.58	2/1/2	99.2	2.4	38.1	.606	3.066	81.9	140.8	-38.9	63.1L	1.251
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																			
5- 170	5- 302.3	.217	80.4	-36.6	-11.7	.920	91.5	.159	.863	188.1	351.2	.726A	1.000D	88.8	1.262	11.0	73.4	326.5	.252
5- 302.3	5- 590	.252	341.9	17.8	3.2	1.380	95.6	.394	1.180	340.0	555.9	.715	1.646	80.1	.631	-3.1	-14.7	182.8	.156
5- 590	5- 770	.340	140.5	16.5	.4	.751	120.2	.510	1.464	230.4	439.2	.717	2.211D	114.6	1.158	1.5	23.2	56.4	.497
		16.08	12.78	4.94	3.29	6.70	7.84	18.48	1/2/2	108.5	5.7	56.3	.949	2.121	85.0	168.3	43.8	117.2D	1.064
5- 180	5- 308.7	.221	77.7	-34.0	-11.6	.921	93.3	.163	.868	197.4	360.8	.727	1.010D	90.1	1.266	10.3	71.7	312.6	.239
5- 308.7	5- 590	.239	336.7	25.9	4.3	1.382	92.9	.388	1.182	349.5	555.2	.723	1.642	80.7	.633	-4.4	-20.4	182.4	.157
5- 590	5- 780	.302	145.8	15.8	.8	.718	117.5	.487	1.369	224.1	443.1	.703	2.035D	114.5	1.139	1.2	24.0	65.2	.484
		15.14	11.83	5.01	3.30	6.71	6.82	18.18	1/2/2	105.9	5.6	47.8	1.055	2.470	81.0	168.6	39.3	112.4D	1.551
5- 190	5- 318.7	.297	81.8	-36.6	-16.2	.921	94.9	.173	.873	205.0	374.4	.722	1.023D	92.1	1.270	14.3	76.0	291.5	.323
5- 318.7	5- 590	.323	323.3	54.3	10.9	1.383	88.7	.387	1.182	4.6	194.6	.725D	1.639	81.1	.632	-11.2	-39.2	173.9	.199
5- 590	5- 790	.268	152.1	14.4	1.1	.689	114.6	.470	1.296	217.8	446.9	.687	1.904D	114.6	1.123	1.0	24.7	74.0	.475
		16.50	12.25	6.33	4.25	7.64	5.93	17.96	1/2/2	101.2	2.2	24.7	.576	4.669	79.8	161.9	21.6	96.4D	2.112
5- 190	5- 331.0	.249	59.6	79.4	13.2	.914	94.0	.177	.863	199.2	386.9	.710	1.016D	94.2	1.268	-15.6	-72.2	286.9	.358
5- 331.0	5- 590	.358	309.1	-46.5	-10.9	1.383	83.0	.399	1.173	24.7	194.7	.705D	1.641	80.6	.627	10.3	26.3	205.5	.197
5- 590	5- 790	.268	152.1	14.4	1.1	.689	114.6	.470	1.296	217.8	446.9	.687	1.904D	114.6	1.123	1.0	24.7	74.0	.475
		15.57	11.39	5.46	4.19	7.58	5.93	17.96	2/1/2	102.7	2.2	27.6	.469	4.191	80.1	145.0	-28.3	64.2L	1.497
5- 200	5- 336.9	.227	68.6	72.4	11.0	.913	95.7	.189	.866	205.7	395.0	.702	1.030D	95.4	1.270	-13.7	-65.5	296.2	.330
5- 336.9	5- 590	.330	310.4	-24.2	-5.7	1.382	80.2	.411	1.165	34.2	194.9	.687D	1.643	80.1	.623	4.9	12.3	196.6	.171
5- 590	5- 800	.237	159.8	12.3	1.3	.662	111.5	.459	1.238	211.5	450.8	.671	1.806D	114.8	1.108	.9	25.1	83.0	.469
		15.86	10.26	5.10	3.59	7.00	5.17	17.83	2/1/2	106.5	2.3	42.3	.552	2.770	82.1	141.7	-43.9	60.9L	.977
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																			
5- 170	5- 302.5	.219	80.5	-36.8	-11.9	.920	91.5	.159	.863	188.0	351.4	.726A	1.000D	88.8	1.262	11.2	73.8	326.4	.255
5- 302.5	5- 600	.255	344.1	15.5	2.8	1.381	96.0	.397	1.183	338.6	559.0	.713	1.652	78.3	.639	-2.8	-12.8	182.4	.163
5- 600	5- 770	.381	142.6	15.9	.4	.782	123.0	.545	1.554	234.7	438.8	.708	2.401D	115.8	1.175	1.5	22.9	56.8	.526
		17.36	13.93	4.98	3.43	6.84	8.95	19.19	1/2/2	114.3	5.8	59.1	.928	2.027	84.5	171.0	44.6	118.3D	.953
5- 180	5- 308.6	.219	77.6	-33.8	-11.5	.921	93.3	.163	.868	197.5	360.6	.727	1.010D	90.1	1.266	10.2	71.4	312.8	.236
5- 308.6	5- 600	.236	339.5	21.5	3.6	1.382	93.5	.391	1.185	347.7	558.4	.722	1.647	78.9	.640	-3.7	-17.2	182.5	.161
5- 600	5- 780	.338	147.4	15.2	.9	.745	120.3	.514	1.429	228.4	442.7	.694	2.164D	115.6	1.153	1.1	23.7	65.5	.509
		16.16	12.77	4.98	3.39	6.80	7.79	18.77	1/2/2	112.0	3.6	52.2	1.076	2.272	80.3	172.0	41.3	114.2D	1.369
5- 190	5- 316.2	.241	77.5	-31.7	-12.3	.922	95.1	.173	.874	206.1	371.6	.723	1.025D	91.7	1.271	10.5	69.0	300.6	.247
5- 316.2	5- 600	.247	330.5	34.3	5.8	1.384	90.2	.388	1.185	359.3	557.9	.726	1.644	78.3	.640	-6.1	-25.6	180.0	.169
5- 600	5- 790	.300	153.0	14.0	1.1	.712	117.4	.491	1.337	222.2	446.5	.680	1.994D	115.5	1.133	.8	24.4	74.3	.495
		15.65	12.09	5.32	3.57	6.97	6.76	18.44	1/2/2	109.4	2.0	38.5	.987	3.036	76.3	169.6	34.1	105.2D	2.009
5- 200	5- 336.7	.233	66.4	73.4	11.5	.913	95.7	.189	.866	205.9	394.8	.702	1.030D	95.3	1.270	-14.2	-66.4	295.0	.339
5- 336.7	5- 600	.339	311.5	-31.5	-7.5	1.383	80.8	.409	1.170	32.1	197.8	.691D	1.648	78.4	.632	8.6	16.9	198.4	.183
5- 600	5- 800	.265	159.7	12.2	1.3	.682	114.3	.475	1.267	215.8	450.4	.685	1.868D	115.5	1.116	.7	24.8	83.3	.485
		14.95	11.07	5.20	3.88	7.27	5.87	18.20	2/1/2	110.5	1.9	36.3	.523	3.208	80.6	145.2	-39.2	61.1L	1.159

STOPOVER TIME = 0 DAYS — 1997 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS

MARS ARRIVAL DATE = 2450460

11 JAN 1997

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2450460 (11 JAN 1997)																			
5- 80	5- 330.7	.281	70.5	30.6	2.6	.946	74.4	.293	.877	129.1	428.5	.620	1.134	103.8	1.275	-1.3	-5.0	275.4	.320
5- 330.7	5- 460	.320	316.0	-6.7	-1.5	1.439	82.5	.509	1.437	22.5	135.1	.705D	2.169A	119.4	.712	1.9	-12.0	218.7	.360
5- 460	5- 720	.150	96.6	14.5	-2.1	.659	99.5	.320	1.302	201.5	418.6	.885	1.719D	103.2	1.109	3.0	19.0	15.2	.287
		17.57	9.19	6.02	8.38	11.74	3.17	13.99	2/1/2	19.6	20.0	40.5	.586	2.890	6.7	205.9	2.4	121.7D	1.108
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																			
5- 80	5- 327.7	.262	69.8	31.7	2.7	.947	75.6	.275	.878	129.4	424.0	.636	1.120	102.4	1.275	-1.2	-5.3	273.1	.292
5- 327.7	5- 470	.292	315.2	-8.5	-1.8	1.423	83.8	.475	1.354	19.4	141.3	.711D	1.997A	115.3	.680	2.2	-11.3	219.4	.313
5- 470	5- 720	.166	96.6	14.4	-2.4	.664	101.6	.330	1.316	206.1	418.9	.882	1.749D	103.6	1.113	3.3	19.6	14.7	.296
		16.30	9.19	5.69	7.10	10.47	3.50	14.15	2/1/2	23.7	20.3	41.8	.704	2.802	8.7	204.7	4.5	125.2D	1.269
5- 90	5- 354.6	.484	81.8	23.7	-.3	.937	61.7	.490	.865	132.6	460.3	.441	1.288	117.8	1.273	-3.1	-5.8	297.3	.607
5- 354.6	5- 470	.607	310.9	-3.2	-1.5	1.400	64.9	.564	1.223	73.8	152.3	.533D	1.913A	117.6	.619	.9	-10.3	208.4	.341
5- 470	5- 730	.150	104.0	16.7	-1.6	.653	99.8	.333	1.291	200.9	423.4	.861	1.720D	104.5	1.108	2.7	19.5	22.6	.307
		21.38	13.52	10.36	7.86	11.23	3.16	14.37	2/1/2	33.9	16.3	13.8	.163	8.294	12.0	213.2	-11.1	90.5D	1.190
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																			
5- 80	5- 325.6	.252	69.3	32.3	2.8	.947	76.2	.264	.879	129.7	421.0	.646	1.111	101.6	1.275	-1.2	-5.5	271.7	.275
5- 325.6	5- 480	.275	314.1	-10.5	-2.0	1.412	84.5	.450	1.298	17.8	147.3	.714D	1.882A	111.4	.656	2.4	-10.1	219.6	.274
5- 480	5- 720	.184	97.0	14.1	-2.7	.671	103.9	.341	1.333	210.8	419.1	.878	1.787D	104.0	1.117	3.7	20.4	14.1	.307
		15.49	9.40	5.50	6.09	9.47	3.90	14.36	2/1/2	28.4	20.7	42.3	.794	2.773	11.0	203.8	6.9	127.4D	1.408
5- 90	5- 353.4	.459	82.1	24.2	-.5	.938	63.2	.467	.865	131.9	457.6	.461	1.269	116.3	1.273	-3.0	-5.9	296.5	.575
5- 353.4	5- 480	.575	309.7	-3.5	-1.6	1.390	66.3	.538	1.183	72.1	157.1	.546D	1.819A	112.6	.596	1.0	-9.7	207.6	.297
5- 480	5- 730	.166	103.6	16.7	-1.7	.659	102.0	.342	1.304	205.4	423.6	.858	1.749D	104.9	1.112	2.9	19.9	22.4	.315
		19.96	13.26	9.77	6.70	10.08	3.49	14.52	2/1/2	39.2	16.5	13.4	.182	8.587	11.4	212.3	-10.4	91.7D	1.381
5- 140	5- 303.1	.239	58.4	84.5	13.1	.928	87.1	.157	.862	164.0	359.0	.727A	.997	89.9	1.262	-13.0	-78.2	308.1	.290
5- 303.1	5- 480	.290	336.8	-31.3	-6.2	1.405	94.7	.439	1.282	344.5	509.6	.719	1.845A	109.7	.649	7.1	1.2	220.2	.267
5- 480	5- 780	.136	165.2	8.9	.5	.603	89.1	.395	1.195	178.6	446.8	.723	1.666	111.1	1.092	1.8	25.6	62.5	.404
		14.08	8.16	5.29	5.92	9.30	2.87	16.36	2/1/2	34.6	4.5	48.5	.717	2.435	83.5	165.1	-33.9	118.3D	1.029
5- 150	5- 311.5	.194	72.3	81.9	10.3	.924	88.1	.157	.860	169.9	368.2	.725	.995	91.1	1.262	-10.9	-72.7	299.2	.250
5- 311.5	5- 480	.250	329.6	-19.3	-3.4	1.409	91.3	.440	1.297	355.9	507.8	.726	1.868A	110.5	.656	4.1	-6.1	220.3	.267
5- 480	5- 790	.155	178.1	4.2	.8	.594	85.5	.420	1.178	173.7	452.0	.683	1.673	113.1	1.088	1.8	26.4	70.8	.435
		13.77	7.86	4.60	5.91	9.29	3.25	17.05	2/1/2	29.9	4.6	56.2	.964	2.125	80.1	162.0	-41.6	103.6D	1.084
5- 160	5- 317.9	.161	69.4	80.2	9.5	.920	89.3	.159	.859	176.4	374.7	.722	.996	92.0	1.263	-10.7	-70.1	296.3	.249
5- 317.9	5- 480	.249	322.4	-14.6	-2.6	1.411	88.4	.443	1.302	5.3	147.1	.725D	1.879A	111.0	.658	3.1	-8.5	220.3	.270
5- 480	5- 800	.185	188.5	.1	1.1	.585	81.2	.453	1.164	169.1	457.6	.637	1.691	115.5	1.084	1.9	26.9	79.2	.475
		14.34	8.35	4.43	6.00	9.38	3.91	17.96	2/1/2	28.6	6.1	57.8	.972	2.069	80.1	155.2	-45.4	91.0D	1.039
MARS ARRIVAL DATE = 2450490 (10 FEB 1997)																			
5- 80	5- 324.4	.246	69.0	32.7	2.8	.947	76.6	.258	.879	129.9	419.2	.652	1.106	101.1	1.275	-1.2	-5.7	270.9	.266
5- 324.4	5- 490	.266	312.9	-12.6	-2.4	1.403	84.8	.432	1.259	17.2	153.0	.715D	1.804A	107.7	.638	2.7	-8.6	219.3	.242
5- 490	5- 720	.204	98.0	13.5	-3.2	.680	106.2	.355	1.354	215.4	419.4	.873	1.835D	104.5	1.122	4.2	21.5	13.4	.320
		15.06	9.77	5.40	5.29	8.67	4.37	14.61	2/1/2	33.6	21.4	42.0	.853	2.788	13.6	203.4	9.6	128.6D	1.524
5- 90	5- 352.2	.437	82.2	24.5	-.7	.938	64.5	.448	.865	131.4	455.1	.478	1.253	114.9	1.273	-2.8	-6.0	295.8	.547
5- 352.2	5- 490	.547	308.8	-3.9	-1.7	1.383	67.5	.518	1.158	70.2	161.5	.558D	1.757A	107.9	.581	1.0	-8.8	206.4	.263
5- 490	5- 730	.183	103.8	16.7	-1.9	.666	104.2	.353	1.320	209.9	423.7	.854	1.786D	105.3	1.116	3.1	20.3	22.1	.325
		18.96	13.16	9.28	5.81	9.19	3.88	14.72	2/1/2	45.0	16.7	13.2	.201	8.711	10.5	211.5	-9.2	92.8D	1.550
5- 150	5- 311.7	.192	73.1	81.6	10.2	.924	88.1	.157	.860	169.9	368.4	.725	.995	91.1	1.262	-10.7	-72.3	299.1	.247
5- 311.7	5- 490	.247	327.2	-23.8	-4.1	1.401	90.8	.424	1.261	357.3	513.3	.726	1.796A	107.1	.639	4.7	-3.3	220.5	.240
5- 490	5- 790	.148	175.4	5.6	.8	.594	88.0	.414	1.179	177.2	451.2	.691	1.667	112.6	1.088	1.7	26.4	71.3	.428
		12.90	7.68	4.57	5.22	8.60	3.11	16.88	2/1/2	35.5	4.4	51.0	.985	2.324	80.3	159.7	-39.7	102.1D	1.304
5- 160	5- 318.1	.178	70.4	79.8	9.3	.920	89.3	.159	.859	176.3	375.0	.722	.996	92.0	1.263	-10.5	-69.6	296.5	.245
5- 318.1	5- 490	.245	319.7	-17.2	-3.0	1.403	87.9	.427	1.263	7.0	152.8	.724D	1.803A	107.5	.640	3.4	-6.7	220.1	.240
5- 490	5- 800	.172	187.2	.9	1.1	.584	84.0	.442	1.163	172.3	456.4	.648	1.677	114.8	1.084	1.8	26.9	79.8	.462
		15.27	8.03	4.39	5.24	8.63	3.63	17.66	2/1/2	33.9	5.6	54.3	1.001	2.190	80.7	151.9	-44.7	88.5L	1.191
MARS ARRIVAL DATE = 2450500 (20 FEB 1997)																			
5- 70	5- 315.6	.242	58.2	32.9	3.2	.952	77.0	.248	.887	128.5	413.9	.666	1.107	99.9	1.277	-.6	-2.9	260.5	.243
5- 315.6	5- 500	.243	320.8	-23.5	-4.0	1.396	88.8	.413	1.236	4.0	158.2	.725D	1.747A	104.0	.628	4.5	-2.6	219.9	.216
5- 500	5- 710	.267	96.0	1.6	-8.7	.709	110.3	.380	1.427	225.6	415.5	.885	1.970D	104.5	1.136	9.7	32.4	357.0	.363
		15.90	11.25	5.34	4.65	8.04	5.91	15.49	2/1/2	40.5	34.4	61.7	1.019	1.951	25.4	204.9	19.8	140.3D	.968
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.2	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.260
5- 323.7	5- 500	.260	311.9	-15.0	-2.8	1.397	85.0	.419	1.232	17.1	158.3	.715D	1.748A	104.2	.625	3.0	-6.5	218.5	.216
5- 500	5- 720	.227	99.3	12.5	-3.9	.692	108.5	.372	1.381	220.1	419.7	.867	1.895D	105.1	1.129	4.9	22.9	12.3	.336
		14.92	10.27	5.35	4.65	8.04	4.92	14.94	2/1/2	39.6	22.3	41.8	.888	2.805	17.0	203.4	12.8	129.2D	1.603
5- 90	5- 350.9	.418	82.3	24.9	-.8	.938	65.7	.430	.866	131.1	452.8	.494	1.238	113.7	1.273	-2.7	-6.1	295.0	.521
5- 350.9	5- 500	.521	308.2	-4.3	-1.7	1.379	68.6	.501	1.143	68.0	165.6	.570D	1.716A	103.6	.573	1.1	-7.8	204.9	.235
5- 500	5- 730	.203	104.6	16.4	-2.1	.676	106.6	.367	1.341	214.4	423.9	.849	1.832D	105.8	1.121	3.4	20.8	21.8	.338
		18.29	13.17	8.84	5.11	8.50	4.34	14.96	2/1/2	51.1	17.0	13.2	.221	8.670	9.3	210.9	-7.6	94.1D	1.696
5- 150	5- 292.5	.270	85.9	-40.4	-15.2	.922	88.3	.160	.858	170.8	338.0	.721A	.995	87.0	1.259	15.6	77.4	349.7	.345
5- 292.5	5- 500	.345	339.5	38.9	9.1	1.387	98.2	.419	1.209	332.0	523.1	.703	1.715A	101.5	.613	-8.0	-33.0	198.3	.215
5- 500	5- 790	.144	172.1	7.1	.8	.596	90.6	.410	1.180	180.8	450.4	.697	1.663D	112.3	1.088	1.7	26.4	71.7	.422
		13.47	8.85	5.82	4.62	8.01	3.03	16.76	1/2/2	51.0	4.2	38.8	.504	3.010	92.7	337.6	7.1	124.9D	1.014
5- 150	5- 311.4	.196	71.4	82.2	10.5	.924	88.1	.157	.860	169.9	367.9	.725	.995	91.1	1.262	-11.1	-73.1	299.2	.253
5- 311.4	5- 500	.253	325.9	-30.6	-5.3	1.395	90.7	.412	1.235	357.7	518.6	.726	1.744A	103.7	.627	5.9	1.4	220.4	.219
5- 500	5- 790	.144	172.1	7.1	.8	.596	90.6	.410	1.180	180.8	450.4	.697	1.663D	112.3	1.088	1.7	26.4	71.7	.422
		12.38	7.67	4.64	4.71	8.10	3.03	16.76	2/1/2	42.3	4.2	44.7	.941	2.628	80.8	158.2	-36.0	102.0D	1.531
5- 160	5- 318.2	.177	70.7	79.7	9.3	.920	89.3	.159	.859	176.3	375.1	.722	.996	92.1	1.263	-10.4	-69.4	296.5	.244
5- 318.2	5- 500	.244	317.7	-20.3	-3.5	1.396	87.6	.415	1.236	8.1	158.2	.723D	1.748A	104.1	.627	3.9	-4.2	219.5	.216
5- 500	5- 800	.162	185.1	2.1	1.1	.585	86.7	.434	1.163	175.7	455.4	.658	1.667	114.3	1.083	1.7	26.8	80.3	.452
		12.44	7.80	4.38	4.64	8.03	3.42	17.43	2/1/2	39.9	5.2	50.8	1.010	2.332	81.1	149.5	-43.4	86.6L	1.345
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																			
5- 70	5- 316.1	.244	58.3	32.7	3.2	.952	76.9	.251	.886	128.4	414.7	.664	1.109	100.1	1.277	-.6	-2.9	260.8	.247
5- 316.1	5- 510	.247	318.8	-27.7	-4.7	1.392	88.4	.404	1.217	5.5	163.3	.725D	1.708A	100.8	.619	5.1	1.1	219.1	.198
5- 510	5- 710	.331	99.8	-9.1	-15.5	.725	112.7	.404	1.473	230.3	415.9	.877	2.068D	105.3	1.146	16.5	42.1	344.2	.451
		17.19	12.97	5.38	4.22	7.61	7.59	17.41	2/1/2	47.3	45.2	60.5	.988	1.984	30.6	206.0	24.3	138.4D	.972
5- 80	5- 323.5	.241	68.8	33.0	2.8	.948	76.9	.254	.880	130.0	417.9	.656	1.103	100.8	1.275	-1.2	-5.8	270.3	.259
5- 323.5	5- 510	.259	310.9	-17.4	-3.2	1.392	84.9	.410	1.212	17.5	163.4	.715D	1.709A	100.9	.616	3.4	-3.9	217.3	.196
5- 510	5- 720	.254	100.9	10.7	-4.9	.706	110.9	.392	1.416	224.7	420.0	.861	1.970D	105.8	1.136	6.1	25.2	10.8	.358
		15.08	10.91	5.33	4.16	7.56	5.58	15.37	2/1/2	46.2	24.0	41.4	.897	2.832	20.7	203.8	16.4	129.1D	1.644
5- 90	5- 349.7	.400	82.4	25.3	-1.0	.938	66.8	.413	.866	130.7	450.5	.509	1.223	112.5	1.273	-2.6	-6.2	294.1	.497
5- 349.7	5- 510	.497	307.7	-4.8	-1.8	1.376	69.8	.486	1.135	65.5	169.5	.583D	1.687A	99.7	.569	1.2	-6.6	203.2	.213
5- 510	5- 730	.226	105.7	16.0	-2.5	.688	109.0	.383	1.367	219.0	424.1	.843	1.891D	106.5	1.128	3.8	21.5	21.3	.352
		17.89	13.30	8.43	4.58	7.97	4.87	15.26	2/1/2	57.5	17.4	13.5	.243	8.485	8.0	210.4	-5.7	95.6D	1.819
5- 150	5- 305.2	.400	357.9	86.1	23.4	.924	88.4	.156	.861	171.5	360.0	.727A	.995	90.0	1.262	-23.7	-68.2	153.0	.506
5- 305.2	5- 510	.506	340.8	-73.4	-20.3	1.389	93.0	.403	1.212	349.6	524.5	.723	1.701A	100.0	.617	21.1	31.5	223.1	.307
5- 510	5- 790	.143	168.3	8.8	.8	.599	93.1	.407	1.183	184.6	449.8	.701	1.664D	112.1	1.089	1.6	26.3	72.0	.419
		18.42	11.47	8.45	6.95	10.32	3.02	16.68	2/1/2	65.8	4.0	18.4	.234	6.248	90.2	340.1	-11.0	116.3D	1.230
5- 150	5- 309.3	.233	55.0	84.9	12.9	.924	88.2	.156	.861	170.4	365.2	.726	.995	90.7	1.262	-13.3	-78.2	299.1	.297
5- 309.3	5- 510	.297	327.5	-46.9	-9.0	1.390	91.3	.403	1.215	355.4	523.8	.726	1.709A	100.4	.618	9.6	12.9	221.2	.217
5- 510	5- 790	.143	168.3	8.8	.8	.599	93.1	.407	1.183	184.6	449.8	.701	1.664D	112.1	1.089	1.6	26.3	72.0	.419
		12.87	8.21	5.19	4.66	8.05	3.02	16.68	2/1/2	53.1	4.0	33.1	.680	3.511	83.0	158.4	-25.9	106.4D	1.708

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2450510
2 MAR 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN 1 / ECCEN 3 / ECCEN 5 / EVR	SMA 1 / SMA 3 / SMA 5 / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH 1 / PERIH / PERIH / KAPPA	APHEL 1 / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 160	5- 318.0	.179	70.2	79.9	9.4	.920	89.3	.159	.859	176.3	374.9	.722	.996	92.0	1.263	-10.5	-69.7	296.4	.246
5- 318.0	5- 510	.246	316.5	-24.4	-4.2	1.392	87.5	.405	1.216	8.6	163.2	.723D	1.709A	100.8	.618	4.5	-.7	218.6	.197
5- 510	5- 800	.156	182.2	3.5	1.1	.587	89.4	.428	1.163	179.2	454.6	.666	1.661	113.8	1.084	1.6	26.8	80.8	.444
		11.87	7.68	4.40	4.19	7.58	3.28	17.25	2/1/2	46.7	4.9	46.8	.994	2.516	81.4	148.1	-41.3	85.6L	1.508
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																			
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.3	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.261
5- 323.7	5- 520	.261	310.0	-19.9	-3.7	1.388	84.8	.404	1.198	18.2	168.2	.714D	1.681A	97.8	.610	3.8	-.9	215.5	.180
5- 520	5- 720	.286	102.9	7.3	-6.9	.723	113.4	.415	1.460	229.3	420.2	.854	2.067D	106.6	1.146	8.1	29.0	7.9	.388
		15.57	11.77	5.35	3.80	7.20	6.41	16.00	2/1/2	53.4	27.2	41.0	.886	2.855	24.7	204.7	20.2	128.6D	1.643
5- 80	5- 348.4	.382	82.4	25.8	-1.1	.939	67.9	.396	.866	130.5	448.1	.523	1.209	111.3	1.273	-2.5	-6.3	293.2	.473
5- 348.4	5- 520	.473	307.3	-5.4	-2.0	1.375	71.0	.473	1.132	62.6	173.0	.596D	1.668A	96.2	.569	1.3	-5.2	201.4	.196
5- 520	5- 730	.251	107.2	15.2	-3.0	.703	111.4	.403	1.401	223.6	424.3	.837	1.965D	107.2	1.136	4.3	22.4	20.7	.370
		17.71	13.53	8.04	4.18	7.57	5.50	15.62	2/1/2	64.1	18.0	14.1	.268	8.157	6.8	209.9	-3.4	97.3D	1.921
5- 160	5- 299.1	.285	84.7	-41.4	-16.2	.921	89.8	.157	.860	178.8	346.6	.725A	.995	88.2	1.260	16.0	81.1	344.5	.351
5- 299.1	5- 520	.351	339.0	51.2	11.4	1.384	95.4	.401	1.194	340.9	530.2	.716	1.673A	96.4	.609	-10.7	-40.8	190.5	.208
5- 520	5- 800	.152	178.8	5.1	1.1	.591	92.1	.424	1.165	182.9	453.9	.672	1.658D	113.5	1.084	1.5	26.6	81.1	.439
		13.74	9.30	6.10	4.44	7.83	3.21	17.13	1/2/2	63.5	4.6	30.0	.488	3.863	91.1	337.8	6.2	120.2D	1.396
5- 160	5- 301.9	.424	86.1	-43.0	-24.9	.921	89.7	.157	.861	178.4	350.3	.726A	.995	88.7	1.261	24.5	86.4	82.6	.524
5- 301.9	5- 520	.524	349.4	72.9	21.3	1.385	94.4	.399	1.197	344.5	529.6	.720	1.675A	96.8	.610	-20.6	-51.5	176.7	.292
5- 520	5- 800	.152	178.8	5.1	1.1	.591	92.1	.424	1.165	182.9	453.9	.672	1.658D	113.5	1.084	1.5	26.6	81.1	.439
		18.74	12.17	8.97	6.57	9.94	3.21	17.13	1/2/2	70.7	4.6	17.7	.219	6.505	93.5	338.5	9.7	118.8D	1.204
5- 160	5- 317.6	.185	68.2	80.7	9.8	.920	89.3	.159	.859	176.4	374.4	.722	.996	92.0	1.263	-10.9	-70.8	296.0	.253
5- 317.6	5- 520	.253	316.2	-30.7	-5.3	1.388	87.7	.398	1.202	8.2	168.0	.723D	1.681A	97.7	.613	5.6	4.7	217.7	.184
5- 520	5- 800	.152	178.8	5.1	1.1	.591	92.1	.424	1.165	182.9	453.9	.672	1.658D	113.5	1.084	1.5	26.6	81.1	.439
		11.59	7.69	4.48	3.90	7.30	3.21	17.13	2/1/2	54.5	4.6	41.7	.939	2.811	81.6	147.8	-37.7	85.7L	1.700
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																			
5- 80	5- 324.3	.245	69.0	32.8	2.8	.947	76.6	.258	.879	129.9	419.1	.652	1.106	101.1	1.275	-1.2	-5.7	270.8	.265
5- 324.3	5- 530	.265	309.4	-22.6	-4.2	1.386	84.6	.399	1.187	19.2	172.6	.713D	1.661A	94.8	.607	4.2	2.6	213.4	.169
5- 530	5- 720	.335	105.5	-.3	-11.5	.744	115.9	.443	1.520	233.9	420.5	.846	2.194D	107.6	1.158	12.7	36.6	.5	.446
		16.66	13.10	5.40	3.55	6.96	7.71	17.30	2/1/2	61.2	34.9	40.8	.857	2.866	28.9	206.2	24.1	127.8D	1.599
5- 90	5- 346.9	.363	82.3	26.3	-1.3	.939	69.1	.379	.867	130.3	445.6	.539	1.195	110.1	1.273	-2.4	-6.4	292.1	.449
5- 346.9	5- 530	.449	307.1	-6.2	-2.1	1.375	72.2	.461	1.133	59.2	176.4	.611D	1.655A	93.0	.573	1.4	-3.7	199.6	.183
5- 530	5- 730	.279	108.9	13.9	-3.7	.720	113.9	.426	1.445	228.1	424.4	.830	2.060D	108.0	1.145	5.1	23.9	19.9	.392
		17.75	13.87	7.65	3.88	7.28	6.23	16.08	2/1/2	70.8	19.1	14.9	.298	7.715	6.4	209.5	-.6	99.3D	2.004
5- 160	5- 297.2	.234	83.9	-38.9	-13.0	.920	89.8	.158	.859	179.0	343.7	.724A	.995	87.8	1.260	12.8	75.3	338.2	.288
5- 297.2	5- 530	.288	337.4	32.8	6.5	1.381	96.2	.398	1.185	338.2	535.0	.713	1.656A	93.3	.606	-5.8	-29.3	193.8	.168
5- 530	5- 800	.153	174.9	6.9	1.1	.596	94.8	.422	1.168	186.7	453.2	.676	1.660D	113.3	1.085	1.4	26.5	81.5	.436
		11.97	8.42	5.21	3.55	6.95	3.21	17.06	1/2/2	67.3	4.2	42.5	.724	2.759	90.2	337.3	6.6	118.7D	1.273
5- 160	5- 316.2	.209	59.5	83.0	11.4	.920	89.4	.158	.859	176.9	372.6	.723	.996	91.7	1.263	-12.4	-74.6	294.2	.281
5- 316.2	5- 530	.281	317.3	-43.3	-8.0	1.386	88.3	.393	1.193	6.1	172.5	.725D	1.661A	94.8	.611	8.2	14.5	217.8	.186
5- 530	5- 800	.153	174.9	6.9	1.1	.596	94.8	.422	1.168	186.7	453.2	.676	1.660D	113.3	1.085	1.4	26.5	81.5	.436
		11.96	8.03	4.82	3.93	7.33	3.21	17.06	2/1/2	64.1	4.2	32.9	.759	3.531	82.0	149.5	-29.3	88.6L	1.920
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																			
5- 90	5- 345.2	.344	82.2	26.9	-1.4	.939	70.3	.360	.867	130.2	442.7	.555	1.180	108.9	1.273	-2.3	-6.5	290.8	.423
5- 345.2	5- 540	.423	307.0	-7.3	-2.3	1.376	73.6	.449	1.136	55.2	179.7	.626D	1.647A	90.3	.579	1.6	-2.0	198.0	.173
5- 540	5- 730	.312	110.9	11.5	-5.1	.741	116.4	.453	1.502	232.7	424.5	.822	2.183D	108.9	1.157	6.3	26.5	18.3	.419
		18.00	14.35	7.25	3.66	7.06	7.10	16.69	2/1/2	77.3	21.1	16.1	.336	7.156	7.5	209.2	2.7	101.7D	2.069
5- 160	5- 296.6	.223	83.7	-38.1	-12.3	.920	89.8	.158	.859	179.0	342.9	.723A	.995	87.7	1.260	12.1	73.8	337.5	.276
5- 296.6	5- 540	.276	337.7	26.2	5.1	1.380	96.5	.397	1.179	337.0	539.1	.711	1.647A	90.6	.606	-4.4	-24.3	191.9	.156
5- 540	5- 800	.157	171.0	6.5	1.1	.602	97.6	.422	1.173	190.6	452.7	.678	1.667D	113.3	1.087	1.4	26.3	81.8	.435
		11.63	8.34	5.04	3.28	6.69	3.30	17.04	1/2/2	74.6	3.9	47.6	.791	2.478	89.9	157.8	40.0	118.0D	1.168
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																			
5- 80	5- 326.3	.255	69.5	32.1	2.7	.947	76.0	.268	.879	129.6	421.9	.643	1.114	101.8	1.275	-1.2	-5.4	272.1	.280
5- 326.3	5- 550	.280	308.6	-27.9	-5.5	1.383	83.9	.396	1.175	21.6	180.8	.710D	1.640	89.4	.607	5.3	10.1	208.5	.159
5- 550	5- 720	.502	136.5	57.3	26.9	.797	120.9	.515	1.711	243.1	420.2	.831	2.592D	109.6	1.189	-25.6	-41.8	29.7	.638
		21.25	17.90	5.56	3.35	6.75	12.34	21.98	2/1/1	77.5	49.4	41.3	.765	2.638	37.5	210.6	31.9	125.7D	1.407
5- 90	5- 343.3	.325	82.0	27.6	1.6	.940	71.5	.342	.868	130.1	439.6	.571	1.165	107.6	1.273	-2.2	-6.7	289.4	.396
5- 343.3	5- 550	.396	307.1	-8.8	-2.6	1.377	75.1	.438	1.141	50.8	182.8	.641D	1.642	87.8	.586	1.9	-.1	196.8	.166
5- 550	5- 730	.355	112.9	6.5	-8.2	.767	119.0	.486	1.581	237.1	424.5	.813	2.349D	109.9	1.171	9.7	31.8	14.4	.463
		18.61	15.10	6.85	3.50	6.91	8.25	17.68	2/1/2	83.7	26.0	17.7	.383	6.510	10.4	209.1	6.8	104.6D	2.108
5- 160	5- 296.4	.219	83.6	-37.8	-12.0	.920	89.8	.158	.859	179.0	342.6	.723A	.995	87.6	1.260	11.9	73.2	337.3	.271
5- 296.4	5- 550	.271	338.4	22.1	4.3	1.379	96.7	.396	1.176	336.1	545.0	.710	1.642	88.0	.608	-3.7	-20.5	189.2	.150
5- 550	5- 800	.165	167.4	9.9	1.1	.610	100.3	.424	1.179	194.6	452.3	.680	1.679D	113.3	1.089	1.3	26.1	82.1	.437
		11.62	8.46	4.98	3.16	6.57	3.48	17.08	1/2/2	82.6	3.6	51.1	.818	2.319	89.6	158.9	42.3	117.9D	1.080
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																			
5- 80	5- 327.5	.262	69.7	31.7	2.7	.947	75.6	.275	.878	129.4	423.8	.637	1.119	102.4	1.275	-1.2	-5.3	273.0	.291
5- 327.5	5- 560	.291	308.6	-30.6	-6.2	1.382	83.6	.396	1.172	22.9	184.6	.708D	1.636	87.0	.610	5.9	13.6	206.3	.160
5- 560	5- 720	.438	118.9	38.2	10.4	.832	123.5	.562	1.874	247.5	420.3	.820	2.927D	110.9	1.210	-9.0	-11.7	26.0	.496
		19.60	16.22	5.68	3.38	6.78	10.55	18.47	2/1/1	85.2	25.4	41.9	.709	2.794	41.7	213.6	35.6	124.7D	1.272
5- 90	5- 341.3	.306	81.7	28.3	1.7	.940	72.6	.324	.869	130.2	436.4	.587	1.151	106.3	1.273	-2.1	-6.9	287.8	.371
5- 341.3	5- 560	.371	307.4	-10.9	-3.0	1.378	76.6	.428	1.148	46.0	185.8	.656D	1.639	85.7	.595	2.3	2.2	196.0	.162
5- 560	5- 730	.458	116.8	-10.5	-20.7	.796	121.6	.525	1.690	241.6	424.5	.803	2.577D	111.1	1.188	22.2	45.8	354.5	.612
		21.01	17.59	6.49	3.41	6.82	11.10	21.31	2/1/2	89.9	43.3	19.8	.438	5.813	14.9	209.4	11.8	107.9D	2.107
5- 100	5- 359.1	.444	92.4	22.5	-.5	.932	63.9	.459	.858	132.7	457.5	.464	1.252	115.8	1.270	-3.8	-7.6	305.7	.566
5- 359.1	5- 560	.566	316.4	-4.6	-2.1	1.365	66.0	.511	1.091	76.6	187.7	.533D	1.648	82.1	.555	.8	-.2	185.3	.206
5- 560	5- 740	.344	119.6	14.2	-3.5	.764	119.5	.493	1.557	235.6	428.3	.789	2.325D	111.2	1.169	5.1	24.7	28.4	.457
		21.80	17.40	9.44	4.40	7.79	7.96	17.55	2/1/2	98.7	16.1	11.1	.187	10.360	17.1	219.3	-15.9	89.5L	1.755
5- 160	5- 296.3	.218	83.6	-37.7	-12.0	.920	89.8	.158	.859	179.0	342.5	.723A	.995	87.6	1.260	11.8	73.0	337.2	.270
5- 296.3	5- 560	.270	339.4	19.2	3.7	1.378	97.0	.397	1.174	335.2	546.7	.709	1.640	85.6	.611	-3.2	-17.3	186.7	.148
5- 560	5- 800	.177	164.4	11.0	1.1	.620	103.1	.428	1.189	198.8	451.9	.679	1.698D	113.5	1.092	1.2	25.9	82.3	.441
		11.84	8.71	4.96	3.13	6.53	3.75	17.17	1/2/2	90.5	3.3	53.9	.826	2.206	89.3	160.4	43.9	118.1D	.996
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																			
5- 80	5- 329.0	.270	70.1	31.2	2.6	.946	75.1	.283	.878	129.2	426.0	.629	1.126	103.0	1.275	-1.3	-5.2	274.1	.304
5- 329.0	5- 570	.304	308.8	-33.4	-7.0	1.382	83.2	.397	1.171	24.2	188.2	.706D	1.635	84.7	.614	6.6	16.8	204.4	.165
5- 570	5- 720	.474	119.2	30.9	6.4	.873	126.1	.619	2.127	251.8	420.1	.809	3.445D	112.3	1.236	-4.9	-2.0	23.9	.515
		20.66	17.39	5.83	3.48	6.88	11.56	18.93	2/1/1	92.3	19.4	42.9	.650	2.755	45.9	217.2	39.0	123.8D	1.128
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 90	5- 338.2	.282	81.1	29.4	1.9	.941	74.1	.301	.870	130.5	431.8	.606	1.132	104.7	1.273	-2.0	-7.2	285.4	.337
5- 338.2	5- 560	.337	309.2	-17.8	-4.3	1.381	79.1	.415	1.159	38.0	191.9	.678D	1.640	81.8	.613	3.6	7.9	195.4	.164
5- 560	5- 730	.487	127.4	33.3	9.3	.873	126.8	.626	2.098	250.3	423.8	.784	3.412D	113.8	1.236	-7.7	-4.3	31.5	.550
		21.41	17.96	6.05	3.45	6.85	11.92	19.77	2/1/1	101.6	20.6	25.5	.529	4.534	27.6	212.6	24.0	114.1D	1.871

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2450460
11 JAN 1997

LAUNCH / SWNGBY DEPART	SWNGBY / ARRIVE RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450460 (11 JAN 1997)																				
S- 60	S- 330.7	.281	70.5	30.6	2.6	.946	74.4	.293	.877	129.1	428.5	.620	1.134	103.8	1.275	-1.3	-5.0	275.4	.320
S- 330.7	S- 460	.320	316.0	-6.7	-1.5	1.439	82.5	.509	1.437	22.5	135.1	.705D	2.169A	119.4	.712	1.9	-12.0	218.7	.360
S- 460	S- 760	.119	143.7	13.9	-.2	.621	90.6	.360	1.224	161.1	437.9	.784	1.665D	108.1	1.097	1.9	23.0	45.7	.358
		16.97	8.59	6.02	8.38	11.74	2.57	15.38	2/1/2	19.6	7.5	40.5	.586	2.890	6.7	205.9	2.4	121.7D	1.108
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																				
S- 60	S- 327.7	.262	69.8	31.7	2.7	.947	75.6	.275	.878	129.4	424.0	.636	1.120	102.4	1.275	-1.2	-5.3	273.1	.292
S- 327.7	S- 470	.292	315.2	-8.5	-1.8	1.423	83.8	.475	1.354	19.4	141.5	.711D	1.997A	115.3	.680	2.2	-11.3	219.4	.313
S- 470	S- 760	.122	139.6	15.2	-.2	.622	92.8	.360	1.227	185.1	437.5	.785	1.669D	108.1	1.098	1.9	23.1	45.9	.358
		15.42	8.31	5.69	7.10	10.47	2.62	15.37	2/1/2	23.7	7.7	41.8	.704	2.802	8.7	204.7	4.5	125.2D	1.269
S- 90	S- 354.6	.484	81.8	23.7	-.3	.937	61.7	.490	.865	132.6	460.3	.441	1.288	117.8	1.273	-3.1	-5.8	297.3	.607
S- 354.6	S- 470	.607	310.9	-3.2	-1.5	1.400	64.9	.564	1.223	73.8	152.3	.933D	1.913A	117.6	.619	.9	-10.3	208.4	.341
S- 470	S- 770	.126	154.6	11.7	.2	.612	90.0	.377	1.210	179.9	442.4	.754	1.666	109.6	1.095	1.8	24.4	54.0	.381
		20.92	13.06	10.36	7.86	11.23	2.70	15.86	2/1/2	33.9	5.7	13.8	.163	8.294	12.0	213.2	-11.1	90.5D	1.190
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																				
S- 60	S- 325.6	.252	69.3	32.3	2.8	.947	76.2	.264	.879	129.7	421.0	.646	1.111	101.6	1.275	-1.2	-5.5	271.7	.275
S- 325.6	S- 480	.275	314.1	-10.5	-2.0	1.412	84.5	.450	1.298	17.6	147.3	.714D	1.882A	111.4	.656	2.4	-10.1	219.6	.274
S- 480	S- 760	.128	135.9	16.4	-.2	.624	95.1	.362	1.232	189.1	437.1	.786	1.678D	108.1	1.099	1.9	23.1	46.1	.359
		14.33	8.24	5.50	6.09	9.47	2.73	15.39	2/1/2	28.4	7.9	42.3	.794	2.773	11.0	203.8	6.9	127.4D	1.408
S- 90	S- 353.4	.459	82.1	24.2	-.5	.938	63.2	.467	.865	131.9	457.6	.461	1.269	116.3	1.273	-3.0	-5.9	296.5	.575
S- 353.4	S- 480	.575	309.7	-3.5	-1.6	1.390	66.3	.538	1.183	72.1	157.1	.546D	1.819A	112.6	.596	1.0	-9.7	207.6	.297
S- 480	S- 770	.127	150.6	13.2	.2	.613	92.3	.376	1.212	183.8	441.9	.757	1.668D	109.5	1.095	1.8	24.4	54.2	.379
		19.19	12.49	9.77	6.70	10.08	2.71	15.82	2/1/2	39.2	5.8	13.4	.162	8.587	11.4	212.3	-10.4	91.7D	1.381
MARS ARRIVAL DATE = 2450490 (10 FEB 1997)																				
S- 60	S- 324.4	.246	69.0	32.7	2.8	.947	76.6	.258	.879	129.9	419.2	.652	1.106	101.1	1.275	-1.2	-5.7	270.9	.266
S- 324.4	S- 490	.266	312.9	-12.6	-2.4	1.403	84.8	.432	1.259	17.2	153.0	.715D	1.804A	107.7	.638	2.7	-8.6	219.3	.242
S- 490	S- 760	.137	132.7	17.3	-.2	.628	97.4	.365	1.238	193.2	436.9	.786	1.690D	108.2	1.101	1.9	23.2	46.2	.361
		13.59	8.30	5.40	5.29	8.67	2.90	15.44	2/1/2	33.6	8.0	42.0	.853	2.788	13.8	203.4	9.6	128.6D	1.524
S- 90	S- 352.2	.437	82.2	24.5	-.7	.938	64.5	.448	.865	131.4	455.1	.478	1.253	114.9	1.273	-2.8	-6.0	295.6	.547
S- 352.2	S- 490	.547	308.8	-3.9	-1.7	1.383	67.5	.518	1.158	70.2	161.5	.556D	1.757A	107.9	.581	1.0	-8.8	206.4	.263
S- 490	S- 770	.132	146.6	14.6	.2	.616	94.6	.377	1.216	187.7	441.5	.758	1.674D	109.4	1.097	1.8	24.5	54.5	.379
		17.88	12.07	9.28	5.81	9.19	2.79	15.81	2/1/2	45.0	5.9	13.2	.201	8.711	10.5	211.5	-9.2	92.8D	1.550
MARS ARRIVAL DATE = 2450500 (20 FEB 1997)																				
S- 70	S- 315.6	.242	58.2	32.9	3.2	.952	77.0	.248	.887	128.5	413.9	.666	1.107	99.9	1.277	-.6	-2.9	260.5	.243
S- 315.6	S- 500	.243	320.6	-23.5	-4.0	1.396	88.8	.413	1.236	4.0	158.2	.725D	1.747A	104.0	.628	4.5	-2.6	219.9	.216
S- 500	S- 750	.164	119.7	18.7	-.6	.647	102.2	.366	1.274	203.1	432.4	.808	1.740D	107.4	1.109	2.2	21.9	38.2	.354
		13.44	8.79	5.34	4.65	8.04	3.45	15.29	2/1/2	40.5	10.5	61.7	1.019	1.951	25.4	204.9	19.8	140.3D	.968
S- 80	S- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	416.2	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.260
S- 323.7	S- 500	.260	311.9	-15.0	-2.8	1.397	85.0	.419	1.232	17.1	158.5	.715D	1.748A	104.2	.625	3.0	-6.5	216.5	.216
S- 500	S- 760	.149	130.3	18.0	-.2	.633	99.7	.370	1.246	197.4	436.7	.785	1.708D	108.4	1.103	1.9	23.2	46.4	.366
		13.13	8.48	5.35	4.65	8.04	3.13	15.53	2/1/2	39.6	8.0	41.8	.888	2.805	17.0	203.4	12.8	129.2D	1.603
S- 90	S- 350.9	.418	82.3	24.9	-.6	.938	65.7	.430	.866	131.1	452.6	.494	1.238	113.7	1.273	-2.7	-6.1	295.0	.521
S- 350.9	S- 500	.521	308.2	-4.3	-1.7	1.379	68.6	.501	1.143	68.0	165.6	.570D	1.716A	103.6	.573	1.1	-7.8	204.9	.235
S- 500	S- 770	.139	143.1	15.8	.2	.620	97.0	.379	1.222	191.8	441.1	.759	1.685D	109.5	1.098	1.8	24.5	54.7	.381
		16.86	11.77	8.84	5.11	8.50	2.93	15.85	2/1/2	51.1	5.9	13.2	.221	8.670	9.3	210.9	-7.6	94.1D	1.696
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																				
S- 70	S- 316.1	.244	58.3	32.7	3.2	.952	76.9	.251	.886	128.4	414.7	.664	1.109	100.1	1.277	-.6	-2.9	260.8	.247
S- 316.1	S- 510	.247	318.8	-27.7	-4.7	1.392	88.4	.404	1.217	5.5	163.3	.725D	1.708A	100.8	.619	5.1	1.1	219.1	.198
S- 510	S- 750	.181	119.2	18.9	-.7	.655	104.6	.376	1.289	207.5	432.4	.804	1.773D	107.8	1.113	2.3	22.0	36.2	.362
		13.45	9.21	5.38	4.22	7.61	3.83	15.47	2/1/2	47.3	10.6	60.5	.986	1.984	30.6	206.0	24.3	138.4D	.972
S- 80	S- 323.5	.241	68.8	33.0	2.8	.948	76.9	.254	.880	130.0	417.9	.656	1.103	100.8	1.275	-1.2	-5.8	270.3	.259
S- 323.5	S- 510	.259	310.9	-17.4	-3.2	1.392	84.9	.410	1.212	17.5	163.4	.715D	1.709A	100.9	.616	3.4	-3.9	217.3	.196
S- 510	S- 760	.163	128.6	18.5	-.2	.640	102.1	.378	1.257	201.6	436.6	.782	1.732D	108.7	1.107	1.9	23.2	46.5	.372
		12.93	8.76	5.33	4.16	7.56	3.43	15.66	2/1/2	46.2	8.1	41.4	.897	2.832	20.7	203.8	16.4	129.1D	1.644
S- 90	S- 349.7	.400	82.4	25.3	-1.0	.938	66.8	.413	.866	130.7	450.5	.509	1.223	112.5	1.273	-2.6	-6.2	294.1	.497
S- 349.7	S- 510	.497	307.7	-4.8	-1.8	1.376	69.8	.486	1.135	65.5	169.5	.583D	1.687A	99.7	.569	1.2	-6.6	203.2	.213
S- 510	S- 770	.149	140.1	16.8	.2	.626	99.4	.383	1.229	195.9	440.8	.758	1.700D	109.6	1.100	1.8	24.4	54.8	.384
		16.15	11.57	8.43	4.58	7.97	3.14	15.92	2/1/2	57.5	6.0	13.5	.243	8.485	8.0	210.4	-5.7	95.6D	1.819
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																				
S- 80	S- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.3	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.261
S- 323.7	S- 520	.261	310.0	-19.9	-3.7	1.388	84.8	.404	1.198	18.2	168.2	.714D	1.681A	97.8	.610	3.8	-.9	215.5	.180
S- 520	S- 760	.180	127.6	18.7	-.2	.649	104.6	.387	1.271	205.9	436.5	.779	1.762D	109.0	1.110	2.0	23.1	46.6	.380
		12.95	9.15	5.35	3.80	7.20	3.80	15.83	2/1/2	53.4	8.1	41.0	.886	2.855	24.7	204.7	20.2	128.6D	1.643
S- 90	S- 348.4	.382	82.4	25.8	-1.1	.939	67.9	.396	.866	130.5	448.1	.523	1.209	111.3	1.273	-2.5	-6.3	293.2	.473
S- 348.4	S- 520	.473	307.3	-5.4	-2.0	1.375	71.0	.473	1.132	62.6	173.0	.596D	1.668A	96.2	.569	1.3	-5.2	201.4	.196
S- 520	S- 770	.162	137.9	17.4	.2	.633	101.9	.389	1.239	200.1	440.6	.757	1.721D	109.9	1.103	1.7	24.3	55.0	.389
		15.63	11.45	8.04	4.18	7.57	3.42	16.03	2/1/2	64.1	6.0	14.1	.268	8.157	6.8	209.9	-3.4	97.3D	1.921
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																				
S- 80	S- 324.3	.245	69.0	32.8	2.8	.947	76.6	.258	.879	129.9	419.1	.652	1.106	101.1	1.275	-1.2	-5.7	270.8	.265
S- 324.3	S- 530	.265	309.4	-22.6	-4.2	1.386	84.6	.399	1.187	19.2	172.6	.713D	1.661A	94.8	.607	4.2	2.6	213.4	.169
S- 530	S- 760	.199	127.4	18.8	-.2	.659	107.0	.398	1.288	210.3	436.4	.775	1.802D	109.5	1.115	2.0	23.1	46.7	.390
		13.19	9.64	5.40	3.55	6.96	4.24	16.05	2/1/2	61.2	8.1	40.8	.857	2.866	28.9	206.2	24.1	127.8D	1.599
S- 90	S- 346.9	.363	82.5	26.3	-1.3	.939	69.1	.379	.867	130.3	445.6	.539	1.195	110.1	1.273	-2.4	-6.4	292.1	.449
S- 346.9	S- 530	.449	307.1	-6.2	-2.1	1.375	72.2	.461	1.133	59.2	176.4	.611D	1.655A	93.0	.573	1.4	-3.7	199.6	.183
S- 530	S- 770	.178	136.4	17.8	.2	.642	104.4	.397	1.251	204.3	440.5	.754	1.749D	110.2	1.107	1.7	24.2	55.2	.397
		15.29	11.41	7.65	3.88	7.28	3.77	16.19	2/1/2	70.8	5.9	14.9	.298	7.715	6.4	209.5	-.6	99.3D	2.004
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																				
S- 80	S- 325.2	.249	69.2	32.5	2.8	.947	76.4	.262	.879	129.7	420.3	.648	1.109	101.4	1.275	-1.2	-5.6	271.4	.272
S- 325.2	S- 540	.272	308.9	-25.2	-4.8	1.384	84.3	.397	1.180	20.3	176.9	.712D	1.648A	92.1	.606	4.7	6.3	211.0	.162
S- 540	S- 760	.221	127.7	18.7	-.2	.673	109.6	.413	1.311	214.7	436.3	.770	1.852D	110.1	1.121	2.0	23.0	46.8	.403
		13.64	10.23	5.46	3.41	6.81	4.77	16.33	2/1/2	69.4	8.1	40.9	.815	2.862	33.1	208.1	28.1	126.8D	1.518
S- 90	S- 345.2	.344	82.2	26.9	-1.4	.939	70.3	.360	.867	130.2	442.7	.555	1.180	108.9	1.273	-2.3	-6.5	290.8	.423
S- 345.2	S- 540	.423	307.0	-7.3	-2.3	1.376	73.6	.449	1.136	55.2	179.7	.626D	1.647A	90.3	.579	1.6	-2.0	198.0	.173
S- 540	S- 770	.197	135.7	18.0	.2	.653	106.9	.408	1.268	208.6	440.3	.750	1.785D	110.6	1.112	1.7	24.1	55.3	.408
		15.10	11.45	7.25	3.66	7.06	4.20	16.40	2/1/2	77.3	5.9	16.1	.336	7.156	7.5	209.2	2.7	101.7D	2.069
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																				
S- 80	S- 326.3	.255	69.5	32.1	2.7	.947	76.0	.268	.879	129.6	421.9	.643	1.114	101.8	1.275	-1.2	-5.4	272.1	.280
S- 326.3	S- 550	.280	308.6	-27.9	-5.5	1.383	83.9	.396	1.175	21.6	180.8	.710D	1.640	89.4	.607	5.3	10.1	208.5	.159
S- 550	S- 760	.246	126.6	18.5	-.2	.668	112.1	.430	1.340	219.1	436.2	.764	1.917D	110.7	1.129	2.0	22.9	46.9	.418
		14.29	10.94	5.56	3.35	6.75	5.38	16.67	2/1/2	77.5	8.1	41.3	.765	2.838	37.5	210.6	31.9	125.7D	1.407
S- 90	S- 343.3	.325	82.0	27.6	1.6	.940	71.5	.342	.868	130.1	439.6	.571	1.165	107.6	1.273	-2.2	-6.7	288.4	.396
S- 343.3	S- 550	.396	307.1	-8.8	-2.6	1.377	75.1	.438	1.141	50.8	182.8	.641D	1.642	87.8	.586	1.9	-.1	196.8	.166
S- 550	S- 770	.219	135.6	18.0	.2	.666	109.5	.421	1.289	212.9	440.1	.746	1.832D	111.2	1.118	1.7	24.0	55.5	.418
		15.08	11.57	6.85	3.50	6.91	4.72	16.66	2/1/2	85.7	5.8	17.7	.383	6.510	10.4	209.1	6.8	104.6D	2.108
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																				
S- 80	S- 327.5	.262	69.7	31.7	2.7	.947	75.6	.275	.878	129.4	423.6	.637	1.119	102.4	1.275	-1.2	-5.3	273.0	.291
S- 327.5	S- 560	.291	308.6	-30.6	-6.2	1.382	83.6	.396	1.172	22.9	184.6	.708D	1.636	87.0	.610	5.9	13.6	206.3	.160
S- 560	S- 760	.274	129.9	18.2	-.3	.707	114.7	.451	1.379	223.4	436.1	.757	2.000D	111.5	1.138	2.1	22.9	47.0	.436
		15.15	11.77	5.66	3.38	6.78	6.10	17.07	2/1/2	85.2	8.1	41.9	.709	2.794	41.7	213.6	35.6	124.7D	1.272

STOPOVER TIME = 0 DAYS

1997 OUTBOUND SWINGBY

MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2450560
21 APR 1997

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 90	5- 341.3	.306	81.7	28.3	1.7	.940	72.6	.324	.869	130.2	436.4	.587	1.151	106.3	1.273	-2.1	-6.9	287.8	.371
5- 341.3	5- 560	.371	307.4	-10.9	-3.0	1.378	76.6	.428	1.148	46.0	185.8	.656D	1.639	85.7	.595	2.3	2.2	196.0	.162
5- 560	5- 770	.244	136.2	17.8	.3	.682	112.1	.438	1.316	217.3	440.0	.740	1.892D	111.8	1.125	1.7	23.8	55.7	.433
		15.23	11.82	6.49	3.41	6.82	5.33	16.99	2/1/2	89.9	5.8	19.8	.436	5.813	14.9	209.4	11.8	107.9D	2.107
5- 100	5- 339.1	.444	92.4	22.5	-.5	.932	63.9	.459	.858	132.7	457.5	.464	1.252	115.8	1.270	-3.8	-7.6	305.7	.566
5- 339.1	5- 560	.566	316.4	-4.6	-2.1	1.365	66.0	.511	1.091	76.6	187.7	.533D	1.648	82.1	.555	.8	-.2	185.3	.206
5- 560	5- 780	.217	143.8	16.6	.6	.660	109.3	.430	1.266	211.1	443.9	.722	1.809D	112.2	1.113	1.4	24.8	64.4	.432
		18.51	14.11	9.44	4.40	7.79	4.67	16.98	2/1/2	98.7	4.0	11.1	.187	10.360	17.1	219.3	-15.9	89.5L	1.755
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																			
5- 80	5- 329.0	.270	70.1	31.2	2.6	.946	75.1	.283	.878	129.2	426.0	.629	1.126	103.0	1.275	-1.3	-5.2	274.1	.304
5- 329.0	5- 570	.304	308.8	-33.4	-7.0	1.382	83.2	.397	1.171	24.2	188.2	.706D	1.635	84.7	.614	6.6	16.8	204.4	.165
5- 570	5- 760	.306	131.5	17.7	-.3	.729	117.4	.476	1.429	227.8	435.9	.749	2.109D	112.5	1.149	2.1	22.8	47.2	.458
		16.23	12.75	5.83	3.48	6.88	6.92	17.57	2/1/2	92.3	8.1	42.9	.650	2.735	45.9	217.2	39.0	123.8D	1.128
5- 90	5- 339.4	.291	81.4	29.0	1.9	.941	73.6	.310	.869	130.4	433.5	.600	1.139	105.3	1.273	-2.0	-7.1	286.3	.349
5- 339.4	5- 570	.349	308.1	-14.0	-3.6	1.380	78.0	.420	1.154	41.5	188.9	.669D	1.639	83.7	.604	2.9	4.9	195.5	.161
5- 570	5- 770	.272	137.2	17.5	.3	.702	114.8	.458	1.352	221.6	439.8	.733	1.971D	112.6	1.134	1.6	23.6	55.9	.451
		15.64	12.25	6.20	3.39	6.79	6.05	17.40	2/1/2	95.8	5.7	22.5	.493	5.122	20.9	210.5	17.7	111.3D	2.032
5- 100	5- 357.8	.422	92.6	22.9	-.2	.932	65.3	.439	.859	132.3	454.9	.482	1.235	114.4	1.270	-3.6	-7.7	304.9	.538
5- 357.8	5- 570	.538	316.6	-5.1	-2.2	1.368	67.5	.498	1.102	72.5	190.3	.553D	1.650	80.1	.569	.9	.3	185.1	.202
5- 570	5- 780	.242	143.9	16.5	.7	.676	112.0	.445	1.291	215.4	443.6	.716	1.866D	112.9	1.120	1.3	24.5	64.6	.446
		18.53	14.21	8.93	4.32	7.71	5.27	17.30	2/1/2	103.7	3.8	11.9	.208	9.641	14.1	219.3	-12.5	91.5D	1.798
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 80	5- 330.6	.280	70.4	30.7	2.6	.946	74.4	.293	.877	129.1	428.4	.620	1.134	103.8	1.275	-1.3	-5.0	275.3	.319
5- 330.6	5- 580	.319	309.3	-36.3	-7.9	1.382	82.8	.399	1.170	25.6	191.5	.704D	1.637	82.5	.620	7.4	19.5	203.1	.173
5- 580	5- 760	.341	133.5	17.1	-.4	.756	120.1	.506	1.498	232.2	435.7	.741	2.255D	113.5	1.163	2.2	22.7	47.4	.483
		17.54	13.89	6.01	3.65	7.05	7.88	18.16	2/1/2	98.6	8.2	44.1	.590	2.664	49.9	221.3	42.1	123.0D	.981
5- 90	5- 338.2	.282	81.1	29.4	1.9	.941	74.1	.301	.870	130.5	431.8	.608	1.132	104.7	1.273	-2.0	-7.2	285.4	.337
5- 338.2	5- 580	.337	309.2	-17.8	-4.3	1.381	79.1	.415	1.159	38.0	191.9	.678D	1.640	81.8	.613	3.6	7.9	195.4	.164
5- 580	5- 770	.304	138.7	17.1	.3	.724	117.5	.482	1.400	226.0	439.5	.726	2.074D	113.5	1.145	1.6	23.4	56.1	.472
		16.37	12.92	6.05	3.45	6.85	6.88	17.89	2/1/2	101.6	5.7	25.5	.529	4.534	27.6	212.8	24.0	114.1D	1.871
5- 100	5- 356.3	.399	92.7	23.4	-.0	.933	66.7	.418	.859	131.9	452.2	.500	1.218	113.0	1.270	-3.4	-7.8	303.8	.508
5- 356.3	5- 580	.508	316.7	-5.9	-2.3	1.371	69.1	.485	1.113	68.1	192.9	.573D	1.654	78.4	.583	1.0	.8	185.4	.200
5- 580	5- 780	.270	144.6	16.2	.7	.695	114.8	.464	1.324	219.8	443.4	.710	1.939D	113.6	1.129	1.3	24.3	64.9	.463
		18.67	14.41	8.42	4.27	7.66	5.99	17.69	2/1/2	108.2	3.7	12.9	.233	8.889	11.1	219.2	-8.7	93.8D	1.841
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																			
5- 90	5- 337.9	.280	81.1	29.5	1.9	.941	74.2	.300	.870	130.5	431.4	.609	1.131	104.5	1.273	-2.0	-7.2	285.1	.334
5- 337.9	5- 590	.334	310.5	-21.9	-5.3	1.382	79.7	.413	1.163	35.9	194.9	.683D	1.644	80.0	.622	4.4	10.8	195.6	.170
5- 590	5- 770	.340	140.5	16.5	.4	.751	120.2	.510	1.464	230.4	439.2	.717	2.211D	114.6	1.158	1.5	23.2	56.4	.497
		17.43	13.85	6.01	3.58	6.99	7.84	18.48	2/1/2	106.9	5.7	28.5	.536	4.062	34.3	216.3	30.1	116.0D	1.649
5- 100	5- 354.6	.375	92.6	24.0	-.2	.933	68.2	.396	.860	131.7	449.1	.520	1.200	111.5	1.270	-3.2	-8.0	302.5	.476
5- 354.6	5- 590	.476	316.8	-7.0	-2.5	1.374	70.8	.473	1.126	63.2	195.4	.594D	1.658	77.0	.598	1.2	1.3	186.1	.199
5- 590	5- 780	.302	145.8	15.8	.8	.718	117.5	.487	1.369	224.1	443.1	.703	2.035D	114.5	1.139	1.2	24.0	65.2	.484
		18.95	14.72	7.89	4.23	7.63	6.82	18.18	2/1/2	112.4	5.6	14.2	.265	8.098	8.7	219.1	-4.2	96.5D	1.883
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																			
5- 90	5- 338.4	.284	81.2	29.3	1.9	.941	74.0	.303	.870	130.5	432.1	.607	1.133	104.8	1.273	-2.0	-7.2	285.5	.339
5- 338.4	5- 600	.339	311.9	-26.1	-6.3	1.383	80.0	.413	1.167	34.9	197.8	.685D	1.649	78.2	.630	5.4	13.4	196.2	.180
5- 600	5- 770	.381	142.6	15.9	.4	.782	123.0	.545	1.554	234.7	438.8	.708	2.401D	115.8	1.175	1.5	22.9	56.8	.526
		18.81	15.02	6.07	3.79	7.19	8.95	19.19	2/1/2	111.6	5.8	31.4	.523	3.690	40.5	220.7	35.5	117.2D	1.408
5- 100	5- 352.6	.350	92.5	24.7	-.5	.934	69.7	.373	.860	131.5	445.8	.540	1.181	109.9	1.270	-3.0	-8.2	301.0	.444
5- 352.6	5- 600	.444	317.0	-8.5	-2.9	1.378	72.6	.460	1.138	57.8	198.0	.615D	1.662	75.8	.613	1.6	2.0	187.3	.198
5- 600	5- 780	.338	147.4	15.2	.9	.745	120.3	.514	1.429	228.4	442.7	.694	2.164D	115.6	1.153	1.1	23.7	65.5	.509
		19.39	15.17	7.36	4.22	7.61	7.79	18.77	2/1/2	116.2	5.6	15.8	.305	7.269	8.5	219.2	1.2	99.8D	1.914

STOPOVER TIME = 0 DAYS | 1997 OUTBOUND SWINGBY | MISSION DURATION = 720 DAYS
MARS ARRIVAL DATE = 2450460
11 JAN 1997

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2450460 (11 JAN 1997)																			
5- 80	5- 330.7	.281	70.5	30.6	2.6	.946	74.4	.293	.877	129.1	428.5	.620	1.134	103.8	1.275	-1.3	-5.0	275.4	.320
5- 330.7	5- 460	.320	316.0	-6.7	-1.5	1.439	82.5	.509	1.437	22.5	135.1	.705D	2.169A	119.4	.712	1.9	-12.0	218.7	.360
5- 460	5- 800	.218	188.8	-.4	1.2	.588	75.6	.481	1.168	163.3	460.5	.606	1.730	117.4	1.085	2.1	26.9	77.6	.509
		19.08	10.70	6.02	8.38	11.74	4.68	18.76	2/1/2	19.6	7.2	40.5	.586	2.890	6.7	205.9	2.4	121.7D	1.108
MARS ARRIVAL DATE = 2450470 (21 JAN 1997)																			
5- 80	5- 327.7	.262	69.8	31.7	2.7	.947	75.6	.275	.878	129.4	424.0	.636	1.120	102.4	1.275	-1.2	-5.3	273.1	.292
5- 327.7	5- 470	.292	315.2	-8.5	-1.8	1.423	83.8	.475	1.354	19.4	141.3	.711D	1.997A	115.3	.680	2.2	-11.3	219.4	.313
5- 470	5- 800	.200	189.0	-.3	1.2	.586	78.5	.466	1.165	166.1	459.0	.623	1.708	116.4	1.084	2.0	26.9	78.4	.490
		17.05	9.95	5.69	7.10	10.47	4.26	18.32	2/1/2	23.7	6.6	41.8	.704	2.802	8.7	204.7	4.5	125.2D	1.269
MARS ARRIVAL DATE = 2450480 (31 JAN 1997)																			
5- 80	5- 325.6	.252	69.3	32.3	2.8	.947	76.2	.264	.879	129.7	421.0	.646	1.111	101.6	1.275	-1.2	-5.5	271.7	.275
5- 325.6	5- 480	.275	314.1	-10.5	-2.0	1.412	84.5	.450	1.298	17.8	147.3	.714D	1.882A	111.4	.656	2.4	-10.1	219.6	.274
5- 480	5- 800	.185	188.5	.1	1.1	.585	81.2	.453	1.164	169.1	457.6	.637	1.691	115.5	1.084	1.9	26.9	79.2	.475
		15.51	9.42	5.50	6.09	9.47	3.91	17.96	2/1/2	28.4	6.1	42.3	.794	2.773	11.0	203.8	6.9	127.4D	1.408
MARS ARRIVAL DATE = 2450490 (10 FEB 1997)																			
5- 80	5- 324.4	.246	69.0	32.7	2.8	.947	76.6	.258	.879	129.9	419.2	.652	1.106	101.1	1.275	-1.2	-5.7	270.9	.266
5- 324.4	5- 490	.266	312.9	-12.6	-2.4	1.403	84.8	.432	1.259	17.2	153.0	.715D	1.804A	107.7	.638	2.7	-8.6	219.3	.242
5- 490	5- 800	.172	187.2	.9	1.1	.584	84.0	.442	1.163	172.3	456.4	.648	1.677	114.8	1.084	1.8	26.9	79 8	.462
		14.32	9.03	5.40	5.29	8.67	3.63	17.66	2/1/2	33.6	5.6	42.0	.853	2.788	13.8	203.4	9.6	128.6D	1.524
MARS ARRIVAL DATE = 2450500 (20 FEB 1997)																			
5- 70	5- 315.6	.242	58.2	32.9	3.2	.952	77.0	.248	.887	128.5	413.9	.666	1.107	99.9	1.277	-.6	-2.9	260.5	.243
5- 315.6	5- 500	.243	320.8	-23.5	-4.0	1.396	88.8	.413	1.236	4.0	158.2	.725D	1.747A	104.0	.628	4.5	-2.6	219.9	.216
5- 500	5- 790	.144	172.1	7.1	.8	.596	90.6	.410	1.180	180.8	450.4	.697	1.663D	112.3	1.088	1.7	26.4	71.7	.422
		13.02	8.37	5.34	4.65	8.04	3.03	16.76	2/1/2	40.5	4.2	61.7	1.019	1.951	25.4	204.9	19.8	140.3D	.968
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.2	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.260
5- 323.7	5- 500	.260	311.9	-15.0	-2.8	1.397	85.0	.419	1.232	17.1	158.3	.715D	1.748A	104.2	.625	3.0	-6.5	218.5	.216
5- 500	5- 800	.162	185.1	2.1	1.1	.585	86.7	.434	1.163	175.7	455.4	.658	1.667	114.3	1.083	1.7	26.8	80.3	.452
		15.42	8.77	5.35	4.65	8.04	3.42	17.43	2/1/2	39.6	5.2	41.8	.888	2.805	17.0	203.4	12.8	129.2D	1.603
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																			
5- 70	5- 316.1	.244	58.3	32.7	3.2	.952	76.9	.251	.886	128.4	414.7	.664	1.109	100.1	1.277	-.6	-2.9	260.8	.247
5- 316.1	5- 510	.247	318.8	-27.7	-4.7	1.392	88.4	.404	1.217	5.5	163.3	.725D	1.708A	100.8	.619	5.1	1.1	219.1	.198
5- 510	5- 790	.143	168.3	8.8	.8	.599	93.1	.407	1.183	184.6	449.8	.701	1.664D	112.1	1.089	1.6	26.3	72.0	.419
		12.62	8.40	5.38	4.22	7.61	3.02	16.68	2/1/2	47.3	4.0	60.5	.988	1.984	30.6	206.0	24.3	138.4D	.972
5- 80	5- 323.5	.241	68.8	33.0	2.8	.948	76.9	.254	.880	130.0	417.9	.656	1.103	100.8	1.275	-1.2	-5.8	270.3	.259
5- 323.5	5- 510	.259	310.9	-17.4	-3.2	1.392	84.9	.410	1.212	17.5	163.4	.715D	1.709A	100.9	.616	3.4	-3.9	217.3	.196
5- 510	5- 800	.156	182.2	3.5	1.1	.587	89.4	.428	1.163	179.2	454.6	.666	1.661	113.8	1.084	1.6	26.8	80.8	.444
		12.77	8.61	5.33	4.16	7.56	3.28	17.25	2/1/2	46.2	4.9	41.4	.897	2.832	20.7	203.8	16.4	129.1D	1.644
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																			
5- 80	5- 323.7	.242	68.8	33.0	2.8	.948	76.8	.255	.879	130.0	418.3	.655	1.104	100.8	1.275	-1.2	-5.7	270.4	.261
5- 323.7	5- 520	.261	310.0	-19.9	-3.7	1.388	84.8	.404	1.198	16.2	168.2	.714D	1.681A	97.8	.610	3.8	-.9	215.5	.180
5- 520	5- 800	.152	178.8	5.1	1.1	.591	92.1	.424	1.165	182.9	453.9	.672	1.658D	113.5	1.084	1.5	26.8	81.1	.439
		12.36	8.56	5.35	3.80	7.20	3.21	17.13	2/1/2	53.4	4.6	41.0	.886	2.855	24.7	204.7	20.2	128.6D	1.643
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																			
5- 80	5- 324.3	.245	69.0	32.8	2.8	.947	76.6	.258	.879	129.9	419.1	.652	1.106	101.1	1.275	-1.2	-5.7	270.8	.265
5- 324.3	5- 530	.265	309.4	-22.6	-4.2	1.386	84.6	.399	1.187	19.2	172.6	.713D	1.661A	94.8	.607	4.2	2.6	213.4	.169
5- 530	5- 800	.153	174.9	6.9	1.1	.596	94.8	.422	1.168	186.7	453.2	.676	1.660D	113.3	1.085	1.4	26.5	81.5	.436
		12.16	8.61	5.40	3.55	6.96	3.21	17.06	2/1/2	61.2	4.2	40.8	.857	2.866	28.9	206.2	24.1	127.8D	1.599
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																			
5- 80	5- 325.2	.249	69.2	32.5	2.8	.947	76.4	.262	.879	129.7	420.3	.648	1.109	101.4	1.275	-1.2	-5.6	271.4	.272
5- 325.2	5- 540	.272	308.9	-25.2	-4.8	1.384	84.3	.397	1.180	20.3	176.9	.712D	1.648A	92.1	.606	4.7	6.3	211.0	.162
5- 540	5- 800	.157	171.0	8.5	1.1	.602	97.6	.422	1.173	190.6	452.7	.678	1.667D	113.3	1.087	1.4	26.3	81.8	.435
		12.17	8.77	5.46	3.41	6.81	3.30	17.04	2/1/2	69.4	3.9	40.9	.815	2.862	33.1	208.1	28.1	126.8D	1.518
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																			
5- 80	5- 326.3	.255	69.5	32.1	2.7	.947	76.0	.268	.879	129.6	421.9	.643	1.114	101.8	1.275	-1.2	-5.4	272.1	.280
5- 326.3	5- 550	.280	308.6	-27.9	-5.5	1.383	83.9	.396	1.175	21.6	180.8	.710D	1.640	89.4	.607	5.3	10.1	208.5	.159
5- 550	5- 800	.165	167.4	9.9	1.1	.610	100.3	.424	1.179	194.6	452.3	.680	1.679D	113.3	1.089	1.3	26.1	82.1	.437
		12.39	9.04	5.56	3.35	6.75	3.46	17.08	2/1/2	77.5	3.6	41.3	.765	2.838	37.5	210.6	31.9	125.7D	1.407
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																			
5- 80	5- 327.5	.262	69.7	31.7	2.7	.947	75.6	.275	.878	129.4	423.6	.637	1.119	102.4	1.275	-1.2	-5.3	273.0	.291
5- 327.5	5- 560	.291	308.6	-30.6	-6.2	1.382	83.6	.396	1.172	22.9	184.6	.708D	1.636	87.0	.610	5.9	13.6	206.3	.160
5- 560	5- 800	.177	164.4	11.0	1.1	.620	103.1	.428	1.189	198.8	451.9	.679	1.698D	113.5	1.092	1.2	25.9	82.5	.441
		12.80	9.43	5.68	3.36	6.78	3.75	17.17	2/1/2	85.2	3.3	41.9	.709	2.794	41.7	213.6	35.6	124.7D	1.272
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																			
5- 80	5- 329.0	.270	70.1	31.2	2.6	.946	75.1	.283	.878	129.2	426.0	.629	1.126	103.0	1.275	-1.3	-5.2	274.1	.304
5- 329.0	5- 570	.304	308.8	-33.4	-7.0	1.382	83.2	.397	1.171	24.2	188.2	.706D	1.635	84.7	.614	6.6	16.8	204.4	.165
5- 570	5- 800	.194	162.1	11.8	1.2	.632	105.8	.436	1.201	203.0	451.5	.678	1.724D	113.8	1.096	1.1	25.7	82.5	.447
		13.42	9.94	5.83	3.48	6.86	4.11	17.32	2/1/2	92.3	3.0	42.9	.650	2.735	45.9	217.2	39.0	123.8D	1.128
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 80	5- 330.6	.280	70.4	30.7	2.6	.946	74.4	.293	.877	129.1	428.4	.620	1.134	103.8	1.275	-1.3	-5.0	275.3	.319
5- 330.6	5- 580	.319	309.3	-36.3	-7.9	1.382	82.8	.399	1.170	25.6	191.5	.704D	1.637	82.5	.620	7.4	19.5	203.1	.173
5- 580	5- 800	.214	160.5	12.2	1.2	.646	108.6	.446	1.217	207.2	451.1	.675	1.759D	114.2	1.101	1.0	25.4	82.8	.457
		14.24	10.59	6.01	3.65	7.05	4.58	17.54	2/1/2	98.6	2.7	44.1	.590	2.664	49.9	221.5	42.1	123.0D	.981

1997

INBOUND SWINGBY

4.15

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / PSI 2 / APHEL / -A	PSI 2 / V 2 / PSI 6 / E	V 2 / I 2 / V 6 / INC	I 2 / DECL2 / I 6 / RAP	DECL2 / RA2 / DECL6 / DECLP	RA2 / SPEED2 / RA4 / SPEED4 / RA6 / SPEED6 / ETA / PERIC
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																			
5- 340	5- 550	.318	150.6	-3.5	-4.2	1.129	106.0	.385	1.397	298.4	495.4	.859	1.936A	110.4	.710	5.4	-12.0	262.3	.308
5- 550	5- 710.0	.203	184.9	-2.4	-.1	.550	95.6	.512	1.090	185.4	281.9	.532A	1.648D	65.6	1.354	1.9	4.2	326.6	.567
5- 710.0	5- 780	.567	310.8	2.6	1.1	1.479	110.6	.655	1.774	306.9	447.6	.613	2.936A	122.5	1.211	2.5	23.0	62.6	.662
		18.03	11.06	6.73	6.97	10.35	4.33	22.60	2/1/1	20.4	3.9	15.9	.187	7.232	173.2	244.9	-4.7	76.1L	1.165
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																			
5- 340	5- 560	.294	151.2	-.3	-3.1	1.119	105.1	.360	1.356	298.8	500.3	.868	1.845A	107.6	.699	4.3	-13.5	264.4	.277
5- 560	5- 710.7	.208	182.4	-1.4	-.1	.556	98.8	.514	1.091	188.5	281.5	.530A	1.652D	65.5	1.354	1.9	4.2	327.8	.571
5- 710.7	5- 780	.571	311.4	2.6	1.1	1.484	110.6	.664	1.824	307.3	447.0	.613	3.036A	122.7	1.217	2.5	25.1	62.9	.668
		16.87	10.70	6.25	6.16	9.54	4.45	22.77	2/1/1	21.7	4.0	16.5	.184	6.988	173.3	246.4	-4.5	76.0L	1.105
5- 350	5- 560	.298	154.3	-11.5	-5.5	1.131	104.3	.367	1.395	303.5	495.3	.882	1.907A	109.3	.713	6.8	-8.6	265.9	.304
5- 560	5- 716.6	.190	178.7	-.8	-.4	.577	99.3	.479	1.121	190.4	292.9	.584A	1.657D	69.6	1.363	2.0	5.2	330.8	.492
5- 716.6	5- 790	.491	319.6	.4	.1	1.439	108.1	.572	1.473	309.0	449.5	.630	2.316A	119.7	1.163	3.3	28.2	72.2	.586
		17.23	10.36	6.33	6.87	10.25	4.03	20.67	2/1/1	22.6	5.7	12.2	.249	9.437	156.6	249.5	-22.1	74.3L	2.099
5- 370	5- 560	.303	188.3	31.0	8.1	1.155	102.5	.387	1.487	313.7	485.7	.911	2.063A	112.1	.744	-6.5	-37.2	272.1	.341
5- 560	5- 728.3	.168	171.4	-.7	-1.2	.606	100.1	.431	1.166	193.8	314.7	.663A	1.669D	76.8	1.375	2.3	8.4	333.6	.361
5- 728.3	5- 810	.361	334.7	-6.7	-1.8	1.371	103.4	.426	1.150	313.4	455.7	.660	1.639A	113.9	1.080	4.6	33.7	91.1	.447
		17.86	9.98	6.44	7.88	11.25	3.54	17.32	1/1/1	17.7	11.1	15.1	.462	7.601	86.1	231.7	86.0	92.6D	3.050
5- 380	5- 560	.265	184.1	15.6	3.6	1.168	101.4	.400	1.543	319.0	481.1	.925	2.160A	113.4	.760	-2.0	-27.9	275.0	.352
5- 560	5- 734.2	.162	168.3	-1.5	-1.6	.616	100.3	.416	1.182	195.2	325.4	.690A	1.673D	80.0	1.379	2.5	11.2	332.8	.309
5- 734.2	5- 820	.309	341.5	-11.8	-2.8	1.346	101.3	.368	1.068	316.5	459.6	.674	1.461A	111.2	1.048	5.2	36.2	100.7	.390
		17.32	9.15	5.74	8.17	11.54	3.41	16.05	1/1/1	10.0	14.6	24.7	.630	4.680	69.5	248.0	69.5	101.1D	2.317
5- 390	5- 560	.252	186.0	9.5	2.4	1.181	100.2	.416	1.605	324.6	476.7	.938	2.273A	114.5	.776	-.6	-25.1	277.0	.371
5- 560	5- 741.0	.159	165.4	-3.7	-2.4	.623	100.4	.404	1.194	196.2	337.2	.712A	1.677D	83.5	1.383	3.1	16.2	329.2	.265
5- 741.0	5- 830	.265	348.4	-17.8	-3.5	1.329	99.2	.322	1.015	320.9	463.5	.688	1.343A	108.7	1.024	5.4	37.9	110.6	.341
		17.53	8.85	5.51	8.68	12.04	3.34	15.04	1/1/1	7.4	17.9	38.9	.856	3.001	61.3	250.2	61.3	108.7D	1.713
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																			
5- 340	5- 570	.274	151.6	2.1	-2.3	1.111	104.2	.339	1.324	299.2	505.3	.876	1.773A	105.0	.690	3.6	-14.3	266.3	.250
5- 570	5- 711.3	.217	179.5	-.2	-.1	.564	102.2	.517	1.095	191.9	281.4	.529A	1.662D	65.3	1.355	1.9	4.1	328.9	.575
5- 711.3	5- 780	.575	312.1	2.5	1.0	1.489	110.7	.673	1.878	307.7	446.5	.614	3.142A	122.8	1.223	2.6	25.1	63.2	.675
		16.02	10.55	5.89	5.47	8.85	4.66	22.94	2/1/1	23.8	4.0	16.9	.182	6.811	173.5	247.7	-4.4	75.8L	1.057
5- 350	5- 570	.269	155.8	-5.6	-3.6	1.121	103.4	.343	1.355	304.0	500.4	.891	1.819A	106.5	.703	5.0	-11.5	269.2	.271
5- 570	5- 717.2	.199	175.6	.5	-.5	.587	102.4	.482	1.127	194.1	292.9	.583A	1.670D	69.5	1.364	2.0	5.1	331.7	.494
5- 717.2	5- 790	.494	320.2	.4	.1	1.443	108.1	.579	1.498	309.4	448.9	.631	2.365A	119.8	1.168	3.3	28.2	72.5	.591
		16.06	10.05	5.80	6.01	9.39	4.25	20.79	2/1/1	22.6	5.7	12.4	.246	9.268	157.5	250.3	-21.2	74.0L	2.036
5- 360	5- 570	.298	154.8	-26.8	-8.8	1.132	102.5	.348	1.389	309.1	495.6	.905	1.872A	108.0	.715	10.3	-.9	270.3	.309
5- 570	5- 723.0	.187	171.8	1.0	-.8	.604	102.7	.455	1.153	196.2	304.2	.628A	1.678D	73.3	1.372	2.0	6.3	333.5	.423
5- 723.0	5- 800	.423	327.9	-2.6	-.8	1.404	105.7	.498	1.288	311.4	451.9	.646	1.929A	116.8	1.121	4.0	31.0	81.9	.516
		17.33	10.32	6.34	7.02	10.39	3.97	18.95	2/1/1	28.9	8.0	10.5	.336	10.913	122.0	262.5	-55.8	79.6L	3.327
5- 380	5- 570	.245	185.5	20.0	4.3	1.153	100.4	.364	1.467	319.9	486.6	.932	2.001A	110.5	.742	-2.7	-29.6	277.7	.318
5- 570	5- 734.7	.174	165.3	.4	-1.6	.626	103.1	.420	1.192	199.5	325.9	.691A	1.692D	80.1	1.382	2.4	10.6	333.0	.309
5- 734.7	5- 820	.309	342.0	-11.6	-2.7	1.348	101.3	.371	1.072	316.8	459.2	.675	1.470A	111.3	1.050	5.1	36.0	100.9	.392
		16.30	9.06	5.39	7.24	10.61	3.67	16.09	1/1/1	12.9	14.3	24.0	.629	4.806	68.2	248.7	68.2	101.8D	2.394
5- 390	5- 570	.226	185.7	11.7	2.5	1.164	99.2	.375	1.511	325.7	482.4	.945	2.077A	111.6	.755	-.8	-25.3	279.6	.333
5- 570	5- 741.4	.170	162.7	-1.3	-2.2	.633	103.1	.409	1.204	200.6	337.7	.712A	1.696D	83.6	1.386	2.8	14.9	329.1	.265
5- 741.4	5- 830	.265	348.7	-17.5	-3.5	1.330	99.2	.324	1.019	321.2	463.1	.689	1.349A	108.8	1.026	5.4	37.6	110.8	.343
		16.32	8.68	5.09	7.64	11.01	3.59	15.07	1/1/1	9.7	17.6	37.8	.856	3.091	59.7	251.1	59.6	109.6D	1.790
5- 440	5- 570	.195	180.6	6.8	1.0	1.211	89.8	.440	1.757	.8	106.9	.984D	2.530A	115.8	.814	1.3	-20.9	285.9	.405
5- 570	5- 738.4	.172	163.7	-.4	-1.9	.631	103.1	.413	1.199	200.2	332.6	.704A	1.695D	82.1	1.384	2.6	12.8	331.2	.282
5- 738.4	5- 880	.282	353.5	60.7	11.3	1.257	95.9	.180	.856	319.6	517.1	.702	1.010A	94.8	.921	-10.8	-31.5	101.0	.212
		17.86	8.24	4.62	9.62	12.98	3.62	12.75	1/1/2	4.1	73.0	50.6	.755	2.342	76.4	311.5	-49.5	75.0L	1.013
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 340	5- 580	.257	151.9	3.9	-1.7	1.104	103.5	.321	1.299	299.6	510.3	.883	1.715A	102.4	.685	3.1	-14.7	267.9	.225
5- 580	5- 711.9	.230	176.4	1.2	-.2	.577	105.8	.522	1.105	195.7	281.5	.528A	1.681D	65.2	1.358	1.9	4.1	329.8	.579
5- 711.9	5- 780	.579	312.7	2.4	1.0	1.495	110.7	.682	1.936	308.2	445.9	.615	3.256A	123.0	1.230	2.6	25.2	63.5	.681
		15.45	10.59	5.60	4.86	8.25	4.99	23.11	2/1/1	26.5	4.1	17.1	.179	6.710	173.6	248.7	-4.3	75.6L	1.025
5- 350	5- 580	.248	156.5	-1.8	-2.4	1.113	102.6	.322	1.324	304.6	505.6	.898	1.750A	103.9	.695	3.9	-13.1	271.2	.243
5- 580	5- 717.8	.214	172.4	2.0	-.5	.600	105.8	.487	1.138	198.2	293.3	.584A	1.692D	69.4	1.366	1.9	5.0	332.3	.497
5- 717.8	5- 790	.497	320.7	.4	.1	1.447	108.1	.585	1.523	309.8	448.4	.631	2.415A	119.9	1.173	3.3	28.2	72.8	.596
		15.33	10.03	5.44	5.30	8.69	4.59	20.92	2/1/1	24.1	5.6	12.4	.244	9.246	158.0	250.8	-20.6	73.6L	2.009
5- 360	5- 580	.247	158.7	-13.2	-4.5	1.123	101.7	.325	1.351	309.8	500.9	.912	1.789A	105.3	.706	6.1	-8.2	273.5	.265
5- 580	5- 723.5	.203	168.6	2.5	-.8	.617	105.8	.460	1.166	200.5	304.7	.629A	1.703D	73.3	1.375	2.0	6.1	333.8	.425
5- 723.5	5- 800	.425	328.4	-2.5	-.8	1.407	105.7	.503	1.300	311.7	451.4	.647	1.953A	117.0	1.125	4.0	30.9	82.2	.520
		15.61	9.75	5.42	5.86	9.24	4.33	19.03	2/1/1	24.7	7.9	10.2	.333	11.195	122.1	262.4	-55.9	79.3L	3.397
5- 360	5- 580	.235	188.9	27.5	5.7	1.142	99.5	.334	1.410	321.0	492.2	.939	1.881A	107.7	.728	-4.0	-33.4	280.2	.289
5- 580	5- 735.2	.190	162.6	2.2	-1.5	.640	105.9	.426	1.207	204.2	326.8	.693A	1.721D	80.2	1.386	2.3	10.1	332.8	.309
5- 735.2	5- 820	.309	342.4	-11.5	-2.7	1.349	101.3	.373	1.077	317.2	458.8	.675	1.479A	111.3	1.052	5.1	35.7	101.2	.394
		15.74	9.28	5.24	6.47	9.84	4.04	16.13	1/1/1	17.2	14.1	23.6	.628	4.894	66.1	249.1	66.1	103.0D	2.445
5- 390	5- 580	.205	185.4	14.3	2.7	1.151	98.2	.341	1.443	326.9	488.2	.951	1.934A	108.7	.739	-.9	-25.7	282.1	.298
5- 580	5- 742.0	.187	160.3	.9	-2.1	.647	105.9	.415	1.219	205.3	338.6	.713A	1.726D	83.8	1.389	2.6	13.9	328.5	.265
5- 742.0	5- 830	.265	349.2	-17.2	-3.4	1.331	99.2	.326	1.022	321.6	462.6	.689	1.355A	108.9	1.028	5.3	37.3	111.0	.344
		15.46	8.73	4.77	6.73	10.10	3.96	15.10	1/1/1	12.2	17.2	37.2	.858	3.137	57.2	251.4	57.2	111.3D	1.834
5- 440	5- 580	.172	175.4	9.0	.9	1.186	89.0	.383	1.594	3.7	114.4	.983D	2.205A	112.5	.782	1.3	-20.3	287.6	.357
5- 580	5- 738.6	.188	161.3	1.7	-1.8	.644	105.9	.420	1.214	204.9	332.9	.704A	1.724D	82.1	1.388	2.4	11.8	331.0	.284
5- 738.6	5- 880	.284	353.9	61.0	11.5	1.257	95.8	.180	.856	319.7	517.0	.702	1.010A	94.8	.921	-11.0	-31.7	101.0	.214
		16.59	8.30	4.31	8.29	11.66	3.99	12.78	1/1/2	6.8	73.1	52.0	.743	2.282	76.5	311.5	-49.9	75.2L	.952
5- 490	5- 580	.187	169.2	10.8	.9	1.189	86.3	.393	1.608	13.2	113.8	.976D	2.240A	113.1	.785	1.5	-20.0	287.7	.366
5- 580	5- 743.8	.186	159.9	.3	-2.3	.648	105.8	.413	1.221	205.5	341.7	.717A	1.726D	84.7	1.390	2.8	15.1	326.9	.256
5- 743.8	5- 890	.256	356.0	60.8	10.3	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.1	101.0	.198
		16.99	8.45	4.51	8.54	11.90	3.94	12.55	1/1/2	6.8	78.7	50.3	.916	2.355	72.7	303.2	-46.1	85.3L	1.241
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																			
5- 340	5- 590	.243	152.0	5.5	-1.3	1.099	102.9	.305	1.279	300.1	515.5	.889	1.670A	100.0	.681	2.7	-14.9	269.1	.203
5- 590	5- 712.5	.250	173.3	2.5	-.2	.595	109.7	.528	1.122	200.0	282.2	.529A	1.714D	65.1	1.363	1.9	4.0	330.4	.583
5- 712.5	5- 780	.583	313.3	2.4	1.0	1.500	110.7	.692	1.999	308.6	445.4	.616	3.382A	123.1	1.236	2.6	25.3	63.8	.688
		15.18	10.84	5.37	4.34	7.73	5.47	23.29	2/1/1	29.7	4.3	17.2	.177	6.699	173.6	249.4	-4.3	75.3L	1.009
5- 350	5- 590	.231	157.0	1.0	-1.7	1.107	101.9	.304	1.300	305.2	510.8	.904	1.695A	101.4	.690	3.2	-13.9	272.7	.218
5- 590	5- 718.3	.234	169.3	5.4	-.5	.618	109.4	.494	1.157	202.8	294.1	.586A	1.728D	69.4	1.373	1.9	4.9	332.7	.499
5- 718.3	5- 790	.499	321.3	.3	.1	1.451	106.1	.592	1.549	310.2	447.9	.632	2.467A	120.1	1.178	3.3	28.2	73.1	.601
		14.96	10.26	5.17	4.70	8.09	5.09	21.04	2/1/1	26.6	5.6	12.2	.241	9.416	158.1	251.0	-20.6	73.2L	2.029
5- 360	5- 590	.222	160.4	-6.2	-2.7	1.115	100.9	.305	1.321	310.6	506.4	.919	1.724A	102.7	.699	4.3	-11.3	275.6	.235
5- 590	5- 724.0	.224	165.7	3.9	-.8	.635	109.2	.468	1.167	205.4	305.7	.632A	1.743D	73.4	1.381	1.9	5.9	333.9	.426
5- 724.0	5- 800	.426	326.9	-2.5	-.8	1.410	105.7	.507	1.313	312.1	451.0	.647	1.979A	117.1	1.128	3.9	30.9	82.4	.523
		14.97	9.86	5.03	5.11	8.49	4.83	19.12	2/1/1	25.1	7.8	9.8	.331	11.690	120.6	262.7	-57.4	79.6L	3.534
5- 370	5- 590	.243	157.5	-28.0	-7.1	1.124	99.9	.306	1.344	316.1	502.1	.932	1.756A	103.9	.709	8.8	-.6	276.3	.267
5- 590	5- 729.7	.217	162.7	4.1	-1.1	.648	109.1	.449	1.211	207.6	317.0	.668A	1.755D	77.0	1.387	2.0	7.4	333.8	.363
5- 729.7	5- 810	.363	336.1	-6.5	-1.7	1.377	105.4	.435	1.172	314.4	454.4	.662	1.683A	114.2	1.087	4.5	33.3	91.9	.455
		15.92	10.02	5.36	5.90	9.28	4.66	17.50	2/1/1	30.6	10.5	13.9	.455	8.236	80.9	241.5	80.9	94.9D	3.296

STOPOVER TIME = 0 DAYS

1997 INBOUND SWINGBY

MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2450590
21 MAY 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 380	5- 590	.271	202.5	43.5	10.4	1.132	98.7	.309	1.368	322.1	498.0	.945	1.790A	105.0	.718	-8.6	-45.6	282.3	.278
5- 590	5- 735.7	.212	160.2	3.8	-1.5	.658	109.0	.435	1.230	209.3	328.1	.695A	1.764D	80.5	1.391	2.1	9.6	332.1	.310
5- 735.7	5- 820	.310	342.9	-11.3	-2.6	1.351	101.2	.375	1.082	317.5	458.3	.676	1.489A	111.4	1.054	5.0	35.5	101.4	.396
		16.57	10.39	5.84	6.19	9.56	4.55	16.18	1/1/1	28.3	13.8	23.4	.627	4.926	62.8	249.1	62.8	105.0D	2.460
5- 390	5- 590	.188	185.4	17.9	3.0	1.140	97.4	.313	1.392	328.2	494.2	.957	1.827A	106.0	.726	-1.2	-26.6	284.4	.268
5- 590	5- 742.7	.208	158.4	2.7	-2.0	.664	108.8	.424	1.242	210.5	340.3	.715A	1.770D	84.2	1.395	2.5	13.0	327.2	.264
5- 742.7	5- 830	.264	349.7	-16.9	-3.3	1.333	99.1	.328	1.027	322.1	462.0	.690	1.365A	109.0	1.030	5.2	36.9	111.4	.347
		14.92	8.98	4.53	5.93	9.31	4.46	15.14	1/1/1	15.0	16.7	37.2	.861	3.134	53.8	251.1	53.7	114.1D	1.837
5- 450	5- 590	.172	163.2	12.7	.8	1.168	85.7	.347	1.490	16.8	122.0	.972D	2.007A	109.8	.758	1.5	-19.4	289.1	.321
5- 590	5- 743.9	.208	158.1	2.4	-2.1	.665	108.7	.423	1.244	210.6	342.4	.718A	1.770D	84.8	1.395	2.5	13.7	326.0	.258
5- 743.9	5- 890	.258	356.3	61.2	10.4	1.258	95.1	.173	.856	324.4	523.2	.708	1.004A	93.4	.918	-10.4	-33.3	101.0	.200
		16.08	8.76	4.32	7.32	10.69	4.44	12.58	1/1/2	10.1	78.8	52.3	.901	2.269	72.7	302.5	-46.5	86.0L	1.142

MARS ARRIVAL DATE = 2450600 (31 MAY 1997)

5- 340	5- 600	.232	152.2	6.9	-.9	1.095	102.4	.292	1.263	300.5	520.6	.894	1.633A	97.6	.680	2.5	-14.9	269.7	.183
5- 600	5- 713.2	.277	170.3	3.8	-.2	.620	113.8	.537	1.150	204.9	283.3	.532A	1.767D	65.1	1.371	1.9	4.0	330.8	.587
5- 713.2	5- 780	.587	314.0	2.3	1.0	1.506	110.7	.702	2.071	309.0	444.8	.617	3.525A	123.3	1.243	2.6	25.3	64.2	.695
		15.22	11.34	5.18	3.86	7.28	6.16	23.47	2/1/1	33.6	4.4	16.9	.174	6.807	173.6	249.6	-4.4	74.7L	1.013
5- 350	5- 600	.218	157.3	3.2	-1.2	1.102	101.3	.289	1.280	305.8	516.1	.910	1.651A	99.0	.688	2.8	-14.3	273.9	.197
5- 600	5- 718.9	.262	166.5	4.6	-.5	.642	113.1	.504	1.188	208.1	295.6	.589A	1.786D	69.5	1.381	1.8	4.7	332.7	.502
5- 718.9	5- 790	.502	321.9	.3	.1	1.455	108.1	.599	1.578	310.6	447.4	.633	2.522A	120.2	1.182	3.3	28.2	73.4	.606
		14.92	10.73	4.96	4.19	7.58	5.77	21.16	2/1/1	29.9	5.6	11.6	.238	9.867	157.5	250.8	-21.3	72.7L	2.114
5- 360	5- 600	.206	161.3	-1.8	-1.7	1.109	100.3	.288	1.298	311.3	511.8	.924	1.672A	100.3	.696	3.3	-12.9	277.2	.210
5- 600	5- 724.5	.252	163.2	5.1	-.8	.659	112.7	.479	1.220	210.9	307.3	.635A	1.804D	73.6	1.389	1.9	5.8	333.5	.428
5- 724.5	5- 800	.428	329.4	-2.5	-.8	1.413	105.7	.512	1.328	312.4	450.5	.648	2.008A	117.2	1.132	3.9	30.8	82.7	.527
		14.80	10.29	4.77	4.51	7.90	5.52	19.21	2/1/1	27.2	7.6	9.2	.328	12.484	116.6	264.2	-61.4	80.7L	3.767
5- 370	5- 600	.199	162.5	-12.2	-3.2	1.117	99.2	.287	1.316	317.1	507.7	.938	1.695A	101.5	.703	4.9	-8.6	279.4	.227
5- 600	5- 730.2	.245	160.5	5.3	-1.1	.672	112.4	.461	1.245	213.3	318.7	.671A	1.819D	77.3	1.395	1.9	7.1	333.1	.364
5- 730.2	5- 810	.364	336.6	-6.2	-1.7	1.379	103.4	.439	1.181	314.8	454.0	.663	1.699A	114.3	1.090	4.5	33.2	92.2	.458
		14.93	10.02	4.67	4.90	8.29	5.35	17.57	2/1/1	26.9	10.3	13.8	.453	8.321	75.4	243.0	75.4	97.7D	3.316
5- 390	5- 600	.177	186.4	23.5	3.7	1.131	96.7	.290	1.353	329.6	500.3	.961	1.745A	103.4	.718	-1.9	-28.6	286.5	.241
5- 600	5- 743.7	.235	156.9	4.1	-2.0	.686	111.7	.437	1.276	216.1	342.8	.718A	1.834D	84.8	1.405	2.5	12.2	324.9	.264
5- 743.7	5- 830	.264	350.6	-16.4	-3.2	1.336	99.0	.332	1.035	322.9	461.2	.691	1.378A	109.2	1.053	5.0	36.3	111.8	.350
		14.74	9.48	4.38	5.25	8.64	5.11	15.20	1/1/1	18.5	16.1	38.2	.864	3.055	49.0	250.1	49.0	118.3D	1.776
5- 450	5- 600	.163	157.3	14.3	.6	1.152	85.2	.313	1.410	20.5	130.4	.968D	1.851A	106.6	.738	1.5	-16.8	290.2	.282
5- 600	5- 744.2	.235	156.9	4.0	-2.0	.686	111.7	.437	1.276	216.2	343.6	.719A	1.834D	85.0	1.403	2.5	12.5	324.5	.262
5- 744.2	5- 890	.262	356.8	61.9	10.6	1.258	95.0	.173	.856	324.6	523.0	.708	1.004A	93.5	.918	-10.7	-33.7	101.0	.203
		15.60	9.30	4.20	6.30	9.67	5.10	12.63	1/1/2	13.7	78.8	54.6	.878	2.180	72.4	300.9	-46.6	87.3L	1.036

MARS ARRIVAL DATE = 2450610 (10 JUN 1997)

5- 340	5- 610	.223	152.3	8.2	-.6	1.091	101.9	.282	1.251	300.9	525.8	.898	1.603A	95.4	.681	2.2	-14.8	269.8	.166
5- 610	5- 713.9	.312	167.6	4.9	-.3	.653	116.0	.550	1.195	210.5	285.3	.538A	1.853D	65.1	1.383	1.8	3.9	330.8	.592
5- 713.9	5- 780	.592	314.7	2.3	1.0	1.512	110.7	.714	2.156	309.5	444.1	.618	3.695A	123.5	1.251	2.7	25.4	64.5	.703
		15.62	12.13	5.03	3.49	6.90	7.10	23.67	2/1/1	38.2	4.6	16.2	.172	7.091	173.4	249.3	-4.7	74.0L	1.045
5- 350	5- 610	.207	157.5	5.1	-.8	1.098	100.8	.277	1.265	306.4	521.5	.915	1.616A	96.8	.687	2.4	-14.5	274.5	.177
5- 610	5- 719.5	.297	164.2	5.7	-.6	.674	117.0	.518	1.236	214.0	297.7	.595A	1.877D	69.7	1.393	1.8	4.6	332.3	.505
5- 719.5	5- 790	.505	322.5	.3	.1	1.459	108.1	.607	1.611	311.0	446.8	.634	2.588A	120.4	1.168	3.3	28.2	73.7	.611
		15.24	11.49	4.80	3.74	7.14	6.70	21.31	2/1/1	33.8	5.6	10.6	.236	10.788	156.0	250.0	-25.0	72.2L	2.306
5- 360	5- 610	.193	161.8	1.4	-1.0	1.104	99.7	.274	1.280	312.1	517.4	.929	1.630A	98.0	.694	2.7	-13.7	278.2	.189
5- 610	5- 725.1	.287	161.3	6.1	-.8	.690	116.3	.495	1.270	217.1	309.7	.641A	1.899D	73.8	1.401	1.8	5.6	332.6	.430
5- 725.1	5- 800	.430	330.0	-2.4	-.8	1.416	105.7	.517	1.344	312.8	450.0	.649	2.039A	117.3	1.136	3.9	30.7	83.0	.531
		15.02	11.02	4.59	4.00	7.40	6.43	19.91	2/1/1	30.4	7.5	8.4	.325	13.625	108.4	270.3	-69.1	83.5L	4.104
5- 370	5- 610	.180	164.5	-4.5	-1.7	1.111	98.6	.272	1.295	318.0	513.5	.943	1.647A	99.1	.700	3.4	-11.7	281.1	.201
5- 610	5- 730.9	.280	159.0	6.3	-1.1	.701	115.8	.479	1.297	219.5	321.1	.676A	1.917D	77.7	1.406	1.8	6.9	331.6	.365
5- 730.9	5- 810	.365	337.1	-6.1	-1.7	1.382	103.4	.443	1.191	315.2	453.5	.663	1.718A	114.4	1.093	4.4	33.1	92.5	.461
		14.94	10.66	4.42	4.28	7.67	6.24	17.65	2/1/1	28.3	10.1	14.1	.450	8.172	67.1	243.5	67.1	102.1D	3.229
5- 380	5- 610	.185	160.7	-23.5	-4.6	1.117	97.4	.271	1.309	324.3	509.8	.955	1.664A	100.1	.707	6.4	-2.9	282.1	.222
5- 610	5- 737.0	.274	157.2	6.1	-1.5	.709	115.3	.466	1.315	221.3	332.7	.702A	1.929D	81.4	1.410	1.9	6.6	328.6	.310
5- 737.0	5- 820	.310	344.1	-10.8	-2.5	1.355	101.1	.382	1.097	318.5	457.2	.678	1.515A	111.7	1.060	4.8	35.0	102.2	.401
		15.35	10.57	4.48	4.78	8.17	6.09	16.30	2/1/1	31.3	13.1	24.8	.624	4.659	51.7	247.7	51.7	112.4D	2.282
5- 390	5- 610	.183	192.3	35.4	5.6	1.123	96.0	.271	1.324	331.1	506.5	.966	1.682A	100.9	.712	-3.8	-35.2	288.9	.220
5- 610	5- 745.4	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	346.9	.722A	1.928D	85.9	1.413	2.2	11.7	321.1	.263
5- 745.4	5- 830	.263	351.9	-15.6	-3.1	1.340	98.8	.339	1.048	324.2	459.7	.693	1.403A	109.5	1.039	4.8	35.4	112.7	.355
		15.13	10.38	4.46	4.75	8.14	5.92	15.31	1/1/1	24.4	15.0	40.9	.868	2.862	42.5	248.3	42.5	124.9D	1.617

MARS ARRIVAL DATE = 2450620 (20 JUN 1997)

5- 340	5- 620	.215	152.4	9.3	-.4	1.088	101.6	.273	1.241	301.2	530.9	.902	1.580A	93.4	.683	2.1	-14.5	269.2	.150
5- 620	5- 714.7	.359	165.4	5.8	-.3	.697	122.2	.570	1.271	217.1	288.3	.547A	1.995D	65.4	1.401	1.8	3.9	330.4	.597
5- 714.7	5- 780	.597	315.5	2.2	.9	1.520	110.8	.727	2.267	310.1	443.4	.619	3.914A	123.7	1.260	2.7	25.5	64.9	.712
		16.43	13.26	4.91	3.17	6.57	8.35	23.91	2/1/1	43.5	4.8	15.0	.168	7.674	173.0	248.3	-5.2	72.9L	1.125
5- 350	5- 620	.198	157.6	6.7	-.5	1.094	100.4	.267	1.253	306.9	526.8	.919	1.588A	94.7	.689	2.2	-14.5	274.5	.160
5- 620	5- 720.3	.343	162.4	6.5	-.6	.715	120.9	.541	1.315	220.9	300.9	.604A	2.025D	70.1	1.410	1.7	4.5	331.3	.509
5- 720.3	5- 790	.509	323.2	.3	.1	1.464	108.1	.616	1.653	311.5	446.2	.635	2.671A	120.6	1.195	3.3	28.2	74.1	.618
		15.95	12.58	4.67	3.37	6.77	7.91	21.48	2/1/1	38.5	5.6	9.1	.232	12.657	152.3	248.7	-26.8	71.8L	2.707
5- 360	5- 620	.183	162.1	3.9	-.6	1.100	99.3	.262	1.266	312.7	522.9	.934	1.598A	95.9	.694	2.3	-14.2	278.8	.170
5- 620	5- 725.8	.332	159.9	6.9	-.9	.729	120.0	.520	1.350	224.1	312.9	.649A	2.052D	74.3	1.417	1.7	5.4	331.1	.432
5- 725.8	5- 800	.432	330.7	-2.3	-.7	1.420	105.7	.524	1.365	313.3	449.3	.650	2.081A	117.5	1.141	3.9	30.7	83.4	.536
		15.64	12.06	4.45	3.58	6.98	7.61	19.44	2/1/1	34.5	7.4	7.8	.322	14.775	93.0	313.2	-80.2	90.0D	4.431
5- 370	5- 620	.168	165.4	.3	-.8	1.106	98.1	.259	1.278	318.9	519.2	.947	1.609A	96.9	.700	2.6	-13.3	282.1	.179
5- 620	5- 731.6	.323	157.9	7.0	-1.2	.739	119.3	.504	1.377	226.5	324.5	.683A	2.072D	78.3	1.422	1.7	6.6	329.4	.367
5- 731.6	5- 810	.367	357.9	-5.9	-1.6	1.385	103.3	.448	1.204	315.8	452.8	.664	1.744A	114.6	1.098	4.4	32.9	92.9	.466
		15.44	11.65	4.26	3.79	7.19	7.39	17.75	2/1/1	31.4	9.8	15.1	.446	7.613	56.0	243.2	56.0	108.2D	2.953
5- 380	5- 620	.155	166.1	-6.6	-1.6	1.112	96.8	.256	1.290	325.5	515.8	.959	1.620A	97.8	.705	3.4	-10.5	284.5	.190
5- 620	5- 738.1	.316	156.6	6.7	-1.5	.745	118.6	.492	1.394	228.2	336.4	.708A	2.081D	82.3	1.426	1.8	8.2	325.4	.311
5- 738.1	5- 820	.311	345.1	-10.4	-2.4	1.359	101.1	.388	1.109	319.3	456.2	.679	1.540A	111.9	1.065	4.7	34.5	102.7	.406
		15.33	11.30	4.11	4.03	7.42	7.19	16.41	2/1/1	29.9	12.5	27.0	.620	4.280	43.8	246.3	43.8	118.4D	2.034

MARS ARRIVAL DATE = 2450630 (30 JUN 1997)

5- 340	5- 630	.209	152.6	10.4	-.2	1.086	101.3	.267	1.233	301.4	536.1	.905	1.562A	91.4	.686	1.9	-14.2	267.7	.137
5- 630	5- 715.6	.418	163.6	6.5	-.4	.755	126.4	.601	1.403	224.9	292.7	.560A	2.246D	65.8	1.427	1.8	3.8	329.3	.604
5- 715.6	5- 780	.604	316.4	2.2	.9	1.529	110.8	.744	2.419	310.7	442.6	.620	4.218A	123.9	1.271	2.7	25.5	65.4	.723
		17.71	14.81	4.83	2.90	6.31	9.98	24.20	2/1/1	49.8	5.1	13.0	.165	8.862	172.2	246.2	-6.3	71.4L	1.295
5- 350	5- 630	.191	157.8	8.2	-.2	1.091	100.1	.259	1.244	307.2	532.1	.922	1.566A	92.7	.691	2.0	-14.5	273.7	.143
5- 630	5- 721.2	.400	161.0	7.1	-.7	.769	124.8	.575	1.449	228.8	305.3	.616A	2.281D	70.6	1.435	1.7	4.4	329.6	.313
5- 721.2	5- 790	.513	324.1	.3	.1	1.471	108.1	.628	1.709	312.1	445.4	.636	2.783A	120.8	1.203	3.3	28.2	74.6	.627
		17.11	14.05	4.57	3.05	6.46	9.48	21.69	2/1/1	44.0	5.7	6.8	.228	16.870	142.9	247.1	-36.3	72.6L	3.619
5- 360	5- 630	.175	162.3	6.0	-.2	1.097	98.9	.253	1.254	313.3	528.4	.937	1.571A	93.9	.696	2.0	-14.4	278.6	.153
5- 630	5- 726.8	.387	159.0	7.4	-.9	.780	123.7	.556	1.485	232.0	317.3	.659A	2.310D	75.0	1.441	1.6	5.2	328.7	.436
5- 726.8	5- 800	.435	331.6	-2.3	-.7	1.425	105.6	.533	1.394	314.0	448.5	.651	2.138A	117.7	1.148	3.9	30.6	83.9	.543
		16.69	13.47	4.35	3.22	6.62	9.12	19.60	2/1/1	39.3	7.2	8.0	.317	14.249	68.6	236.4	68.6	101.5D	4.198
5- 370	5- 630	.159	165.8	3.7	-.3	1.103	97.7	.248	1.264	319.7	524.9	.950	1.578A	94.9	.701	2.1	-14.2	282.4	.161
5- 630	5- 732.8	.376	157.4	7.4	-1.2	.787	122.7	.542	1.509	234.2	329.1	.692A	2.327D	79.2	1.445	1.6	6.3	326.1	.369
5- 732.8	5- 810	.369	338.9	-5.7	-1.6	1.390	103.3	.457	1.225	316.5	451.8	.666	1.784A	114.8	1.104	4.3	32.8	93.5	.472
		16.36	12.98	4.15	3.38	6.79	8.83	17.90	2/1/1	35.7	9.5	17.6	.441	6.535	43.2	242.2	43.2	115.9D	2.443

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 440 DAYS
MARS ARRIVAL DATE = 2450630
30 JUN 1997

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
3- 380	3- 630	.144	167.8	1.0	-.5	1.108	96.4	.245	1.274	326.5	521.8	.962	1.586A	95.7	.705	2.3	-13.4	285.5	.168
3- 630	3- 739.9	.366	156.4	7.1	-1.5	.790	121.9	.529	1.519	235.5	341.7	.715A	2.322D	83.7	1.446	1.7	7.8	320.6	.313
3- 739.9	3- 820	.315	346.6	-9.9	-2.3	1.366	100.9	.398	1.131	320.6	454.6	.681	1.581A	112.3	1.073	4.6	33.9	103.7	.414
		16.07	12.52	3.98	3.55	6.95	6.54	16.58	2/1/1	32.9	11.7	31.4	.614	3.692	34.6	244.3	34.6	126.3D	1.654

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2450530
22 MAR 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																				
5- 310	5- 530	.369	133.0	10.6	-2.4	1.110	109.6	.408	1.344	285.1	502.2	.796	1.891A	110.2	.683	3.1	-15.5	248.1	.288
5- 530	5- 714.8	.181	185.8	-3.8	-.3	.564	90.9	.474	1.121	181.0	294.0	.589A	1.652D	70.0	1.363	2.0	5.4	327.2	.483
5- 714.8	5- 790	.483	317.7	.4	.1	1.427	108.1	.552	1.402	307.8	451.1	.628	2.177A	119.2	1.148	3.3	28.1	71.2	.571
		18.05	11.59	7.76	6.46	9.83	3.83	20.28	2/1/1	22.4	6.0	10.7	.257	10.677	151.9	246.0	-26.8	75.4L	2.491
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																				
5- 310	5- 540	.349	133.1	11.3	-2.0	1.101	108.7	.386	1.311	285.1	506.7	.804	1.817A	107.4	.672	2.8	-15.7	249.9	.261
5- 540	5- 715.4	.181	184.0	-3.0	-.4	.566	93.5	.475	1.118	183.9	293.4	.587A	1.650D	69.9	1.362	2.0	5.4	328.5	.486
5- 715.4	5- 790	.486	318.3	.4	.1	1.431	108.1	.559	1.425	308.2	450.6	.628	2.222A	119.3	1.153	3.3	28.2	71.6	.576
		16.94	11.19	7.35	5.76	9.14	3.84	20.41	2/1/1	25.0	5.9	11.3	.254	10.143	153.8	247.3	-24.9	75.0L	2.326
5- 320	5- 540	.344	139.7	7.5	-2.5	1.113	108.2	.393	1.351	289.3	501.3	.820	1.881A	109.5	.689	3.4	-15.3	253.8	.286
5- 540	5- 721.3	.167	180.7	-3.2	-.8	.582	94.2	.448	1.141	185.3	304.2	.629A	1.652D	73.5	1.368	2.2	6.9	330.9	.418
5- 721.3	5- 800	.418	326.2	-2.8	-.9	1.396	105.7	.484	1.248	310.3	453.4	.644	1.853A	116.4	1.110	4.0	31.2	81.0	.505
		17.16	10.77	7.25	6.40	9.77	3.52	18.67	2/1/1	21.8	8.5	10.7	.344	10.715	115.8	265.5	-61.3	82.2L	3.341
5- 330	5- 540	.342	145.4	2.0	-3.5	1.126	107.6	.402	1.397	293.6	495.9	.835	1.959A	111.5	.707	4.5	-13.8	257.2	.312
5- 540	5- 727.2	.157	177.5	-3.8	-1.2	.594	94.8	.427	1.159	186.5	314.7	.664A	1.655D	76.9	1.373	2.4	9.1	332.0	.359
5- 727.2	5- 810	.359	333.6	-7.0	-1.9	1.366	103.5	.419	1.134	312.7	456.7	.659	1.609A	113.6	1.074	4.7	34.0	90.5	.442
		17.60	10.51	7.21	7.09	10.47	3.30	17.19	2/1/1	19.7	11.6	16.1	.467	7.119	84.3	232.1	84.2	93.6D	2.856
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																				
5- 300	5- 550	.342	126.1	14.7	-1.5	1.085	108.6	.368	1.256	281.1	516.7	.794	1.718A	102.4	.651	2.2	-15.4	245.9	.215
5- 550	5- 710.0	.203	184.9	-2.4	-.1	.550	95.6	.512	1.090	185.4	281.9	.532A	1.648D	65.6	1.354	1.9	4.2	326.6	.567
5- 710.0	5- 780	.567	310.8	2.6	1.1	1.479	110.6	.655	1.774	306.9	447.6	.613	2.936A	122.5	1.211	2.5	25.0	62.6	.662
		16.15	11.53	7.20	4.61	8.00	4.33	22.60	2/1/1	33.0	3.9	15.9	.187	7.232	173.2	244.9	-4.7	76.1L	1.165
5- 310	5- 550	.332	133.2	12.0	-1.7	1.094	107.9	.368	1.285	285.3	511.3	.812	1.758A	104.6	.665	2.6	-15.8	251.3	.236
5- 550	5- 716.0	.184	181.6	-2.1	-.4	.570	96.3	.477	1.118	187.0	293.0	.585A	1.651D	69.7	1.362	2.0	5.3	329.7	.489
5- 716.0	5- 790	.489	319.0	.4	.1	1.435	108.1	.566	1.449	308.6	450.0	.629	2.269A	119.5	1.158	3.3	28.2	71.9	.561
		16.04	10.90	7.01	5.14	8.52	3.90	20.54	2/1/1	28.1	5.8	11.8	.252	9.730	155.3	248.5	-23.3	74.7L	2.196
5- 320	5- 550	.325	139.8	8.5	-2.1	1.105	107.3	.371	1.318	289.5	505.9	.829	1.806A	106.7	.679	3.1	-15.6	255.6	.259
5- 550	5- 721.9	.170	178.0	-2.0	-.8	.587	96.9	.450	1.142	188.6	304.0	.628A	1.655D	73.4	1.369	2.1	6.7	331.9	.420
5- 721.9	5- 800	.420	326.8	-2.7	-.8	1.399	105.7	.489	1.261	310.6	452.9	.645	1.878A	116.6	1.114	4.0	31.1	81.3	.509
		16.14	10.44	6.85	5.70	9.08	3.59	18.77	2/1/1	24.3	8.3	10.7	.341	10.714	118.6	264.0	-58.8	81.1L	3.313
5- 330	5- 550	.319	145.8	3.9	-2.7	1.116	106.6	.377	1.355	293.9	500.6	.844	1.865A	108.6	.694	3.8	-14.6	259.3	.282
5- 550	5- 727.8	.161	174.6	-2.4	-1.2	.599	97.4	.429	1.161	190.0	314.6	.663A	1.659D	76.8	1.374	2.3	8.8	332.9	.360
5- 727.8	5- 810	.360	334.1	-6.8	-1.8	1.369	103.5	.422	1.142	313.1	456.2	.660	1.625A	113.8	1.077	4.7	33.9	90.8	.445
		16.42	10.13	6.74	6.30	9.67	3.38	17.26	2/1/1	21.5	11.4	15.6	.464	7.362	85.5	231.3	85.4	93.0D	2.954
5- 340	5- 550	.318	150.6	-3.5	-4.2	1.129	106.0	.385	1.397	298.4	495.4	.859	1.936A	110.4	.710	5.4	-12.0	262.3	.308
5- 550	5- 733.7	.154	171.4	-3.5	-1.7	.608	97.7	.413	1.176	191.2	325.2	.690A	1.662D	80.0	1.378	2.7	11.9	332.2	.309
5- 733.7	5- 820	.309	341.1	-12.1	-2.8	1.345	101.3	.366	1.063	316.2	460.1	.674	1.452A	111.1	1.046	5.2	36.4	100.4	.388
		16.95	9.97	6.73	6.97	10.35	3.25	16.01	2/1/1	20.4	14.9	25.5	.631	4.529	70.0	246.9	70.0	100.9D	2.226
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																				
5- 300	5- 560	.330	126.2	15.2	-1.3	1.080	108.1	.355	1.240	281.1	521.2	.800	1.681A	99.8	.647	2.1	-15.1	246.3	.195
5- 560	5- 710.7	.208	182.4	-1.4	-.1	.556	98.8	.514	1.091	188.5	281.5	.530A	1.652D	65.5	1.354	1.9	4.2	327.8	.571
5- 710.7	5- 780	.571	311.4	2.6	1.1	1.484	110.6	.664	1.824	307.3	447.0	.613	3.036A	122.7	1.217	2.5	25.1	62.9	.668
		15.55	11.41	6.96	4.14	7.54	4.45	22.77	2/1/1	37.2	4.0	16.5	.184	6.988	173.3	246.4	-4.5	76.0L	1.105
5- 310	5- 560	.318	133.2	12.6	-1.5	1.089	107.3	.352	1.265	285.4	515.9	.819	1.710A	102.0	.659	2.4	-15.7	252.3	.214
5- 560	5- 716.6	.190	178.7	-.8	-.4	.577	99.3	.479	1.121	190.4	292.9	.584A	1.657D	69.6	1.363	2.0	5.2	330.6	.492
5- 716.6	5- 790	.491	319.6	.4	.1	1.439	108.1	.572	1.473	309.0	449.5	.630	2.316A	119.7	1.163	3.3	28.2	72.2	.586
		15.34	10.75	6.72	4.59	7.98	4.03	20.67	2/1/1	31.6	5.7	12.2	.249	9.437	156.6	249.5	-22.1	74.3L	2.099
5- 320	5- 560	.308	139.9	9.5	-1.7	1.098	106.5	.353	1.292	289.7	510.6	.836	1.747A	104.0	.672	2.8	-15.7	257.1	.234
5- 560	5- 722.5	.177	175.0	-.6	-.8	.594	99.7	.452	1.146	192.2	303.9	.628A	1.663D	73.3	1.370	2.1	6.5	332.8	.422
5- 722.5	5- 800	.421	327.3	-2.6	-.8	1.402	105.7	.493	1.274	311.0	452.4	.646	1.903A	116.7	1,118	4.0	31.0	81.6	.513
		15.34	10.26	6.52	5.08	8.47	3.73	18.86	2/1/1	27.2	8.1	10.7	.338	10.767	120.7	263.1	-56.9	80.2L	3.304
5- 330	5- 560	.299	146.0	5.5	-2.2	1.108	105.8	.355	1.322	294.2	505.4	.852	1.792A	105.9	.685	3.3	-15.1	261.1	.285
5- 560	5- 728.3	.168	171.4	-.7	-1.2	.606	100.1	.431	1.166	193.8	314.7	.663A	1.669D	76.8	1.375	2.3	8.4	333.6	.361
5- 728.3	5- 810	.361	334.7	-6.7	-1.8	1.371	103.4	.426	1.150	313.4	455.7	.660	1.639A	113.9	1.080	4.6	33.7	91.1	.447
		15.50	9.90	6.36	5.60	8.98	3.54	17.32	2/1/1	23.8	11.1	15.1	.462	7.601	86.1	231.7	86.0	92.6D	3.050
5- 340	5- 560	.294	151.2	-.3	-3.1	1.119	103.1	.360	1.356	298.8	500.3	.868	1.845A	107.6	.699	4.3	-13.5	264.4	.277
5- 560	5- 734.2	.162	168.3	-1.5	-1.6	.616	100.3	.416	1.182	195.2	325.4	.690A	1.673D	80.0	1.379	2.5	11.2	332.8	.309
5- 734.2	5- 820	.309	341.5	-11.8	-2.8	1.346	101.3	.368	1.068	316.5	459.6	.674	1.461A	111.2	1.048	5.2	36.2	100.7	.390
		15.83	9.67	6.25	6.16	9.54	3.41	16.05	2/1/1	21.7	14.6	24.7	.630	4.680	69.5	248.0	69.5	101.1D	2.317
5- 350	5- 560	.298	154.3	-11.5	-5.5	1.131	104.3	.367	1.395	303.5	495.3	.882	1.907A	109.3	.713	6.8	-8.6	266.9	.304
5- 560	5- 741.0	.159	165.4	-3.7	-2.4	.623	100.4	.404	1.194	196.2	337.2	.712A	1.677D	83.5	1.383	3.1	16.2	329.2	.265
5- 741.0	5- 830	.265	348.4	-17.8	-3.5	1.329	99.2	.322	1.015	320.9	463.5	.688	1.343A	108.7	1.024	5.4	37.9	110.6	.341
		16.54	9.67	6.33	6.87	10.25	3.34	15.04	2/1/1	22.6	17.9	38.9	.856	3.001	61.3	250.2	61.3	108.7D	1.713
5- 400	5- 560	.242	188.2	8.2	1.8	1.194	98.8	.433	1.676	330.5	472.5	.951	2.401A	115.6	.793	.0	-23.7	278.8	.390
5- 560	5- 738.3	.160	166.4	-2.7	-2.1	.621	100.4	.408	1.190	195.9	332.7	.704A	1.676D	82.2	1.382	2.8	14.0	330.9	.280
5- 738.3	5- 880	.280	353.2	60.3	11.2	1.257	95.9	.180	.855	319.5	517.2	.701	1.009A	94.8	.920	-10.7	-31.2	101.0	.210
		17.90	8.70	5.34	9.20	12.56	3.36	12.73	1/1/2	5.6	72.9	49.1	.766	2.406	76.0	310.8	-49.0	75.1L	1.078
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																				
5- 300	5- 570	.320	126.2	15.6	-1.1	1.076	107.6	.345	1.228	281.1	525.8	.805	1.651A	97.2	.646	2.0	-14.7	246.0	.177
5- 570	5- 711.3	.217	179.5	-.2	-.1	.564	102.2	.517	1.095	191.9	281.4	.529A	1.662D	65.3	1.355	1.9	4.1	328.9	.575
5- 711.3	5- 780	.575	312.1	2.5	1.0	1.489	110.7	.673	1.878	307.7	446.5	.614	3.142A	122.8	1.223	2.6	25.1	63.2	.675
		15.16	11.42	6.76	3.74	7.14	4.66	22.94	2/1/1	42.2	4.0	16.9	.182	6.811	173.5	247.7	-4.4	75.8L	1.057
5- 310	5- 570	.306	133.2	13.2	-1.2	1.084	106.7	.339	1.248	285.5	520.6	.825	1.672A	99.4	.656	2.3	-15.4	252.8	.194
5- 570	5- 717.2	.199	175.6	.5	-.5	.587	102.4	.482	1.127	194.1	292.9	.583A	1.670D	69.5	1.364	2.0	5.1	331.7	.494
5- 717.2	5- 790	.494	320.2	.4	.1	1.443	108.1	.579	1.498	309.4	448.9	.631	2.365A	119.8	1.168	3.3	28.2	72.5	.591
		14.86	10.73	6.49	4.12	7.52	4.25	20.79	2/1/1	35.7	5.7	12.4	.246	9.268	157.5	250.3	-21.2	74.0L	2.036
5- 320	5- 570	.293	139.9	10.3	-1.4	1.092	105.9	.337	1.271	289.9	515.4	.843	1.699A	101.4	.667	2.5	-15.6	258.2	.212
5- 570	5- 723.0	.187	171.8	1.0	-.8	.604	102.7	.455	1.153	196.2	304.2	.628A	1.678D	73.3	1.372	2.0	6.3	333.5	.423
5- 723.0	5- 800	.423	327.9	-2.6	-.8	1.404	105.7	.498	1.288	311.4	451.9	.646	1.929A	116.8	1.121	4.0	31.0	81.9	.516
		14.76	10.22	6.25	4.54	7.93	3.97	18.95	2/1/1	30.6	8.0	10.5	.336	10.913	122.0	262.5	-55.8	79.6L	3.327
5- 330	5- 570	.283	146.1	6.8	-1.7	1.101	105.1	.337	1.296	294.5	510.3	.860	1.733A	103.3	.678	2.9	-15.3	262.7	.230
5- 570	5- 728.8	.179	168.3	1.0	-1.1	.617	102.9	.435	1.175	198.0	315.1	.664A	1.686D	76.8	1.378	2.2	8.1	334.0	.362
5- 728.8	5- 810	.361	335.2	-6.6	-1.8	1.373	103.4	.429	1.157	313.8	455.3	.661	1.653A	114.0	1.082	4.6	33.6	91.4	.450
		14.83	9.84	6.05	4.99	8.38	3.79	17.38	2/1/1	26.6	10.9	14.7	.460	7.827	85.7	234.5	85.6	92.7D	3.140
5- 340	5- 570	.274	151.6	2.1	-2.3	1.111	104.2	.339	1.324	299.2	505.3	.876	1.773A	105.0	.690	3.6	-14.3	266.3	.250
5- 570	5- 734.7	.174	165.3	.4	-1.6	.626	103.1	.420	1.192	199.5	325.9	.691A	1.692D	80.1	1.382	2.4	10.6	333.0	.309
5- 734.7	5- 820	.309	342.0	-11.6	-2.7	1.348	101.3	.371	1.072	316.8	459.2	.675	1.470A	111.3	1.050	5.1	36.0	100.9	.392
		15.03	9.56	5.89	5.47	8.85	3.67	16.09	2/1/1	23.8	14.3	24.0	.629	4.606	68.2	248.7	68.2	101.8D	2.394
5- 350	5- 570	.269	155.8	-5.6	-3.6	1.121	103.4	.343	1.355	304.0	500.4	.891	1.819A	106.5	.703	5.0	-11.5	269.2	.271
5- 570	5- 741.4	.170	162.7	-1.3	-2.2	.633	103.1	.409	1.204	200.6	337.7	.712A	1.696D	83.6	1.386	2.8	14.9	329.1	.269
5- 741.4	5- 830	.265	348.7	-17.5	-3.5	1.330	99.2	.324	1.019	321.2	463.1	.689	1.349A	108.8	1.026	5.4	37.6	110.8	.343
		15.40	9.39	5.80	6.01	9.39	3.59	15.07	2/1/1	22.6	17.6	37.8	.856	3.091	59.7	251.1	59.6	109.6D	1.790
5- 400	5- 570	.214	187.1	7.7	1.8	1.175	97.8	.386	1.559	331.8	478.4	.957	2.160A	112.6	.768	.0	-23.5	281.3	.348
5- 570	5- 738.4	.172	163.7	-.4	-1.9	.631	103.1	.413	1.199	200.2	332.6	.704A	1.695D	82.1	1.384	2.6	12.8	331.2	.282
5- 738.4	5- 880	.282	353.5	60.7	11.3	1.257	95.9	.180	.856	319.6	517.1	.702	1.010A	94.8	.921	-10.8	-31.5	101.0	.212
		16.59	8.52	4.90	8.07	11.45	3.62	12.75	1/1/2	7.9	73.0	50.6	.755	2.342	76.4	311.5	-49.5	75.0L	1.013

STOPOVER TIME = 0 DAYS

1997 INBOUND SWINGBY

MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2450570
1 MAY 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 410	5- 570	.204	188.0	5.7	1.5	1.186	96.2	.399	1.609	338.2	474.8	.967	2.250A	113.5	.781	.5	-22.5	282.8	.364
5- 570	5- 743.7	.170	162.1	-2.2	-2.5	.635	103.1	.406	1.207	200.8	341.4	.717A	1.697D	84.7	1.386	3.0	16.8	327.2	.255
5- 743.7	5- 890	.255	355.8	60.5	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.9	101.0	.197
		16.81	8.33	4.75	8.48	11.85	3.58	12.53	1/1/2	6.5	78.7	48.3	.927	2.443	72.4	303.1	-45.3	85.2L	1.338
5- 420	5- 570	.196	187.4	5.1	1.2	1.195	94.3	.412	1.660	345.1	471.6	.976	2.344A	114.3	.793	.8	-21.8	284.1	.378
5- 570	5- 749.9	.170	160.6	-5.9	-3.6	.637	102.9	.401	1.210	200.9	351.4	.725A	1.696D	87.6	1.388	3.9	23.4	320.5	.240
5- 749.9	5- 900	.240	358.7	62.4	9.7	1.259	94.2	.168	.857	329.8	529.0	.713	1.002A	92.2	.916	-10.4	-34.9	100.5	.195
		17.10	8.21	4.64	8.88	12.25	3.58	12.51	1/1/2	5.4	84.6	46.7	1.045	2.523	68.9	293.2	-38.2	100.1D	1.592
5- 430	5- 570	.192	185.0	5.5	1.1	1.204	92.2	.426	1.711	352.6	468.9	.982	2.439A	115.1	.805	1.1	-21.3	285.1	.392
5- 570	5- 759.5	.186	157.5	-19.5	-7.8	.635	102.3	.399	1.207	199.9	365.6	.725	1.689D	91.6	1.386	7.9	42.4	308.9	.282
5- 759.5	5- 910	.282	4.4	73.0	12.3	1.263	92.8	.164	.861	339.6	533.5	.720	1.002A	91.3	.915	-13.7	-40.1	100.5	.243
		17.77	8.51	4.58	9.26	12.62	3.93	13.23	1/1/2	4.6	89.1	39.9	.758	2.929	73.9	286.1	-24.4	121.8D	1.463
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
5- 300	5- 580	.312	126.3	16.1	-.9	1.073	107.2	.336	1.218	281.1	530.4	.808	1.627A	94.8	.646	2.0	-14.0	244.9	.162
5- 580	5- 711.9	.230	176.4	1.2	-.2	.577	105.8	.522	1.105	195.7	281.5	.528A	1.681D	65.2	1.358	1.9	4.1	329.8	.579
5- 711.9	5- 780	.579	312.7	2.4	1.0	1.495	110.7	.682	1.936	308.2	445.9	.615	3.256A	123.0	1.230	2.6	25.2	63.5	.681
		15.00	11.60	6.61	3.41	6.81	4.99	23.11	2/1/1	47.8	4.1	17.1	.179	6.710	173.6	248.7	-4.3	75.6L	1.025
5- 310	5- 580	.296	133.3	13.8	-1.0	1.080	106.2	.329	1.236	285.6	525.3	.830	1.641A	97.0	.655	2.1	-15.0	252.7	.176
5- 580	5- 717.8	.214	172.4	2.0	-.5	.600	105.8	.487	1.138	198.2	293.3	.584A	1.692D	69.4	1.368	1.9	5.0	332.3	.497
5- 717.8	5- 790	.497	320.7	.4	.1	1.447	108.1	.585	1.523	309.8	448.4	.631	2.415A	119.9	1.173	3.3	28.2	72.8	.596
		14.60	10.89	6.30	3.72	7.12	4.59	20.92	2/1/1	40.4	5.6	12.4	.244	9.246	158.0	250.8	-20.6	75.6L	2.009
5- 320	5- 580	.281	140.0	11.1	-1.1	1.088	105.3	.324	1.255	290.1	520.2	.849	1.661A	99.0	.665	2.4	-15.4	258.8	.192
5- 580	5- 723.5	.203	168.6	2.5	-.8	.617	105.8	.460	1.166	200.5	304.7	.629A	1.703D	73.3	1.375	2.0	6.1	333.8	.425
5- 723.5	5- 800	.425	328.4	-2.5	-.8	1.407	105.7	.503	1.300	311.7	451.4	.647	1.953A	117.0	1.125	4.0	30.9	82.2	.520
		14.43	10.36	6.03	4.07	7.47	4.33	19.03	2/1/1	34.5	7.9	10.2	.333	11.195	122.1	262.4	-55.9	79.5L	3.397
5- 330	5- 580	.269	146.2	7.9	-1.3	1.096	104.4	.321	1.276	294.8	515.2	.866	1.686A	100.8	.674	2.7	-15.4	263.8	.208
5- 580	5- 729.2	.195	165.3	2.6	-1.1	.631	105.9	.441	1.189	202.6	315.8	.665A	1.713D	76.9	1.381	2.1	7.8	334.2	.362
5- 729.2	5- 810	.362	335.6	-6.4	-1.7	1.375	103.4	.432	1.165	314.1	454.9	.661	1.668A	114.1	1.085	4.6	33.5	91.6	.453
		14.41	9.95	5.80	4.46	7.85	4.15	17.44	2/1/1	30.0	10.7	14.3	.458	8.055	84.2	238.4	84.2	93.3D	3.228
5- 340	5- 580	.257	151.9	3.9	-1.7	1.104	103.5	.321	1.299	299.6	510.3	.883	1.715A	102.4	.685	3.1	-14.7	267.9	.225
5- 580	5- 735.2	.190	162.6	2.2	-1.5	.640	105.9	.426	1.207	204.2	326.8	.693A	1.721D	80.2	1.386	2.3	10.1	332.8	.309
5- 735.2	5- 820	.309	342.4	-11.5	-2.7	1.349	101.3	.373	1.077	317.2	458.8	.675	1.479A	111.3	1.052	5.1	35.7	101.2	.394
		14.50	9.64	5.60	4.86	8.25	4.04	16.13	2/1/1	26.5	14.1	23.6	.628	4.894	66.1	249.1	66.1	103.0D	2.445
5- 350	5- 580	.248	156.5	-1.8	-2.4	1.113	102.6	.322	1.324	304.6	505.6	.898	1.750A	103.9	.695	3.9	-13.1	271.2	.243
5- 580	5- 742.0	.187	160.3	.9	-2.1	.647	105.9	.415	1.219	205.3	338.6	.713A	1.726D	83.8	1.389	2.6	13.9	328.5	.265
5- 742.0	5- 830	.265	349.2	-17.2	-3.4	1.331	99.2	.326	1.022	321.6	462.6	.689	1.355A	108.9	1.028	5.3	37.3	111.0	.344
		14.70	9.40	5.44	5.30	8.69	3.96	15.10	2/1/1	24.1	17.2	37.2	.858	3.137	57.2	251.4	57.2	111.3D	1.834
5- 400	5- 580	.191	185.8	9.5	1.8	1.160	96.8	.348	1.476	333.2	484.5	.962	1.990A	109.7	.749	.0	-23.3	283.6	.312
5- 580	5- 738.6	.188	161.3	1.7	-1.8	.644	105.9	.420	1.214	204.9	332.9	.704A	1.724D	82.1	1.388	2.4	11.8	331.0	.284
5- 738.6	5- 880	.284	353.9	61.0	11.5	1.257	95.8	.180	.856	319.7	517.0	.702	1.010A	94.8	.921	-11.0	-31.7	101.0	.214
		15.64	8.56	4.56	7.08	10.45	3.99	12.78	1/1/2	10.3	73.1	52.0	.745	2.282	76.5	311.5	-49.9	75.2L	.952
5- 410	5- 580	.180	185.8	7.3	1.4	1.168	95.2	.356	1.510	339.9	481.1	.972	2.047A	110.5	.759	.5	-22.0	285.0	.324
5- 580	5- 743.8	.186	159.9	.3	-2.3	.648	105.6	.413	1.221	205.5	341.7	.717A	1.726D	84.7	1.390	2.8	15.1	326.9	.256
5- 743.8	5- 890	.256	356.0	60.8	10.3	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.1	101.0	.198
		15.77	8.36	4.41	7.42	10.79	3.94	12.55	1/1/2	9.0	78.7	50.3	.916	2.355	72.7	303.2	-46.1	85.3L	1.241
5- 420	5- 580	.171	184.3	6.8	1.2	1.176	93.4	.365	1.542	347.2	478.2	.979	2.105A	111.2	.768	.9	-21.3	286.2	.336
5- 580	5- 749.9	.185	158.8	-2.4	-3.1	.650	105.6	.408	1.225	205.6	351.5	.725A	1.725D	87.5	1.391	3.4	20.3	320.3	.239
5- 749.9	5- 900	.239	358.6	62.3	9.7	1.259	94.2	.168	.857	329.8	529.1	.713	1.002A	92.2	.916	-10.3	-34.8	100.5	.194
		15.95	8.22	4.30	7.73	11.10	3.91	12.50	1/1/2	8.0	84.6	49.6	1.051	2.386	69.2	293.7	-40.1	99.5D	1.456
5- 430	5- 580	.168	180.8	7.5	1.0	1.182	91.4	.374	1.571	355.0	475.9	.983	2.159A	111.9	.776	1.1	-20.7	287.1	.347
5- 580	5- 758.2	.188	157.7	-9.9	-5.3	.648	105.0	.406	1.221	204.7	363.8	.726	1.717D	91.1	1.392	5.4	31.0	310.6	.252
5- 758.2	5- 910	.252	1.8	69.0	10.8	1.262	93.1	.164	.860	338.0	534.0	.719	1.002A	91.2	.915	-12.0	-38.4	100.4	.218
		16.27	8.24	4.26	8.02	11.39	3.99	12.84	1/1/2	7.2	89.5	47.7	.944	2.474	71.1	286.8	-31.2	117.3D	1.391
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																			
5- 300	5- 590	.306	126.4	16.6	-.8	1.071	106.9	.330	1.210	281.0	535.0	.811	1.609A	92.5	.648	1.9	-13.2	243.0	.149
5- 590	5- 712.5	.250	173.3	2.5	-.2	.595	109.7	.528	1.122	200.0	282.2	.529A	1.714D	65.1	1.363	1.9	4.0	330.4	.563
5- 712.5	5- 780	.583	313.3	2.4	1.0	1.500	110.7	.692	1.999	308.6	445.4	.616	3.382A	123.1	1.236	2.6	25.3	63.6	.688
		15.11	11.97	6.50	3.13	6.54	5.47	23.29	2/1/1	54.4	4.3	17.2	.177	6.699	173.6	249.4	-4.3	75.3L	1.009
5- 310	5- 590	.288	133.4	14.4	-.8	1.077	105.8	.320	1.225	285.6	530.0	.834	1.617A	94.6	.656	2.1	-14.5	251.8	.160
5- 590	5- 716.3	.234	169.3	3.4	-.5	.618	109.4	.494	1.157	202.8	294.1	.586A	1.728D	69.4	1.373	1.9	4.9	332.7	.499
5- 716.3	5- 790	.499	321.3	.3	.1	1.451	108.1	.592	1.549	310.2	447.9	.632	2.467A	120.1	1.178	3.3	28.2	73.1	.601
		14.61	11.23	6.15	3.38	6.78	5.09	21.04	2/1/1	45.9	5.6	12.2	.241	9.416	158.1	251.0	-20.6	73.2L	2.029
5- 320	5- 590	.271	140.0	11.9	-.9	1.084	104.8	.313	1.242	290.3	525.1	.854	1.631A	96.6	.664	2.2	-15.1	258.9	.174
5- 590	5- 724.0	.224	165.7	3.9	-.8	.635	109.2	.468	1.187	205.4	305.7	.632A	1.743D	73.4	1.381	1.9	5.9	333.9	.426
5- 724.0	5- 800	.426	328.9	-2.5	-.8	1.410	105.7	.507	1.313	312.1	451.0	.647	1.979A	117.1	1.128	3.9	30.9	82.4	.523
		14.35	10.68	5.65	3.67	7.07	4.83	19.12	2/1/1	39.1	7.8	9.8	.331	11.690	120.6	262.7	-57.4	79.6L	3.534
5- 330	5- 590	.257	146.3	9.0	-1.0	1.091	103.9	.308	1.260	295.1	520.2	.872	1.648A	98.4	.673	2.4	-15.3	264.5	.188
5- 590	5- 729.7	.217	162.7	4.1	-1.1	.648	109.1	.449	1.211	207.6	317.0	.668A	1.755D	77.0	1.387	2.0	7.4	333.9	.363
5- 729.7	5- 810	.363	336.1	-6.3	-1.7	1.377	103.4	.435	1.172	314.4	454.4	.662	1.683A	114.2	1.087	4.5	33.3	91.9	.455
		14.25	10.26	5.59	3.99	7.39	4.66	17.50	2/1/1	33.8	10.5	13.9	.455	8.236	80.9	241.5	80.9	94.9D	3.296
5- 340	5- 590	.243	152.0	5.5	-1.3	1.099	102.9	.305	1.279	300.1	515.5	.889	1.670A	100.0	.681	2.7	-14.9	269.1	.203
5- 590	5- 735.7	.212	160.2	3.8	-1.5	.658	109.0	.435	1.230	209.3	328.1	.695A	1.764D	80.5	1.391	2.1	9.6	332.1	.310
5- 735.7	5- 820	.310	342.9	-11.3	-2.6	1.351	101.2	.375	1.082	317.5	458.3	.676	1.469A	111.4	1.054	5.0	35.5	101.4	.396
		14.25	9.92	5.37	4.34	7.73	4.55	16.18	2/1/1	29.7	13.8	23.4	.627	4.926	62.8	249.1	62.8	105.0D	2.460
5- 350	5- 590	.231	157.0	1.0	-1.7	1.107	101.9	.304	1.300	305.2	510.8	.904	1.695A	101.4	.690	3.2	-13.9	272.7	.218
5- 590	5- 742.7	.208	158.4	2.7	-2.0	.664	108.8	.424	1.242	210.5	340.3	.715A	1.770D	84.2	1.395	2.5	13.0	327.2	.264
5- 742.7	5- 830	.264	349.7	-16.9	-3.3	1.333	99.1	.328	1.027	322.1	462.0	.690	1.365A	109.0	1.030	5.2	36.9	111.4	.347
		14.33	9.63	5.17	4.70	8.09	4.46	15.14	2/1/1	26.6	16.7	37.2	.861	3.134	53.8	251.1	53.7	114.1D	1.837
5- 410	5- 590	.160	183.2	9.0	1.3	1.154	94.4	.322	1.439	341.6	487.7	.976	1.902A	107.6	.742	.6	-21.5	287.1	.289
5- 590	5- 743.9	.208	158.1	2.4	-2.1	.665	108.7	.423	1.244	210.6	342.4	.718A	1.770D	84.8	1.395	2.5	13.7	326.0	.258
5- 743.9	5- 890	.258	356.3	61.2	10.4	1.258	95.1	.173	.856	324.4	523.2	.708	1.004A	93.4	.918	-10.4	-33.3	101.0	.200
		15.09	8.60	4.16	6.49	9.86	4.44	12.58	1/1/2	11.7	76.8	52.3	.901	2.269	72.7	302.5	-46.5	66.0L	1.142
5- 420	5- 590	.152	180.6	8.6	1.1	1.160	92.6	.328	1.460	349.4	485.1	.982	1.938A	108.3	.749	.9	-20.7	286.1	.299
5- 590	5- 750.0	.205	157.4	.3	-2.8	.666	108.4	.418	1.246	210.7	352.1	.725A	1.767D	87.7	1.396	3.0	17.8	319.4	.241
5- 750.0	5- 900	.241	358.8	62.6	9.8	1.259	94.2	.168	.857	329.9	529.0	.713	1.002A	92.2	.916	-10.4	-35.0	100.5	.195
		15.19	8.45	4.07	6.74	10.11	4.39	12.52	1/1/2	10.8	84.6	52.4	1.037	2.264	69.5	293.4	-41.3	99.6D	1.311
5- 430	5- 590	.149	175.9	9.5	.9	1.165	90.6	.333	1.477	357.7	483.2	.984	1.969A	106.8	.754	1.2	-20.1	288.9	.307
5- 590	5- 757.9	.204	157.1	-4.7	-4.3	.664	107.8	.415	1.241	209.8	363.6	.726	1.756D	91.1	1.396	4.3	25.0	310.5	.246
5- 757.9	5- 910	.246	1.3	68.0	10.4	1.262	93.1	.164	.860	337.6	534.1	.719	1.002A	91.1	.915	-11.7	-37.9	100.4	.213
		15.55	8.40	4.04	6.96	10.33	4.36	12.76	1/1/2	10.1	89.6	52.7	.992	2.255	70.7	287.1	-34.6	115.6D	1.245
5- 440	5- 590	.155	169.6	11.1	.8	1.167	88.3	.340	1.487	6.7	122.1	.982D	1.993A	109.4	.758	1.3	-19.7	289.2	.314
5- 590	5- 768.9	.244	154.2	-26.7	-12.8	.654	106.6	.415	1.222	206.9	378.2	.715	1.729D	95.3	1.393	12.5	52.9	299.4	.376
5- 768.9	5- 920	.376	10.2	83.5	17.2	1.266	91.4	.162	.864	349.9	538.8	.724	1.004A	90.2	.914	-19.1	-43.3	101.3	.328
		16.60	9.44	4.11	7.15	10.52	5.34	14.77	1/1/2	9.9	92.2	55.4	.425	3.292	65.6	286.7	-18.8	134.4D	.974
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																			
5- 300	5- 600	.302	126.6	17.1	-.6	1.069	106.8	.325	1.204	280.8	539.5	.812	1.595A	90.2	.651	1.9	-12.1	240.3	.139
5- 600	5- 713.2	.277	170.3	3.8	-.2	.620	113.8	.537	1.150	204.9	283.3	.532A	1.767D	65.1	1.371	1.8	4.0	330.6	.587
5- 713.2	5- 780	.587	314.0	2.3	1.0	1.506	110.7	.702	2.071	309.0	444.8	.617	3.525A	123.3	1.243	2.8	25.3	64.2	.695
		15.51	12.58	6.42	2.93	6.34	6.16	25.47	2/1/1	62.0	4.4	16.9	.174	6.807	173.6	249.6	-4.4	74.7L	1.013

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2450600
31 MAY 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROF	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 310	5- 600	.282	133.5	15.0	-.6	1.075	105.5	.313	1.217	285.6	534.7	.836	1.599A	92.4	.658	2.0	-13.7	250.2		.147
5- 600	5- 718.9	.262	166.5	4.6	-.5	.642	113.1	.504	1.188	208.1	295.6	.589A	1.786D	69.5	1.381	1.8	4.7	332.7		.502
5- 718.9	5- 790	.502	321.9	.3	.1	1.455	108.1	.599	1.578	310.6	447.4	.633	2.522A	120.2	1.182	3.3	28.2	73.4		.606
		14.90	11.81	6.03	3.10	6.51	5.77	21.16	2/1/1	52.2	5.6	11.6	.238	9.867	157.5	250.8	-21.3	72.7L		2.114
5- 320	5- 600	.263	140.2	12.7	-.7	1.081	104.4	.304	1.232	290.4	529.9	.858	1.606A	94.3	.665	2.1	-14.6	258.2		.158
5- 600	5- 724.5	.252	163.2	5.1	-.8	.659	112.7	.479	1.220	210.9	307.3	.635A	1.804D	73.6	1.389	1.9	5.8	333.5		.428
5- 724.5	5- 800	.428	329.4	-2.5	-.8	1.413	105.7	.512	1.328	312.4	450.5	.648	2.008A	117.2	1.132	3.9	30.8	82.7		.527
		14.55	11.23	5.71	3.33	6.73	5.52	19.21	2/1/1	44.5	7.6	9.2	.328	12.484	116.6	264.2	-61.4	80.7L		3.767
5- 330	5- 600	.247	146.4	10.0	-.8	1.088	103.4	.297	1.247	295.4	525.2	.877	1.618A	96.1	.673	2.3	-15.0	264.6		.170
5- 600	5- 730.2	.245	160.5	5.3	-1.1	.672	112.4	.461	1.245	213.3	318.7	.671A	1.819D	77.3	1.395	1.9	7.1	333.1		.364
5- 730.2	5- 810	.364	336.6	-6.2	-1.7	1.379	103.4	.439	1.181	314.8	454.0	.663	1.699A	114.3	1.090	4.5	33.2	92.2		.456
		14.37	10.77	5.43	3.59	6.99	5.35	17.57	2/1/1	38.4	10.3	13.8	.453	8.321	75.4	243.0	75.4	97.7D		3.316
5- 340	5- 600	.232	152.2	6.9	-.9	1.095	102.4	.292	1.263	300.5	520.6	.894	1.633A	97.6	.680	2.5	-14.9	269.7		.183
5- 600	5- 736.3	.240	158.5	5.1	-1.5	.680	112.1	.448	1.264	215.0	330.0	.698A	1.830D	80.8	1.399	2.0	9.1	330.7		.310
5- 736.3	5- 820	.310	343.4	-11.0	-2.6	1.353	101.2	.378	1.089	317.9	457.8	.677	1.500A	111.6	1.057	4.9	35.5	101.8		.398
		14.28	10.40	5.18	3.88	7.28	5.22	16.23	2/1/1	33.6	13.4	23.7	.625	4.863	58.1	248.7	58.1	108.0D		2.416
5- 350	5- 600	.218	157.3	3.2	-1.2	1.102	101.3	.289	1.280	305.8	516.1	.910	1.651A	99.0	.686	2.8	-14.3	273.9		.197
5- 600	5- 743.7	.235	156.9	4.1	-2.0	.686	111.7	.437	1.276	216.1	342.8	.718A	1.834D	84.8	1.403	2.3	12.2	324.9		.264
5- 743.7	5- 830	.264	350.6	-16.4	-3.2	1.336	99.0	.332	1.035	322.9	461.2	.691	1.378A	109.2	1.033	5.0	36.5	111.8		.350
		14.25	10.07	4.96	4.19	7.58	5.11	15.20	2/1/1	29.9	16.1	38.2	.864	3.055	49.0	250.1	49.0	118.3D		1.776
5- 410	5- 600	.143	180.1	10.5	1.2	1.143	93.7	.295	1.387	343.8	494.4	.979	1.796A	104.8	.730	.7	-20.9	288.9		.258
5- 600	5- 744.2	.235	156.9	4.0	-2.0	.686	111.7	.437	1.276	216.2	343.6	.719A	1.834D	85.0	1.403	2.3	12.5	324.5		.262
5- 744.2	5- 890	.262	356.8	61.9	10.6	1.258	95.0	.173	.856	324.6	523.0	.708	1.004A	93.5	.918	-10.7	-33.7	101.0		.203
		14.75	9.07	3.97	5.68	9.06	5.10	12.63	1/1/2	14.7	78.8	54.6	.878	2.180	72.4	300.9	-46.6	87.3L		1.036
5- 420	5- 600	.136	176.3	10.2	.9	1.147	91.9	.298	1.401	351.7	492.2	.983	1.818A	105.4	.735	1.0	-19.9	289.8		.266
5- 600	5- 750.3	.231	156.4	2.3	-2.6	.686	111.4	.432	1.277	216.1	353.2	.726A	1.829D	88.0	1.403	2.7	15.7	317.8		.244
5- 750.3	5- 900	.244	359.2	63.3	10.0	1.259	94.2	.168	.858	330.2	528.9	.713	1.002A	92.2	.916	-10.6	-35.4	100.6		.199 *
		14.78	8.91	3.89	5.88	9.26	5.01	12.56	1/1/2	13.9	84.5	55.5	1.007	2.146	69.7	292.4	-42.0	100.6D		1.154
5- 430	5- 600	.135	170.5	11.3	.8	1.151	89.9	.302	1.410	.4	130.7	.984D	1.835A	105.9	.738	1.2	-19.3	290.4		.272
5- 600	5- 757.9	.227	156.6	-1.3	-3.7	.683	110.7	.428	1.269	215.1	364.3	.726	1.812D	91.3	1.403	3.6	20.8	309.5		.247
5- 757.9	5- 910	.247	1.4	68.2	10.5	1.262	93.1	.164	.860	337.7	534.1	.719	1.002A	91.2	.915	-11.8	-38.0	100.4		.214
		14.85	8.81	3.89	6.04	9.42	4.92	12.78	1/1/2	13.4	89.5	57.1	.982	2.094	71.0	286.9	-36.9	115.0D		1.074

MARS ARRIVAL DATE = 2450610 (10 JUN 1997)

5- 300	5- 610	.300	126.9	17.6	-.4	1.067	106.7	.323	1.199	280.5	544.0	.812	1.586	88.1	.655	1.8	-10.9	236.7		.131
5- 610	5- 713.9	.312	167.6	4.9	-.3	.653	118.0	.550	1.195	210.5	285.3	.538A	1.853D	65.1	1.383	1.8	3.9	330.8		.592
5- 713.9	5- 780	.592	314.7	2.3	1.0	1.512	110.7	.714	2.156	309.5	444.1	.618	3.695A	123.5	1.251	2.7	25.4	64.5		.703
		16.27	13.48	6.38	2.79	6.20	7.10	23.67	2/1/1	70.4	4.6	16.2	.172	7.091	173.4	249.3	-4.7	74.0L		1.045
5- 310	5- 610	.277	133.8	15.6	-.5	1.073	105.3	.308	1.211	285.5	539.4	.838	1.584A	90.3	.661	1.9	-12.9	247.6		.136
5- 610	5- 719.5	.297	164.2	5.7	-.6	.674	117.0	.518	1.236	214.0	297.7	.595A	1.877D	69.7	1.393	1.8	4.6	332.3		.505
5- 719.5	5- 790	.505	322.5	.3	.1	1.459	108.1	.607	1.611	311.0	446.8	.634	2.588A	120.4	1.188	3.3	28.2	73.7		.611
		15.53	12.65	5.95	2.88	6.29	6.70	21.31	2/1/1	59.5	5.6	10.6	.236	10.788	156.0	250.0	-23.0	72.2L		2.306
5- 320	5- 610	.257	140.3	13.4	-.5	1.078	104.1	.297	1.224	290.5	534.8	.861	1.587A	92.2	.668	2.0	-14.1	256.7		.145
5- 610	5- 725.1	.287	161.3	6.1	-.8	.690	116.3	.495	1.270	217.1	309.7	.641A	1.899D	73.8	1.401	1.8	5.6	332.6		.430
5- 725.1	5- 800	.430	330.0	-2.4	-.8	1.416	105.7	.517	1.344	312.8	450.0	.649	2.039A	117.3	1.136	3.9	30.7	83.0		.531
		15.08	12.03	5.60	3.05	6.46	6.43	19.31	2/1/1	50.7	7.5	8.4	.325	13.625	108.4	270.3	-69.1	83.5L		4.104
5- 330	5- 610	.239	146.5	10.9	-.5	1.085	103.0	.288	1.237	295.6	530.2	.880	1.594A	93.9	.674	2.1	-14.6	264.0		.155
5- 610	5- 730.9	.280	159.0	6.3	-1.1	.701	115.8	.479	1.297	219.5	321.1	.676A	1.917D	77.7	1.406	1.8	6.9	331.6		.365
5- 730.9	5- 810	.365	337.1	-6.1	-1.7	1.382	103.4	.443	1.191	315.2	453.5	.663	1.718A	114.4	1.093	4.4	33.1	92.5		.461
		14.80	11.54	5.29	3.26	6.66	6.24	17.65	2/1/1	43.7	10.1	14.1	.450	8.172	67.1	243.5	67.1	102.1D		3.229
5- 340	5- 610	.223	152.3	8.2	-.6	1.091	101.9	.282	1.251	300.9	525.8	.898	1.603A	95.4	.681	2.2	-14.8	269.8		.166
5- 610	5- 737.0	.274	157.2	6.1	-1.5	.709	115.3	.466	1.315	221.3	332.7	.702A	1.929D	81.4	1.410	1.9	8.6	326.6		.310
5- 737.0	5- 820	.310	344.1	-10.8	-2.5	1.355	101.1	.382	1.097	318.5	457.2	.678	1.515A	111.7	1.060	4.8	35.0	102.2		.401
		14.62	11.12	5.03	3.49	6.90	6.09	16.30	2/1/1	38.2	13.1	24.8	.624	4.659	51.7	247.7	51.7	112.4D		2.282
5- 350	5- 610	.207	157.5	5.1	-.8	1.098	100.8	.277	1.265	306.4	521.5	.915	1.616A	96.8	.687	2.4	-14.5	274.5		.177
5- 610	5- 745.4	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	346.9	.722A	1.928D	85.9	1.413	2.2	11.7	321.1		.263
5- 745.4	5- 830	.263	351.9	-15.6	-3.1	1.340	98.8	.339	1.048	324.2	459.7	.693	1.403A	109.5	1.039	4.8	35.4	112.7		.355
		14.46	10.72	4.80	3.74	7.14	5.92	15.31	2/1/1	33.8	15.0	40.9	.868	2.862	42.5	248.3	42.5	124.9D		1.617
5- 420	5- 610	.124	171.6	11.4	.8	1.137	91.3	.274	1.357	354.1	499.3	.985	1.729A	102.7	.725	1.2	-19.0	291.2		.236
5- 610	5- 750.7	.263	156.0	3.8	-2.4	.712	114.4	.451	1.322	222.0	355.0	.726A	1.918D	88.4	1.413	2.4	13.9	315.3		.251
5- 750.7	5- 900	.250	359.9	64.5	10.4	1.260	94.1	.168	.858	330.6	528.7	.714	1.002A	92.3	.916	-11.0	-36.0	100.6		.204
		14.73	9.59	3.77	5.14	8.52	5.82	12.64	1/1/2	17.3	84.5	59.1	.958	2.028	70.0	290.9	-42.3	102.2D		.984

MARS ARRIVAL DATE = 2450620 (20 JUN 1997)

5- 300	5- 620	.300	127.3	18.0	-.3	1.066	106.7	.322	1.196	280.1	548.5	.811	1.581	86.0	.660	1.8	-9.6	232.4		.127
5- 620	5- 714.7	.359	165.4	5.8	-.5	.697	122.2	.570	1.271	217.1	288.3	.547A	1.995D	65.4	1.401	1.8	3.9	330.4		.597
5- 714.7	5- 780	.597	315.5	2.2	.9	1.520	110.8	.727	2.267	310.1	443.4	.619	3.914A	123.7	1.260	2.7	25.5	64.9		.712
		17.44	14.73	6.38	2.72	6.13	8.35	25.91	2/1/1	79.6	4.8	15.0	.168	7.674	173.0	248.3	-5.2	72.9L		1.125
5- 310	5- 620	.275	134.0	16.2	-.3	1.071	105.2	.305	1.206	285.3	544.0	.838	1.574	88.2	.666	1.9	-11.8	244.2		.128
5- 620	5- 720.3	.343	162.4	6.5	-.6	.715	120.9	.541	1.315	220.9	300.9	.604A	2.025D	70.1	1.410	1.7	4.5	331.5		.509
5- 720.3	5- 790	.509	323.2	.3	.1	1.464	108.1	.616	1.653	311.5	446.2	.635	2.671A	120.6	1.195	3.3	28.2	74.1		.618
		16.55	13.82	5.91	2.73	6.14	7.91	21.48	2/1/1	67.8	5.6	9.1	.232	12.657	152.3	248.7	-26.8	71.8L		2.707
5- 320	5- 620	.253	140.5	14.1	-.3	1.076	103.9	.292	1.218	290.5	539.6	.862	1.573A	90.2	.671	1.9	-13.3	254.3		.133
5- 620	5- 725.8	.332	159.9	6.9	-.9	.729	120.0	.520	1.350	224.1	312.9	.649A	2.052D	74.3	1.417	1.7	5.4	331.1		.432
5- 725.8	5- 800	.432	330.7	-2.3	-.7	1.420	105.7	.524	1.365	313.3	449.3	.650	2.081A	117.5	1.141	3.9	30.7	83.4		.536
		15.97	13.13	5.52	2.83	6.24	7.61	19.44	2/1/1	57.9	7.4	7.8	.322	14.775	93.0	313.2	-80.2	90.0D		4.431
5- 330	5- 620	.233	146.7	11.8	-.3	1.082	102.7	.281	1.229	295.8	535.2	.883	1.575A	91.9	.677	2.0	-14.2	262.5		.141
5- 620	5- 731.6	.323	157.9	7.0	-1.2	.739	119.3	.504	1.377	226.5	324.5	.683A	2.072D	78.3	1.422	1.7	6.6	329.4		.367
5- 731.6	5- 810	.367	337.9	-5.9	-1.6	1.385	103.3	.448	1.204	315.8	452.8	.664	1.744A	114.6	1.098	4.4	32.9	92.9		.466
		15.57	12.59	5.20	2.98	6.39	7.39	17.75	2/1/1	49.9	9.8	15.1	.446	7.613	56.0	243.2	56.0	108.2D		2.953
5- 340	5- 620	.215	152.4	9.3	-.4	1.088	101.6	.273	1.241	301.2	530.9	.902	1.580A	93.4	.683	2.1	-14.5	269.2		.150
5- 620	5- 738.1	.316	156.6	6.7	-1.5	.745	118.6	.492	1.394	228.2	336.4	.708A	2.081D	82.3	1.426	1.8	8.2	325.4		.311
5- 738.1	5- 820	.311	345.1	-10.4	-2.4	1.359	101.1	.388	1.109	319.3	456.2	.679	1.540A	111.9	1.065	4.7	34.5	102.7		.406
		15.27	12.11	4.91	3.17	6.57	7.19	16.41	2/1/1	43.5	12.5	27.0	.620	4.280	43.8	246.3	43.8	118.4D		2.034
5- 350	5- 620	.198	157.6	6.7	-.5	1.094	100.4	.267	1.253	306.9	526.8	.919	1.586A	94.7	.689	2.2	-14.5	274.5		.160
5- 620	5- 750.0	.304	156.0	5.1	-2.2	.744	117.6	.478	1.391	228.4	355.3	.727A	2.056D	86.5	1.426	2.1	11.7	313.5		.262
5- 750.0	5- 830	.262	355.1	-14.1	-2.7	1.353	98.3	.357	1.085	327.7	456.1	.698	1.472A	110.2	1.055	4.3	33.3	114.7		.370
		14.90	11.53	4.67	3.37	6.77	6.86	15.62	2/1/1	38.5	12.6	48.6	.875	2.428	32.9	245.0	32.9	137.3D		1.250

MARS ARRIVAL DATE = 2450630 (30 JUN 1997)

5- 310	5- 630	.274	134.4	16.7	-.1	1.070	105.2	.304	1.203	284.9	548.6	.838	1.568	86.3	.671	1.9	-10.7	240.0		.124
5- 630	5- 721.2	.400	161.0	7.1	-.7	.769	124.8	.575	1.449	228.8	305.3	.616A	2.281D	70.6	1.435	1.7	4.4	329.6		.519
5- 721.2	5- 790	.513	324.1	.3	.1	1.471	108.1	.628	1.709	312.1	445.4	.636	2.783A	120.8	1.208	3.3	28.2	74.6		.627
		16.02	15.36	5.90	2.64	6.06	9.48	21.69	2/1/1	76.9	5.7	6.8	.228	16.870	142.9	247.1	-36.3	72.6L		3.619
5- 320	5- 630	.250	140.8	14.7	-.1	1.075	103.8	.288	1.213	290.3	544.3	.863	1.563	88.2	.676	1.9	-12.5	250.9		.125
5- 630	5- 726.8	.387	159.0	7.4	-.9	.780	123.7	.556	1.485	232.0	317.5	.659A	2.310D	75.0	1.441	1.8	5.2	328.7		.436
5- 726.8	5- 800	.435	331.6	-2.3	-.7	1.425	105.6	.533	1.394	314.0	448.5	.651	2.138A	117.7	1.148	3.9	30.6	83.9		.543
		17.27	14.60	5.48	2.67	6.09	9.12	19.60	2/1/1	66.1	7.2	8.0	.317	14.249	88.6	236.4	88.6	101.9D		4.198
5- 330	5- 630	.229	146.9	12.6	-.1	1.080	102.5	.276	1.223	295.8	540.2	.885	1.561	89.9	.681	1.9	-13.6	260.1		.130
5- 630	5- 732.8	.376	157.4	7.4	-1.2	.787	122.7	.542	1.509	234.2	329.1	.692A	2.327D	79.2	1.445	1.6	6.3	326.1		.369
5- 732.8	5- 810	.369	336.9	-5.7	-1.6	1.390	103.3	.457	1.225	316.5	451.8	.666	1.784A	114.8	1.104	4.3	32.6	93.5		.472
		16.72	13.96	5.13	2.77	6.18	8.83	17.90	2/1/1	57.1	9.5	17.6	.441	8.535	43.2	242.2	43.2	115.9D		2.443

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 460 DAYS
MARS ARRIVAL DATE = 2450630
30 JUN 1997

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 340	5- 630	.209	152.6	10.4	-.2	1.086	101.3	.267	1.233	301.4	536.1	.905	1.562A	91.4	.686	1.9	-14.2	267.7	.137
5- 630	5- 739.9	.366	156.4	7.1	-1.5	.790	121.9	.529	1.519	235.5	341.7	.715A	2.322D	63.7	1.446	1.7	7.8	320.6	.313
5- 739.9	5- 820	.313	346.6	-9.9	-2.3	1.366	100.9	.398	1.131	320.6	454.6	.681	1.581A	112.3	1.073	4.6	33.9	103.7	.414
		16.27	13.37	4.83	2.90	6.31	8.54	16.58	2/1/1	49.8	11.7	31.4	.614	3.692	34.6	244.3	34.6	126.3D	1.654

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450510
2 MAR 1997

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																			
5- 270	5- 510	.424	103.0	18.8	-1.7	1.078	113.1	.425	1.239	269.7	516.2	.712	1.766A	105.7	.630	1.6	-13.0	224.8	.233
5- 510	5- 713.4	.185	187.9	-4.4	-.3	.565	86.2	.474	1.130	175.8	295.4	.594A	1.665	70.4	1.368	2.1	5.8	324.1	.477
5- 713.4	5- 790	.477	316.2	.4	.1	1.419	108.0	.538	1.355	306.9	452.4	.626	2.085A	118.8	1.138	3.3	28.1	70.5	.559
		17.94	12.89	8.97	5.05	8.44	3.92	20.00	2/1/1	35.4	6.2	9.4	.264	12.163	146.8	243.2	-32.0	76.5L	2.946
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																			
5- 270	5- 520	.411	103.0	19.0	-1.6	1.072	112.5	.412	1.221	269.5	520.4	.717	1.724A	102.8	.623	1.6	-12.7	224.8	.211
5- 520	5- 714.1	.183	187.1	-4.2	-.3	.564	88.5	.474	1.125	178.3	294.7	.592A	1.658	70.2	1.364	2.1	5.5	325.7	.460
5- 714.1	5- 790	.460	317.0	.4	.1	1.423	108.1	.545	1.379	307.3	451.8	.627	2.130A	119.0	1.143	3.3	28.1	70.9	.565
		17.07	12.54	8.68	4.53	7.92	3.86	20.14	2/1/1	39.9	6.1	10.1	.261	11.347	149.5	244.6	-29.2	75.9L	2.697
5- 280	5- 520	.402	110.9	17.7	-1.7	1.082	111.9	.412	1.253	273.3	514.6	.737	1.769A	105.7	.640	1.9	-14.2	231.9	.235
5- 520	5- 720.1	.167	184.6	-4.8	-.7	.578	89.4	.448	1.145	179.3	305.1	.632A	1.657	73.8	1.369	2.3	7.2	328.2	.414
5- 720.1	5- 800	.414	324.9	-2.9	-.9	1.389	105.7	.474	1.221	309.4	454.5	.643	1.799A	116.1	1.102	4.1	31.4	80.3	.496
		17.11	12.00	8.48	5.11	8.50	3.53	18.47	2/1/1	33.0	8.9	10.7	.350	10.736	108.2	272.2	-67.8	85.1L	3.410
5- 290	5- 520	.396	118.6	15.8	-1.9	1.093	111.4	.415	1.290	277.1	508.9	.755	1.825A	108.4	.658	2.3	-15.1	237.6	.261
5- 520	5- 726.0	.156	181.9	-6.0	-1.3	.588	90.2	.427	1.161	180.2	315.4	.665A	1.657D	77.0	1.374	2.6	9.9	329.5	.357
5- 726.0	5- 810	.357	332.4	-7.3	-2.0	1.362	103.5	.411	1.117	311.9	457.8	.658	1.577A	113.4	1.068	4.8	34.4	89.8	.435
		17.40	11.63	8.34	5.77	9.15	3.29	17.05	2/1/1	27.6	12.2	17.4	.472	6.611	80.7	233.2	80.6	95.4D	2.649
5- 300	5- 520	.392	126.0	13.2	-2.5	1.106	111.0	.422	1.334	281.0	503.3	.771	1.897A	110.9	.677	2.7	-15.4	242.2	.289
5- 520	5- 732.0	.148	178.8	-8.4	-2.0	.597	90.7	.411	1.174	181.0	325.8	.691A	1.657D	80.2	1.377	3.2	14.2	329.2	.308
5- 732.0	5- 820	.308	339.5	-12.9	-3.0	1.339	101.4	.359	1.048	315.0	461.5	.672	1.423A	110.7	1.040	5.5	37.2	99.5	.382
		17.88	11.40	8.27	6.48	9.86	3.13	15.87	2/1/1	23.3	16.0	28.9	.633	4.001	69.5	242.6	69.5	101.7D	1.900
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																			
5- 270	5- 530	.400	103.1	19.2	-1.5	1.068	112.0	.402	1.207	269.3	524.6	.722	1.692A	99.9	.618	1.5	-12.1	224.2	.192
5- 530	5- 714.8	.181	185.8	-3.8	-.3	.564	90.9	.474	1.121	181.0	294.0	.589A	1.652D	70.0	1.363	2.0	5.4	327.2	.483
5- 714.8	5- 790	.483	317.7	.4	.1	1.427	108.1	.552	1.402	307.8	451.1	.628	2.177A	119.2	1.148	3.3	28.1	71.2	.571
		16.36	12.28	8.44	4.09	7.48	3.83	20.28	2/1/1	45.1	6.0	10.7	.257	10.677	151.9	246.0	-26.8	75.4L	2.491
5- 280	5- 530	.388	111.0	17.9	-1.6	1.077	111.2	.398	1.234	273.2	519.0	.743	1.725A	102.8	.633	1.8	-14.0	232.3	.213
5- 530	5- 720.7	.166	183.0	-4.1	-.7	.579	91.8	.448	1.142	182.2	304.6	.631A	1.653D	73.6	1.369	2.2	7.1	329.6	.416
5- 720.7	5- 800	.416	325.5	-2.8	-.9	1.393	105.7	.479	1.235	309.8	454.0	.643	1.826A	116.3	1.106	4.1	31.3	80.6	.501
		16.26	11.68	8.18	4.58	7.97	3.50	18.57	2/1/1	37.1	8.7	10.7	.347	10.728	112.2	268.0	-64.4	83.5L	3.376
5- 290	5- 530	.379	118.7	16.1	-1.7	1.086	110.6	.397	1.265	277.1	513.3	.762	1.768A	105.5	.649	2.1	-15.0	238.7	.237
5- 530	5- 726.6	.155	179.9	-5.1	-1.2	.590	92.4	.427	1.159	183.3	315.0	.664A	1.654D	76.9	1.373	2.5	9.5	330.8	.358
5- 726.6	5- 810	.358	333.0	-7.1	-1.9	1.364	103.5	.415	1.126	312.3	457.3	.658	1.594A	113.5	1.071	4.8	34.2	90.1	.439
		16.40	11.26	7.99	5.15	8.53	3.27	17.12	2/1/1	31.0	11.9	16.7	.469	6.870	82.6	232.9	82.5	94.4D	2.755
5- 300	5- 530	.373	126.0	13.7	-2.0	1.098	110.1	.401	1.302	281.0	507.7	.780	1.823A	108.0	.665	2.5	-15.6	243.8	.262
5- 530	5- 732.6	.148	176.8	-7.0	-1.9	.599	92.9	.411	1.173	184.2	325.4	.691A	1.655D	80.1	1.377	3.0	13.4	330.4	.308
5- 732.6	5- 820	.308	340.1	-12.6	-2.9	1.341	101.4	.361	1.053	315.4	461.0	.673	1.433A	110.8	1.042	5.4	36.9	99.8	.384
		16.74	10.97	7.85	5.78	9.16	3.12	15.92	2/1/1	26.1	15.6	27.6	.632	4.187	69.9	244.2	69.9	101.2D	2.015
5- 310	5- 530	.369	133.0	10.6	-2.4	1.110	109.6	.408	1.344	285.1	502.2	.796	1.891A	110.2	.683	3.1	-15.5	248.1	.288
5- 530	5- 740.5	.145	172.5	-12.2	-3.4	.606	93.3	.398	1.185	185.0	338.7	.714A	1.656D	84.0	1.381	4.3	22.6	326.6	.266
5- 740.5	5- 830	.266	348.0	-18.0	-3.6	1.328	99.3	.321	1.013	320.6	463.8	.688	1.338A	108.7	1.023	5.5	38.1	110.5	.341
		17.27	10.82	7.76	6.46	9.83	3.06	15.02	2/1/1	22.4	18.2	45.7	.852	2.575	63.4	242.8	63.2	109.7D	1.343
5- 310	5- 530	.369	133.0	10.6	-2.4	1.110	109.6	.408	1.344	285.1	502.2	.796	1.891A	110.2	.683	3.1	-15.5	248.1	.288
5- 530	5- 745.7	.151	168.9	-19.2	-5.3	.608	93.3	.393	1.189	185.2	347.1	.722A	1.657D	86.4	1.382	6.1	33.7	322.0	.263
5- 745.7	5- 830	.263	352.1	-15.5	-3.0	1.341	98.8	.340	1.050	324.4	459.5	.693	1.406A	109.5	1.040	4.8	35.2	112.8	.356
		17.39	10.93	7.76	6.46	9.83	3.17	15.33	2/1/1	22.4	14.8	57.0	.869	2.096	61.4	231.8	59.6	117.9D	.953
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																			
5- 270	5- 540	.392	103.2	19.4	-1.4	1.064	111.6	.394	1.196	269.1	526.9	.725	1.667A	97.0	.616	1.5	-11.3	222.8	.176
5- 540	5- 715.4	.181	184.0	-3.0	-.4	.566	93.5	.475	1.118	183.9	293.4	.587A	1.650D	69.9	1.362	2.0	5.4	328.5	.486
5- 715.4	5- 790	.486	318.3	.4	.1	1.431	108.1	.559	1.425	308.2	450.6	.628	2.222A	119.3	1.153	3.3	28.2	71.6	.576
		15.83	12.10	8.27	3.72	7.12	3.84	20.41	2/1/1	51.1	5.9	11.3	.254	10.143	153.8	247.3	-24.9	75.0L	2.326
5- 280	5- 540	.377	111.0	18.2	-1.4	1.072	110.7	.386	1.219	273.1	523.3	.748	1.690A	100.0	.629	1.8	-13.5	232.0	.194
5- 540	5- 721.3	.167	180.7	-3.2	-.8	.582	94.2	.448	1.141	185.3	304.2	.629A	1.652D	73.5	1.368	2.2	6.9	330.9	.418
5- 721.3	5- 800	.418	326.2	-2.8	-.9	1.396	105.7	.484	1.248	310.3	453.4	.644	1.853A	116.4	1.110	4.0	31.2	81.0	.505
		15.56	11.46	7.94	4.12	7.52	3.52	18.67	2/1/1	41.9	8.5	10.7	.344	10.715	115.8	265.5	-61.3	82.2L	3.341
5- 290	5- 540	.365	118.7	16.5	-1.5	1.081	109.9	.383	1.246	277.0	517.7	.769	1.723A	102.7	.642	2.0	-14.9	239.3	.215
5- 540	5- 727.2	.157	177.5	-3.8	-1.2	.594	94.8	.427	1.159	186.5	314.7	.664A	1.655D	76.9	1.373	2.4	9.1	332.0	.359
5- 727.2	5- 810	.359	333.6	-7.0	-1.9	1.366	103.5	.419	1.134	312.7	456.7	.659	1.609A	113.6	1.074	4.7	34.0	90.5	.442
		15.59	10.99	7.69	4.61	8.00	3.30	17.19	2/1/1	34.8	11.6	16.1	.467	7.119	84.3	232.1	84.2	93.6D	2.856
5- 300	5- 540	.356	126.1	14.2	-1.7	1.091	109.3	.383	1.276	281.1	512.2	.787	1.765A	105.1	.657	2.4	-15.6	245.1	.237
5- 540	5- 733.2	.150	174.3	-5.3	-1.8	.602	95.3	.412	1.174	187.6	325.2	.690A	1.657D	80.1	1.377	2.8	12.6	331.4	.308
5- 733.2	5- 820	.308	340.6	-12.3	-2.9	1.343	101.4	.364	1.058	315.8	460.5	.673	1.443A	111.0	1.044	5.3	36.7	100.1	.386
		15.81	10.65	7.49	5.16	8.54	3.15	15.97	2/1/1	29.3	15.2	26.5	.632	4.363	70.1	245.8	70.1	101.0D	2.124
5- 310	5- 540	.349	133.1	11.3	-2.0	1.101	108.7	.386	1.311	285.1	506.7	.804	1.817A	107.4	.672	2.8	-15.7	249.9	.261
5- 540	5- 740.4	.146	170.7	-9.1	-2.9	.609	95.5	.399	1.185	188.4	337.5	.712A	1.658D	83.6	1.381	3.7	19.6	328.0	.266
5- 740.4	5- 830	.266	347.9	-18.1	-3.6	1.327	99.3	.321	1.012	320.5	463.9	.688	1.336A	108.6	1.023	5.5	38.2	110.2	.340
		16.19	10.43	7.35	5.76	9.14	3.08	15.01	2/1/1	25.0	18.3	42.5	.852	2.760	63.1	246.5	63.1	108.5D	1.499
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																			
5- 260	5- 550	.409	95.5	20.4	-1.2	1.055	112.6	.403	1.169	264.8	538.5	.698	1.640A	91.0	.604	1.3	-6.4	208.0	.155
5- 550	5- 710.0	.203	184.9	-2.4	-.1	.550	95.6	.512	1.090	185.4	281.9	.532A	1.648D	65.6	1.354	1.9	4.2	326.6	.567
5- 710.0	5- 780	.567	310.8	2.6	1.1	1.479	110.6	.655	1.774	306.9	447.6	.613	2.936A	122.5	1.211	2.5	25.0	62.6	.662
		16.24	12.97	8.64	3.27	6.68	4.33	22.60	2/1/1	70.9	3.9	15.9	.187	7.232	173.2	244.9	-4.7	76.1L	1.165
5- 270	5- 550	.386	103.3	19.7	-1.2	1.061	111.3	.388	1.187	268.9	533.1	.727	1.648A	94.3	.615	1.5	-10.2	220.7	.163
5- 550	5- 716.0	.184	181.6	-2.1	-.4	.570	96.3	.477	1.118	187.0	293.0	.585A	1.651D	69.7	1.362	2.0	5.3	329.7	.489
5- 716.0	5- 790	.489	319.0	.4	.1	1.435	108.1	.566	1.449	308.6	450.0	.629	2.269A	119.5	1.158	3.3	28.2	71.9	.581
		15.47	12.04	8.14	3.43	6.84	3.90	20.54	2/1/1	57.9	5.8	11.8	.252	9.730	155.3	248.5	-23.3	74.7L	2.196
5- 280	5- 550	.368	111.1	18.5	-1.3	1.068	110.3	.377	1.208	272.9	527.6	.752	1.663A	97.3	.626	1.7	-12.9	231.1	.177
5- 550	5- 721.9	.170	178.0	-2.0	-.8	.587	96.9	.450	1.142	188.6	304.0	.628A	1.655D	73.4	1.369	2.1	6.7	331.9	.420
5- 721.9	5- 800	.420	326.8	-2.7	-.8	1.399	105.7	.489	1.261	310.6	452.9	.645	1.878A	116.6	1.114	4.0	31.1	81.3	.509
		15.08	11.34	7.75	3.74	7.14	3.59	18.77	2/1/1	47.4	8.3	10.7	.341	10.714	118.6	264.0	-58.8	81.1L	3.313
5- 290	5- 550	.354	118.7	16.8	-1.4	1.076	109.4	.371	1.231	277.0	522.2	.774	1.687A	100.0	.638	2.0	-14.5	239.4	.195
5- 550	5- 727.8	.161	174.6	-2.4	-1.2	.599	97.4	.429	1.161	190.0	314.6	.663A	1.659D	76.8	1.374	2.3	8.8	332.9	.360
5- 727.8	5- 810	.360	334.1	-6.8	-1.8	1.369	103.5	.422	1.142	313.1	456.2	.660	1.625A	113.8	1.077	4.7	33.9	90.8	.445
		14.97	10.83	7.44	4.14	7.54	3.38	17.26	2/1/1	39.3	11.4	15.6	.464	7.362	85.5	231.3	85.4	93.0D	2.954
5- 300	5- 550	.342	126.1	14.7	-1.5	1.085	108.6	.368	1.256	281.1	516.7	.794	1.718A	102.4	.651	2.2	-15.4	245.9	.215
5- 550	5- 733.7	.154	171.4	-3.5	-1.7	.608	97.7	.413	1.176	191.2	325.2	.690A	1.662D	80.0	1.378	2.7	11.9	332.2	.309
5- 733.7	5- 820	.309	341.1	-12.1	-2.8	1.345	101.3	.366	1.063	316.2	460.1	.674	1.452A	111.1	1.046	5.2	36.4	100.4	.388
		15.06	10.45	7.20	4.61	8.00	3.25	16.01	2/1/1	33.0	14.9	25.5	.631	4.529	70.0	246.9	70.0	100.9D	2.226
5- 310	5- 550	.332	133.2	12.0	-1.7	1.094	107.9	.368	1.285	285.3	511.3	.812	1.758A	104.6	.665	2.6	-15.8	251.3	.236
5- 550	5- 740.8	.151	168.1	-6.3	-2.6	.615	97.9	.401	1.188	192.2	337.1	.711A	1.665D	83.5	1.381	3.4	17.7	328.8	.266
5- 740.8	5- 830	.265	348.1	-18.0	-3.6	1.328	99.3	.321	1.013	320.6	463.7	.688	1.339A	108.7	1.023	5.5	38.1	110.4	.341
		15.31	10.18	7.01	5.14	8.52	3.17	15.02	2/1/1	28.1	18.2	40.4	.853	2.899	62.5	248.7	62.5	108.3D	1.619
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																			
5- 260	5- 560	.409	95.7	20.7	-1.1	1.054	112.7	.403	1.165	264.3	542.6	.696	1.634	88.3	.606	1.3	-4.6	204.1	.151
5- 560	5- 710.7	.208	182.4	-1.4	-.1	.556	98.6	.514	1.091	188.5	281.5	.530A	1.652D	65.5	1.354	1.9	4.2	327.8	.571
5- 710.7	5- 780	.571	311.4	2.6	1.1	1.464	110.6	.664	1.824	307.3	447.0	.613	3.036A	122.7	1.217	2.5	25.1	62.9	.668
		16.27	13.09	8.64	3.18	6.59	4.45	22.77	2/1/1	79.7	4.0	16.5	.184	6.988	173.3	246.4	-4.5	76.0L	1.105

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 520 DAYS | MARS ARRIVAL DATE = 2450560 | 21 APR 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 270	5- 560	.383	103.5	20.0	-1.1	1.059	111.2	.384	1.181	268.6	537.3	.728	1.634A	91.7	.615	1.5	-8.9	217.7	.153
5- 560	5- 716.6	.190	178.7	-.8	-.4	.577	99.3	.479	1.121	190.4	292.9	.584A	1.657D	69.6	1.363	2.0	5.2	330.8	.492
5- 716.6	5- 790	.491	319.6	.4	.1	1.439	108.1	.572	1.473	309.0	449.5	.630	2.316A	119.7	1.163	3.3	28.2	72.2	.586
		15.31	12.09	8.06	3.22	6.63	4.03	20.67	2/1/1	65.6	5.7	12.2	.249	9.437	156.8	249.5	-22.1	74.3L	2.099
5- 280	5- 560	.361	111.2	18.8	-1.1	1.065	110.0	.370	1.199	272.8	532.0	.755	1.642A	94.7	.625	1.7	-11.9	229.3	.163
5- 560	5- 722.5	.177	175.0	-.6	-.8	.594	99.7	.452	1.146	192.2	303.9	.628A	1.663D	73.3	1.370	2.1	6.5	332.8	.422
5- 722.5	5- 800	.421	327.3	-2.6	-.8	1.402	105.7	.493	1.274	311.0	452.4	.646	1.903A	116.7	1.116	4.0	31.0	81.6	.513
		14.77	11.34	7.61	3.43	6.83	3.73	18.86	2/1/1	53.8	8.1	10.7	.338	10.767	120.7	263.1	-56.9	80.2L	3.304
5- 290	5- 560	.344	118.8	17.2	-1.2	1.072	108.9	.361	1.218	276.9	526.6	.779	1.658A	97.3	.636	1.9	-13.9	238.8	.177
5- 560	5- 728.3	.168	171.4	-.7	-1.2	.606	100.1	.431	1.166	193.8	314.7	.663A	1.669D	76.8	1.375	2.3	8.4	333.6	.361
5- 728.3	5- 810	.361	334.7	-6.7	-1.8	1.371	103.4	.426	1.150	313.4	455.7	.660	1.639A	113.9	1.080	4.6	33.7	91.1	.447
		14.53	10.79	7.25	3.75	7.15	3.54	17.32	2/1/1	44.5	11.1	15.1	.462	7.601	86.1	231.7	86.0	92.6D	3.050
5- 300	5- 560	.330	126.2	15.2	-1.3	1.080	108.1	.355	1.240	281.1	521.2	.800	1.681A	99.8	.647	2.1	-15.1	246.3	.195
5- 560	5- 734.2	.162	168.3	-1.5	-1.6	.616	100.3	.416	1.182	195.2	325.4	.690A	1.673D	80.0	1.379	2.5	11.2	332.8	.309
5- 734.2	5- 820	.309	341.5	-11.8	-2.8	1.346	101.3	.368	1.068	316.5	459.6	.674	1.461A	111.2	1.048	5.2	36.2	100.7	.390
		14.51	10.37	6.96	4.14	7.54	3.41	16.05	2/1/1	37.2	14.6	24.7	.630	4.680	69.5	248.0	69.5	101.1D	2.317
5- 310	5- 560	.318	133.2	12.6	-1.5	1.089	107.3	.352	1.265	285.4	515.9	.819	1.710A	102.0	.659	2.4	-15.7	252.3	.214
5- 560	5- 741.0	.159	165.4	-3.7	-2.4	.623	100.4	.404	1.194	196.2	337.2	.712A	1.677D	83.5	1.383	3.1	16.2	329.2	.265
5- 741.0	5- 830	.265	346.4	-17.8	-3.5	1.329	99.2	.322	1.015	320.9	463.5	.688	1.343A	108.7	1.024	5.4	37.9	110.6	.341
		14.65	10.06	6.72	4.59	7.98	3.34	15.04	2/1/1	31.6	17.9	38.9	.856	3.001	61.3	250.2	61.3	108.7D	1.713
5- 370	5- 560	.303	188.3	31.0	8.1	1.155	102.5	.387	1.487	313.7	485.7	.911	2.063A	112.1	.744	-6.5	-37.2	272.1	.341
5- 560	5- 743.6	.158	164.5	-5.0	-2.8	.625	100.4	.401	1.197	196.4	341.5	.717A	1.677D	84.7	1.384	3.4	18.7	327.0	.254
5- 743.6	5- 890	.254	355.7	60.4	10.1	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		17.64	9.77	6.44	7.86	11.25	3.33	12.52	1/1/2	17.7	78.7	46.4	.933	2.540	71.9	302.2	-44.1	85.6L	1.436
5- 380	5- 560	.265	184.1	15.6	3.6	1.168	101.4	.400	1.543	319.0	481.1	.925	2.160A	113.4	.760	-2.0	-27.9	275.0	.352
5- 560	5- 750.2	.160	162.3	-10.4	-4.3	.627	100.3	.396	1.201	196.5	352.1	.725A	1.677D	87.7	1.386	4.7	27.7	319.9	.243
5- 750.2	5- 900	.243	356.1	65.2	10.0	1.259	94.2	.168	.858	330.1	526.9	.713	1.002A	92.2	.916	-10.6	-35.3	100.6	.198
		17.28	9.11	5.74	8.17	11.54	3.37	12.55	1/1/2	10.0	84.5	43.6	1.014	2.696	68.5	291.9	-35.2	102.0D	1.720

MARS ARRIVAL DATE = 2450570 (1 MAY 1997)

5- 260	5- 570	.412	96.1	20.9	-1.0	1.053	112.8	.405	1.162	263.7	546.5	.691	1.632	85.6	.609	1.3	-2.8	200.0	.151
5- 570	5- 711.3	.217	179.5	-.2	-.1	.564	102.2	.517	1.095	191.9	281.4	.529A	1.662D	65.3	1.355	1.9	4.1	328.9	.575
5- 711.3	5- 780	.575	312.1	2.5	1.0	1.489	110.7	.673	1.878	307.7	446.5	.614	3.142A	122.8	1.223	2.6	25.1	63.2	.675
		16.53	13.35	8.69	3.18	6.58	4.66	22.94	2/1/1	88.8	4.0	16.9	.182	6.811	173.5	247.7	-4.4	75.8L	1.057
5- 270	5- 570	.381	103.7	20.2	-1.0	1.057	111.1	.382	1.176	268.2	541.5	.727	1.625	89.1	.617	1.5	-7.3	214.0	.146
5- 570	5- 717.2	.199	175.6	.5	-.3	.587	102.4	.482	1.127	194.1	292.9	.583A	1.670D	69.5	1.364	2.0	5.1	331.7	.494
5- 717.2	5- 790	.494	320.2	.4	.1	1.443	108.1	.579	1.498	309.4	448.9	.631	2.365A	119.8	1.168	3.3	28.2	72.5	.591
		15.36	12.28	8.03	3.09	6.49	4.25	20.79	2/1/1	74.1	5.7	12.4	.246	9.268	157.5	250.3	-21.2	74.0L	2.036
5- 280	5- 570	.357	111.4	19.1	-1.0	1.063	109.7	.365	1.192	272.5	536.3	.757	1.626A	92.1	.626	1.7	-10.8	226.8	.151
5- 570	5- 725.0	.187	171.8	1.0	-.8	.604	102.7	.455	1.153	196.2	304.2	.628A	1.678D	75.5	1.372	2.0	6.3	333.5	.423
5- 725.0	5- 800	.423	327.9	-2.6	-.8	1.404	105.7	.498	1.288	311.4	451.9	.646	1.929A	116.8	1.121	4.0	31.0	81.9	.518
		14.67	11.48	7.51	3.19	6.59	3.97	18.95	2/1/1	61.1	8.0	10.5	.336	10.913	122.0	262.5	-55.8	79.6L	3.327
5- 290	5- 570	.337	118.9	17.6	-1.0	1.069	108.6	.353	1.209	276.8	531.1	.782	1.635A	94.8	.636	1.8	-13.2	237.4	.162
5- 570	5- 728.8	.179	168.3	1.0	-1.1	.617	102.9	.435	1.175	198.0	315.1	.664A	1.686D	76.8	1.378	2.2	8.1	334.0	.362
5- 728.8	5- 810	.361	335.2	-6.6	-1.8	1.373	103.4	.429	1.157	313.8	455.3	.661	1.653A	114.0	1.082	4.6	33.6	91.4	.450
		14.31	10.89	7.10	3.42	6.82	3.79	17.38	2/1/1	50.5	10.9	14.7	.460	7.827	85.7	234.5	85.6	92.7D	3.140
5- 300	5- 570	.320	126.2	15.6	-1.1	1.076	107.6	.345	1.228	281.1	525.8	.805	1.651A	97.2	.646	2.0	-14.7	246.0	.177
5- 570	5- 734.7	.174	165.3	.4	-1.6	.626	103.1	.420	1.192	199.5	325.9	.691A	1.692D	80.1	1.382	2.4	10.6	333.0	.309
5- 734.7	5- 820	.309	342.0	-11.6	-2.7	1.348	101.3	.371	1.072	316.8	459.2	.675	1.470A	111.3	1.050	5.1	36.0	100.9	.392
		14.17	10.43	6.76	3.74	7.14	3.87	16.09	2/1/1	42.2	14.3	24.0	.629	4.806	68.2	248.7	68.2	101.8D	2.394
5- 310	5- 570	.306	133.2	13.2	-1.2	1.084	106.7	.339	1.248	285.5	520.6	.825	1.672A	99.4	.656	2.3	-15.4	252.8	.194
5- 570	5- 741.4	.170	162.7	-1.3	-2.2	.633	103.1	.409	1.204	200.6	337.7	.712A	1.696D	83.6	1.386	2.8	14.9	329.1	.265
5- 741.4	5- 830	.265	348.7	-17.5	-3.5	1.330	99.2	.324	1.019	321.2	463.1	.689	1.349A	108.8	1.026	5.4	37.6	110.8	.343
		14.20	10.08	6.49	4.12	7.52	3.59	15.07	2/1/1	35.7	17.6	37.8	.856	3.091	59.7	251.1	59.6	109.6D	1.790
5- 360	5- 570	.298	154.8	-26.8	-6.8	1.132	102.5	.348	1.389	309.1	495.6	.905	1.872A	108.0	.715	10.3	-.9	270.3	.309
5- 570	5- 738.4	.172	163.7	-.4	-1.9	.631	103.1	.413	1.199	200.2	332.6	.704A	1.695D	82.1	1.384	2.6	12.8	331.2	.282
5- 738.4	5- 880	.282	353.5	60.7	11.3	1.257	95.9	.180	.856	319.6	517.1	.702	1.010A	94.8	.921	-10.8	-31.5	101.0	.212
		16.98	9.96	6.34	7.02	10.39	3.62	12.75	2/1/2	28.9	73.0	50.6	.755	2.342	76.4	311.5	-49.5	75.0L	1.013
5- 380	5- 570	.245	185.5	20.0	4.3	1.153	100.4	.364	1.467	319.9	486.6	.932	2.001A	110.5	.742	-2.7	-29.6	277.7	.318
5- 570	5- 749.9	.170	160.6	-5.9	-3.6	.637	102.9	.401	1.210	200.9	351.4	.725A	1.696D	87.6	1.388	3.9	23.4	320.5	.240
5- 749.9	5- 900	.240	358.7	62.4	9.7	1.259	94.2	.168	.857	329.8	529.0	.713	1.002A	92.2	.916	-10.4	-34.9	100.5	.195
		16.21	8.97	5.39	7.24	10.61	3.58	12.51	1/1/2	12.9	84.6	46.7	1.045	2.523	68.9	293.2	-38.2	100.1D	1.592
5- 390	5- 570	.226	185.7	11.7	2.5	1.164	99.2	.375	1.511	325.7	482.4	.945	2.077A	111.6	.755	-.8	-25.3	279.6	.333
5- 570	5- 759.5	.186	157.5	-19.5	-7.8	.635	102.3	.399	1.207	199.9	365.6	.725	1.689D	91.6	1.388	7.9	42.4	308.9	.282
5- 759.5	5- 910	.282	4.4	73.0	12.3	1.263	92.8	.164	.861	339.6	533.5	.720	1.002A	91.3	.915	-13.7	-40.1	100.5	.243
		16.66	9.02	5.09	7.64	11.01	3.93	13.23	1/1/2	9.7	89.1	39.9	.758	2.929	73.9	286.1	-24.4	121.8D	1.463

MARS ARRIVAL DATE = 2450580 (11 MAY 1997)

5- 260	5- 580	.417	96.5	21.2	-.9	1.052	113.1	.409	1.160	262.9	550.4	.685	1.634	82.9	.613	1.4	-1.2	195.9	.155
5- 580	5- 711.9	.230	176.4	1.2	-.2	.577	105.8	.522	1.105	195.7	281.5	.528A	1.681D	65.2	1.358	1.9	4.1	329.8	.579
5- 711.9	5- 780	.579	312.7	2.4	1.0	1.495	110.7	.682	1.936	308.2	445.9	.615	3.256A	123.0	1.230	2.6	25.2	63.5	.681
		17.06	13.80	8.81	3.26	6.66	4.99	23.11	2/1/1	97.7	4.1	17.1	.179	6.710	173.6	248.7	-4.3	75.6L	1.025
5- 270	5- 580	.382	104.0	20.5	-.9	1.056	111.2	.382	1.172	267.7	545.6	.724	1.620	86.5	.621	1.5	-5.5	209.9	.144
5- 580	5- 717.8	.214	172.4	2.0	-.5	.600	105.8	.487	1.138	198.2	293.3	.584A	1.692D	69.4	1.368	1.9	5.0	332.3	.497
5- 717.8	5- 790	.497	320.7	.4	.1	1.447	108.1	.585	1.523	309.8	448.4	.631	2.415A	119.9	1.173	3.3	28.2	72.8	.596
		15.67	12.64	8.05	3.03	6.44	4.59	20.92	2/1/1	83.2	5.6	12.4	.244	9.246	158.0	250.8	-20.6	73.6L	2.009
5- 280	5- 580	.354	111.6	19.5	-.9	1.061	109.6	.362	1.186	272.2	540.6	.757	1.616	89.7	.629	1.7	-9.4	223.4	.143
5- 580	5- 723.5	.203	168.6	2.5	-.8	.617	105.8	.460	1.166	200.5	304.7	.629A	1.703D	73.3	1.375	2.0	6.1	333.8	.425
5- 723.5	5- 800	.425	328.4	-2.5	-.8	1.407	105.7	.503	1.300	311.7	451.4	.647	1.953A	117.0	1.125	4.0	30.9	82.2	.520
		14.80	11.78	7.46	3.02	6.43	4.33	19.03	2/1/1	69.3	7.9	10.2	.333	11.195	122.1	262.4	-55.9	79.3L	3.397
5- 290	5- 580	.331	119.0	18.0	-.9	1.067	108.3	.347	1.201	276.7	535.5	.784	1.618A	92.4	.637	1.8	-12.2	235.2	.150
5- 580	5- 729.2	.195	165.3	2.6	-1.1	.631	105.9	.441	1.189	202.6	315.8	.665A	1.713D	76.9	1.381	2.1	7.8	334.2	.362
5- 729.2	5- 810	.362	335.6	-6.4	-1.7	1.375	103.4	.432	1.165	314.1	454.9	.661	1.668A	114.1	1.085	4.6	33.5	91.6	.453
		14.30	11.14	6.99	3.16	6.57	4.15	17.44	2/1/1	57.4	10.7	14.3	.458	8.055	84.2	238.4	84.2	93.3D	3.228
5- 300	5- 580	.312	126.3	16.1	-.9	1.073	107.2	.336	1.218	281.1	530.4	.808	1.627A	94.8	.646	2.0	-14.0	244.9	.162
5- 580	5- 735.2	.190	162.6	2.2	-1.5	.640	105.9	.426	1.207	204.2	326.8	.693A	1.721D	80.2	1.386	2.3	10.1	332.8	.309
5- 735.2	5- 820	.309	342.4	-11.5	-2.7	1.349	101.3	.373	1.077	317.2	458.8	.675	1.479A	111.3	1.052	5.1	35.7	101.2	.394
		14.05	10.65	6.61	3.41	6.81	4.04	16.13	2/1/1	47.8	14.1	23.6	.628	4.894	66.1	249.1	66.1	103.0D	2.445
5- 310	5- 580	.296	133.3	13.8	-1.0	1.080	106.2	.329	1.236	285.6	525.3	.830	1.641A	97.0	.655	2.1	-15.0	252.7	.176
5- 580	5- 742.0	.187	160.3	.9	-2.1	.647	105.9	.415	1.219	205.3	338.6	.713A	1.726D	83.8	1.389	2.6	13.9	328.5	.265
5- 742.0	5- 830	.265	349.2	-17.2	-3.4	1.331	99.2	.326	1.022	321.6	462.6	.689	1.355A	108.9	1.028	5.3	37.3	111.0	.344
		13.97	10.25	6.30	3.72	7.12	3.96	15.10	2/1/1	40.4	17.2	37.2	.858	3.137	57.2	251.4	57.2	111.3D	1.634
5- 360	5- 580	.247	158.7	-13.2	-4.5	1.123	101.7	.325	1.351	309.8	500.9	.912	1.789A	105.3	.706	6.1	-8.2	273.5	.265
5- 580	5- 738.6	.188	161.3	1.7	-1.8	.644	105.9	.420	1.214	204.9	332.9	.704A	1.724D	82.1	1.388	2.4	11.8	331.0	.284
5- 738.6	5- 880	.284	353.9	61.0	11.5	1.257	95.8	.180	.856	319.7	517.0	.702	1.010A	94.8	.921	-11.0	-31.7	101.0	.214
		15.26	9.42	5.42	6.86	9.24	3.99	12.78	2/1/2	24.7	73.1	52.0	.743	2.282	76.5	311.5	-49.9	75.2L	.952
5- 380	5- 580	.235	188.9	27.5	5.7	1.142	99.5	.334	1.410	321.0	492.2	.939	1.881A	107.7	.728	-4.0	-33.4	280.2	.289
5- 580	5- 749.9	.185	158.8	-2.4	-3.1	.650	105.6	.408	1.225	205.6	351.5	.725A	1.725D	87.5	1.391	3.4	20.3	320.3	.239
5- 749.9	5- 900	.239	358.6	62.3	9.7	1.259	94.2	.168	.857	329.8	529.1	.713	1.002A	92.2	.916	-10.3	-34.8	100.5	.194
		15.62	9.15	5.24	6.47	9.04	3.91	12.50	1/1/2	17.2	84.8	49.6	1.051	2.586	69.2	293.7	-40.1	99.8D	1.456

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450580
11 MAY 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 390	5- 580	.205	185.4	14.3	2.7	1.151	98.2	.341	1.443	326.9	488.2	.951	1.934A	108.7	.739	-.9	-25.7	282.1	.298	
5- 580	5- 758.2	.188	157.7	-9.9	-5.3	.648	105.0	.406	1.221	204.7	363.8	.726	1.717D	91.1	1.392	5.4	31.0	310.6	.252	
5- 758.2	5- 910	.252	1.8	69.0	10.8	1.262	93.1	.164	.860	338.0	534.0	.719	1.002A	91.2	.915	-12.0	-38.4	100.4	.218	
		15.48	8.75	4.77	6.73	10.10	3.99	12.84	1/1/2	12.2	89.5	47.7	.944	2.474	71.1	286.8	-31.2	117.3D	1.391	
5- 450	5- 580	.187	169.2	10.8	.9	1.189	86.3	.393	1.608	13.2	113.8	.976D	2.240A	113.1	.785	1.5	-20.0	267.7	.366	
5- 580	5- 719.2	.211	171.4	2.1	-.6	.605	105.8	.480	1.145	198.8	296.1	.596A	1.695D	70.4	1.370	1.9	5.2	332.8	.478	
5- 719.2	5- 970	.478	347.9	.5	.2	1.259	112.2	.404	.859	268.2	583.8	.512	1.206	68.5	.899	-3.3	15.9	98.5	.373	
		17.56	9.02	4.51	8.54	11.90	4.52	15.69	1/1/2	6.8	154.9	15.9	.263	7.250	17.7	249.5	17.5	97.7D	1.643	
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																				
5- 260	5- 590	.425	97.0	21.5	-.8	1.051	113.6	.416	1.158	262.0	554.2	.676	1.641	80.3	.619	1.4	.2	192.4	.163	
5- 590	5- 712.5	.250	173.3	2.5	-.2	.595	109.7	.528	1.122	200.0	282.2	.529A	1.714D	65.1	1.363	1.9	4.0	330.4	.583	
5- 712.5	5- 780	.583	313.3	2.4	1.0	1.500	110.7	.692	1.999	308.6	445.4	.616	3.382A	123.1	1.236	2.6	25.3	63.8	.688	
		17.90	14.46	8.99	3.44	6.84	5.47	23.29	2/1/1	106.1	4.3	17.2	.177	6.699	173.6	249.4	-4.3	75.3L	1.009	
5- 270	5- 590	.385	104.4	20.9	-.8	1.055	111.4	.385	1.170	267.0	549.6	.720	1.620	84.1	.625	1.5	-3.8	205.7	.145	
5- 590	5- 718.3	.234	169.3	3.4	-.5	.618	109.4	.494	1.157	202.8	294.1	.586A	1.728D	69.4	1.373	1.9	4.9	332.7	.499	
5- 718.3	5- 790	.499	321.3	.3	.1	1.451	108.1	.592	1.549	310.2	447.9	.632	2.467A	120.1	1.178	3.3	28.2	73.1	.601	
		16.26	13.20	8.12	3.06	6.47	5.09	21.04	2/1/1	92.3	5.6	12.2	.241	9.416	158.1	251.0	-20.6	73.2L	2.029	
5- 280	5- 590	.354	111.9	19.8	-.7	1.060	109.6	.361	1.182	271.8	544.9	.755	1.609	87.3	.632	1.7	-7.8	219.4	.139	
5- 590	5- 724.0	.224	165.7	3.9	-.8	.635	109.2	.468	1.187	205.4	305.7	.632A	1.743D	73.4	1.381	1.9	5.9	333.9	.426	
5- 724.0	5- 800	.426	328.9	-2.5	-.8	1.410	105.7	.507	1.313	312.1	451.0	.647	1.979A	117.1	1.128	3.9	30.9	82.4	.523	
		15.21	12.28	7.45	2.93	6.34	4.83	19.12	2/1/1	78.1	7.8	9.8	.331	11.690	120.6	262.7	-57.4	79.6L	3.534	
5- 290	5- 590	.328	119.2	18.4	-.7	1.065	108.2	.343	1.195	276.4	539.9	.785	1.606A	90.0	.640	1.8	-11.0	232.2	.141	
5- 590	5- 729.7	.217	162.7	4.1	-1.1	.648	109.1	.449	1.211	207.6	317.0	.668A	1.755D	77.0	1.387	2.0	7.4	333.9	.363	
5- 729.7	5- 810	.363	336.1	-6.3	-1.7	1.377	103.4	.435	1.172	314.4	454.4	.662	1.683A	114.2	1.087	4.5	33.3	91.9	.455	
		14.56	11.58	6.92	2.97	6.38	4.66	17.50	2/1/1	65.2	10.5	13.9	.455	8.236	80.9	241.5	80.9	94.9D	3.296	
5- 300	5- 590	.306	126.4	16.6	-.8	1.071	106.9	.330	1.210	281.0	535.0	.811	1.609A	92.5	.648	1.9	-13.2	243.0	.149	
5- 590	5- 735.7	.212	160.2	3.8	-1.5	.658	109.0	.435	1.230	209.3	328.1	.695A	1.764D	80.5	1.391	2.1	9.6	332.1	.310	
5- 735.7	5- 820	.310	342.9	-11.3	-2.6	1.551	101.2	.375	1.082	317.5	458.3	.676	1.489A	111.4	1.054	5.0	35.5	101.4	.396	
		14.18	11.05	6.50	3.13	6.54	4.55	16.18	2/1/1	54.4	13.8	23.4	.627	4.926	62.8	249.1	62.8	105.0D	2.460	
5- 310	5- 590	.288	133.4	14.4	-.8	1.077	105.8	.320	1.225	285.6	530.0	.834	1.617A	94.6	.656	2.1	-14.5	251.8	.160	
5- 590	5- 742.7	.208	158.4	2.7	-2.0	.664	108.8	.424	1.242	210.5	340.3	.715A	1.770D	84.2	1.395	2.5	13.0	327.2	.264	
5- 742.7	5- 830	.264	349.7	-16.9	-3.3	1.333	99.1	.328	1.027	322.1	462.0	.690	1.365A	109.0	1.030	5.2	36.9	111.4	.347	
		13.98	10.60	6.15	3.38	6.78	4.46	15.14	2/1/1	45.9	16.7	37.2	.861	3.134	53.8	251.1	53.7	114.1D	1.837	
5- 370	5- 590	.243	157.5	-28.0	-7.1	1.124	99.9	.306	1.344	316.1	502.1	.932	1.756A	103.9	.709	8.8	-.6	276.3	.267	
5- 590	5- 743.9	.208	158.1	2.4	-2.1	.665	108.7	.423	1.244	210.6	342.4	.718A	1.770D	84.8	1.395	2.5	13.7	326.0	.258	
5- 743.9	5- 890	.258	356.3	61.2	10.4	1.258	95.1	.173	.856	324.4	523.2	.708	1.004A	93.4	.918	-10.4	-33.3	101.0	.200	
		15.70	9.80	5.36	5.90	9.28	4.44	12.58	2/1/2	30.6	78.8	52.3	.901	2.269	72.7	302.5	-46.5	86.0L	1.142	
5- 380	5- 590	.271	202.5	43.5	10.4	1.132	98.7	.309	1.368	322.1	498.0	.945	1.790A	105.0	.718	-8.8	-45.6	282.3	.278	
5- 590	5- 750.0	.205	157.4	.3	-2.8	.666	108.4	.418	1.246	210.7	352.1	.725A	1.767D	87.7	1.396	3.0	17.8	319.4	.241	
5- 750.0	5- 900	.241	356.8	62.6	9.8	1.259	94.2	.168	.857	329.9	529.0	.713	1.002A	92.2	.916	-10.4	-35.0	100.5	.195	
		16.41	10.22	5.84	6.19	9.56	4.39	12.52	1/1/2	28.3	84.6	52.4	1.037	2.264	69.5	293.4	-41.3	99.6D	1.311	
5- 390	5- 590	.188	185.4	17.9	3.0	1.140	97.4	.313	1.392	328.2	494.2	.957	1.827A	106.0	.726	-1.2	-26.6	284.4	.268	
5- 590	5- 757.9	.204	157.1	-4.7	-4.3	.664	107.8	.415	1.241	209.8	363.6	.726	1.756D	91.1	1.396	4.3	25.0	310.5	.246	
5- 757.9	5- 910	.246	1.3	66.0	10.4	1.262	93.1	.164	.860	337.6	534.1	.719	1.002A	91.1	.915	-11.7	-37.9	100.4	.213	*
		14.82	8.89	4.53	5.93	9.31	4.36	12.76	1/1/2	15.0	89.6	52.7	.992	2.255	70.7	287.1	-34.6	115.6D	1.245	
5- 400	5- 590	.171	184.2	11.4	1.8	1.147	96.0	.317	1.416	334.8	490.7	.967	1.865A	106.9	.735	.0	-23.0	285.8	.279	
5- 590	5- 768.9	.244	154.2	-26.7	-12.8	.654	106.6	.415	1.222	206.9	378.2	.715	1.729D	95.3	1.393	12.5	52.9	299.4	.376	
5- 768.9	5- 920	.376	10.2	83.5	17.2	1.266	91.4	.162	.864	349.9	538.8	.724	1.004A	90.2	.914	-19.1	-43.3	101.3	.328	
		15.86	9.64	4.30	6.22	9.59	5.34	14.77	1/1/2	13.0	92.2	55.4	.425	3.292	63.6	288.7	-18.8	134.4D	.974	
5- 450	5- 590	.172	163.2	12.7	.8	1.168	85.7	.347	1.490	16.8	122.0	.972D	2.007A	109.8	.758	1.5	-19.4	289.1	.321	
5- 590	5- 716.5	.238	170.5	3.1	-.4	.611	109.4	.503	1.147	202.0	290.5	.569A	1.724D	68.1	1.370	1.9	4.6	332.1	.524	
5- 716.5	5- 970	.524	345.9	.4	.2	1.259	114.5	.437	.858	264.0	583.7	.484	1.233	66.2	.898	-3.2	16.7	98.5	.408	
		16.83	9.51	4.32	7.32	10.69	5.19	16.44	1/1/2	10.1	155.1	14.4	.219	7.968	16.9	248.2	16.7	94.9D	1.525	
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																				
5- 270	5- 600	.391	104.9	21.2	-.6	1.055	111.8	.390	1.168	266.2	553.5	.713	1.624	81.6	.631	1.6	-2.3	201.7	.151	
5- 600	5- 718.9	.262	166.5	4.6	-.5	.642	113.1	.504	1.188	208.1	295.6	.589A	1.786D	69.5	1.381	1.8	4.7	332.7	.502	
5- 718.9	5- 790	.502	321.9	.3	.1	1.455	108.1	.599	1.578	310.6	447.4	.633	2.522A	120.2	1.182	3.3	28.2	73.4	.606	
		17.19	14.02	8.24	3.17	6.58	5.77	21.16	2/1/1	101.2	5.6	11.6	.238	9.867	157.5	250.8	-21.3	72.7L	2.114	
5- 280	5- 600	.356	112.2	20.2	-.6	1.059	109.8	.362	1.179	271.2	549.0	.752	1.607	84.9	.637	1.7	-6.2	215.1	.138	
5- 600	5- 724.5	.252	163.2	5.1	-.8	.659	112.7	.479	1.220	210.9	307.3	.635A	1.804D	73.6	1.389	1.9	5.8	333.5	.428	
5- 724.5	5- 800	.428	329.4	-2.5	-.8	1.413	105.7	.512	1.328	312.4	450.5	.648	2.008A	117.2	1.132	3.9	30.8	82.7	.527	
		15.91	13.00	7.48	2.91	6.32	5.52	19.21	2/1/1	87.4	7.6	9.2	.328	12.484	116.6	264.2	-61.4	80.7L	3.767	
5- 290	5- 600	.327	119.5	18.8	-.6	1.063	108.1	.341	1.191	276.1	544.3	.785	1.598	87.8	.644	1.8	-9.6	228.4	.135	
5- 600	5- 730.2	.245	160.5	5.3	-1.1	.672	112.4	.461	1.245	213.3	318.7	.671A	1.819D	77.3	1.395	1.9	7.1	333.1	.364	
5- 730.2	5- 810	.364	336.6	-6.2	-1.7	1.379	103.4	.439	1.181	314.8	454.0	.663	1.699A	114.3	1.090	4.5	33.2	92.2	.458	
		15.09	12.24	6.89	2.85	6.26	5.35	17.57	2/1/1	73.9	10.3	13.8	.453	8.321	75.4	243.0	75.4	97.7D	3.316	
5- 300	5- 600	.302	126.6	17.1	-.6	1.069	106.8	.325	1.204	280.8	539.5	.812	1.595A	90.2	.651	1.9	-12.1	240.3	.139	
5- 600	5- 736.3	.240	158.5	5.1	-1.5	.680	112.1	.446	1.264	215.0	330.0	.698A	1.830D	80.8	1.399	2.0	9.1	330.7	.310	
5- 736.3	5- 820	.310	343.4	-11.0	-2.6	1.353	101.2	.378	1.089	317.9	457.8	.677	1.500A	111.6	1.057	4.9	35.3	101.8	.398	
		14.57	11.64	6.42	2.93	6.34	5.22	16.23	2/1/1	62.0	13.4	23.7	.625	4.863	58.1	248.7	58.1	108.0D	2.416	
5- 310	5- 600	.282	133.5	15.0	-.6	1.075	105.5	.313	1.217	285.6	534.7	.836	1.599A	92.4	.658	2.0	-13.7	250.2	.147	
5- 600	5- 743.7	.235	156.9	4.1	-2.0	.686	111.7	.437	1.276	216.1	342.8	.718A	1.834D	84.8	1.403	2.3	12.2	324.9	.264	
5- 743.7	5- 830	.264	350.6	-16.4	-3.2	1.336	99.0	.332	1.035	322.9	461.2	.691	1.378A	109.2	1.033	5.0	36.3	111.8	.350	
		14.24	11.14	6.03	3.10	6.51	5.11	15.20	2/1/1	52.2	16.1	38.2	.864	3.055	49.0	250.1	49.0	116.3D	1.776	
5- 370	5- 600	.199	162.5	-12.2	-3.2	1.117	99.2	.287	1.316	317.1	507.7	.938	1.695A	101.5	.703	4.9	-8.6	279.4	.227	
5- 600	5- 744.2	.235	156.9	4.0	-2.0	.686	111.7	.437	1.276	216.2	343.6	.719A	1.834D	85.0	1.403	2.3	12.5	324.5	.262	
5- 744.2	5- 890	.262	356.8	61.9	10.6	1.258	95.0	.173	.856	324.6	523.0	.708	1.004A	93.5	.918	-10.7	-33.7	101.0	.203	
		14.68	9.77	4.67	4.90	8.29	5.10	12.63	2/1/2	26.9	78.8	54.6	.878	2.180	72.4	300.9	-46.6	87.3L	1.036	
5- 390	5- 600	.177	186.4	23.5	3.7	1.131	96.7	.290	1.353	329.6	500.3	.961	1.745A	103.4	.718	-1.9	-28.6	286.5	.241	
5- 600	5- 757.9	.227	156.6	-1.3	-3.7	.683	110.7	.428	1.269	215.1	364.3	.726	1.812D	91.3	1.403	3.6	20.8	309.5	.247	
5- 757.9	5- 910	.247	1.4	68.2	10.5	1.262	93.1	.164	.860	337.7	534.1	.719	1.002A	91.2	.915	-11.8	-38.0	100.4	.214	
		14.55	9.30	4.58	5.25	8.64	4.92	12.78	1/1/2	18.5	89.5	57.1	.982	2.094	71.0	286.9	-36.9	115.0D	1.074	
5- 450	5- 600	.163	157.3	14.3	.6	1.152	85.2	.313	1.410	20.5	130.4	.968D	1.851A	106.6	.738	1.5	-18.8	290.2	.282	
5- 600	5- 714.2	.274	169.6	3.9	-.3	.624	113.6	.531	1.157	205.4	285.5	.543A	1.770D	65.9	1.373	1.9	4.1	331.2	.572	
5- 714.2	5- 970	.572	344.2	.4	.2	1.258	116.8	.470	.857	259.9	583.4	.454	1.261	63.9	.898	-3.2	17.4	98.7	.445	
		16.58	10.28	4.20	8.30	9.67	6.08	17.26	1/1/2	13.7	155.1	13.5	.184	8.508	15.9	247.1	15.8	92.4D	1.382	
MARS ARRIVAL DATE = 2450610 (10 JUN 1997)																				
5- 280	5- 610	.360	112.7	20.5	-.5	1.058	110.0	.366	1.177	270.5	553.1	.747	1.608	82.7	.643	1.7	-4.6	210.9	.141	
5- 610	5- 725.1	.287	161.3	6.1	-.8	.690	116.3	.495	1.270	217.1	309.7	.641A	1.899D	73.8	1.401	1.8	5.6	332.6	.430	
5- 725.1	5- 800	.430	330.0	-2.4	-.8	1.416	105.7	.517	1.344	312.8	450.0	.649	2.039A	117.3	1.136	3.9	30.7	83.0	.531	
		16.98	14.00	7.57	2.98	6.38	6.43	19.31	2/1/1	96.6	7.5	8.4	.325	13.625	108.4	270.3	-69.1	83.5L	4.104	
5- 290	5- 610	.327	119.9	19.2	-.4	1.062	108.2	.341	1.188	275.6	548.6	.782	1.594	85.6	.649	1.8	-8.1	224.1	.132	
5- 610	5- 730.9	.280	159.0	6.3	-1.1	.701	115.6	.479	1.297	219.5	321.1	.676A	1.917D	77.7	1.406	1.8	6.9	331.6	.365	
5- 730.9	5- 810	.365	337.1	-6.1	-1.7	1.382	103.4	.443	1.191	315.2	453.5	.663	1.718A	114.4	1.093	4.4	33.1	92.5	.461	
		15.95	13.15	6.91	2.80	6.21	6.24	17.65	2/1/1	83.1	10.1	14.1	.450	8.172	67.1	243.5	67.1	102.1D	3.229	
5- 300	5- 610	.300	126.9	17.6	-.4	1.067	106.7	.323	1.199	280.5	544.0	.812	1.586	88.1	.655	1.8	-10.9	236.7	.131	
5- 610	5- 737.0	.274	157.2	6.1	-1.5	.709	115.3	.466	1.315	221.3	332.7	.702A	1.929D	81.4	1.410	1.9	8.8	328.8	.310	
5- 737.0	5- 820	.310	344.1	-10.8	-2.5	1.355	101.1	.382	1.097	318.5	457.2	.676	1.515A	111.7	1.060	4.8	35.0	102.2	.401	
		15.26	12.48	6.36	2.79	6.20	6.09	16.30	2/1/1	70.4	13.1	24.8	.624	4.659	51.7	247.7	51.7	112.4D	2.282	

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2450610
10 JUN 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 310	5- 610	.277	133.8	15.6	-.5	1.073	105.3	.308	1.211	285.5	539.4	.838	1.584A	90.3	.661	1.9	-12.9	247.6	.136
5- 610	5- 745.4	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	346.9	.722A	1.928D	85.9	1.413	2.2	11.7	321.1	.263
5- 745.4	5- 830	.263	351.9	-15.6	-3.1	1.340	98.8	.339	1.048	324.2	459.7	.693	1.403A	109.5	1.039	4.6	35.4	112.7	.355
		14.76	11.88	5.95	2.88	6.29	5.92	15.31	2/1/1	59.5	15.0	40.9	.868	2.862	42.5	248.3	42.5	124.9D	1.617
5- 380	5- 610	.185	160.7	-23.5	-4.6	1.117	97.4	.271	1.309	324.3	509.8	.955	1.664A	100.1	.707	6.4	-2.9	282.1	.222
5- 610	5- 750.7	.263	156.0	3.8	-2.4	.712	114.4	.451	1.322	222.0	355.0	.726A	1.918D	88.4	1.413	2.4	13.9	315.3	.251
5- 750.7	5- 900	.250	359.9	64.5	10.4	1.260	94.1	.168	.858	330.6	528.7	.714	1.002A	92.3	.916	-11.0	-36.0	100.6	.204
		15.07	10.29	4.48	4.78	8.17	5.82	12.64	2/1/2	31.3	84.5	59.1	.958	2.028	70.0	290.9	-42.3	102.2D	.984
5- 450	5- 610	.157	151.9	15.3	.5	1.139	84.7	.288	1.354	24.0	138.7	.964D	1.743A	103.6	.724	1.6	-18.0	290.9	.248
5- 610	5- 711.9	.319	168.9	4.6	-.2	.644	118.4	.564	1.180	209.2	280.9	.515A	1.845D	63.4	1.379	1.9	3.7	330.1	.625
5- 711.9	5- 970	.625	342.7	.4	.2	1.258	119.4	.508	.857	255.6	582.7	.421	1.292	61.2	.897	-3.2	18.0	99.1	.486
		16.84	11.41	4.13	5.43	8.81	7.28	18.22	1/1/2	17.7	154.9	13.0	.154	8.838	14.8	245.9	14.6	90.1D	1.206

MARS ARRIVAL DATE = 2450620 (20 JUN 1997)

5- 290	5- 620	.330	120.3	19.6	-.3	1.062	108.4	.344	1.186	274.9	552.8	.778	1.593	83.5	.655	1.8	-6.6	219.7	.133
5- 620	5- 731.6	.323	157.9	7.0	-1.2	.739	119.3	.504	1.377	226.5	324.5	.683A	2.072D	78.3	1.422	1.7	6.6	329.4	.367
5- 731.6	5- 810	.367	337.9	-5.9	-1.6	1.385	103.3	.448	1.204	315.8	452.8	.664	1.744A	114.6	1.098	4.4	32.9	92.9	.466
		17.18	14.35	6.96	2.83	6.24	7.39	17.75	2/1/1	92.5	9.8	15.1	.446	7.613	56.0	243.2	56.0	108.2D	2.953
5- 300	5- 620	.300	127.3	18.0	-.3	1.066	106.7	.322	1.196	280.1	548.5	.811	1.581	86.0	.660	1.8	-9.6	232.4	.127
5- 620	5- 738.1	.316	156.6	6.7	-1.5	.745	118.6	.492	1.394	228.2	336.4	.708A	2.081D	82.3	1.426	1.8	8.2	[illegible].4	.311
5- 738.1	5- 820	.311	345.1	-10.4	-2.4	1.359	101.1	.388	1.109	319.3	456.2	.679	1.540A	111.9	1.065	4.7	34.5	102.7	.406
		16.29	13.57	6.38	2.72	6.13	7.19	16.41	2/1/1	79.6	12.5	27.0	.620	4.280	43.8	246.3	43.8	118.4D	2.034
5- 310	5- 620	.275	134.0	16.2	-.3	1.071	105.2	.305	1.206	285.3	544.0	.838	1.574	88.2	.666	1.9	-11.8	244.2	.128
5- 620	5- 750.0	.304	156.0	5.1	-2.2	.744	117.6	.478	1.391	228.4	355.3	.727A	2.056D	88.5	1.426	2.1	11.7	313.5	.262
5- 750.0	5- 830	.262	355.1	-14.1	-2.7	1.353	98.3	.357	1.085	327.7	456.1	.698	1.472A	110.2	1.055	4.3	33.3	114.7	.370
		15.50	12.77	5.91	2.73	6.14	6.86	15.62	2/1/1	67.8	12.6	48.6	.875	2.428	32.9	245.0	32.9	137.3D	1.250

MARS ARRIVAL DATE = 2450630 (30 JUN 1997)

5- 300	5- 630	.302	127.7	18.5	-.1	1.065	106.8	.323	1.194	279.5	552.8	.808	1.579	84.0	.666	1.8	-8.3	227.9	.127
5- 630	5- 739.9	.366	156.4	7.1	-1.5	.790	121.9	.529	1.319	235.5	341.7	.715A	2.322D	83.7	1.448	1.7	7.8	320.8	.313
5- 739.9	5- 820	.313	346.6	-9.9	-2.3	1.366	100.9	.398	1.131	320.6	454.8	.681	1.581A	112.3	1.073	4.6	33.9	103.7	.414
		17.67	14.96	6.42	2.71	6.13	6.54	16.58	2/1/1	89.1	11.7	31.4	.614	3.692	34.6	244.3	34.8	126.3D	1.654

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 360 DAYS
MARS ARRIVAL DATE = 2450510
2 MAR 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																				
5- 240	5- 510	.465	78.7	19.8	-1.6	1.052	115.7	.446	1.154	258.5	533.5	.639	1.669A	95.1	.582	.8	-3.7	194.9	.176
5- 510	5- 719.4	.170	185.7	-5.2	-.7	.578	87.2	.448	1.149	176.6	305.7	.634A	1.663	73.9	1.371	2.3	7.4	326.7	.412
5- 719.4	5- 800	.412	324.1	-3.0	-.9	1.386	105.7	.468	1.207	308.9	455.2	.642	1.772A	116.0	1.098	4.1	31.4	79.9	.492
		17.24	13.51	9.93	3.73	7.13	3.58	18.36	2/1/1	66.3	9.1	10.7	.354	10.709	103.8	278.9	-71.1	86.8L	3.434
5- 250	5- 510	.446	86.8	20.0	-1.6	1.059	114.5	.434	1.178	262.3	527.8	.667	1.689A	99.1	.597	1.1	-7.9	207.2	.189
5- 510	5- 725.3	.158	183.2	-6.7	-1.3	.588	88.0	.427	1.164	177.4	315.8	.667A	1.662	77.2	1.375	2.7	10.2	328.1	.356
5- 725.3	5- 810	.356	331.7	-7.5	-2.0	1.359	103.5	.407	1.109	311.4	458.4	.657	1.560A	113.2	1.064	4.9	34.6	89.4	.432
		16.83	12.82	9.49	4.01	7.40	3.33	16.97	2/1/1	53.4	12.6	18.1	.475	6.346	78.6	233.2	78.5	96.4D	2.540
5- 260	5- 510	.433	94.9	19.7	-1.6	1.068	113.7	.427	1.206	266.0	522.0	.691	1.721A	102.5	.613	1.3	-11.0	217.0	.209
5- 510	5- 731.4	.151	180.3	-9.5	-2.2	.596	88.6	.412	1.177	178.1	326.2	.692A	1.661	80.3	1.378	3.4	15.2	327.8	.308
5- 731.4	5- 820	.308	339.0	-13.2	-3.1	1.338	101.5	.356	1.042	314.6	462.1	.671	1.413A	110.6	1.037	5.6	37.6	99.1	.380
		16.82	12.35	9.18	4.47	7.86	3.17	15.82	2/1/1	43.3	16.4	30.4	.634	3.809	68.9	240.8	68.9	102.2D	1.781
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																				
5- 240	5- 520	.464	78.9	19.9	-1.5	1.049	115.6	.445	1.148	258.0	537.5	.637	1.658A	92.0	.580	.8	-2.0	191.3	.169
5- 520	5- 720.1	.167	184.6	-4.8	-.7	.578	89.4	.448	1.145	179.3	305.1	.632A	1.657	73.8	1.369	2.3	7.2	326.2	.414
5- 720.1	5- 800	.414	324.9	-2.9	-.9	1.389	105.7	.474	1.221	309.4	454.5	.643	1.799A	116.1	1.102	4.1	31.4	80.3	.496
		16.98	13.42	9.89	3.56	6.96	3.53	18.47	2/1/1	74.6	8.9	10.7	.350	10.736	108.2	272.2	-67.8	85.1L	3.410
5- 250	5- 520	.441	86.9	20.1	-1.5	1.056	114.3	.428	1.169	261.9	531.9	.669	1.669A	96.0	.593	1.1	-6.7	204.8	.175
5- 520	5- 726.0	.156	181.9	-6.0	-1.3	.588	90.2	.427	1.161	180.2	315.4	.665A	1.657D	77.0	1.374	2.6	9.9	329.5	.357
5- 726.0	5- 810	.357	332.4	-7.3	-2.0	1.362	103.5	.411	1.117	311.9	457.8	.658	1.577A	113.4	1.068	4.8	34.4	89.8	.435
		16.34	12.64	9.35	3.70	7.10	3.29	17.05	2/1/1	60.5	12.2	17.4	.472	6.611	80.7	233.2	80.6	95.4D	2.649
5- 260	5- 520	.423	95.0	19.8	-1.5	1.063	113.3	.418	1.193	265.7	526.1	.695	1.692A	99.6	.608	1.3	-10.3	215.9	.191
5- 520	5- 732.0	.148	178.8	-8.4	-2.0	.597	90.7	.411	1.174	181.0	325.8	.691A	1.657D	80.2	1.377	3.2	14.2	329.2	.308
5- 732.0	5- 820	.308	339.5	-12.9	-3.0	1.339	101.4	.359	1.048	315.0	461.5	.672	1.423A	110.7	1.040	5.5	37.2	99.5	.382
		16.13	12.09	8.96	4.05	7.44	3.13	15.87	2/1/1	48.9	16.0	28.9	.635	4.001	69.5	242.6	69.5	101.7D	1.900
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																				
5- 240	5- 530	.465	79.2	20.1	-1.5	1.048	115.7	.446	1.143	257.4	541.3	.634	1.653	88.9	.580	.8	-.1	187.3	.166
5- 530	5- 720.7	.166	183.0	-4.1	-.7	.579	91.6	.448	1.142	182.2	304.6	.631A	1.653D	73.6	1.369	2.2	7.1	329.6	.416
5- 720.7	5- 800	.416	325.5	-2.8	-.9	1.393	105.7	.479	1.235	309.8	454.0	.643	1.826A	116.3	1.106	4.1	31.3	80.6	.501
		16.91	13.42	9.92	3.49	6.90	3.50	18.57	2/1/1	83.4	8.7	10.7	.347	10.728	112.2	268.0	-64.4	83.5L	3.376
5- 250	5- 530	.437	87.1	20.3	-1.4	1.053	114.1	.425	1.162	261.5	535.9	.668	1.655A	93.0	.592	1.1	-5.2	201.6	.165
5- 530	5- 726.6	.155	179.9	-5.1	-1.2	.590	92.4	.427	1.159	183.3	315.0	.664A	1.654D	76.9	1.373	2.5	9.5	330.8	.358
5- 726.6	5- 810	.358	333.0	-7.1	-1.9	1.364	103.5	.415	1.126	312.3	457.3	.658	1.594A	113.5	1.071	4.8	34.2	90.1	.439
		16.03	12.55	9.28	3.49	6.89	3.27	17.12	2/1/1	68.3	11.9	16.7	.469	6.870	82.6	232.9	82.5	94.4D	2.755
5- 260	5- 530	.416	95.1	20.0	-1.4	1.060	112.9	.411	1.183	265.5	530.3	.697	1.669A	96.6	.605	1.3	-9.3	214.1	.176
5- 530	5- 732.6	.148	176.8	-7.0	-1.9	.599	92.9	.411	1.173	184.2	325.4	.691A	1.655D	80.1	1.377	3.0	13.4	330.4	.308
5- 732.6	5- 820	.308	340.1	-12.6	-2.9	1.341	101.4	.361	1.053	315.4	461.0	.673	1.433A	110.8	1.042	5.4	36.9	99.8	.384
		15.63	11.92	8.80	3.71	7.10	3.12	15.92	2/1/1	55.4	15.6	27.6	.632	4.187	69.9	244.2	69.9	101.2D	2.015
5- 270	5- 530	.400	103.1	19.2	-1.5	1.068	112.0	.402	1.207	269.3	524.6	.722	1.692A	99.9	.618	1.5	-12.1	224.2	.192
5- 530	5- 740.5	.145	172.5	-12.2	-3.4	.606	93.3	.398	1.185	185.0	336.7	.714A	1.656D	84.0	1.381	4.3	22.6	326.6	.266
5- 740.5	5- 830	.266	348.0	-18.0	-3.6	1.328	99.3	.321	1.013	320.6	463.8	.688	1.338A	108.7	1.023	5.5	38.1	110.3	.341
		15.59	11.50	8.44	4.09	7.48	3.06	15.02	2/1/1	45.1	18.2	45.7	.852	2.575	63.4	242.8	63.2	109.7D	1.343
5- 270	5- 530	.400	103.1	19.2	-1.5	1.068	112.0	.402	1.207	269.3	524.6	.722	1.692A	99.9	.618	1.5	-12.1	224.2	.192
5- 530	5- 745.7	.151	168.9	-19.2	-5.3	.608	93.3	.393	1.189	185.2	347.1	.722A	1.657D	86.4	1.382	6.1	33.7	322.0	.263
5- 745.7	5- 830	.263	352.1	-15.5	-3.0	1.341	98.8	.340	1.050	324.4	459.5	.693	1.406A	109.5	1.040	4.8	35.2	112.8	.356
		15.70	11.61	8.44	4.09	7.48	3.17	15.33	2/1/1	45.1	14.8	57.0	.869	2.096	61.4	231.8	59.6	117.9D	.953
5- 320	5- 530	.367	139.5	6.3	-3.1	1.124	109.1	.418	1.393	289.2	496.7	.811	1.975A	112.4	.702	3.9	-14.7	251.8	.316
5- 530	5- 738.0	.145	174.0	-10.1	-2.8	.604	93.2	.401	1.182	184.8	334.6	.708A	1.656D	82.8	1.380	3.7	18.9	328.2	.276
5- 738.0	5- 880	.275	352.6	59.5	10.9	1.257	95.9	.180	.855	319.2	517.4	.701	1.009A	94.7	.920	-10.4	-30.7	101.1	.206
		17.97	10.78	7.73	7.19	10.56	3.06	12.66	2/1/2	19.6	72.8	44.2	.792	2.659	73.5	304.8	-45.6	77.8L	1.313
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																				
5- 240	5- 540	.469	79.5	20.3	-1.4	1.047	116.0	.449	1.140	256.7	545.1	.628	1.652	85.9	.581	.8	1.7	183.3	.167
5- 540	5- 721.3	.167	180.7	-3.2	-.8	.582	94.2	.448	1.141	185.3	304.2	.629A	1.652D	73.5	1.368	2.2	6.9	330.9	.418
5- 721.3	5- 800	.418	326.2	-2.8	-.9	1.396	105.7	.484	1.248	310.3	453.4	.644	1.853A	116.4	1.110	4.0	31.2	81.0	.505
		17.06	13.53	10.01	3.53	6.93	3.52	18.67	2/1/1	92.3	6.5	10.7	.344	10.715	115.8	265.5	-61.3	82.2L	3.341
5- 250	5- 540	.436	87.3	20.5	-1.4	1.051	114.1	.424	1.157	261.1	539.9	.667	1.647A	90.1	.592	1.1	-3.5	197.9	.160
5- 540	5- 727.2	.157	177.5	-3.8	-1.2	.594	94.8	.427	1.159	186.5	314.7	.664A	1.655D	76.9	1.373	2.4	9.1	332.0	.359
5- 727.2	5- 810	.359	333.6	-7.0	-1.9	1.366	103.5	.419	1.134	312.7	456.7	.659	1.609A	113.6	1.074	4.7	34.0	90.5	.442
		15.91	12.56	9.26	3.56	6.76	3.30	17.19	2/1/1	76.9	11.6	16.1	.467	7.119	84.3	232.1	84.2	93.6D	2.656
5- 260	5- 540	.412	95.3	20.2	-1.3	1.057	112.7	.406	1.175	265.2	534.4	.698	1.652A	93.8	.603	1.3	-8.0	211.4	.184
5- 540	5- 733.2	.150	174.3	-5.3	-1.8	.602	95.3	.412	1.174	187.6	325.2	.690A	1.657D	80.1	1.377	2.8	12.6	331.4	.308
5- 733.2	5- 820	.308	340.6	-12.3	-2.9	1.343	101.4	.364	1.058	315.8	460.5	.673	1.443A	111.0	1.044	5.3	36.7	100.1	.386
		15.30	11.85	8.69	3.45	6.85	3.15	15.97	2/1/1	62.7	15.2	26.5	.632	4.363	70.1	245.6	70.1	101.0D	2.124
5- 270	5- 540	.392	103.2	19.4	-1.4	1.064	111.6	.394	1.196	269.1	528.9	.725	1.667A	97.0	.616	1.5	-11.3	222.8	.176
5- 540	5- 740.4	.146	170.7	-9.1	-2.9	.609	95.5	.399	1.185	188.4	337.5	.712A	1.658D	83.6	1.381	3.7	19.6	328.0	.266
5- 740.4	5- 830	.266	347.9	-18.1	-3.6	1.327	99.3	.321	1.012	320.5	463.9	.688	1.336A	108.6	1.023	5.5	38.2	110.2	.340
		15.07	11.35	8.27	3.72	7.12	3.08	15.01	2/1/1	51.1	18.3	42.5	.852	2.760	63.1	246.5	63.1	108.5D	1.499
5- 320	5- 540	.344	139.7	7.5	-2.5	1.113	108.2	.393	1.351	289.3	501.3	.820	1.881A	109.5	.689	3.4	-15.3	253.8	.286
5- 540	5- 738.1	.147	171.8	-7.6	-2.5	.608	95.5	.403	1.182	188.2	333.7	.706A	1.658D	82.5	1.380	3.4	16.9	329.4	.277
5- 738.1	5- 880	.277	352.7	59.7	11.0	1.257	95.9	.180	.855	319.3	517.4	.701	1.009A	94.8	.920	-10.5	-30.8	101.1	.207
		16.74	10.34	7.25	6.40	9.77	3.09	12.68	2/1/2	21.8	72.8	46.0	.785	2.559	74.6	307.4	-47.1	76.5L	1.224
5- 330	5- 540	.342	145.4	2.0	-3.5	1.126	107.6	.402	1.397	293.6	495.9	.835	1.959A	111.5	.707	4.5	-13.8	257.2	.312
5- 540	5- 743.7	.147	169.0	-12.0	-3.7	.611	95.6	.395	1.189	188.6	342.9	.719A	1.659D	85.2	1.382	4.4	24.5	325.2	.256
5- 743.7	5- 890	.255	355.9	60.7	10.2	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.0	101.0	.197
		17.40	10.31	7.21	7.09	10.47	3.10	12.54	2/1/2	19.7	78.7	41.8	.921	2.801	70.1	298.2	-39.8	88.6L	1.658
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																				
5- 240	5- 550	.476	79.9	20.5	-1.3	1.046	116.4	.455	1.138	255.9	548.8	.620	1.656	82.8	.584	.9	3.5	179.8	.174
5- 550	5- 721.9	.170	178.0	-2.0	-.8	.587	96.9	.450	1.142	188.6	304.0	.628A	1.655D	73.4	1.369	2.1	6.7	331.9	.420
5- 721.9	5- 800	.420	326.8	-2.7	-.8	1.399	105.7	.489	1.261	310.6	452.9	.645	1.876A	116.6	1.114	4.0	31.1	81.3	.509
		17.43	13.77	10.16	3.66	7.06	3.59	18.77	2/1/1	100.9	8.3	10.7	.341	10.714	118.6	264.0	-58.8	81.1L	3.313
5- 250	5- 550	.438	87.6	20.7	-1.3	1.050	114.3	.425	1.153	260.5	543.8	.663	1.643	87.2	.594	1.1	-1.6	193.8	.158
5- 550	5- 727.8	.161	174.6	-2.4	-1.2	.599	97.4	.429	1.161	190.0	314.6	.663A	1.659D	76.8	1.374	2.3	8.8	332.9	.360
5- 727.8	5- 810	.360	334.1	-6.8	-1.8	1.369	103.5	.422	1.142	313.1	456.2	.660	1.625A	113.8	1.077	4.7	33.9	90.8	.445
		16.00	12.68	9.30	3.32	6.73	3.38	17.26	2/1/1	85.8	11.4	15.6	.464	7.362	85.5	231.3	85.4	93.0D	2.954
5- 260	5- 550	.409	95.5	20.4	-1.2	1.055	112.6	.403	1.169	264.8	538.5	.698	1.640A	91.0	.604	1.3	-6.4	208.0	.155
5- 550	5- 733.7	.154	171.4	-3.5	-1.7	.608	97.7	.413	1.176	191.2	325.2	.690A	1.662D	80.0	1.378	2.7	11.9	332.2	.309
5- 733.7	5- 820	.309	341.1	-12.1	-2.8	1.345	101.3	.366	1.063	316.2	460.1	.674	1.452A	111.1	1.046	5.2	36.4	100.4	.388
		15.16	11.89	8.64	3.27	6.68	3.25	16.01	2/1/1	70.9	14.9	25.5	.631	4.529	70.0	246.9	70.0	100.9D	2.226
5- 270	5- 550	.386	103.3	19.7	-1.2	1.061	111.3	.388	1.187	268.9	533.1	.727	1.648A	94.3	.615	1.5	-10.2	220.7	.183
5- 550	5- 740.6	.151	168.1	-6.3	-2.6	.615	97.9	.401	1.188	192.2	337.1	.711A	1.665D	83.5	1.381	3.4	17.7	328.8	.286
5- 740.6	5- 830	.265	348.1	-18.0	-3.6	1.328	99.3	.321	1.013	320.6	463.7	.688	1.339A	108.7	1.023	5.5	38.1	110.4	.341
		14.74	11.31	8.14	3.43	6.84	3.17	15.02	2/1/1	57.9	18.2	40.4	.853	2.899	62.5	248.7	62.5	108.3D	1.619
5- 320	5- 550	.325	139.8	8.5	-2.1	1.105	107.3	.371	1.318	289.5	505.9	.829	1.806A	106.7	.679	3.1	-15.6	255.6	.259
5- 550	5- 738.2	.151	169.2	-5.1	-2.2	.613	97.9	.405	1.185	191.9	333.0	.705A	1.664D	82.3	1.380	3.1	15.3	330.4	.278
5- 738.2	5- 880	.278	353.0	60.0	11.1	1.257	95.9	.180	.855	319.4	517.3	.701	1.009A	94.8	.920	-10.6	-31.0	101.0	.208
		16.74	10.04	6.85	5.70	9.08	3.19	12.70	2/1/2	24.3	72.9	47.6	.776	2.477	75.5	309.4	-48.2	79.7L	1.148

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 330	5- 550	.319	145.8	3.9	-2.7	1.116	106.6	.377	1.355	293.9	300.6	.844	1.865A	108.6	.694	3.8	-14.6	259.3	.282
5- 550	5- 743.6	.150	166.9	-8.3	-3.1	.617	97.9	.398	1.191	192.4	342.0	.718A	1.665D	84.9	1.383	3.8	21.2	326.3	.254
5- 743.6	5- 890	.254	355.7	60.4	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		16.21	9.91	6.74	6.30	9.67	3.17	12.52	2/1/2	21.5	78.7	44.3	.932	2.654	71.1	300.6	-42.3	86.7L	1.542
5- 340	5- 550	.318	150.6	-3.5	-4.2	1.129	106.0	.385	1.397	298.4	495.4	.859	1.936A	110.4	.710	5.4	-12.0	262.3	.308
5- 550	5- 751.0	.158	163.3	-16.9	-5.6	.619	97.8	.393	1.195	192.4	353.7	.726A	1.665D	86.2	1.384	6.0	34.9	316.3	.255
5- 751.0	5- 900	.255	.4	65.3	10.6	1.260	94.1	.168	.858	330.9	526.5	.714	1.002A	92.3	.916	-11.3	-36.4	100.7	.208
		17.02	10.04	6.73	6.97	10.35	3.32	12.70	2/1/2	20.4	84.5	39.3	.926	2.973	68.7	289.6	-30.1	105.8D	1.826
5- 340	5- 550	.318	150.6	-3.5	-4.2	1.129	106.0	.385	1.397	298.4	495.4	.859	1.936A	110.4	.710	5.4	-12.0	262.3	.308
5- 550	5- 769.0	.192	196.3	33.5	10.9	.613	96.3	.398	1.184	189.6	379.9	.713	1.655D	95.6	1.384	-10.9	-48.8	297.9	.348
5- 769.0	5- 900	.347	349.0	-82.3	-15.8	1.267	90.8	.163	.866	354.4	522.6	.725	1.007A	93.3	.922	14.3	79.0	172.0	.256
		17.79	10.81	6.73	6.97	10.35	4.09	13.44	2/2/1	20.4	81.8	36.8	.498	3.168	83.4	287.6	22.2	134.2D	1.079

MARS ARRIVAL DATE = 2450560 (21 APR 1997)

5- 240	5- 560	.486	80.4	20.7	-1.3	1.045	117.0	.464	1.137	254.9	552.3	.609	1.665	79.7	.588	.9	4.6	176.4	.184
5- 560	5- 722.5	.177	175.0	-.6	-.8	.594	99.7	.452	1.146	192.2	303.9	.628A	1.663D	73.3	1.370	2.1	6.5	332.8	.422
5- 722.5	5- 800	.421	327.3	-2.6	-.8	1.402	105.7	.493	1.274	311.0	452.4	.646	1.903A	116.7	1.118	4.0	31.0	81.6	.513
		18.06	14.16	10.42	5.90	7.30	3.73	18.86	2/1/1	108.8	8.1	10.7	.338	10.767	120.7	263.1	-56.9	80.2L	3.304
5- 250	5- 560	.443	88.0	20.9	-1.2	1.049	114.6	.429	1.150	259.8	547.6	.657	1.644	84.4	.597	1.1	.2	189.8	.161
5- 560	5- 728.3	.168	171.4	-.7	-1.2	.606	100.1	.431	1.166	193.8	314.7	.663A	1.669D	76.8	1.375	2.3	8.4	333.6	.361
5- 728.3	5- 810	.361	334.7	-6.7	-1.8	1.371	103.4	.426	1.150	313.4	455.7	.660	1.639A	113.9	1.080	4.8	33.7	91.1	.447
		16.32	12.94	9.40	5.38	6.78	3.54	17.32	2/1/1	94.8	11.1	15.1	.462	7.601	86.1	231.7	86.0	92.8D	3.050
5- 260	5- 560	.409	95.7	20.7	-1.1	1.054	112.7	.403	1.165	264.3	542.6	.696	1.634	88.3	.606	1.3	-4.6	204.1	.151
5- 560	5- 734.2	.162	168.3	-1.5	-1.6	.616	100.3	.416	1.162	195.2	325.4	.690A	1.673D	80.0	1.379	2.5	11.2	332.8	.309
5- 734.2	5- 820	.309	341.5	-11.8	-2.8	1.346	101.3	.368	1.068	316.5	459.6	.674	1.461A	111.2	1.048	5.2	36.2	100.7	.390
		15.23	12.05	8.64	5.18	6.59	3.41	16.05	2/1/1	79.7	14.8	24.7	.630	4.680	69.5	248.0	69.5	101.1D	2.317
5- 270	5- 560	.383	103.5	20.0	-1.1	1.059	111.2	.384	1.181	268.6	537.3	.728	1.634A	91.7	.615	1.5	-8.9	217.7	.153
5- 560	5- 741.0	.159	165.4	-3.7	-2.4	.623	100.4	.404	1.194	196.2	337.2	.712A	1.677D	83.5	1.383	3.1	16.2	329.2	.265
5- 741.0	5- 830	.265	348.4	-17.8	-3.5	1.329	99.2	.322	1.015	320.9	463.5	.688	1.343A	108.7	1.024	5.4	37.9	110.6	.341
		14.82	11.40	8.06	5.22	6.63	3.34	15.04	2/1/1	65.6	17.9	38.9	.856	3.001	61.3	250.2	61.3	108.7D	1.713
5- 320	5- 560	.308	139.9	9.5	-1.7	1.098	106.5	.353	1.292	289.7	510.6	.836	1.747A	104.0	.672	2.8	-15.7	257.1	.234
5- 560	5- 738.5	.160	166.4	-2.7	-2.1	.621	100.4	.408	1.190	195.9	332.7	.704A	1.676D	82.2	1.382	2.8	14.0	330.9	.280
5- 738.5	5- 880	.280	353.2	60.3	11.2	1.257	95.9	.180	.855	319.5	517.2	.701	1.009A	94.8	.920	-10.7	-31.2	101.0	.210
		14.96	9.88	6.52	5.08	6.47	3.36	12.73	2/1/2	27.2	72.9	49.1	.766	2.406	76.0	310.8	-49.0	75.1L	1.078
5- 330	5- 560	.299	146.0	5.5	-2.2	1.108	105.8	.355	1.322	294.2	505.4	.852	1.792A	105.9	.685	3.3	-15.1	261.1	.255
5- 560	5- 743.6	.158	164.5	-5.0	-2.8	.625	100.4	.401	1.197	196.4	341.5	.717A	1.677D	84.7	1.384	3.4	18.7	327.0	.254
5- 743.6	5- 890	.254	355.7	60.4	10.1	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		15.29	9.69	6.56	5.60	8.98	3.33	12.52	2/1/2	23.8	78.7	46.4	.933	2.540	71.9	302.2	-44.1	85.6L	1.436
5- 340	5- 560	.294	151.2	-.3	-3.1	1.119	105.1	.360	1.356	298.8	500.3	.868	1.845A	107.6	.699	4.3	-13.5	264.4	.277
5- 560	5- 750.2	.160	162.3	-10.4	-4.3	.627	100.3	.396	1.201	196.5	352.1	.725A	1.677D	87.7	1.386	4.7	27.7	319.9	.243
5- 750.2	5- 900	.243	359.1	63.2	10.0	1.259	94.2	.168	.858	330.1	528.9	.713	1.002A	92.2	.916	-10.6	-35.3	100.6	.198
		15.79	9.62	6.25	6.16	9.54	3.37	12.55	2/1/2	21.7	84.5	43.6	1.014	2.696	68.5	291.9	-35.2	102.0D	1.720

MARS ARRIVAL DATE = 2450570 (1 MAY 1997)

5- 250	5- 570	.450	88.5	21.2	-1.1	1.049	115.0	.435	1.149	258.9	551.3	.648	1.649	81.5	.601	1.1	1.7	186.1	.168
5- 570	5- 728.8	.179	168.3	1.0	-1.1	.617	102.9	.435	1.175	198.0	315.1	.664A	1.686D	76.8	1.378	2.2	8.1	334.0	.362
5- 728.8	5- 810	.361	335.2	-6.6	-1.8	1.373	103.4	.429	1.157	313.8	455.3	.661	1.653A	114.0	1.082	4.6	33.6	91.4	.450
		16.90	13.36	9.57	5.53	6.94	3.79	17.38	2/1/1	103.3	10.9	14.7	.460	7.827	85.7	234.5	85.6	92.7D	3.140
5- 260	5- 570	.412	96.1	20.9	-1.0	1.053	112.8	.405	1.162	263.7	546.5	.691	1.632	85.6	.609	1.3	-2.8	200.0	.151
5- 570	5- 734.7	.174	165.3	.4	-1.6	.626	103.1	.420	1.192	199.5	325.9	.691A	1.692D	80.1	1.382	2.4	10.6	333.0	.309
5- 734.7	5- 820	.309	342.0	-11.6	-2.7	1.348	101.3	.371	1.072	316.8	459.2	.675	1.470A	111.3	1.050	5.1	36.0	100.9	.392
		15.54	12.36	8.69	5.18	6.58	3.67	16.09	2/1/1	88.8	14.3	24.0	.629	4.806	68.2	246.7	68.2	101.6D	2.394
5- 270	5- 570	.381	103.7	20.2	-1.0	1.057	111.1	.382	1.176	268.2	541.5	.727	1.625	89.1	.617	1.5	-7.3	214.0	.146
5- 570	5- 741.4	.170	162.7	-1.3	-2.2	.633	103.1	.409	1.204	200.6	337.7	.712A	1.696D	83.6	1.386	2.8	14.9	329.1	.265
5- 741.4	5- 830	.265	348.7	-17.5	-3.5	1.330	99.2	.324	1.019	321.2	463.1	.689	1.349A	108.8	1.026	5.4	37.6	110.8	.343
		14.71	11.62	8.03	5.09	6.49	3.59	15.07	2/1/1	74.1	17.6	37.8	.856	3.091	59.7	251.1	59.6	109.6D	1.790
5- 320	5- 570	.293	139.9	10.3	-1.4	1.092	105.9	.337	1.271	289.9	515.4	.843	1.699A	101.4	.667	2.5	-15.6	258.2	.212
5- 570	5- 738.4	.172	163.7	-.4	-1.9	.631	103.1	.413	1.199	200.2	332.6	.704A	1.695D	82.1	1.384	2.6	12.8	331.2	.282
5- 738.4	5- 880	.282	353.5	60.7	11.3	1.257	95.9	.180	.856	319.6	517.1	.702	1.010A	94.8	.921	-10.8	-31.5	101.0	.212
		14.41	9.87	6.25	4.54	7.93	3.62	12.75	2/1/2	30.6	73.0	50.6	.755	2.342	76.4	311.5	-49.5	75.0L	1.013
5- 330	5- 570	.283	146.1	6.8	-1.7	1.101	105.1	.337	1.296	294.5	510.3	.860	1.733A	103.3	.678	2.9	-15.3	262.7	.230
5- 570	5- 743.7	.170	162.1	-2.2	-2.5	.635	103.1	.406	1.207	200.8	341.4	.717A	1.697D	84.7	1.386	3.0	16.8	327.2	.255
5- 743.7	5- 890	.255	355.8	60.5	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.9	101.0	.197
		14.62	9.63	6.05	4.99	8.38	3.58	12.53	2/1/2	26.6	78.7	48.3	.927	2.443	72.4	303.1	-45.3	85.2L	1.338
5- 340	5- 570	.274	151.8	2.1	-2.3	1.111	104.2	.339	1.324	299.2	505.3	.876	1.773A	105.0	.690	3.6	-14.3	266.3	.250
5- 570	5- 749.9	.170	160.6	-5.9	-3.6	.637	102.9	.401	1.210	200.9	351.4	.725A	1.696D	87.6	1.388	3.9	23.4	320.5	.240
5- 749.9	5- 900	.240	358.7	62.4	9.7	1.259	94.2	.168	.857	329.8	529.0	.713	1.002A	92.2	.916	-10.4	-34.9	100.5	.195
		14.94	9.47	5.89	5.47	8.85	3.58	12.51	2/1/2	23.8	84.6	46.7	1.045	2.523	68.9	293.2	-38.2	100.1D	1.592
5- 350	5- 570	.269	155.8	-5.6	-3.6	1.121	103.4	.343	1.355	304.0	500.4	.891	1.819A	106.5	.703	5.0	-11.5	269.2	.271
5- 570	5- 759.5	.186	157.5	-19.5	-7.8	.635	102.3	.399	1.207	199.9	365.6	.725	1.689D	91.6	1.388	7.9	42.4	308.9	.282
5- 759.5	5- 910	.282	4.4	73.0	12.3	1.263	92.8	.164	.861	339.6	533.5	.720	1.002A	91.3	.915	-13.7	-40.1	100.5	.243
		15.74	9.73	5.80	6.01	9.39	3.93	13.23	2/1/2	22.6	89.1	39.9	.758	2.929	73.9	286.1	-24.4	121.8D	1.463
5- 410	5- 570	.204	168.0	5.7	1.5	1.186	96.2	.399	1.609	338.2	474.8	.967	2.250A	113.5	.781	.5	-22.5	282.8	.364
5- 570	5- 722.5	.186	172.0	1.0	-.8	.603	102.7	.457	1.151	196.0	303.3	.625A	1.678D	73.0	1.371	2.0	6.2	333.4	.429
5- 722.5	5- 970	.429	350.7	.5	.2	1.260	109.8	.369	.861	273.3	583.6	.543	1.178	70.9	.900	-3.3	14.9	98.7	.336
		17.22	8.74	4.75	8.48	11.85	3.99	14.93	1/1/2	6.5	154.3	18.2	.327	6.329	18.7	250.9	18.4	101.3D	1.745
5- 420	5- 570	.196	187.4	5.1	1.2	1.195	94.3	.412	1.660	345.1	471.6	.976	2.344A	114.3	.793	.8	-21.6	284.1	.378
5- 570	5- 748.9	.170	160.8	-5.1	-3.4	.637	102.9	.402	1.210	200.9	349.9	.724A	1.696D	87.1	1.388	3.7	22.1	321.7	.241
5- 748.9	5- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	301.9	579.9	.659	1.094	78.9	.911	-3.4	7.3	110.2	.210
		17.09	8.21	4.64	8.88	12.25	3.57	12.73	1/1/2	5.4	149.4	58.0	1.038	2.063	28.1	254.4	25.4	133.9D	1.103

MARS ARRIVAL DATE = 2450580 (11 MAY 1997)

5- 250	5- 580	.461	89.0	21.4	-1.0	1.048	115.6	.445	1.148	257.9	554.9	.637	1.659	78.7	.606	1.2	2.9	183.2	.179
5- 580	5- 729.2	.195	165.3	2.6	-1.1	.631	105.9	.441	1.189	202.6	315.8	.665A	1.713D	76.9	1.381	2.1	7.8	334.2	.362
5- 729.2	5- 810	.362	335.6	-6.4	-1.7	1.375	103.4	.432	1.165	314.1	454.9	.661	1.668A	114.1	1.085	4.6	33.5	91.6	.453
		17.77	13.98	9.82	5.79	7.19	4.15	17.44	2/1/1	111.1	10.7	14.3	.458	8.055	84.2	236.4	84.2	93.3D	3.228
5- 260	5- 580	.417	96.5	21.2	-.9	1.052	113.1	.409	1.160	262.9	550.4	.685	1.634	82.9	.613	1.4	-1.2	195.9	.155
5- 580	5- 735.2	.190	162.6	2.2	-1.5	.640	105.9	.426	1.207	204.2	326.8	.693A	1.721D	80.2	1.386	2.3	10.1	332.8	.309
5- 735.2	5- 820	.309	342.4	-11.5	-2.7	1.349	101.3	.373	1.077	317.2	458.8	.675	1.479A	111.3	1.052	5.1	35.7	101.2	.394
		16.11	12.85	8.81	5.26	6.66	4.04	16.13	2/1/1	97.7	14.1	23.6	.628	4.894	66.1	249.1	66.1	103.0D	2.445
5- 270	5- 580	.382	104.0	20.5	-.9	1.056	111.2	.382	1.172	267.7	545.6	.724	1.620	86.5	.621	1.5	-5.5	209.9	.144
5- 580	5- 742.0	.187	160.3	.9	-2.1	.647	105.9	.415	1.219	205.3	338.6	.715A	1.726D	83.8	1.389	2.6	13.9	328.5	.265
5- 742.0	5- 830	.265	349.2	-17.2	-3.4	1.331	99.2	.326	1.022	321.6	462.6	.689	1.355A	108.9	1.028	5.3	37.3	111.0	.344
		15.04	12.00	8.05	5.03	6.44	3.96	15.10	2/1/1	83.2	17.2	37.2	.858	3.137	57.2	251.4	57.2	111.3D	1.834
5- 320	5- 580	.281	140.0	11.1	-1.1	1.088	105.3	.324	1.255	290.1	520.2	.849	1.661A	99.0	.665	2.4	-15.4	258.8	.192
5- 580	5- 738.6	.188	161.3	1.7	-1.8	.644	105.9	.420	1.214	204.9	332.9	.704A	1.724D	82.1	1.386	2.4	11.8	331.0	.284
5- 738.6	5- 880	.284	353.9	61.0	11.5	1.257	95.8	.180	.856	319.7	517.0	.702	1.010A	94.8	.921	-11.0	-31.7	101.0	.214
		14.09	10.02	6.03	4.07	7.47	3.99	12.78	2/1/2	34.5	73.1	52.0	.743	2.282	76.5	311.5	-49.9	75.2L	.952
5- 330	5- 580	.269	146.2	7.9	-1.3	1.096	104.4	.321	1.276	294.8	515.2	.866	1.686A	100.8	.674	2.7	-15.4	263.8	.208
5- 580	5- 743.6	.186	159.9	.3	-2.3	.648	105.8	.413	1.221	205.5	341.7	.717A	1.726D	84.7	1.390	2.8	15.1	326.9	.256
5- 743.6	5- 890	.256	356.0	60.8	10.3	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.1	101.0	.198
		14.20	9.74	5.80	4.46	7.85	3.94	12.55	2/1/2	30.0	78.7	50.3	.916	2.355	72.7	303.2	-46.1	85.3L	1.241

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2450580
11 MAY 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / &WNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC	
5- 340	5- 580	.257	151.9	3.9	-1.7	1.104	103.5	.321	1.299	299.6	510.3	.883	1.715A	102.4	.685	3.1	-14.7	267.9	.225	
5- 580	5- 749.9	.185	158.8	-2.4	-3.1	.650	105.6	.408	1.225	205.6	351.5	.725A	1.725D	87.5	1.391	3.4	20.3	320.3	.239	
5- 749.9	5- 900	.239	358.6	62.3	9.7	1.259	94.2	.168	.857	329.8	529.1	.713	1.002A	92.2	.916	-10.3	-34.8	100.5	.194	
		14.38	9.51	5.60	4.86	8.25	3.91	12.50	2/1/2	26.5	84.6	49.6	1.051	2.386	69.2	293.7	-40.1	99.5D	1.456	
5- 350	5- 580	.248	156.5	-1.8	-2.4	1.113	102.6	.322	1.324	304.6	505.6	.898	1.750A	103.9	.695	3.9	-13.1	271.2	.243	
5- 580	5- 758.2	.188	157.7	-9.9	-5.3	.648	105.0	.406	1.221	204.7	363.8	.726	1.717D	91.1	1.392	5.4	31.0	310.6	.252	
5- 758.2	5- 910	.252	1.8	69.0	10.8	1.262	93.1	.164	.860	338.0	534.0	.719	1.002A	91.2	.915	-12.0	-38.4	100.4	.218	O
		14.73	9.43	5.44	5.30	8.69	3.99	12.84	2/1/2	24.1	89.5	47.7	.944	2.474	71.1	286.8	-31.2	117.3D	1.391	
5- 410	5- 580	.180	185.8	7.3	1.4	1.168	95.2	.356	1.510	339.9	481.1	.972	2.047A	110.5	.759	.5	-22.0	285.0	.324	
5- 580	5- 719.2	.211	171.4	2.1	-.6	.605	105.8	.480	1.145	198.8	296.1	.596A	1.695D	70.4	1.370	1.9	5.2	332.8	.478	
5- 719.2	5- 970	.478	347.9	.5	.2	1.259	112.2	.404	.859	268.2	583.8	.512	1.206	68.5	.899	-3.3	15.9	98.5	.373	
		16.35	8.93	4.41	7.42	10.79	4.52	15.69	1/1/2	9.0	154.9	15.9	.263	7.250	17.7	249.5	17.5	97.7D	1.643	
5- 420	5- 580	.171	184.3	6.8	1.2	1.176	93.4	.365	1.542	347.2	478.2	.979	2.105A	111.2	.768	.9	-21.3	286.2	.336	
5- 580	5- 748.9	.185	159.0	-1.9	-3.0	.650	105.6	.409	1.225	205.6	350.0	.724A	1.725D	87.1	1.391	3.3	19.3	321.4	.241	
5- 748.9	5- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	302.0	579.9	.659	1.094	78.9	.911	-3.4	7.3	110.2	.210	
		15.95	8.22	4.30	7.73	11.10	3.92	12.73	1/1/2	8.0	149.4	57.4	1.039	2.081	24.8	255.4	22.7	134.3D	1.123	

MARS ARRIVAL DATE = 2450590 (21 MAY 1997)

5- 260	5- 590	.425	97.0	21.5	-.8	1.051	113.6	.416	1.158	262.0	554.2	.676	1.641	80.3	.619	1.4	.6	192.4	.163	
5- 590	5- 735.7	.212	160.2	3.8	-1.5	.658	109.0	.435	1.230	209.3	328.1	.695A	1.764D	80.5	1.391	2.1	9.6	332.1	.310	
5- 735.7	5- 820	.310	342.9	-11.3	-2.6	1.351	101.2	.375	1.082	317.5	458.3	.676	1.489A	111.4	1.054	5.0	35.5	101.4	.396	
		16.98	13.54	8.99	3.44	6.84	4.55	16.18	2/1/1	106.1	13.8	23.4	.627	4.926	62.8	249.1	62.8	105.0D	2.460	
5- 270	5- 590	.385	104.4	20.9	-.8	1.055	111.4	.385	1.170	267.0	549.6	.720	1.620	84.1	.625	1.5	-3.8	205.7	.145	
5- 590	5- 742.7	.208	158.4	2.7	-2.0	.664	108.8	.424	1.242	210.5	340.3	.715A	1.770D	84.2	1.395	2.5	13.0	327.2	.264	
5- 742.7	5- 830	.264	349.7	-16.9	-3.3	1.333	99.1	.328	1.027	322.1	462.0	.690	1.365A	109.0	1.030	5.2	36.9	111.4	.347	
		15.63	12.57	8.12	3.06	6.47	4.46	15.14	2/1/1	92.3	16.7	37.2	.861	3.134	53.8	251.1	53.7	114.1D	1.837	
5- 330	5- 590	.257	146.3	9.0	-1.0	1.091	103.9	.308	1.260	295.1	520.2	.872	1.648A	98.4	.673	2.4	-15.3	264.5	.188	
5- 590	5- 743.9	.208	158.1	2.4	-2.1	.665	108.7	.423	1.244	210.6	342.4	.718A	1.770D	84.8	1.395	2.5	13.7	326.0	.258	
5- 743.9	5- 890	.258	356.3	61.2	10.4	1.258	95.1	.173	.856	324.4	523.2	.708	1.004A	93.4	.918	-10.4	-33.3	101.0	.200	*
		14.03	10.03	5.59	3.99	7.39	4.44	12.58	2/1/2	33.8	78.8	52.3	.901	2.269	72.7	302.5	-46.5	86.0L	1.142	
5- 340	5- 590	.243	152.0	5.5	-1.3	1.099	102.9	.305	1.279	300.1	515.5	.689	1.670A	100.0	.681	2.7	-14.9	269.1	.203	
5- 590	5- 750.0	.205	157.4	.3	-2.8	.666	108.4	.418	1.246	210.7	352.1	.725A	1.767D	87.7	1.396	3.0	17.8	319.4	.241	
5- 750.0	5- 900	.241	358.8	62.6	9.8	1.259	94.2	.168	.857	329.9	529.0	.713	1.002A	92.2	.916	-10.4	-35.0	100.5	.195	
		14.09	9.75	5.37	4.34	7.73	4.39	12.52	2/1/2	29.7	84.6	52.4	1.037	2.264	69.5	293.4	-41.5	99.6D	1.311	
5- 350	5- 590	.231	157.0	1.0	-1.7	1.107	101.9	.304	1.300	305.2	510.8	.904	1.695A	101.4	.690	3.2	-13.9	272.7	.218	
5- 590	5- 757.9	.204	157.1	-4.7	-4.3	.664	107.8	.415	1.241	209.8	363.6	.726	1.756D	91.1	1.396	4.3	25.0	310.5	.246	
5- 757.9	5- 910	.246	1.3	68.0	10.4	1.262	93.1	.164	.860	337.6	534.1	.719	1.002A	91.1	.915	-11.7	-37.9	100.4	.213	
		14.23	9.53	5.17	4.70	8.09	4.36	12.76	2/1/2	26.6	89.6	52.7	.992	2.255	70.7	287.1	-34.6	115.6D	1.245	
5- 360	5- 590	.222	160.4	-6.2	-2.7	1.115	100.9	.305	1.321	310.6	506.4	.919	1.724A	102.7	.699	4.3	-11.3	275.6	.235	
5- 590	5- 768.9	.244	154.2	-26.7	-12.8	.654	106.6	.415	1.222	206.9	378.2	.715	1.729D	95.3	1.393	12.5	52.9	299.4	.376	
5- 768.9	5- 920	.376	10.2	83.5	17.2	1.266	91.4	.162	.864	349.9	538.6	.724	1.004A	90.2	.914	-19.1	-43.3	101.5	.328	
		15.47	10.36	5.03	5.11	8.49	5.34	14.77	2/1/2	25.1	92.2	35.4	.425	3.292	83.6	288.7	-18.8	134.4D	.974	
5- 410	5- 590	.160	183.2	9.0	1.3	1.154	94.4	.322	1.439	341.8	487.7	.976	1.902A	107.6	.742	.6	-21.5	287.1	.289	
5- 590	5- 716.5	.238	170.5	3.1	-.4	.611	109.4	.503	1.147	202.0	290.5	.569A	1.724D	68.1	1.370	1.9	4.6	332.1	.524	
5- 716.5	5- 970	.524	345.9	.4	.2	1.259	114.5	.437	.858	264.0	583.7	.484	1.233	66.2	.898	-3.2	16.7	98.5	.408	
		15.84	9.35	4.16	6.49	9.86	5.19	16.44	1/1/2	11.7	155.1	14.4	.219	7.968	16.9	248.2	16.7	94.9D	1.525	
5- 420	5- 590	.152	180.6	8.6	1.1	1.160	92.6	.328	1.460	349.4	485.1	.982	1.938A	108.3	.749	.9	-20.7	288.1	.299	
5- 590	5- 748.5	.206	157.5	.9	-2.6	.666	108.5	.419	1.246	210.7	349.7	.724A	1.768D	87.0	1.396	2.9	16.7	321.2	.243	
5- 748.5	5- 980	.243	15.4	-2.2	-.4	1.269	100.7	.249	.876	301.4	580.1	.658	1.095	78.8	.910	-3.4	7.4	110.2	.212	
		15.20	8.46	4.07	6.74	10.11	4.40	12.75	1/1/2	10.8	149.5	56.7	1.015	2.105	21.8	255.9	20.1	134.2D	1.121	

MARS ARRIVAL DATE = 2450600 (31 MAY 1997)

5- 270	5- 600	.391	104.9	21.2	-.6	1.055	111.8	.390	1.168	266.2	553.5	.713	1.624	81.6	.631	1.6	-2.3	201.7	.151	
5- 600	5- 743.7	.235	156.9	4.1	-2.0	.686	111.7	.437	1.276	216.1	342.8	.718A	1.834D	84.8	1.403	2.3	12.2	324.9	.264	
5- 743.7	5- 830	.264	350.6	-16.4	-3.2	1.336	99.0	.332	1.035	322.9	461.2	.691	1.378A	109.2	1.033	5.0	36.3	111.8	.350	
		16.52	13.35	8.24	3.17	6.58	5.11	15.20	2/1/1	101.2	16.1	38.2	.864	3.055	49.0	250.1	49.0	118.3D	1.776	
5- 330	5- 600	.247	146.4	10.0	-.8	1.088	103.4	.297	1.247	295.4	525.2	.877	1.618A	96.1	.673	2.3	-15.0	264.6	.170	
5- 600	5- 744.2	.235	156.9	4.0	-2.0	.686	111.7	.437	1.276	216.2	343.6	.719A	1.834D	85.0	1.403	2.3	12.5	324.5	.262	
5- 744.2	5- 890	.262	356.8	61.9	10.6	1.258	95.0	.173	.856	324.6	523.0	.708	1.004A	93.5	.918	-10.7	-33.7	101.0	.203	
		14.12	10.52	5.43	3.59	6.99	5.10	12.63	2/1/2	38.4	78.8	54.6	.878	2.180	72.4	300.9	-46.6	87.3L	1.036	
5- 340	5- 600	.232	152.2	6.9	-.9	1.095	102.4	.292	1.263	300.5	520.6	.894	1.633A	97.6	.680	2.5	-14.9	269.7	.183	
5- 600	5- 750.3	.231	156.4	2.3	-2.6	.686	111.4	.432	1.277	216.1	353.2	.726A	1.829D	88.0	1.403	2.7	15.7	317.8	.244	
5- 750.3	5- 900	.244	359.2	63.3	10.0	1.259	94.2	.168	.858	330.2	528.9	.713	1.002A	92.2	.916	-10.6	-35.4	100.6	.199	
		14.07	10.19	5.18	3.88	7.28	5.01	12.56	2/1/2	33.6	84.5	55.5	1.007	2.146	69.7	292.4	-42.0	100.6D	1.154	
5- 350	5- 600	.216	157.3	3.2	-1.2	1.102	101.3	.289	1.280	305.8	516.1	.910	1.651A	99.0	.688	2.8	-14.3	273.9	.197	
5- 600	5- 757.9	.227	156.6	-1.3	-3.7	.683	110.7	.428	1.269	215.1	364.3	.726	1.812D	91.3	1.403	3.6	20.8	309.5	.247	
5- 757.9	5- 910	.247	1.4	68.2	10.5	1.262	93.1	.164	.860	337.7	534.1	.719	1.002A	91.2	.915	-11.8	-38.0	100.4	.214	
		14.07	9.88	4.96	4.19	7.58	4.92	12.78	2/1/2	29.9	89.5	57.1	.982	2.094	71.0	286.9	-36.9	115.0D	1.074	
5- 410	5- 600	.143	180.1	10.5	1.2	1.143	93.7	.295	1.387	343.8	494.4	.979	1.796A	104.8	.730	.7	-20.9	288.9	.256	
5- 600	5- 714.2	.274	169.6	3.9	-.3	.624	113.6	.531	1.157	205.4	285.5	.543A	1.770D	65.9	1.373	1.9	4.1	331.2	.572	
5- 714.2	5- 970	.572	344.2	.4	.2	1.258	116.8	.470	.857	259.9	583.4	.454	1.261	63.9	.898	-3.2	17.4	98.7	.445	
		15.74	10.05	3.97	5.68	9.06	6.08	17.26	1/1/2	14.7	155.1	13.5	.184	8.508	15.9	247.1	15.8	92.4D	1.382	
5- 420	5- 600	.136	176.3	10.2	.9	1.147	91.9	.298	1.401	351.7	492.2	.983	1.818A	105.4	.735	1.0	-19.9	289.8	.266	
5- 600	5- 747.4	.233	156.6	3.2	-2.3	.687	111.5	.434	1.278	216.3	348.9	.723A	1.832D	86.6	1.403	2.5	14.1	321.0	.250	
5- 747.4	5- 980	.250	14.6	-2.2	-.4	1.269	101.0	.253	.876	300.0	580.4	.654	1.098	78.5	.910	-3.4	7.7	110.0	.216	
		14.82	8.95	3.89	5.88	9.26	5.05	12.82	1/1/2	13.9	149.8	55.6	.961	2.144	18.9	256.1	17.6	133.4D	1.099	

MARS ARRIVAL DATE = 2450610 (10 JUN 1997)

5- 270	5- 610	.400	105.5	21.5	-.5	1.055	112.3	.398	1.168	265.2	557.3	.703	1.632	79.2	.637	1.6	-1.2	198.4	.161	
5- 610	5- 745.4	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	346.9	.722A	1.928D	85.9	1.413	2.2	11.7	321.1	.263	
5- 745.4	5- 830	.263	351.9	-15.6	-3.1	1.340	98.8	.339	1.048	324.2	459.7	.693	1.403A	109.5	1.039	4.8	35.4	112.7	.355	
		17.74	14.36	8.43	3.38	6.76	5.92	15.31	2/1/1	109.5	15.0	40.9	.866	2.862	42.5	248.3	42.5	124.9D	1.617	
5- 340	5- 610	.223	152.3	8.2	-.6	1.091	101.9	.282	1.251	300.9	525.8	.898	1.603A	95.4	.681	2.2	-14.8	269.8	.166	
5- 610	5- 750.7	.263	156.0	3.8	-2.4	.712	114.4	.451	1.322	222.0	355.0	.726A	1.918D	88.4	1.413	2.4	13.9	315.3	.251	
5- 750.7	5- 900	.250	359.9	64.5	10.4	1.260	94.1	.168	.858	330.6	526.7	.714	1.002A	92.3	.916	-11.0	-36.0	100.6	.204	
		14.34	10.85	5.03	3.49	6.90	5.62	12.64	2/1/2	38.2	84.5	59.1	.958	2.028	70.0	290.9	-42.3	102.2D	.984	
5- 410	5- 610	.130	176.6	11.7	1.1	1.134	93.0	.272	1.348	345.8	501.2	.981	1.715A	102.2	.722	.8	-20.1	290.4	.230	
5- 610	5- 711.9	.319	168.9	4.6	-.2	.644	116.4	.564	1.180	209.2	280.9	.515A	1.845D	65.4	1.379	1.9	3.7	330.1	.625	
5- 711.9	5- 970	.625	342.7	.4	.2	1.258	119.4	.508	.857	255.6	582.7	.421	1.292	61.2	.897	-3.2	18.0	99.1	.486	
		16.10	11.11	3.83	4.99	8.37	7.28	18.22	1/1/2	18.1	154.9	13.0	.154	8.838	14.8	245.9	14.6	90.1D	1.208	
5- 420	5- 610	.124	171.6	11.4	.8	1.137	91.3	.274	1.357	354.1	499.3	.985	1.729A	102.7	.725	1.2	-19.0	291.2	.236	
5- 610	5- 745.6	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	347.1	.722A	1.928D	86.0	1.413	2.2	11.7	321.0	.263	
5- 745.6	5- 980	.263	13.2	-2.1	-.4	1.268	101.7	.261	.875	297.6	581.0	.647	1.104	78.0	.910	-3.5	8.2	109.7	.224	
		14.83	9.69	3.77	5.14	8.52	5.92	12.94	1/1/2	17.3	150.4	53.8	.872	2.212	16.3	259.9	15.4	131.4D	1.056	

MARS ARRIVAL DATE = 2450620 (20 JUN 1997)

5- 420	5- 620	.115	186.5	12.0	.6	1.129	90.7	.256	1.324	356.3	506.5	.985	1.663A	100.2	.719	1.3	-17.9	292.2	.210	
5- 620	5- 742.5	.311	156.1	6.3	-1.7	.746	118.3	.486	1.398	228.6	343.7	.718A	2.078D	84.7	1.427	1.9	9.4	321.5	.285	
5- 742.5	5- 980	.265	10.9	-2.0	-.5	1.267	102.8	.275	.874	293.6	581.9	.634	1.114	77.0	.909	-3.5	9.1	109.1	.239	
		15.27	10.76	3.68	4.50	7.90	7.07	15.17	1/1/2	21.2	151.3	50.5	.738	2.345	14.1	255.4	13.5	127.7D	.993	

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 600 DAYS | MARS ARRIVAL DATE = 2450510 | 2 MAR 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																				
S- 270	S- 510	.424	103.0	18.8	-1.7	1.078	113.1	.425	1.239	269.7	516.2	.712	1.766A	105.7	.630	1.6	-13.0	224.8	.233
S- 510	S- 732.7	.150	179.6	-10.3	-2.4	.597	88.7	.409	1.179	178.2	328.4	.697A	1.661	81.0	1.379	3.6	16.6	327.5	.300
S- 732.7	S- 870	.300	349.0	56.7	11.8	1.257	96.7	.189	.856	314.9	511.4	.694	1.018A	96.2	.924	-10.8	-28.1	100.4	.220
		17.17	12.12	8.97	5.05	8.44	3.15	12.88	2/1/2	35.4	67.0	44.9	.670	2.618	75.0	305.6	-48.0	72.6L	1.083
S- 280	S- 510	.418	110.9	17.4	-1.9	1.089	112.6	.428	1.277	273.4	510.4	.730	1.823A	108.6	.649	2.0	-14.2	231.1	.260
S- 510	S- 738.1	.149	176.1	-15.6	-3.9	.602	89.1	.400	1.186	178.6	337.3	.712A	1.661	83.6	1.381	4.9	25.3	325.0	.277
S- 738.1	S- 880	.277	352.7	59.7	11.0	1.257	95.9	.180	.855	319.3	517.4	.701	1.009A	94.8	.920	-10.5	-30.8	101.1	.207
		17.70	11.97	8.83	5.73	9.11	3.14	12.68	2/1/2	29.4	72.8	39.4	.786	2.967	70.5	297.9	-40.3	82.0L	1.546
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																				
S- 270	S- 520	.411	103.0	19.0	-1.6	1.072	112.5	.412	1.221	269.5	520.4	.717	1.724A	102.8	.623	1.6	-12.7	224.8	.211
S- 520	S- 732.9	.148	178.4	-8.8	-2.1	.598	90.8	.409	1.176	181.1	327.2	.694A	1.657D	80.6	1.378	3.3	15.0	329.0	.302
S- 732.9	S- 870	.302	349.3	59.1	12.0	1.257	96.7	.189	.856	315.0	511.3	.694	1.018A	96.2	.924	-10.9	-28.5	100.3	.223
		16.32	11.79	8.68	4.53	7.92	3.11	12.91	2/1/2	39.9	67.1	46.6	.657	2.529	76.2	308.7	-49.2	71.2L	1.006
S- 280	S- 520	.402	110.9	17.7	-1.7	1.082	111.9	.412	1.253	273.3	514.6	.737	1.769A	105.7	.640	1.9	-14.2	231.9	.235
S- 520	S- 738.0	.146	175.5	-12.7	-3.2	.602	91.1	.400	1.183	181.6	335.7	.710A	1.657D	83.1	1.380	4.2	21.6	326.8	.275
S- 738.0	S- 880	.275	352.5	59.4	10.9	1.257	95.9	.180	.855	319.2	517.4	.701	1.009A	94.7	.920	-10.4	-30.7	101.1	.206
		16.66	11.55	8.48	5.11	8.50	3.07	12.66	2/1/2	33.0	72.7	42.1	.794	2.786	72.1	301.7	-43.4	79.6L	1.418
S- 290	S- 520	.396	118.6	15.8	-1.9	1.093	111.4	.415	1.290	277.1	508.9	.755	1.825A	108.4	.658	2.3	-15.1	237.6	.261
S- 520	S- 745.5	.157	169.1	-24.0	-6.6	.606	91.2	.393	1.190	181.9	347.4	.723A	1.657D	86.5	1.382	7.4	39.7	321.1	.279
S- 745.5	S- 890	.279	359.1	64.8	11.6	1.258	94.9	.173	.857	325.6	522.5	.709	1.005A	93.6	.919	-11.7	-35.4	101.0	.219
		17.42	11.65	8.34	5.77	9.15	3.30	12.85	2/1/2	27.6	79.1	33.3	.773	3.487	68.4	289.9	-27.7	97.8D	1.923
S- 290	S- 520	.396	118.6	15.8	-1.9	1.093	111.4	.415	1.290	277.1	508.9	.755	1.825A	108.4	.658	2.3	-15.1	237.6	.261
S- 520	S- 765.5	.159	195.6	20.3	6.3	.604	90.0	.397	1.186	180.0	377.8	.716	1.657	95.0	1.384	-6.0	-31.5	298.0	.277
S- 765.5	S- 890	.277	352.4	-75.0	-12.2	1.268	91.5	.168	.870	349.5	513.4	.724	1.016A	95.1	.928	11.1	72.9	158.8	.214
		17.46	11.69	8.34	5.77	9.15	3.34	12.79	2/2/1	27.6	72.2	50.7	.783	2.336	76.6	281.3	31.1	130.6D	1.046
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																				
S- 230	S- 530	.502	71.4	19.5	-1.6	1.043	117.8	.475	1.127	253.0	546.5	.592	1.662	84.2	.569	.5	5.1	172.8	.181
S- 530	S- 740.5	.145	172.5	-12.2	-3.4	.606	93.3	.398	1.185	185.0	338.7	.714A	1.656D	84.0	1.381	4.3	22.6	326.6	.266
S- 740.5	S- 830	.266	348.0	-18.0	-3.6	1.328	99.3	.321	1.013	320.6	463.8	.688	1.338A	108.7	1.023	5.5	38.1	110.3	.341
		17.67	13.85	10.79	3.82	7.22	3.06	15.02	2/1/1	98.9	18.2	45.7	.852	2.575	63.4	242.8	63.2	109.7D	1.343
S- 230	S- 530	.502	71.4	19.5	-1.6	1.043	117.8	.475	1.127	253.0	546.5	.592	1.662	84.2	.569	.5	5.1	172.8	.181
S- 530	S- 745.7	.151	168.9	-19.2	-5.3	.608	93.3	.393	1.189	185.2	347.1	.722A	1.657D	86.4	1.382	6.1	33.7	322.0	.263
S- 745.7	S- 830	.263	352.1	-15.5	-5.0	1.341	98.8	.340	1.050	324.4	459.5	.693	1.406A	109.5	1.040	4.8	35.2	112.8	.356
		17.78	13.96	10.79	3.82	7.22	3.17	15.33	2/1/1	98.9	14.8	57.0	.869	2.096	61.4	251.8	59.6	117.0D	.953
S- 280	S- 530	.388	111.0	17.9	-1.6	1.077	111.2	.398	1.234	273.2	519.0	.743	1.725A	102.8	.633	1.8	-14.0	232.3	.213
S- 530	S- 738.0	.145	174.0	-10.1	-2.8	.604	93.2	.401	1.182	184.8	334.6	.708A	1.656D	82.8	1.380	3.7	18.9	328.2	.276
S- 738.0	S- 880	.275	352.6	59.5	10.9	1.257	95.9	.180	.855	319.2	517.4	.701	1.009A	94.7	.920	-10.4	-30.7	101.1	.206
		15.81	11.24	8.18	4.58	7.97	3.06	12.66	2/1/2	37.1	72.8	44.2	.792	2.659	73.5	304.8	-45.6	77.8L	1.313
S- 290	S- 530	.379	118.7	16.1	-1.7	1.086	110.6	.397	1.265	277.1	513.3	.762	1.768A	105.5	.649	2.1	-15.0	238.7	.237
S- 530	S- 744.1	.148	170.2	-16.5	-4.5	.608	93.3	.394	1.188	185.1	344.4	.720A	1.657D	85.6	1.382	5.3	29.5	323.6	.260
S- 744.1	S- 890	.260	356.6	61.6	10.5	1.258	95.0	.173	.856	324.5	523.1	.708	1.004A	93.5	.918	-10.6	-33.6	101.0	.202
		16.24	11.09	7.99	5.15	8.53	3.11	12.61	2/1/2	31.0	78.8	38.7	.887	3.016	68.9	294.9	-35.8	91.6D	1.789
S- 290	S- 530	.379	118.7	16.1	-1.7	1.086	110.6	.397	1.265	277.1	513.3	.762	1.768A	105.5	.649	2.1	-15.0	238.7	.237
S- 530	S- 763.9	.183	198.4	31.7	10.2	.607	92.3	.394	1.187	183.6	374.5	.719	1.654D	94.1	1.384	-10.0	-48.0	298.9	.321
S- 763.9	S- 890	.321	358.8	-78.5	-14.4	1.268	91.8	.168	.869	347.6	514.1	.723	1.015A	94.9	.928	13.4	76.3	164.3	.248
		17.00	11.85	7.99	5.15	8.53	3.87	13.31	2/2/1	31.0	75.1	37.3	.582	3.125	79.1	282.1	21.7	132.1D	1.238
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																				
S- 280	S- 540	.377	111.0	18.2	-1.4	1.072	110.7	.386	1.219	273.1	523.3	.748	1.690A	100.0	.629	1.8	-13.5	232.0	.194
S- 540	S- 738.1	.147	171.8	-7.6	-2.5	.608	95.5	.403	1.182	188.2	333.7	.706A	1.658D	82.5	1.380	3.4	16.9	329.4	.277
S- 738.1	S- 880	.277	352.7	59.7	11.0	1.257	95.9	.180	.855	319.3	517.4	.701	1.009A	94.8	.920	-10.5	-30.8	101.1	.207
		15.15	11.03	7.94	4.12	7.52	3.09	12.68	2/1/2	41.9	72.8	46.0	.785	2.559	74.6	307.4	-47.1	76.5L	1.224
S- 290	S- 540	.365	118.7	16.5	-1.5	1.081	109.9	.383	1.246	277.0	517.7	.769	1.723A	102.7	.642	2.0	-14.9	239.3	.215
S- 540	S- 743.7	.147	169.0	-12.0	-3.7	.611	95.6	.395	1.189	188.6	342.9	.719A	1.659D	85.2	1.382	4.4	24.5	325.2	.256
S- 743.7	S- 890	.255	355.9	60.7	10.2	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.0	101.0	.197
		15.39	10.78	7.69	4.61	8.00	3.10	12.54	2/1/2	34.8	78.7	41.8	.921	2.801	70.1	298.2	-39.8	88.6L	1.658
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																				
S- 280	S- 550	.368	111.1	18.5	-1.3	1.068	110.3	.377	1.208	272.9	527.6	.752	1.663A	97.3	.626	1.7	-12.9	231.1	.177
S- 550	S- 736.2	.151	169.2	-5.1	-2.2	.613	97.9	.405	1.185	191.9	333.0	.705A	1.664D	82.3	1.380	3.1	15.3	330.4	.278
S- 736.2	S- 880	.278	353.0	60.0	11.1	1.257	95.9	.180	.855	319.4	517.3	.701	1.009A	94.8	.920	-10.6	-31.0	101.0	.208
		14.68	10.94	7.75	3.74	7.14	3.19	12.70	2/1/2	47.4	72.9	47.6	.776	2.477	75.5	309.4	-48.2	75.7L	1.148
S- 290	S- 550	.354	118.7	16.6	-1.4	1.076	109.4	.371	1.231	277.0	522.2	.774	1.667A	100.0	.636	2.0	-14.5	239.4	.195
S- 550	S- 743.6	.150	166.8	-8.3	-3.1	.617	97.9	.398	1.191	192.4	342.0	.716A	1.665D	84.9	1.383	3.8	21.2	326.3	.254
S- 743.6	S- 890	.254	355.7	60.4	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		14.75	10.61	7.44	4.14	7.54	3.17	12.52	2/1/2	39.3	78.7	44.3	.932	2.654	71.1	300.6	-42.3	86.7L	1.542
S- 300	S- 550	.342	126.1	14.7	-1.5	1.085	108.6	.368	1.256	281.1	516.7	.794	1.718A	102.4	.651	2.2	-15.4	245.9	.215
S- 550	S- 751.0	.158	163.5	-16.9	-5.6	.619	97.8	.393	1.195	192.4	353.7	.726A	1.665D	88.2	1.384	6.0	34.9	318.3	.255
S- 751.0	S- 900	.255	.4	65.3	10.8	1.260	94.1	.168	.858	330.9	528.5	.714	1.002A	92.3	.916	-11.3	-36.4	100.7	.208
		13.13	10.52	7.20	4.61	8.00	3.32	12.70	2/1/2	33.0	84.5	39.3	.926	2.973	68.7	289.6	-30.1	105.8D	1.826
S- 300	S- 550	.342	126.1	14.7	-1.5	1.085	108.6	.368	1.256	281.1	516.7	.794	1.718A	102.4	.651	2.2	-15.4	245.9	.215
S- 550	S- 769.0	.192	196.3	33.5	10.9	.613	96.3	.398	1.184	189.6	379.9	.713	1.655D	95.6	1.384	-10.9	-48.8	297.9	.348
S- 769.0	S- 900	.347	349.0	-82.3	-15.8	1.267	90.8	.163	.866	354.4	522.6	.725	1.007A	93.3	.922	14.3	79.0	172.0	.256
		15.90	11.29	7.20	4.61	8.00	4.09	13.44	2/2/1	33.0	81.8	36.8	.498	3.168	83.4	287.6	22.2	134.2D	1.079
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																				
S- 280	S- 560	.361	111.2	18.8	-1.1	1.065	110.0	.370	1.199	272.8	532.0	.755	1.642A	94.7	.625	1.7	-11.9	229.3	.163
S- 560	S- 738.3	.160	166.4	-2.7	-2.1	.621	100.4	.408	1.190	195.9	332.7	.704A	1.676D	82.2	1.382	2.8	14.0	330.9	.280
S- 738.3	S- 880	.280	353.2	60.3	11.2	1.257	95.9	.180	.855	319.5	517.2	.701	1.009A	94.8	.920	-10.7	-31.2	101.0	.210
		14.39	10.96	7.61	3.43	6.83	3.36	12.73	2/1/2	53.8	72.9	49.1	.766	2.406	76.0	310.8	-49.0	75.1L	1.078
S- 290	S- 560	.344	118.8	17.2	-1.2	1.072	108.9	.361	1.218	276.9	526.6	.779	1.658A	97.3	.636	1.9	-13.9	238.8	.177
S- 560	S- 743.6	.158	164.5	-5.0	-2.8	.625	100.4	.401	1.197	196.4	341.5	.717A	1.677D	84.7	1.384	3.4	18.7	327.0	.254
S- 743.6	S- 890	.254	355.7	60.4	10.1	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		14.32	10.57	7.25	3.75	7.15	3.33	12.52	2/1/2	44.5	78.7	46.4	.933	2.540	71.9	302.2	-44.1	85.6L	1.436
S- 300	S- 560	.330	126.2	15.2	-1.3	1.080	108.1	.355	1.240	281.1	521.2	.800	1.681A	99.8	.647	2.1	-15.1	246.3	.195
S- 560	S- 750.2	.160	162.3	-10.4	-4.3	.627	100.3	.396	1.201	196.5	352.1	.725A	1.677D	87.7	1.386	4.7	27.7	319.9	.243
S- 750.2	S- 900	.243	359.1	63.2	10.0	1.259	94.2	.168	.858	330.1	528.9	.713	1.002A	92.2	.916	-10.6	-35.5	100.6	.198
		14.47	10.33	6.96	4.14	7.54	3.37	12.55	2/1/2	37.2	84.5	43.6	1.014	2.696	68.5	291.9	-35.2	102.0D	1.720
S- 270	S- 560	.303	186.3	31.0	8.1	1.155	102.5	.387	1.487	313.7	485.7	.911	2.063A	112.1	.744	-6.5	-37.2	272.1	.341
S- 560	S- 728.4	.168	171.4	-.7	-1.2	.607	100.1	.431	1.166	193.9	314.9	.664A	1.669D	76.6	1.375	2.3	8.4	333.6	.360
S- 728.4	S- 970	.360	355.6	.5	.2	1.261	106.5	.321	.863	281.3	582.4	.586	1.140	74.1	.902	-3.3	13.0	99.4	.285
		17.85	9.98	6.44	7.86	11.25	3.54	15.96	1/1/2	17.7	152.9	25.3	.464	4.957	20.5	253.0	20.0	107.9D	1.836
S- 280	S- 560	.265	184.1	15.6	3.6	1.166	101.4	.400	1.543	319.0	481.1	.925	2.160A	113.4	.760	-2.0	-27.9	275.0	.352
S- 560	S- 748.6	.159	162.8	-8.7	-3.8	.626	100.3	.397	1.201	196.5	349.5	.724A	1.677D	87.0	1.385	4.3	25.1	321.9	.243
S- 748.6	S- 880	.243	15.5	-2.2	-.4	1.269	100.7	.249	.877	301.5	580.1	.658	1.095	78.8	.911	-3.4	7.4	110.2	.212
		17.25	9.08	5.74	8.17	11.54	3.35	12.75	1/1/2	10.0	149.5	58.6	1.017	2.043	31.4	253.1	28.2	133.1D	1.060
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																				
S- 280	S- 570	.357	111.4	19.1	-1.0	1.063	109.7	.365	1.192	272.5	536.3	.757	1.626A	92.1	.626	1.7	-10.8	226.8	.151
S- 570	S- 738.4	.172	163.7	-.4	-1.9	.631	103.1	.413	1.199	200.2	332.6	.704A	1.695D	82.1	1.384	2.6	12.8	331.2	.282
S- 738.4	S- 880	.282	353.5	60.7	11.3	1.257	95.9	.180	.856	319.6	517.1	.702	1.010A	94.8	.921	-10.8	-31.5	101.0	.212
		14.52	11.13	7.51	3.19	6.59	3.62	12.75	2/1/2	61.1	73.0	50.6	.755	2.342	76.4	311.5	-49.5	79.0L	1.013

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2450570
1 MAY 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 290	5- 570	.337	118.9	17.6	-1.0	1.069	108.6	.353	1.209	276.8	531.1	.782	1.635A	94.8	.636	1.8	-13.2	237.4	.162
5- 570	5- 743.7	.170	162.1	-2.2	-2.5	.635	103.1	.406	1.207	200.8	341.4	.717A	1.697D	84.7	1.386	3.0	16.8	327.2	.255
5- 743.7	5- 890	.255	355.8	60.5	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.9	101.0	.197
		14.10	10.68	7.10	3.42	6.82	3.58	12.53	2/1/2	50.5	78.7	48.3	.927	2.443	72.4	303.1	-45.3	85.2L	1.338
5- 300	5- 570	.320	126.2	15.6	-1.1	1.076	107.6	.345	1.228	281.1	525.8	.805	1.651A	97.2	.646	2.0	-14.7	246.0	.177
5- 570	5- 749.9	.170	160.6	-5.9	-3.6	.637	102.9	.401	1.210	200.9	351.4	.725A	1.696D	87.6	1.388	3.9	23.4	320.5	.240
5- 749.9	5- 900	.240	358.7	62.4	9.7	1.259	94.2	.168	.857	329.8	529.0	.713	1.002A	92.2	.916	-10.4	-34.9	100.5	.195
		14.08	10.34	6.76	3.74	7.14	3.58	12.51	2/1/2	42.2	84.6	46.7	1.045	2.523	68.9	293.2	-38.2	100.1D	1.592
5- 310	5- 570	.306	133.2	13.2	-1.2	1.084	106.7	.339	1.248	285.5	520.6	.825	1.672A	99.4	.656	2.3	-15.4	252.8	.194
5- 570	5- 759.5	.186	157.5	-19.5	-7.8	.635	102.3	.399	1.207	199.9	365.6	.725	1.689D	91.6	1.388	7.9	42.4	308.9	.282
5- 759.5	5- 910	.282	4.4	73.0	12.3	1.263	92.8	.164	.861	339.6	533.5	.720	1.002A	91.3	.915	-13.7	-40.1	100.5	.243
		14.54	10.42	6.49	4.12	7.52	3.93	13.23	2/1/2	35.7	89.1	39.9	.758	2.929	73.9	286.1	-24.4	121.8D	1.463
5- 360	5- 570	.245	185.5	20.0	4.3	1.153	100.4	.364	1.467	319.9	486.6	.932	2.001A	110.5	.742	-2.7	-29.6	277.7	.318
5- 570	5- 748.9	.170	160.8	-5.1	-3.4	.637	102.9	.402	1.210	200.9	349.9	.724A	1.696D	87.1	1.388	3.7	22.1	321.7	.241
5- 748.9	5- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	301.9	579.9	.659	1.094	78.9	.911	-3.4	7.3	110.2	.210
		16.20	8.97	5.39	7.24	10.61	3.57	12.73	1/1/2	12.9	149.4	58.0	1.038	2.063	28.1	254.4	25.4	133.9D	1.103

MARS ARRIVAL DATE = 2450580 (11 MAY 1997)

5- 280	5- 580	.354	111.6	19.5	-.9	1.061	109.6	.362	1.186	272.2	540.6	.757	1.616	89.7	.629	1.7	-9.4	223.4	.143
5- 580	5- 738.6	.188	161.3	1.7	-1.8	.644	105.9	.420	1.214	204.9	332.9	.704A	1.724D	82.1	1.388	2.4	11.8	331.0	.284
5- 738.6	5- 880	.284	353.9	61.0	11.5	1.257	95.8	.180	.856	319.7	517.0	.702	1.010A	94.8	.921	-11.0	-31.7	101.0	.214
		14.47	11.45	7.46	3.02	6.43	3.99	12.78	2/1/2	69.3	73.1	52.0	.743	2.282	76.5	311.5	-49.9	75.2L	.952
5- 290	5- 580	.331	119.0	18.0	-.9	1.067	108.3	.347	1.201	276.7	535.5	.784	1.618A	92.4	.637	1.8	-12.2	235.2	.150
5- 580	5- 743.8	.186	159.9	.3	-2.3	.648	105.8	.413	1.221	205.5	341.7	.717A	1.726D	84.7	1.390	2.8	15.1	326.9	.256
5- 743.8	5- 890	.256	356.0	60.8	10.3	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.1	101.0	.198
		14.09	10.93	6.99	3.16	6.57	3.94	12.55	2/1/2	57.4	78.7	50.3	.916	2.355	72.7	303.2	-46.1	85.3L	1.241
5- 300	5- 580	.312	126.3	16.1	-.9	1.073	107.2	.336	1.216	281.1	530.4	.808	1.627A	94.8	.646	2.0	-14.0	244.9	.162
5- 580	5- 749.9	.185	158.8	-2.4	-3.1	.650	105.6	.408	1.225	205.6	351.5	.725A	1.725D	87.5	1.391	3.4	20.3	320.3	.239
5- 749.9	5- 900	.239	358.6	62.3	9.7	1.259	94.2	.168	.857	329.8	529.1	.713	1.002A	92.2	.916	-10.3	-34.8	100.5	.194
		13.93	10.52	6.61	3.41	6.81	3.91	12.50	2/1/2	47.8	84.6	49.6	1.051	2.386	69.2	293.7	-40.1	99.5D	1.456
5- 310	5- 580	.296	133.3	13.8	-1.0	1.080	106.2	.329	1.236	285.6	525.3	.830	1.641A	97.0	.655	2.1	-15.0	252.7	.176
5- 580	5- 758.2	.188	157.7	-9.9	-5.3	.648	105.0	.406	1.221	204.7	363.8	.726	1.717D	91.1	1.392	5.4	31.0	310.6	.252
5- 758.2	5- 910	.252	1.8	69.0	10.8	1.262	93.1	.164	.860	338.0	534.0	.719	1.002A	91.2	.915	-12.0	-36.4	100.4	.218 ○
		14.00	10.28	6.30	3.72	7.12	3.99	12.84	2/1/2	40.4	89.5	47.7	.944	2.474	71.1	286.8	-31.2	117.3D	1.391
5- 380	5- 580	.235	188.9	27.5	5.7	1.142	99.5	.334	1.410	321.0	492.2	.939	1.881A	107.7	.728	-4.0	-33.4	280.2	.289
5- 580	5- 748.9	.185	159.0	-1.9	-3.0	.650	105.6	.409	1.225	205.6	350.0	.724A	1.725D	87.1	1.391	3.3	19.3	321.4	.241
5- 748.9	5- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	302.0	579.9	.659	1.094	78.9	.911	-3.4	7.3	110.2	.210
		15.62	9.15	5.24	6.47	9.84	3.92	12.73	1/1/2	17.2	149.4	57.4	1.039	2.081	24.8	255.4	22.7	134.3D	1.123

MARS ARRIVAL DATE = 2450590 (21 MAY 1997)

5- 290	5- 590	.328	119.2	18.4	-.7	1.065	108.2	.343	1.195	276.4	539.9	.785	1.606A	90.0	.640	1.8	-11.0	232.2	.141
5- 590	5- 743.9	.208	158.1	2.4	-2.1	.665	108.7	.423	1.244	210.6	342.4	.718A	1.770D	84.8	1.395	2.5	13.7	326.0	.258
5- 743.9	5- 890	.258	356.3	61.2	10.4	1.258	95.1	.173	.856	324.4	523.2	.708	1.004A	93.4	.918	-10.4	-33.3	101.0	.200
		14.33	11.36	6.92	2.97	6.38	4.44	12.58	2/1/2	65.2	78.8	52.3	.901	2.269	72.7	302.5	-46.5	86.0L	1.142
5- 300	5- 590	.306	126.4	16.6	-.8	1.071	106.9	.330	1.210	281.0	535.0	.811	1.609A	92.5	.648	1.9	-12.2	243.0	.149
5- 590	5- 750.0	.205	157.4	.3	-2.8	.666	108.4	.418	1.246	210.7	352.1	.725A	1.767D	87.7	1.396	3.0	17.8	319.4	.241
5- 750.0	5- 900	.241	358.8	62.6	9.8	1.259	94.2	.168	.857	329.9	529.0	.713	1.002A	92.2	.916	-10.4	-35.0	100.5	.195
		14.02	10.88	6.50	3.13	6.54	4.39	12.52	2/1/2	54.4	84.6	52.4	1.037	2.264	69.5	293.4	-41.3	99.6D	1.311
5- 310	5- 590	.288	133.4	14.4	-.8	1.077	105.8	.320	1.225	285.6	530.0	.834	1.617A	94.6	.656	2.1	-14.5	251.8	.160
5- 590	5- 757.9	.204	157.1	-4.7	-4.3	.664	107.8	.415	1.241	209.8	363.6	.726	1.756D	91.1	1.396	4.3	25.0	310.5	.246
5- 757.9	5- 910	.246	1.3	68.0	10.4	1.262	93.1	.164	.860	337.6	534.1	.719	1.002A	91.1	.915	-11.7	-37.9	100.4	.213 *
		13.88	10.51	6.15	3.58	6.78	4.36	12.76	2/1/2	45.9	89.6	52.7	.992	2.255	70.7	287.1	-34.6	115.6D	1.245
5- 320	5- 590	.271	140.0	11.9	-.9	1.084	104.8	.313	1.242	290.3	525.1	.854	1.631A	96.6	.664	2.2	-15.1	258.9	.174
5- 590	5- 768.9	.244	154.2	-26.7	-12.8	.654	106.6	.415	1.222	206.9	378.2	.715	1.729D	95.3	1.393	12.5	52.9	299.4	.376
5- 768.9	5- 920	.376	10.2	83.5	17.2	1.266	91.4	.162	.864	349.9	536.8	.724	1.004A	90.2	.914	-19.1	-43.3	101.3	.328
		14.85	11.19	5.85	3.67	7.07	5.34	14.77	2/1/2	39.1	92.2	55.4	.425	3.292	83.6	288.7	-18.8	134.4D	.974
5- 370	5- 590	.243	157.5	-28.0	-7.1	1.124	99.9	.306	1.344	316.1	502.1	.932	1.756A	103.9	.709	8.8	-.6	276.3	.267
5- 590	5- 716.5	.238	170.5	3.1	-.4	.611	109.4	.503	1.147	202.0	290.5	.569A	1.724D	68.1	1.370	1.9	4.6	332.1	.524
5- 716.5	5- 970	.524	345.9	.4	.2	1.259	114.5	.437	.858	264.0	583.7	.484	1.233	66.2	.898	-3.2	16.7	98.5	.408
		16.45	10.55	5.36	5.90	9.28	5.19	16.44	2/1/2	30.6	155.1	14.4	.219	7.968	16.9	248.2	16.7	94.9D	1.525
5- 380	5- 590	.271	202.5	43.5	10.4	1.132	98.7	.309	1.368	322.1	498.0	.945	1.790A	105.0	.718	-8.6	-45.6	282.3	.278
5- 590	5- 748.5	.206	157.5	.9	-2.6	.666	108.5	.419	1.246	210.7	349.7	.724A	1.768D	87.0	1.396	2.9	16.7	321.2	.243
5- 748.5	5- 980	.243	15.4	-2.2	-.4	1.269	100.7	.249	.876	301.4	580.1	.658	1.095	78.8	.910	-3.4	7.4	110.2	.212
		16.42	10.24	5.84	6.19	9.56	4.40	12.75	1/1/2	28.3	149.5	56.7	1.015	2.105	21.8	255.9	20.1	134.2D	1.121

MARS ARRIVAL DATE = 2450600 (31 MAY 1997)

5- 290	5- 600	.327	119.5	18.8	-.6	1.063	108.1	.341	1.191	276.1	544.3	.785	1.598	87.8	.644	1.8	-9.6	228.4	.135
5- 600	5- 744.2	.235	156.9	4.0	-2.0	.686	111.7	.437	1.276	216.2	343.6	.719A	1.834D	85.0	1.403	2.3	12.5	324.5	.262
5- 744.2	5- 890	.262	356.8	61.9	10.6	1.258	95.0	.173	.856	324.6	523.0	.708	1.004A	93.5	.918	-10.7	-33.7	101.0	.203
		14.84	11.99	6.89	2.85	6.26	5.10	12.63	2/1/2	73.9	78.8	54.6	.878	2.180	72.4	300.9	-46.6	87.3L	1.036
5- 300	5- 600	.302	126.6	17.1	-.6	1.069	106.8	.325	1.204	280.8	539.5	.812	1.595A	90.2	.651	1.9	-12.1	240.3	.139
5- 600	5- 750.3	.231	156.4	2.3	-2.6	.686	111.4	.432	1.277	216.1	353.2	.726A	1.829D	88.0	1.403	2.7	15.7	317.8	.244
5- 750.3	5- 900	.244	359.2	63.3	10.0	1.259	94.2	.168	.858	330.2	528.9	.713	1.002A	92.2	.916	-10.6	-35.4	100.6	.199
		14.36	11.43	6.42	2.93	6.34	5.01	12.56	2/1/2	62.0	84.5	55.5	1.007	2.146	69.7	292.4	-42.0	100.6D	1.154
5- 310	5- 600	.282	133.5	15.0	-.6	1.075	105.5	.313	1.217	285.6	534.7	.836	1.599A	92.4	.658	2.0	-13.7	250.2	.147
5- 600	5- 757.9	.227	156.6	-1.3	-3.7	.683	110.7	.428	1.269	215.1	364.3	.726	1.812D	91.3	1.403	3.6	20.8	309.5	.247
5- 757.9	5- 910	.247	1.4	66.2	10.5	1.262	93.1	.164	.860	337.7	534.1	.719	1.002A	91.2	.915	-11.8	-38.0	100.4	.214
		14.05	10.95	6.03	3.10	6.51	4.92	12.78	2/1/2	52.2	89.5	57.1	.982	2.094	71.0	286.9	-36.9	115.0D	1.074
5- 370	5- 600	.199	162.5	-12.2	-3.2	1.117	99.2	.287	1.316	317.1	507.7	.938	1.695A	101.5	.703	4.9	-8.6	279.4	.227
5- 600	5- 714.2	.274	169.6	3.9	-.3	.624	113.6	.531	1.157	205.4	285.5	.543A	1.770D	65.9	1.373	1.9	4.1	331.2	.572
5- 714.2	5- 970	.572	344.2	.4	.2	1.258	116.8	.470	.857	259.9	583.4	.454	1.261	63.9	.898	-3.2	17.4	98.7	.445
		15.66	10.76	4.67	4.90	8.29	6.08	17.26	2/1/2	26.9	155.1	13.5	.184	8.508	15.9	247.1	15.8	92.4D	1.382

MARS ARRIVAL DATE = 2450610 (10 JUN 1997)

5- 300	5- 610	.300	126.9	17.6	-.4	1.067	106.7	.323	1.199	280.5	544.0	.812	1.586	88.1	.655	1.8	-10.9	236.7	.131
5- 610	5- 750.7	.263	156.0	3.8	-2.4	.712	114.4	.451	1.322	222.0	355.0	.726A	1.918D	88.4	1.413	2.4	13.9	315.3	.251
5- 750.7	5- 900	.250	359.9	64.5	10.4	1.260	94.1	.168	.858	330.6	528.7	.714	1.002A	92.3	.916	-11.0	-36.0	100.6	.204
		14.99	12.20	6.38	2.79	6.20	5.82	12.64	2/1/2	70.4	84.5	59.1	.958	2.028	70.0	290.9	-42.3	102.2D	.984
5- 370	5- 610	.180	164.5	-4.5	-1.7	1.111	98.6	.272	1.295	318.0	513.5	.943	1.647A	99.1	.700	3.4	-11.7	281.1	.201
5- 610	5- 711.9	.319	168.9	4.6	-.2	.644	118.4	.564	1.180	209.2	280.9	.515A	1.845D	63.4	1.379	1.9	3.7	330.1	.625
5- 711.9	5- 970	.625	342.7	.4	.2	1.258	119.4	.508	.857	255.6	582.7	.421	1.292	61.2	.897	-3.2	16.0	99.1	.486
		15.98	11.70	4.42	4.28	7.67	7.28	18.22	2/1/2	28.3	154.9	13.0	.154	8.838	14.8	249.9	14.6	90.1D	1.206
5- 380	5- 610	.185	160.7	-23.5	-4.6	1.117	97.4	.271	1.309	324.3	509.8	.955	1.664A	100.1	.707	8.4	-2.9	282.1	.222
5- 610	5- 745.6	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	347.1	.722A	1.926D	86.0	1.413	2.2	11.7	321.0	.263
5- 745.6	5- 980	.263	13.2	-2.1	-.4	1.268	101.7	.261	.875	297.6	581.0	.647	1.104	78.0	.910	-3.5	8.2	109.7	.224
		15.16	10.40	4.46	4.78	8.17	5.92	12.94	2/1/2	31.3	150.4	53.8	.872	2.212	16.3	255.9	15.4	131.4D	1.058

MARS ARRIVAL DATE = 2450620 (20 JUN 1997)

5- 380	5- 620	.155	166.1	-6.6	-1.6	1.112	98.8	.256	1.290	325.5	515.8	.959	1.620A	97.8	.705	3.4	-10.5	284.5	.190
5- 620	5- 742.5	.311	156.1	6.3	-1.7	.748	118.3	.486	1.398	228.8	343.7	.718A	2.078D	84.7	1.427	1.9	9.4	321.5	.285
5- 742.5	5- 980	.285	10.9	-2.0	-.5	1.267	102.8	.275	.874	293.6	581.9	.634	1.114	77.0	.909	-3.5	9.1	109.1	.259
		15.21	11.18	4.11	4.03	7.42	7.07	13.17	2/1/2	29.9	151.3	50.5	.738	2.345	14.1	255.4	13.5	127.7D	.993

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2450510
2 MAR 1997

LAUNCH	ARRIVE	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
DEPART	SWNGBY	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
SWNGBY	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2450510 (2 MAR 1997)																			
5- 230	5- 510	.491	70.7	19.1	-1.6	1.045	117.2	.466	1.133	254.5	539.2	.605	1.661A	90.7	.568	.5	1.6	180.6	.175
5- 510	5- 732.7	.150	179.6	-10.3	-2.4	.597	88.7	.409	1.179	178.2	328.4	.697A	1.661	81.0	1.379	3.0	16.6	327.5	.300
5- 732.7	5- 870	.300	349.0	58.7	11.8	1.257	96.7	.189	.856	314.9	511.4	.694	1.018A	96.2	.924	-10.8	-28.1	100.4	.220
		17.39	13.70	10.55	3.70	7.10	3.15	12.88	2/1/2	81.4	67.0	44.9	.670	2.618	75.0	305.6	-48.0	72.6L	1.083
5- 240	5- 510	.465	78.7	19.8	-1.6	1.052	115.7	.446	1.154	258.5	533.5	.639	1.669A	95.1	.582	.8	-3.7	194.9	.176
5- 510	5- 738.1	.149	176.1	-15.6	-3.9	.602	89.1	.400	1.186	178.6	337.3	.712A	1.661	83.6	1.381	4.9	25.3	325.0	.277
5- 738.1	5- 880	.277	352.7	59.7	11.0	1.257	95.9	.180	.855	319.3	517.4	.701	1.009A	94.8	.920	-10.5	-30.8	101.1	.207
		16.79	13.07	9.93	3.73	7.13	3.14	12.68	2/1/2	66.3	72.8	39.4	.786	2.967	70.5	297.9	-40.3	82.0L	1.546
5- 240	5- 510	.465	78.7	19.8	-1.6	1.052	115.7	.446	1.154	258.5	533.5	.639	1.669A	95.1	.582	.8	-3.7	194.9	.176
5- 510	5- 738.5	.180	199.4	29.8	9.8	.605	88.7	.393	1.193	177.9	369.2	.724	1.661	92.6	1.385	-9.2	-47.1	300.3	.302
5- 738.5	5- 880	.302	2.1	-73.6	-13.2	1.270	92.9	.177	.875	340.7	505.7	.720	1.029A	96.6	.935	12.8	73.0	155.3	.246
		17.46	13.74	9.93	3.73	7.13	3.81	13.32	2/2/1	66.3	67.9	37.4	.658	3.116	73.9	275.9	20.6	130.5D	1.392
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																			
5- 230	5- 520	.495	71.0	19.3	-1.6	1.044	117.4	.469	1.129	253.8	542.9	.600	1.659	87.4	.567	.5	3.4	176.6	.176
5- 520	5- 732.9	.148	178.4	-8.8	-2.1	.598	90.8	.409	1.176	181.1	327.2	.694A	1.657D	80.6	1.378	3.3	15.0	329.0	.302
5- 732.9	5- 870	.302	349.3	59.1	12.0	1.257	96.7	.189	.856	315.0	511.3	.694	1.018A	96.2	.924	-10.9	-28.5	100.3	.223
		17.45	13.74	10.65	3.70	7.10	3.11	12.91	2/1/2	90.3	67.1	46.6	.657	2.529	76.2	308.7	-49.2	71.2L	1.006
5- 240	5- 520	.464	78.9	19.9	-1.5	1.049	115.6	.445	1.148	258.0	537.5	.637	1.658A	92.0	.580	.8	-2.0	191.3	.169
5- 520	5- 738.0	.146	175.5	-12.7	-3.2	.602	91.1	.400	1.183	181.6	335.7	.710A	1.657D	83.1	1.380	4.2	21.6	326.8	.275
5- 738.0	5- 880	.275	352.5	59.4	10.9	1.257	95.9	.180	.855	319.2	517.4	.701	1.009A	94.7	.920	-10.4	-30.7	101.1	.206
		16.52	12.96	9.89	3.56	6.96	3.07	12.66	2/1/2	74.6	72.7	42.1	.794	2.786	72.1	301.7	-43.4	79.6L	1.418
5- 250	5- 520	.441	86.9	20.1	-1.5	1.056	114.3	.428	1.169	261.9	531.9	.669	1.669A	96.0	.593	1.1	-6.7	204.8	.175
5- 520	5- 745.3	.157	169.1	-24.0	-6.6	.606	91.2	.393	1.190	181.9	347.4	.723A	1.657D	86.5	1.382	7.4	39.7	321.1	.279
5- 745.3	5- 890	.279	359.1	64.8	11.6	1.258	94.9	.173	.857	325.6	522.5	.709	1.005A	93.6	.919	-11.7	-35.4	101.0	.219
		16.36	12.66	9.35	3.70	7.10	3.30	12.85	2/1/2	60.5	79.1	33.3	.773	3.487	68.4	289.9	-27.7	97.8D	1.923
5- 250	5- 520	.441	86.9	20.1	-1.5	1.056	114.3	.428	1.169	261.9	531.9	.669	1.669A	96.0	.593	1.1	-6.7	204.8	.175
5- 520	5- 765.5	.159	195.6	20.3	6.3	.604	90.0	.397	1.186	180.0	377.8	.716	1.657	95.0	1.384	-6.0	-31.5	298.0	.277
5- 765.5	5- 890	.277	352.4	-75.0	-12.2	1.268	91.5	.168	.870	349.5	513.4	.724	1.016A	95.1	.928	11.1	72.9	158.8	.214
		16.40	12.70	9.35	3.70	7.10	3.34	12.79	2/2/1	60.5	72.2	50.7	.783	2.336	76.6	281.3	31.1	130.6D	1.046
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																			
5- 240	5- 530	.465	79.2	20.1	-1.5	1.048	115.7	.446	1.143	257.4	541.3	.634	1.653	88.9	.580	.8	-.1	187.3	.166
5- 530	5- 738.0	.145	174.0	-10.1	-2.8	.604	93.2	.401	1.182	184.8	334.6	.708A	1.656D	82.8	1.380	3.7	18.9	328.2	.276
5- 738.0	5- 880	.275	352.6	59.5	10.9	1.257	95.9	.180	.855	319.2	517.4	.701	1.009A	94.7	.920	-10.4	-30.7	101.1	.206
		16.47	12.97	9.92	3.49	6.90	3.06	12.66	2/1/2	83.4	72.8	44.2	.792	2.659	73.5	304.8	-45.6	77.8L	1.313
5- 250	5- 530	.437	87.1	20.3	-1.4	1.053	114.1	.425	1.162	261.5	535.9	.668	1.655A	93.0	.592	1.1	-5.2	201.6	.165
5- 530	5- 744.1	.148	170.2	-16.5	-4.5	.608	93.3	.394	1.188	185.1	344.4	.720A	1.657D	85.6	1.382	5.3	29.5	323.6	.280
5- 744.1	5- 890	.260	356.6	61.6	10.5	1.258	95.0	.173	.856	324.5	523.1	.708	1.004A	93.5	.918	-10.6	-33.6	101.0	.202
		15.87	12.39	9.28	3.49	6.89	3.11	12.61	2/1/2	68.3	78.8	38.7	.887	3.016	68.9	294.9	-35.8	91.6D	1.789
5- 250	5- 530	.437	87.1	20.3	-1.4	1.053	114.1	.425	1.162	261.5	535.9	.668	1.655A	93.0	.592	1.1	-5.2	201.6	.165
5- 530	5- 763.9	.183	198.4	31.7	10.2	.607	92.3	.394	1.187	183.6	374.5	.719	1.654D	94.1	1.384	-10.0	-48.0	298.9	.321
5- 763.9	5- 890	.321	358.8	-78.5	-14.4	1.268	91.8	.168	.869	347.6	514.1	.723	1.015A	94.9	.928	13.4	76.3	164.3	.248
		16.63	13.14	9.28	3.49	6.89	3.87	13.31	2/2/1	68.3	75.1	37.3	.582	3.125	79.1	282.1	21.7	132.1D	1.238
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																			
5- 240	5- 540	.469	79.5	20.3	-1.4	1.047	116.0	.449	1.140	256.7	545.1	.628	1.652	85.9	.581	.8	1.7	183.3	.167
5- 540	5- 738.1	.147	171.8	-7.6	-2.5	.608	95.5	.403	1.182	188.2	333.7	.706A	1.656D	82.5	1.380	3.4	16.9	329.4	.277
5- 738.1	5- 880	.277	352.7	59.7	11.0	1.257	95.9	.180	.855	319.3	517.4	.701	1.009A	94.8	.920	-10.5	-30.8	101.1	.207
		16.63	13.10	10.01	3.53	6.93	3.09	12.68	2/1/2	92.3	72.8	46.0	.785	2.559	74.6	307.4	-47.1	76.5L	1.224
5- 250	5- 540	.436	87.3	20.5	-1.4	1.051	114.1	.424	1.157	261.1	539.9	.667	1.647A	90.1	.592	1.1	-3.5	197.9	.160
5- 540	5- 743.7	.147	169.0	-12.0	-3.7	.611	95.6	.395	1.189	188.6	342.9	.719A	1.659D	85.2	1.382	4.4	24.5	325.2	.256
5- 743.7	5- 890	.255	355.9	60.7	10.2	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.0	101.0	.197
		15.71	12.35	9.26	3.36	6.76	3.10	12.54	2/1/2	76.9	78.7	41.8	.921	2.801	70.1	298.2	-39.8	88.6L	1.658
5- 330	5- 540	.342	145.4	2.0	-3.5	1.126	107.6	.402	1.397	293.6	495.9	.835	1.959A	111.5	.707	4.5	-13.8	257.2	.312
5- 540	5- 738.2	.147	171.8	-7.6	-2.5	.608	95.5	.402	1.182	188.2	333.8	.707A	1.658D	82.6	1.380	3.4	17.0	329.4	.276
5- 738.2	5- 970	.276	3.9	.6	.1	1.264	102.4	.266	.868	293.9	579.4	.637	1.098	78.0	.905	-3.4	9.8	101.5	.227
		17.40	10.30	7.21	7.09	10.47	3.09	12.98	2/1/2	19.7	149.7	37.7	.787	3.096	27.7	252.5	25.9	121.1D	1.650
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																			
5- 240	5- 550	.476	79.9	20.5	-1.3	1.046	116.4	.455	1.138	255.9	548.8	.620	1.656	82.8	.584	.9	3.3	179.6	.174
5- 550	5- 738.2	.151	169.2	-5.1	-2.2	.613	97.9	.405	1.185	191.9	333.0	.705A	1.664D	82.3	1.380	3.1	15.3	330.4	.278
5- 738.2	5- 880	.278	353.0	60.0	11.1	1.257	95.9	.180	.855	319.4	517.3	.701	1.009A	94.8	.920	-10.6	-31.0	101.0	.208
		17.03	13.37	10.18	3.66	7.06	3.19	12.70	2/1/2	100.9	72.9	47.6	.776	2.477	75.5	309.4	-48.2	75.7L	1.146
5- 250	5- 550	.438	87.6	20.7	-1.3	1.050	114.3	.425	1.153	260.5	543.8	.663	1.643	87.2	.594	1.1	-1.6	193.8	.158
5- 550	5- 743.6	.150	166.9	-6.3	-3.1	.617	97.9	.398	1.191	192.4	342.0	.718A	1.665D	84.9	1.383	3.8	21.2	326.3	.254
5- 743.6	5- 890	.254	355.7	60.4	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		15.79	12.47	9.30	3.32	6.73	3.17	12.52	2/1/2	85.8	78.7	44.3	.932	2.654	71.1	300.6	-42.3	86.7L	1.542
5- 260	5- 550	.409	95.5	20.4	-1.2	1.055	112.6	.403	1.169	264.8	538.5	.698	1.640A	91.0	.604	1.3	-6.4	208.0	.155
5- 550	5- 751.0	.158	163.3	-16.9	-5.6	.619	97.8	.393	1.195	192.4	353.7	.726A	1.665D	88.2	1.384	6.0	34.9	318.3	.255
5- 751.0	5- 900	.255	.4	65.3	10.6	1.260	94.1	.168	.858	330.9	528.5	.714	1.002A	92.3	.916	-11.3	-36.4	100.7	.208
		15.23	11.96	8.64	3.27	6.68	3.52	12.70	2/1/2	70.9	84.5	39.3	.926	2.973	68.7	289.6	-30.1	105.8D	1.626
5- 260	5- 550	.409	95.5	20.4	-1.2	1.055	112.6	.403	1.169	264.8	538.5	.698	1.640A	91.0	.604	1.3	-6.4	208.0	.155
5- 550	5- 769.0	.192	196.3	33.5	10.9	.613	96.3	.398	1.184	189.6	379.9	.713	1.655D	95.6	1.384	-10.9	-48.8	297.9	.348
5- 769.0	5- 900	.347	349.0	-82.5	-15.8	1.267	90.8	.163	.866	354.4	522.6	.725	1.007A	93.3	.922	14.3	79.0	172.0	.256
		16.00	12.73	8.64	3.27	6.68	4.09	13.44	2/2/1	70.9	81.8	36.8	.498	3.168	83.4	267.6	22.2	134.2D	1.079
5- 330	5- 550	.319	145.8	3.9	-2.7	1.116	106.6	.377	1.355	293.9	500.6	.844	1.865A	108.6	.694	3.8	-14.6	259.3	.282
5- 550	5- 756.1	.153	170.2	-4.3	-2.0	.611	97.8	.408	1.181	191.6	329.4	.699A	1.663D	81.3	1.379	2.9	13.6	331.4	.291
5- 756.1	5- 970	.291	2.2	.6	.1	1.263	103.1	.275	.867	291.3	580.1	.628	1.105	77.3	.905	-3.3	10.5	101.0	.237
		16.25	9.95	6.74	6.30	9.67	3.21	13.14	2/1/2	21.5	150.5	33.1	.708	3.507	24.5	253.8	23.2	117.6D	1.775
5- 340	5- 550	.318	150.6	-3.5	-4.2	1.129	106.0	.385	1.397	298.4	495.4	.859	1.936A	110.4	.710	5.4	-12.0	262.3	.308
5- 550	5- 747.8	.153	165.0	-12.3	-4.3	.619	97.9	.394	1.194	192.5	348.8	.724A	1.665D	86.8	1.384	4.8	27.9	322.0	.248
5- 747.8	5- 980	.248	14.9	-2.2	-.4	1.269	100.9	.252	.876	300.5	580.3	.655	1.097	78.6	.910	-3.4	7.6	110.1	.215
		16.91	9.94	6.73	6.97	10.35	3.21	12.79	2/1/2	20.4	149.7	59.0	.979	2.030	34.8	251.4	30.9	132.1D	1.008
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																			
5- 240	5- 560	.486	80.4	20.7	-1.3	1.045	117.0	.464	1.137	254.9	552.3	.609	1.665	79.7	.588	.9	4.6	176.4	.184
5- 560	5- 738.3	.160	166.4	-2.7	-2.1	.621	100.4	.408	1.190	195.9	332.7	.704A	1.676D	82.2	1.382	2.8	14.0	330.9	.280
5- 738.3	5- 880	.280	353.2	60.3	11.2	1.257	95.9	.180	.855	319.5	517.2	.701	1.009A	94.8	.920	-10.7	-31.2	101.0	.210
		17.69	13.78	10.42	3.90	7.30	3.36	12.73	2/1/2	108.8	72.9	49.1	.766	2.406	76.0	310.6	-49.0	75.1L	1.078
5- 250	5- 560	.443	86.0	20.9	-1.2	1.049	114.6	.429	1.150	259.8	547.6	.657	1.644	84.4	.597	1.1	.2	189.8	.161
5- 560	5- 743.6	.158	164.5	-5.0	-2.8	.625	100.4	.401	1.197	196.4	341.5	.717A	1.677D	84.7	1.384	3.4	18.7	327.0	.254
5- 743.6	5- 890	.254	355.7	60.4	10.1	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.8	101.0	.196
		16.11	12.73	9.40	3.38	6.78	3.33	12.52	2/1/2	94.8	78.7	46.4	.933	2.540	71.9	302.2	-44.1	85.6L	1.436
5- 260	5- 560	.409	95.7	20.7	-1.1	1.054	112.7	.403	1.165	264.3	542.6	.696	1.634	88.3	.606	1.3	-4.6	204.1	.151
5- 560	5- 750.2	.160	162.3	-10.4	-4.3	.627	100.3	.396	1.201	196.5	352.1	.725A	1.677D	87.7	1.386	4.7	27.7	319.9	.243
5- 750.2	5- 900	.243	359.1	63.2	10.0	1.259	94.2	.168	.858	330.1	528.9	.713	1.002A	92.2	.916	-10.6	-35.3	100.6	.198
		15.19	12.01	8.64	3.18	6.59	3.37	12.55	2/1/2	79.7	84.5	43.6	1.014	2.696	68.5	291.9	-35.2	102.0D	1.720
5- 330	5- 560	.299	146.0	5.5	-2.2	1.108	105.8	.355	1.322	294.2	505.4	.852	1.792A	105.9	.685	3.3	-15.1	261.1	.255
5- 560	5- 728.4	.168	171.4	-.7	-1.2	.607	100.1	.431	1.166	193.9	314.9	.684A	1.669D	76.8	1.375	2.3	8.4	333.6	.360
5- 728.4	5- 970	.360	355.6	.5	.2	1.261	106.5	.321	.863	281.3	582.4	.586	1.140	74.2	.902	-3.5	15.0	99.4	.285
		18.50	9.90	6.36	5.60	8.98	3.54	13.96	2/1/2	23.8	152.9	23.3	.464	4.097	20.5	253.0	20.0	107.9D	1.836

STOPOVER TIME = 0 DAYS — 1997 INBOUND SWINGBY — MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2450560
21 APR 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5	RA1 / RA3 / RA5	DECL1 / DECL3 / DECL5	I 1 / I 3 / I 5	V 1 / V 3 / V 5	PSI 1 / PSI 3 / PSI 5	ECCEN / ECCEN / ECCEN	SMA / SMA / SMA	THET1 / THET3 / THET5	THET2 / THET4 / THET6	PERIH / PERIH / PERIH	APHEL / APHEL / APHEL	PSI 2 / PSI 4 / PSI 6	V 2 / V 4 / V 6	I 2 / I 4 / I 6	DECL2 / DECL4 / DECL6	RA2 / RA4 / RA6	SPEED2 / SPEED4 / SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
S- 340	S- 560	.294	151.2	-.5	-3.1	1.119	105.1	.360	1.356	298.8	300.5	.866	1.845A	107.6	.699	4.5	-13.5	264.4	.277
S- 560	S- 748.6	.159	162.8	-8.7	-3.8	.626	100.3	.397	1.201	196.5	349.5	.724A	1.677D	87.0	1.385	4.3	25.1	321.9	.243
S- 748.6	S- 980	.243	15.5	-2.2	-.4	1.269	100.7	.249	.877	301.5	580.1	.658	1.095	78.6	.911	-3.4	7.4	110.2	.212
		15.77	9.60	6.25	6.16	9.54	3.35	12.75	2/1/2	21.7	149.5	58.6	1.017	2.045	31.4	253.1	28.2	133.1D	1.060
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																			
S- 250	S- 570	.450	88.5	21.2	-1.1	1.049	115.0	.435	1.149	256.9	551.3	.648	1.649	81.5	.601	1.1	1.7	186.1	.168
S- 570	S- 743.7	.170	162.1	-2.2	-2.5	.635	103.1	.406	1.207	200.8	341.4	.717A	1.697D	84.7	1.386	3.0	16.8	327.2	.255
S- 743.7	S- 890	.255	355.8	60.5	10.2	1.258	95.1	.173	.856	324.1	523.4	.707	1.004A	93.4	.918	-10.2	-32.9	101.0	.197
		16.69	13.15	9.37	5.53	6.94	3.58	12.53	2/1/2	103.3	78.7	48.3	.927	2.443	72.4	303.1	-45.3	85.2L	1.338
S- 260	S- 570	.412	96.1	20.9	-1.0	1.053	112.8	.405	1.162	263.7	546.5	.691	1.632	85.6	.609	1.3	-2.6	200.0	.151
S- 570	S- 749.9	.170	160.6	-5.9	-3.6	.637	102.9	.401	1.210	200.9	351.4	.725A	1.696D	87.6	1.388	3.9	23.4	320.5	.240
S- 749.9	S- 900	.240	358.7	62.4	9.7	1.259	94.2	.168	.857	329.8	529.0	.713	1.002A	92.2	.916	-10.4	-34.9	100.5	.195
		15.45	12.27	8.69	3.18	6.58	3.58	12.51	2/1/2	88.8	64.6	46.7	1.045	2.523	68.9	295.2	-38.2	100.1D	1.592
S- 270	S- 570	.381	103.7	20.2	-1.0	1.057	111.1	.382	1.176	268.2	541.5	.727	1.625	89.1	.617	1.5	-7.3	214.0	.146
S- 570	S- 759.5	.186	157.5	-19.5	-7.6	.635	102.3	.399	1.207	199.9	365.6	.725	1.689D	91.6	1.388	7.9	42.4	308.9	.282
S- 759.5	S- 910	.282	4.4	73.0	12.3	1.263	92.8	.164	.861	339.6	533.5	.720	1.002A	91.5	.915	-13.7	-40.1	100.5	.243
		15.04	11.96	8.03	3.09	6.49	3.93	13.23	2/1/2	74.1	89.1	39.9	.758	2.929	73.9	286.1	-24.4	121.6D	1.463
S- 330	S- 570	.283	146.1	6.8	-1.7	1.101	105.1	.337	1.296	294.5	510.3	.660	1.733A	103.3	.678	2.9	-15.3	262.7	.230
S- 570	S- 722.5	.188	172.0	1.0	-.8	.603	102.7	.457	1.151	196.0	303.3	.625A	1.678D	73.0	1.371	2.0	6.2	335.4	.429
S- 722.5	S- 970	.429	350.7	.5	.2	1.260	109.8	.369	.861	273.3	583.6	.543	1.178	70.9	.900	-3.5	14.9	98.7	.336
		15.03	10.04	6.05	4.99	6.38	3.99	14.93	2/1/2	26.8	154.3	18.2	.327	6.329	16.7	250.9	18.4	101.3D	1.745
S- 340	S- 570	.274	151.6	2.1	-2.3	1.111	104.2	.339	1.324	299.2	505.3	.676	1.773A	105.0	.690	3.6	-14.3	266.3	.250
S- 570	S- 748.9	.170	160.8	-3.1	-3.4	.637	102.9	.402	1.210	200.9	349.9	.724A	1.696D	87.1	1.388	3.7	22.1	321.7	.241
S- 748.9	S- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	301.9	579.9	.659	1.094	78.9	.911	-3.4	7.5	110.2	.210
		14.93	9.46	5.89	5.47	8.85	3.57	12.73	2/1/2	23.8	149.4	58.0	1.038	2.063	28.1	254.4	25.4	133.9D	1.103
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																			
S- 250	S- 580	.461	89.0	21.4	-1.0	1.048	115.6	.445	1.148	257.9	554.9	.637	1.659	78.7	.606	1.2	2.9	183.2	.179
S- 580	S- 743.8	.186	159.9	.3	-2.3	.648	105.8	.413	1.221	205.5	341.7	.717A	1.726D	84.7	1.390	2.8	15.1	326.9	.256
S- 743.8	S- 890	.256	356.0	60.8	10.3	1.258	95.1	.173	.856	324.2	523.3	.707	1.004A	93.4	.918	-10.3	-33.1	101.0	.196
		17.56	13.77	9.82	5.79	7.19	3.94	12.55	2/1/2	111.1	78.7	50.3	.916	2.355	72.7	303.2	-46.1	85.3L	1.241
S- 260	S- 580	.417	96.5	21.2	-.9	1.052	113.1	.409	1.160	262.9	550.4	.685	1.634	82.9	.613	1.4	-1.2	195.9	.155
S- 580	S- 749.9	.185	158.6	-2.4	-3.1	.650	105.6	.408	1.225	205.6	351.5	.725A	1.725D	87.5	1.391	3.4	20.3	320.3	.239
S- 749.9	S- 900	.239	358.6	62.3	9.7	1.259	94.2	.168	.857	329.8	529.1	.713	1.002A	92.2	.916	-10.5	-34.8	100.5	.194
		15.98	12.72	8.81	5.26	6.66	3.91	12.50	2/1/2	97.7	64.6	49.6	1.051	2.386	69.2	293.7	-40.1	99.5D	1.456
S- 270	S- 580	.382	104.0	20.5	-.9	1.056	111.2	.382	1.172	267.7	545.6	.724	1.620	86.5	.621	1.5	-5.5	209.0	.144
S- 580	S- 758.2	.188	157.7	-9.9	-5.3	.648	105.0	.406	1.221	204.7	363.8	.726	1.717D	91.1	1.392	5.4	31.0	310.6	.252
S- 758.2	S- 910	.252	1.8	69.0	10.6	1.262	93.1	.164	.860	338.0	534.0	.719	1.002A	91.2	.915	-12.0	-36.4	100.4	.216
		15.06	12.03	8.05	5.03	6.44	3.99	12.84	2/1/2	83.2	89.5	47.7	.944	2.474	71.1	286.8	-31.2	117.3D	1.391
S- 330	S- 580	.269	146.2	7.9	-1.3	1.096	104.4	.321	1.276	294.6	515.2	.666	1.686A	100.8	.674	2.7	-15.4	265.8	.208
S- 580	S- 719.2	.211	171.4	2.1	-.6	.605	105.8	.480	1.145	198.6	296.1	.596A	1.695D	70.4	1.370	1.9	5.2	332.8	.478
S- 719.2	S- 970	.476	347.9	.5	.2	1.259	112.2	.404	.859	268.2	583.6	.512	1.206	66.5	.899	-3.3	15.9	98.5	.373
		14.77	10.32	5.80	4.46	7.85	4.52	15.69	2/1/2	30.0	154.9	15.9	.263	7.25D	17.7	249.5	17.5	97.7D	1.643
S- 340	S- 580	.257	151.9	3.9	-1.7	1.104	103.5	.321	1.299	299.6	510.3	.683	1.715A	102.4	.685	3.1	-14.7	267.9	.225
S- 580	S- 748.9	.185	159.0	-1.9	-3.0	.650	105.6	.409	1.225	205.6	350.0	.724A	1.725D	87.1	1.391	3.5	19.3	321.4	.241
S- 748.9	S- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	302.0	579.9	.659	1.094	78.9	.911	-3.4	7.5	110.2	.210
		14.38	9.52	5.60	4.86	8.25	3.92	12.73	2/1/2	26.5	149.4	57.4	1.039	2.081	24.8	255.4	22.7	134.3D	1.123
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																			
S- 260	S- 590	.425	97.0	21.5	-.8	1.051	113.6	.416	1.158	262.0	554.2	.676	1.641	80.3	.619	1.4	.2	192.4	.163
S- 590	S- 750.0	.205	157.4	.3	-2.8	.666	108.4	.418	1.246	210.7	352.1	.725A	1.767D	87.7	1.396	3.0	17.8	319.4	.241
S- 750.0	S- 900	.241	358.8	62.6	9.8	1.259	94.2	.168	.857	329.9	529.0	.713	1.002A	92.2	.916	-10.4	-35.0	100.5	.195
		16.81	13.38	8.99	5.44	6.84	4.39	12.52	2/1/2	106.1	84.6	52.4	1.037	2.264	69.5	293.4	-41.3	99.6D	1.311
S- 270	S- 590	.385	104.4	20.9	-.8	1.055	111.4	.385	1.170	267.0	549.6	.720	1.620	84.1	.625	1.5	-3.8	205.7	.149
S- 590	S- 757.9	.204	157.1	-4.7	-4.3	.664	107.6	.415	1.241	209.8	363.6	.726	1.756D	91.1	1.396	4.3	25.0	310.5	.246
S- 757.9	S- 910	.246	1.5	68.0	10.4	1.262	93.1	.164	.860	337.6	534.1	.719	1.002A	91.1	.915	-11.7	-37.9	100.4	.213
		15.53	12.48	8.12	5.06	6.47	4.36	12.76	2/1/2	92.3	69.6	52.7	.992	2.255	70.7	287.1	-34.6	115.6D	1.245
S- 280	S- 590	.354	111.9	19.8	-.7	1.060	109.6	.361	1.182	271.8	544.9	.755	1.609	87.3	.632	1.7	-7.8	219.4	.139
S- 590	S- 768.8	.244	154.2	-26.7	-12.8	.654	106.8	.415	1.222	206.9	378.2	.715	1.729D	95.3	1.393	12.5	52.9	299.4	.376
S- 768.9	S- 920	.376	10.2	63.5	17.2	1.266	91.4	.162	.864	349.9	538.8	.724	1.004A	90.2	.914	-19.1	-43.3	101.3	.328
		15.71	12.78	7.45	2.93	6.34	5.34	14.77	2/1/2	78.1	92.2	35.4	.425	3.292	83.6	288.7	-18.8	134.4D	.974
S- 330	S- 590	.257	146.5	9.0	-1.0	1.091	103.9	.308	1.260	295.1	520.2	.672	1.648A	98.4	.673	2.4	-15.3	264.5	.188
S- 590	S- 716.3	.238	170.5	3.1	-.4	.611	109.4	.503	1.147	202.0	290.5	.569A	1.724D	68.1	1.370	1.9	4.6	332.1	.324
S- 716.3	S- 970	.524	345.9	.4	.2	1.259	114.5	.437	.858	264.0	583.7	.484	1.233	66.2	.898	-3.2	16.7	98.5	.408
		14.77	10.76	5.59	3.99	7.39	5.19	16.44	2/1/2	33.8	155.1	14.4	.219	7.968	16.9	248.2	16.7	94.9D	1.325
S- 340	S- 590	.243	152.0	5.5	-1.3	1.099	102.9	.305	1.279	300.1	515.9	.669	1.670A	100.0	.681	2.7	-14.9	269.1	.203
S- 590	S- 748.5	.206	157.5	.9	-2.6	.666	108.5	.419	1.246	210.7	349.7	.724A	1.768D	87.0	1.396	2.9	16.7	321.2	.243
S- 748.5	S- 980	.243	15.4	-2.2	-.4	1.269	100.7	.249	.876	301.4	580.1	.658	1.095	78.6	.910	-3.4	7.4	110.2	.212
		14.10	9.76	5.37	4.34	7.73	4.40	12.75	2/1/2	29.7	149.5	56.7	1.015	2.105	21.8	255.9	20.1	134.2D	1.121
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																			
S- 260	S- 600	.436	97.7	21.8	-.7	1.051	114.3	.426	1.158	260.9	557.7	.665	1.652	77.7	.625	1.5	1.2	189.7	.178
S- 600	S- 750.3	.231	156.4	2.3	-2.6	.686	111.4	.432	1.277	216.1	353.2	.726A	1.829D	88.0	1.403	2.7	15.7	317.8	.244
S- 750.3	S- 900	.244	359.2	63.3	10.0	1.259	94.2	.168	.858	330.2	528.9	.713	1.002A	92.2	.916	-10.6	-35.4	100.6	.199
		17.97	14.26	9.25	5.72	7.12	5.01	12.56	2/1/2	113.6	84.5	55.5	1.007	2.146	69.7	292.4	-42.0	100.6D	1.154
S- 270	S- 600	.391	104.9	21.2	-.6	1.055	111.8	.390	1.168	266.2	553.5	.713	1.624	81.6	.631	1.6	-2.3	201.7	.151
S- 600	S- 757.9	.227	156.6	-1.3	-3.7	.683	110.7	.428	1.269	215.1	364.3	.726	1.812D	91.3	1.403	3.6	20.8	309.5	.247
S- 757.9	S- 910	.247	1.4	68.2	10.5	1.262	93.1	.164	.860	337.7	534.1	.719	1.002A	91.2	.915	-11.8	-38.0	100.4	.214
		16.33	13.16	8.24	5.17	6.58	4.92	12.78	2/1/2	101.2	89.5	57.1	.982	2.094	71.0	286.9	-36.9	115.0D	1.074
S- 330	S- 600	.247	146.4	10.0	-.8	1.088	103.4	.297	1.247	295.4	525.2	.677	1.618A	96.1	.673	2.3	-15.0	264.6	.170
S- 600	S- 714.2	.274	169.6	3.9	-.3	.624	113.6	.531	1.157	205.4	265.5	.543A	1.770D	65.9	1.373	1.9	4.1	331.2	.372
S- 714.2	S- 970	.572	344.2	.4	.2	1.258	116.8	.470	.857	259.9	583.4	.454	1.261	63.9	.898	-3.2	17.4	98.7	.445
		15.10	11.51	5.43	3.59	6.99	6.08	17.26	2/1/2	38.4	155.1	13.5	.184	8.508	15.9	247.1	15.8	92.4D	1.382
S- 340	S- 600	.232	152.2	6.9	-.9	1.095	102.4	.292	1.263	300.5	520.6	.694	1.633A	97.6	.680	2.3	-14.9	269.7	.163
S- 600	S- 747.4	.233	156.6	3.2	-2.3	.687	111.5	.434	1.278	216.3	348.9	.723A	1.832D	86.6	1.403	2.5	14.1	321.0	.250
S- 747.4	S- 980	.250	14.6	-2.2	-.4	1.269	101.0	.253	.878	300.0	580.4	.654	1.098	78.5	.910	-3.4	7.7	110.0	.216
		14.11	10.23	5.16	3.88	7.28	5.05	12.82	2/1/2	33.6	149.8	55.6	.961	2.144	18.9	256.1	17.6	133.4D	1.099
MARS ARRIVAL DATE = 2450610 (10 JUN 1997)																			
S- 330	S- 610	.239	146.5	10.9	-.5	1.085	103.0	.288	1.237	295.6	530.2	.680	1.594A	93.9	.674	2.1	-14.6	264.0	.155
S- 610	S- 711.9	.319	168.9	4.6	-.2	.644	118.4	.564	1.180	209.2	260.9	.515A	1.845D	63.4	1.379	1.9	3.7	330.1	.625
S- 711.9	S- 970	.625	342.7	.4	.2	1.258	119.4	.508	.857	255.6	582.7	.421	1.292	61.2	.897	-3.2	18.0	99.1	.486
		15.83	12.58	5.29	3.26	6.66	7.28	16.22	2/1/2	43.7	154.9	13.0	.154	8.838	14.8	245.9	14.6	90.1D	1.206
S- 340	S- 610	.223	152.3	8.2	-.6	1.091	101.9	.282	1.251	300.9	525.8	.698	1.603A	95.4	.681	2.2	-14.8	269.8	.166
S- 610	S- 745.6	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	347.1	.722A	1.928D	66.0	1.415	2.2	11.7	321.0	.265
S- 745.6	S- 980	.265	13.2	-2.1	-.4	1.268	101.7	.261	.875	297.6	581.0	.647	1.104	78.0	.910	-3.5	8.2	109.7	.224
		14.44	10.95	5.03	3.49	6.90	5.92	12.94	2/1/2	36.2	150.4	53.8	.872	2.212	16.3	255.9	15.4	131.4D	1.056
MARS ARRIVAL DATE = 2450620 (20 JUN 1997)																			
S- 340	S- 620	.215	152.4	9.3	-.4	1.088	101.6	.273	1.241	301.2	530.9	.902	1.580A	93.4	.683	2.1	-14.5	269.2	.150
S- 620	S- 742.8	.311	156.1	6.3	-1.7	.746	116.3	.486	1.398	228.6	345.7	.716A	2.078D	64.7	1.427	1.9	9.4	321.5	.285
S- 742.8	S- 980	.285	10.9	-2.0	-.5	1.267	102.8	.275	.874	293.6	581.9	.634	1.114	77.0	.909	-3.5	9.1	109.1	.239
		15.15	11.99	4.91	3.17	6.57	7.07	13.17	2/1/2	43.5	151.3	50.5	.738	2.345	14.1	255.4	13.6	127.7D	.993

STOPOVER TIME = 0 DAYS | 1997 INBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2450520
12 MAR 1997

LAUNCH / DEPART / SWNGBY	ARRIVE / SWNGBY / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2450520 (12 MAR 1997)																				
5- 280	5- 520	.402	110.9	17.7	-1.7	1.082	111.9	.412	1.253	273.5	514.6	.737	1.769A	105.7	.640	1.9	-14.2	231.9	.235
5- 520	5- 710.9	.193	188.3	-4.1	-.1	.555	87.9	.491	1.112	177.8	289.1	.567A	1.658	68.2	1.361	2.0	4.8	324.0	.519
5- 710.9	5- 960	.519	337.1	2.3	1.1	1.255	114.2	.430	.851	263.6	582.8	.484	1.217	66.9	.894	-2.5	18.3	89.1	.400
		17.68	12.57	8.48	5.11	8.50	4.09	16.26	2/1/2	33.0	154.8	13.4	.223	8.589	11.3	239.9	10.7	94.4D	1.696
5- 290	5- 520	.396	118.8	15.8	-1.9	1.093	111.4	.415	1.290	277.1	508.9	.755	1.825A	108.4	.658	2.3	-15.1	237.6	.261
5- 520	5- 738.7	.146	175.1	-13.3	-3.4	.605	91.1	.399	1.184	181.6	336.8	.711A	1.657D	63.4	1.380	4.4	22.7	326.4	.273
5- 738.7	5- 970	.273	4.3	.6	.1	1.264	102.2	.264	.868	294.5	579.2	.639	1.097	78.2	.905	-3.4	9.6	101.6	.225
		17.18	11.42	8.54	5.77	9.15	3.07	12.94	2/1/2	27.6	149.5	42.9	.808	2.732	33.7	248.7	30.8	125.3D	1.399
MARS ARRIVAL DATE = 2450530 (22 MAR 1997)																				
5- 290	5- 530	.379	118.7	16.1	-1.7	1.086	110.6	.397	1.265	277.1	513.3	.762	1.768A	105.5	.649	2.1	-15.0	236.7	.257
5- 530	5- 738.7	.145	173.6	-10.6	-2.9	.605	93.2	.400	1.183	184.9	335.6	.709A	1.656D	63.1	1.380	3.9	19.8	327.9	.273
5- 738.7	5- 970	.273	4.3	.6	.1	1.264	102.2	.263	.868	294.5	579.2	.639	1.096	78.2	.905	-3.4	9.6	101.5	.224
		16.19	11.04	7.99	5.15	8.58	3.05	12.94	2/1/2	31.0	149.6	40.4	.809	2.694	30.6	250.8	28.3	122.4D	1.532
MARS ARRIVAL DATE = 2450540 (1 APR 1997)																				
5- 290	5- 540	.365	118.7	16.5	-1.5	1.081	109.9	.383	1.246	277.0	517.7	.769	1.723A	102.7	.642	2.0	-14.9	239.3	.215
5- 540	5- 738.2	.147	171.8	-7.6	-2.5	.608	95.5	.402	1.182	188.2	333.8	.707A	1.658D	62.6	1.380	3.4	17.0	329.4	.276
5- 738.2	5- 970	.276	5.9	.6	.1	1.264	102.4	.266	.868	293.9	579.4	.637	1.096	78.0	.905	-3.4	9.8	101.5	.227
		15.39	10.78	7.69	4.61	8.00	3.09	12.98	2/1/2	34.8	149.7	37.7	.787	3.096	27.7	252.5	25.9	121.1D	1.650
MARS ARRIVAL DATE = 2450550 (11 APR 1997)																				
5- 290	5- 550	.354	118.7	16.6	-1.4	1.076	109.4	.371	1.231	277.0	522.2	.774	1.687A	100.0	.638	2.0	-14.5	239.4	.195
5- 550	5- 736.1	.153	170.2	-4.3	-2.0	.611	97.8	.408	1.181	191.6	329.4	.699A	1.663D	61.3	1.379	2.9	13.6	331.4	.291
5- 736.1	5- 970	.291	2.2	.6	.1	1.263	103.1	.275	.867	291.3	580.1	.628	1.105	77.3	.905	-3.3	10.5	101.0	.237
		14.80	10.65	7.44	4.14	7.54	3.21	13.14	2/1/2	39.3	150.5	33.1	.706	3.507	24.5	253.8	23.2	117.8D	1.775
5- 300	5- 550	.342	126.1	14.7	-1.5	1.085	108.6	.368	1.256	281.1	516.7	.794	1.718A	102.4	.651	2.2	-15.4	245.9	.215
5- 550	5- 747.8	.153	165.0	-12.3	-4.3	.619	97.9	.394	1.194	192.5	348.8	.724A	1.665D	66.8	1.384	4.8	27.9	322.0	.248
5- 747.8	5- 980	.248	14.9	-2.2	-.4	1.269	100.9	.252	.876	300.5	580.3	.655	1.097	78.6	.910	-3.4	7.6	110.1	.215
		15.03	10.41	7.20	4.61	8.00	3.21	12.79	2/1/2	33.0	149.7	59.0	.979	2.030	34.8	251.4	30.9	132.1D	1.008
MARS ARRIVAL DATE = 2450560 (21 APR 1997)																				
5- 290	5- 560	.344	118.8	17.2	-1.2	1.072	108.9	.361	1.218	276.9	526.6	.779	1.658A	97.5	.636	1.9	-13.9	238.8	.177
5- 560	5- 728.4	.168	171.4	-.7	-1.2	.607	100.1	.431	1.166	193.9	314.9	.664A	1.669D	76.8	1.375	2.3	8.4	333.6	.360
5- 728.4	5- 970	.360	355.6	.5	.2	1.261	106.5	.321	.863	281.3	582.4	.586	1.140	74.2	.902	-3.3	13.0	99.4	.285
		14.53	10.78	7.25	3.75	7.15	3.54	13.96	2/1/2	44.5	152.9	23.3	.464	4.957	20.5	253.0	20.0	107.9D	1.836
5- 300	5- 560	.330	126.2	15.2	-1.3	1.080	108.1	.355	1.240	281.1	521.2	.800	1.681A	99.8	.647	2.1	-15.1	246.3	.195
5- 560	5- 748.6	.159	162.8	-8.7	-3.8	.626	100.3	.397	1.201	196.5	349.5	.724A	1.677D	87.0	1.385	4.3	25.1	321.9	.243
5- 748.6	5- 980	.243	15.5	-2.2	-.4	1.269	100.7	.249	.877	301.5	580.1	.658	1.095	78.8	.911	-3.4	7.4	110.2	.212
		14.45	10.30	6.96	4.14	7.54	3.35	12.75	2/1/2	37.2	149.5	58.6	1.017	2.043	31.4	253.1	28.2	133.1D	1.060
MARS ARRIVAL DATE = 2450570 (1 MAY 1997)																				
5- 290	5- 570	.337	118.9	17.6	-1.0	1.069	108.6	.353	1.209	276.8	531.1	.782	1.635A	94.8	.636	1.8	-13.2	237.4	.162
5- 570	5- 722.8	.188	172.0	1.0	-.8	.603	102.7	.457	1.151	196.0	303.3	.625A	1.678D	73.0	1.371	2.0	6.2	333.4	.429
5- 722.8	5- 970	.429	350.7	.5	.2	1.260	109.8	.369	.861	273.3	583.6	.543	1.178	70.9	.900	-3.3	14.9	98.7	.336
		14.51	11.09	7.10	3.42	6.82	3.99	14.93	2/1/2	50.5	154.3	18.2	.327	6.329	18.7	250.9	18.4	101.3D	1.745
5- 300	5- 570	.320	126.2	15.6	-1.1	1.076	107.6	.345	1.228	281.1	525.8	.805	1.651A	97.2	.646	2.0	-14.7	246.0	.177
5- 570	5- 748.9	.170	160.8	-5.1	-3.4	.637	102.9	.402	1.210	200.9	349.9	.724A	1.696D	87.1	1.388	3.7	22.1	321.7	.241
5- 748.9	5- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	301.9	579.9	.659	1.094	78.9	.911	-3.4	7.3	110.2	.210
		14.08	10.34	6.76	3.74	7.14	3.57	12.73	2/1/2	42.2	149.4	58.0	1.038	2.063	28.1	254.4	25.4	133.9D	1.103
MARS ARRIVAL DATE = 2450580 (11 MAY 1997)																				
5- 290	5- 580	.331	119.0	18.0	-.9	1.067	108.3	.347	1.201	276.7	535.5	.784	1.618A	92.4	.637	1.8	-12.2	235.2	.150
5- 580	5- 719.2	.211	171.4	2.1	-.6	.605	105.8	.480	1.145	198.8	296.1	.596A	1.695D	70.4	1.370	1.9	5.2	332.8	.478
5- 719.2	5- 970	.478	347.9	.5	.2	1.259	112.2	.404	.859	268.2	583.8	.512	1.206	68.5	.899	-3.3	15.9	98.5	.373
		14.67	11.50	8.99	3.16	6.57	4.52	15.69	2/1/2	57.4	154.9	15.9	.263	7.250	17.7	249.5	17.5	97.7D	1.643
5- 300	5- 580	.312	126.3	16.1	-.9	1.073	107.2	.336	1.218	281.1	530.4	.808	1.627A	94.8	.646	2.0	-14.0	244.9	.162
5- 580	5- 748.9	.185	159.0	-1.9	-3.0	.650	105.6	.409	1.225	205.6	350.0	.724A	1.725D	87.1	1.391	3.5	19.5	321.4	.241
5- 748.9	5- 980	.241	15.7	-2.2	-.4	1.269	100.5	.248	.877	302.0	579.9	.659	1.094	78.9	.911	-3.4	7.3	110.2	.210
		13.93	10.53	6.61	3.41	6.81	3.92	12.73	2/1/2	47.8	149.4	57.4	1.039	2.081	24.8	255.4	22.7	134.3D	1.123
MARS ARRIVAL DATE = 2450590 (21 MAY 1997)																				
5- 290	5- 590	.328	119.2	18.4	-.7	1.065	108.2	.343	1.195	276.4	539.9	.785	1.606A	90.0	.640	1.8	-11.0	232.2	.141
5- 590	5- 716.8	.238	170.5	3.1	-.4	.611	109.4	.503	1.147	202.0	290.5	.569A	1.724D	68.1	1.370	1.9	4.6	332.1	.524
5- 716.8	5- 970	.524	345.9	.4	.2	1.259	114.5	.437	.858	264.0	583.7	.484	1.233	66.2	.898	-3.2	16.7	98.5	.406
		15.08	12.11	8.92	2.97	6.38	5.19	16.44	2/1/2	65.2	155.1	14.4	.219	7.968	16.9	248.2	16.7	94.9D	1.525
5- 300	5- 590	.306	126.4	16.6	-.8	1.071	106.9	.330	1.210	281.0	535.0	.811	1.609A	92.5	.646	1.9	-13.2	243.0	.149
5- 590	5- 748.8	.206	157.5	.8	-2.6	.666	108.5	.419	1.246	210.7	349.7	.724A	1.768D	87.0	1.396	2.9	16.7	321.2	.243
5- 748.8	5- 980	.243	15.4	-2.2	-.4	1.269	100.7	.249	.876	301.4	580.1	.658	1.095	78.8	.910	-3.4	7.4	110.2	.212
		14.03	10.89	6.50	3.13	6.54	4.40	12.75	2/1/2	54.4	149.5	56.7	1.015	2.105	21.8	255.9	20.1	134.2D	1.121
MARS ARRIVAL DATE = 2450600 (31 MAY 1997)																				
5- 290	5- 600	.327	119.5	18.8	-.6	1.063	108.1	.341	1.191	276.1	544.3	.785	1.598	87.8	.644	1.8	-9.6	228.4	.135
5- 600	5- 714.2	.274	169.6	3.9	-.3	.624	113.6	.531	1.157	205.4	285.5	.543A	1.770D	65.9	1.373	1.9	4.1	331.2	.572
5- 714.2	5- 970	.572	344.2	.4	.2	1.258	116.6	.470	.857	259.9	583.4	.454	1.261	63.9	.898	-3.2	17.4	98.7	.445
		15.83	12.97	8.89	2.85	6.26	6.08	17.26	2/1/2	73.9	155.1	13.5	.184	8.508	15.9	247.1	15.8	92.4D	1.382
5- 300	5- 600	.302	126.6	17.1	-.6	1.069	106.8	.325	1.204	280.8	539.5	.812	1.595A	90.2	.651	1.9	-12.1	240.3	.139
5- 600	5- 747.4	.233	156.8	3.2	-2.3	.687	111.5	.434	1.278	216.3	348.9	.723A	1.832D	86.6	1.403	2.5	14.1	321.0	.250
5- 747.4	5- 980	.250	14.8	-2.2	-.4	1.269	101.0	.253	.876	300.0	580.4	.654	1.098	78.5	.910	-3.4	7.7	110.0	.216
		14.40	11.47	6.42	2.93	6.34	5.05	12.82	2/1/2	62.0	149.8	55.6	.961	2.144	18.9	256.1	17.8	133.4D	1.099
MARS ARRIVAL DATE = 2450610 (10 JUN 1997)																				
5- 290	5- 610	.327	119.9	19.2	-.4	1.062	108.2	.341	1.188	275.6	548.6	.782	1.594	85.6	.649	1.8	-8.1	224.1	.132
5- 610	5- 711.9	.319	168.9	4.6	-.2	.644	118.4	.564	1.180	209.2	280.9	.515A	1.845D	63.4	1.379	1.9	3.7	330.1	.625
5- 711.9	5- 970	.625	342.7	.4	.2	1.258	119.4	.508	.857	255.6	582.7	.421	1.292	61.2	.897	-3.2	18.0	99.1	.486
		16.99	14.19	9.91	2.80	6.21	7.28	18.22	2/1/2	83.1	154.9	13.0	.154	8.838	14.8	243.9	14.6	90.1D	1.206
5- 300	5- 610	.300	126.9	17.6	-.4	1.067	106.7	.323	1.199	280.5	544.0	.812	1.586	88.1	.655	1.8	-10.9	236.7	.131
5- 610	5- 745.6	.267	156.1	5.0	-2.0	.713	114.8	.455	1.325	222.2	347.1	.722A	1.928D	86.0	1.413	2.2	11.7	321.0	.263
5- 748.6	5- 980	.263	13.2	-2.1	-.4	1.268	101.7	.261	.875	297.6	581.0	.647	1.104	78.0	.910	-3.5	8.2	109.7	.224
		15.09	12.30	6.38	2.79	6.20	5.92	12.94	2/1/2	70.4	150.4	55.8	.872	2.212	16.3	255.9	15.4	131.4D	1.056
MARS ARRIVAL DATE = 2450620 (20 JUN 1997)																				
5- 300	5- 620	.300	127.3	18.0	-.3	1.066	106.7	.322	1.196	280.1	546.3	.811	1.581	86.0	.660	1.8	-9.6	232.4	.127
5- 620	5- 742.8	.311	156.1	6.3	-1.7	.746	118.3	.486	1.398	228.6	343.7	.716A	2.076D	84.7	1.427	1.9	9.4	321.5	.285
5- 742.8	5- 980	.285	10.9	-2.0	-.5	1.267	102.8	.275	.874	293.6	581.9	.634	1.114	77.0	.909	-3.5	9.1	109.1	.239
		16.17	13.45	6.38	2.72	6.13	7.07	13.17	2/1/2	79.6	151.3	50.5	.738	2.345	14.1	255.4	13.5	127.7D	.993

1999

OUTBOUND SWINGBY

4.16

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2451150
2 DEC 1998

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2451150 (2 DEC 1998)																			
5- 830	5-1002.5	.160	26.9	25.1	2.4	.864	88.2	.269	.776	175.2	451.2	.568	.985	105.1	1.215	-2.2	-7.8	259.9	.328
5-1002.5	5-1150	.328	301.1	-6.8	-1.6	1.408	80.2	.460	1.279	31.5	149.1	.691D	1.867A	111.3	.648	2.1	-7.4	209.5	.266
5-1150	5-1310	.151	139.3	16.3	.0	.593	92.8	.418	1.176	183.9	264.6	.684A	1.668D	66.6	1.064	-1.8	14.3	50.5	.438
		13.23	7.35	4.17	5.88	9.26	3.19	17.11	2/1/1	31.1	175.4	40.8	.559	2.868	7.9	190.4	-1.4	109.8D	1.044
5- 840	5-1001.9	.159	16.6	21.5	2.4	.866	91.7	.264	.780	184.8	449.7	.574	.986D	104.8	1.217	-2.6	-9.5	259.7	.323
5-1001.9	5-1150	.323	301.4	-7.0	-1.6	1.408	80.6	.459	1.280	30.4	148.9	.693D	1.868A	111.3	.649	2.1	-7.3	209.7	.265
5-1150	5-1320	.130	134.0	19.4	.3	.617	93.3	.370	1.219	185.7	276.0	.767A	1.670D	70.5	1.076	-1.8	14.4	54.5	.373
		12.79	6.92	4.15	5.87	9.25	2.77	15.68	2/1/1	31.0	173.7	41.3	.577	2.834	9.5	190.1	-3.5	110.4D	1.058
5- 850	5-1002.8	.175	11.4	18.2	2.4	.868	94.7	.270	.784	193.1	449.2	.572	.995D	105.0	1.220	-3.0	-10.8	261.2	.330
5-1002.8	5-1150	.330	301.0	-6.7	-1.6	1.408	80.0	.461	1.278	32.0	149.1	.689D	1.866A	111.3	.647	2.0	-7.4	209.4	.266
5-1150	5-1330	.116	127.7	23.0	.6	.637	93.9	.332	1.256	187.9	287.8	.838A	1.673D	74.0	1.085	-1.9	13.9	58.0	.315
		12.73	6.85	4.34	5.88	9.26	2.50	14.52	2/1/1	31.2	168.1	39.5	.551	2.962	11.1	190.2	-6.0	109.1D	1.081
5- 860	5-1004.5	.200	10.4	15.9	2.4	.871	97.6	.282	.790	200.4	449.1	.567	1.012D	105.7	1.224	-3.4	-11.7	263.9	.346
5-1004.5	5-1150	.346	300.3	-6.2	-1.6	1.407	79.0	.464	1.272	35.2	149.6	.682D	1.863A	111.4	.645	2.0	-7.4	208.9	.267
5-1150	5-1340	.107	121.4	26.8	1.0	.651	94.4	.303	1.286	190.2	299.7	.896A	1.676D	77.1	1.093	-1.9	12.8	60.6	.265
		12.94	7.04	4.69	5.90	9.28	2.35	13.61	2/1/1	31.7	160.9	36.4	.503	3.201	12.9	190.8	-8.7	106.9D	1.106
5- 870	5-1006.7	.232	12.2	14.8	2.4	.876	100.5	.299	.798	207.1	449.3	.559	1.036D	106.6	1.230	-3.8	-12.2	267.2	.367
5-1006.7	5-1150	.367	299.7	-5.7	-1.5	1.406	77.7	.469	1.264	39.4	150.4	.671D	1.858A	111.4	.641	1.9	-7.4	208.1	.268
5-1150	5-1350	.102	115.6	30.6	1.3	.662	94.8	.282	1.310	192.3	311.4	.940A	1.680D	79.9	1.098	-2.1	10.6	62.2	.223
		13.38	7.45	5.18	5.93	9.31	2.27	12.91	2/1/1	32.4	152.2	32.7	.445	3.547	14.9	191.7	-11.5	104.2D	1.134
MARS ARRIVAL DATE = 2451160 (12 DEC 1998)																			
5- 830	5-1003.2	.162	28.4	25.2	2.4	.863	88.0	.271	.776	174.5	451.5	.566	.985	105.2	1.214	-2.2	-7.7	260.8	.330
5-1003.2	5-1160	.330	299.4	-7.4	-1.8	1.399	79.7	.447	1.240	34.0	154.9	.686D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1310	.160	136.8	17.0	.0	.592	95.3	.426	1.175	187.3	263.6	.674A	1.676D	66.0	1.063	-1.8	14.5	51.0	.447
		12.67	7.55	4.18	5.12	8.51	3.36	17.31	2/1/1	37.1	175.3	38.2	.552	3.054	8.0	190.0	-.5	108.4D	1.133
5- 840	5-1002.5	.159	17.8	21.8	2.4	.865	91.5	.265	.779	184.2	450.0	.572	.986D	104.8	1.217	-2.6	-9.4	260.4	.324
5-1002.5	5-1160	.324	299.6	-7.6	-1.8	1.400	80.1	.445	1.241	32.7	154.7	.689D	1.794A	107.6	.629	2.2	-6.1	208.6	.235
5-1160	5-1320	.138	131.0	20.1	.3	.618	95.6	.376	1.221	189.5	275.5	.762A	1.680D	70.1	1.076	-1.8	14.6	54.8	.379
		12.19	7.08	4.15	5.11	8.50	2.93	15.82	2/1/1	36.9	174.0	38.8	.573	3.011	9.4	189.6	-2.7	109.1D	1.151
5- 850	5-1003.3	.174	12.3	18.4	2.4	.867	94.6	.270	.783	192.6	449.4	.572	.995D	105.1	1.220	-3.0	-10.8	261.8	.331
5-1003.3	5-1160	.331	299.3	-7.4	-1.8	1.399	79.6	.447	1.239	34.2	154.9	.685D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1330	.125	124.5	23.4	.6	.638	96.0	.337	1.260	192.1	287.6	.836A	1.685D	73.8	1.087	-1.8	14.2	58.0	.320
		12.12	7.00	4.33	5.12	8.51	2.66	14.61	2/1/1	37.1	168.3	37.2	.549	3.138	10.9	189.8	-5.3	108.0D	1.174
5- 860	5-1004.9	.199	11.0	16.0	2.4	.871	97.5	.282	.789	200.0	449.3	.567	1.011D	105.7	1.224	-3.4	-11.7	264.4	.346
5-1004.9	5-1160	.346	298.9	-6.8	-1.7	1.398	78.7	.451	1.234	37.2	155.4	.678D	1.790A	107.6	.625	2.0	-6.2	207.6	.236
5-1160	5-1340	.116	118.1	26.8	.9	.654	96.3	.307	1.293	194.7	299.8	.895A	1.690D	77.0	1.094	-1.9	13.1	60.5	.268
		12.32	7.18	4.67	5.14	8.52	2.51	13.65	2/1/1	37.7	161.0	34.3	.502	3.388	12.7	190.4	-8.1	105.8D	1.199
5- 870	5-1007.1	.231	12.6	14.9	2.3	.875	100.4	.299	.797	206.7	449.4	.559	1.035D	106.6	1.229	-3.8	-12.1	267.7	.367
5-1007.1	5-1160	.367	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.3	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1350	.112	112.6	30.0	1.3	.665	96.6	.286	1.318	197.1	311.8	.941A	1.696D	79.8	1.100	-2.0	11.2	61.7	.224
		12.76	7.59	5.16	5.17	8.56	2.43	12.94	2/1/1	38.5	152.1	30.9	.446	3.749	14.7	191.4	-11.0	103.3D	1.225
5- 880	5-1009.6	.268	16.2	14.7	2.2	.882	103.4	.321	.808	212.8	449.6	.549	1.067D	107.8	1.237	-4.1	-12.2	271.6	.394
5-1009.6	5-1160	.394	298.4	-5.6	-1.6	1.395	75.8	.464	1.217	46.3	156.9	.652D	1.782A	107.6	.616	1.8	-6.1	205.4	.239
5-1160	5-1360	.110	108.5	33.2	1.7	.673	96.8	.272	1.337	199.1	323.2	.973A	1.700D	82.4	1.105	-2.2	7.9	61.4	.189
		13.40	8.19	5.79	5.21	8.59	2.40	12.43	2/1/1	39.6	141.4	27.2	.387	4.249	16.9	192.8	-14.1	100.6D	1.257
MARS ARRIVAL DATE = 2451170 (22 DEC 1998)																			
5- 830	5-1003.8	.163	29.7	25.4	2.3	.862	87.7	.272	.775	173.9	451.9	.564	.986	105.3	1.214	-2.2	-7.7	261.5	.332
5-1003.8	5-1170	.332	298.3	-8.0	-1.9	1.393	79.3	.437	1.212	35.9	160.3	.682D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1310	.171	134.1	17.8	.0	.593	98.1	.434	1.177	190.9	262.8	.666A	1.689D	65.5	1.064	-1.8	14.7	51.3	.456
		12.33	7.81	4.20	4.52	7.91	3.61	17.53	2/1/1	43.6	175.1	36.4	.545	3.204	8.3	190.0	.6	107.5D	1.201
5- 840	5-1002.9	.159	18.8	22.0	2.4	.865	91.4	.266	.778	183.8	450.2	.571	.985D	104.9	1.216	-2.6	-9.4	261.0	.325
5-1002.9	5-1170	.325	298.5	-8.4	-2.0	1.393	79.7	.435	1.214	34.4	160.0	.686D	1.743A	104.1	.615	2.2	-4.6	206.9	.211
5-1170	5-1320	.150	128.1	20.7	.3	.621	98.1	.382	1.226	193.6	275.1	.757A	1.695D	69.8	1.078	-1.8	14.8	54.9	.386
		11.82	7.30	4.15	4.52	7.91	3.15	15.95	2/1/1	43.3	174.3	37.0	.569	3.148	9.5	189.5	-1.6	108.3D	1.222
5- 850	5-1003.7	.173	13.0	18.5	2.4	.867	94.4	.270	.783	192.1	449.6	.571	.994D	105.1	1.219	-3.0	-10.7	262.4	.331
5-1003.7	5-1170	.331	298.3	-8.1	-1.9	1.393	79.3	.437	1.212	35.7	160.2	.683D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1330	.136	121.6	23.8	.6	.642	98.3	.342	1.268	196.6	287.7	.834A	1.702D	73.6	1.089	-1.8	14.4	57.9	.324
		11.73	7.20	4.32	4.52	7.92	2.88	14.69	2/1/1	43.6	168.4	35.5	.547	3.278	10.8	189.7	-4.3	107.2D	1.246
5- 860	5-1005.3	.197	11.6	16.1	2.3	.870	97.3	.282	.788	199.6	449.5	.566	1.010D	105.7	1.223	-3.4	-11.6	264.9	.346
5-1005.3	5-1170	.346	298.0	-7.5	-1.9	1.392	78.4	.441	1.208	38.7	160.6	.675D	1.740A	104.1	.611	2.1	-4.7	205.9	.212
5-1170	5-1340	.128	115.4	26.7	.9	.658	98.4	.312	1.303	199.6	300.3	.896A	1.710D	76.9	1.097	-1.8	13.4	60.1	.271
		11.93	7.38	4.66	4.54	7.93	2.73	13.70	2/1/1	44.2	160.8	32.9	.502	3.536	12.3	190.3	-7.2	105.2D	1.272
5- 870	5-1007.4	.229	13.1	14.9	2.3	.875	100.2	.299	.796	206.3	449.6	.558	1.034D	106.6	1.229	-3.7	-12.1	268.2	.367
5-1007.4	5-1170	.367	297.7	-6.8	-1.8	1.391	77.1	.447	1.201	42.8	161.3	.664D	1.737A	104.0	.607	2.0	-4.7	204.8	.213
5-1170	5-1350	.124	110.2	29.4	1.2	.670	98.6	.291	1.329	202.3	312.5	.942A	1.717D	79.8	1.103	-1.9	11.6	61.0	.226
		12.35	7.78	5.13	4.57	7.96	2.65	12.96	2/1/1	45.2	151.7	29.6	.446	3.914	14.3	191.3	-10.3	102.7D	1.299
5- 880	5-1010.0	.267	16.6	14.7	2.2	.881	103.3	.321	.807	212.4	449.8	.548	1.066D	107.8	1.236	-4.0	-12.1	272.1	.394
5-1010.0	5-1170	.394	297.8	-6.0	-1.8	1.389	75.6	.455	1.191	47.6	162.0	.649D	1.734A	103.9	.602	1.8	-4.7	203.3	.215
5-1170	5-1360	.122	106.5	32.0	1.6	.678	98.7	.277	1.349	204.3	324.2	.975A	1.723D	82.5	1.108	-2.0	8.6	60.4	.190
		12.99	8.37	5.76	4.61	8.00	2.61	12.44	2/1/1	46.5	140.8	26.1	.387	4.433	16.5	192.8	-13.5	100.1D	1.330
MARS ARRIVAL DATE = 2451180 (1 JAN 1999)																			
5- 830	5-1004.3	.164	31.0	25.5	2.3	.862	87.5	.274	.774	173.4	452.2	.562	.986	105.4	1.214	-2.2	-7.6	262.3	.334
5-1004.3	5-1180	.334	297.7	-8.7	-2.1	1.388	79.0	.431	1.193	37.3	165.1	.679D	1.707A	100.7	.603	2.3	-2.8	204.3	.192
5-1180	5-1310	.186	131.5	16.5	.0	.597	101.2	.444	1.183	194.8	262.3	.658A	1.709D	64.9	1.066	-1.8	14.8	51.5	.466
		12.24	8.16	4.21	4.07	7.47	3.95	17.77	2/1/1	50.8	175.1	35.1	.538	3.320	8.8	190.2	1.6	106.8D	1.248
5- 840	5-1003.4	.159	19.7	22.2	2.3	.864	91.2	.267	.778	183.3	450.4	.570	.985D	105.0	1.216	-2.6	-9.3	261.6	.326
5-1003.4	5-1180	.326	297.9	-9.1	-2.2	1.389	79.5	.428	1.196	35.6	164.9	.683D	1.708A	100.8	.605	2.3	-2.7	204.8	.191
5-1180	5-1320	.164	125.4	21.2	.3	.626	100.8	.390	1.235	197.9	275.2	.754A	1.716D	69.4	1.081	-1.7	14.9	54.9	.393
		11.67	7.61	4.15	4.06	7.46	3.46	16.11	2/1/1	50.4	174.4	35.8	.565	3.253	9.7	189.7	-.3	107.8D	1.274
5- 850	5-1004.1	.172	13.7	18.7	2.3	.866	94.3	.271	.782	191.7	449.8	.570	.994D	105.1	1.219	-3.0	-10.7	262.9	.332
5-1004.1	5-1180	.332	297.7	-8.8	-2.1	1.388	79.1	.430	1.194	36.9	165.1	.680D	1.707A	100.7	.603	2.3	-2.8	204.4	.192
5-1180	5-1330	.150	119.0	24.0	.6	.649	100.7	.349	1.280	201.4	288.2	.834A	1.726D	73.4	1.092	-1.7	14.5	57.6	.328
		11.55	7.48	4.32	4.07	7.46	3.17	14.78	2/1/1	50.7	168.2	34.4	.545	3.385	10.7	189.8	-3.1	106.8D	1.301
5- 860	5-1005.8	.196	12.1	16.3	2.3	.869	97.2	.282	.787	199.2	449.7	.565	1.009D	105.7	1.223	-3.4	-11.6	265.4	.346
5-1005.8	5-1180	.346	297.5	-8.2	-2.1	1.388	78.2	.434	1.189	39.8	165.5	.673D	1.706A	100.6	.601	2.2	-2.9	203.6	.192
5-1180	5-1340	.143	113.2	26.5	.9	.665	100.7	.319	1.317	204.8	301.2	.897A	1.737D	76.8	1.101	-1.7	13.6	59.5	.274
		11.73	7.65	4.64	4.09	7.48	3.01	13.75	2/1/1	51.4	160.4	31.8	.501	3.649	12.0	190.4	-6.1	104.8D	1.327
5- 870	5-1007.8	.228	13.6	15.0	2.2	.874	100.1	.299	.795	205.9	449.8	.558	1.032D	106.6	1.228	-3.7	-12.0	268.7	.367
5-1007.8	5-1180	.367	297.4	-7.3	-2.0	1.386	77.0	.440	1.183	43.8	166.1	.662D	1.703A	100.5	.597	2.0	-3.0	202.4	.194
5-1180	5-1350	.138	108.5	28.8	1.2	.677	100.7	.298	1.345	207.7	313.7	.944A	1.746D	79.9	1.107	-1.8	11.9	60.0	.228
		12.15	8.04	5.11	4.11	7.51	2.92	12.99	2/1/1	52.4	151.0	28.7	.446	4.037	15.7	191.5	-9.3	102.3D	1.355
5- 880	5-1010.4	.265	17.0	14.7	2.1	.880	103.1	.320	.806	212.0	450.0	.548	1.064D	107.8	1.236	-4.0	-12.1	272.6	.393
5-1010.4	5-1180	.393	297.6	-8.5	-1.9	1.384	75.5	.449	1.174	48.6	166.7	.647D	1.701A	100.4	.592	1.9	-3.0	200.8	.196
5-1180	5-1360	.136	105.2	30.9	1.5	.685	100.7	.284	1.365	209.9	325.4	.977A	1.753D	82.5	1.112	-1.9	9.2	58.9	.191
		12.78	8.61	5.73	4.17	7.56	2.88	12.45	2/1/1	53.8	139.7	25.3	.388	4.571	15.9	193.1	-12.6	99.8D	1.386
MARS ARRIVAL DATE = 2451190 (11 JAN 1999)																			
5- 830	5-1004.9	.165	32.4	25.6	2.3	.861	87.3	.275	.774	172.8	452.5	.561	.987	105.6	1.213	-2.2	-7.6	265.1	.337
5-1004.9	5-1190	.337	297.5	-9.4	-2.3	1.385	78.8	.426	1.180	38.5	169.7	.677D	1.683A	97.5	.596	2.4	-.7	201.6	.177
5-1190	5-1310	.206	129.1	19.1	.0	.605	104.6	.455	1.195	199.0	262.2	.651A	1.738D	64.4	1.070	-1.8	14.9	51.6	.478
		12.37	8.64	4.23	3.74	7.13	4.41	18.04	2/1/1	56.5	175.1	34.1	.531	3.412	9.4	190.7	3.1	108.3D	1.280

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 480 DAYS
MARS ARRIVAL DATE = 2451190
11 JAN 1999

LAUNCH	SWNGBY	$PEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	$PEED2
SWNGBY	ARRIVE	$PEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	$PEED4
DEPART	RETURN	$PEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	$PEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 840	5-1003.8	.159	20.8	22.3	2.3	.863	91.0	.267	.777	182.8	450.7	.569	.985D	105.0	1.216	-2.6	-9.3	262.2	.327
5-1003.8	5-1190	.327	297.6	-10.0	-2.4	1.385	79.4	.424	1.182	36.5	169.5	.682D	1.683A	97.5	.598	2.5	-.6	202.2	.176
5-1190	5-1320	.183	123.0	21.6	.3	.635	103.7	.399	1.250	202.7	275.6	.752A	1.748D	69.1	1.085	-1.7	15.0	54.6	.400
		11.74	8.02	4.15	3.72	7.12	3.87	16.28	2/1/1	58.0	174.4	34.9	.561	3.331	10.2	190.1	1.2	107.5D	1.309
5- 850	5-1004.5	.172	14.5	18.9	2.3	.866	94.1	.271	.781	191.3	450.0	.569	.993D	105.2	1.219	-3.0	-10.6	263.4	.333
5-1004.5	5-1190	.333	297.5	-9.7	-2.4	1.385	79.0	.425	1.181	37.7	169.6	.679D	1.683A	97.5	.597	2.4	-.7	201.8	.177
5-1190	5-1330	.168	116.9	24.1	.6	.658	103.2	.357	1.298	206.7	289.1	.835A	1.761D	73.2	1.097	-1.7	14.7	57.1	.334
		11.58	7.86	4.31	3.73	7.13	3.55	14.88	2/1/1	58.3	167.9	33.6	.543	3.462	10.7	190.2	-1.6	106.6D	1.338
5- 860	5-1006.0	.195	12.8	16.4	2.3	.868	97.1	.282	.787	198.8	449.9	.565	1.008D	105.7	1.222	-3.4	-11.5	265.9	.347
5-1006.0	5-1190	.347	297.4	-8.9	-2.3	1.384	78.1	.429	1.177	40.5	169.9	.672D	1.682A	97.4	.595	2.3	-.8	200.9	.178
5-1190	5-1340	.160	111.5	26.3	.9	.675	103.0	.327	1.337	210.5	302.5	.899A	1.774D	76.8	1.106	-1.6	13.8	58.5	.277
		11.75	8.00	4.62	3.75	7.15	3.37	13.81	2/1/1	59.0	159.7	31.1	.500	3.731	11.6	190.8	-4.8	104.6D	1.366
5- 870	5-1008.2	.226	14.1	15.1	2.2	.873	100.0	.298	.794	205.5	450.0	.557	1.031D	106.6	1.228	-3.7	-11.9	269.2	.367
5-1008.2	5-1190	.367	297.4	-8.0	-2.2	1.383	76.9	.436	1.171	44.4	170.4	.661D	1.681A	97.3	.591	2.1	-1.0	199.6	.179
5-1190	5-1350	.156	107.3	28.2	1.2	.687	102.9	.307	1.366	213.6	315.2	.947A	1.786D	79.9	1.113	-1.7	12.1	58.7	.230
		12.15	8.36	5.09	3.79	7.19	3.27	13.02	2/1/1	60.1	150.0	28.1	.446	4.124	13.1	191.9	-8.1	102.2D	1.394
5- 880	5-1010.8	.263	17.5	14.8	2.1	.879	103.0	.320	.804	211.6	450.2	.547	1.062D	107.8	1.235	-4.0	-12.0	273.2	.393
5-1010.8	5-1190	.393	297.8	-7.0	-2.1	1.381	75.4	.444	1.162	49.2	171.1	.646D	1.679A	97.0	.586	1.9	-1.1	197.9	.182
5-1190	5-1360	.153	104.5	29.9	1.5	.695	102.7	.294	1.387	215.9	327.0	.979A	1.794D	82.7	1.117	-1.8	9.6	57.1	.192
		12.75	8.91	5.70	3.84	7.24	3.21	12.47	2/1/1	61.6	138.3	24.7	.389	4.667	15.1	193.6	-11.4	99.6D	1.427

MARS ARRIVAL DATE = 2451200 (21 JAN 1999)

5- 830	5-1005.6	.167	34.0	25.8	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339
5-1005.6	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167
5-1200	5-1310	.231	126.9	19.7	.0	.618	108.2	.468	1.214	203.7	262.5	.646A	1.783D	63.7	1.076	-1.8	15.0	51.4	.492
		12.77	9.26	4.25	3.51	6.91	5.01	18.36	2/1/1	66.5	175.3	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.296
5- 840	5-1004.3	.159	22.0	22.6	2.3	.863	90.8	.268	.777	182.3	451.0	.568	.985D	105.1	1.215	-2.6	-9.3	262.8	.328
5-1004.3	5-1200	.328	297.8	-11.0	-2.6	1.383	79.2	.420	1.174	37.2	173.7	.680D	1.667A	94.5	.595	2.6	1.8	199.3	.166
5-1200	5-1320	.206	121.0	22.0	.4	.648	106.8	.410	1.273	208.0	276.5	.751A	1.795D	68.7	1.092	-1.7	15.1	54.2	.410
		12.04	8.55	4.15	3.49	6.89	4.40	16.48	2/1/1	66.0	174.2	34.4	.557	3.383	11.0	190.8	2.8	107.3D	1.328
5- 850	5-1004.9	.171	15.4	19.0	2.3	.865	94.0	.272	.780	190.8	450.3	.568	.993D	105.2	1.218	-3.0	-10.6	264.0	.333
5-1004.9	5-1200	.333	297.7	-10.6	-2.6	1.383	78.9	.422	1.172	38.2	173.8	.678D	1.667A	94.5	.594	2.5	1.6	199.0	.166
5-1200	5-1330	.190	115.3	24.1	.6	.671	106.0	.368	1.324	212.5	290.6	.837A	1.811D	73.0	1.104	-1.6	14.7	56.2	.340
		11.84	8.34	4.30	3.50	6.90	4.04	15.00	2/1/1	66.2	167.3	33.1	.541	3.512	11.0	190.9	.1	106.5D	1.360
5- 860	5-1006.5	.194	13.5	16.5	2.2	.868	96.9	.282	.786	198.3	450.1	.564	1.007D	105.8	1.222	-3.4	-11.4	266.5	.347
5-1006.5	5-1200	.347	297.6	-9.7	-2.5	1.382	78.1	.426	1.168	41.0	174.1	.671D	1.666A	94.4	.591	2.4	1.4	198.0	.167
5-1200	5-1340	.181	110.4	26.0	.9	.688	105.5	.339	1.365	216.6	304.2	.903A	1.827D	76.8	1.113	-1.6	13.8	57.3	.281
		11.96	8.44	4.61	3.52	6.92	3.83	13.88	2/1/1	67.0	158.7	30.6	.500	3.784	11.4	191.5	-3.2	104.6D	1.391
5- 870	5-1008.6	.225	14.7	15.2	2.1	.872	99.8	.298	.793	205.0	450.2	.556	1.029D	106.6	1.227	-3.7	-11.9	269.8	.367
5-1008.6	5-1200	.367	297.8	-8.6	-2.3	1.381	76.9	.433	1.163	44.8	174.5	.660D	1.666A	94.2	.588	2.2	1.0	196.6	.169
5-1200	5-1350	.176	106.7	27.6	1.2	.699	105.2	.319	1.396	219.9	317.1	.950A	1.841D	80.0	1.119	-1.6	12.3	57.0	.232
		12.34	8.77	5.06	3.57	6.97	3.71	13.06	2/1/1	68.0	148.5	27.7	.446	4.180	12.5	192.6	-6.7	102.2D	1.420
5- 880	5-1011.2	.261	18.0	14.8	2.0	.878	102.8	.319	.803	211.1	450.4	.547	1.059D	107.7	1.234	-3.9	-11.9	273.8	.393
5-1011.2	5-1200	.393	298.2	-7.6	-2.2	1.380	75.4	.441	1.155	49.5	175.0	.645D	1.664A	93.9	.583	2.0	.8	194.8	.172
5-1200	5-1360	.172	104.3	29.1	1.4	.707	104.9	.306	1.416	222.2	328.9	.982A	1.849D	82.9	1.124	-1.6	9.8	54.9	.193
		12.92	9.29	5.66	3.63	7.03	3.63	12.51	2/1/1	69.6	136.4	24.4	.390	4.726	14.2	194.3	-10.1	99.7D	1.453

MARS ARRIVAL DATE = 2451210 (31 JAN 1999)

5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.3	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160
5-1210	5-1310	.263	125.0	20.1	.0	.637	112.2	.485	1.246	208.9	263.3	.642A	1.850D	63.0	1.086	-1.8	15.0	51.0	.508
		13.46	10.09	4.28	3.37	6.78	5.81	18.75	2/1/1	74.7	175.6	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299
5- 840	5-1004.9	.159	23.3	22.8	2.2	.862	90.6	.269	.776	181.7	451.3	.567	.985D	105.2	1.215	-2.6	-9.2	263.6	.330
5-1004.9	5-1210	.330	298.2	-12.0	-2.9	1.382	79.1	.418	1.168	37.6	177.6	.679D	1.657A	91.7	.594	2.6	4.2	196.3	.159
5-1210	5-1320	.235	119.4	22.2	.4	.666	110.1	.425	1.308	213.9	278.0	.752A	1.864D	68.3	1.101	-1.7	15.0	53.4	.421
		12.59	9.25	4.15	3.35	6.75	5.09	16.72	2/1/1	74.0	173.8	34.1	.552	3.413	12.0	191.7	4.7	107.3D	1.333
5- 850	5-1005.4	.170	16.4	19.2	2.2	.864	93.8	.272	.780	190.2	450.5	.567	.992D	105.3	1.218	-3.0	-10.5	264.7	.334
5-1005.4	5-1210	.334	298.1	-11.6	-2.8	1.382	78.9	.420	1.167	38.5	177.7	.677D	1.657A	91.6	.593	2.7	4.0	196.0	.159
5-1210	5-1330	.217	114.1	24.1	.7	.689	108.9	.383	1.362	218.9	292.5	.841A	1.883D	72.9	1.114	-1.6	14.7	55.0	.347
		12.31	8.96	4.29	3.35	6.76	4.67	15.15	2/1/1	74.3	166.3	32.8	.539	3.538	11.7	191.8	1.9	106.6D	1.367
5- 860	5-1007.0	.193	14.2	16.7	2.2	.867	96.7	.282	.785	197.7	450.4	.563	1.006D	105.8	1.221	-3.3	-11.4	267.2	.347
5-1007.0	5-1210	.347	298.2	-10.6	-2.7	1.381	78.0	.424	1.163	41.2	178.0	.670D	1.656A	91.5	.591	2.5	3.6	195.0	.161
5-1210	5-1340	.207	109.8	25.7	.9	.705	108.1	.354	1.405	223.3	306.5	.908A	1.902D	76.8	1.122	-1.5	13.8	55.6	.286
		12.39	9.00	4.59	3.38	6.79	4.42	13.97	2/1/1	75.0	157.2	30.4	.499	3.611	11.5	192.4	-1.4	104.7D	1.401
5- 870	5-1009.1	.223	15.3	15.3	2.1	.871	99.6	.298	.792	204.5	450.5	.556	1.028D	106.6	1.226	-3.7	-11.6	270.5	.367
5-1009.1	5-1210	.367	298.4	-9.4	-2.6	1.380	76.9	.431	1.158	45.0	178.3	.659D	1.656A	91.3	.587	2.3	3.1	193.6	.163
5-1210	5-1350	.200	106.6	27.1	1.2	.716	107.6	.335	1.436	226.7	319.4	.955A	1.918D	80.1	1.128	-1.5	12.3	54.8	.236
		12.72	9.29	5.03	3.43	6.83	4.26	13.13	2/1/1	76.1	146.6	27.5	.447	4.209	12.0	193.5	-5.0	102.3D	1.433
5- 880	5-1011.7	.258	18.6	14.9	2.0	.877	102.6	.319	.801	210.5	450.7	.546	1.057D	107.7	1.233	-3.9	-11.8	274.5	.392
5-1011.7	5-1210	.392	298.9	-8.2	-2.4	1.378	75.4	.439	1.150	49.7	178.8	.645D	1.656A	91.0	.582	2.1	2.7	191.8	.166
5-1210	5-1360	.195	104.6	28.3	1.4	.722	107.1	.323	1.456	228.9	331.2	.986A	1.926D	83.1	1.132	-1.5	10.0	52.2	.198
		13.26	9.76	5.62	3.50	6.90	4.14	12.56	2/1/1	77.5	134.0	24.3	.391	4.752	13.4	195.2	-8.5	99.6D	1.467

MARS ARRIVAL DATE = 2451220 (10 FEB 1999)

5- 840	5-1005.6	.159	24.8	23.0	2.2	.861	90.4	.271	.775	181.0	451.6	.565	.985D	105.2	1.215	-2.6	-9.2	264.4	.332
5-1005.6	5-1220	.332	298.9	-13.1	-3.2	1.381	79.1	.417	1.165	37.9	181.3	.679D	1.651	89.1	.595	3.0	6.5	193.5	.156
5-1220	5-1320	.270	116.3	22.3	.4	.691	113.6	.446	1.362	220.5	280.1	.755A	1.969D	67.9	1.115	-1.6	14.9	52.3	.435
		13.42	10.14	4.16	3.28	6.69	5.99	17.04	2/1/1	82.0	173.0	34.0	.547	3.423	13.5	192.9	6.7	107.4D	1.325
5- 850	5-1006.0	.169	17.5	19.5	2.2	.863	93.6	.273	.779	189.6	450.8	.566	.991D	105.3	1.217	-3.0	-10.4	265.4	.335
5-1006.0	5-1220	.335	298.9	-12.8	-3.1	1.381	78.9	.418	1.164	38.6	181.4	.677D	1.651	89.0	.594	2.9	6.3	193.2	.156
5-1220	5-1330	.249	113.5	24.0	.7	.712	111.9	.403	1.418	225.9	295.1	.846A	1.990D	72.7	1.127	-1.5	14.5	53.4	.357
		13.03	9.74	4.28	3.29	6.69	5.46	15.35	2/1/1	82.1	164.9	32.8	.536	3.542	12.8	192.9	4.0	106.6D	1.362
5- 860	5-1007.5	.191	15.2	16.9	2.1	.866	96.5	.283	.784	197.1	450.7	.562	1.005D	105.8	1.221	-3.3	-11.3	267.9	.348
5-1007.5	5-1220	.348	298.9	-11.6	-3.0	1.380	78.1	.423	1.161	41.3	181.6	.670D	1.651	88.8	.592	2.7	5.7	192.2	.158
5-1220	5-1340	.237	109.6	25.4	.9	.727	110.8	.375	1.465	230.5	309.3	.914A	2.011D	76.8	1.135	-1.4	13.7	53.5	.293
		13.03	9.71	4.57	3.32	6.72	5.14	14.10	2/1/1	82.8	155.3	30.4	.497	3.815	11.9	193.5	.6	105.0D	1.400
5- 870	5-1009.7	.221	16.1	15.4	2.0	.869	99.4	.298	.790	203.9	450.8	.555	1.026D	106.7	1.226	-3.6	-11.7	271.2	.367
5-1009.7	5-1220	.367	299.2	-10.2	-2.8	1.379	76.9	.429	1.155	45.1	181.9	.659D	1.651	88.6	.589	2.4	5.1	190.7	.160
5-1220	5-1350	.228	106.9	26.6	1.2	.737	110.1	.357	1.493	233.8	322.2	.960A	2.026D	80.3	1.140	-1.4	12.2	52.1	.242
		13.30	9.93	5.00	3.37	6.77	4.93	13.22	2/1/1	83.9	144.1	27.5	.447	4.212	11.7	194.6	-3.1	102.8D	1.435

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2451140
22 NOV 1998

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC

MARS ARRIVAL DATE = 2451140 (22 NOV 1998)

5- 810	5-1002.2	.176	10.3	17.9	2.5	.869	94.9	.269	.785	193.7	448.9	.574	.996D	105.0	1.221	-3.0	-10.9	260.4	.330
5-1002.2	5-1140	.330	303.4	-6.1	-1.4	1.419	80.7	.479	1.334	29.1	142.9	.694D	1.974A	115.1	.674	2.0	-8.3	210.1	.302
5-1140	5-1370	.093	112.3	41.6	2.6	.673	93.5	.254	1.333	190.4	332.9	.994A	1.672D	84.6	1.104	-3.0	-.3	61.5	.163
		13.31	6.49	4.36	6.83	10.20	2.13	12.10	2/1/1	25.8	128.8	42.7	.553	2.744	11.2	191.0	-6.5	110.8D	.965

MARS ARRIVAL DATE = 2451150 (2 DEC 1998)

5- 820	5-1006.2	.196	41.5	26.6	2.3	.860	83.2	.296	.772	163.2	455.1	.543	1.001	106.9	1.213	-1.8	-5.7	263.8	.362
5-1006.2	5-1150	.362	299.9	-5.8	-1.5	1.406	78.0	.468	1.267	38.4	150.1	.674D	1.860A	111.4	.642	1.9	-7.4	208.3	.268
5-1150	5-1340	.107	121.4	26.8	1.0	.651	94.4	.303	1.286	190.2	299.7	.896A	1.676D	77.1	1.093	-1.9	12.8	60.6	.265
		12.91	6.99	4.63	5.93	9.31	2.35	13.61	2/1/1	32.2	160.9	35.9	.459	3.247	6.1	191.9	.2	105.5D	1.031
5- 830	5-1002.5	.160	26.9	25.1	2.4	.864	88.2	.269	.776	175.2	451.2	.568	.985	105.1	1.215	-2.2	-7.8	259.9	.328
5-1002.5	5-1150	.328	301.1	-6.8	-1.6	1.408	80.2	.460	1.279	31.5	149.1	.691D	1.867A	111.3	.648	2.1	-7.4	209.5	.266
5-1150	5-1350	.102	115.6	30.6	1.3	.662	94.8	.282	1.310	192.3	311.4	.940A	1.680D	79.9	1.098	-2.1	10.6	62.2	.223
		12.32	6.44	4.17	5.88	9.26	2.27	12.91	2/1/1	31.1	152.2	40.8	.559	2.868	7.9	190.4	-1.4	109.8D	1.044
5- 840	5-1001.9	.159	16.6	21.5	2.4	.866	91.7	.264	.780	184.8	449.7	.574	.986D	104.8	1.217	-2.6	-9.5	259.7	.323
5-1001.9	5-1150	.323	301.4	-7.0	-1.6	1.408	80.6	.459	1.280	30.4	148.9	.693D	1.868A	111.3	.649	2.1	-7.3	209.7	.265
5-1150	5-1360	.100	111.3	34.5	1.8	.670	95.0	.268	1.328	194.1	322.6	.973A	1.683D	82.4	1.103	-2.3	7.1	62.2	.188
		12.27	6.39	4.15	5.87	9.25	2.24	12.42	2/1/1	31.0	141.7	41.3	.537	2.834	9.5	190.1	-3.5	110.4D	1.058
5- 850	5-1002.8	.175	11.4	18.2	2.4	.868	94.7	.270	.784	193.1	449.2	.572	.995D	105.0	1.220	-3.0	-10.8	261.2	.330
5-1002.8	5-1150	.330	301.0	-6.7	-1.6	1.408	80.0	.461	1.278	32.0	149.1	.689D	1.866A	111.3	.647	2.0	-7.4	209.4	.266
5-1150	5-1370	.100	108.7	39.0	2.3	.675	95.2	.258	1.340	195.2	333.3	.994A	1.685D	84.8	1.106	-2.7	1.5	60.6	.163
		12.46	6.58	4.34	5.88	9.26	2.24	12.09	2/1/1	31.2	128.8	39.5	.551	2.962	11.1	190.2	-6.0	109.1D	1.081
5- 860	5-1004.5	.200	10.4	15.9	2.4	.871	97.6	.282	.790	200.4	449.1	.567	1.012D	105.7	1.224	-3.4	-11.7	263.9	.346
5-1004.5	5-1150	.346	300.3	-6.2	-1.6	1.407	79.0	.464	1.272	35.2	149.6	.682D	1.863A	111.4	.645	2.0	-7.4	208.9	.267
5-1150	5-1380	.102	108.4	44.7	3.2	.678	95.2	.252	1.347	195.7	343.3	1.008A	1.686D	86.7	1.108	-3.4	-6.7	57.5	.149
		12.86	6.96	4.69	5.90	9.28	2.27	11.94	2/1/1	31.7	113.8	36.4	.503	3.201	12.9	190.8	-8.7	106.9D	1.106
5- 870	5-1006.7	.232	12.2	14.8	2.4	.876	100.5	.299	.798	207.1	449.3	.559	1.036D	106.6	1.230	-3.8	-12.2	267.2	.367
5-1006.7	5-1150	.367	299.7	-5.7	-1.5	1.406	77.7	.469	1.264	39.4	150.4	.671D	1.858A	111.4	.641	1.9	-7.4	208.1	.268
5-1150	5-1390	.106	111.4	53.3	4.6	.679	95.0	.249	1.349	195.5	352.7	1.014A	1.685D	88.5	1.109	-4.7	-18.5	54.4	.152
		13.48	7.56	5.18	5.93	9.31	2.37	11.97	2/1/1	32.4	98.1	32.7	.445	3.547	14.9	191.7	-11.5	104.2D	1.134

MARS ARRIVAL DATE = 2451160 (12 DEC 1998)

5- 820	5-1007.1	.201	43.2	26.6	2.2	.859	82.7	.301	.771	162.3	455.8	.539	1.003	107.1	1.212	-1.8	-5.7	265.0	.368
5-1007.1	5-1160	.368	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.4	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1340	.116	116.1	26.8	.9	.654	96.3	.307	1.293	194.7	299.8	.895A	1.690D	77.0	1.094	-1.9	13.1	60.5	.268
		12.39	7.22	4.70	5.17	8.56	2.51	13.65	2/1/1	38.5	161.0	33.3	.445	3.490	6.3	191.8	.9	104.0D	1.107
5- 830	5-1003.2	.162	28.4	25.2	2.4	.863	88.0	.271	.776	174.5	451.5	.566	.985	105.2	1.214	-2.2	-7.7	260.8	.330
5-1003.2	5-1160	.330	299.4	-7.4	-1.8	1.399	79.7	.447	1.240	34.0	154.9	.686D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1350	.112	112.6	30.0	1.3	.665	96.6	.286	1.318	197.1	311.8	.941A	1.696D	79.8	1.100	-2.0	11.2	61.7	.224
		11.74	6.62	4.18	5.12	8.51	2.43	12.94	2/1/1	37.1	152.1	38.2	.552	3.054	8.0	190.0	-.5	108.4D	1.133
5- 840	5-1002.9	.159	17.8	21.8	2.4	.865	91.5	.265	.779	184.2	450.0	.572	.986D	104.8	1.217	-2.6	-9.4	260.4	.324
5-1002.9	5-1160	.324	299.6	-7.6	-1.8	1.400	80.1	.445	1.241	32.7	154.7	.689D	1.794A	107.6	.629	2.2	-6.1	208.6	.235
5-1160	5-1360	.110	108.5	33.2	1.7	.673	96.8	.272	1.337	199.1	323.2	.973A	1.700D	82.4	1.105	-2.2	7.9	61.4	.189
		11.66	6.55	4.15	5.11	8.50	2.40	12.43	2/1/1	36.9	141.4	38.8	.573	3.011	9.4	189.6	-2.7	109.1D	1.151
5- 850	5-1003.3	.174	12.3	18.4	2.4	.867	94.6	.270	.783	192.6	449.4	.572	.995D	105.1	1.220	-3.0	-10.8	261.6	.331
5-1003.3	5-1160	.331	299.3	-7.4	-1.8	1.399	79.6	.447	1.239	34.2	154.9	.688D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1370	.109	106.1	36.7	2.2	.678	96.9	.262	1.349	200.3	334.0	.995A	1.703D	84.7	1.108	-2.5	3.0	59.4	.163
		11.85	6.72	4.33	5.12	8.51	2.39	12.09	2/1/1	37.1	128.4	37.2	.549	3.138	10.9	189.8	-5.3	108.0D	1.174
5- 860	5-1004.9	.199	11.0	16.0	2.4	.871	97.5	.282	.789	200.0	449.3	.567	1.011D	105.7	1.224	-3.4	-11.7	264.4	.346
5-1004.9	5-1160	.346	298.9	-6.8	-1.7	1.398	78.7	.451	1.234	37.2	155.4	.678D	1.790A	107.6	.625	2.0	-6.2	207.6	.236
5-1160	5-1380	.110	105.6	41.2	2.9	.681	96.8	.256	1.356	200.8	344.0	1.008A	1.703D	86.8	1.110	-3.0	-4.1	55.8	.147
		12.21	7.07	4.67	5.14	8.52	2.40	11.92	2/1/1	37.7	113.4	34.3	.502	3.388	12.7	190.4	-8.1	105.8D	1.199
5- 870	5-1007.1	.231	12.6	14.9	2.3	.875	100.4	.299	.797	206.7	449.4	.559	1.035D	106.6	1.229	-3.8	-12.1	267.7	.367
5-1007.1	5-1160	.367	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.3	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1390	.113	107.5	47.6	3.9	.682	96.6	.253	1.358	200.5	353.3	1.014A	1.702D	88.6	1.111	-3.9	-13.7	51.8	.146
		12.78	7.61	5.16	5.17	8.56	2.45	11.90	2/1/1	38.5	97.6	30.9	.446	3.749	14.7	191.4	-11.0	103.3D	1.225

MARS ARRIVAL DATE = 2451170 (22 DEC 1998)

5- 820	5-1008.1	.206	44.9	26.5	2.2	.859	82.2	.305	.771	161.4	456.4	.535	1.006	107.4	1.212	-1.8	-5.6	268.2	.374
5-1008.1	5-1170	.374	297.7	-6.6	-1.8	1.390	76.7	.449	1.199	44.0	161.4	.660D	1.737A	104.0	.606	1.9	-4.7	204.4	.214
5-1170	5-1340	.128	115.4	26.7	.9	.658	98.4	.312	1.303	199.6	300.3	.896A	1.710D	76.9	1.097	-1.8	13.4	60.1	.271
		12.09	7.51	4.78	4.58	7.97	2.73	13.70	2/1/1	45.5	160.8	31.3	.430	3.702	6.6	192.1	1.7	102.7D	1.163
5- 830	5-1003.8	.163	29.7	25.4	2.3	.862	87.7	.272	.775	173.9	451.9	.564	.986	105.3	1.214	-2.2	-7.7	261.5	.332
5-1003.8	5-1170	.332	298.3	-8.0	-1.9	1.393	79.3	.437	1.212	35.9	160.3	.682D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1350	.124	110.2	29.4	1.2	.670	98.6	.291	1.329	202.3	312.5	.942A	1.717D	79.8	1.103	-1.9	11.6	61.0	.226
		11.37	6.84	4.20	4.52	7.91	2.65	12.96	2/1/1	43.6	151.7	36.4	.545	3.204	8.3	190.0	.6	107.5D	1.201
5- 840	5-1002.9	.159	18.8	22.0	2.4	.865	91.4	.266	.778	183.8	450.2	.571	.985D	104.9	1.216	-2.6	-9.4	261.0	.325
5-1002.9	5-1170	.325	298.5	-8.4	-2.0	1.393	79.7	.435	1.214	34.4	160.0	.686D	1.743A	104.1	.615	2.2	-4.6	206.9	.211
5-1170	5-1360	.122	106.5	32.0	1.6	.678	98.7	.277	1.349	204.3	324.2	.975A	1.723D	82.5	1.108	-2.0	8.6	60.4	.190
		11.28	6.76	4.15	4.52	7.91	2.61	12.44	2/1/1	43.3	140.8	37.0	.569	3.148	9.5	189.5	-1.6	108.3D	1.222
5- 850	5-1003.7	.173	13.0	18.5	2.4	.867	94.4	.270	.783	192.1	449.6	.571	.994D	105.1	1.219	-3.0	-10.7	262.4	.331
5-1003.7	5-1170	.331	298.3	-8.1	-1.9	1.393	79.3	.437	1.212	35.7	160.2	.683D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1370	.121	104.4	34.8	2.0	.683	98.7	.268	1.361	205.6	335.0	.997A	1.726D	84.8	1.111	-2.3	4.2	57.8	.163
		11.44	6.92	4.32	4.52	7.92	2.59	12.10	2/1/1	43.6	127.6	35.5	.547	3.278	10.8	189.7	-4.3	107.2D	1.246
5- 860	5-1005.3	.197	11.6	16.1	2.3	.870	97.3	.282	.788	199.6	449.5	.566	1.010D	105.7	1.223	-3.4	-11.6	264.9	.346
5-1005.3	5-1170	.346	298.0	-7.5	-1.9	1.392	78.4	.441	1.208	38.7	160.6	.675D	1.740A	104.1	.611	2.1	-4.7	205.9	.212
5-1170	5-1380	.120	103.9	38.3	2.6	.686	98.6	.262	1.368	206.1	345.0	1.009A	1.726D	86.9	1.113	-2.7	-2.0	53.8	.147
		11.78	7.24	4.66	4.54	7.93	2.58	11.91	2/1/1	44.2	112.4	32.9	.502	3.536	12.3	190.3	-7.2	105.2D	1.272
5- 870	5-1007.4	.229	13.1	14.9	2.3	.875	100.2	.299	.796	206.3	449.6	.558	1.034D	106.6	1.229	-3.7	-12.1	268.2	.367
5-1007.4	5-1170	.367	297.7	-6.8	-1.8	1.391	77.1	.447	1.201	42.8	161.3	.664D	1.737A	104.0	.607	2.0	-4.7	204.8	.213
5-1170	5-1390	.121	105.3	43.1	3.4	.686	98.3	.259	1.369	205.7	354.2	1.014A	1.724D	88.8	1.114	-3.3	-9.9	49.3	.143
		12.30	7.73	5.13	4.57	7.96	2.59	11.87	2/1/1	45.2	96.6	29.6	.446	3.914	14.3	191.5	-10.3	102.7D	1.299
5- 880	5-1010.0	.267	16.6	14.7	2.2	.881	103.3	.321	.807	212.4	449.8	.548	1.066D	107.8	1.236	-4.0	-12.1	272.1	.394
5-1010.0	5-1170	.394	297.8	-6.0	-1.8	1.389	75.6	.455	1.191	47.6	162.0	.649D	1.734A	103.9	.602	1.8	-4.7	203.3	.215
5-1170	5-1400	.125	109.4	50.7	4.9	.685	98.0	.258	1.366	204.6	362.6	1.014	1.718D	90.5	1.115	-4.7	-20.2	46.4	.155
		13.06	8.44	5.76	4.61	8.00	2.68	12.00	2/1/1	46.5	82.7	26.1	.387	4.433	16.5	192.8	-13.5	100.1D	1.330

MARS ARRIVAL DATE = 2451180 (1 JAN 1999)

5- 820	5-1009.2	.213	46.8	26.4	2.1	.858	81.6	.311	.770	160.4	457.2	.530	1.009	107.8	1.212	-1.8	-5.6	267.6	.381
5-1009.2	5-1180	.381	297.5	-6.9	-1.9	1.385	76.2	.445	1.178	46.4	166.4	.654D	1.702A	100.4	.594	1.9	-3.0	201.6	.195
5-1180	5-1340	.143	113.2	26.5	.9	.665	100.7	.319	1.317	204.8	301.2	.897A	1.737D	76.8	1.101	-1.7	13.6	59.5	.274
		12.03	7.89	4.88	4.14	7.54	3.01	13.75	2/1/1	53.1	160.4	29.7	.414	3.896	6.9	192.8	2.5	101.6D	1.199
5- 830	5-1004.3	.164	31.0	25.5	2.3	.862	87.5	.274	.774	173.4	452.2	.562	.986	105.4	1.214	-2.2	-7.6	262.3	.334
5-1004.3	5-1180	.334	297.7	-8.7	-2.1	1.388	79.0	.431	1.193	37.3	165.1	.679D	1.707A	100.7	.603	2.3	-2.8	204.3	.192
5-1180	5-1350	.138	108.5	28.8	1.2	.677	100.7	.298	1.345	207.7	313.7	.944A	1.746D	79.9	1.107	-1.8	11.9	60.0	.228
		11.21	7.14	4.21	4.07	7.47	2.92	12.99	2/1/1	50.8	151.0	35.1	.538	3.320	8.8	190.2	1.8	106.8D	1.248
5- 840	5-1003.4	.159	19.7	22.2	2.3	.864	91.2	.267	.778	183.3	450.4	.570	.985D	105.0	1.216	-2.6	-9.3	261.6	.326
5-1003.4	5-1180	.326	297.9	-9.1	-2.2	1.389	78.5	.426	1.196	35.6	164.9	.683D	1.708A	100.8	.605	2.3	-2.7	204.8	.191
5-1180	5-1360	.136	105.2	30.9	1.5	.685	100.7	.284	1.365	209.9	325.4	.977A	1.753D	82.5	1.112	-1.9	9.2	58.9	.191
		11.09	7.03	4.15	4.06	7.46	2.88	12.45	2/1/1	50.4	139.7	35.8	.565	3.253	9.7	189.7	-.3	107.8D	1.274

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2451180
1 JAN 1999

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 850	5-1004.1	.172	13.7	16.7	2.3	.866	94.3	.271	.782	191.7	449.8	.570	.994D	105.1	1.219	-3.0	-10.7	262.9	.332
5-1004.1	5-1180	.332	297.7	-8.8	-2.1	1.388	79.1	.430	1.194	36.9	165.1	.680D	1.707A	100.7	.603	2.3	-2.8	204.4	.192
5-1180	5-1370	.134	103.4	33.2	1.9	.690	100.6	.275	1.377	211.2	336.2	.998A	1.756D	84.9	1.115	-2.1	5.2	56.0	.164
		11.23	7.16	4.32	4.07	7.46	2.85	12.11	2/1/1	50.7	126.3	34.4	.545	3.385	10.7	189.8	-3.1	106.8D	1.301
5- 860	5-1005.6	.196	12.1	16.3	2.3	.869	97.2	.282	.787	199.2	449.7	.565	1.009D	105.7	1.223	-3.4	-11.6	265.4	.346
5-1005.6	5-1180	.346	297.5	-8.2	-2.1	1.388	78.2	.434	1.189	39.8	165.5	.673D	1.706A	100.6	.601	2.2	-2.9	203.6	.192
5-1180	5-1380	.133	103.0	35.9	2.4	.692	100.4	.270	1.383	211.6	346.2	1.010A	1.756D	87.1	1.117	-2.4	-.2	51.5	.147
		11.55	7.46	4.64	4.09	7.48	2.82	11.92	2/1/1	51.4	111.0	31.8	.501	3.649	12.0	190.4	-6.1	104.8D	1.327
5- 870	5-1007.8	.228	13.6	15.0	2.2	.874	100.1	.299	.795	205.9	449.8	.558	1.032D	106.6	1.228	-3.7	-12.0	268.7	.367
5-1007.8	5-1180	.367	297.4	-7.3	-2.0	1.386	77.0	.440	1.183	43.8	166.1	.662D	1.703A	100.5	.597	2.0	-3.0	202.4	.194
5-1180	5-1390	.132	104.2	39.5	3.1	.692	100.1	.267	1.383	211.1	355.2	1.014A	1.752D	89.0	1.117	-2.9	-6.9	46.6	.143
		12.03	7.91	5.11	4.11	7.51	2.80	11.87	2/1/1	52.4	95.2	28.7	.446	4.037	13.7	191.5	-9.3	102.3D	1.355
5- 880	5-1010.4	.265	17.0	14.7	2.1	.880	103.1	.320	.806	212.0	450.0	.548	1.064D	107.8	1.236	-4.0	-12.1	272.6	.393
5-1010.4	5-1180	.393	297.6	-6.5	-1.9	1.384	75.5	.449	1.174	48.6	166.7	.647D	1.701A	100.4	.592	1.9	-3.0	200.8	.196
5-1180	5-1400	.133	107.2	45.0	4.2	.691	99.7	.265	1.379	209.9	363.5	1.013	1.745D	90.7	1.118	-3.8	-14.8	43.1	.150
		12.71	8.55	5.73	4.17	7.56	2.81	11.95	2/1/1	53.8	81.0	25.3	.388	4.571	15.9	193.1	-12.6	99.8D	1.386

MARS ARRIVAL DATE = 2451190 (11 JAN 1999)

5- 820	5-1010.6	.222	49.1	26.3	2.0	.856	80.8	.319	.768	159.2	458.2	.523	1.013	108.3	1.211	-1.9	-5.6	269.3	.391
5-1010.6	5-1190	.391	297.7	-7.1	-2.1	1.382	75.5	.444	1.163	48.8	171.0	.647D	1.679A	97.0	.586	1.9	-1.1	198.1	.182
5-1190	5-1340	.160	111.5	26.3	.9	.675	103.0	.327	1.337	210.5	302.5	.899A	1.774D	76.8	1.106	-1.6	13.8	58.5	.277
		12.23	8.39	5.02	3.84	7.24	3.37	13.61	2/1/1	61.4	159.7	28.3	.393	4.094	7.2	193.9	3.1	100.4D	1.216
5- 830	5-1004.9	.165	32.4	25.6	2.3	.861	87.3	.275	.774	172.8	452.5	.561	.987	105.6	1.213	-2.2	-7.6	263.1	.337
5-1004.9	5-1190	.337	297.5	-9.4	-2.3	1.385	78.8	.426	1.180	38.5	169.7	.677D	1.683A	97.5	.596	2.4	-.7	201.6	.177
5-1190	5-1350	.156	107.3	28.2	1.2	.687	102.9	.307	1.366	213.6	315.2	.947A	1.786D	79.9	1.113	-1.7	12.1	58.7	.230
		11.24	7.50	4.23	3.74	7.13	3.27	13.02	2/1/1	58.5	150.0	34.1	.531	3.412	9.4	190.7	3.1	106.3D	1.280
5- 840	5-1003.8	.159	20.8	22.3	2.3	.863	91.0	.267	.777	182.8	450.7	.569	.985D	105.0	1.216	-2.6	-9.3	262.2	.327
5-1003.8	5-1190	.327	297.6	-10.0	-2.4	1.385	79.4	.424	1.182	36.5	169.5	.682D	1.683A	97.5	.598	2.5	-.6	202.2	.176
5-1190	5-1360	.153	104.5	29.9	1.5	.695	102.7	.294	1.387	215.9	327.0	.979A	1.794D	82.7	1.117	-1.8	9.6	57.1	.192 *
		11.09	7.36	4.15	3.72	7.12	3.21	12.47	2/1/1	58.0	138.3	34.9	.561	3.331	10.2	190.1	1.2	107.5D	1.309
5- 850	5-1004.5	.172	14.5	18.9	2.3	.866	94.1	.271	.781	191.3	450.0	.569	.993D	105.2	1.219	-3.0	-10.6	263.4	.333
5-1004.5	5-1190	.333	297.5	-9.7	-2.4	1.385	79.0	.425	1.181	37.7	169.6	.679D	1.683A	97.5	.597	2.4	-.7	201.8	.177
5-1190	5-1370	.150	103.0	31.8	1.8	.699	102.6	.285	1.399	217.2	337.8	1.000A	1.797D	85.1	1.120	-1.9	5.9	53.7	.165
		11.20	7.47	4.31	3.73	7.13	3.17	12.12	2/1/1	58.3	124.5	33.6	.543	3.462	10.7	190.2	-1.6	106.6D	1.338
5- 860	5-1006.0	.195	12.8	16.4	2.3	.868	97.1	.282	.787	198.8	449.9	.565	1.008D	105.7	1.222	-3.4	-11.5	265.9	.347
5-1006.0	5-1190	.347	297.4	-8.9	-2.3	1.384	78.1	.429	1.177	40.5	169.9	.672D	1.682A	97.4	.595	2.3	-.8	200.9	.178
5-1190	5-1380	.148	102.8	33.9	2.2	.701	102.3	.280	1.403	217.4	347.6	1.011A	1.795D	87.3	1.121	-2.1	1.1	48.8	.149
		11.50	7.74	4.62	3.75	7.15	3.12	11.94	2/1/1	59.0	109.1	31.1	.500	3.731	11.6	190.8	-4.8	104.6D	1.366
5- 870	5-1008.2	.226	14.1	15.1	2.2	.873	100.0	.298	.794	205.5	450.0	.557	1.031D	106.6	1.228	-3.7	-11.9	269.2	.367
5-1008.2	5-1190	.367	297.4	-8.0	-2.2	1.383	76.9	.436	1.171	44.4	170.4	.661D	1.681A	97.3	.591	2.1	-1.0	199.6	.179
5-1190	5-1390	.146	103.9	36.7	2.8	.700	102.0	.276	1.402	216.8	356.5	1.015A	1.789D	89.2	1.122	-2.5	-4.4	43.7	.144
		11.95	8.16	5.09	3.79	7.19	3.07	11.88	2/1/1	60.1	93.2	28.1	.446	4.124	13.1	191.9	-8.1	102.2D	1.394
5- 880	5-1010.8	.263	17.5	14.8	2.1	.879	103.0	.320	.804	211.6	450.2	.547	1.062D	107.8	1.235	-4.0	-12.0	273.2	.393
5-1010.8	5-1190	.393	297.8	-7.0	-2.1	1.381	75.4	.444	1.162	49.2	171.1	.646D	1.679A	97.0	.586	1.9	-1.1	197.9	.182
5-1190	5-1400	.144	106.4	40.7	3.6	.698	101.5	.274	1.396	215.3	364.6	1.013	1.778D	91.0	1.122	-3.2	-10.6	39.9	.150
		12.57	8.73	5.70	3.84	7.24	3.03	11.94	2/1/1	61.6	79.0	24.7	.389	4.667	15.1	193.6	-11.4	99.6D	1.427
5- 890	5-1013.7	.305	22.4	15.2	1.9	.888	106.1	.346	.819	217.2	450.4	.535	1.102D	109.1	1.244	-4.2	-11.6	277.7	.424
5-1013.7	5-1190	.424	298.5	-6.2	-2.0	1.379	73.6	.455	1.152	54.6	171.8	.628D	1.677A	96.7	.579	1.7	-1.1	195.9	.185
5-1190	5-1410	.145	111.3	47.4	5.1	.694	101.0	.273	1.386	213.2	372.0	1.007	1.765D	92.6	1.121	-4.6	-18.7	39.0	.167
		13.45	9.53	6.46	3.92	7.32	3.06	12.15	2/1/1	63.4	68.3	21.3	.334	5.420	17.5	195.7	-14.8	97.1D	1.475

MARS ARRIVAL DATE = 2451200 (21 JAN 1999)

5- 820	5-1012.6	.236	52.2	26.0	1.9	.855	79.6	.331	.767	157.4	459.6	.513	1.021	109.1	1.210	-2.0	-5.5	271.8	.407
5-1012.6	5-1200	.407	298.5	-7.1	-2.2	1.379	74.6	.446	1.151	52.0	175.4	.637D	1.664A	93.7	.580	1.9	.8	193.9	.174
5-1200	5-1340	.181	110.4	26.0	.9	.688	105.5	.339	1.365	216.6	304.2	.903A	1.827D	76.8	1.113	-1.6	13.8	57.3	.281
		12.74	9.08	5.24	3.66	7.06	3.83	13.88	2/1/1	70.4	158.7	26.6	.364	4.341	7.4	195.5	3.5	98.9D	1.215
5- 830	5-1003.8	.167	34.0	25.8	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339
5-1003.8	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167
5-1200	5-1350	.176	106.7	27.6	1.2	.699	105.2	.319	1.396	219.9	317.1	.950A	1.841D	80.0	1.119	-1.6	12.3	57.0	.232
		11.47	7.97	4.25	3.51	6.91	3.71	13.06	2/1/1	66.5	148.5	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.296
5- 840	5-1004.3	.159	22.0	22.6	2.3	.863	90.8	.268	.777	182.3	451.0	.568	.985D	105.1	1.215	-2.6	-9.3	262.8	.328
5-1004.3	5-1200	.328	297.8	-11.0	-2.6	1.383	79.2	.420	1.174	37.2	173.7	.680D	1.667A	94.5	.595	2.6	1.8	199.3	.166
5-1200	5-1360	.172	104.3	29.1	1.4	.707	104.9	.306	1.416	222.2	328.9	.982A	1.849D	82.9	1.124	-1.6	9.8	54.9	.195
		11.27	7.78	4.15	3.49	6.89	3.63	12.51	2/1/1	66.0	136.4	34.4	.557	3.383	11.0	190.8	2.8	107.3D	1.328
5- 850	5-1004.9	.171	15.4	19.0	2.3	.865	94.0	.272	.780	190.8	450.3	.568	.993D	105.2	1.218	-3.0	-10.6	264.0	.333
5-1004.9	5-1200	.333	297.7	-10.6	-2.6	1.383	78.9	.422	1.172	38.2	173.8	.678D	1.667A	94.5	.594	2.5	1.6	199.0	.166
5-1200	5-1370	.169	103.2	30.6	1.7	.711	104.6	.298	1.427	223.4	339.6	1.002A	1.852D	85.4	1.126	-1.8	6.4	51.0	.168
		11.36	7.86	4.30	3.50	6.90	3.56	12.16	2/1/1	66.2	122.3	33.1	.541	3.512	11.0	190.9	.1	106.9D	1.360
5- 860	5-1006.5	.194	13.5	16.5	2.2	.868	96.9	.282	.786	198.3	450.1	.564	1.007D	105.8	1.222	-3.4	-11.4	266.5	.347
5-1006.5	5-1200	.347	297.6	-9.7	-2.5	1.382	78.1	.426	1.168	41.0	174.1	.671D	1.666A	94.4	.591	2.4	1.4	198.0	.167
5-1200	5-1380	.166	103.1	32.3	2.1	.712	104.3	.292	1.430	223.4	349.2	1.012A	1.847D	87.6	1.127	-1.9	2.2	45.8	.152
		11.62	8.09	4.61	3.52	6.92	3.49	11.97	2/1/1	67.0	106.7	30.6	.500	3.784	11.4	191.5	-3.2	104.6D	1.391
5- 870	5-1008.6	.225	14.7	15.2	2.1	.872	99.8	.298	.793	205.0	450.2	.556	1.029D	106.6	1.227	-3.7	-11.9	269.8	.367
5-1008.6	5-1200	.367	297.8	-8.6	-2.3	1.381	76.9	.433	1.163	44.8	174.5	.660D	1.666A	94.2	.588	2.2	1.0	196.6	.169
5-1200	5-1390	.162	104.2	34.4	2.6	.710	103.9	.288	1.426	222.6	357.9	1.015A	1.837D	89.5	1.127	-2.2	-2.5	40.6	.147
		12.03	8.47	5.06	3.57	6.97	3.41	11.92	2/1/1	68.0	91.0	27.7	.446	4.180	12.5	192.6	-6.7	102.2D	1.420
5- 880	5-1011.2	.261	16.0	14.8	2.0	.878	102.8	.319	.803	211.1	450.4	.547	1.059D	107.7	1.234	-3.9	-11.9	273.8	.393
5-1011.2	5-1200	.393	298.2	-7.6	-2.2	1.380	75.4	.441	1.155	49.5	175.0	.645D	1.664A	93.9	.583	2.0	.8	194.8	.172
5-1200	5-1400	.158	106.4	37.3	3.2	.707	103.4	.285	1.417	220.9	365.6	1.013	1.821D	91.3	1.126	-2.7	-7.3	36.8	.152
		12.61	8.99	5.66	3.63	7.03	3.33	11.97	2/1/1	69.6	76.5	24.4	.390	4.726	14.2	194.3	-10.1	99.7D	1.453
5- 890	5-1014.1	.302	22.8	15.2	1.8	.887	105.9	.345	.817	216.6	450.7	.535	1.099D	109.1	1.243	-4.1	-11.5	278.3	.424
5-1014.1	5-1200	.424	299.0	-6.6	-2.1	1.377	73.6	.452	1.145	54.8	175.7	.627D	1.663A	93.6	.577	1.8	.7	192.8	.176
5-1200	5-1410	.155	110.3	42.0	4.3	.703	102.8	.284	1.405	218.6	373.0	1.006	1.803D	92.9	1.125	-3.7	-13.0	35.6	.165
		13.40	9.69	6.41	3.72	7.12	3.27	12.13	2/1/1	71.4	65.8	21.0	.335	5.480	16.4	196.5	-13.5	97.2D	1.501

MARS ARRIVAL DATE = 2451210 (31 JAN 1999)

5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.5	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160
5-1210	5-1350	.200	106.6	27.1	1.2	.716	107.6	.335	1.436	226.7	319.4	.955A	1.918D	80.1	1.128	-1.5	12.3	54.8	.236
		11.91	8.54	4.28	3.37	6.78	4.26	13.13	2/1/1	74.7	146.8	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299
5- 840	5-1004.9	.159	23.3	22.8	2.2	.862	90.6	.269	.776	181.7	451.3	.567	.985D	105.2	1.215	-2.6	-9.2	263.6	.330
5-1004.9	5-1210	.330	298.2	-12.0	-2.9	1.382	79.1	.418	1.168	37.6	177.6	.679D	1.657A	91.7	.594	2.8	4.2	196.3	.159
5-1210	5-1360	.195	104.6	28.3	1.4	.722	107.1	.323	1.456	228.9	331.2	.986A	1.926D	83.1	1.132	-1.5	10.0	52.2	.198
		11.64	8.30	4.15	3.35	6.75	4.14	12.56	2/1/1	74.0	134.0	34.1	.552	3.413	12.0	191.7	4.7	107.3D	1.333
5- 850	5-1005.4	.170	16.4	19.2	2.2	.864	93.8	.272	.780	190.2	450.5	.567	.992D	105.3	1.216	-3.0	-10.5	264.7	.334
5-1005.4	5-1210	.334	298.1	-11.6	-2.8	1.382	78.9	.420	1.167	38.5	177.7	.677D	1.657A	91.6	.593	2.7	4.0	196.0	.159
5-1210	5-1370	.191	103.8	29.6	1.7	.725	106.8	.314	1.465	229.8	341.6	1.004A	1.925D	85.6	1.134	-1.6	6.8	47.9	.172
		11.69	8.33	4.29	3.35	6.76	4.04	12.21	2/1/1	74.3	119.5	32.8	.539	3.538	11.7	191.8	1.9	106.8D	1.367
5- 860	5-1007.0	.193	14.2	16.7	2.2	.867	96.7	.282	.785	197.7	450.4	.563	1.006D	105.8	1.221	-3.3	-11.4	267.2	.347
5-1007.0	5-1210	.347	298.2	-10.6	-2.7	1.381	78.0	.424	1.163	41.2	178.0	.670D	1.656A	91.5	.591	2.5	3.6	195.0	.161
5-1210	5-1380	.186	103.9	30.9	2.0	.725	106.4	.308	1.464	229.7	351.0	1.013A	1.916D	87.9	1.134	-1.7	3.0	42.5	.157
		11.91	8.52	4.59	3.38	6.79	3.94	12.03	2/1/1	75.0	103.8	30.4	.499	3.811	11.5	192.4	-1.4	104.7D	1.401

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 520 DAYS
MARS ARRIVAL DATE = 2451210
31 JAN 1999

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
°		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 870	5-1009.1	.223	15.3	15.3	2.1	.871	99.6	.298	.792	204.5	450.5	.556	1.028D	106.6	1.226	-3.7	-11.8	270.5	.367
5-1009.1	5-1210	.367	298.4	-9.4	-2.6	1.380	76.9	.431	1.158	45.0	178.3	.659D	1.656A	91.3	.587	2.3	3.1	193.6	.163
5-1210	5-1390	.181	105.0	32.5	2.4	.723	105.9	.303	1.457	228.6	359.5	1.015A	1.899D	89.9	1.134	-2.0	-.9	37.3	.153
		12.28	8.85	5.03	3.43	6.83	3.82	11.98	2/1/1	76.1	88.4	27.5	.447	4.209	12.0	193.5	-5.0	102.3D	1.433
5- 880	5-1011.7	.258	18.6	14.9	2.0	.877	102.6	.319	.801	210.5	450.7	.546	1.057D	107.7	1.233	-3.9	-11.8	274.5	.392
5-1011.7	5-1210	.592	298.9	-8.2	-2.4	1.378	75.4	.439	1.150	49.7	178.8	.645D	1.656A	91.0	.582	2.1	2.7	191.8	.166
5-1210	5-1400	.175	107.0	34.7	2.9	.719	105.3	.300	1.445	226.6	367.1	1.012	1.877D	91.6	1.132	-2.3	-4.7	33.7	.157
		12.81	9.31	5.62	3.50	6.90	3.69	12.03	2/1/1	77.5	74.6	24.3	.391	4.752	13.4	195.2	-8.5	99.8D	1.467
5- 890	5-1014.7	.299	23.3	15.2	1.8	.885	105.7	.344	.815	216.1	451.0	.534	1.095D	109.1	1.242	-4.1	-11.4	279.0	.423
5-1014.7	5-1210	.423	299.8	-7.1	-2.3	1.376	73.7	.451	1.141	54.9	179.3	.627D	1.656A	90.6	.576	1.8	2.5	189.7	.171
5-1210	5-1410	.170	110.3	38.0	3.7	.713	104.7	.296	1.428	224.1	374.1	1.005	1.852D	93.2	1.130	-3.0	-6.7	32.5	.168
		13.54	9.94	6.36	3.60	7.00	3.58	12.16	2/1/1	79.2	63.5	21.0	.337	5.499	15.3	197.5	-11.9	97.3D	1.514
MARS ARRIVAL DATE = 2451220 (10 FEB 1999)																			
5- 830	5-1007.4	.173	38.0	26.0	2.1	.858	86.2	.283	.771	170.2	454.0	.553	.989	106.1	1.212	-2.2	-7.5	266.3	.347
5-1007.4	5-1220	.347	298.9	-11.7	-3.0	1.380	78.1	.422	1.161	41.1	181.6	.670D	1.651	88.9	.592	2.7	5.8	192.2	.157
5-1220	5-1350	.228	106.9	26.6	1.2	.737	110.1	.357	1.493	233.8	322.2	.960A	2.026D	80.3	1.140	-1.4	12.2	52.1	.242
		12.57	9.25	4.32	3.31	6.72	4.93	13.22	2/1/1	82.8	144.1	32.4	.499	3.585	12.5	193.8	7.5	105.3D	1.291
5- 840	5-1005.6	.159	24.8	23.0	2.2	.861	90.4	.271	.775	181.0	451.6	.565	.985D	105.2	1.215	-2.6	-9.2	264.4	.332
5-1005.6	5-1220	.332	298.9	-13.1	-3.2	1.381	79.1	.417	1.165	37.9	181.3	.679D	1.651	89.1	.595	3.0	6.5	193.5	.156
5-1220	5-1360	.221	105.3	27.7	1.4	.742	109.5	.345	1.510	235.8	333.7	.990A	2.031D	83.3	1.143	-1.4	9.9	49.0	.204
		12.21	8.93	4.16	3.28	6.69	4.77	12.63	2/1/1	82.0	131.1	34.0	.547	3.423	13.5	192.9	6.7	107.4D	1.325
5- 850	5-1006.0	.169	17.5	19.5	2.2	.863	93.6	.273	.779	189.6	450.8	.566	.991D	105.3	1.217	-3.0	-10.4	265.4	.335
5-1006.0	5-1220	.335	298.9	-12.8	-3.1	1.381	78.9	.418	1.164	38.6	181.4	.677D	1.651	89.0	.594	2.9	6.3	193.2	.156
5-1220	5-1370	.215	104.7	28.7	1.6	.743	109.0	.336	1.516	236.5	343.9	1.007A	2.025D	86.0	1.144	-1.5	7.0	44.3	.178
		12.19	8.90	4.28	3.29	6.69	4.63	12.28	2/1/1	82.1	116.3	32.8	.536	3.542	12.8	192.9	4.0	106.8D	1.362
5- 860	5-1007.5	.191	15.2	16.9	2.1	.866	96.5	.283	.784	197.1	450.7	.562	1.005D	105.8	1.221	-3.3	-11.3	267.9	.348
5-1007.5	5-1220	.348	298.9	-11.6	-3.0	1.380	78.1	.423	1.161	41.3	181.6	.670D	1.651	88.8	.592	2.7	5.7	192.2	.158
5-1220	5-1380	.209	105.0	29.8	1.9	.742	108.5	.329	1.511	236.1	353.0	1.014A	2.008D	88.3	1.144	-1.6	3.6	38.9	.164
		12.36	9.04	4.57	3.32	6.72	4.48	12.11	2/1/1	82.8	100.7	30.4	.497	3.815	11.9	193.5	.6	105.0D	1.400
5- 870	5-1009.7	.221	16.1	15.4	2.0	.869	99.4	.298	.790	203.9	450.8	.555	1.026D	106.7	1.226	-3.6	-11.7	271.2	.367
5-1009.7	5-1220	.367	299.2	-10.2	-2.8	1.379	76.9	.429	1.155	45.1	181.9	.659D	1.651	88.6	.589	2.4	5.1	190.7	.160
5-1220	5-1390	.202	106.2	31.0	2.2	.738	107.9	.323	1.499	234.7	361.1	1.015	1.982D	90.3	1.142	-1.7	.3	33.9	.160
		12.68	9.32	5.00	3.37	6.77	4.32	12.07	2/1/1	83.9	85.6	27.5	.447	4.212	11.7	194.6	-3.1	102.6D	1.435
5- 880	5-1012.3	.256	19.3	15.0	1.9	.875	102.4	.318	.800	209.9	451.0	.545	1.054D	107.7	1.232	-3.9	-11.7	275.2	.392
5-1012.3	5-1220	.392	299.8	-8.8	-2.6	1.378	75.4	.438	1.148	49.6	182.3	.645D	1.652	88.2	.584	2.2	4.5	188.9	.164
5-1220	5-1400	.195	108.1	32.6	2.7	.733	107.3	.317	1.481	232.5	368.5	1.011	1.951D	92.1	1.140	-2.0	-2.8	30.7	.165
		13.16	9.72	5.58	3.44	6.85	4.15	12.12	2/1/1	85.2	72.3	24.3	.392	4.749	12.5	196.3	-6.8	100.0D	1.469
MARS ARRIVAL DATE = 2451230 (20 FEB 1999)																			
5- 830	5-1008.6	.177	40.7	26.1	2.0	.857	85.6	.287	.770	169.0	454.7	.549	.991	106.3	1.212	-2.2	-7.4	267.8	.352
5-1008.6	5-1230	.352	299.9	-12.3	-3.2	1.380	77.8	.424	1.159	42.0	185.0	.668D	1.649	86.3	.594	2.8	7.5	189.3	.158
5-1230	5-1350	.261	107.5	26.2	1.2	.763	112.6	.387	1.575	241.3	325.2	.965A	2.185D	80.5	1.155	-1.3	11.9	49.0	.250
		13.45	10.13	4.57	3.32	6.73	5.76	13.35	2/1/1	90.5	141.2	32.0	.484	3.630	13.6	195.4	8.8	104.9D	1.274
5- 840	5-1006.3	.160	26.4	23.3	2.1	.860	90.1	.272	.774	180.2	452.0	.563	.985D	105.3	1.214	-2.6	-9.1	265.4	.334
5-1006.3	5-1230	.334	299.8	-14.4	-3.5	1.381	79.1	.417	1.164	38.0	184.8	.678D	1.649	86.6	.598	3.2	6.6	190.9	.156
5-1230	5-1360	.252	106.2	27.1	1.4	.766	111.9	.374	1.588	243.0	336.4	.994A	2.182D	83.6	1.157	-1.3	9.7	45.4	.212
		12.97	9.69	4.16	3.28	6.68	5.53	12.75	2/1/1	89.5	127.7	34.1	.540	3.415	15.2	194.4	8.9	107.6D	1.305
5- 850	5-1006.6	.169	18.8	19.7	2.1	.862	93.3	.273	.778	189.0	451.1	.565	.991D	105.4	1.217	-3.0	-10.4	266.2	.336
5-1006.6	5-1230	.336	299.8	-14.1	-3.5	1.381	78.9	.418	1.163	38.6	184.8	.677D	1.649	86.6	.597	3.1	6.5	190.7	.156
5-1230	5-1370	.244	105.9	27.9	1.6	.766	111.3	.364	1.587	243.4	346.3	1.009A	2.164D	86.4	1.157	-1.3	7.0	40.4	.187
		12.88	9.60	4.27	3.28	6.69	5.33	12.40	2/1/1	89.6	112.7	33.0	.533	3.525	14.3	194.4	6.4	107.2D	1.345
5- 860	5-1008.1	.190	16.2	17.1	2.1	.865	96.3	.283	.783	196.5	451.0	.561	1.004D	105.9	1.220	-3.3	-11.2	268.7	.348
5-1008.1	5-1230	.348	299.9	-12.7	-3.5	1.380	78.1	.422	1.160	41.2	185.0	.670D	1.649	86.4	.595	2.9	7.7	189.7	.157
5-1230	5-1380	.236	106.4	28.8	1.9	.763	110.7	.355	1.574	242.6	355.1	1.015A	2.134D	88.7	1.155	-1.4	4.0	35.1	.174
		12.98	9.67	4.55	3.31	6.72	5.13	12.23	2/1/1	90.3	97.2	30.5	.496	3.798	12.7	194.9	2.8	105.4D	1.388
5- 870	5-1010.3	.218	17.0	15.5	2.0	.868	99.2	.298	.789	203.2	451.1	.554	1.024D	106.7	1.225	-3.6	-11.6	272.1	.367
5-1010.3	5-1230	.367	300.2	-11.1	-3.0	1.379	76.9	.429	1.155	44.9	185.2	.660D	1.650	86.1	.592	2.6	6.8	188.2	.160
5-1230	5-1390	.227	107.7	29.7	2.1	.757	110.0	.347	1.554	240.9	362.9	1.015	2.093D	90.7	1.153	-1.5	1.3	30.5	.171
		13.24	9.88	4.98	3.37	6.77	4.91	12.19	2/1/1	91.2	82.6	27.6	.447	4.193	11.7	195.9	-1.1	102.9D	1.426

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2451150
2 DEC 1998

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2451150 (2 DEC 1998)																			
5- 820	5-1006.2	.196	41.5	26.6	2.3	.860	83.2	.296	.772	163.2	455.1	.543	1.001	106.9	1.213	-1.8	+5.7	263.8	.362
5-1006.2	5-1150	.362	299.9	-5.8	-1.5	1.406	78.0	.468	1.267	38.4	150.1	.674D	1.86DA	111.4	.642	1.9	-7.4	208.3	.268
5-1150	5-1380	.102	108.4	44.7	3.2	.678	95.2	.252	1.347	195.7	343.3	1.008A	1.686D	86.7	1.108	-3.4	-6.7	57.5	.149
		12.83	6.90	4.63	5.93	9.31	2.27	11.94	2/1/1	32.2	113.8	35.9	.459	3.247	6.1	191.9	.2	105.5D	1.031
5- 830	5-1002.5	.160	26.9	25.1	2.4	.864	88.2	.269	.776	175.2	451.2	.568	.985	105.1	1.215	-2.2	-7.8	259.9	.328
5-1002.5	5-1150	.328	301.1	-6.8	-1.6	1.408	80.2	.460	1.279	31.5	149.1	.691D	1.867A	111.3	.648	2.1	-7.4	209.5	.266
5-1150	5-1390	.108	111.4	53.3	4.6	.679	95.0	.249	1.349	195.5	352.7	1.014A	1.685D	88.5	1.109	-4.7	-18.5	54.4	.152
		12.42	6.54	4.17	5.88	9.26	2.37	11.97	2/1/1	31.1	98.1	40.8	.559	2.868	7.9	190.4	-1.4	109.8D	1.044
5- 840	5-1001.9	.159	16.6	21.5	2.4	.866	91.7	.264	.780	184.8	449.7	.574	.986D	104.8	1.217	-2.6	-9.5	259.7	.323
5-1001.9	5-1150	.323	301.4	-7.0	-1.6	1.408	80.6	.459	1.280	30.4	148.9	.693D	1.868A	111.3	.649	2.1	-7.3	209.7	.265
5-1150	5-1400	.133	123.9	66.9	8.0	.678	94.7	.248	1.348	194.6	361.3	1.014	1.683D	90.3	1.110	-7.9	-36.0	54.9	.191
		12.86	6.98	4.15	5.87	9.25	2.83	12.45	2/1/1	31.0	85.7	41.3	.577	2.834	9.5	190.1	-3.5	110.4D	1.058
5- 870	5-1006.7	.232	12.2	14.8	2.4	.876	100.5	.299	.798	207.1	449.3	.559	1.036D	106.6	1.230	-3.8	-12.2	267.2	.367
5-1006.7	5-1150	.367	299.7	-5.7	-1.5	1.406	77.7	.469	1.264	39.4	150.4	.671D	1.858A	111.4	.641	1.9	-7.4	208.1	.268
5-1150	5-1430	.111	113.6	-18.7	-6.1	.671	93.0	.257	1.330	188.8	384.6	.989	1.672D	95.0	1.111	6.7	47.4	6.9	.201
		13.52	7.60	5.18	5.93	9.31	2.42	12.59	2/1/2	32.4	56.5	32.7	.445	3.547	14.9	191.7	-11.5	104.2D	1.134
MARS ARRIVAL DATE = 2451160 (12 DEC 1998)																			
5- 820	5-1007.1	.201	43.2	26.6	2.2	.859	82.7	.301	.771	162.3	455.8	.539	1.003	107.1	1.212	-1.8	-5.7	265.0	.368
5-1007.1	5-1160	.368	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.4	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1380	.110	105.6	41.2	2.9	.681	96.8	.256	1.356	200.8	344.0	1.008A	1.703D	86.8	1.110	-3.0	-4.1	55.8	.147
		12.28	7.10	4.70	5.17	8.56	2.40	11.92	2/1/1	38.5	113.4	33.3	.445	3.490	6.3	191.8	.9	104.0D	1.107
5- 830	5-1003.2	.162	28.4	25.2	2.4	.863	88.0	.271	.776	174.5	451.5	.566	.985	105.2	1.214	-2.2	-7.7	260.8	.330
5-1003.2	5-1160	.330	299.4	-7.4	-1.8	1.399	79.7	.447	1.240	34.0	154.9	.686D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1390	.113	107.5	47.6	3.9	.682	96.6	.253	1.358	200.5	353.3	1.014A	1.702D	88.6	1.111	-3.9	-13.7	51.8	.146
		11.76	6.63	4.18	5.12	8.51	2.45	11.90	2/1/1	37.1	97.6	38.2	.552	3.054	8.0	190.0	-.5	108.4D	1.133
5- 840	5-1002.5	.159	17.8	21.8	2.4	.865	91.5	.265	.779	184.2	450.0	.572	.986D	104.8	1.217	-2.6	-9.4	260.4	.324
5-1002.5	5-1160	.324	299.6	-7.6	-1.8	1.400	80.1	.445	1.241	32.7	154.7	.689D	1.794A	107.6	.629	2.2	-6.1	208.6	.235
5-1160	5-1400	.124	114.0	58.0	6.1	.681	96.3	.252	1.356	199.5	361.9	1.014	1.698D	90.4	1.112	-5.9	-27.0	50.1	.166
		11.92	6.81	4.15	5.11	8.50	2.65	12.14	2/1/1	36.9	84.3	38.8	.573	3.011	9.4	189.6	-2.7	109.1D	1.151
5- 850	5-1003.3	.174	12.3	18.4	2.4	.867	94.6	.270	.783	192.6	449.4	.572	.995D	105.1	1.220	-3.0	-10.8	261.8	.331
5-1003.3	5-1160	.331	299.3	-7.4	-1.8	1.399	79.6	.447	1.239	34.2	154.9	.685D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1410	.186	146.6	74.1	13.0	.679	95.8	.253	1.351	197.9	369.7	1.009	1.693D	92.0	1.112	-12.7	-49.7	56.6	.267
		13.40	8.28	4.33	5.12	8.51	3.95	13.64	2/1/1	37.1	79.3	37.2	.549	3.138	10.9	189.8	-5.3	108.0D	1.174
5- 870	5-1007.1	.231	12.6	14.9	2.3	.875	100.4	.299	.797	206.7	449.4	.559	1.035D	106.6	1.229	-3.8	-12.1	267.7	.367
5-1007.1	5-1160	.367	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.3	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1430	.136	111.5	-24.4	-8.4	.672	94.6	.260	1.335	193.3	384.8	.988	1.682D	95.0	1.112	9.0	54.1	357.2	.231
		13.20	8.03	5.16	5.17	8.56	2.87	13.04	2/1/2	38.5	60.8	30.9	.446	3.749	14.7	191.4	-11.0	103.3D	1.225
5- 880	5-1009.6	.268	16.2	14.7	2.2	.882	103.4	.321	.808	212.8	449.6	.549	1.067D	107.8	1.237	-4.1	-12.2	271.6	.394
5-1009.6	5-1160	.394	298.4	-5.6	-1.6	1.395	75.8	.464	1.217	46.3	156.9	.652D	1.782A	107.6	.616	1.8	-6.1	205.4	.239
5-1160	5-1440	.099	119.2	-8.9	-4.2	.668	93.7	.265	1.325	190.3	391.4	.974	1.676D	96.4	1.112	5.0	38.5	17.1	.200
		13.22	8.01	5.79	5.21	8.59	2.22	12.58	2/1/2	39.6	45.4	27.2	.387	4.249	16.9	192.8	-14.1	100.6D	1.257
MARS ARRIVAL DATE = 2451170 (22 DEC 1998)																			
5- 820	5-1008.1	.206	44.9	26.5	2.2	.859	82.2	.305	.771	161.4	456.4	.535	1.006	107.4	1.212	-1.8	-5.6	266.2	.374
5-1008.1	5-1170	.374	297.7	-6.6	-1.8	1.390	76.7	.449	1.199	44.0	161.4	.660D	1.737A	104.0	.606	1.9	-4.7	204.4	.214
5-1170	5-1380	.120	103.9	38.3	2.6	.686	98.6	.262	1.368	206.1	345.0	1.009A	1.726D	86.9	1.113	-2.7	-2.0	53.8	.147
		11.95	7.37	4.78	4.58	7.97	2.58	11.91	2/1/1	45.5	112.4	31.3	.430	3.702	6.6	192.1	1.7	102.7D	1.163
5- 830	5-1003.8	.163	29.7	25.4	2.3	.862	87.7	.272	.775	173.9	451.9	.564	.986	105.3	1.214	-2.2	-7.7	261.5	.332
5-1003.8	5-1170	.332	298.3	-8.0	-1.9	1.393	79.3	.437	1.212	35.9	160.3	.682D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1390	.121	105.3	43.1	3.4	.686	98.3	.259	1.369	205.7	354.2	1.014A	1.724D	88.8	1.114	-3.3	-9.9	49.3	.145
		11.31	6.79	4.20	4.52	7.91	2.59	11.87	2/1/1	43.6	96.6	36.4	.545	3.204	8.3	190.0	.6	107.5D	1.201
5- 840	5-1002.9	.159	18.8	22.0	2.4	.865	91.4	.266	.778	183.8	450.2	.571	.985D	104.9	1.216	-2.6	-9.4	261.0	.325
5-1002.9	5-1170	.325	298.5	-8.4	-2.0	1.393	79.7	.435	1.214	34.4	160.0	.686D	1.743A	104.1	.615	2.2	-4.6	206.9	.211
5-1170	5-1400	.125	109.4	50.7	4.9	.685	98.0	.258	1.366	204.6	362.6	1.014	1.718D	90.5	1.115	-4.7	-20.2	46.4	.155
		11.35	6.83	4.15	4.52	7.91	2.68	12.00	2/1/1	43.3	82.7	37.0	.569	3.148	9.5	189.5	-1.6	108.3D	1.222
5- 850	5-1003.7	.173	13.0	18.5	2.4	.867	94.4	.270	.783	192.1	449.6	.571	.994D	105.1	1.219	-3.0	-10.7	262.4	.331
5-1003.7	5-1170	.331	298.3	-8.1	-1.9	1.393	79.3	.437	1.212	35.7	160.2	.683D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1410	.149	122.5	64.3	8.5	.683	97.5	.258	1.360	202.8	370.4	1.009	1.711D	92.1	1.115	-8.1	-36.2	48.4	.202
		11.99	7.46	4.32	4.52	7.92	3.14	12.60	2/1/1	43.6	74.8	35.5	.547	3.278	10.8	189.7	-4.3	107.2D	1.246
5- 860	5-1010.0	.267	16.6	14.7	2.2	.881	103.3	.321	.807	212.4	449.8	.548	1.066D	107.8	1.236	-4.0	-12.1	272.1	.394
5-1010.0	5-1170	.394	297.8	-6.0	-1.8	1.389	75.6	.455	1.191	47.6	162.0	.649D	1.734A	103.9	.602	1.8	-4.7	203.3	.215
5-1170	5-1440	.112	116.5	-11.9	-5.2	.670	95.2	.268	1.330	194.7	391.5	.974	1.686D	96.5	1.114	6.1	42.7	13.6	.212
		12.81	8.20	5.76	4.61	8.00	2.43	12.75	2/1/2	46.5	47.9	26.1	.387	4.433	16.5	192.8	-13.5	100.1D	1.330
5- 890	5-1012.8	.309	21.8	15.1	2.0	.891	106.4	.348	.822	218.0	450.0	.536	1.108D	109.2	1.246	-4.2	-11.8	276.5	.426
5-1012.8	5-1170	.426	298.2	-5.3	-1.7	1.387	73.8	.466	1.180	53.1	162.9	.631D	1.730A	103.8	.595	1.7	-4.5	201.6	.218
5-1170	5-1450	.095	126.0	-1.8	-2.9	.665	94.2	.274	1.317	191.2	397.8	.957	1.678D	97.8	1.113	3.9	32.9	24.9	.211
		13.39	8.71	6.55	4.68	8.07	2.15	12.73	2/1/2	48.1	36.9	22.4	.331	5.155	19.0	194.8	-16.7	97.4D	1.376
MARS ARRIVAL DATE = 2451180 (1 JAN 1999)																			
5- 820	5-1009.2	.213	46.8	26.4	2.1	.858	81.6	.311	.770	160.4	457.2	.530	1.009	107.8	1.212	-1.8	-5.6	267.6	.381
5-1009.2	5-1180	.381	297.5	-6.9	-1.9	1.385	76.2	.445	1.178	46.4	166.4	.654D	1.702A	100.4	.594	1.9	-3.0	201.6	.195
5-1180	5-1380	.133	103.0	35.9	2.4	.692	100.4	.270	1.383	211.6	346.2	1.010A	1.756D	87.1	1.117	-2.4	-.2	51.5	.147
		11.84	7.70	4.88	4.14	7.54	2.82	11.92	2/1/1	53.1	111.0	29.7	.414	3.896	6.9	192.8	2.5	101.6D	1.199
5- 830	5-1004.3	.164	31.0	25.5	2.3	.862	87.5	.274	.774	173.4	452.2	.562	.986	105.4	1.214	-2.2	-7.6	262.3	.334
5-1004.3	5-1180	.334	297.7	-8.7	-2.1	1.388	79.0	.431	1.193	37.3	165.1	.679D	1.707A	100.7	.603	2.3	-2.8	204.3	.192
5-1180	5-1390	.132	104.2	39.5	3.1	.692	100.1	.267	1.383	211.1	355.2	1.014A	1.752D	89.0	1.117	-2.9	-6.9	46.6	.143
		11.09	7.01	4.21	4.07	7.47	2.80	11.87	2/1/1	50.8	95.2	35.1	.538	3.320	8.8	190.2	1.8	106.8D	1.248
5- 840	5-1003.4	.159	19.7	22.2	2.3	.864	91.2	.267	.778	183.3	450.4	.570	.985D	105.0	1.216	-2.6	-9.3	261.6	.326
5-1003.4	5-1180	.326	297.9	-9.1	-2.2	1.389	79.5	.428	1.196	35.6	164.9	.683D	1.708A	100.8	.605	2.3	-2.7	204.8	.191
5-1180	5-1400	.133	107.2	45.0	4.2	.691	99.7	.265	1.379	209.9	363.5	1.013	1.745D	90.7	1.118	-3.8	-14.8	43.1	.150
		11.03	6.96	4.15	4.06	7.46	2.81	11.95	2/1/1	50.4	81.0	35.8	.565	3.253	9.7	189.7	-.3	107.8D	1.274
5- 850	5-1004.1	.172	13.7	18.7	2.3	.866	94.3	.271	.782	191.7	449.8	.570	.994D	105.1	1.219	-3.0	-10.7	262.9	.332
5-1004.1	5-1180	.332	297.7	-8.8	-2.1	1.388	79.1	.430	1.194	36.9	165.1	.680D	1.707A	100.7	.603	2.3	-2.8	204.4	.192
5-1180	5-1410	.141	114.5	54.8	6.4	.688	99.2	.265	1.371	207.9	371.1	1.008	1.735D	92.3	1.117	-5.9	-26.2	43.1	.177
		11.37	7.30	4.32	4.07	7.46	2.98	12.27	2/1/1	50.7	71.3	34.4	.545	3.385	10.7	189.8	-3.1	106.8D	1.301
5- 860	5-1005.6	.196	12.1	16.3	2.3	.869	97.2	.282	.787	199.2	449.7	.565	1.009D	105.7	1.223	-3.4	-11.6	265.4	.346
5-1005.6	5-1180	.346	297.5	-8.2	-2.1	1.388	78.2	.434	1.189	39.8	165.5	.673D	1.706A	100.6	.601	2.2	-2.9	203.6	.192
5-1180	5-1420	.207	147.4	71.8	14.2	.684	98.5	.266	1.361	205.4	376.1	.999	1.723D	93.8	1.117	-13.6	-49.5	51.4	.291
		13.16	9.07	4.64	4.09	7.48	4.43	14.06	2/1/1	51.4	72.6	31.8	.501	5.649	12.0	190.4	-6.1	104.8D	1.327
5- 880	5-1010.4	.265	17.0	14.7	2.1	.880	103.1	.320	.806	212.0	450.0	.548	1.064D	107.8	1.236	-4.0	-12.1	272.6	.393
5-1010.4	5-1180	.393	297.6	-6.5	-1.9	1.384	75.5	.449	1.174	48.6	166.7	.647D	1.701A	100.4	.592	1.9	-3.0	200.8	.196
5-1180	5-1440	.132	114.5	-16.8	-7.0	.673	96.9	.272	1.336	199.3	391.7	.973	1.699D	96.6	1.115	7.9	48.5	7.2	.233
		12.70	8.93	5.73	4.17	7.56	2.80	13.08	2/1/2	53.8	51.7	25.3	.388	4.571	15.9	193.1	-12.6	99.8D	1.366
5- 890	5-1013.2	.307	21.9	15.1	2.0	.890	106.3	.347	.820	217.6	450.2	.536	1.105D	109.1	1.245	-4.2	-11.7	277.1	.425
5-1013.2	5-1180	.425	298.2	-5.7	-1.8	1.382	73.7	.459	1.163	54.0	167.6	.629D	1.698A	100.2	.585	1.7	-2.9	198.9	.199
5-1180	5-1450	.104	123.2	-2.9	-3.5	.666	95.8	.277	1.322	195.6	397.8	.956	1.686D	97.9	1.114	4.5	35.3	23.5	.216
		13.04	8.81	6.51	4.23	7.63	2.30	12.82	2/1/2	55.6	36.2	21.7	.333	5.314	18.3	195.2	-15.9	97.2D	1.434
MARS ARRIVAL DATE = 2451190 (11 JAN 1999)																			
5- 820	5-1010.6	.222	49.1	26.3	2.0	.856	80.8	.319	.768	159.2	458.2	.523	1.013	108.3	1.211	-1.9	-5.6	269.3	.391
5-1010.6	5-1190	.391	297.7	-7.1	-2.1	1.382	75.5	.444	1.163	48.8	171.0	.647D	1.679A	97.0	.586	1.9	-1.1	198.1	.182
5-1190	5-1380	.148	102.8	33.9	2.2	.701	102.3	.280	1.403	217.4	347.6	1.011A	1.795D	87.3	1.121	-2.1	1.1	48.8	.149
		11.98	8.14	5.02	3.84	7.24	3.12	11.94	2/1/1	61.4	109.1	28.5	.393	4.094	7.2	193.9	3.1	100.4D	1.216

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2451190
11 JAN 1999

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC	
5- 830	5-1004.9	.165	32.4	25.6	2.3	.861	87.3	.275	.774	172.8	452.5	.561	.987	105.6	1.213	-2.2	-7.6	263.1	.337		
5-1004.9	5-1190	.337	297.5	-9.4	-2.3	1.385	78.8	.426	1.180	38.5	169.7	.677D	1.683A	97.5	.596	2.4	-.7	201.6	.177		
5-1190	5-1390	.146	103.9	36.7	2.8	.700	102.0	.276	1.402	216.8	356.5	1.015A	1.789D	89.2	1.122	-2.5	-4.4	43.7	.144		
		11.04	7.30	4.23	3.74	7.13	3.07	11.88	2/1/1	58.5	93.2	34.1	.531	3.412	9.4	190.7	3.1	106.3D	1.280		
5- 840	5-1003.8	.159	20.8	22.3	2.3	.863	91.0	.267	.777	182.8	450.7	.569	.985D	105.0	1.216	-2.6	-9.3	262.2	.327		
5-1003.8	5-1190	.327	297.6	-10.0	-2.4	1.385	79.4	.424	1.182	36.5	169.5	.682D	1.683A	97.5	.598	2.5	-.6	202.2	.176		
5-1190	5-1400	.144	106.4	40.7	3.6	.696	101.5	.274	1.396	215.3	364.6	1.013	1.778D	91.0	1.122	-3.2	-10.6	39.9	.150	*	
		10.91	7.16	4.15	3.72	7.12	3.03	11.94	2/1/1	58.0	79.0	34.9	.561	3.331	10.2	190.1	1.2	107.5D	1.309		
5- 850	5-1004.5	.172	14.5	18.9	2.3	.866	94.1	.271	.781	191.3	450.0	.569	.993D	105.2	1.219	-3.0	-10.6	263.4	.333		
5-1004.5	5-1190	.333	297.5	-9.7	-2.4	1.385	79.0	.425	1.181	37.7	169.6	.679D	1.683A	97.5	.597	2.4	-.7	201.8	.177		
5-1190	5-1410	.145	111.3	47.4	5.1	.694	101.0	.273	1.386	213.2	372.0	1.007	1.765D	92.6	1.121	-4.6	-18.7	39.0	.167		
		11.10	7.37	4.51	3.73	7.13	3.06	12.15	2/1/1	58.3	68.3	33.6	.543	3.462	10.7	190.2	-1.6	106.6D	1.338		
5- 860	5-1006.0	.195	12.8	16.4	2.3	.868	97.1	.282	.787	198.8	449.9	.565	1.008D	105.7	1.222	-3.4	-11.5	265.9	.347		
5-1006.0	5-1190	.347	297.4	-8.9	-2.3	1.384	78.1	.429	1.177	40.5	169.9	.672D	1.682A	97.4	.595	2.3	-.8	200.9	.178		
5-1190	5-1420	.166	124.5	60.7	8.9	.690	100.3	.273	1.374	210.5	378.9	.998	1.749D	94.0	1.120	-8.2	-33.7	43.2	.217		
		11.87	8.12	4.62	3.75	7.15	3.49	12.83	2/1/1	59.0	64.9	31.1	.500	3.731	11.6	190.8	-4.8	104.6D	1.366		
5- 880	5-1010.8	.263	17.5	14.8	2.1	.879	103.0	.320	.804	211.6	450.2	.547	1.062D	107.8	1.235	-4.0	-12.0	273.2	.393		
5-1010.8	5-1190	.393	297.8	-7.0	-2.1	1.381	75.4	.444	1.162	49.2	171.1	.646D	1.679A	97.0	.586	1.9	-1.1	197.9	.182		
5-1190	5-1440	.172	113.4	-25.2	-10.7	.678	98.6	.277	1.345	203.9	392.1	.972	1.718D	96.8	1.117	11.7	56.4	352.9	.284		
		13.17	9.32	5.70	-3.84	7.24	3.65	13.94	2/1/2	61.6	58.6	24.7	.389	4.667	15.1	193.6	-11.4	[illegible]6D	1.427		
5- 890	5-1013.7	.305	22.4	15.2	1.9	.888	106.1	.346	.819	217.2	450.4	.535	1.102D	109.1	1.244	-4.2	-11.6	277.7	.424		
5-1013.7	5-1190	.424	298.5	-6.2	-2.0	1.379	73.6	.455	1.152	54.6	171.8	.628D	1.677A	96.7	.579	1.7	-1.1	195.9	.185		
5-1190	5-1450	.116	121.0	-5.1	-4.3	.672	97.5	.281	1.329	200.1	397.9	.956	1.702D	98.0	1.116	5.4	36.5	21.2	.225		
		12.89	8.97	6.46	3.92	7.32	2.50	12.96	2/1/2	63.4	40.0	21.3	.334	5.420	17.5	195.7	-14.8	97.1D	1.475		

MARS ARRIVAL DATE = 2451200 (21 JAN 1999)

5- 820	5-1012.6	.236	52.2	26.0	1.9	.855	79.6	.331	.767	157.4	459.6	.513	1.021	109.1	1.210	-2.0	-5.5	271.8	.407		
5-1012.6	5-1200	.407	298.5	-7.1	-2.2	1.379	74.6	.446	1.151	52.0	175.4	.637D	1.664A	93.7	.580	1.9	.8	193.9	.174		
5-1200	5-1380	.166	103.1	32.3	2.1	.712	104.3	.292	1.430	223.4	349.2	1.012A	1.847D	87.6	1.127	-1.9	2.2	45.8	.152		
		12.39	8.73	5.24	3.66	7.06	3.49	11.97	2/1/1	70.4	106.7	26.6	.364	4.341	7.4	195.5	3.5	98.9D	1.215		
5- 830	5-1005.6	.167	34.0	25.8	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339		
5-1005.6	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167		
5-1200	5-1390	.162	104.2	34.4	2.6	.710	103.9	.288	1.426	222.6	357.9	1.015A	1.837D	89.5	1.127	-2.2	-2.5	40.6	.147		
		11.17	7.66	4.25	3.51	6.91	3.41	11.92	2/1/1	66.5	91.0	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.296		
5- 840	5-1004.3	.159	22.0	22.6	2.3	.863	90.8	.268	.777	182.3	451.0	.568	.985D	105.1	1.215	-2.6	-9.3	262.8	.328		
5-1004.3	5-1200	.328	297.8	-11.0	-2.6	1.383	79.2	.420	1.174	37.2	173.7	.680D	1.667A	94.5	.595	2.6	1.8	199.3	.166		
5-1200	5-1400	.158	106.4	37.3	3.2	.707	103.4	.285	1.417	220.9	365.8	1.013	1.821D	91.3	1.126	-2.7	-7.3	36.8	.152		
		10.97	7.48	4.15	3.49	6.89	3.33	11.97	2/1/1	66.0	76.9	34.4	.557	3.383	11.0	190.8	2.8	107.3D	1.328		
5- 850	5-1004.9	.171	15.4	19.0	2.3	.865	94.0	.272	.780	190.8	450.3	.568	.993D	105.2	1.218	-3.0	-10.6	264.0	.333		
5-1004.9	5-1200	.333	297.7	-10.6	-2.6	1.383	78.9	.422	1.172	38.2	173.8	.678D	1.667A	94.5	.594	2.5	1.6	199.0	.166		
5-1200	5-1410	.155	110.3	42.0	4.3	.703	102.8	.284	1.405	218.6	373.0	1.006	1.803D	92.9	1.125	-3.7	-13.0	35.6	.165		
		11.07	7.57	4.30	3.50	6.90	3.27	12.13	2/1/1	66.2	65.8	33.1	.541	3.512	11.0	190.9	.1	106.5D	1.360		
5- 860	5-1006.5	.194	13.5	16.5	2.2	.868	96.9	.282	.786	198.3	450.1	.564	1.007D	105.8	1.222	-3.4	-11.4	266.5	.347		
5-1006.5	5-1200	.347	297.6	-9.7	-2.5	1.382	78.1	.426	1.168	41.0	174.1	.671D	1.666A	94.4	.591	2.4	1.4	198.0	.167		
5-1200	5-1420	.160	117.8	50.8	6.5	.697	102.1	.283	1.390	215.7	379.7	.997	1.782D	94.3	1.124	-5.7	-22.6	38.0	.194		
		11.50	7.98	4.61	3.52	6.92	3.37	12.49	2/1/1	67.0	59.7	30.6	.500	3.784	11.4	191.5	-3.2	104.6D	1.391		
5- 890	5-1014.1	.302	22.8	15.2	1.8	.887	105.9	.345	.817	216.6	450.7	.535	1.099D	109.1	1.243	-4.1	-11.5	278.5	.424		
5-1014.1	5-1200	.424	299.0	-6.6	-2.1	1.377	73.6	.452	1.145	54.8	175.7	.627D	1.663A	93.6	.577	1.8	.7	192.8	.176		
5-1200	5-1450	.133	119.3	-8.9	-5.6	.677	99.2	.286	1.337	204.7	398.2	.954	1.721D	98.2	1.118	6.8	43.1	17.2	.241		
		12.96	9.24	6.41	3.72	7.12	2.83	13.21	2/1/2	71.4	43.0	21.0	.335	5.480	16.4	196.5	-13.5	97.2D	1.501		

MARS ARRIVAL DATE = 2451210 (31 JAN 1999)

5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343		
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.3	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160		
5-1210	5-1390	.161	105.0	32.5	2.4	.723	105.9	.303	1.457	228.6	359.5	1.015A	1.899D	89.9	1.134	-2.0	-.9	37.3	.153		
		11.47	8.10	4.28	3.37	6.78	3.82	11.98	2/1/1	74.7	88.4	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299		
5- 840	5-1004.9	.159	23.3	22.8	2.2	.862	90.6	.269	.776	181.7	451.3	.567	.985D	105.2	1.215	-2.6	-9.2	263.6	.330		
5-1004.9	5-1210	.330	298.2	-12.0	-2.9	1.382	79.1	.418	1.168	37.6	177.6	.679D	1.657A	91.7	.594	2.8	4.2	196.3	.159		
5-1210	5-1400	.175	107.0	34.7	2.9	.719	105.3	.300	1.445	226.6	367.1	1.012	1.877D	91.6	1.132	-2.3	-4.7	33.7	.157		
		11.19	7.85	4.15	3.35	6.75	3.69	12.03	2/1/1	74.0	74.6	34.1	.552	3.413	12.0	191.7	4.7	107.3D	1.333		
5- 850	5-1005.4	.170	16.4	19.2	2.2	.864	93.8	.272	.780	190.2	450.5	.567	.992D	105.3	1.218	-3.0	-10.5	264.7	.334		
5-1005.4	5-1210	.334	298.1	-11.6	-2.8	1.382	78.9	.420	1.167	38.5	177.7	.677D	1.657A	91.6	.593	2.7	4.0	196.0	.159		
5-1210	5-1410	.170	110.3	38.0	3.7	.713	104.7	.296	1.428	224.1	374.1	1.005	1.852D	93.2	1.130	-3.0	-8.7	32.5	.168		
		11.22	7.87	4.29	3.35	6.76	3.58	12.16	2/1/1	74.3	63.5	32.8	.539	3.538	11.7	191.8	1.9	106.6D	1.367		
5- 860	5-1007.0	.193	14.2	16.7	2.2	.867	96.7	.282	.785	197.7	450.4	.563	1.006D	105.8	1.221	-3.3	-11.4	267.2	.347		
5-1007.0	5-1210	.347	298.2	-10.6	-2.7	1.381	78.0	.424	1.163	41.2	178.0	.670D	1.656A	91.5	.591	2.5	3.6	195.0	.161		
5-1210	5-1420	.167	115.6	43.7	5.1	.707	103.9	.294	1.410	221.0	380.7	.995	1.824D	94.7	1.128	-4.3	-14.8	34.2	.188		
		11.50	8.11	4.59	3.38	6.79	3.53	12.41	2/1/1	75.0	56.0	30.4	.499	3.811	11.5	192.4	-1.4	104.7D	1.401		
5- 870	5-1009.1	.223	15.3	15.3	2.1	.871	99.6	.298	.792	204.5	450.5	.556	1.028D	106.6	1.226	-3.7	-11.8	270.5	.367		
5-1009.1	5-1210	.367	298.4	-9.4	-2.6	1.380	76.9	.431	1.158	45.0	178.3	.659D	1.656A	91.3	.587	2.3	3.1	193.6	.163		
5-1210	5-1430	.184	128.3	56.3	9.0	.699	103.0	.293	1.390	217.4	386.7	.983	1.796D	96.0	1.126	-8.1	-28.9	40.3	.236		
		12.35	8.92	5.03	3.43	6.83	3.88	13.11	2/1/1	76.1	56.0	27.5	.447	4.209	12.0	193.5	-5.0	102.3D	1.433		
5- 890	5-1014.7	.299	23.3	15.2	1.8	.885	105.7	.344	.815	216.1	451.0	.534	1.095D	109.1	1.242	-4.1	-11.4	279.0	.423		
5-1014.7	5-1210	.423	299.8	-7.1	-2.3	1.376	73.7	.451	1.141	54.9	179.3	.627D	1.656A	90.6	.576	1.8	2.5	189.7	.171		
5-1210	5-1450	.163	116.1	-16.0	-8.3	.683	101.0	.294	1.348	209.4	398.5	.953	1.744D	98.5	1.121	9.5	50.3	8.7	.275		
		13.38	9.78	6.36	3.60	7.00	3.42	13.77	2/1/2	79.2	48.7	21.0	.337	5.499	15.3	197.5	-11.9	97.3D	1.514		

MARS ARRIVAL DATE = 2451220 (10 FEB 1999)

5- 830	5-1007.4	.173	38.0	26.0	2.1	.858	86.2	.283	.771	170.2	454.0	.553	.989	106.1	1.212	-2.2	-7.5	266.3	.347		
5-1007.4	5-1220	.347	298.9	-11.7	-3.0	1.380	78.1	.422	1.161	41.1	181.6	.670D	1.651	88.9	.592	2.7	5.8	192.2	.157		
5-1220	5-1390	.202	106.2	31.0	2.2	.738	107.9	.323	1.499	234.7	361.1	1.015	1.982D	90.3	1.142	-1.7	.3	33.9	.160		
		11.95	8.64	4.32	3.31	6.72	4.32	12.07	2/1/1	82.8	85.6	32.4	.499	3.585	12.5	193.8	7.5	105.3D	1.291		
5- 840	5-1005.8	.159	24.8	23.0	2.2	.861	90.4	.271	.775	181.0	451.6	.565	.985D	105.2	1.215	-2.6	-9.2	264.4	.332		
5-1005.8	5-1220	.332	298.9	-13.1	-3.2	1.381	79.1	.417	1.165	37.9	181.3	.679D	1.651	89.1	.595	3.0	6.5	193.5	.156		
5-1220	5-1400	.195	108.1	32.6	2.7	.733	107.3	.317	1.481	232.5	368.5	1.011	1.951D	92.1	1.140	-2.0	-2.6	30.7	.165		
		11.58	8.30	4.16	3.28	6.69	4.15	12.12	2/1/1	82.0	72.3	34.0	.547	3.423	13.5	192.9	6.7	107.4D	1.325		
5- 850	5-1006.0	.169	17.5	19.5	2.2	.863	93.6	.273	.779	189.6	450.8	.566	.991D	105.3	1.217	-3.0	-10.4	265.4	.335		
5-1006.0	5-1220	.335	298.9	-12.8	-3.1	1.381	78.9	.418	1.164	38.6	181.4	.677D	1.651	89.0	.594	2.9	6.3	193.2	.156		
5-1220	5-1410	.167	111.0	34.9	3.3	.726	106.6	.312	1.459	229.7	375.3	1.003	1.915D	93.6	1.137	-2.5	-5.4	29.7	.174		
		11.54	8.25	4.28	3.29	6.69	3.97	12.24	2/1/1	82.1	61.4	32.8	.536	3.542	12.8	192.9	4.0	106.8D	1.362		
5- 860	5-1007.5	.191	15.2	16.9	2.1	.866	96.5	.283	.784	197.1	450.7	.562	1.005D	105.8	1.221	-3.3	-11.3	267.9	.348		
5-1007.5	5-1220	.348	298.9	-11.6	-3.0	1.380	78.1	.423	1.161	41.3	181.6	.670D	1.651	88.8	.592	2.7	5.7	192.2	.158		
5-1220	5-1420	.181	115.2	38.6	4.3	.718	105.8	.308	1.436	226.4	381.6	.993	1.879D	95.0	1.134	-3.4	-9.2	31.1	.169		
		11.71	8.39	4.57	3.32	6.72	3.83	12.43	2/1/1	82.8	53.3	30.4	.497	3.815	11.9	193.5	.6	105.0D	1.400		
5- 870	5-1009.7	.221	16.1	15.4	2.0	.869	99.4	.298	.790	203.9	450.8	.555	1.026D	106.7	1.226	-3.6	-11.7	271.2	.367		
5-1009.7	5-1220	.367	299.2	-10.2	-2.8	1.379	76.9	.429	1.155	45.1	181.9	.659D	1.651	88.6	.589	2.4	5.1	190.7	.160		
5-1220	5-1430	.181	122.7	46.3	6.4	.710	104.9	.305	1.411	222.6	387.5	.981	1.842D	96.3	1.131	-5.4	-17.1	35.6	.216		
		12.19	8.63	5.00	3.37	6.77	3.83	12.81	2/1/1	83.9	49.6	27.5	.447	4.212	11.7	194.6	-3.1	102.6D	1.435		

MARS ARRIVAL DATE = 2451230 (20 FEB 1999)

5- 830	5-1008.6	.177	40.7	26.1	2.0	.857	85.6	.287	.770	169.0	454.7	.549	.991	106.3	1.212	-2.2	-7.4	267.8	.352		
5-1008.6	5-1230	.352	299.9	-12.3	-3.2	1.380	77.8	.424	1.159	42.0	185.0	.668D	1.649	86.3	.594	2.8	7.5	189.3	.156		
5-1230	5-1390	.227	107.7	29.7	2.1	.757	110.0	.347	1.554	240.9	362.9	1.015	2.093D	90.7	1.153	-1.5	1.3	30.5	.171		
		12.61	9.28	4.37	3.32	6.73	4.91	12.19	2/1/1	90.5	82.6	32.0	.484	3.630	13.6	195.4	8.8	104.9D	1.274		

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 560 DAYS
MARS ARRIVAL DATE = 2451230
20 FEB 1999

LAUNCH SWNGBY DEPART	SWNGBY ARRIVE RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
5- 840	5-1006.3	.160	26.4	23.3	2.1	.860	90.1	.272	.774	180.2	452.0	.563	.985D	105.3	1.214	-2.6	-9.1	265.4	.334
5-1006.3	5-1230	.334	299.8	-14.4	-3.5	1.381	79.1	.417	1.164	38.0	184.8	.678D	1.649	86.6	.598	3.2	8.6	190.9	.156
5-1230	5-1400	.218	109.6	30.9	2.5	.750	109.4	.339	1.529	238.4	370.0	1.010	2.047D	92.5	1.149	-1.7	-.9	27.7	.175
		12.13	8.85	4.16	3.28	6.68	4.69	12.24	2/1/1	89.5	69.9	34.1	.540	3.415	15.2	194.4	8.9	107.6D	1.305
5- 850	5-1006.6	.169	18.8	19.7	2.1	.862	93.3	.273	.778	189.0	451.1	.565	.991D	105.4	1.217	-3.0	-10.4	266.2	.336
5-1006.6	5-1230	.336	299.8	-14.1	-3.5	1.381	78.9	.418	1.163	38.6	184.8	.677D	1.649	86.6	.597	3.1	8.5	190.7	.156
5-1230	5-1410	.208	112.2	32.5	2.9	.742	108.6	.332	1.500	235.4	376.6	1.002	1.998D	94.1	1.145	-2.1	-2.8	27.0	.184
		12.01	8.73	4.27	3.28	6.69	4.46	12.36	2/1/1	89.6	59.4	33.0	.533	3.525	14.3	194.4	6.4	107.2D	1.345
5- 860	5-1008.1	.190	16.2	17.1	2.1	.865	96.3	.283	.783	196.5	451.0	.561	1.004D	105.9	1.220	-3.3	-11.2	268.7	.348
5-1008.1	5-1230	.348	299.9	-12.7	-3.3	1.380	78.1	.422	1.160	41.2	185.0	.670D	1.649	86.4	.595	2.9	7.7	189.7	.157
5-1230	5-1420	.199	115.8	34.9	3.7	.732	107.8	.326	1.470	231.8	382.7	.991	1.948D	95.5	1.141	-2.7	-5.1	28.5	.196
		12.09	8.78	4.55	3.31	6.72	4.24	12.53	2/1/1	90.3	51.3	30.5	.496	3.798	12.7	194.9	2.8	105.4D	1.388
5- 870	5-1010.3	.216	17.0	15.5	2.0	.868	99.2	.298	.789	203.2	451.1	.554	1.024D	106.7	1.225	-3.6	-11.6	272.1	.367
5-1010.3	5-1230	.367	300.2	-11.1	-3.0	1.379	76.9	.429	1.155	44.9	185.2	.660D	1.650	86.1	.592	2.6	6.8	188.2	.160
5-1230	5-1430	.192	121.2	39.6	5.0	.722	106.8	.320	1.439	227.9	388.4	.978	1.900D	96.8	1.137	-3.9	-9.4	32.3	.214
		12.41	9.04	4.96	3.37	6.77	4.08	12.78	2/1/1	91.2	45.9	27.6	.447	4.193	11.7	195.9	-1.1	102.9D	1.426
5- 880	5-1012.9	.253	20.0	15.0	1.8	.873	102.1	.318	.798	209.2	451.3	.544	1.051D	107.7	1.231	-3.8	-11.6	276.1	.391
5-1012.9	5-1230	.391	300.9	-9.5	-2.8	1.378	75.5	.438	1.148	49.5	185.5	.646D	1.651	85.7	.588	2.3	6.0	186.5	.164
5-1230	5-1440	.202	133.1	51.1	8.9	.712	105.8	.316	1.409	223.6	393.8	.964	1.854D	97.9	1.132	-7.7	-22.5	39.6	.256
		13.26	9.83	5.53	3.45	6.85	4.31	13.45	2/1/1	92.5	47.8	24.5	.393	4.722	11.9	197.6	-4.9	100.3D	1.462
MARS ARRIVAL DATE = 2451240 (2 MAR 1999)																			
5- 830	5-1010.1	.182	43.8	26.2	1.9	.856	85.0	.293	.768	167.6	455.6	.543	.993	106.7	1.211	-2.3	-7.3	269.7	.359
5-1010.1	5-1240	.359	301.3	-12.8	-3.4	1.380	77.5	.426	1.158	43.2	188.3	.665D	1.651	83.9	.598	2.9	8.7	186.9	.161
5-1240	5-1390	.256	109.4	28.6	2.0	.780	112.2	.378	1.630	247.1	364.7	1.014	2.246D	91.3	1.165	-1.4	2.0	27.2	.184
		13.46	10.07	4.44	3.39	6.80	5.62	12.37	2/1/1	97.6	79.8	31.5	.465	3.685	14.5	197.2	10.0	104.4D	1.250
5- 840	5-1007.0	.160	28.2	23.5	2.1	.859	89.8	.274	.773	179.4	452.4	.562	.985	105.5	1.214	-2.6	-9.0	266.4	.336
5-1007.0	5-1240	.336	300.9	-15.9	-3.9	1.381	79.0	.417	1.164	38.0	188.1	.678D	1.650	84.3	.602	3.5	10.5	188.9	.158
5-1240	5-1400	.244	111.3	29.4	2.3	.771	111.5	.367	1.593	244.4	371.5	1.008	2.177D	93.1	1.160	-1.5	.4	24.9	.188
		12.83	9.50	4.17	3.33	6.73	5.34	12.42	2/1/1	96.5	67.6	34.3	.533	3.388	17.4	196.1	11.4	108.0D	1.274
5- 850	5-1007.2	.168	20.1	20.0	2.1	.861	93.1	.274	.777	188.3	451.4	.564	.990D	105.4	1.216	-2.9	-10.3	267.1	.337
5-1007.2	5-1240	.337	300.9	-15.6	-3.8	1.381	79.0	.418	1.164	38.3	188.1	.677D	1.650	84.3	.602	3.4	10.4	188.8	.158
5-1240	5-1410	.232	113.8	30.5	2.7	.760	110.7	.357	1.553	241.1	377.8	.999	2.107D	94.7	1.155	-1.7	-.8	24.7	.196
		12.63	9.30	4.26	3.33	6.74	5.04	12.53	2/1/1	96.5	57.6	33.3	.529	3.485	16.4	196.0	9.1	107.8D	1.315
5- 860	5-1008.8	.188	17.3	17.3	2.0	.864	96.0	.283	.781	195.8	451.3	.560	1.002D	105.9	1.220	-3.3	-11.1	269.6	.349
5-1008.8	5-1240	.349	301.1	-14.0	-3.6	1.381	78.2	.422	1.160	41.0	188.2	.671D	1.650	84.1	.600	3.1	9.4	187.7	.160
5-1240	5-1420	.220	117.0	32.1	3.2	.749	109.8	.347	1.514	237.4	383.7	.988	2.039D	96.0	1.150	-2.2	-2.0	26.3	.207
		12.63	9.27	4.52	3.36	6.76	4.75	12.68	2/1/1	97.1	49.6	30.8	.494	3.760	14.1	196.5	5.3	105.9D	1.365
5- 870	5-1011.0	.216	17.9	15.7	1.9	.867	98.9	.298	.787	202.4	451.4	.553	1.022D	106.7	1.224	-3.6	-11.5	273.0	.367
5-1011.0	5-1240	.367	301.4	-12.1	-3.3	1.380	77.0	.429	1.156	44.7	188.4	.660D	1.651	83.8	.597	2.7	8.3	186.3	.162
5-1240	5-1430	.209	121.4	34.9	4.1	.737	108.8	.339	1.475	233.2	389.2	.975	1.975D	97.3	1.144	-3.0	-4.3	29.8	.221
		12.83	9.41	4.93	3.42	6.82	4.48	12.88	2/1/1	98.0	43.6	27.9	.446	4.154	12.2	197.4	1.1	103.4D	1.408
5- 880	5-1013.6	.250	20.8	15.1	1.7	.872	101.8	.317	.796	208.5	451.7	.544	1.048D	107.7	1.230	-3.8	-11.5	277.0	.391
5-1013.6	5-1240	.391	302.2	-10.2	-3.0	1.378	75.6	.438	1.149	49.2	188.6	.646D	1.652	83.4	.593	2.4	7.2	184.6	.166
5-1240	5-1440	.204	126.4	41.2	6.1	.726	107.7	.332	1.458	228.8	394.5	.961	1.916D	98.4	1.139	-4.9	-10.6	35.5	.242
		13.33	9.83	5.47	3.50	6.90	4.35	13.21	2/1/1	99.1	41.1	24.7	.394	4.673	11.5	199.1	-2.9	100.7D	1.447
MARS ARRIVAL DATE = 2451250 (12 MAR 1999)																			
5- 850	5-1007.8	.167	21.4	20.2	2.0	.861	92.9	.275	.776	187.6	451.8	.563	.989D	105.5	1.216	-2.9	-10.2	267.9	.338
5-1007.8	5-1250	.338	302.2	-17.6	-4.3	1.382	79.1	.418	1.165	37.9	191.2	.676D	1.653	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1410	.260	115.6	28.9	2.5	.783	112.8	.387	1.626	246.9	379.0	.997	2.255D	95.3	1.167	-1.5	.8	22.5	.212
		13.41	9.99	4.25	3.45	6.83	5.74	12.76	2/1/1	102.7	56.0	34.0	.526	3.417	19.2	198.0	12.2	108.5D	1.271
5- 860	5-1009.4	.186	18.5	17.5	1.9	.862	95.8	.284	.780	195.0	451.6	.559	1.001D	105.9	1.219	-3.3	-11.0	270.5	.349
5-1009.4	5-1250	.349	302.4	-15.5	-4.0	1.381	78.3	.422	1.162	40.6	191.3	.672D	1.653	82.0	.606	3.4	10.9	186.5	.164
5-1250	5-1420	.246	118.6	29.9	2.9	.769	111.8	.374	1.572	242.9	384.7	.985	2.160D	96.6	1.160	-1.8	.3	24.4	.221
		13.32	9.87	4.50	3.45	6.85	5.37	12.89	2/1/1	103.3	48.2	31.4	.493	3.701	16.1	198.3	8.1	106.5D	1.330
5- 870	5-1011.7	.213	19.0	15.9	1.8	.865	98.6	.298	.786	201.7	451.8	.552	1.020D	106.7	1.223	-3.6	-11.4	273.9	.367
5-1011.7	5-1250	.367	302.8	-13.2	-3.6	1.380	77.1	.429	1.158	44.3	191.4	.661D	1.655	81.7	.603	2.9	9.4	185.0	.167
5-1250	5-1430	.231	122.4	31.6	3.5	.755	110.8	.362	1.522	236.6	390.1	.971	2.073D	97.9	1.153	-2.3	-.6	27.6	.232
		13.41	9.91	4.89	3.51	6.91	5.02	13.06	2/1/1	104.1	42.0	28.3	.446	4.096	13.2	199.1	5.5	103.9D	1.382

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2451140
22 NOV 1998

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC

MARS ARRIVAL DATE = 2451140 (22 NOV 1998)

5- 850	5-1002.2	.176	10.3	17.9	2.5	.869	94.9	.269	.785	193.7	448.9	.574	.996D	105.0	1.221	-3.0	-10.9	260.4	.330
5-1002.2	5-1140	.330	303.4	-6.1	-1.4	1.419	80.7	.479	1.334	29.1	142.9	.694D	1.974A	115.1	.674	2.0	-8.3	210.1	.302
5-1140	5-1450	.081	136.9	-.9	-2.0	.663	89.6	.270	1.309	178.9	398.5	.956	1.663	97.9	1.111	2.9	27.9	26.8	.204
		13.14	6.32	4.36	6.83	10.20	1.96	12.64	2/1/2	25.8	34.1	42.7	.553	2.744	11.2	191.0	-6.5	110.8D	.965
5- 860	5-1004.0	.201	9.6	15.7	2.5	.872	97.8	.282	.791	201.0	448.9	.568	1.013D	105.6	1.225	-3.4	-11.8	263.2	.346
5-1004.0	5-1140	.346	302.5	-5.7	-1.4	1.419	79.6	.483	1.328	32.5	143.4	.687D	1.970A	115.2	.671	1.9	-8.3	209.7	.303
5-1140	5-1460	.083	148.5	1.2	-1.4	.659	88.3	.281	1.300	175.7	405.2	.935	1.665	99.4	1.111	2.4	25.9	32.8	.225
		13.55	6.70	4.71	6.85	10.22	1.99	12.94	2/1/2	26.2	27.7	39.3	.503	2.974	13.0	191.5	-9.0	108.4D	.994

MARS ARRIVAL DATE = 2451150 (2 DEC 1998)

5- 830	5-1002.5	.160	26.9	25.1	2.4	.864	88.2	.269	.776	175.2	451.2	.568	.985	105.1	1.215	-2.2	-7.8	259.9	.328
5-1002.5	5-1150	.328	301.1	-6.8	-1.6	1.408	80.2	.460	1.279	31.5	149.1	.691D	1.867A	111.3	.648	2.1	-7.4	209.5	.266
5-1150	5-1430	.111	113.6	-18.7	-6.1	.671	93.0	.257	1.330	188.8	384.6	.989	1.672D	95.0	1.111	6.7	47.4	6.9	.201
		12.46	6.59	4.17	5.88	9.26	2.42	12.59	2/1/2	31.1	56.5	40.8	.559	2.868	7.9	190.4	-1.4	109.8D	1.044
5- 840	5-1001.9	.159	16.8	21.5	2.4	.866	91.7	.264	.780	184.8	449.7	.574	.986D	104.8	1.217	-2.6	-9.5	259.7	.323
5-1001.9	5-1150	.323	301.4	-7.0	-1.6	1.408	80.6	.459	1.280	30.4	148.9	.693D	1.868A	111.3	.649	2.1	-7.3	209.7	.265
5-1150	5-1440	.090	122.4	-7.0	-3.5	.667	92.1	.263	1.321	186.0	391.5	.974	1.668D	96.4	1.111	4.2	35.2	19.2	.193
		12.11	6.24	4.15	5.87	9.25	2.09	12.49	2/1/2	31.0	43.7	41.3	.577	2.834	9.5	190.1	-3.5	110.4D	1.058
5- 850	5-1002.8	.175	11.4	18.2	2.4	.868	94.7	.270	.784	193.1	449.2	.572	.995D	105.0	1.220	-3.0	-10.8	261.2	.330
5-1002.8	5-1150	.330	301.0	-6.7	-1.6	1.408	80.0	.461	1.278	32.0	149.1	.689D	1.866A	111.3	.647	2.0	-7.4	209.4	.266
5-1150	5-1450	.084	133.0	-1.0	-2.3	.663	91.1	.270	1.311	182.9	398.1	.956	1.666D	97.8	1.111	3.2	29.4	26.5	.205
		12.22	6.34	4.34	5.88	9.26	1.99	12.65	2/1/2	31.2	34.9	39.5	.551	2.962	11.1	190.2	-6.0	109.1D	1.081
5- 860	5-1004.5	.200	10.4	15.9	2.4	.871	97.6	.282	.790	200.4	449.1	.567	1.012D	105.7	1.224	-3.4	-11.7	263.9	.346
5-1004.5	5-1150	.346	300.3	-6.2	-1.6	1.407	79.0	.464	1.272	35.2	149.6	.682D	1.863A	111.4	.645	2.0	-7.4	208.9	.267
5-1150	5-1460	.083	144.6	1.7	-1.5	.658	89.8	.280	1.301	179.5	404.6	.936	1.665	99.3	1.111	2.6	26.8	32.9	.223
		12.58	6.67	4.69	5.90	9.28	1.98	12.92	2/1/2	31.7	28.3	36.4	.503	3.201	12.9	190.8	-8.7	106.9D	1.106
5- 870	5-1006.7	.232	12.2	14.8	2.4	.876	100.5	.299	.798	207.1	449.3	.559	1.036D	106.6	1.230	-3.8	-12.2	267.2	.367
5-1006.7	5-1150	.367	299.7	-5.7	-1.5	1.406	77.7	.469	1.264	39.4	150.4	.671D	1.858A	111.4	.641	1.9	-7.4	208.1	.268
5-1150	5-1470	.087	156.8	2.2	-1.0	.653	88.4	.292	1.290	176.0	411.0	.913	1.667	100.9	1.111	2.2	25.8	39.2	.245
		13.15	7.23	5.18	5.93	9.31	2.05	13.27	2/1/2	32.4	23.0	32.7	.445	3.547	14.9	191.7	-11.5	104.2D	1.134

MARS ARRIVAL DATE = 2451160 (12 DEC 1998)

5- 830	5-1003.2	.162	28.4	25.2	2.4	.863	88.0	.271	.776	174.5	451.5	.566	.985	105.2	1.214	-2.2	-7.7	260.8	.330
5-1003.2	5-1160	.330	299.4	-7.4	-1.8	1.399	79.7	.447	1.240	34.0	154.9	.686D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1430	.136	111.3	-24.4	-8.4	.672	94.6	.260	1.335	193.3	384.8	.988	1.682D	95.0	1.112	9.0	54.1	357.2	.231
		12.18	7.06	4.18	5.12	8.51	2.87	13.04	2/1/2	37.1	60.8	38.2	.552	3.054	8.0	190.0	-.5	108.4D	1.133
5- 840	5-1002.5	.159	17.8	21.8	2.4	.865	91.5	.265	.779	184.2	450.0	.572	.986D	104.8	1.217	-2.6	-9.4	260.4	.324
5-1002.5	5-1160	.324	299.6	-7.6	-1.8	1.400	80.1	.445	1.241	32.7	154.7	.689D	1.794A	107.6	.629	2.2	-6.1	208.6	.235
5-1160	5-1440	.099	119.2	-8.9	-4.2	.668	93.7	.265	1.325	190.3	391.4	.974	1.676D	96.4	1.112	5.0	38.5	17.1	.200
		11.48	6.37	4.15	5.11	8.50	2.22	12.58	2/1/2	36.9	45.4	38.8	.573	3.011	9.4	189.6	-2.7	109.1D	1.151
5- 850	5-1003.3	.174	12.3	18.4	2.4	.867	94.6	.270	.783	192.6	449.4	.572	.995D	105.1	1.220	-3.0	-10.8	261.8	.331
5-1003.3	5-1160	.331	299.3	-7.4	-1.8	1.399	79.6	.447	1.239	34.2	154.9	.685D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1450	.088	129.3	-1.2	-2.5	.663	92.6	.272	1.314	187.0	397.9	.957	1.670D	97.8	1.112	3.5	31.0	25.9	.207
		11.51	6.39	4.33	5.12	8.51	2.05	12.68	2/1/2	37.1	35.8	37.2	.549	3.136	10.9	189.8	-5.3	108.0D	1.174
5- 860	5-1004.9	.199	11.0	16.0	2.4	.871	97.5	.282	.789	200.0	449.3	.567	1.011D	105.7	1.224	-3.4	-11.7	264.4	.346
5-1004.9	5-1160	.346	298.9	-6.8	-1.7	1.398	78.7	.451	1.234	37.2	155.4	.678D	1.790A	107.6	.625	2.0	-6.2	207.6	.236
5-1160	5-1460	.085	140.9	2.2	-1.6	.658	91.4	.280	1.302	183.5	404.2	.937	1.667D	99.2	1.111	2.7	27.7	32.8	.223
		11.82	6.68	4.67	5.14	8.52	2.01	12.92	2/1/2	37.7	29.0	34.3	.502	3.388	12.7	190.4	-8.1	105.6D	1.199
5- 870	5-1007.1	.231	12.6	14.9	2.3	.875	100.4	.299	.797	206.7	449.4	.559	1.035D	106.6	1.229	-3.8	-12.1	267.7	.367
5-1007.1	5-1160	.367	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.3	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1470	.086	153.3	3.0	-1.0	.653	89.9	.291	1.290	179.8	410.4	.915	1.666	100.7	1.111	2.3	26.4	39.4	.243
		12.36	7.19	5.16	5.17	8.56	2.03	13.24	2/1/2	38.5	23.5	30.9	.446	3.749	14.7	191.4	-11.0	103.3D	1.225
5- 880	5-1009.6	.268	16.2	14.7	2.2	.882	103.4	.321	.808	212.8	449.6	.549	1.067D	107.8	1.237	-4.1	-12.2	271.6	.394
5-1009.6	5-1160	.394	298.4	-5.6	-1.6	1.395	75.8	.464	1.217	46.3	156.9	.652D	1.782A	107.6	.616	1.8	-6.1	205.4	.239
5-1160	5-1480	.093	165.5	2.1	-.6	.647	88.3	.304	1.279	176.0	416.6	.889	1.668	102.3	1.110	2.1	26.2	46.2	.266
		13.14	7.93	5.79	5.21	8.59	2.13	13.62	2/1/2	39.6	18.9	27.2	.387	4.249	16.9	192.8	-14.1	100.6D	1.257

MARS ARRIVAL DATE = 2451170 (22 DEC 1998)

5- 830	5-1003.8	.163	29.7	25.4	2.3	.862	87.7	.272	.775	173.9	451.9	.564	.986	105.3	1.214	-2.2	-7.7	261.5	.332
5-1003.8	5-1170	.332	298.3	-8.0	-1.9	1.393	79.3	.437	1.212	35.9	160.3	.682D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1430	.191	110.5	-33.0	-13.5	.675	96.2	.264	1.341	197.9	385.1	.988	1.695D	95.2	1.114	14.1	61.4	334.9	.306
		12.77	8.25	4.20	4.52	7.91	4.05	14.35	2/1/2	43.6	67.9	36.4	.545	3.204	8.3	190.0	.6	107.5D	1.201
5- 840	5-1002.9	.159	18.8	22.0	2.4	.865	91.4	.266	.778	185.6	450.2	.571	.985D	104.9	1.216	-2.6	-9.4	261.0	.325
5-1002.9	5-1170	.325	298.5	-8.4	-2.0	1.393	79.7	.435	1.214	34.4	160.0	.686D	1.743A	104.1	.615	2.2	-4.6	206.9	.211
5-1170	5-1440	.112	116.5	-11.9	-5.2	.670	95.2	.268	1.330	194.7	391.5	.974	1.686D	96.5	1.114	6.1	42.7	13.6	.212
		11.10	6.58	4.15	4.52	7.91	2.43	12.75	2/1/2	43.3	47.9	37.0	.569	3.148	9.5	189.5	-1.6	108.3D	1.222
5- 850	5-1003.7	.173	13.0	18.5	2.4	.867	94.4	.270	.783	192.1	449.6	.571	.994D	105.1	1.219	-3.0	-10.7	262.4	.331
5-1003.7	5-1170	.331	298.3	-8.1	-1.9	1.393	79.3	.437	1.212	35.7	160.2	.683D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1450	.095	126.0	-1.8	-2.9	.665	94.2	.274	1.317	191.2	397.8	.957	1.678D	97.8	1.113	3.9	32.9	24.9	.211
		11.00	6.48	4.32	4.52	7.92	2.15	12.73	2/1/2	43.6	36.9	35.5	.547	3.278	10.8	189.7	-4.3	107.2D	1.246
5- 860	5-1005.3	.197	11.6	16.1	2.3	.870	97.3	.282	.788	199.6	449.5	.566	1.010D	105.7	1.223	-3.4	-11.6	264.9	.346
5-1005.3	5-1170	.346	298.0	-7.5	-1.9	1.392	78.4	.441	1.208	38.7	160.6	.675D	1.740A	104.1	.611	2.1	-4.7	205.9	.212
5-1170	5-1460	.088	137.1	2.7	-1.8	.659	92.9	.281	1.305	187.6	403.9	.938	1.671D	99.2	1.112	3.0	28.7	32.6	.224
		11.26	6.71	4.66	4.54	7.93	2.06	12.93	2/1/2	44.2	29.6	32.9	.502	3.536	12.3	190.3	-7.2	105.2D	1.272
5- 870	5-1007.4	.229	13.1	14.9	2.3	.875	100.2	.299	.796	206.3	449.6	.558	1.034D	106.6	1.229	-3.7	-12.1	268.2	.367
5-1007.4	5-1170	.367	297.7	-6.8	-1.8	1.391	77.1	.447	1.201	42.8	161.3	.664D	1.737A	104.0	.607	2.0	-4.7	204.8	.213
5-1170	5-1470	.087	149.5	4.0	-1.1	.653	91.5	.291	1.292	183.7	410.0	.916	1.667D	100.6	1.111	2.4	27.0	39.6	.242
		11.75	7.18	5.13	4.57	7.96	2.04	13.22	2/1/2	45.2	24.0	29.6	.446	3.914	14.3	191.3	-10.3	102.7D	1.299
5- 880	5-1010.0	.267	16.6	14.7	2.2	.881	103.3	.321	.807	212.4	449.8	.548	1.066D	107.8	1.236	-4.0	-12.1	272.1	.394
5-1010.0	5-1170	.394	297.8	-6.0	-1.8	1.389	75.6	.455	1.191	47.6	162.0	.649D	1.734A	103.9	.602	1.8	-4.7	203.3	.215
5-1170	5-1480	.091	162.3	3.2	-.6	.647	89.9	.303	1.279	179.7	415.9	.892	1.666	102.1	1.110	2.1	26.6	46.5	.263
		12.48	7.87	5.76	4.61	8.00	2.10	13.57	2/1/2	46.5	19.4	26.1	.387	4.433	16.5	192.8	-13.5	100.1D	1.330
5- 890	5-1012.8	.309	21.6	15.1	2.0	.891	106.4	.348	.822	218.0	450.0	.536	1.108D	109.2	1.246	-4.2	-11.8	276.5	.426
5-1012.8	5-1170	.426	298.2	-5.3	-1.7	1.387	73.8	.466	1.180	53.1	162.9	.631D	1.730A	103.8	.595	1.7	-4.5	201.6	.218
5-1170	5-1490	.101	174.3	1.2	-.2	.641	88.0	.317	1.266	175.7	421.9	.865	1.668	103.7	1.109	1.9	26.7	53.7	.287
		13.48	8.60	6.55	4.68	8.07	2.25	13.99	2/1/2	48.1	15.4	22.4	.331	5.155	19.0	194.8	-16.7	97.4D	1.376

MARS ARRIVAL DATE = 2451180 (1 JAN 1999)

5- 820	5-1009.2	.213	46.8	26.4	2.1	.858	81.6	.311	.770	160.4	457.2	.530	1.009	107.8	1.212	-1.8	-5.6	267.6	.361
5-1009.2	5-1180	.361	297.5	-6.9	-1.9	1.385	76.2	.445	1.178	46.4	166.4	.654D	1.702A	100.4	.594	1.9	-3.0	201.6	.195
5-1180	5-1420	.207	147.4	71.8	14.2	.684	98.5	.266	1.361	205.4	378.1	.999	1.723D	93.8	1.117	-13.6	-49.5	51.4	.291
		13.45	9.31	4.88	4.14	7.54	4.43	14.06	2/1/1	53.1	72.6	29.7	.414	3.896	6.9	192.8	2.5	101.6D	1.199
5- 840	5-1003.4	.159	19.7	22.2	2.3	.864	91.2	.267	.778	183.3	450.4	.570	.985D	105.0	1.216	-2.6	-9.3	261.8	.326
5-1003.4	5-1180	.326	297.9	-9.1	-2.2	1.389	79.5	.428	1.196	35.6	164.9	.683D	1.708A	100.8	.605	2.3	-2.7	204.8	.191
5-1180	5-1440	.132	114.5	-16.8	-7.0	.673	96.9	.272	1.336	199.3	391.7	.973	1.699D	96.8	1.115	7.9	48.5	7.2	.233
		11.01	6.95	4.15	4.06	7.46	2.80	13.08	2/1/2	50.4	51.7	35.8	.565	3.253	9.7	189.7	-.3	107.8D	1.274
5- 850	5-1004.1	.172	13.7	18.7	2.3	.866	94.3	.271	.782	191.7	449.8	.570	.994D	105.1	1.219	-3.0	-10.7	262.9	.332
5-1004.1	5-1180	.332	297.7	-8.8	-2.1	1.388	79.1	.430	1.194	36.9	165.1	.680D	1.707A	100.7	.603	2.3	-2.8	204.4	.192
5-1180	5-1450	.104	123.2	-2.9	-3.5	.668	95.8	.277	1.322	195.6	397.8	.956	1.688D	97.9	1.114	4.5	35.3	23.5	.216
		10.88	6.61	4.32	4.07	7.46	2.50	12.82	2/1/2	50.7	38.2	34.4	.545	3.385	10.7	189.8	-3.1	106.8D	1.301

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2451180
1 JAN 1999

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 860	5-1005.6	.196	12.1	16.3	2.3	.869	97.2	.282	.787	199.2	449.7	.565	1.009D	105.7	1.223	-3.4	-11.6	265.4	.346
5-1005.6	5-1180	.346	297.5	-8.2	-2.1	1.388	78.2	.434	1.189	39.8	165.5	.673D	1.706A	100.6	.601	2.2	-2.9	203.6	.192
5-1180	5-1460	.094	133.7	3.0	-2.0	.661	94.6	.283	1.308	191.7	403.8	.938	1.678D	99.2	1.113	3.2	29.8	32.2	.226
		10.87	6.78	4.64	4.09	7.48	2.14	12.96	2/1/2	51.4	30.2	31.8	.501	3.649	12.0	190.4	-6.1	104.8D	1.327
5- 870	5-1007.8	.228	13.6	15.0	2.2	.874	100.1	.299	.795	205.9	449.8	.558	1.032D	106.6	1.228	-3.7	-12.0	268.7	.367
5-1007.8	5-1180	.367	297.4	-7.3	-2.0	1.386	77.0	.440	1.183	43.8	166.1	.662D	1.703A	100.5	.597	2.0	-3.0	202.4	.194
5-1180	5-1470	.090	145.7	4.9	-1.2	.655	93.1	.291	1.294	187.7	409.6	.917	1.671D	100.6	1.112	2.6	27.6	39.6	.242
		11.31	7.19	5.11	4.11	7.51	2.08	13.22	2/1/2	52.4	24.5	28.7	.446	4.037	13.7	191.5	-9.3	102.3D	1.355
5- 880	5-1010.4	.265	17.0	14.7	2.1	.880	103.1	.320	.806	212.0	450.0	.548	1.064D	107.8	1.236	-4.0	-12.1	272.6	.393
5-1010.4	5-1180	.393	297.6	-6.5	-1.9	1.384	75.5	.449	1.174	48.6	166.7	.647D	1.701A	100.4	.592	1.9	-3.0	200.8	.196
5-1180	5-1480	.091	156.7	4.4	-.6	.649	91.5	.302	1.280	183.6	415.4	.894	1.666D	102.0	1.111	2.2	26.9	46.8	.261
		12.00	7.83	5.73	4.17	7.56	2.10	13.54	2/1/2	53.8	19.8	25.3	.388	4.571	15.9	193.1	-12.6	99.8D	1.386
5- 890	5-1013.2	.307	21.9	15.1	2.0	.890	106.3	.347	.820	217.6	450.2	.536	1.105D	109.1	1.245	-4.2	-11.7	277.1	.425
5-1013.2	5-1180	.425	298.2	-5.7	-1.8	1.382	73.7	.459	1.163	54.0	167.6	.629D	1.698A	100.2	.585	1.7	-2.9	198.9	.199
5-1180	5-1490	.097	171.5	2.4	-.2	.642	89.7	.315	1.266	179.4	421.2	.868	1.665	103.5	1.109	1.9	26.9	54.1	.283
		12.94	8.71	6.51	4.23	7.63	2.20	13.93	2/1/2	55.6	15.9	21.7	.333	5.314	18.3	195.2	-15.9	97.2D	1.434

MARS ARRIVAL DATE = 2451190 (11 JAN 1999)

5- 820	5-1010.6	.222	49.1	26.3	2.0	.856	80.8	.319	.768	159.2	458.2	.523	1.013	108.3	1.211	-1.9	-5.6	269.3	.391
5-1010.6	5-1190	.391	297.7	-7.1	-2.1	1.382	75.5	.444	1.163	48.8	171.0	.647D	1.679A	97.0	.586	1.9	-1.1	198.1	.182
5-1190	5-1420	.166	124.5	60.7	8.9	.690	100.3	.273	1.374	210.5	378.9	.998	1.749D	94.0	1.120	-8.2	-33.7	43.2	.217
		12.35	8.51	5.02	3.84	7.24	3.49	12.83	2/1/1	61.4	64.9	28.3	.393	4.094	7.2	193.9	3.1	100.4D	1.216
5- 840	5-1003.8	.159	20.8	22.3	2.3	.863	91.0	.267	.777	182.8	450.7	.569	.985D	105.0	1.216	-2.6	-9.3	262.2	.327
5-1003.8	5-1190	.327	297.6	-10.0	-2.4	1.385	79.4	.424	1.182	36.5	169.5	.682D	1.683A	97.5	.598	2.5	-.6	202.2	.176
5-1190	5-1440	.172	113.4	-25.2	-10.7	.678	98.6	.277	1.345	203.9	392.1	.972	1.718D	96.8	1.117	11.7	56.4	352.9	.264
		11.50	7.78	4.15	3.72	7.12	3.63	13.94	2/1/2	58.0	58.6	34.9	.561	3.331	10.2	190.1	1.2	107.5D	1.309
5- 850	5-1004.5	.172	14.5	18.9	2.3	.866	94.1	.271	.781	191.3	450.0	.569	.993D	105.2	1.219	-3.0	-10.6	263.4	.333
5-1004.5	5-1190	.333	297.5	-9.7	-2.4	1.385	79.0	.425	1.181	37.7	169.6	.679D	1.683A	97.5	.597	2.4	-.7	201.8	.177
5-1190	5-1450	.116	121.0	-5.1	-4.3	.672	97.5	.281	1.329	200.1	397.9	.956	1.702D	98.0	1.116	5.4	38.5	21.2	.225 *
		10.54	6.81	4.31	3.73	7.13	2.50	12.96	2/1/2	58.3	40.0	33.6	.543	3.462	10.7	190.2	-1.6	106.6D	1.338
5- 860	5-1006.0	.195	12.8	16.4	2.3	.868	97.1	.282	.787	198.8	449.9	.565	1.008D	105.7	1.222	-3.4	-11.5	265.9	.347
5-1006.0	5-1190	.347	297.4	-8.9	-2.3	1.384	78.1	.429	1.177	40.5	169.9	.672D	1.682A	97.4	.595	2.3	-.8	200.9	.178
5-1190	5-1460	.101	130.8	2.9	-2.3	.665	96.2	.286	1.313	196.1	403.7	.938	1.689D	99.3	1.114	3.5	31.2	31.6	.229
		10.64	6.88	4.62	3.75	7.15	2.26	13.02	2/1/2	59.0	30.9	31.1	.500	3.731	11.6	190.8	-4.8	104.6D	1.366
5- 870	5-1008.2	.226	14.1	15.1	2.2	.873	100.0	.298	.794	205.5	450.0	.557	1.031D	106.6	1.228	-3.7	-11.9	269.2	.367
5-1008.2	5-1190	.367	297.4	-8.0	-2.2	1.383	76.9	.436	1.171	44.4	170.4	.661D	1.681A	97.3	.591	2.1	-1.0	199.6	.179
5-1190	5-1470	.095	142.2	5.8	-1.3	.658	94.8	.293	1.297	191.9	409.4	.918	1.677D	100.6	1.113	2.7	28.3	39.5	.243
		11.03	7.24	5.09	3.79	7.19	2.15	13.24	2/1/2	60.1	24.9	28.1	.446	4.124	13.1	191.9	-6.1	102.2D	1.394
5- 880	5-1010.8	.263	17.5	14.6	2.1	.879	103.0	.320	.804	211.6	450.2	.547	1.062D	107.8	1.235	-4.0	-12.0	273.2	.393
5-1010.8	5-1190	.393	297.8	-7.0	-2.1	1.381	75.4	.444	1.162	49.2	171.1	.646D	1.679A	97.0	.586	1.9	-1.1	197.9	.182
5-1190	5-1480	.093	154.9	5.7	-.7	.651	93.2	.302	1.282	187.5	415.0	.895	1.669D	101.9	1.111	2.2	27.5	47.0	.261
		11.67	7.63	5.70	3.84	7.24	2.13	13.53	2/1/2	61.6	20.2	24.7	.389	4.667	15.1	193.6	-11.4	99.6D	1.427
5- 890	5-1013.7	.305	22.4	15.2	1.9	.888	106.1	.346	.819	217.2	450.4	.535	1.102D	109.1	1.244	-4.2	-11.6	277.7	.424
5-1013.7	5-1190	.424	298.5	-6.2	-2.0	1.379	73.6	.455	1.152	54.6	171.8	.628D	1.677A	96.7	.579	1.7	-1.1	195.9	.185
5-1190	5-1490	.096	168.1	3.8	-.2	.644	91.4	.313	1.267	183.1	420.6	.871	1.664D	103.3	1.109	1.9	27.2	54.4	.281
		12.57	8.64	6.46	3.92	7.32	2.18	13.88	2/1/2	63.4	16.2	21.3	.334	5.420	17.5	195.7	-14.8	97.1D	1.475

MARS ARRIVAL DATE = 2451200 (21 JAN 1999)

5- 820	5-1012.6	.236	52.2	26.0	1.9	.855	79.6	.331	.767	157.4	459.6	.513	1.021	109.1	1.210	-2.0	-5.5	271.6	.407
5-1012.6	5-1200	.407	298.5	-7.1	-2.2	1.379	74.6	.446	1.151	52.0	175.4	.637D	1.664A	93.7	.580	1.9	.8	195.9	.174
5-1200	5-1420	.160	117.8	50.8	6.5	.697	102.1	.283	1.390	215.7	379.7	.997	1.782D	94.3	1.124	-5.7	-22.6	38.0	.184
		12.28	8.62	5.24	3.66	7.06	3.37	12.49	2/1/1	70.4	59.7	26.6	.364	4.341	7.4	195.5	3.5	98.9D	1.215
5- 830	5-1005.6	.167	34.0	25.6	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339
5-1005.6	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167
5-1200	5-1430	.229	150.4	68.8	15.2	.691	101.2	.282	1.373	212.3	385.9	.985	1.761D	95.6	1.122	-14.3	-47.4	47.8	.316
		12.71	9.20	4.25	3.51	6.91	4.95	14.54	2/1/1	66.5	66.7	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.298
5- 850	5-1004.9	.171	15.4	19.0	2.3	.865	94.0	.272	.780	190.8	450.3	.568	.993D	105.2	1.218	-3.0	-10.8	264.0	.333
5-1004.9	5-1200	.333	297.7	-10.8	-2.6	1.383	78.9	.422	1.172	38.2	173.8	.678D	1.667A	94.5	.594	2.5	1.6	199.0	.166
5-1200	5-1450	.133	119.3	-8.9	-5.6	.677	99.2	.286	1.337	204.7	396.2	.954	1.721D	98.2	1.116	6.8	43.1	17.2	.241
		10.62	7.12	4.30	3.50	6.90	2.83	13.21	2/1/2	66.2	43.0	33.1	.541	3.512	11.0	190.9	.1	106.5D	1.360
5- 860	5-1006.5	.194	13.5	16.5	2.2	.868	96.9	.282	.786	198.3	450.1	.564	1.007D	105.8	1.222	-3.4	-11.4	266.5	.347
5-1006.5	5-1200	.347	297.6	-9.7	-2.5	1.382	78.1	.426	1.168	41.0	174.1	.671D	1.666A	94.4	.591	2.4	1.4	198.0	.167
5-1200	5-1460	.111	128.5	2.4	-2.7	.669	97.9	.290	1.320	200.5	403.7	.937	1.702D	99.4	1.116	4.0	32.8	30.7	.234
		10.55	7.03	4.61	3.52	6.92	2.42	13.10	2/1/2	67.0	31.8	30.6	.500	3.784	11.4	191.5	-3.2	104.6D	1.391
5- 870	5-1008.6	.225	14.7	15.2	2.1	.872	99.8	.298	.793	205.0	450.2	.556	1.029D	106.6	1.227	-3.7	-11.9	269.8	.367
5-1008.6	5-1200	.367	297.8	-8.6	-2.3	1.381	76.9	.433	1.163	44.8	174.5	.660D	1.666A	94.2	.588	2.2	1.0	196.6	.169
5-1200	5-1470	.102	139.1	6.4	-1.4	.662	96.5	.295	1.302	196.1	409.2	.917	1.687D	100.6	1.114	2.9	29.0	39.3	.245
		10.89	7.32	5.06	3.57	6.97	2.26	13.27	2/1/2	68.0	25.3	27.7	.446	4.180	12.5	192.6	-6.7	102.2D	1.420
5- 880	5-1011.2	.261	18.0	14.8	2.0	.878	102.6	.319	.803	211.1	450.4	.547	1.059D	107.7	1.234	-3.9	-11.9	273.8	.393
5-1011.2	5-1200	.393	298.2	-7.8	-2.2	1.380	75.4	.441	1.155	49.5	175.0	.645D	1.664A	93.9	.583	2.0	.8	194.8	.172
5-1200	5-1480	.097	151.3	7.0	-.7	.654	95.0	.303	1.285	191.6	414.7	.896	1.674D	101.9	1.112	2.3	27.6	47.1	.261
		11.46	7.85	5.66	3.63	7.03	2.19	13.53	2/1/2	69.6	20.5	24.4	.390	4.726	14.2	194.3	-10.1	99.7D	1.453
5- 890	5-1014.1	.302	22.8	15.2	1.8	.887	105.9	.345	.817	216.6	450.7	.535	1.099D	109.1	1.243	-4.1	-11.5	276.3	.424
5-1014.1	5-1200	.424	299.0	-6.6	-2.1	1.377	73.6	.452	1.145	54.8	175.7	.627D	1.663A	93.6	.577	1.8	.7	192.8	.176
5-1200	5-1490	.097	164.4	5.3	-.2	.646	93.2	.312	1.269	187.1	420.1	.873	1.665D	103.2	1.110	2.0	27.3	54.7	.279
		12.32	8.61	6.41	3.72	7.12	2.19	13.85	2/1/2	71.4	16.5	21.0	.335	5.480	16.4	196.5	-13.5	97.2D	1.501
5- 900	5-1017.3	.348	28.7	16.0	1.6	.899	109.2	.376	.836	221.7	450.9	.522	1.150D	110.7	1.255	-4.2	-10.8	283.3	.460
5-1017.3	5-1200	.460	300.2	-5.7	-2.0	1.375	71.7	.466	1.134	60.7	176.4	.605D	1.662A	93.1	.569	1.6	.7	190.4	.182
5-1200	5-1500	.103	177.5	2.3	.2	.639	91.2	.325	1.253	182.5	425.6	.846	1.660D	104.6	1.108	1.6	27.5	62.4	.300
		13.45	9.62	7.33	3.84	7.24	2.26	14.23	2/1/2	73.5	13.1	17.5	.284	6.569	18.9	199.3	-16.9	94.8D	1.584

MARS ARRIVAL DATE = 2451210 (31 JAN 1999)

5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.3	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160
5-1210	5-1430	.184	128.3	56.3	9.0	.699	103.0	.293	1.390	217.4	386.7	.983	1.796D	96.0	1.126	-8.1	-28.9	40.3	.236
		11.54	8.17	4.28	3.37	6.78	3.88	13.11	2/1/1	74.7	56.0	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299
5- 850	5-1005.4	.170	16.4	19.2	2.2	.864	93.8	.272	.780	190.2	450.5	.567	.992D	105.3	1.218	-3.0	-10.5	264.7	.334
5-1005.4	5-1210	.334	298.1	-11.6	-2.8	1.382	78.9	.420	1.167	38.5	177.7	.677D	1.657A	91.6	.593	2.7	4.0	196.0	.159
5-1210	5-1450	.163	118.1	-16.0	-8.3	.683	101.0	.294	1.348	209.4	398.5	.953	1.744D	98.5	1.121	9.5	50.3	8.7	.275
		11.06	7.71	4.29	3.35	6.76	3.42	13.77	2/1/2	74.3	48.7	32.8	.539	3.538	11.7	191.0	1.9	106.6D	1.367
5- 860	5-1007.0	.193	14.2	16.7	2.2	.867	96.7	.282	.785	197.7	450.4	.563	1.006D	105.8	1.221	-3.3	-11.4	267.2	.347
5-1007.0	5-1210	.347	298.2	-10.6	-2.7	1.381	78.0	.424	1.163	41.2	176.0	.670D	1.656A	91.5	.591	2.5	3.6	195.0	.161
5-1210	5-1460	.124	126.7	1.1	-3.3	.675	99.7	.296	1.328	205.0	403.9	.935	1.721D	99.6	1.118	4.6	35.1	29.5	.242
		10.61	7.23	4.59	3.38	6.79	2.65	13.22	2/1/2	75.0	33.1	30.4	.499	3.811	11.5	192.4	-1.4	104.7D	1.401
5- 870	5-1009.1	.223	15.3	15.3	2.1	.871	99.6	.298	.792	204.5	450.5	.556	1.028D	106.6	1.226	-3.7	-11.8	270.5	.367
5-1009.1	5-1210	.367	298.4	-9.4	-2.6	1.380	76.9	.431	1.158	45.0	178.3	.659D	1.656A	91.3	.587	2.3	3.1	193.6	.163
5-1210	5-1470	.110	136.6	6.7	-1.6	.667	98.3	.299	1.309	200.9	409.2	.917	1.700D	100.7	1.116	3.1	29.8	39.0	.249
		10.87	7.44	5.05	3.45	6.83	2.41	13.33	2/1/2	76.1	25.8	27.5	.447	4.209	12.0	193.5	-5.0	102.3D	1.433
5- 880	5-1011.7	.258	18.6	14.9	2.0	.877	102.6	.319	.801	210.5	450.7	.546	1.057D	107.7	1.233	-3.9	-11.8	274.5	.392
5-1011.7	5-1210	.392	298.9	-8.2	-2.4	1.378	75.4	.439	1.150	49.7	178.8	.645D	1.656A	91.0	.582	2.1	2.7	191.8	.166
5-1210	5-1480	.105	148.0	8.0	-.8	.658	96.7	.305	1.290	195.8	414.5	.896	1.683D	101.9	1.115	2.4	28.0	47.1	.262
		11.41	7.91	5.62	3.50	6.90	2.29	13.56	2/1/2	77.5	20.8	24.3	.391	4.752	13.4	195.2	-8.5	99.8D	1.467

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2451210
31 JAN 1999

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 890	5-1014.7	.299	23.3	15.2	1.8	.885	105.7	.344	.815	216.1	451.0	.534	1.095D	109.1	1.242	-4.1	-11.4	279.0	.423
5-1014.7	5-1210	.423	299.8	-7.1	-2.3	1.376	73.7	.451	1.141	54.9	179.3	.627D	1.656A	90.6	.576	1.8	2.5	189.7	.171
5-1210	5-1490	.100	160.7	6.8	-.2	.650	95.0	.313	1.272	191.1	419.8	.874	1.670D	103.1	1.111	2.0	27.5	54.9	.279
		12.20	8.60	6.36	3.60	7.00	2.24	13.84	2/1/2	79.2	16.8	21.0	.337	5.499	15.3	197.5	-11.9	97.3D	1.514
5- 900	5-1017.9	.345	29.2	15.9	1.5	.897	108.9	.374	.833	221.1	451.2	.521	1.145D	110.7	1.254	-4.2	-10.7	284.0	.458
5-1017.9	5-1210	.458	301.1	-6.1	-2.1	1.374	71.7	.465	1.130	60.7	179.9	.605D	1.656A	90.1	.569	1.6	2.3	187.5	.177
5-1210	5-1500	.102	174.0	3.9	.2	.642	93.0	.323	1.255	186.3	425.0	.849	1.660D	104.5	1.108	1.7	27.5	62.8	.297
		13.27	9.54	7.26	3.73	7.13	2.28	14.18	2/1/2	81.3	13.4	17.5	.286	6.572	17.6	200.3	-15.3	95.0D	1.595
MARS ARRIVAL DATE = 2451220 (10 FEB 1999)																			
5- 830	5-1007.4	.173	38.0	26.0	2.1	.858	86.2	.283	.771	170.2	454.0	.553	.989	106.1	1.212	-2.2	-7.5	266.3	.347
5-1007.4	5-1220	.347	298.9	-11.7	-3.0	1.380	78.1	.422	1.161	41.1	181.6	.670D	1.651	88.9	.592	2.7	5.8	192.2	.157
5-1220	5-1430	.181	122.7	46.3	6.4	.710	104.9	.305	1.411	222.6	387.5	.981	1.842D	96.3	1.131	-5.4	-17.1	35.6	.216
		11.46	8.15	4.32	3.31	6.72	3.83	12.81	2/1/1	82.8	49.6	32.4	.499	3.585	12.5	193.8	7.5	105.3D	1.291
5- 840	5-1005.6	.159	24.8	23.0	2.2	.861	90.4	.271	.775	181.0	451.6	.565	.985D	105.2	1.215	-2.6	-9.2	264.4	.332
5-1005.6	5-1220	.332	298.9	-13.1	-3.2	1.381	79.1	.417	1.165	37.9	181.3	.679D	1.651	89.1	.595	3.0	6.5	193.5	.156
5-1220	5-1440	.250	154.2	65.1	16.1	.701	103.9	.303	1.387	218.5	393.1	.967	1.806D	97.5	1.127	-14.9	-44.0	46.2	.342
		12.92	9.63	4.16	3.28	6.69	5.48	15.04	2/1/1	82.0	61.5	34.0	.547	3.423	13.5	192.9	6.7	107.4D	1.325
5- 850	5-1006.0	.169	17.5	19.5	2.2	.863	93.6	.273	.779	189.6	450.8	.566	.991D	105.3	1.217	-3.0	-10.4	265.4	.335
5-1006.0	5-1220	.335	298.9	-12.8	-3.1	1.381	78.9	.418	1.164	38.6	181.4	.677D	1.651	89.0	.594	2.9	6.3	193.2	.156
5-1220	5-1450	.243	118.5	-30.1	-16.0	.692	102.8	.303	1.363	214.3	399.0	.950	1.775D	98.8	1.124	17.3	60.0	341.4	.365
		12.86	9.58	4.28	3.29	6.69	5.30	15.94	2/1/2	82.1	60.8	32.8	.536	3.542	12.8	192.9	4.0	106.6D	1.362
5- 860	5-1007.5	.191	15.2	16.9	2.1	.866	96.5	.283	.784	197.1	450.7	.562	1.005D	105.8	1.221	-3.3	-11.3	267.9	.348
5-1007.5	5-1220	.348	298.9	-11.6	-3.0	1.380	78.1	.423	1.161	41.3	181.6	.670D	1.651	88.8	.592	2.7	5.7	192.2	.158
5-1220	5-1460	.140	125.5	-1.6	-4.3	.682	101.5	.303	1.339	209.7	404.1	.934	1.745D	99.8	1.121	5.6	38.4	27.0	.254
		10.83	7.52	4.57	3.32	6.72	2.95	13.42	2/1/2	82.8	35.1	30.4	.497	3.815	11.9	193.5	.8	105.0D	1.400
5- 870	5-1009.7	.221	16.1	15.4	2.0	.869	99.4	.298	.790	203.9	450.8	.555	1.026D	106.7	1.226	-3.6	-11.7	271.2	.367
5-1009.7	5-1220	.367	299.2	-10.2	-2.8	1.379	76.9	.429	1.155	45.1	181.9	.659D	1.651	88.6	.589	2.4	5.1	190.7	.160
5-1220	5-1470	.122	134.8	6.6	-1.9	.673	100.1	.305	1.317	205.0	409.3	.915	1.718D	100.9	1.118	3.4	30.8	38.6	.254
		10.97	7.61	5.00	3.37	6.77	2.61	13.42	2/1/2	83.9	26.3	27.5	.447	4.212	11.7	194.6	-3.1	102.6D	1.435
5- 880	5-1012.3	.256	19.3	15.0	1.9	.875	102.4	.318	.800	209.9	451.0	.545	1.054D	107.7	1.232	-3.9	-11.7	275.2	.392
5-1012.3	5-1220	.392	299.8	-8.8	-2.6	1.378	75.4	.438	1.148	49.6	182.3	.645D	1.652	88.2	.584	2.2	4.5	188.9	.164
5-1220	5-1480	.111	145.3	8.8	-.9	.664	98.5	.309	1.296	200.1	414.4	.896	1.696D	102.0	1.115	2.5	28.4	47.1	.265
		11.45	8.00	5.58	3.44	6.85	2.43	13.60	2/1/2	85.2	21.0	24.3	.392	4.749	12.5	196.3	-6.8	100.0D	1.469
5- 890	5-1015.2	.296	23.9	15.2	1.7	.883	105.4	.343	.813	215.5	451.3	.534	1.091D	109.1	1.241	-4.0	-11.3	279.8	.422
5-1015.2	5-1220	.422	300.8	-7.5	-2.4	1.376	73.7	.449	1.140	54.8	182.7	.628D	1.652	87.8	.579	1.9	4.0	187.0	.169
5-1220	5-1490	.106	157.2	8.2	-.2	.654	96.8	.315	1.276	195.2	419.5	.874	1.677D	103.2	1.112	2.0	27.6	55.1	.279
		12.18	8.63	6.30	3.55	6.95	2.33	13.86	2/1/2	86.8	17.0	21.0	.338	5.483	14.1	198.6	-10.2	97.5D	1.516
5- 900	5-1018.5	.341	29.7	15.9	1.4	.895	108.7	.373	.830	220.5	451.5	.521	1.140D	110.6	1.252	-4.1	-10.6	284.8	.457
5-1018.5	5-1220	.457	302.2	-6.5	-2.3	1.374	71.8	.463	1.129	60.5	183.2	.606D	1.653	87.3	.572	1.6	3.7	184.8	.175
5-1220	5-1500	.104	170.3	5.6	.2	.646	94.8	.323	1.257	190.3	424.6	.851	1.663D	104.4	1.109	1.7	27.5	63.1	.296
		13.19	9.49	7.18	3.70	7.10	2.31	14.16	2/1/2	88.6	13.6	17.6	.288	6.529	16.1	201.5	-13.5	95.2D	1.594
MARS ARRIVAL DATE = 2451230 (20 FEB 1999)																			
5- 830	5-1008.6	.177	40.7	26.1	2.0	.857	85.6	.287	.770	169.0	454.7	.549	.991	106.3	1.212	-2.2	-7.4	267.8	.352
5-1008.6	5-1230	.352	299.9	-12.3	-3.2	1.380	77.8	.424	1.159	42.0	185.0	.668D	1.649	86.3	.594	2.8	7.5	189.3	.158
5-1230	5-1430	.192	121.2	39.6	5.0	.722	106.8	.320	1.439	227.9	388.4	.978	1.900D	96.8	1.137	-3.9	-9.4	32.3	.214
		11.77	8.45	4.37	3.32	6.73	4.08	12.78	2/1/1	90.5	45.9	32.0	.484	3.630	13.6	195.4	8.8	104.9D	1.274
5- 840	5-1006.3	.160	26.4	23.3	2.1	.860	90.1	.272	.774	180.2	452.0	.563	.985D	105.3	1.214	-2.6	-9.1	265.4	.334
5-1006.3	5-1230	.334	299.8	-14.4	-3.5	1.381	79.1	.417	1.164	38.0	184.8	.678D	1.649	86.6	.598	3.2	8.6	190.9	.156
5-1230	5-1440	.202	133.1	51.1	8.9	.712	105.8	.316	1.409	223.6	393.8	.964	1.854D	97.9	1.132	-7.7	-22.5	39.6	.256
		11.75	8.47	4.16	3.28	6.68	4.31	13.45	2/1/1	89.5	47.8	34.1	.540	3.415	15.2	194.4	8.9	107.6D	1.305
5- 860	5-1008.1	.190	16.2	17.1	2.1	.865	96.3	.283	.783	196.5	451.0	.561	1.004D	105.9	1.220	-3.3	-11.2	268.7	.348
5-1008.1	5-1230	.348	299.9	-12.7	-3.3	1.380	78.1	.422	1.160	41.2	185.0	.670D	1.649	86.4	.595	2.9	7.7	189.7	.157
5-1230	5-1460	.163	124.5	-6.9	-6.1	.691	103.3	.312	1.353	214.4	404.4	.931	1.775D	100.1	1.124	7.6	43.9	22.3	.276
		11.28	7.97	4.55	3.31	6.72	3.43	13.80	2/1/2	90.3	39.1	30.5	.496	3.798	12.7	194.9	2.8	105.4D	1.388
5- 870	5-1010.3	.218	17.0	15.5	2.0	.868	99.2	.298	.789	203.2	451.1	.554	1.024D	106.7	1.225	-3.6	-11.6	272.1	.367
5-1010.3	5-1230	.367	300.2	-11.1	-3.0	1.379	76.9	.429	1.155	44.9	185.2	.660D	1.650	86.1	.592	2.6	6.8	188.2	.160
5-1230	5-1470	.135	133.6	5.9	-2.3	.681	101.9	.312	1.328	209.5	409.4	.914	1.742D	101.1	1.121	3.9	32.2	37.8	.261
		11.19	7.83	4.96	3.37	6.77	2.86	13.54	2/1/2	91.2	27.0	27.6	.447	4.193	11.7	195.9	-1.1	102.9D	1.426
5- 880	5-1012.9	.253	20.0	15.0	1.8	.873	102.1	.318	.798	209.2	451.3	.544	1.051D	107.7	1.231	-3.8	-11.6	276.1	.391
5-1012.9	5-1230	.391	300.9	-9.5	-2.8	1.378	75.5	.438	1.148	49.5	185.5	.646D	1.651	85.7	.588	2.3	6.0	186.5	.164
5-1230	5-1480	.122	143.2	9.3	-1.0	.670	100.3	.314	1.304	204.6	414.3	.895	1.713D	102.2	1.117	2.6	28.8	47.0	.269
		11.39	8.14	5.53	3.45	6.85	2.62	13.67	2/1/2	92.5	21.3	24.5	.393	4.722	11.9	197.6	-4.9	100.3D	1.462
5- 890	5-1015.9	.293	24.6	15.2	1.6	.881	105.2	.342	.810	214.8	451.6	.533	1.087D	109.1	1.240	-4.0	-11.2	280.7	.421
5-1015.9	5-1230	.421	301.9	-8.1	-2.6	1.376	73.8	.449	1.140	54.6	185.9	.628D	1.652	85.2	.582	2.0	5.3	184.6	.169
5-1230	5-1490	.113	154.3	9.3	-.3	.660	98.6	.316	1.281	199.5	419.3	.874	1.689D	103.2	1.113	2.0	27.7	55.2	.281
		12.26	8.70	6.24	3.56	6.97	2.46	13.89	2/1/2	93.9	17.1	21.2	.340	5.437	13.0	199.9	-8.4	97.8D	1.508
5- 900	5-1019.1	.337	30.3	15.9	1.3	.892	108.4	.371	.827	219.8	451.9	.520	1.134D	110.6	1.250	-4.0	-10.5	285.7	.455
5-1019.1	5-1230	.455	303.4	-6.8	-2.4	1.374	71.9	.463	1.130	60.1	186.3	.607D	1.653	84.6	.576	1.7	4.8	182.6	.176
5-1230	5-1500	.109	166.7	7.2	.2	.651	96.7	.324	1.261	194.4	424.2	.852	1.670D	104.4	1.110	1.7	27.5	63.3	.296
		13.20	9.49	7.10	3.72	7.12	2.38	14.16	2/1/2	95.5	13.7	17.8	.290	6.447	14.6	202.8	-11.6	95.5D	1.582
MARS ARRIVAL DATE = 2451240 (2 MAR 1999)																			
5- 830	5-1010.1	.182	43.8	26.2	1.9	.856	85.0	.293	.768	167.6	455.6	.543	.993	106.7	1.211	-2.3	-7.3	269.7	.359
5-1010.1	5-1240	.359	301.3	-12.8	-3.4	1.380	77.5	.426	1.158	43.2	188.3	.665D	1.651	83.9	.598	2.9	8.7	186.9	.161
5-1240	5-1430	.209	121.4	34.9	4.1	.737	108.8	.339	1.475	233.2	389.2	.975	1.975D	97.3	1.144	-3.0	-4.3	29.8	.221
		12.32	8.93	4.44	3.39	6.80	4.48	12.88	2/1/1	97.6	43.6	31.5	.465	3.685	14.5	197.2	10.0	104.4D	1.250
5- 840	5-1007.0	.160	28.2	23.5	2.1	.859	89.8	.274	.773	179.4	452.4	.562	.985	105.5	1.214	-2.6	-9.0	266.4	.336
5-1007.0	5-1240	.336	300.9	-15.9	-3.9	1.381	79.0	.417	1.164	38.0	188.1	.678D	1.650	84.3	.602	3.5	10.5	186.9	.158
5-1240	5-1440	.204	128.4	41.2	6.1	.726	107.7	.332	1.438	228.8	394.5	.961	1.916D	98.4	1.139	-4.9	-10.6	35.5	.242
		11.85	8.52	4.17	3.33	6.73	4.35	13.21	2/1/1	96.5	41.1	34.3	.533	3.388	17.4	196.1	11.4	108.0D	1.274
5- 860	5-1008.8	.186	17.3	17.3	2.0	.864	96.0	.283	.781	195.8	451.3	.560	1.002D	105.9	1.220	-3.3	-11.1	269.6	.349
5-1008.8	5-1240	.349	301.1	-14.0	-3.6	1.381	78.2	.422	1.160	41.0	188.2	.671D	1.650	84.1	.600	3.1	9.4	187.7	.160
5-1240	5-1460	.212	123.6	-18.8	-11.1	.702	105.3	.323	1.371	219.3	404.8	.928	1.814D	100.5	1.129	12.5	54.3	7.9	.338
		12.42	9.06	4.52	3.36	6.76	4.53	14.97	2/1/2	97.1	48.9	30.8	.494	3.760	14.1	196.5	5.3	105.9D	1.365
5- 870	5-1011.0	.216	17.9	15.7	1.9	.867	98.9	.298	.787	202.4	451.4	.553	1.022D	106.7	1.224	-3.6	-11.5	273.0	.367
5-1011.0	5-1240	.367	301.4	-12.1	-3.3	1.380	77.0	.429	1.156	44.7	188.4	.660D	1.651	83.8	.597	2.7	8.3	186.3	.162
5-1240	5-1470	.151	132.8	4.3	-3.0	.690	103.8	.321	1.342	214.2	409.6	.911	1.772D	101.4	1.124	4.5	34.3	36.7	.271
		11.53	8.11	4.93	3.42	6.82	3.19	13.71	2/1/2	98.0	28.2	27.9	.446	4.154	12.2	197.4	1.1	103.4D	1.408
5- 880	5-1013.6	.250	20.8	15.1	1.7	.872	101.8	.317	.796	208.5	451.7	.544	1.048D	107.7	1.230	-3.8	-11.5	277.0	.391
5-1013.6	5-1240	.391	302.2	-10.2	-3.0	1.378	75.6	.438	1.149	49.2	188.6	.646D	1.652	83.4	.593	2.4	7.2	184.6	.166
5-1240	5-1480	.135	141.9	9.5	-1.1	.679	102.2	.321	1.314	209.1	414.4	.893	1.735D	102.4	1.120	2.8	29.3	46.8	.275
		11.83	8.33	5.47	3.50	6.90	2.86	13.77	2/1/2	99.1	21.5	24.7	.394	4.673	11.5	199.1	-2.9	100.7D	1.447
5- 890	5-1016.6	.269	25.3	15.3	1.5	.879	104.9	.341	.808	214.0	452.0	.532	1.083D	109.0	1.238	-3.9	-11.1	281.6	.419
5-1016.6	5-1240	.419	303.3	-8.6	-2.7	1.377	73.9	.449	1.142	54.2	188.9	.629D	1.654	82.9	.588	2.0	6.3	182.9	.172
5-1240	5-1490	.123	151.9	10.2	-.3	.668	100.5	.323	1.289	203.9	419.2	.873	1.705D	103.4	1.115	2.1	27.8	55.3	.285
		12.43	8.81	6.17	3.62	7.03	2.64	13.95	2/1/2	100.4	17.3	21.5	.342	5.366	12.0	201.3	-6.5	98.2D	1.492
5- 900	5-1019.8	.333	31.0	15.9	1.2	.890	108.1	.370	.824	219.0	452.3	.519	1.128D	110.5	1.249	-4.0	-10.3	286.7	.453
5-1019.8	5-1240	.453	304.6	-7.3	-2.5	1.375	72.1	.463	1.132	59.7	189.2	.609D	1.656	82.3	.582	1.7	5.5	181.1	.179
5-1240	5-1500	.116	163.4	8.6	.2	.657	98.6	.327	1.266	198.6	424.0	.852	1.680D	104.4	1.111	1.7	27.4	63.6	.297
		13.31	9.52	7.01	3.79	7.19	2.50	14.19	2/1/2	101.7	13.8	18.2	.293	6.335	13.2	204.2	-9.7	95.9D	1.561

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 600 DAYS
MARS ARRIVAL DATE = 2451250
12 MAR 1999

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2451250 (12 MAR 1999)																			
5- 830	5-1012.0	.190	47.8	26.2	1.8	.854	84.0	.301	.766	165.7	456.8	.536	.997	107.2	1.210	-2.3	-7.2	272.2	.369
5-1012.0	5-1250	.369	302.9	-12.9	-3.5	1.380	76.9	.430	1.157	44.8	191.4	.660D	1.655	81.6	.603	2.9	9.3	184.8	.167
5-1250	5-1430	.231	122.4	31.6	3.5	.755	110.8	.362	1.522	238.6	390.1	.971	2.073D	97.9	1.153	-2.3	-.6	27.8	.232
		13.09	9.57	4.56	3.52	6.92	5.02	13.06	2/1/1	104.2	42.0	30.8	.441	3.771	15.0	199.4	10.6	103.5D	1.221
5- 840	5-1007.8	.161	30.1	23.8	2.0	.859	89.5	.275	.772	178.6	452.8	.559	.985	105.6	1.213	-2.6	-9.0	267.4	.338
5-1007.8	5-1250	.338	302.2	-17.6	-4.3	1.382	79.1	.418	1.166	37.9	191.2	.679D	1.652	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1440	.219	127.5	35.0	4.7	.741	109.7	.351	1.476	234.0	395.2	.957	1.994D	98.9	1.146	-3.4	-3.5	32.6	.246
		12.32	8.89	4.18	3.43	6.83	4.72	13.28	2/1/1	102.7	37.8	34.9	.526	3.338	20.0	198.1	14.1	108.5D	1.230
5- 850	5-1007.8	.167	21.4	20.2	2.0	.861	92.9	.275	.776	187.6	451.8	.563	.989D	105.5	1.216	-2.9	-10.2	267.9	.338
5-1007.8	5-1250	.338	302.2	-17.6	-4.3	1.382	79.1	.418	1.165	37.9	191.2	.678D	1.653	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1450	.221	138.1	44.9	8.3	.728	108.5	.343	1.433	229.2	400.1	.942	1.925D	99.9	1.140	-6.9	-14.9	40.7	.278
		12.45	9.02	4.25	3.43	6.83	4.77	13.83	2/1/1	102.7	39.9	34.0	.526	3.417	19.2	198.0	12.2	108.5D	1.271
5- 870	5-1011.7	.213	19.0	15.9	1.8	.865	98.6	.298	.786	201.7	451.8	.552	1.020D	106.7	1.223	-3.6	-11.4	273.9	.367
5-1011.7	5-1250	.367	302.8	-13.2	-3.6	1.380	77.1	.429	1.158	44.3	191.4	.661D	1.655	81.7	.603	2.9	9.4	185.0	.167
5-1250	5-1470	.172	132.2	.9	-4.2	.701	105.7	.332	1.359	219.0	409.8	.908	1.811D	101.8	1.128	5.8	38.0	34.4	.287
		12.02	8.51	4.89	3.51	6.91	3.62	13.99	2/1/2	104.1	30.6	28.3	.446	4.096	13.2	199.1	3.5	103.9D	1.382
5- 880	5-1014.4	.247	21.8	15.2	1.6	.870	101.5	.317	.794	207.7	452.1	.543	1.045D	107.7	1.229	-3.8	-11.4	278.0	.390
5-1014.4	5-1250	.390	303.6	-11.0	-3.2	1.379	75.7	.438	1.152	48.8	191.6	.647D	1.656	81.2	.599	2.5	8.1	183.4	.171
5-1250	5-1480	.150	141.1	9.2	-1.4	.689	104.1	.329	1.328	213.7	414.5	.890	1.765D	102.7	1.123	3.1	29.9	46.6	.282
		12.17	8.58	5.42	3.60	7.00	3.16	13.91	2/1/2	105.1	21.8	25.1	.395	4.605	11.5	200.7	-.7	101.2D	1.424
5- 890	5-1017.4	.285	26.1	15.3	1.4	.877	104.6	.340	.805	213.2	452.4	.531	1.079D	109.0	1.237	-3.9	-10.9	282.6	.418
5-1017.4	5-1250	.418	304.8	-9.2	-2.9	1.378	74.0	.449	1.144	53.8	191.8	.631D	1.658	80.7	.594	2.1	6.9	181.7	.176
5-1250	5-1490	.136	150.3	10.7	-.3	.676	102.4	.329	1.299	208.4	419.1	.872	1.726D	103.6	1.118	2.1	27.8	55.4	.290
		12.70	8.97	6.09	3.72	7.12	2.88	14.04	2/1/2	106.2	17.3	21.9	.343	5.274	11.2	202.9	-4.5	98.6D	1.466
5- 900	5-1020.6	.328	31.7	15.9	1.1	.887	107.7	.368	.820	218.2	452.7	.519	1.122D	110.5	1.247	-3.9	-10.2	287.7	.452
5-1020.6	5-1250	.452	306.4	-7.7	-2.6	1.376	72.2	.463	1.136	59.2	192.0	.610D	1.661	80.1	.589	1.7	6.0	180.1	.184
5-1250	5-1500	.125	160.8	9.7	.2	.665	100.5	.331	1.273	203.0	423.6	.852	1.694D	104.5	1.113	1.7	27.3	63.7	.300
		13.49	9.60	6.92	3.89	7.29	2.68	14.24	2/1/2	107.3	13.9	18.6	.295	6.196	11.9	205.8	-7.7	96.2D	1.532
MARS ARRIVAL DATE = 2451260 (22 MAR 1999)																			
5- 840	5-1008.5	.162	31.7	24.0	2.0	.858	89.2	.277	.771	177.9	453.2	.558	.985	105.7	1.213	-2.6	-8.9	268.3	.340
5-1008.5	5-1260	.340	303.6	-20.0	-4.9	1.383	79.2	.418	1.168	37.3	194.1	.680D	1.657	80.3	.615	4.3	13.9	187.2	.169
5-1260	5-1440	.241	128.1	30.9	3.8	.760	111.8	.375	1.525	239.2	395.9	.953	2.098D	99.6	1.156	-2.4	1.0	30.9	.257
		13.01	9.44	4.18	3.56	6.96	5.26	13.47	2/1/1	108.1	36.8	35.9	.520	3.249	23.5	200.4	17.6	109.4D	1.169
5- 850	5-1008.3	.167	22.3	20.4	2.0	.860	92.7	.276	.775	187.2	452.0	.562	.989D	105.5	1.215	-2.9	-10.2	268.5	.339
5-1008.3	5-1260	.339	303.6	-20.3	-5.0	1.383	79.3	.418	1.169	37.0	194.1	.681D	1.657	80.3	.615	4.4	14.1	187.4	.169
5-1260	5-1450	.229	134.5	35.5	5.6	.745	110.5	.363	1.472	234.3	400.7	.938	2.006D	100.5	1.148	-4.1	-3.5	37.4	.272
		12.77	9.21	4.25	3.56	6.97	4.96	13.72	2/1/1	108.0	33.7	35.3	.523	3.302	23.2	200.4	16.3	109.8D	1.204
5- 870	5-1012.5	.211	20.1	16.1	1.7	.864	98.3	.298	.784	200.8	452.2	.551	1.017D	106.7	1.222	-3.5	-11.3	275.0	.367
5-1012.5	5-1260	.367	304.4	-14.5	-3.9	1.381	77.2	.430	1.161	43.9	194.3	.662D	1.660	79.7	.610	3.2	10.4	184.3	.172
5-1260	5-1470	.204	131.3	-7.3	-7.2	.714	107.7	.346	1.383	223.8	410.1	.905	1.861D	102.2	1.134	8.9	46.0	27.9	.321
		12.84	9.21	4.85	3.63	7.03	4.36	14.64	2/1/2	109.5	36.9	28.8	.446	4.020	14.7	201.1	6.2	104.5D	1.346
5- 880	5-1015.2	.243	22.8	15.4	1.5	.868	101.2	.316	.792	206.8	452.5	.541	1.042D	107.7	1.228	-3.7	-11.2	279.1	.390
5-1015.2	5-1260	.390	305.2	-11.9	-3.5	1.380	75.8	.439	1.155	48.3	194.4	.649D	1.662	79.3	.607	2.7	8.7	182.7	.176
5-1260	5-1480	.168	140.8	8.5	-1.7	.700	106.1	.340	1.345	218.4	414.6	.887	1.803D	103.0	1.127	3.5	31.0	46.1	.292
		12.61	8.89	5.36	3.72	7.12	3.53	14.08	2/1/2	110.4	22.4	25.6	.396	4.521	12.0	202.5	1.6	101.7D	1.394
5- 890	5-1018.2	.281	27.0	15.4	1.3	.874	104.2	.339	.802	212.3	452.8	.530	1.074D	109.0	1.235	-3.8	-10.8	283.6	.417
5-1018.2	5-1260	.417	306.4	-9.8	-3.1	1.379	74.1	.450	1.148	53.3	194.5	.632D	1.664	78.7	.602	2.2	7.3	181.2	.182
5-1260	5-1490	.151	149.4	11.0	-.4	.687	104.4	.337	1.312	212.9	419.1	.869	1.755D	103.9	1.121	2.2	27.9	55.4	.296
		13.05	9.19	6.02	3.85	7.25	3.18	14.17	2/1/2	111.4	17.4	22.3	.345	5.166	10.8	204.7	-2.5	99.0D	1.439
MARS ARRIVAL DATE = 2451270 (1 APR 1999)																			
5- 860	5-1010.6	.184	20.7	17.9	1.8	.860	95.3	.284	.778	193.7	452.2	.557	.999D	106.0	1.218	-3.2	-10.9	272.1	-.351
5-1010.6	5-1270	.351	305.4	-20.1	-5.1	1.383	78.7	.423	1.170	39.0	197.0	.675D	1.664	78.3	.621	4.4	13.8	186.3	.177
5-1270	5-1460	.242	143.0	37.7	7.3	.747	111.2	.373	1.464	234.1	405.7	.917	2.010D	102.0	1.149	-5.7	-6.2	43.3	.302
		13.50	9.75	4.46	3.75	7.15	5.29	14.27	2/1/1	113.3	32.4	33.4	.489	3.484	22.8	203.0	15.6	108.8D	1.215
5- 880	5-1016.1	.239	23.9	15.5	1.4	.865	100.9	.315	.789	205.8	452.9	.540	1.038D	107.8	1.226	-3.7	-11.1	280.3	.389
5-1016.1	5-1270	.389	307.0	-13.0	-3.7	1.382	75.9	.439	1.159	47.8	197.1	.650D	1.668	77.5	.615	2.9	9.1	182.7	.183
5-1270	5-1480	.188	140.8	6.5	-2.4	.714	108.1	.354	1.368	223.2	414.7	.884	1.852D	103.5	1.133	4.2	32.9	45.2	.305
		13.17	9.29	5.30	3.88	7.27	3.99	14.33	2/1/2	115.1	23.5	26.1	.397	4.423	13.0	204.5	4.0	102.2D	1.358
5- 890	5-1019.1	.276	28.0	15.5	1.2	.871	103.9	.338	.799	211.3	453.3	.529	1.069D	109.0	1.233	-3.8	-10.7	285.0	.416
5-1019.1	5-1270	.416	308.2	-10.5	-3.3	1.380	74.3	.450	1.152	52.7	197.1	.634D	1.671	76.9	.611	2.3	7.5	181.2	.189
5-1270	5-1490	.166	149.1	11.0	-.3	.699	106.3	.348	1.329	217.6	419.1	.866	1.791D	104.2	1.126	2.3	28.0	55.4	.305
		13.49	9.48	5.93	4.01	7.41	3.95	14.32	2/1/2	119.9	17.5	22.9	.347	5.044	10.8	206.5	-.4	99.3D	1.404

STOPOVER TIME = 0 DAYS — 1999 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS; MARS ARRIVAL DATE = 2451150 2 DEC 1998

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V E / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2451150 (2 DEC 1998)																				
5- 820	5-1006.2	.196	41.5	26.6	2.3	.860	83.2	.296	.772	163.2	455.1	.543	1.001	106.9	1.213	-1.8	-5.7	263.8	.362	
5-1006.2	5-1150	.362	299.9	-5.8	-1.5	1.406	76.0	.468	1.267	38.4	150.1	.674D	1.860A	111.4	.642	1.9	-7.4	206.3	.268	
5-1150	5-1460	.083	144.8	1.7	-1.5	.658	89.8	.280	1.301	179.5	404.6	.936	1.665	99.3	1.111	2.6	26.8	32.9	.223	
		12.54	6.62	4.63	5.93	9.31	1.98	12.92	2/1/2	32.2	28.3	35.9	.459	3.247	6.1	191.9	.2	105.5D	1.031	
5- 830	5-1002.5	.160	26.9	25.1	2.4	.864	88.2	.269	.776	175.2	451.2	.568	.985	105.1	1.215	-2.2	-7.8	259.9	.328	
5-1002.5	5-1150	.328	301.1	-6.8	-1.6	1.408	80.2	.460	1.279	31.5	149.1	.691D	1.867A	111.3	.648	2.1	-7.4	209.5	.266	
5-1150	5-1470	.087	156.8	2.2	-1.0	.653	88.4	.292	1.290	176.0	411.0	.913	1.667	100.9	1.111	2.2	25.8	39.2	.245	
		12.09	6.21	4.17	5.88	9.26	2.05	13.27	2/1/2	31.1	23.0	40.8	.559	2.868	7.9	190.4	-1.4	109.8D	1.044	
5- 840	5-1001.9	.159	16.6	21.5	2.4	.866	91.7	.264	.780	184.8	449.7	.574	.986D	104.8	1.217	-2.6	-9.5	259.7	.323	
5-1001.9	5-1150	.323	301.4	-7.0	-1.6	1.408	80.6	.459	1.280	30.4	148.9	.693D	1.868A	111.3	.649	2.1	-7.3	209.7	.265	
5-1150	5-1480	.097	168.2	1.3	-.5	.648	86.7	.307	1.279	172.4	417.3	.886	1.671	102.5	1.110	2.0	25.7	45.8	.270	
		12.21	6.34	4.15	5.87	9.25	2.19	13.69	2/1/2	31.0	18.4	41.3	.577	2.834	9.5	190.1	-3.5	110.4D	1.058	
5- 850	5-1002.8	.175	11.4	18.2	2.4	.868	94.7	.270	.784	193.1	449.2	.572	.995D	105.0	1.220	-3.0	-10.8	261.2	.330	
5-1002.8	5-1150	.330	301.0	-6.7	-1.6	1.408	80.0	.461	1.278	32.0	149.1	.689D	1.866A	111.3	.647	2.0	-7.4	209.4	.266	
5-1150	5-1490	.111	178.0	-.2	-.2	.643	84.7	.325	1.268	168.8	423.7	.855	1.680	104.3	1.110	1.9	26.1	52.7	.298	
		12.65	6.77	4.34	5.88	9.26	2.43	14.19	2/1/2	31.2	14.4	39.5	.551	2.962	11.1	190.2	-6.0	109.1D	1.061	
5- 860	5-1004.5	.200	10.4	15.9	2.4	.871	97.6	.282	.790	200.4	449.1	.567	1.012D	105.7	1.224	-3.4	-11.7	263.9	.346	
5-1004.5	5-1150	.346	300.3	-6.2	-1.6	1.407	79.0	.464	1.272	35.2	149.6	.682D	1.863A	111.4	.645	2.0	-7.4	208.9	.267	
5-1150	5-1500	.131	186.1	-1.9	.2	.637	82.4	.348	1.257	165.2	430.2	.820	1.694	106.3	1.109	1.8	26.6	59.9	.330	
		13.38	7.48	4.69	5.90	9.28	2.79	14.80	2/1/2	31.7	10.8	36.4	.503	3.201	12.9	190.8	-8.7	106.9D	1.106	
MARS ARRIVAL DATE = 2451160 (12 DEC 1998)																				
5- 820	5-1007.1	.201	43.2	26.6	2.2	.859	82.7	.301	.771	162.3	455.8	.539	1.003	107.1	1.212	-1.8	-5.7	265.0	.368	
5-1007.1	5-1160	.368	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.4	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238	
5-1160	5-1460	.085	140.9	2.2	-1.6	.658	91.4	.280	1.302	183.5	404.2	.937	1.667D	99.2	1.111	2.7	27.7	32.8	.223	
		11.88	6.71	4.70	5.17	8.56	2.01	12.92	2/1/2	38.5	29.0	33.3	.445	3.490	6.3	191.8	.9	104.0D	1.107	
5- 830	5-1003.2	.162	28.4	25.2	2.4	.863	88.0	.271	.776	174.5	451.5	.566	.985	105.2	1.214	-2.2	-7.7	260.8	.330	
5-1003.2	5-1160	.330	299.4	-7.4	-1.8	1.399	79.7	.447	1.240	34.0	154.9	.686D	1.793A	107.7	.628	2.1	-6.2	208.3	.236	
5-1160	5-1470	.086	153.3	3.0	-1.0	.653	89.9	.291	1.290	179.8	410.4	.915	1.666	100.7	1.111	2.3	26.4	39.4	.243	
		11.34	6.21	4.18	5.12	8.51	2.03	13.24	2/1/2	37.1	23.5	38.2	.552	3.054	8.0	190.0	-.5	108.4D	1.133	
5- 840	5-1002.5	.159	17.8	21.8	2.4	.865	91.5	.265	.779	184.2	450.0	.572	.986D	104.8	1.217	-2.6	-9.4	260.4	.324	
5-1002.5	5-1160	.324	299.6	-7.6	-1.8	1.400	80.1	.445	1.241	32.7	154.7	.689D	1.794A	107.6	.629	2.2	-6.1	208.6	.235	
5-1160	5-1480	.093	165.5	2.1	-.6	.647	88.3	.304	1.279	176.0	416.6	.889	1.668	102.3	1.110	2.1	26.2	46.2	.266	
		11.39	6.28	4.15	5.11	8.50	2.13	13.62	2/1/2	36.9	18.9	38.8	.573	3.011	9.4	189.6	-2.7	109.1D	1.151	
5- 850	5-1003.3	.174	12.3	18.4	2.4	.867	94.6	.270	.783	192.6	449.4	.572	.995D	105.1	1.220	-3.0	-10.8	261.8	.331	
5-1003.3	5-1160	.331	299.3	-7.4	-1.8	1.399	79.6	.447	1.239	34.2	154.9	.685D	1.793A	107.7	.628	2.1	-6.2	208.3	.236	
5-1160	5-1490	.105	176.5	.4	-.2	.642	86.3	.321	1.267	172.2	422.8	.860	1.673	104.0	1.109	1.9	26.4	53.2	.292	
		11.78	6.66	4.33	5.12	8.51	2.32	14.08	2/1/2	37.1	14.9	37.2	.549	3.138	10.9	189.8	-5.3	108.0D	1.174	
5- 860	5-1004.9	.199	11.0	16.0	2.4	.871	97.5	.282	.789	200.0	449.3	.567	1.011D	105.7	1.224	-3.4	-11.7	264.4	.346	
5-1004.9	5-1160	.346	298.9	-6.8	-1.7	1.398	78.7	.451	1.234	37.2	155.4	.678D	1.790A	107.6	.625	2.0	-6.2	207.6	.236	
5-1160	5-1500	.123	185.8	-1.7	.2	.636	84.1	.341	1.255	168.4	429.0	.827	1.684	105.8	1.108	1.8	26.8	60.5	.321	
		12.44	7.30	4.67	5.14	8.52	2.63	14.64	2/1/2	37.7	11.4	34.3	.502	3.388	12.7	190.4	-8.1	105.8D	1.199	
5- 870	5-1007.1	.231	12.6	14.9	2.3	.875	100.4	.299	.797	206.7	449.4	.559	1.035D	106.6	1.229	-3.8	-12.1	267.7	.367	
5-1007.1	5-1160	.367	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.3	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238	
5-1160	5-1510	.146	193.2	-3.6	.5	.630	81.5	.366	1.244	164.7	435.4	.789	1.700	108.0	1.107	1.8	27.3	68.0	.356	
		13.41	8.24	5.16	5.17	8.56	3.08	15.32	2/1/2	38.5	8.2	30.9	.446	3.749	14.7	191.4	-11.0	103.3D	1.225	
MARS ARRIVAL DATE = 2451170 (22 DEC 1998)																				
5- 820	5-1008.1	.206	44.9	26.5	2.2	.859	82.2	.305	.771	161.4	456.4	.535	1.006	107.4	1.212	-1.8	-5.6	266.2	.374	
5-1008.1	5-1170	.374	297.7	-6.6	-1.8	1.390	76.7	.449	1.199	44.0	161.4	.660D	1.737A	104.0	.606	1.9	-4.7	204.4	.214	
5-1170	5-1460	.088	137.1	2.7	-1.8	.659	92.9	.281	1.305	187.6	403.9	.938	1.671D	99.2	1.112	3.0	28.7	32.6	.224	
		11.42	6.84	4.78	4.58	7.97	2.06	12.93	2/1/2	45.5	29.6	31.3	.430	3.702	6.6	192.1	1.7	102.7D	1.163	
5- 830	5-1003.8	.163	29.7	25.4	2.3	.862	87.7	.272	.775	173.9	451.9	.564	.986	105.3	1.214	-2.2	-7.7	261.5	.332	
5-1003.8	5-1170	.332	298.3	-8.0	-1.9	1.393	79.3	.437	1.212	35.9	160.3	.682D	1.742A	104.1	.613	2.2	-4.6	206.6	.211	
5-1170	5-1470	.087	149.5	4.0	-1.1	.653	91.5	.291	1.292	183.7	410.0	.916	1.667D	100.6	1.111	2.4	27.0	39.6	.242	
		10.76	6.24	4.20	4.52	7.91	2.04	13.22	2/1/2	43.6	24.0	36.4	.545	3.204	8.3	190.0	.6	107.5D	1.201	
5- 840	5-1002.9	.159	18.8	22.0	2.4	.865	91.4	.266	.778	183.8	450.2	.571	.985D	104.9	1.216	-2.6	-9.4	261.0	.325	
5-1002.9	5-1170	.325	298.5	-8.4	-2.0	1.393	79.7	.435	1.214	34.4	160.0	.686D	1.743A	104.1	.615	2.2	-4.6	206.9	.211	
5-1170	5-1480	.091	162.3	3.2	-.6	.647	89.9	.303	1.279	179.7	415.9	.892	1.666	102.1	1.110	2.1	26.6	46.5	.263	
		10.77	6.25	4.15	4.52	7.91	2.10	13.57	2/1/2	43.3	19.4	37.0	.569	3.148	9.5	189.5	-1.6	108.3D	1.222	
5- 850	5-1003.7	.173	13.0	18.5	2.4	.867	94.4	.270	.783	192.1	449.6	.571	.994D	105.1	1.219	-3.0	-10.7	262.4	.331	
5-1003.7	5-1170	.331	298.3	-8.1	-1.9	1.393	79.3	.437	1.212	35.7	160.2	.683D	1.742A	104.1	.613	2.2	-4.6	206.6	.211	
5-1170	5-1490	.101	174.3	1.2	-.2	.641	88.0	.317	1.266	175.7	421.9	.865	1.668	103.7	1.109	1.9	26.7	53.7	.287	
		11.10	6.57	4.32	4.52	7.92	2.25	13.99	2/1/2	43.6	15.4	35.5	.547	3.278	10.8	189.7	-4.3	107.2D	1.246	
5- 860	5-1005.3	.197	11.6	16.1	2.3	.870	97.3	.282	.788	199.6	449.5	.566	1.010D	105.7	1.223	-3.4	-11.6	264.9	.346	
5-1005.3	5-1170	.346	298.0	-7.5	-1.9	1.392	78.4	.441	1.208	38.7	160.6	.675D	1.740A	104.1	.611	2.1	-4.7	205.9	.212	
5-1170	5-1500	.116	184.7	-1.1	.2	.635	85.9	.335	1.254	171.7	428.0	.833	1.675	105.4	1.108	1.8	27.1	61.1	.314	
		11.70	7.16	4.66	4.54	7.93	2.50	14.50	2/1/2	44.2	11.9	32.9	.502	3.536	12.3	190.3	-7.2	105.2D	1.272	
5- 870	5-1007.4	.229	13.1	14.9	2.3	.875	100.2	.299	.796	206.3	449.6	.558	1.034D	106.6	1.229	-3.7	-12.1	268.2	.367	
5-1007.4	5-1170	.367	297.7	-6.8	-1.8	1.391	77.1	.447	1.201	42.8	161.3	.664D	1.737A	104.0	.607	2.0	-4.7	204.8	.213	
5-1170	5-1510	.136	193.2	-3.4	.5	.629	83.4	.358	1.242	167.8	434.2	.798	1.687	107.4	1.106	1.8	27.4	68.7	.345	
		12.59	8.02	5.13	4.57	7.96	2.89	15.11	2/1/2	45.2	8.7	29.6	.446	3.914	14.3	191.3	-10.3	102.7D	1.299	
MARS ARRIVAL DATE = 2451180 (1 JAN 1999)																				
5- 820	5-1009.2	.213	46.8	26.4	2.1	.858	81.6	.311	.770	160.4	457.2	.530	1.009	107.8	1.212	-1.8	-5.6	267.6	.381	
5-1009.2	5-1180	.381	297.5	-6.9	-1.9	1.385	76.2	.445	1.178	46.4	166.4	.654D	1.702A	100.4	.594	1.9	-3.0	201.6	.195	
5-1180	5-1460	.094	133.7	3.0	-2.0	.661	94.6	.283	1.308	191.7	403.8	.938	1.678D	99.2	1.113	3.2	29.8	32.2	.226	
		11.16	7.02	4.88	4.14	7.54	2.14	12.96	2/1/2	53.1	30.2	29.7	.414	3.896	6.9	192.8	2.5	101.6D	1.199	
5- 830	5-1004.3	.164	31.0	25.5	2.3	.862	87.5	.274	.774	173.4	452.2	.562	.986	105.4	1.214	-2.2	-7.6	262.3	.334	
5-1004.3	5-1180	.334	297.7	-8.7	-2.1	1.388	79.0	.431	1.193	37.3	165.1	.679D	1.707A	100.7	.603	2.3	-2.8	204.3	.192	
5-1180	5-1470	.090	145.7	4.9	-1.2	.655	93.1	.291	1.294	187.7	409.6	.917	1.671D	100.6	1.112	2.6	27.6	39.6	.242	
		10.37	6.29	4.21	4.07	7.47	2.08	13.22	2/1/2	50.8	24.5	35.1	.538	3.320	8.8	190.2	1.8	106.8D	1.248	
5- 840	5-1003.4	.159	19.7	22.2	2.3	.864	91.2	.267	.778	183.3	450.4	.570	.985D	105.0	1.216	-2.6	-9.3	261.6	.326	
5-1003.4	5-1180	.326	297.9	-9.1	-2.2	1.389	79.5	.428	1.196	35.6	164.9	.683D	1.708A	100.8	.605	2.3	-2.7	204.8	.191	
5-1180	5-1480	.091	156.7	4.4	-.6	.649	91.5	.302	1.280	183.6	415.4	.894	1.666D	102.0	1.111	2.2	26.9	46.8	.261	
		10.31	6.25	4.15	4.06	7.46	2.10	13.54	2/1/2	50.4	19.8	35.8	.565	3.253	9.7	189.7	-.3	107.8D	1.274	
5- 850	5-1004.1	.172	13.7	18.7	2.3	.866	94.3	.271	.782	191.7	449.8	.570	.994D	105.1	1.219	-3.0	-10.7	262.9	.332	
5-1004.1	5-1180	.332	297.7	-8.8	-2.1	1.388	79.1	.430	1.194	36.9	165.1	.680D	1.707A	100.7	.603	2.3	-2.8	204.4	.192	
5-1180	5-1490	.097	171.5	2.4	-.2	.642	89.7	.315	1.266	179.4	421.2	.868	1.665	103.5	1.109	1.9	26.9	54.1	.283	
		10.58	6.51	4.32	4.07	7.46	2.20	13.93	2/1/2	50.7	15.9	34.4	.545	3.385	10.7	189.8	-3.1	106.8D	1.301	
5- 860	5-1005.6	.196	12.1	16.3	2.3	.869	97.2	.282	.787	199.2	449.7	.565	1.009D	105.7	1.223	-3.4	-11.6	265.4	.346	
5-1005.6	5-1180	.346	297.5	-8.2	-2.1	1.388	78.2	.434	1.189	39.6	165.5	.673D	1.706A	100.6	.601	2.2	-2.9	203.6	.192	
5-1180	5-1500	.110	183.0	-.3	.2	.636	87.6	.331	1.253	175.2	427.1	.839	1.668	105.1	1.107	1.8	27.2	61.6	.308	
		11.12	7.04	4.64	4.09	7.48	2.40	14.38	2/1/2	51.4	12.3	31.8	.501	3.649	12.0	190.4	-6.1	104.8D	1.327	
5- 870	5-1007.8	.228	13.6	15.0	2.2	.874	100.1	.299	.795	205.9	449.8	.558	1.032D	106.6	1.228	-3.7	-12.0	268.7	.367	
5-1007.8	5-1180	.367	297.4	-7.3	-2.0	1.386	77.0	.440	1.183	43.8	166.1	.662D	1.703A	100.5	.597	2.0	-3.0	202.4	.194	
5-1180	5-1510	.128	192.7	-3.0	.5	.629	85.2	.351	1.240	171.0	433.0	.805	1.676	106.9	1.106	1.7	27.6	69.3	.337	
		11.95	7.83	5.11	4.11	7.51	2.72	14.94	2/1/2	52.4	9.2	28.7	.446	4.037	13.7	191.5	-9.3	102.3D	1.355	
5- 880	5-1010.4	.265	17.0	14.7	2.1	.880	103.1	.320	.806	212.0	450.0	.548	1.064D	107.8	1.236	-4.0	-12.1	272.6	.393	
5-1010.4	5-1180	.393	297.6	-6.5	-1.9	1.384	75.5	.449	1.174	48.6	166.7	.647D	1.701A	100.4	.592	1.9	-3.0	200.8	.196	
5-1180	5-1520	.152	200.4	-5.4	.8	.623	82.4	.376	1.228	167.0	439.2	.767	1.690	109.0	1.103	1.7	27.8	77.1	.370	
		13.10	8.94	5.73	4.17	7.56	3.20	15.62	2/1/2	53.8	6.4	25.3	.366	4.571	15.9	193.1	-12.6	99.8D	1.386	

STOPOVER TIME = 0 DAYS — 1999 OUTBOUND SWINGBY — MISSION DURATION = 640 DAYS

MARS ARRIVAL DATE = 2451190
11 JAN 1999

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2451190 (11 JAN 1999)																			
5- 820	5-1010.6	.222	49.1	26.3	2.0	.856	80.8	.319	.768	159.2	458.2	.523	1.013	108.3	1.211	-1.9	-5.6	269.3	.391
5-1010.6	5-1190	.391	297.7	-7.1	-2.1	1.382	75.5	.444	1.163	48.8	171.0	.647D	1.679A	97.0	.586	1.9	-1.1	198.1	.182
5-1190	5-1460	.101	130.8	2.9	-2.3	.665	96.2	.286	1.313	196.1	403.7	.938	1.689D	99.3	1.114	3.5	31.2	31.6	.229
		11.12	7.28	5.02	3.84	7.24	2.26	13.02	2/1/2	61.4	30.9	28.3	.393	4.094	7.2	193.9	3.1	100.4D	1.216
5- 830	5-1004.9	.165	32.4	25.6	2.3	.861	87.3	.275	.774	172.8	452.5	.561	.987	105.6	1.213	-2.2	-7.6	263.1	.337
5-1004.9	5-1190	.337	297.5	-9.4	-2.3	1.385	78.8	.426	1.160	38.5	169.7	.677D	1.683A	97.5	.596	2.4	-.7	201.6	.177
5-1190	5-1470	.095	142.2	5.8	-1.3	.658	94.8	.293	1.297	191.9	409.4	.918	1.677D	100.6	1.113	2.7	28.3	39.5	.243
		10.12	6.36	4.23	3.74	7.13	2.15	13.24	2/1/2	58.5	24.9	34.1	.531	3.412	9.4	190.7	3.1	106.3D	1.280
5- 840	5-1003.8	.159	20.8	22.3	2.3	.863	91.0	.267	.777	182.8	450.7	.569	.985D	105.0	1.216	-2.6	-9.3	262.2	.327
5-1003.8	5-1190	.327	297.6	-10.0	-2.4	1.385	79.4	.424	1.182	36.5	169.5	.682D	1.683A	97.5	.598	2.5	-.6	202.2	.176
5-1190	5-1480	.093	154.9	5.7	-.7	.651	93.2	.302	1.282	187.5	415.0	.895	1.669D	101.9	1.111	2.2	27.3	47.0	.261
		10.00	6.28	4.15	3.72	7.12	2.13	13.53	2/1/2	58.0	20.2	34.9	.561	3.331	10.2	190.1	1.2	107.5D	1.309
5- 850	5-1004.5	.172	14.5	18.9	2.3	.866	94.1	.271	.781	191.3	450.0	.569	.993D	105.2	1.219	-3.0	-10.6	263.4	.333
5-1004.5	5-1190	.333	297.5	-9.7	-2.4	1.385	79.0	.425	1.181	37.7	169.6	.679D	1.683A	97.5	.597	2.4	-.7	201.8	.177
5-1190	5-1490	.096	168.1	3.8	-.2	.644	91.4	.313	1.267	183.1	420.6	.871	1.664D	103.3	1.109	1.9	27.2	54.4	.281
		10.21	6.49	4.31	3.73	7.13	2.18	13.88	2/1/2	58.3	16.2	33.6	.543	3.462	10.7	190.2	-1.6	106.6D	1.338
5- 860	5-1006.0	.195	12.8	16.4	2.3	.868	97.1	.282	.787	198.8	449.9	.565	1.008D	105.7	1.222	-3.4	-11.5	265.9	.347
5-1006.0	5-1190	.347	297.4	-8.9	-2.3	1.384	78.1	.429	1.177	40.5	169.9	.672D	1.682A	97.4	.595	2.3	-.8	200.9	.178
5-1190	5-1500	.105	180.6	.9	.2	.637	89.4	.327	1.253	176.8	426.3	.843	1.663	104.8	1.107	1.8	27.4	62.1	.303
		10.70	6.95	4.62	3.75	7.15	2.32	14.29	2/1/2	59.0	12.7	31.1	.500	3.731	11.6	190.8	-4.8	104.6D	1.366
5- 870	5-1008.2	.226	14.1	15.1	2.2	.873	100.0	.298	.794	205.5	450.0	.557	1.031D	106.6	1.228	-3.7	-11.9	269.2	.367
5-1008.2	5-1190	.367	297.4	-8.0	-2.2	1.383	76.9	.436	1.171	44.4	170.4	.661D	1.681A	97.3	.591	2.1	-1.0	199.6	.179
5-1190	5-1510	.121	191.4	-2.2	.5	.630	87.1	.345	1.239	174.4	432.0	.812	1.667	106.5	1.105	1.7	27.6	69.9	.329
		11.47	7.68	5.09	3.79	7.19	2.59	14.79	2/1/2	60.1	9.6	28.1	.446	4.124	13.1	191.9	-8.1	102.2D	1.394
5- 880	5-1010.8	.263	17.5	14.8	2.1	.879	103.0	.320	.804	211.6	450.2	.547	1.062D	107.8	1.235	-4.0	-12.0	273.2	.393
5-1010.8	5-1190	.393	297.8	-7.0	-2.1	1.381	75.4	.444	1.162	49.2	171.1	.646D	1.679A	97.0	.586	1.9	-1.1	197.9	.182
5-1190	5-1520	.142	200.3	-5.1	.8	.623	84.4	.367	1.226	170.2	437.9	.776	1.677	108.4	1.103	1.6	27.8	77.8	.359
		12.54	8.70	5.70	3.84	7.24	3.00	15.40	2/1/2	61.6	6.8	24.7	.389	4.667	15.1	193.6	-11.4	99.6D	1.427
MARS ARRIVAL DATE = 2451200 (21 JAN 1999)																			
5- 820	5-1012.6	.236	52.2	26.0	1.9	.855	79.6	.331	.767	157.4	459.6	.513	1.021	109.1	1.210	-2.0	-5.5	271.8	.407
5-1012.6	5-1200	.407	298.5	-7.1	-2.2	1.379	74.6	.446	1.151	52.0	175.4	.637D	1.664A	93.7	.580	1.9	.8	193.9	.174
5-1200	5-1460	.111	128.5	2.4	-2.7	.669	97.9	.290	1.320	200.5	403.7	.937	1.702D	99.4	1.116	4.0	32.8	30.7	.234
		11.33	7.67	5.24	3.66	7.06	2.42	13.10	2/1/2	70.4	31.8	26.6	.364	4.341	7.4	195.5	3.5	98.9D	1.215
5- 830	5-1005.6	.167	34.0	25.8	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339
5-1005.6	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167
5-1200	5-1470	.102	139.1	6.4	-1.4	.662	96.5	.295	1.302	196.1	409.2	.917	1.687D	100.6	1.114	2.9	29.0	39.3	.245
		10.02	6.51	4.25	3.51	6.91	2.26	13.27	2/1/2	66.5	25.3	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.296
5- 840	5-1004.3	.159	22.0	22.6	2.3	.863	90.8	.268	.777	182.3	451.0	.568	.985D	105.1	1.215	-2.6	-9.3	262.8	.328
5-1004.3	5-1200	.328	297.8	-11.0	-2.6	1.383	79.2	.420	1.174	37.2	173.7	.680D	1.667A	94.5	.595	2.6	1.8	199.3	.166
5-1200	5-1480	.097	151.3	7.0	-.7	.654	95.0	.303	1.285	191.6	414.7	.896	1.674D	101.9	1.112	2.3	27.6	47.1	.261
		9.83	6.34	4.15	3.49	6.89	2.19	13.53	2/1/2	66.0	20.5	34.4	.557	3.383	11.0	190.8	2.8	107.3D	1.328
5- 850	5-1004.9	.171	15.4	19.0	2.3	.865	94.0	.272	.780	190.8	450.3	.568	.993D	105.2	1.218	-3.0	-10.6	264.0	.333
5-1004.9	5-1200	.333	297.7	-10.6	-2.6	1.383	78.9	.422	1.172	38.2	173.8	.678D	1.667A	94.5	.594	2.5	1.6	199.0	.166
5-1200	5-1490	.097	164.4	5.3	-.2	.646	93.2	.312	1.269	187.1	420.1	.873	1.665D	103.2	1.110	2.0	27.3	54.7	.279
		9.99	6.49	4.30	3.50	6.90	2.19	13.85	2/1/2	66.2	16.5	33.1	.541	3.512	11.0	190.9	.1	106.5D	1.360
5- 860	5-1006.5	.194	13.5	16.5	2.2	.868	96.9	.282	.786	198.3	450.1	.564	1.007D	105.8	1.222	-3.4	-11.4	266.5	.347
5-1006.5	5-1200	.347	297.6	-9.7	-2.5	1.382	78.1	.426	1.168	41.0	174.1	.671D	1.666A	94.4	.591	2.4	1.4	198.0	.167
5-1200	5-1500	.103	177.5	2.3	.2	.639	91.2	.325	1.253	182.5	425.6	.846	1.660D	104.6	1.108	1.8	27.5	62.4	.300
		10.41	6.89	4.61	3.52	6.92	2.28	14.23	2/1/2	67.0	13.1	30.6	.500	3.784	11.4	191.5	-3.2	104.6D	1.391
5- 870	5-1008.6	.225	14.7	15.2	2.1	.872	99.8	.298	.793	205.0	450.2	.556	1.029D	106.6	1.227	-3.7	-11.9	269.8	.367
5-1008.6	5-1200	.367	297.8	-8.6	-2.3	1.381	76.9	.433	1.163	44.8	174.5	.660D	1.666A	94.2	.588	2.2	1.0	196.6	.169
5-1200	5-1510	.115	189.4	-1.2	.5	.631	88.9	.340	1.239	177.9	431.2	.817	1.660	106.2	1.105	1.6	27.7	70.4	.323
		11.11	7.55	5.06	3.57	6.97	2.49	14.67	2/1/2	68.0	10.0	27.7	.446	4.180	12.5	192.6	-6.7	102.2D	1.420
5- 880	5-1011.2	.261	18.0	14.8	2.0	.878	102.8	.319	.803	211.1	450.4	.547	1.059D	107.7	1.234	-3.9	-11.9	273.8	.393
5-1011.2	5-1200	.393	298.2	-7.6	-2.2	1.380	75.4	.441	1.155	49.5	175.0	.645D	1.664A	93.9	.583	2.0	.8	194.8	.172
5-1200	5-1520	.133	199.5	-4.4	.8	.624	86.3	.360	1.225	173.5	436.8	.784	1.666	108.0	1.102	1.6	27.8	78.4	.350
		12.11	8.49	5.66	3.63	7.03	2.83	15.22	2/1/2	69.6	7.2	24.4	.390	4.726	14.2	194.3	-10.1	99.7D	1.453
5- 890	5-1014.1	.302	22.8	15.2	1.8	.887	105.9	.345	.817	216.6	450.7	.535	1.099D	109.1	1.243	-4.1	-11.5	278.3	.424
5-1014.1	5-1200	.424	299.0	-6.6	-2.1	1.377	73.6	.452	1.145	54.8	175.7	.627D	1.663A	93.6	.577	1.8	.7	192.8	.176
5-1200	5-1530	.158	207.6	-7.2	1.1	.617	83.4	.385	1.212	169.2	442.7	.745	1.678	110.0	1.099	1.6	27.7	86.6	.383
		13.46	9.75	6.41	3.72	7.12	3.33	15.89	2/1/2	71.4	4.9	21.0	.335	5.480	16.4	196.5	-13.5	97.2D	1.501
MARS ARRIVAL DATE = 2451210 (31 JAN 1999)																			
5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.3	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160
5-1210	5-1470	.110	136.6	6.7	-1.6	.667	98.5	.299	1.309	200.5	409.2	.917	1.700D	100.7	1.116	3.1	29.8	39.0	.249
		10.06	6.69	4.28	3.57	6.78	2.41	13.33	2/1/2	74.7	25.8	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299
5- 840	5-1004.9	.159	23.3	22.8	2.2	.862	90.6	.269	.776	181.7	451.3	.567	.985D	105.2	1.215	-2.6	-9.2	263.6	.330
5-1004.9	5-1210	.330	298.2	-12.0	-2.9	1.382	79.1	.418	1.168	37.6	177.6	.679D	1.657A	91.7	.594	2.8	4.2	196.3	.159
5-1210	5-1480	.103	148.0	8.0	-.8	.658	96.7	.305	1.290	195.8	414.5	.896	1.683D	101.9	1.113	2.4	28.0	47.1	.262
		9.79	6.44	4.15	3.35	6.75	2.29	13.56	2/1/2	74.0	20.8	34.1	.552	3.413	12.0	191.7	4.7	107.3D	1.333
5- 850	5-1005.4	.170	16.4	19.2	2.2	.864	93.8	.272	.780	190.2	450.5	.567	.992D	105.3	1.218	-3.0	-10.5	264.7	.334
5-1005.4	5-1210	.334	298.1	-11.6	-2.8	1.382	78.9	.420	1.167	38.5	177.7	.677D	1.657A	91.6	.593	2.7	4.0	196.0	.159
5-1210	5-1490	.100	160.7	-6.8	-.2	.650	95.0	.313	1.272	191.1	419.8	.874	1.670D	103.1	1.111	2.0	27.5	54.9	.279
		9.88	6.53	4.29	3.35	6.76	2.24	13.84	2/1/2	74.3	16.8	32.8	.539	3.538	11.7	191.8	1.9	106.6D	1.367
5- 860	5-1007.0	.193	14.2	16.7	2.2	.867	96.7	.282	.785	197.7	450.4	.563	1.006D	105.8	1.221	-3.3	-11.4	267.2	.347
5-1007.0	5-1210	.347	298.2	-10.6	-2.7	1.381	78.0	.424	1.163	41.2	178.0	.670D	1.656A	91.5	.591	2.5	3.6	195.0	.161
5-1210	5-1500	.102	174.0	3.9	.2	.642	93.0	.323	1.255	186.3	425.0	.849	1.660D	104.5	1.108	1.7	27.5	62.8	.297
		10.25	6.87	4.59	3.38	6.79	2.28	14.18	2/1/2	75.0	13.4	30.4	.499	3.811	11.5	192.4	-1.4	104.7D	1.401
5- 870	5-1009.1	.223	15.3	15.3	2.1	.871	99.6	.298	.792	204.5	450.5	.556	1.028D	106.6	1.226	-3.7	-11.8	270.5	.367
5-1009.1	5-1210	.367	298.4	-9.4	-2.6	1.380	76.9	.431	1.158	45.0	178.3	.659D	1.656A	91.3	.587	2.3	3.1	193.6	.163
5-1210	5-1510	.111	186.7	.2	.5	.633	90.8	.337	1.239	181.6	430.4	.822	1.656D	105.9	1.105	1.6	27.7	70.8	.318
		10.88	7.45	5.03	3.43	6.83	2.42	14.58	2/1/2	76.1	10.3	27.5	.447	4.209	12.0	193.5	-5.0	102.3D	1.433
5- 880	5-1011.7	.258	18.6	14.9	2.0	.877	102.6	.319	.801	210.5	450.7	.546	1.057D	107.7	1.233	-3.9	-11.8	274.5	.392
5-1011.7	5-1210	.392	298.9	-8.2	-2.4	1.378	75.4	.439	1.150	49.7	178.8	.645D	1.656A	91.0	.582	2.1	2.7	191.8	.166
5-1210	5-1520	.126	198.0	-3.5	.8	.626	88.3	.354	1.224	176.9	435.9	.790	1.657	107.5	1.102	1.5	27.7	79.0	.343
		11.81	8.31	5.62	3.50	6.90	2.69	15.06	2/1/2	77.5	7.5	24.3	.391	4.752	13.4	195.2	-8.5	99.8D	1.467
5- 890	5-1014.7	.299	23.3	15.2	1.8	.885	105.7	.344	.815	216.1	451.0	.534	1.095D	109.1	1.242	-4.1	-11.4	279.0	.423
5-1014.7	5-1210	.423	299.8	-7.1	-2.3	1.376	73.7	.451	1.141	54.9	179.3	.627D	1.656A	90.6	.576	1.8	2.5	189.7	.171
5-1210	5-1530	.148	207.3	-6.7	1.1	.618	85.5	.376	1.210	172.4	441.5	.755	1.664	109.4	1.099	1.5	27.6	87.2	.372
		13.07	9.48	6.36	3.60	7.00	3.12	15.66	2/1/2	79.2	5.1	21.0	.337	5.499	15.3	197.5	-11.9	97.3D	1.514
MARS ARRIVAL DATE = 2451220 (10 FEB 1999)																			
5- 830	5-1007.4	.173	38.0	26.0	2.1	.858	86.2	.283	.771	170.2	454.0	.553	.989	106.1	1.212	-2.2	-7.5	266.3	.347
5-1007.4	5-1220	.347	298.9	-11.7	-3.0	1.380	78.1	.422	1.161	41.1	181.6	.670D	1.651	88.9	.592	2.7	5.8	192.2	.157
5-1220	5-1470	.122	134.8	6.6	-1.9	.673	100.1	.305	1.317	205.0	409.3	.915	1.718D	100.9	1.118	3.4	30.8	38.6	.254
		10.24	6.93	4.32	3.31	6.72	2.61	13.42	2/1/2	82.8	26.3	32.4	.499	3.585	12.5	193.8	7.5	105.3D	1.291
5- 840	5-1005.6	.159	24.8	23.0	2.2	.861	90.4	.271	.775	181.0	451.6	.565	.985D	105.2	1.215	-2.6	-9.2	264.4	.332
5-1005.6	5-1220	.332	298.9	-13.1	-3.2	1.381	79.1	.417	1.165	37.9	181.3	.679D	1.651	89.1	.595	3.0	6.5	193.5	.156
5-1220	5-1480	.111	145.3	8.8	-.9	.664	98.5	.309	1.296	200.1	414.4	.896	1.696D	102.0	1.115	2.5	28.4	47.1	.265
		9.86	6.58	4.16	3.28	6.69	2.43	13.60	2/1/2	82.0	21.0	34.0	.547	3.423	13.5	192.9	8.7	107.4D	1.325

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2451220
10 FEB 1999

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 850	5-1006.0	.169	17.5	19.5	2.2	.863	93.6	.273	.779	189.6	450.8	.566	.991D	105.3	1.217	-3.0	-10.4	265.4	.335
5-1006.0	5-1220	.335	298.9	-12.8	-3.1	1.381	78.9	.418	1.164	38.6	181.4	.677D	1.651	89.0	.594	2.9	6.3	193.2	.156
5-1220	5-1490	.106	157.2	8.2	-.2	.654	96.8	.315	1.276	195.2	419.5	.874	1.677D	103.2	1.112	2.0	27.6	55.1	.279
		9.89	6.61	4.28	3.29	6.69	2.33	13.86	2/1/2	82.1	17.0	32.8	.536	3.542	12.8	192.9	4.0	106.8D	1.362
5- 860	5-1007.5	.191	15.2	16.9	2.1	.866	96.5	.283	.784	197.1	450.7	.562	1.005D	105.8	1.221	-3.3	-11.3	267.9	.348
5-1007.5	5-1220	.348	298.9	-11.6	-3.0	1.380	78.1	.423	1.161	41.3	181.6	.670D	1.651	88.8	.592	2.7	5.7	192.2	.158
5-1220	5-1500	.104	170.3	5.6	.2	.646	94.8	.323	1.257	190.3	424.6	.851	1.663D	104.4	1.109	1.7	27.5	63.1	.296
		10.19	6.38	4.57	3.32	6.72	2.31	14.16	2/1/2	82.8	13.6	30.4	.497	3.815	11.9	193.5	.6	105.0D	1.400
5- 870	5-1009.7	.221	16.1	15.4	2.0	.869	99.4	.298	.790	203.9	450.8	.555	1.026D	106.7	1.226	-3.6	-11.7	271.2	.367
5-1009.7	5-1220	.367	299.2	-10.2	-2.8	1.379	76.9	.429	1.155	45.1	181.9	.659D	1.651	88.6	.589	2.4	5.1	190.7	.160
5-1220	5-1510	.109	163.5	1.8	.5	.637	92.7	.335	1.240	185.4	429.8	.825	1.654D	105.7	1.105	1.6	27.6	71.2	.315
		10.76	7.39	5.00	3.37	6.77	2.39	14.52	2/1/2	83.9	10.5	27.5	.447	4.212	11.7	194.6	-3.1	102.6D	1.435
5- 880	5-1012.3	.256	19.3	15.0	1.9	.875	102.4	.318	.800	209.9	451.0	.545	1.054D	107.7	1.232	-3.9	-11.7	275.2	.392
5-1012.3	5-1220	.392	299.8	-8.8	-2.6	1.378	75.4	.438	1.148	49.6	182.3	.645D	1.652	88.2	.584	2.2	4.5	188.9	.164
5-1220	5-1520	.121	195.7	-2.2	.8	.628	90.3	.349	1.223	180.5	435.0	.796	1.651D	107.2	1.102	1.5	27.7	79.5	.337
		11.61	8.17	5.58	3.44	6.85	2.59	14.94	2/1/2	85.2	7.8	24.3	.392	4.749	12.5	196.3	-6.8	100.0D	1.469
5- 890	5-1015.2	.296	23.9	15.2	1.7	.883	105.4	.343	.813	215.5	451.3	.534	1.091D	109.1	1.241	-4.0	-11.3	279.8	.422
5-1015.2	5-1220	.422	300.8	-7.5	-2.4	1.376	73.7	.449	1.140	54.8	182.7	.628D	1.652	87.8	.579	1.9	4.0	187.0	.169
5-1220	5-1530	.139	206.2	-6.0	1.1	.620	87.5	.368	1.208	175.8	440.4	.763	1.653	108.9	1.098	1.4	27.5	87.8	.362
		12.79	9.24	6.30	3.55	6.95	2.94	15.47	2/1/2	86.8	5.3	21.0	.338	5.483	14.1	198.6	-10.2	97.8D	1.516
MARS ARRIVAL DATE = 2451230 (20 FEB 1999)																			
5- 830	5-1008.6	.177	40.7	26.1	2.0	.857	65.6	.287	.770	169.0	454.7	.549	.991	106.3	1.212	-2.2	-7.4	267.8	.352
5-1008.6	5-1230	.352	299.9	-12.3	-3.2	1.380	77.8	.424	1.159	42.0	185.0	.668D	1.649	86.3	.594	2.8	7.5	189.3	.158
5-1230	5-1470	.135	133.6	5.9	-2.3	.681	101.9	.312	1.328	209.5	409.4	.914	1.742D	101.1	1.121	3.9	32.2	37.8	.261
		10.55	7.23	4.37	3.32	6.73	2.86	13.54	2/1/2	90.5	27.0	32.0	.484	3.630	13.6	195.4	8.8	104.9D	1.274
5- 840	5-1006.3	.160	26.4	23.3	2.1	.860	90.1	.272	.774	180.2	452.0	.563	.985D	105.3	1.214	-2.6	-9.1	265.4	.334
5-1006.3	5-1230	.334	299.8	-14.4	-3.5	1.381	79.1	.417	1.164	38.0	184.8	.678D	1.649	86.6	.598	3.2	8.6	190.9	.156
5-1230	5-1480	.122	143.2	9.3	-1.0	.670	100.3	.314	1.304	204.6	414.3	.895	1.713D	102.2	1.117	2.6	28.8	47.0	.269
		10.05	6.78	4.16	3.28	6.68	2.62	13.67	2/1/2	89.5	21.3	34.1	.540	3.415	15.2	194.4	8.9	107.6D	1.305
5- 850	5-1006.6	.169	18.8	19.7	2.1	.862	93.3	.273	.778	189.0	451.1	.565	.991D	105.4	1.217	-3.0	-10.4	266.2	.336
5-1006.6	5-1230	.336	299.8	-14.1	-3.5	1.381	78.9	.418	1.163	38.6	184.8	.677D	1.649	86.6	.597	3.1	8.5	190.7	.156
5-1230	5-1490	.113	154.3	9.3	-.3	.660	98.6	.318	1.281	199.5	419.3	.874	1.689D	103.2	1.113	2.0	27.7	55.2	.281
		10.01	6.73	4.27	3.28	6.69	2.46	13.89	2/1/2	89.6	17.1	33.0	.533	3.525	14.3	194.4	6.4	107.2D	1.345
5- 860	5-1008.1	.190	16.2	17.1	2.1	.865	96.3	.283	.783	196.5	451.0	.561	1.004D	105.9	1.220	-3.3	-11.2	268.7	.348
5-1008.1	5-1230	.348	299.9	-12.7	-3.3	1.380	78.1	.422	1.160	41.2	185.0	.670D	1.649	86.4	.595	2.9	7.7	189.7	.157
5-1230	5-1500	.109	166.7	7.2	.2	.651	96.7	.324	1.261	194.4	424.2	.852	1.670D	104.4	1.110	1.7	27.5	63.3	.296
		10.24	6.93	4.55	3.31	6.72	2.38	14.16	2/1/2	90.3	13.7	30.5	.496	3.798	12.7	194.9	2.8	105.4D	1.388
5- 870	5-1010.3	.218	17.0	15.5	2.0	.868	99.2	.298	.789	203.2	451.1	.554	1.024D	106.7	1.225	-3.6	-11.6	272.1	.367
5-1010.3	5-1230	.367	300.2	-11.1	-3.0	1.379	76.9	.429	1.155	44.9	185.2	.660D	1.650	86.1	.592	2.6	6.8	188.2	.160
5-1230	5-1510	.110	179.8	3.6	.6	.641	94.6	.334	1.242	189.3	429.2	.827	1.656D	105.6	1.106	1.5	27.6	71.6	.313
		10.73	7.36	4.96	3.37	6.77	2.40	14.47	2/1/2	91.2	10.7	27.6	.447	4.193	11.7	195.9	-1.1	102.9D	1.426
5- 880	5-1012.9	.253	20.0	15.0	1.8	.873	102.1	.318	.798	209.2	451.3	.544	1.051D	107.7	1.231	-3.8	-11.6	276.1	.391
5-1012.9	5-1230	.391	300.9	-9.5	-2.8	1.378	75.5	.438	1.148	49.5	185.5	.646D	1.651	85.7	.588	2.3	6.0	186.5	.164
5-1230	5-1520	.117	192.7	-.7	.8	.632	92.2	.346	1.224	184.2	434.3	.800	1.647D	106.9	1.102	1.4	27.6	79.9	.332
		11.51	8.06	5.53	3.45	6.85	2.53	14.85	2/1/2	92.5	8.0	24.5	.393	4.722	11.9	197.6	-4.9	100.3D	1.462
5- 890	5-1015.9	.293	24.6	15.2	1.6	.881	105.2	.342	.810	214.8	451.6	.533	1.087D	109.1	1.240	-4.0	-11.2	280.7	.421
5-1015.9	5-1230	.421	301.9	-8.1	-2.6	1.376	73.8	.449	1.140	54.6	185.9	.628D	1.652	85.2	.582	2.0	5.5	184.6	.169
5-1230	5-1530	.132	204.3	-4.9	1.1	.623	89.6	.362	1.207	179.3	439.5	.770	1.645	108.5	1.098	1.3	27.3	88.3	.355
		12.60	9.04	6.24	3.56	6.97	2.80	15.31	2/1/2	93.9	5.6	21.2	.340	5.437	13.0	199.9	-8.4	97.8D	1.508
MARS ARRIVAL DATE = 2451240 (2 MAR 1999)																			
5- 830	5-1010.1	.182	43.8	26.2	1.9	.856	85.0	.293	.768	167.6	455.6	.543	.993	106.7	1.211	-2.3	-7.3	269.7	.359
5-1010.1	5-1240	.359	301.3	-12.8	-3.4	1.380	77.5	.426	1.158	43.2	188.3	.665D	1.651	83.9	.598	2.9	8.7	186.9	.161
5-1240	5-1470	.151	132.8	4.3	-3.0	.690	103.8	.321	1.342	214.2	409.6	.911	1.772D	101.4	1.124	4.5	34.3	36.7	.271
		11.02	7.63	4.44	3.39	6.80	3.19	13.71	2/1/2	97.6	28.2	31.5	.465	3.685	14.5	197.2	10.0	104.4D	1.250
5- 840	5-1007.0	.160	28.2	23.5	2.1	.859	89.8	.274	.773	179.4	452.4	.562	.985	105.5	1.214	-2.6	-9.0	266.4	.336
5-1007.0	5-1240	.336	300.9	-15.9	-3.9	1.381	79.0	.417	1.164	38.0	188.1	.678D	1.650	84.3	.602	3.5	10.5	188.9	.158
5-1240	5-1480	.135	141.9	9.5	-1.1	.679	102.2	.321	1.314	209.1	414.4	.893	1.735D	102.4	1.120	2.8	29.3	46.8	.275
		10.55	7.02	4.17	3.33	6.73	2.86	13.77	2/1/2	96.5	21.5	34.3	.533	3.388	17.4	196.1	11.4	108.0D	1.274
5- 850	5-1007.2	.168	20.1	20.0	2.1	.861	93.1	.274	.777	188.3	451.4	.564	.990D	105.4	1.216	-2.9	-10.3	267.1	.337
5-1007.2	5-1240	.337	300.9	-15.6	-3.8	1.381	79.0	.418	1.164	38.5	188.1	.677D	1.650	84.3	.602	3.4	10.4	188.8	.158
5-1240	5-1490	.123	151.9	10.2	-.3	.668	100.5	.323	1.289	203.9	419.2	.873	1.705D	103.4	1.115	2.1	27.8	55.3	.285
		10.23	6.90	4.26	3.33	6.74	2.64	13.95	2/1/2	96.5	17.3	33.3	.529	3.485	16.4	196.0	9.1	107.8D	1.315
5- 860	5-1008.8	.188	17.3	17.3	2.0	.864	96.0	.283	.781	195.8	451.3	.560	1.002D	105.9	1.220	-3.3	-11.1	269.6	.349
5-1008.8	5-1240	.349	301.1	-14.0	-3.6	1.381	78.2	.422	1.160	41.0	188.2	.671D	1.650	84.1	.600	3.1	9.4	187.7	.160
5-1240	5-1500	.116	163.4	6.6	.2	.657	98.6	.327	1.266	198.6	424.0	.852	1.680D	104.4	1.111	1.7	27.4	63.8	.297
		10.39	7.03	4.52	3.36	6.76	2.50	14.19	2/1/2	97.1	13.8	30.8	.494	3.760	14.1	196.5	5.3	105.9D	1.365
5- 870	5-1011.0	.216	17.9	15.7	1.9	.867	98.9	.298	.787	202.4	451.4	.553	1.022D	106.7	1.224	-3.6	-11.5	273.0	.367
5-1011.0	5-1240	.367	301.4	-12.1	-3.3	1.380	77.0	.429	1.156	44.7	188.4	.660D	1.651	83.8	.597	2.7	8.3	186.3	.162
5-1240	5-1510	.113	176.1	5.3	.6	.647	96.5	.334	1.245	193.4	428.8	.829	1.660D	105.5	1.107	1.5	27.4	71.9	.312
		10.80	7.38	4.93	3.42	6.82	2.46	14.46	2/1/2	98.0	10.9	27.9	.446	4.154	12.2	197.4	1.1	103.4D	1.408
5- 880	5-1013.6	.250	20.8	15.1	1.7	.872	101.8	.317	.796	208.5	451.7	.544	1.048D	107.7	1.230	-3.8	-11.5	277.0	.391
5-1013.6	5-1240	.391	302.2	-10.2	-3.0	1.378	75.6	.438	1.149	49.2	188.6	.646D	1.652	83.4	.593	2.4	7.2	184.6	.166
5-1240	5-1520	.116	189.3	1.0	.9	.637	94.2	.344	1.225	188.1	433.7	.804	1.647D	106.8	1.102	1.3	27.4	80.3	.329
		11.49	7.99	5.47	3.50	6.90	2.51	14.79	2/1/2	99.1	8.2	24.7	.394	4.673	11.5	199.1	-2.9	100.7D	1.447
5- 890	5-1016.6	.289	25.3	15.3	1.5	.879	104.9	.341	.808	214.0	452.0	.532	1.083D	109.0	1.238	-3.9	-11.1	281.6	.419
5-1016.6	5-1240	.419	303.5	-8.6	-2.7	1.377	73.9	.449	1.142	54.2	188.9	.629D	1.654	82.9	.588	2.0	6.3	182.9	.172
5-1240	5-1530	.127	201.7	-3.5	1.1	.627	91.7	.358	1.207	183.0	438.7	.776	1.639D	108.1	1.098	1.2	27.2	88.8	.349
		12.50	8.87	6.17	3.62	7.03	2.71	15.19	2/1/2	100.4	5.7	21.5	.342	5.366	12.0	201.3	-6.5	98.2D	1.492
MARS ARRIVAL DATE = 2451250 (12 MAR 1999)																			
5- 830	5-1012.0	.190	47.6	26.2	1.8	.854	84.0	.301	.766	165.7	456.8	.536	.997	107.2	1.210	-2.3	-7.2	272.2	.369
5-1012.0	5-1250	.369	302.9	-12.9	-3.5	1.380	76.9	.430	1.157	44.6	191.4	.660D	1.655	81.6	.603	2.9	9.3	184.8	.167
5-1250	5-1470	.172	132.2	.9	-4.2	.701	105.7	.332	1.359	219.0	409.8	.908	1.811D	101.8	1.128	5.8	38.0	34.4	.287
		11.69	8.16	4.56	3.52	6.92	3.62	13.99	2/1/2	104.2	30.6	30.8	.441	3.771	15.0	199.4	10.6	103.5D	1.221
5- 840	5-1007.8	.161	30.1	23.8	2.0	.859	89.5	.275	.772	178.6	452.6	.559	.985	105.6	1.213	-2.6	-9.0	267.4	.338
5-1007.8	5-1250	.338	302.2	-17.6	-4.3	1.382	79.1	.418	1.166	37.9	191.2	.679D	1.652	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1480	.150	141.1	9.2	-1.4	.689	104.1	.329	1.328	213.7	414.5	.890	1.765D	102.7	1.123	3.1	29.9	46.6	.282
		10.76	7.33	4.18	3.43	6.83	3.16	13.91	2/1/2	102.7	21.8	34.9	.526	3.338	20.0	198.1	14.1	108.5D	1.230
5- 850	5-1007.8	.167	21.4	20.2	2.0	.861	92.9	.275	.776	187.6	451.8	.563	.989D	105.5	1.216	-2.9	-10.2	267.9	.338
5-1007.8	5-1250	.338	302.2	-17.6	-4.3	1.382	79.1	.418	1.165	37.9	191.2	.678D	1.653	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1490	.136	150.3	10.7	-.3	.676	102.4	.329	1.299	206.4	419.1	.872	1.726D	103.6	1.118	2.1	27.8	55.4	.290
		10.56	7.13	4.25	3.43	6.83	2.88	14.04	2/1/2	102.7	17.3	34.0	.526	3.417	19.2	198.0	12.2	108.5D	1.271
5- 860	5-1009.4	.186	18.5	17.5	1.9	.862	95.8	.284	.780	195.0	451.6	.559	1.001D	105.9	1.219	-3.3	-11.0	270.5	.349
5-1009.4	5-1250	.349	302.4	-15.5	-4.0	1.381	78.3	.422	1.162	40.6	191.3	.672D	1.653	82.0	.606	3.4	10.9	186.5	.164
5-1250	5-1500	.125	160.8	9.7	.2	.665	100.5	.331	1.273	203.0	423.8	.852	1.694D	104.5	1.113	1.7	27.3	63.7	.300
		10.63	7.18	4.50	3.45	6.85	2.68	14.24	2/1/2	103.3	13.9	31.4	.493	3.701	16.1	198.3	8.1	106.5D	1.330
5- 870	5-1011.7	.213	19.0	15.9	1.8	.865	98.6	.298	.786	201.7	451.8	.552	1.020D	106.7	1.223	-3.6	-11.4	273.9	.367
5-1011.7	5-1250	.367	302.8	-13.2	-3.8	1.380	77.1	.429	1.158	44.3	191.4	.661D	1.655	81.7	.603	2.9	9.4	185.0	.167
5-1250	5-1510	.119	172.6	6.9	.6	.653	98.5	.336	1.249	197.5	428.4	.830	1.669D	105.5	1.108	1.4	27.2	72.1	.313
		10.96	7.45	4.89	3.51	6.91	2.56	14.47	2/1/2	104.1	10.9	28.3	.446	4.096	13.2	199.1	3.5	103.9D	1.382

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 640 DAYS
MARS ARRIVAL DATE = 2451250
12 MAR 1999

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
5- 880	5-1014.4	.247	21.8	15.2	1.6	.870	101.5	.317	.794	207.7	452.1	.543	1.045D	107.7	1.229	-3.8	-11.4	278.0	.390
5-1014.4	5-1250	.390	303.6	-11.0	-3.2	1.379	75.7	.438	1.152	48.8	191.6	.647D	1.656	81.2	.599	2.5	6.1	183.4	.171
5-1250	5-1520	.116	185.5	2.8	.9	.642	96.2	.343	1.228	192.2	433.2	.806	1.649D	106.6	1.103	1.2	27.2	80.6	.327
		11.56	7.97	5.42	3.60	7.00	2.55	14.76	2/1/2	105.1	8.3	25.1	.395	4.605	11.5	200.7	-.7	101.2D	1.424
5- 890	5-1017.4	.285	26.1	15.3	1.4	.877	104.6	.340	.805	213.2	452.4	.531	1.079D	109.0	1.237	-3.9	-10.9	282.6	.418
5-1017.4	5-1250	.418	304.8	-9.2	-2.9	1.378	74.0	.449	1.144	53.8	191.8	.631D	1.658	80.7	.594	2.1	6.9	181.7	.176
5-1250	5-1530	.124	198.5	-1.8	1.1	.632	93.7	.355	1.208	186.8	438.0	.780	1.637D	107.9	1.098	1.1	26.9	89.2	.345
		12.48	8.75	6.09	3.72	7.12	2.66	15.10	2/1/2	106.2	5.9	21.9	.343	5.274	11.2	202.9	-4.5	98.6D	1.468
MARS ARRIVAL DATE = 2451260 (22 MAR 1999)																			
5- 830	5-1014.7	.204	53.1	26.0	1.6	.851	82.6	.313	.764	163.1	458.5	.525	1.003	108.0	1.209	-2.4	-7.1	275.6	.385
5-1014.7	5-1260	.385	305.0	-12.4	-3.5	1.381	76.0	.437	1.156	47.5	194.4	.651D	1.661	79.4	.607	2.8	9.0	183.0	.176
5-1260	5-1470	.204	131.3	-7.3	-7.2	.714	107.7	.346	1.383	223.8	410.1	.905	1.661D	102.2	1.134	8.9	46.0	27.9	.321
		12.82	9.11	4.75	3.70	7.10	4.36	14.64	2/1/2	110.2	36.9	29.4	.405	3.935	14.4	202.0	10.2	101.6D	1.188
5- 840	5-1008.5	.162	31.7	24.0	2.0	.858	89.2	.277	.771	177.9	453.2	.558	.985	105.7	1.213	-2.6	-8.9	268.3	.340
5-1008.5	5-1260	.340	303.6	-20.0	-4.9	1.383	79.2	.418	1.168	37.3	194.1	.680D	1.657	80.3	.615	4.3	13.9	187.2	.169
5-1260	5-1480	.168	140.8	8.3	-1.7	.700	106.1	.340	1.345	218.4	414.6	.887	1.803D	103.0	1.127	3.5	31.0	46.1	.292
		11.28	7.71	4.18	3.56	6.96	3.53	14.08	2/1/2	108.1	22.4	35.9	.520	3.249	23.5	200.4	17.6	109.4D	1.169
5- 850	5-1008.5	.167	22.3	20.4	2.0	.860	92.7	.276	.775	187.2	452.0	.562	.989D	105.5	1.215	-2.9	-10.2	268.5	.339
5-1008.5	5-1260	.339	303.6	-20.3	-5.0	1.383	79.3	.418	1.169	37.0	194.1	.681D	1.657	80.3	.615	4.4	14.1	187.4	.169
5-1260	5-1490	.151	149.4	11.0	-.4	.687	104.4	.337	1.312	212.9	419.1	.869	1.755D	103.9	1.121	2.2	27.9	55.4	.296
		10.99	7.42	4.25	3.56	6.97	3.18	14.17	2/1/2	108.0	17.4	35.3	.523	3.302	23.2	200.4	16.3	109.6D	1.204
5- 860	5-1010.1	.185	19.7	17.7	1.9	.861	95.5	.284	.779	194.3	452.0	.558	1.000D	106.0	1.218	-3.3	-11.0	271.4	.350
5-1010.1	5-1260	.350	303.9	-17.4	-4.4	1.382	78.4	.423	1.165	40.0	194.2	.673D	1.658	80.0	.613	3.8	12.3	185.9	.170
5-1260	5-1500	.138	158.8	10.5	.3	.674	102.5	.337	1.282	207.4	423.6	.850	1.714D	104.7	1.116	1.6	27.1	63.9	.305
		10.97	7.39	4.48	3.58	6.98	2.91	14.32	2/1/2	108.7	13.9	32.1	.491	3.614	18.8	200.4	11.4	107.4D	1.283
5- 870	5-1012.5	.211	20.1	16.1	1.7	.864	98.3	.298	.784	200.8	452.2	.551	1.017D	106.7	1.222	-3.5	-11.3	275.0	.367
5-1012.5	5-1260	.367	304.4	-14.5	-3.9	1.381	77.2	.430	1.161	43.9	194.3	.662D	1.660	79.7	.610	3.2	10.4	184.3	.172
5-1260	5-1510	.128	169.7	8.2	.7	.661	100.4	.339	1.256	201.8	428.2	.830	1.682D	105.6	1.110	1.3	27.0	72.4	.315
		11.21	7.58	4.85	3.63	7.03	2.73	14.52	2/1/2	109.5	11.0	28.8	.446	4.020	14.7	201.1	6.2	104.5D	1.346
5- 880	5-1015.2	.243	22.8	15.4	1.5	.868	101.2	.316	.792	206.8	452.5	.541	1.042D	107.7	1.228	-3.7	-11.2	279.1	.390
5-1015.2	5-1260	.390	305.2	-11.9	-3.5	1.380	75.8	.439	1.155	48.3	194.4	.649D	1.662	79.3	.607	2.7	8.7	182.7	.176
5-1260	5-1520	.123	181.9	4.6	.9	.650	98.2	.344	1.232	196.3	432.8	.808	1.656D	106.6	1.104	1.2	26.9	80.9	.327
		11.72	8.00	5.36	3.72	7.12	2.64	14.75	2/1/2	110.4	8.4	25.6	.396	4.521	12.0	202.5	1.6	101.7D	1.394
5- 890	5-1018.2	.281	27.0	15.4	1.3	.874	104.2	.339	.802	212.3	452.8	.530	1.074D	109.0	1.235	-3.8	-10.8	283.8	.417
5-1018.2	5-1260	.417	306.4	-9.8	-3.1	1.379	74.1	.450	1.148	53.3	194.5	.632D	1.664	78.7	.602	2.2	7.3	181.2	.182
5-1260	5-1530	.125	194.8	-.0	1.2	.638	95.8	.353	1.210	190.8	437.4	.783	1.638D	107.7	1.099	1.0	26.7	89.5	.342
		12.53	8.68	6.02	3.85	7.25	2.66	15.04	2/1/2	111.4	6.0	22.3	.345	5.166	10.8	204.7	-2.5	99.0D	1.439
MARS ARRIVAL DATE = 2451270 (1 APR 1999)																			
5- 860	5-1010.6	.184	20.7	17.9	1.8	.860	95.3	.284	.778	193.7	452.2	.557	.999D	106.0	1.218	-3.2	-10.9	272.1	.351
5-1010.6	5-1270	.351	305.4	-20.1	-5.1	1.383	78.7	.423	1.170	39.0	197.0	.675D	1.664	78.3	.621	4.4	13.8	186.3	.177
5-1270	5-1500	.152	157.6	11.0	.3	.684	104.5	.345	1.295	211.9	423.5	.848	1.741D	105.0	1.119	1.6	26.9	64.1	.311
		11.42	7.67	4.46	3.75	7.15	3.21	14.44	2/1/2	113.3	13.9	33.4	.489	3.484	22.8	203.0	15.6	108.8D	1.215
5- 870	5-1013.8	.208	21.4	16.3	1.6	.862	98.0	.298	.782	199.9	452.6	.549	1.015D	106.8	1.221	-3.5	-11.2	276.0	.367
5-1013.8	5-1270	.367	306.0	-16.0	-4.3	1.383	77.3	.430	1.165	43.3	197.0	.664D	1.666	77.9	.618	3.5	11.1	184.4	.179
5-1270	5-1510	.140	167.3	9.2	.7	.671	102.4	.345	1.264	206.3	428.0	.829	1.700D	105.8	1.112	1.2	26.7	72.6	.319
		11.55	7.76	4.81	3.79	7.19	2.95	14.59	2/1/2	114.3	11.0	29.5	.445	3.924	16.9	203.2	9.2	105.3D	1.302
5- 880	5-1016.1	.239	23.9	15.5	1.4	.865	100.9	.315	.789	205.8	452.9	.540	1.038D	107.8	1.226	-3.7	-11.1	280.3	.389
5-1016.1	5-1270	.389	307.0	-13.0	-3.7	1.382	75.9	.439	1.159	47.8	197.1	.650D	1.668	77.5	.615	2.9	9.1	182.7	.183
5-1270	5-1520	.131	178.6	6.0	1.0	.658	100.3	.347	1.238	200.6	432.4	.808	1.667D	106.7	1.106	1.1	26.6	81.1	.329
		11.96	8.09	5.30	3.88	7.27	2.78	14.79	2/1/2	115.1	8.4	26.1	.397	4.423	13.0	204.5	4.0	102.2D	1.358
5- 890	5-1019.1	.276	28.0	15.5	1.2	.871	103.9	.338	.799	211.3	453.3	.529	1.069D	109.0	1.233	-3.8	-10.7	285.0	.416
5-1019.1	5-1270	.416	308.2	-10.5	-3.3	1.380	74.3	.450	1.152	52.7	197.1	.634D	1.671	76.9	.611	2.3	7.5	181.2	.189
5-1270	5-1530	.128	191.0	1.7	1.2	.646	97.9	.353	1.214	194.9	436.9	.785	1.642D	107.7	1.100	.9	26.3	89.8	.341
		12.67	8.66	5.93	4.01	7.41	2.73	15.02	2/1/2	115.9	6.0	22.9	.347	5.044	10.8	206.5	-.4	99.5D	1.404
MARS ARRIVAL DATE = 2451280 (11 APR 1999)																			
5- 870	5-1014.0	.206	22.6	16.5	1.6	.860	97.7	.298	.781	199.1	453.0	.548	1.013D	106.8	1.220	-3.5	-11.1	277.1	.366
5-1014.0	5-1280	.368	307.8	-18.0	-4.8	1.384	77.6	.431	1.170	42.5	199.7	.665D	1.674	76.3	.627	3.9	11.9	185.1	.187
5-1280	5-1510	.154	165.8	9.9	.8	.682	104.5	.352	1.276	210.8	427.8	.827	1.725D	106.0	1.116	1.2	26.3	72.8	.325
		11.99	8.02	4.78	3.97	7.37	3.25	14.70	2/1/2	118.3	11.0	30.5	.444	3.800	20.0	205.7	12.8	106.3D	1.245
5- 880	5-1017.0	.236	25.2	15.6	1.3	.863	100.5	.315	.787	204.8	453.4	.539	1.035D	107.8	1.225	-3.6	-11.0	281.5	.389
5-1017.0	5-1280	.389	308.9	-14.1	-4.1	1.383	76.0	.440	1.164	47.2	199.7	.651D	1.676	75.8	.624	3.1	9.3	183.3	.191
5-1280	5-1520	.142	175.9	7.2	1.1	.668	102.3	.352	1.246	205.0	432.1	.807	1.684D	106.8	1.109	.9	26.2	81.4	.332
		12.29	8.24	5.24	4.05	7.45	3.00	14.85	2/1/2	119.3	8.4	26.8	.397	4.312	14.5	206.6	6.6	102.8D	1.316
5- 890	5-1020.0	.271	29.2	15.5	1.1	.869	103.5	.337	.796	210.3	453.8	.528	1.064D	109.0	1.232	-3.7	-10.5	286.3	.415
5-1020.0	5-1280	.415	310.2	-11.3	-3.5	1.382	74.4	.451	1.157	52.1	199.7	.635D	1.680	75.2	.620	2.4	7.4	181.8	.197
5-1280	5-1530	.135	187.5	3.3	1.3	.654	100.0	.355	1.219	199.2	436.5	.786	1.652D	107.7	1.102	.8	26.0	90.1	.342
		12.89	8.71	5.85	4.19	7.58	2.86	15.04	2/1/2	120.0	6.1	23.5	.349	4.911	11.3	208.6	1.7	99.9D	1.365
MARS ARRIVAL DATE = 2451290 (21 APR 1999)																			
5- 880	5-1017.9	.232	26.5	15.8	1.2	.861	100.1	.315	.784	203.8	453.9	.538	1.031D	107.8	1.224	-3.6	-10.9	282.8	.389
5-1017.9	5-1290	.389	310.9	-15.5	-4.4	1.385	76.2	.441	1.169	46.5	202.2	.653D	1.685	74.3	.634	3.4	9.4	184.4	.199
5-1290	5-1520	.156	173.9	8.1	1.2	.679	104.4	.359	1.257	209.5	431.9	.806	1.707D	107.0	1.112	.8	25.8	81.6	.337
		12.72	8.47	5.18	4.25	7.64	3.29	14.96	2/1/2	122.9	8.4	27.7	.398	4.184	16.7	209.0	9.5	103.6D	1.287
5- 890	5-1021.1	.267	30.4	15.6	1.0	.866	103.0	.336	.793	209.1	454.3	.527	1.059D	108.9	1.230	-3.7	-10.4	287.6	.414
5-1021.1	5-1290	.414	312.8	-12.1	-3.7	1.384	74.6	.452	1.163	51.4	202.1	.637D	1.689	73.7	.630	2.6	7.1	182.9	.205
5-1290	5-1530	.145	184.4	4.7	1.3	.664	102.1	.359	1.226	203.6	436.2	.786	1.667D	107.8	1.104	.7	25.6	90.3	.344
		13.20	8.82	5.76	4.38	7.77	3.06	15.09	2/1/2	123.6	6.1	24.2	.351	4.771	12.2	210.7	3.9	100.4D	1.323
MARS ARRIVAL DATE = 2451300 (1 MAY 1999)																			
5- 880	5-1018.9	.228	27.9	16.0	1.1	.859	99.7	.314	.782	202.7	454.4	.536	1.028D	107.8	1.222	-3.6	-10.8	284.1	.389
5-1018.9	5-1300	.389	313.0	-17.3	-4.9	1.386	76.4	.442	1.175	45.6	204.6	.655D	1.695	72.9	.644	3.8	9.5	186.1	.209
5-1300	5-1520	.174	172.7	8.6	1.3	.692	106.5	.368	1.271	214.1	431.7	.804	1.739D	107.4	1.116	.7	25.3	81.8	.345
		13.25	8.79	5.12	4.47	7.86	3.67	15.11	2/1/2	126.0	8.5	28.7	.398	4.036	19.5	211.7	12.8	104.6D	1.209

STOPOVER TIME = 0 DAYS — 1999 OUTBOUND SWINGBY — MISSION DURATION = 680 DAYS
MARS ARRIVAL DATE = 2451150
2 DEC 1998

LAUNCH / SWNGBY DEPART	SWNGBY ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / PERIH / PERIH / KAPPA	APHEL / APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
MARS ARRIVAL DATE = 2451150 (2 DEC 1998)																			
5- 820	5-1006.2	.196	41.5	26.6	2.3	.860	83.2	.296	.772	163.2	455.1	.543	1.001	106.9	1.213	-1.8	-5.7	263.8	.362
5-1006.2	5-1150	.362	299.9	-5.8	-1.5	1.406	78.0	.468	1.267	38.4	150.1	.674D	1.860A	111.4	.642	1.9	-7.4	208.3	.268
5-1150	5-1500	.151	186.1	-1.9	.2	.637	82.4	.348	1.257	165.2	430.2	.820	1.694	106.3	1.109	1.8	26.6	59.9	.330
		13.35	7.42	4.63	5.93	9.31	2.79	14.80	2/1/2	32.2	10.8	35.9	.459	3.247	6.1	191.9	.2	105.5D	1.031
5- 830	5-1002.5	.160	26.9	25.1	2.4	.864	88.2	.269	.776	175.2	451.2	.568	.985	105.1	1.215	-2.2	-7.8	259.9	.328
5-1002.5	5-1150	.328	301.1	-6.8	-1.6	1.408	80.2	.460	1.279	31.5	149.1	.691D	1.867A	111.3	.648	2.1	-7.4	209.5	.266
5-1150	5-1510	.157	192.6	-3.5	.5	.632	79.6	.376	1.247	161.8	436.9	.778	1.715	108.6	1.107	1.8	27.1	67.2	.367
		13.36	7.48	4.17	5.88	9.26	3.31	15.57	2/1/2	31.1	7.6	40.8	.559	2.868	7.9	190.4	-1.4	109.8D	1.044
MARS ARRIVAL DATE = 2451160 (12 DEC 1998)																			
5- 820	5-1007.1	.201	43.2	26.6	2.2	.859	82.7	.301	.771	162.3	455.8	.539	1.003	107.1	1.212	-1.8	-5.7	265.0	.368
5-1007.1	5-1160	.368	298.5	-6.2	-1.7	1.397	77.3	.456	1.227	41.4	156.0	.667D	1.787A	107.7	.621	1.9	-6.2	206.7	.238
5-1160	5-1500	.123	185.8	-1.7	.2	.636	84.1	.341	1.255	168.4	429.0	.827	1.684	105.8	1.108	1.8	26.8	60.5	.321
		12.51	7.33	4.70	5.17	8.56	2.63	14.64	2/1/2	38.5	11.4	33.3	.445	3.490	6.3	191.8	.9	104.0D	1.107
5- 830	5-1003.2	.162	28.4	25.2	2.4	.863	88.0	.271	.776	174.5	451.5	.566	.985	105.2	1.214	-2.2	-7.7	260.8	.330
5-1003.2	5-1160	.330	299.4	-7.4	-1.8	1.399	79.7	.447	1.240	34.0	154.9	.686D	1.793A	107.7	.628	2.1	-6.2	208.3	.236
5-1160	5-1510	.146	193.2	-3.6	.5	.630	81.5	.366	1.244	164.7	435.4	.789	1.700	108.0	1.107	1.8	27.3	68.0	.356
		12.39	7.27	4.18	5.12	8.51	3.08	15.32	2/1/2	37.1	8.2	38.2	.552	3.054	8.0	190.0	-.5	108.4D	1.133
5- 840	5-1002.5	.159	17.8	21.8	2.4	.865	91.5	.265	.779	184.2	450.0	.572	.986D	104.8	1.217	-2.6	-9.4	260.4	.324
5-1002.5	5-1160	.324	299.6	-7.6	-1.8	1.400	80.1	.445	1.241	32.7	154.7	.689D	1.794A	107.6	.629	2.2	-6.1	208.6	.235
5-1160	5-1520	.176	199.0	-5.2	.8	.625	78.4	.397	1.234	161.2	442.1	.743	1.724	110.5	1.105	1.8	27.6	75.5	.396
		12.98	7.87	4.15	5.11	8.50	3.72	16.18	2/1/2	36.9	5.5	38.8	.573	3.011	9.4	189.6	-2.7	109.1D	1.151
MARS ARRIVAL DATE = 2451170 (22 DEC 1998)																			
5- 820	5-1008.1	.206	44.9	26.5	2.2	.859	82.2	.305	.771	161.4	456.4	.535	1.006	107.4	1.212	-1.8	-5.6	266.2	.374
5-1008.1	5-1170	.374	297.7	-6.6	-1.8	1.390	76.7	.449	1.199	44.0	161.4	.660D	1.737A	104.0	.606	1.9	-4.7	204.4	.214
5-1170	5-1500	.116	184.7	-1.1	.2	.635	85.9	.335	1.254	171.7	428.0	.833	1.675	105.4	1.108	1.8	27.1	61.1	.314
		11.86	7.28	4.78	4.58	7.97	2.50	14.50	2/1/2	45.5	11.9	31.3	.430	3.702	6.6	192.1	1.7	102.7D	1.163
5- 830	5-1003.8	.163	29.7	25.4	2.3	.862	87.7	.272	.775	173.9	451.9	.564	.986	105.3	1.214	-2.2	-7.7	261.5	.332
5-1003.8	5-1170	.332	298.3	-8.0	-1.9	1.393	79.3	.437	1.212	35.9	160.3	.682D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1510	.136	193.2	-3.4	.5	.629	83.4	.358	1.242	167.8	434.2	.798	1.687	107.4	1.106	1.8	27.4	68.7	.345
		11.61	7.08	4.20	4.52	7.91	2.89	15.11	2/1/2	43.6	8.7	36.4	.545	3.204	8.3	190.0	.6	107.5D	1.201
5- 840	5-1002.9	.159	18.8	22.0	2.4	.865	91.4	.266	.778	183.8	450.2	.571	.985D	104.9	1.216	-2.6	-9.4	261.0	.325
5-1002.9	5-1170	.325	298.5	-8.4	-2.0	1.393	79.7	.435	1.214	34.4	160.0	.686D	1.743A	104.1	.615	2.2	-4.6	206.9	.211
5-1170	5-1520	.164	200.0	-5.4	.8	.623	80.4	.386	1.231	164.1	440.6	.756	1.706	109.7	1.104	1.8	27.7	76.4	.382
		12.11	7.60	4.15	4.52	7.91	3.45	15.88	2/1/2	43.3	6.0	37.0	.569	3.148	9.5	189.5	-1.6	108.3D	1.222
5- 850	5-1003.7	.173	13.0	18.5	2.4	.867	94.4	.270	.783	192.1	449.6	.571	.994D	105.1	1.219	-3.0	-10.7	262.4	.331
5-1003.7	5-1170	.331	298.3	-8.1	-1.9	1.393	79.3	.437	1.212	35.7	160.2	.683D	1.742A	104.1	.613	2.2	-4.6	206.6	.211
5-1170	5-1530	.198	205.2	-7.1	1.1	.618	76.9	.421	1.220	160.6	447.3	.706	1.734	112.4	1.102	1.8	27.7	84.1	.427
		13.07	8.54	4.32	4.52	7.92	4.22	16.86	2/1/2	43.6	4.4	35.5	.547	3.278	10.8	189.7	-4.3	107.2D	1.246
MARS ARRIVAL DATE = 2451180 (1 JAN 1999)																			
5- 820	5-1009.2	.213	46.8	26.4	2.1	.858	81.6	.311	.770	160.4	457.2	.530	1.009	107.8	1.212	-1.8	-5.6	267.6	.381
5-1009.2	5-1180	.381	297.5	-6.9	-1.9	1.385	76.2	.445	1.178	46.4	166.4	.654D	1.702A	100.4	.594	1.9	-3.0	201.6	.195
5-1180	5-1500	.110	183.0	-.3	.2	.636	87.6	.331	1.253	175.2	427.1	.839	1.668	105.1	1.107	1.8	27.2	61.6	.308
		11.42	7.28	4.88	4.14	7.54	2.40	14.38	2/1/2	53.1	12.3	29.7	.414	3.896	6.9	192.8	2.5	101.6D	1.199
5- 830	5-1004.3	.164	31.0	25.5	2.3	.862	87.5	.274	.774	173.4	452.2	.562	.986	105.4	1.214	-2.2	-7.6	262.3	.334
5-1004.3	5-1180	.334	297.7	-8.7	-2.1	1.388	79.0	.431	1.193	37.3	165.1	.679D	1.707A	100.7	.603	2.3	-2.8	204.3	.192
5-1180	5-1510	.128	192.7	-3.0	.5	.629	85.2	.351	1.240	171.0	433.0	.805	1.676	106.9	1.106	1.7	27.6	69.3	.337
		11.01	6.93	4.21	4.07	7.47	2.72	14.94	2/1/2	50.8	9.2	35.1	.538	3.520	8.8	190.2	1.8	106.8D	1.248
5- 840	5-1003.4	.159	19.7	22.2	2.3	.864	91.2	.267	.778	183.3	450.4	.570	.985D	105.0	1.216	-2.6	-9.3	261.6	.326
5-1003.4	5-1180	.326	297.9	-9.1	-2.2	1.389	79.5	.428	1.196	35.6	164.9	.683D	1.708A	100.8	.605	2.3	-2.7	204.8	.191
5-1180	5-1520	.152	200.4	-5.4	.8	.623	82.4	.376	1.228	167.0	439.2	.767	1.690	109.0	1.103	1.7	27.8	77.1	.370
		11.42	7.35	4.15	4.06	7.46	3.20	15.62	2/1/2	50.4	6.4	35.8	.565	3.253	9.7	189.7	-.3	107.8D	1.274
5- 850	5-1004.1	.172	13.7	18.7	2.3	.866	94.3	.271	.782	191.7	449.8	.570	.994D	105.1	1.219	-3.0	-10.7	262.9	.332
5-1004.1	5-1180	.332	297.7	-8.8	-2.1	1.388	79.1	.430	1.194	36.9	165.1	.680D	1.707A	100.7	.603	2.3	-2.8	204.4	.192
5-1180	5-1530	.183	206.5	-7.3	1.1	.617	79.1	.408	1.217	163.3	445.6	.721	1.713	111.5	1.101	1.7	27.7	85.0	.410
		12.26	8.20	4.32	4.07	7.46	3.88	16.48	2/1/2	50.7	4.5	34.4	.545	3.385	10.7	189.8	-3.1	106.8D	1.301
5- 860	5-1005.6	.196	12.1	16.3	2.3	.869	97.2	.282	.787	199.2	449.7	.565	1.009D	105.7	1.223	-3.4	-11.6	265.4	.346
5-1005.6	5-1180	.346	297.5	-8.2	-2.1	1.388	78.2	.434	1.189	39.8	165.5	.673D	1.706A	100.6	.601	2.2	-2.9	203.6	.192
5-1180	5-1540	.223	211.1	-8.9	1.4	.611	75.2	.448	1.206	159.9	452.4	.666	1.746	114.5	1.098	1.8	27.4	92.7	.459
		13.53	9.45	4.64	4.09	7.48	4.81	17.60	2/1/2	51.4	4.6	31.8	.501	3.649	12.0	190.4	-6.1	104.8D	1.327
MARS ARRIVAL DATE = 2451190 (11 JAN 1999)																			
5- 820	5-1010.6	.222	49.1	26.3	2.0	.856	80.8	.319	.768	159.2	458.2	.523	1.013	108.3	1.211	-1.9	-5.6	269.3	.391
5-1010.6	5-1190	.391	297.7	-7.1	-2.1	1.382	75.5	.444	1.163	48.8	171.0	.647D	1.679A	97.0	.586	1.9	-1.1	198.1	.182
5-1190	5-1500	.105	180.6	.9	.2	.637	89.4	.327	1.253	178.8	426.3	.843	1.663	104.8	1.107	1.8	27.4	62.1	.303
		11.18	7.34	5.02	3.84	7.24	2.32	14.29	2/1/2	61.4	12.7	28.3	.393	4.094	7.2	193.9	3.1	100.4D	1.216
5- 830	5-1004.9	.165	32.4	25.6	2.3	.861	87.3	.275	.774	172.8	452.5	.561	.987	105.6	1.213	-2.2	-7.6	263.1	.337
5-1004.9	5-1190	.337	297.5	-9.4	-2.3	1.385	78.8	.426	1.180	38.5	169.7	.677D	1.683A	97.5	.596	2.4	-.7	201.6	.177
5-1190	5-1510	.121	191.4	-2.2	.5	.630	87.1	.345	1.239	174.4	432.0	.812	1.667	106.5	1.105	1.7	27.6	69.9	.329
		10.55	6.82	4.23	3.74	7.13	2.59	14.79	2/1/2	58.5	9.6	34.1	.531	3.412	9.4	190.7	3.1	106.3D	1.260
5- 840	5-1003.8	.159	20.8	22.3	2.3	.863	91.0	.267	.777	182.8	450.7	.569	.985D	105.0	1.216	-2.6	-9.3	262.2	.327
5-1003.8	5-1190	.327	297.6	-10.0	-2.4	1.385	79.4	.424	1.182	36.5	169.5	.682D	1.683A	97.5	.598	2.5	-.6	202.2	.176
5-1190	5-1520	.142	200.3	-5.1	.8	.623	84.4	.367	1.226	170.2	437.9	.776	1.677	108.4	1.103	1.6	27.8	77.8	.359
		10.87	7.15	4.15	3.72	7.12	3.00	15.40	2/1/2	58.0	6.8	34.9	.561	3.351	10.2	190.1	1.2	107.5D	1.309
5- 850	5-1004.5	.172	14.5	18.9	2.3	.866	94.1	.271	.781	191.3	450.0	.569	.993D	105.2	1.219	-3.0	-10.6	263.4	.333
5-1004.5	5-1190	.333	297.5	-9.7	-2.4	1.385	79.0	.425	1.181	37.7	169.6	.679D	1.683A	97.5	.597	2.4	-.7	201.8	.177
5-1190	5-1530	.170	207.3	-7.4	1.1	.616	81.3	.395	1.214	166.1	444.1	.734	1.694	110.7	1.100	1.7	27.7	85.8	.395
		11.62	7.90	4.31	3.73	7.13	3.59	16.16	2/1/2	58.3	4.7	33.6	.543	3.462	10.7	190.2	-1.6	106.6D	1.338
5- 860	5-1006.0	.195	12.8	16.4	2.3	.868	97.1	.282	.787	198.8	449.9	.565	1.008D	105.7	1.222	-3.4	-11.5	265.9	.347
5-1006.0	5-1190	.347	297.4	-8.9	-2.3	1.384	78.1	.429	1.177	40.5	169.9	.672D	1.682A	97.4	.595	2.3	-.8	200.9	.178
5-1190	5-1540	.206	212.8	-9.3	1.4	.610	77.6	.431	1.203	162.5	450.6	.684	1.721	113.4	1.097	1.7	27.4	93.7	.439
		12.78	9.03	4.62	3.75	7.15	4.40	17.14	2/1/2	59.0	4.2	31.1	.500	3.731	11.6	190.8	-4.8	104.6D	1.366
MARS ARRIVAL DATE = 2451200 (21 JAN 1999)																			
5- 820	5-1012.6	.236	52.2	26.0	1.9	.855	79.6	.331	.767	157.4	459.6	.513	1.021	109.1	1.210	-2.0	-5.5	271.8	.407
5-1012.6	5-1200	.407	298.5	-7.1	-2.2	1.379	74.6	.446	1.151	52.0	175.4	.637D	1.664A	93.7	.580	1.9	-.8	193.9	.174
5-1200	5-1500	.103	177.5	2.3	.2	.639	91.2	.325	1.253	182.5	425.6	.846	1.660D	104.6	1.108	1.8	27.5	62.4	.300
		11.19	7.53	5.24	3.66	7.06	2.28	14.23	2/1/2	70.4	13.1	26.6	.364	4.341	7.4	195.5	3.5	98.9D	1.215
5- 830	5-1005.6	.167	34.0	25.8	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339
5-1005.6	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167
5-1200	5-1510	.115	189.4	-1.2	.5	.631	88.9	.340	1.239	177.9	431.2	.817	1.660	106.2	1.105	1.6	27.7	70.4	.323
		10.25	6.74	4.25	3.51	6.91	2.49	14.67	2/1/2	66.5	10.0	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.296
5- 840	5-1004.3	.159	22.0	22.6	2.3	.863	90.6	.268	.777	182.3	451.0	.566	.985D	105.1	1.215	-2.6	-9.3	262.8	.326
5-1004.3	5-1200	.326	297.8	-11.0	-2.6	1.383	79.2	.420	1.174	37.2	173.7	.680D	1.667A	94.5	.595	2.6	1.8	199.3	.166
5-1200	5-1520	.133	199.5	-4.4	.8	.624	86.3	.360	1.225	173.5	436.8	.784	1.666	108.0	1.102	1.6	27.8	78.4	.350
		10.47	6.98	4.15	3.49	6.89	2.83	15.22	2/1/2	66.0	7.2	34.4	.557	3.383	11.0	190.8	2.8	107.3D	1.326
5- 850	5-1004.9	.171	15.4	19.0	2.3	.865	94.0	.272	.780	190.8	450.3	.568	.993D	105.2	1.218	-3.0	-10.6	264.0	.333
5-1004.9	5-1200	.333	297.7	-10.6	-2.6	1.383	78.9	.422	1.172	36.2	173.8	.676D	1.667A	94.5	.594	2.5	1.6	199.0	.166
5-1200	5-1530	.158	207.6	-7.2	1.1	.617	83.4	.385	1.212	169.2	442.7	.745	1.678	110.0	1.099	1.6	27.7	86.6	.383
		11.13	7.65	4.30	3.50	6.90	3.33	15.69	2/1/2	66.2	4.9	33.1	.541	3.512	11.0	190.9	.1	106.5D	1.360

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2451200
21 JAN 1999

LAUNCH / SWNGBY / DEPART	SWNGBY / ARRIVE / RETURN	SPEED1 / SPEED3 / SPEED5 / PROP	RA1 / RA3 / RA5 / AERO	DECL1 / DECL3 / DECL5 / DVL	I 1 / I 3 / I 5 / DVA	V 1 / V 3 / V 5 / EVA	PSI 1 / PSI 3 / PSI 5 / DVD	ECCEN / ECCEN / ECCEN / EVR	SMA / SMA / SMA / TYPE	THET1 / THET3 / THET5 / SUN A	THET2 / THET4 / THET6 / SUN R	PERIH / APHEL / PERIH / KAPPA	APHEL / APHEL / -A	PSI 2 / PSI 4 / PSI 6 / E	V 2 / V 4 / V 6 / INC	I 2 / I 4 / I 6 / RAP	DECL2 / DECL4 / DECL6 / DECLP	RA2 / RA4 / RA6 / ETA	SPEED2 / SPEED4 / SPEED6 / PERIC
5- 860	5-1006.5	.194	13.5	16.5	2.2	.868	96.9	.282	.786	198.3	450.1	.564	1.007D	105.8	1.222	-3.4	-11.4	266.5	.347
5-1006.5	5-1200	.347	297.6	-9.7	-2.5	1.382	78.1	.426	1.168	41.0	174.1	.671D	1.666A	94.4	.591	2.4	1.4	198.0	.167
5-1200	5-1540	.191	214.0	-9.4	1.4	.610	79.9	.416	1.200	165.2	448.9	.700	1.699	112.4	1.096	1.6	27.3	94.6	.422
		12.17	8.65	4.61	3.52	6.92	4.05	16.74	2/1/2	67.0	3.9	30.6	.500	3.784	11.4	191.5	-3.2	104.6D	1.391
MARS ARRIVAL DATE = 2451210 (31 JAN 1999)																			
5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.3	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160
5-1210	5-1510	.111	186.7	.2	.5	.633	90.8	.337	1.239	181.6	430.4	.822	1.656D	105.9	1.105	1.6	27.7	70.8	.318
		10.07	6.70	4.28	3.37	6.78	2.42	14.58	2/1/2	74.7	10.3	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299
5- 840	5-1004.9	.159	23.3	22.8	2.2	.862	90.6	.269	.776	181.7	451.3	.567	.985D	105.2	1.215	-2.6	-9.2	263.6	.330
5-1004.9	5-1210	.330	298.2	-12.0	-2.9	1.382	79.1	.418	1.168	37.6	177.6	.679D	1.657A	91.7	.594	2.8	4.2	196.3	.159
5-1210	5-1520	.126	198.0	-3.5	.8	.626	88.3	.354	1.224	176.9	435.9	.790	1.657	107.5	1.102	1.5	27.7	79.0	.343
		10.19	6.84	4.15	3.35	6.75	2.69	15.06	2/1/2	74.0	7.5	34.1	.552	3.413	12.0	191.7	4.7	107.3D	1.333
5- 850	5-1005.4	.170	16.4	19.2	2.2	.864	93.8	.272	.780	190.2	450.5	.567	.992D	105.3	1.218	-3.0	-10.5	264.7	.334
5-1005.4	5-1210	.334	298.1	-11.6	-2.8	1.382	78.9	.420	1.167	38.5	177.7	.677D	1.657A	91.6	.593	2.7	4.0	196.0	.159
5-1210	5-1530	.148	207.3	-6.7	1.1	.618	85.5	.376	1.210	172.4	441.5	.755	1.664	109.4	1.099	1.5	27.6	87.2	.372
		10.76	7.40	4.29	3.35	6.76	3.12	15.66	2/1/2	74.3	5.1	32.8	.539	3.538	11.7	191.8	1.9	106.6D	1.367
5- 860	5-1007.0	.193	14.2	16.7	2.2	.867	96.7	.282	.785	197.7	450.4	.563	1.006D	105.8	1.221	-3.3	-11.4	267.2	.347
5-1007.0	5-1210	.347	298.2	-10.6	-2.7	1.381	78.0	.424	1.163	41.2	178.0	.670D	1.656A	91.5	.591	2.5	3.6	195.0	.161
5-1210	5-1540	.177	214.7	-9.3	1.3	.611	82.2	.404	1.197	168.1	447.4	.713	1.660	111.6	1.095	1.5	27.2	95.4	.406
		11.70	8.32	4.59	3.38	6.79	3.73	16.41	2/1/2	75.0	3.8	30.4	.499	3.811	11.5	192.4	-1.4	104.7D	1.401
5- 870	5-1009.1	.223	15.3	15.3	2.1	.871	99.6	.298	.792	204.5	450.5	.556	1.020D	106.6	1.226	-3.7	-11.8	270.5	.367
5-1009.1	5-1210	.367	298.4	-9.4	-2.6	1.380	76.9	.431	1.158	45.0	178.3	.659D	1.656A	91.3	.587	2.3	3.1	193.6	.163
5-1210	5-1550	.214	220.4	-11.4	1.6	.604	78.2	.439	1.185	164.1	453.6	.664	1.705	114.3	1.091	1.6	26.4	103.4	.449
		13.05	9.62	5.03	3.43	6.83	4.58	17.37	2/1/2	76.1	4.6	27.5	.447	4.209	12.0	193.5	-5.0	102.3D	1.433
MARS ARRIVAL DATE = 2451220 (10 FEB 1999)																			
5- 830	5-1007.4	.173	38.0	26.0	2.1	.858	86.2	.283	.771	170.2	454.0	.553	.989	106.1	1.212	-2.2	-7.5	266.3	.347
5-1007.4	5-1220	.347	298.9	-11.7	-3.0	1.380	78.1	.422	1.161	41.1	181.6	.670D	1.651	88.9	.592	2.7	5.8	192.2	.157
5-1220	5-1510	.109	183.5	1.8	.5	.637	92.7	.335	1.240	185.4	429.8	.825	1.654D	105.7	1.105	1.6	27.6	71.2	.315
		10.02	6.71	4.32	3.31	6.72	2.39	14.52	2/1/2	82.8	10.5	32.4	.499	3.585	12.5	193.8	7.5	105.3D	1.291
5- 840	5-1005.8	.159	24.8	23.0	2.2	.861	90.4	.271	.775	181.0	451.6	.565	.985D	105.2	1.215	-2.6	-9.2	264.4	.332
5-1005.8	5-1220	.332	298.9	-13.1	-3.2	1.381	79.1	.417	1.165	37.9	181.3	.679D	1.651	89.1	.595	3.0	6.5	193.5	.156
5-1220	5-1520	.121	195.7	-2.2	.8	.628	90.3	.349	1.223	180.5	435.0	.796	1.651D	107.2	1.102	1.5	27.7	79.5	.337
		10.03	6.75	4.16	3.28	6.69	2.59	14.94	2/1/2	82.0	7.8	34.0	.547	3.423	13.5	192.9	6.7	107.4D	1.325
5- 850	5-1006.0	.169	17.5	19.5	2.2	.863	93.6	.273	.779	189.6	450.8	.566	.991D	105.3	1.217	-3.0	-10.4	265.4	.335
5-1006.0	5-1220	.335	298.9	-12.8	-3.1	1.381	78.9	.418	1.164	38.6	181.4	.677D	1.651	89.0	.594	2.9	6.3	193.2	.156
5-1220	5-1530	.139	206.2	-6.0	1.1	.620	87.5	.368	1.208	175.8	440.4	.763	1.653	108.9	1.098	1.4	27.5	87.8	.362
		10.50	7.22	4.28	3.29	6.69	2.94	15.47	2/1/2	82.1	5.3	32.8	.536	3.542	12.8	192.9	4.0	106.8D	1.362
5- 860	5-1007.5	.191	15.2	16.9	2.1	.866	96.5	.283	.784	197.1	450.7	.562	1.005D	105.8	1.221	-3.3	-11.3	267.9	.348
5-1007.5	5-1220	.348	298.9	-11.6	-3.0	1.380	78.1	.423	1.161	41.3	181.6	.670D	1.651	88.8	.592	2.7	5.7	192.2	.158
5-1220	5-1540	.164	214.7	-9.0	1.3	.612	84.4	.393	1.194	171.2	446.1	.725	1.663	110.9	1.094	1.4	27.0	96.1	.393
		11.35	8.03	4.57	3.32	6.72	3.46	16.12	2/1/2	82.8	3.7	30.4	.497	3.815	11.9	193.5	.6	105.0D	1.400
5- 870	5-1009.7	.221	16.1	15.4	2.0	.869	99.4	.298	.790	203.9	450.8	.555	1.026D	106.7	1.226	-3.6	-11.7	271.2	.367
5-1009.7	5-1220	.367	299.2	-10.2	-2.8	1.379	76.9	.429	1.155	45.1	181.9	.659D	1.651	88.6	.589	2.4	5.1	190.7	.160
5-1220	5-1550	.198	221.5	-11.4	1.6	.605	80.7	.424	1.181	166.9	452.0	.680	1.682	113.3	1.090	1.5	26.2	104.2	.431
		12.57	9.20	5.00	3.37	6.77	4.20	16.95	2/1/2	83.9	4.0	27.5	.447	4.212	11.7	194.6	-3.1	102.6D	1.435
MARS ARRIVAL DATE = 2451230 (20 FEB 1999)																			
5- 830	5-1008.6	.177	40.7	26.1	2.0	.857	85.6	.287	.770	169.0	454.7	.549	.991	106.3	1.212	-2.2	-7.4	267.8	.352
5-1008.6	5-1230	.352	299.9	-12.3	-3.2	1.380	77.8	.424	1.159	42.0	185.0	.668D	1.649	86.3	.594	2.6	7.5	189.3	.158
5-1230	5-1510	.110	179.8	3.6	.6	.641	94.6	.334	1.242	189.3	429.2	.827	1.656D	105.6	1.106	1.5	27.6	71.6	.313
		10.09	6.77	4.37	3.32	6.73	2.40	14.47	2/1/2	90.5	10.7	32.0	.484	3.630	13.6	195.4	8.8	104.9D	1.274
5- 840	5-1006.3	.160	26.4	23.3	2.1	.860	90.1	.272	.774	180.2	452.0	.563	.985D	105.3	1.214	-2.6	-9.1	265.4	.334
5-1006.3	5-1230	.334	299.8	-14.4	-3.5	1.381	79.1	.417	1.164	38.0	184.8	.678D	1.649	86.6	.598	3.2	8.6	190.9	.156
5-1230	5-1520	.117	192.7	-.7	.8	.632	92.2	.346	1.224	184.2	434.3	.800	1.647D	106.9	1.102	1.4	27.6	79.9	.332
		9.97	6.69	4.16	3.28	6.68	2.53	14.85	2/1/2	89.5	8.0	34.1	.540	3.415	15.2	194.4	8.9	107.6D	1.305
5- 850	5-1006.8	.169	18.8	19.7	2.1	.862	93.3	.273	.778	189.0	451.1	.565	.991D	105.4	1.217	-3.0	-10.4	266.2	.336
5-1006.8	5-1230	.336	299.8	-14.1	-3.5	1.381	78.9	.418	1.163	38.6	184.8	.677D	1.649	86.6	.597	3.1	8.5	190.7	.156
5-1230	5-1530	.132	204.3	-4.9	1.1	.623	89.6	.362	1.207	179.3	439.5	.770	1.645	108.5	1.098	1.3	27.3	88.3	.355
		10.35	7.07	4.27	3.28	6.69	2.80	15.31	2/1/2	89.6	5.6	33.0	.533	3.525	14.3	194.4	6.4	107.2D	1.345
5- 860	5-1008.1	.190	16.2	17.1	2.1	.865	96.3	.283	.783	196.5	451.0	.561	1.004D	105.9	1.220	-3.3	-11.2	268.7	.348
5-1008.1	5-1230	.348	299.9	-12.7	-3.3	1.380	78.1	.422	1.160	41.2	185.0	.670D	1.649	86.4	.595	2.9	7.7	189.7	.157
5-1230	5-1540	.154	214.1	-8.4	1.3	.615	86.6	.383	1.192	174.5	444.9	.735	1.649	110.3	1.094	1.3	26.8	96.7	.382
		11.09	7.78	4.55	3.31	6.72	3.24	15.88	2/1/2	90.3	3.7	30.5	.496	3.798	12.7	194.9	2.8	105.4D	1.388
5- 870	5-1010.3	.218	17.0	15.5	2.0	.868	99.2	.298	.789	203.2	451.1	.554	1.024D	106.7	1.225	-3.6	-11.6	272.1	.367
5-1010.3	5-1230	.367	300.2	-11.1	-3.0	1.379	76.9	.429	1.155	44.9	185.2	.660D	1.650	86.1	.592	2.6	6.8	188.2	.160
5-1230	5-1550	.183	222.0	-11.2	1.6	.607	83.1	.411	1.178	169.9	450.5	.694	1.662	112.4	1.089	1.3	26.0	105.0	.415
		12.20	8.84	4.96	3.37	6.77	3.87	16.60	2/1/2	91.2	3.5	27.6	.447	4.193	11.7	195.9	-1.1	102.9D	1.426
MARS ARRIVAL DATE = 2451240 (2 MAR 1999)																			
5- 830	5-1010.1	.182	43.8	26.2	1.9	.856	85.0	.293	.768	167.6	455.6	.543	.993	106.7	1.211	-2.3	-7.3	269.7	.359
5-1010.1	5-1240	.359	301.3	-12.8	-3.4	1.380	77.5	.426	1.158	43.2	188.3	.665D	1.651	83.9	.598	2.9	8.7	186.9	.161
5-1240	5-1510	.113	176.1	5.3	.6	.647	96.5	.334	1.245	193.4	428.8	.829	1.660D	105.5	1.107	1.5	27.4	71.9	.312
		10.29	6.90	4.44	3.39	6.80	2.46	14.46	2/1/2	97.6	10.9	31.5	.465	3.685	14.5	197.2	10.0	104.4D	1.250
5- 840	5-1007.0	.160	28.2	23.5	2.1	.859	89.8	.274	.773	179.4	452.4	.562	.985	105.5	1.214	-2.6	-9.0	266.4	.336
5-1007.0	5-1240	.336	300.9	-15.9	-3.9	1.381	79.0	.417	1.164	38.0	188.1	.678D	1.650	84.3	.602	3.5	10.5	188.9	.156
5-1240	5-1520	.116	189.3	1.0	.9	.637	94.2	.344	1.225	188.1	433.7	.804	1.647D	106.8	1.102	1.3	27.4	80.3	.329
		10.01	6.68	4.17	3.33	6.73	2.51	14.79	2/1/2	96.5	8.2	34.3	.533	3.388	17.4	196.1	11.4	108.0D	1.274
5- 850	5-1007.2	.168	20.1	20.0	2.1	.861	93.1	.274	.777	188.3	451.4	.564	.990D	105.4	1.216	-2.9	-10.3	267.1	.337
5-1007.2	5-1240	.337	300.9	-15.6	-3.8	1.381	79.0	.418	1.164	38.3	188.1	.677D	1.650	84.3	.602	3.4	10.4	188.8	.158
5-1240	5-1530	.127	201.7	-3.5	1.1	.627	91.7	.358	1.207	183.0	438.7	.776	1.639D	108.1	1.096	1.2	27.2	88.8	.349
		10.30	6.96	4.26	3.33	6.74	2.71	15.19	2/1/2	96.5	5.7	33.3	.529	3.485	16.4	196.0	9.1	107.8D	1.315
5- 860	5-1008.8	.188	17.3	17.3	2.0	.864	96.0	.283	.781	195.8	451.3	.560	1.002D	105.9	1.220	-3.3	-11.1	269.6	.349
5-1008.8	5-1240	.349	301.1	-14.0	-3.6	1.381	78.2	.422	1.160	41.0	188.2	.671D	1.650	84.1	.600	3.1	9.4	187.7	.160
5-1240	5-1540	.145	212.7	-7.5	1.3	.618	88.8	.376	1.191	177.9	443.9	.744	1.639	109.8	1.093	1.2	26.6	97.3	.373
		10.94	7.58	4.52	3.36	6.76	3.05	15.68	2/1/2	97.1	3.8	30.8	.494	3.760	14.1	196.5	5.3	105.9D	1.365
5- 870	5-1011.0	.216	17.9	15.7	1.9	.867	98.9	.298	.787	202.4	451.4	.553	1.022D	106.7	1.224	-3.6	-11.5	273.0	.367
5-1011.0	5-1240	.367	301.4	-12.1	-3.3	1.380	77.0	.429	1.156	44.7	188.4	.660D	1.651	83.8	.597	2.7	8.3	186.3	.162
5-1240	5-1550	.170	221.8	-10.7	1.5	.609	85.5	.399	1.176	173.1	449.2	.706	1.646	111.7	1.089	1.2	25.7	105.6	.402
		11.93	8.52	4.93	3.42	6.82	3.59	16.30	2/1/2	98.0	3.2	27.9	.446	4.154	12.2	197.4	1.1	103.4D	1.408
MARS ARRIVAL DATE = 2451250 (12 MAR 1999)																			
5- 830	5-1012.0	.190	47.8	26.2	1.8	.854	84.0	.301	.766	165.7	456.8	.536	.997	107.2	1.210	-2.3	-7.2	272.2	.369
5-1012.0	5-1250	.369	302.9	-12.9	-3.5	1.380	76.9	.430	1.157	44.8	191.4	.660D	1.655	81.6	.603	2.9	9.3	184.6	.167
5-1250	5-1510	.119	172.6	6.9	.6	.653	98.5	.336	1.249	197.5	428.4	.830	1.669D	105.5	1.108	1.4	27.2	72.1	.313
		10.64	7.12	4.56	3.52	6.92	2.56	14.47	2/1/2	104.2	10.9	30.8	.441	3.771	15.0	199.4	10.6	103.5D	1.221
5- 840	5-1007.8	.181	30.1	23.8	2.0	.859	89.5	.275	.772	178.6	452.8	.559	.985	105.6	1.213	-2.6	-9.0	267.4	.338
5-1007.8	5-1250	.338	302.2	-17.6	-4.5	1.382	79.1	.418	1.166	37.9	191.2	.679D	1.652	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1520	.118	185.5	2.8	.9	.642	96.2	.343	1.228	192.2	433.2	.806	1.649D	106.6	1.103	1.2	27.2	80.6	.327
		10.15	6.72	4.18	3.43	6.83	2.55	14.76	2/1/2	102.7	8.3	34.9	.526	3.338	20.0	198.1	14.1	108.9D	1.230

STOPOVER TIME = 0 DAYS | 1999 OUTBOUND SWINGBY | MISSION DURATION = 660 DAYS
MARS ARRIVAL DATE = 2451250
12 MAR 1999

LAUNCH SWNGBY DEPART	SWNGBY ARRIVE RETURN	SPEED1 SPEED3 SPEED5 PROP	RA1 RA3 RA5 AERO	DECL1 DECL3 DECL5 DVL	I 1 I 3 I 5 DVA	V 1 V 3 V 5 EVA	PSI 1 PSI 3 PSI 5 DVD	ECCEN ECCEN ECCEN EVR	SMA SMA SMA TYPE	THET1 THET3 THET5 SUN A	THET2 THET4 THET6 SUN R	PERIH PERIH PERIH KAPPA	APHEL APHEL APHEL -A	PSI 2 PSI 4 PSI 6 E	V 2 V 4 V 6 INC	I 2 I 4 I 6 RAP	DECL2 DECL4 DECL6 DECLP	RA2 RA4 RA6 ETA	SPEED2 SPEED4 SPEED6 PERIC
5- 850	5-1007.6	.167	21.4	20.2	2.0	.861	92.9	.275	.776	187.6	451.8	.563	.989D	105.5	1.216	-2.9	-10.2	267.9	.338
5-1007.6	5-1250	.338	302.2	-17.6	-4.3	1.382	79.1	.418	1.165	37.9	191.2	.678D	1.653	82.2	.608	3.8	12.2	187.6	.163
5-1250	5-1530	.124	198.5	-1.8	1.1	.632	93.7	.355	1.208	186.8	438.0	.780	1.637D	107.9	1.098	1.1	26.9	89.2	.345
		10.34	6.91	4.25	3.43	6.83	2.66	15.10	2/1/2	102.7	5.9	34.0	.526	3.417	19.2	198.0	12.2	108.5D	1.271
5- 860	5-1009.4	.166	18.5	17.5	1.9	.862	95.8	.284	.780	195.0	451.6	.559	1.001D	105.9	1.219	-3.3	-11.0	270.5	.349
5-1009.4	5-1250	.349	302.4	-15.5	-4.0	1.381	78.3	.422	1.162	40.6	191.3	.672D	1.653	82.0	.606	3.4	10.9	186.5	.164
5-1250	5-1540	.138	210.5	-6.3	1.3	.622	90.9	.370	1.191	181.6	443.0	.750	1.631D	109.3	1.093	1.1	26.4	97.7	.365
		10.87	7.42	4.50	3.45	6.85	2.92	15.52	2/1/2	103.3	3.8	31.4	.493	3.701	16.1	198.3	8.1	106.5D	1.330
5- 870	5-1011.7	.213	19.0	15.9	1.8	.865	98.6	.298	.786	201.7	451.8	.552	1.020D	106.7	1.223	-3.6	-11.4	273.9	.367
5-1011.7	5-1250	.367	302.8	-13.2	-3.6	1.380	77.1	.429	1.158	44.3	191.4	.661D	1.655	81.7	.603	2.9	9.4	185.0	.167
5-1250	5-1550	.159	220.8	-10.0	1.5	.613	87.8	.390	1.174	176.5	448.1	.717	1.632	111.0	1.088	1.1	25.5	106.2	.390
		11.75	8.24	4.89	3.51	6.91	3.35	16.06	2/1/2	104.1	2.8	28.3	.446	4.096	13.2	199.1	3.5	103.9D	1.382
MARS ARRIVAL DATE = 2451260 (22 MAR 1999)																			
5- 830	5-1014.7	.204	53.1	26.0	1.6	.851	82.6	.313	.764	163.1	458.5	.525	1.003	108.0	1.209	-2.4	-7.1	275.6	.385
5-1014.7	5-1260	.385	305.0	-12.4	-3.5	1.381	76.0	.437	1.156	47.5	194.4	.651D	1.661	79.4	.607	2.8	9.0	183.0	.176
5-1260	5-1510	.128	169.7	8.2	.7	.661	100.4	.339	1.256	201.8	428.2	.830	1.682D	105.6	1.110	1.3	27.0	72.4	.315
		11.19	7.48	4.75	3.70	7.10	2.73	14.52	2/1/2	110.2	11.0	29.4	.405	3.935	14.4	282.0	10.2	101.8D	1.188
5- 840	5-1008.5	.162	31.7	24.0	2.0	.858	89.2	.277	.771	177.9	453.2	.558	.985	105.7	1.213	-2.6	-8.9	268.3	.340
5-1008.5	5-1260	.340	303.6	-20.0	-4.9	1.383	79.2	.418	1.168	37.3	194.1	.680D	1.657	80.3	.615	4.3	13.9	187.2	.169
5-1260	5-1520	.123	181.9	4.6	.9	.650	98.2	.344	1.232	196.3	432.8	.808	1.656D	106.6	1.104	1.2	26.9	80.9	.327
		10.38	6.82	4.18	3.56	6.96	2.64	14.75	2/1/2	108.1	8.4	35.9	.520	3.249	23.5	200.4	17.6	109.4D	1.169
5- 850	5-1008.3	.167	22.3	20.4	2.0	.860	92.7	.276	.775	187.2	452.0	.562	.989D	105.5	1.215	-2.9	-10.2	268.5	.339
5-1008.3	5-1260	.339	303.6	-20.3	-5.0	1.383	79.3	.418	1.169	37.0	194.1	.681D	1.657	80.3	.615	4.4	14.1	187.4	.169
5-1260	5-1530	.125	194.8	-.0	1.2	.638	95.8	.353	1.210	190.8	437.4	.783	1.638D	107.7	1.099	1.0	26.7	89.5	.342
		10.47	6.91	4.25	3.56	6.97	2.66	15.04	2/1/2	108.0	6.0	35.3	.523	3.302	23.2	200.4	16.3	109.8D	1.204
5- 860	5-1010.1	.165	19.7	17.7	1.9	.861	95.5	.284	.779	194.3	452.0	.558	1.000D	106.0	1.218	-3.3	-11.0	271.4	.350
5-1010.1	5-1260	.350	303.9	-17.4	-4.4	1.382	78.4	.423	1.165	40.0	194.2	.673D	1.658	80.0	.613	3.8	12.3	185.9	.170
5-1260	5-1540	.134	207.5	-4.8	1.4	.628	93.1	.365	1.191	185.4	442.2	.756	1.626D	109.0	1.093	1.0	26.1	98.1	.359
		10.89	7.31	4.48	3.58	6.98	2.83	15.40	2/1/2	108.7	3.8	32.1	.491	3.614	18.8	200.4	11.4	107.4D	1.283
5- 870	5-1012.5	.211	20.1	16.1	1.7	.864	98.3	.298	.784	200.8	452.2	.551	1.017D	106.7	1.222	-3.5	-11.3	275.0	.367
5-1012.5	5-1260	.367	304.4	-14.5	-3.9	1.381	77.2	.430	1.161	43.9	194.3	.662D	1.660	79.7	.610	3.2	10.4	184.3	.172
5-1260	5-1550	.151	218.9	-9.0	1.5	.618	90.1	.382	1.174	180.1	447.1	.725	1.622D	110.5	1.088	1.0	25.2	106.7	.381
		11.65	8.02	4.85	3.63	7.03	3.17	15.86	2/1/2	109.5	2.6	28.8	.446	4.020	14.7	201.1	6.2	104.5D	1.546
MARS ARRIVAL DATE = 2451270 (1 APR 1999)																			
5- 830	5-1020.0	.240	62.3	25.2	1.2	.847	79.4	.344	.759	158.3	462.2	.498	1.020	109.9	1.207	-2.6	-6.9	282.3	.425
5-1020.0	5-1270	.425	308.7	-9.9	-3.2	1.380	73.8	.454	1.150	54.2	197.2	.628D	1.672	76.7	.609	2.2	7.1	180.8	.191
5-1270	5-1510	.140	167.3	9.2	.7	.671	102.4	.345	1.264	206.3	428.0	.829	1.700D	105.8	1.112	1.2	26.7	72.6	.319
		12.32	8.26	5.31	4.06	7.45	2.95	14.59	2/1/2	116.2	11.0	26.3	.333	4.399	10.9	206.4	6.5	97.8D	1.133
5- 830	5-1025.3	.290	69.7	24.0	.7	.842	75.4	.386	.755	153.9	466.4	.463	1.047	112.6	1.205	-2.9	-6.8	288.7	.478
5-1025.3	5-1270	.478	311.6	-7.3	-2.7	1.377	70.8	.477	1.136	62.8	197.2	.595D	1.678	75.5	.601	1.5	5.3	178.8	.205
5-1270	5-1510	.140	167.3	9.2	.7	.671	102.4	.345	1.264	206.3	428.0	.829	1.700D	105.8	1.112	1.2	26.7	72.6	.319
		13.52	9.14	6.19	4.38	7.77	2.95	14.59	2/1/2	117.4	11.0	22.8	.263	5.066	7.3	210.3	1.2	93.2D	1.068
5- 860	5-1010.6	.164	20.7	17.9	1.8	.860	95.3	.284	.778	193.7	452.2	.557	.999D	106.0	1.218	-3.2	-10.9	272.1	.351
5-1010.6	5-1270	.351	305.4	-20.1	-5.1	1.383	78.7	.423	1.170	39.0	197.0	.675D	1.664	78.3	.621	4.4	13.8	186.3	.177
5-1270	5-1540	.132	204.0	-3.1	1.4	.634	95.2	.362	1.193	189.4	441.5	.760	1.625D	108.8	1.094	.9	25.8	96.5	.356
		11.01	7.27	4.46	3.75	7.15	2.80	15.32	2/1/2	113.3	3.9	33.4	.489	3.484	22.8	203.0	15.6	108.8D	1.215
5- 870	5-1013.3	.208	21.4	16.3	1.6	.862	98.0	.298	.782	199.9	452.6	.549	1.015D	106.8	1.221	-3.5	-11.2	276.0	.367
5-1013.3	5-1270	.367	306.0	-16.0	-4.3	1.383	77.3	.430	1.165	43.3	197.0	.664D	1.666	77.9	.618	3.5	11.1	184.4	.179
5-1270	5-1550	.144	216.3	-7.7	1.5	.623	92.3	.376	1.173	183.9	446.3	.732	1.615D	110.1	1.088	.8	24.8	107.1	.374
		11.64	7.85	4.81	3.79	7.19	3.04	15.70	2/1/2	114.3	2.4	29.5	.445	3.924	16.9	203.2	9.2	105.3D	1.302
MARS ARRIVAL DATE = 2451280 (11 APR 1999)																			
5- 870	5-1014.0	.206	22.6	16.5	1.6	.860	97.7	.298	.781	199.1	453.0	.548	1.013D	106.8	1.220	-3.5	-11.1	277.1	.368
5-1014.0	5-1280	.368	307.8	-18.0	-4.8	1.384	77.6	.431	1.170	42.5	199.7	.665D	1.674	76.3	.627	3.9	11.9	185.1	.187
5-1280	5-1550	.141	212.9	-6.2	1.6	.630	94.6	.372	1.173	187.8	445.5	.738	1.612D	109.8	1.088	.7	24.5	107.5	.368
		11.72	7.75	4.76	3.87	7.37	2.97	15.59	2/1/2	118.3	2.2	30.5	.444	5.800	20.0	205.7	12.9	106.3D	1.245

LAUNCH	SWNGBY	SPEED1	RA1	DECL1	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	PSI 2	V 2	I 2	DECL2	RA2	SPEED2
SWNGBY	ARRIVE	SPEED3	RA3	DECL3	I 3	V 3	PSI 3	ECCEN	SMA	THET3	THET4	PERIH	APHEL	PSI 4	V 4	I 4	DECL4	RA4	SPEED4
DEPART	RETURN	SPEED5	RA5	DECL5	I 5	V 5	PSI 5	ECCEN	SMA	THET5	THET6	PERIH	APHEL	PSI 6	V 6	I 6	DECL6	RA6	SPEED6
		PROP	AERO	DVL	DVA	EVA	DVD	EVR	TYPE	SUN A	SUN R	KAPPA	-A	E	INC	RAP	DECLP	ETA	PERIC
MARS ARRIVAL DATE = 2451190 (11 JAN 1999)																			
5- 820	5-1010.6	.222	49.1	26.3	2.0	.856	80.8	.319	.768	159.2	458.2	.523	1.013	108.3	1.211	-1.9	-5.6	269.3	.391
5-1010.6	5-1190	.391	297.7	-7.1	-2.1	1.382	75.5	.444	1.163	48.8	171.0	.647D	1.679A	97.0	.586	1.9	-1.1	198.1	.182
5-1190	5-1540	.206	212.8	-9.3	1.4	.610	77.6	.431	1.203	162.5	450.6	.684	1.721	113.4	1.097	1.7	27.4	93.7	.439
		13.26	9.42	5.02	3.84	7.24	4.40	17.14	2/1/2	61.4	4.2	28.3	.393	4.094	7.2	193.9	3.1	100.4D	1.216
5- 830	5-1004.9	.165	32.4	25.6	2.3	.861	87.3	.275	.774	172.8	452.5	.561	.987	105.6	1.213	-2.2	-7.6	263.1	.337
5-1004.9	5-1190	.337	297.5	-9.4	-2.3	1.385	78.8	.426	1.180	38.5	169.7	.677D	1.683A	97.5	.596	2.4	-.7	201.6	.177
5-1190	5-1550	.251	216.8	-10.7	1.7	.604	73.1	.477	1.192	159.3	457.6	.624	1.761	116.7	1.094	1.9	26.7	101.4	.494
		13.47	9.73	4.23	3.74	7.13	5.50	18.42	2/1/2	58.5	6.0	34.1	.531	3.412	9.4	190.7	3.1	106.3D	1.280
MARS ARRIVAL DATE = 2451200 (21 JAN 1999)																			
5- 820	5-1012.6	.236	52.2	26.0	1.9	.855	79.6	.331	.767	157.4	459.6	.513	1.021	109.1	1.210	-2.0	-5.5	271.8	.407
5-1012.6	5-1200	.407	298.5	-7.1	-2.2	1.379	74.6	.446	1.151	52.0	175.4	.637D	1.664A	93.7	.580	1.9	.8	193.9	.174
5-1200	5-1540	.191	214.0	-9.4	1.4	.610	79.9	.416	1.200	165.2	448.9	.700	1.699	112.4	1.096	1.6	27.3	94.6	.422
		12.95	9.29	5.24	3.66	7.06	4.05	16.74	2/1/2	70.4	3.9	26.6	.364	4.341	7.4	195.5	3.5	98.9D	1.215
5- 830	5-1005.6	.167	34.0	25.8	2.2	.860	87.0	.278	.773	172.0	452.9	.558	.987	105.7	1.213	-2.2	-7.6	264.0	.339
5-1005.6	5-1200	.339	297.7	-10.2	-2.5	1.383	78.5	.424	1.171	39.4	173.9	.675D	1.666A	94.4	.593	2.5	1.5	198.5	.167
5-1200	5-1550	.231	218.8	-11.1	1.7	.603	75.7	.457	1.188	161.6	455.5	.646	1.731	115.4	1.093	1.7	26.6	102.4	.470
		12.78	9.27	4.25	3.51	6.91	5.02	17.86	2/1/2	66.5	5.2	33.4	.522	3.483	10.3	191.5	4.5	105.9D	1.296
MARS ARRIVAL DATE = 2451210 (31 JAN 1999)																			
5- 830	5-1006.5	.170	35.8	25.9	2.2	.859	86.6	.280	.772	171.2	453.4	.556	.988	105.9	1.213	-2.2	-7.5	265.0	.343
5-1006.5	5-1210	.343	298.1	-10.9	-2.8	1.381	78.3	.422	1.164	40.3	177.9	.673D	1.656A	91.6	.591	2.6	3.7	195.3	.160
5-1210	5-1550	.214	220.4	-11.4	1.6	.604	78.2	.439	1.185	164.1	453.6	.664	1.705	114.3	1.091	1.6	26.4	103.4	.449
		12.24	8.87	4.28	3.37	6.78	4.58	17.37	2/1/2	74.7	4.6	32.8	.512	3.538	11.4	192.5	6.0	105.6D	1.299
MARS ARRIVAL DATE = 2451220 (10 FEB 1999)																			
5- 830	5-1007.4	.173	38.0	26.0	2.1	.858	86.2	.283	.771	170.2	454.0	.553	.989	106.1	1.212	-2.2	-7.5	266.3	.347
5-1007.4	5-1220	.347	298.9	-11.7	-3.0	1.380	78.1	.422	1.161	41.1	181.6	.670D	1.651	88.9	.592	2.7	5.8	192.2	.157
5-1220	5-1550	.198	221.5	-11.4	1.6	.605	80.7	.424	1.181	166.9	452.0	.680	1.682	113.3	1.090	1.5	26.2	104.2	.431
		11.84	8.52	4.32	3.31	6.72	4.20	16.95	2/1/2	82.8	4.0	32.4	.499	3.585	12.5	193.8	7.5	105.3D	1.291
MARS ARRIVAL DATE = 2451230 (20 FEB 1999)																			
5- 830	5-1008.6	.177	40.7	26.1	2.0	.857	85.6	.287	.770	169.0	454.7	.549	.991	106.3	1.212	-2.2	-7.4	267.8	.352
5-1008.6	5-1230	.352	299.9	-12.3	-3.2	1.380	77.8	.424	1.159	42.0	185.0	.668D	1.649	86.3	.594	2.8	7.5	189.3	.158
5-1230	5-1550	.183	222.0	-11.2	1.6	.607	83.1	.411	1.178	160.9	450.5	.694	1.662	112.4	1.089	1.3	26.0	105.0	.415
		11.57	8.24	4.37	3.32	6.73	3.87	16.60	2/1/2	90.5	3.5	32.0	.484	3.630	13.6	195.4	8.8	104.9D	1.274
MARS ARRIVAL DATE = 2451240 (2 MAR 1999)																			
5- 830	5-1010.1	.182	43.8	26.2	1.9	.856	85.0	.293	.768	167.6	455.6	.543	.993	106.7	1.211	-2.3	-7.3	269.7	.359
5-1010.1	5-1240	.359	301.3	-12.8	-3.4	1.380	77.5	.426	1.158	43.2	188.3	.665D	1.651	83.9	.598	2.9	8.7	186.9	.161
5-1240	5-1550	.170	221.8	-10.7	1.5	.609	85.5	.399	1.176	173.1	449.2	.706	1.646	111.7	1.089	1.2	25.7	105.6	.402
		11.43	8.03	4.44	3.39	6.80	3.59	16.30	2/1/2	97.6	3.2	31.5	.465	3.685	14.5	197.2	10.0	104.4D	1.250
MARS ARRIVAL DATE = 2451250 (12 MAR 1999)																			
5- 830	5-1012.0	.190	47.8	26.2	1.8	.854	84.0	.301	.766	165.7	456.8	.536	.997	107.2	1.210	-2.3	-7.2	272.2	.369
5-1012.0	5-1250	.369	302.9	-12.9	-3.5	1.380	76.9	.430	1.157	44.8	191.4	.660D	1.655	81.6	.603	2.9	9.3	184.6	.167
5-1250	5-1550	.159	220.8	-10.0	1.5	.613	87.8	.390	1.174	176.5	448.1	.717	1.632	111.0	1.088	1.1	25.5	106.2	.390
		11.43	7.91	4.56	3.52	6.92	3.35	16.06	2/1/2	104.2	2.8	30.8	.441	3.771	15.0	199.4	10.6	103.5D	1.221
MARS ARRIVAL DATE = 2451260 (22 MAR 1999)																			
5- 830	5-1014.7	.204	53.1	26.0	1.6	.851	82.6	.313	.764	163.1	458.5	.525	1.003	108.0	1.209	-2.4	-7.1	275.6	.385
5-1014.7	5-1260	.385	305.0	-12.4	-3.5	1.381	76.0	.437	1.156	47.5	194.4	.651D	1.661	79.4	.607	2.8	9.0	183.0	.176
5-1260	5-1550	.151	218.9	-9.0	1.5	.618	90.1	.382	1.174	180.1	447.1	.725	1.622D	110.5	1.088	1.0	25.2	106.7	.381
		11.63	7.93	4.75	3.70	7.10	3.17	15.86	2/1/2	110.2	2.6	29.4	.405	3.935	14.4	202.0	10.2	101.8D	1.188
MARS ARRIVAL DATE = 2451270 (1 APR 1999)																			
5- 830	5-1020.0	.240	62.3	25.2	1.2	.847	79.4	.344	.759	158.3	462.2	.498	1.020	109.9	1.207	-2.6	-6.9	282.3	.423
5-1020.0	5-1270	.425	308.7	-9.9	-3.2	1.380	73.8	.454	1.150	54.2	197.2	.628D	1.672	76.7	.609	2.2	7.1	180.8	.191
5-1270	5-1550	.144	216.3	-7.7	1.5	.623	92.3	.376	1.175	183.9	446.3	.732	1.615D	110.1	1.088	.8	24.8	107.1	.374
		12.41	8.35	5.31	4.06	7.45	3.04	15.70	2/1/2	116.2	2.4	26.3	.335	4.399	10.9	206.4	6.5	97.8D	1.133