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[redacted] Reference No. 64-2020

BELLCOMM, INC.

TR-64-209-2
C65-5891

LUNAR ORBIT RENDEZVOUS REFERENCE TRAJECTORY DATA PACKAGE (U)

REFERENCE TRAJECTORY NO. 1
(GUIDED RE-ENTRY) [U]

Issue 4
Volume 1E

August 20, 1964

[redacted]

Approved: R. L. Wagner
Trajectory Analysis Department

Work Performed for Manned Space Flight, National Aeronautics and Space Administration as part of Task 9 under Contract NASw-417

GROUP-4
Downgraded at 3 year intervals;
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BELLCOMM, INC.

ABSTRACT

This report, Reference Trajectory No. 1 (Guided Reentry) is issued as volume 1E of Lunar Orbit Rendezvous Reference Trajectory Data Package (U), Issue 4. The first four volumes prepared by Space Technology Laboratories are as follows.

Volume 1A - Summary and Reference Trajectory No. 1 Data Exhibits, dated July 8, 1964, No. 8408-6056-RC-000

Volume 1B - Printout Keys and Reference Trajectory No. 1 Listing (Earth Launch to LEM Final Descent), dated July 8, 1964, No. 8408-6057-RC-000

Volume 1C - Reference Trajectory No. 1 Listing Continued (LEM Final Descent to Earth Re-entry), dated July 8, 1964, No. 8408-6058-RC-000

Volume 1D - Reference Trajectory No. 1 Listing Concluded (Re-entry), dated July 8, 1964, No. 8408-6059-RC-000

The above volumes contain a complete unguided reference trajectory including the re-entry phase. This report (volume 1E) contains a guided re-entry with the same terminal conditions as the unguided re-entry of volume 1D.

GUIDED RE-ENTRY

The Reference Trajectory Data Package to which this is appended contains an "open loop" (unguided) Apollo LOR trajectory. For the powered flight maneuvers the full optimized steering orders of the "open loop" trajectory result in good first approximations to the final guided trajectories. In the reentry phase the correspondence between the "open loop" and guided trajectories is less close. The intent of this volume is to present the resultant LOR re-entry trajectory parameters as influenced by the closed loop control of the MIT re-entry guidance logic.

The guidance logic utilized is that defined by MIT as of July 1, 1964. The characteristics of the vehicle restated from Volume 1A are;

$$L/D \text{ max} = .4$$

$$\frac{W}{C_D A} = 57 \text{ lbs/sq. ft.}$$

$$W = 9500.0$$

ATMOSPHERE MODEL = U.S. Standard ATMOSPHERE, 1962

The re-entry phase is initiated 10,526.4 min. from lift-off. At the point of re-entry the vehicle has a longitudinal range to go of 1288 naut. miles and a lateral range to go of 185 naut. miles to reach the landing site located at 15 degrees N latitude, 210 degrees E longitude. For this range a skip from the atmosphere is not required, therefore, the re-entry profile consists of an initial full positive lift

phase to "pull up", a second phase in which the flight profile is influenced by "constant drag" guidance and a third and final phase in which the flight profile reflects the "equilibrium glide" guidance mode.

This volume contains the printout and print key plus plotted time histories of several important trajectory parameters. The equivalent information for the "open loop" reentry trajectory is contained in Volumes 1A and 1D.

OUTPUT KEY FOR GUIDED RE-ENTRY

X Y Z	Components of the missile position in an earth centered, right handed, inertial coordinate system. The system is oriented such that the X-Z plane contains the true vernal equinox of date and the X-Y plane contains the equator. The Z axis passes through the north pole. (ft)
XD YD ZD	Components of velocity in the earth centered inertial coordinate system. (ft/sec)
XL YL ZL	Components of the landing site position in the earth centered inertial coordinate system. (ft)
ALT	Altitude with respect to the Fischer ellipsoid 1960, measured along the radius vector. (ft)
R	Radial distance from the center of the earth. (ft)
RDOT	Component of inertial velocity along the radius vector R. (ft/sec)
VI	Magnitude of the inertial velocity. (ft/sec)
FPAI	Flight path with respect to VI. Angle between the inertial velocity vector and the local geocentric horizontal, positive upward (deg.)
PSIV	Azimuth from north of the inertial velocity vector projected on a plane normal to the radius vector. (deg.)

VA	Magnitude of the velocity relative to the air mass.(ft/sec)
FPAA	Flight path with respect to the VA. Angle between the air velocity vector and the local geocentric horizontal, positive upward.(deg.)
PSAV	Azimuth from north of the air velocity vector projected on a plane normal to the radius vector. (deg.)
LAT	Geodetic latitude of the vehicle position. (deg.)
LONG	Longitude of the vehicle position. (deg.)
RTGN	Right ascension of the landing site from the vehicle position vector measured in the instantaneous plane of motion. The angle is projected to the surface of a spherical earth. (naut. mi.)
RTGL	Declination of the landing site relative to the instantaneous plane of motion. The angle is projected to the surface of a spherical earth. (naut. mi.)
ACC	Magnitude of the total acceleration vector (ft/sec^2)
DRAG	Magnitude of the aerodynamic drag force acting along the relative velocity vector VA. (lbs.)
FLY	Magnitude of the aerodynamic lift force acting normal to the relative velocity vector VA and in the instantaneous relative plane of motion. (lbs.)
FLP	Magnitude of the aerodynamic lift force acting normal to the relative velocity vector VA and normal to the instantaneous relative plane of motion. (lbs.)
GLOAD	Ratio of the magnitude of the aerodynamic acceleration to the magnitude of the gravitational acceleration.

ROLL Roll attitude. Angle between the lift vector (defined in a plane normal to the relative velocity vector) and the line of intersection of the relative plane of motion and the plane normal to the relative velocity vector. Positive 0 to 360 degrees counter clockwise as viewed from the rear of the vehicle. 0 degrees representing maximum lift up in the relative plane of motion. (deg.)

RLDOT Magnitude of the roll rate. (deg/sec)

TAG Guidance phase indicator (1 to 6)

1 - guidance phase prior to initial pull up

2 - guidance targeting iteration phase (determines guidance strategy) This phase occurs at the point of pull up, requiring approximately 300 to 500 milliseconds of time to complete.

3 - guidance "constant drag" or "reference trajectory" phase. For various range requirements either one or both of these phases may be required.

5 - guidance atmospheric skip phase. This phase may or may not exist as ranging requirements dictate.

6 - guidance equilibrium glide phase

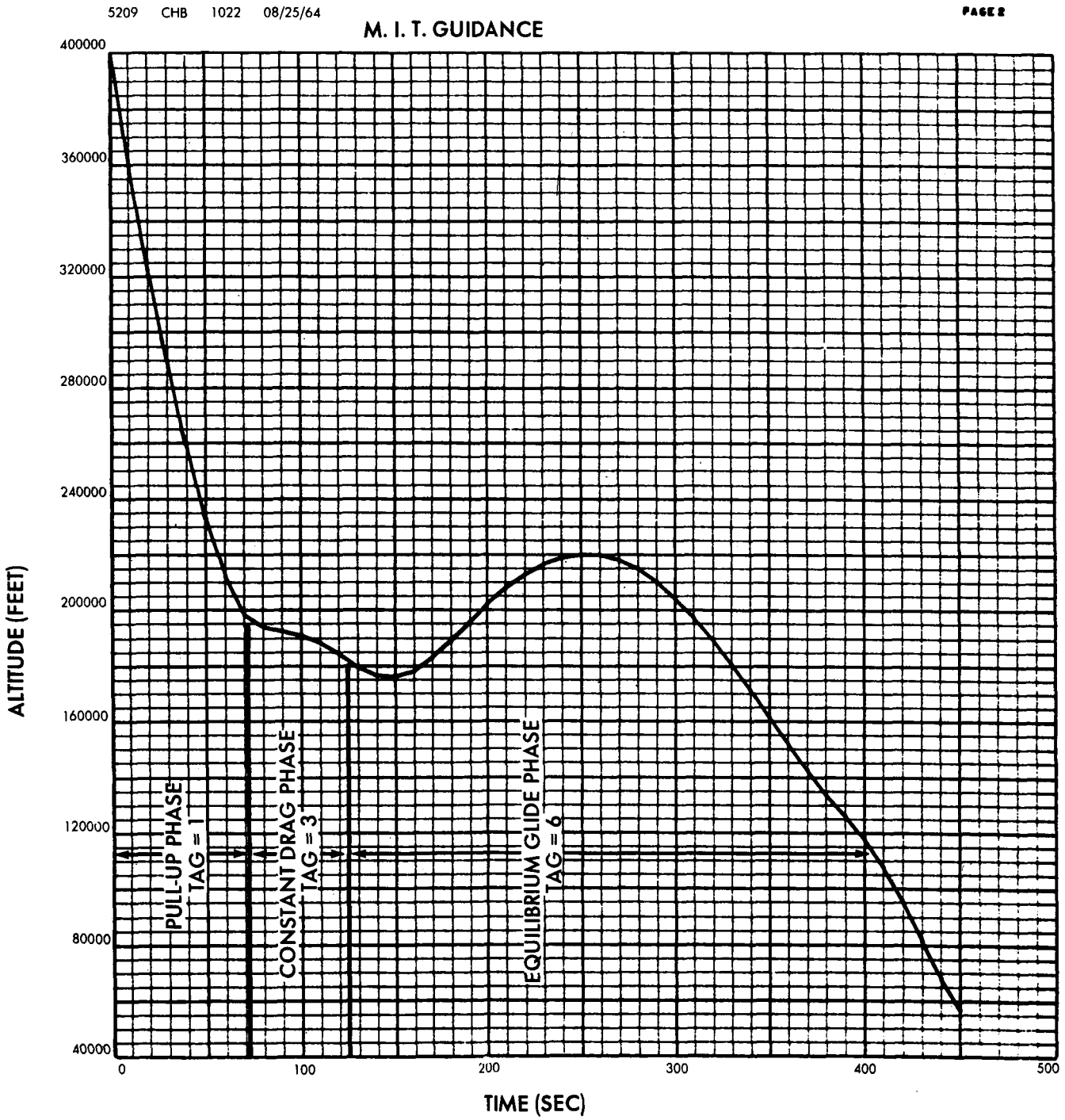

FIGURE 1 ALTITUDE

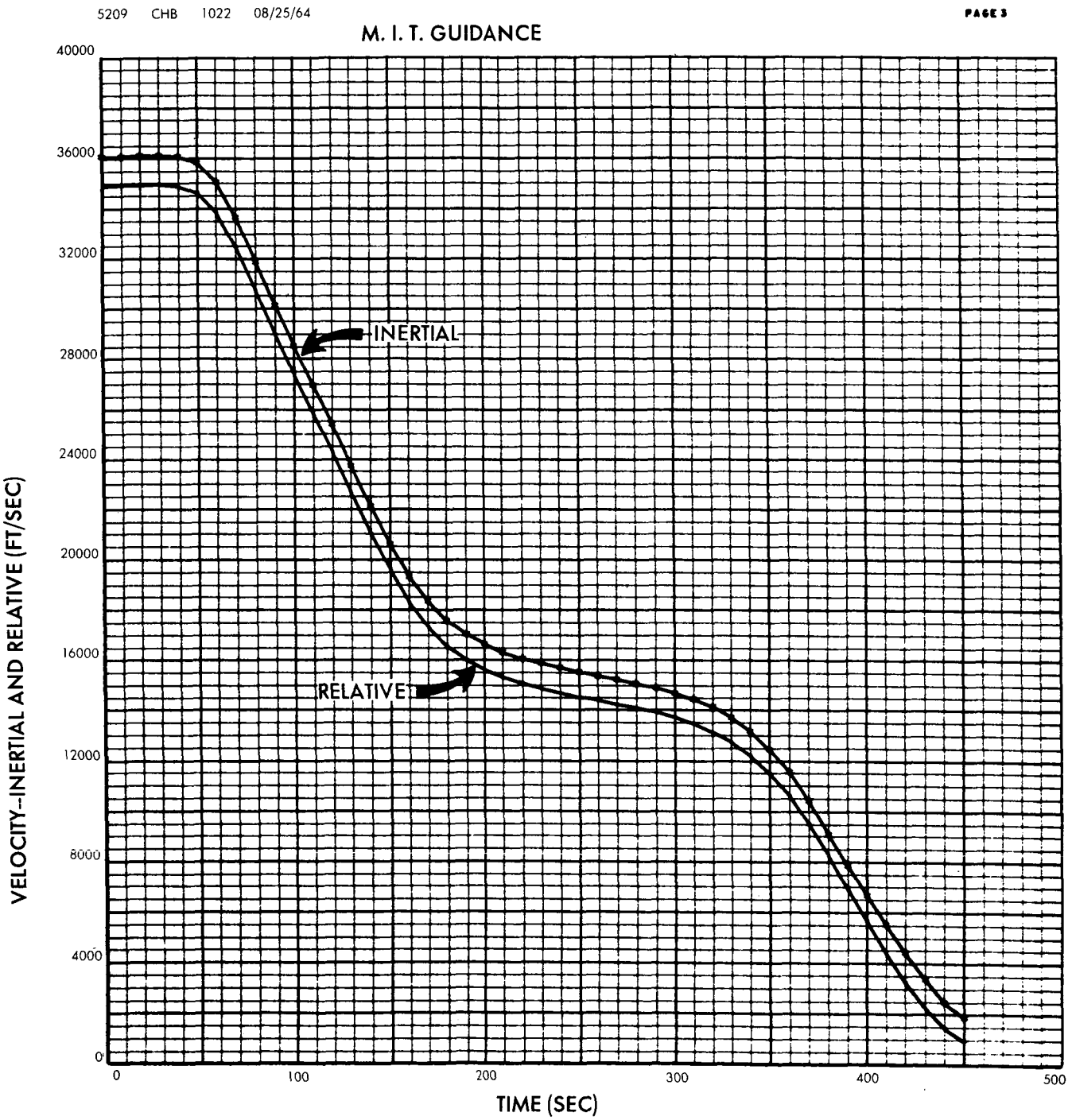

FIGURE 2 INERTIAL AND RELATIVE VELOCITY

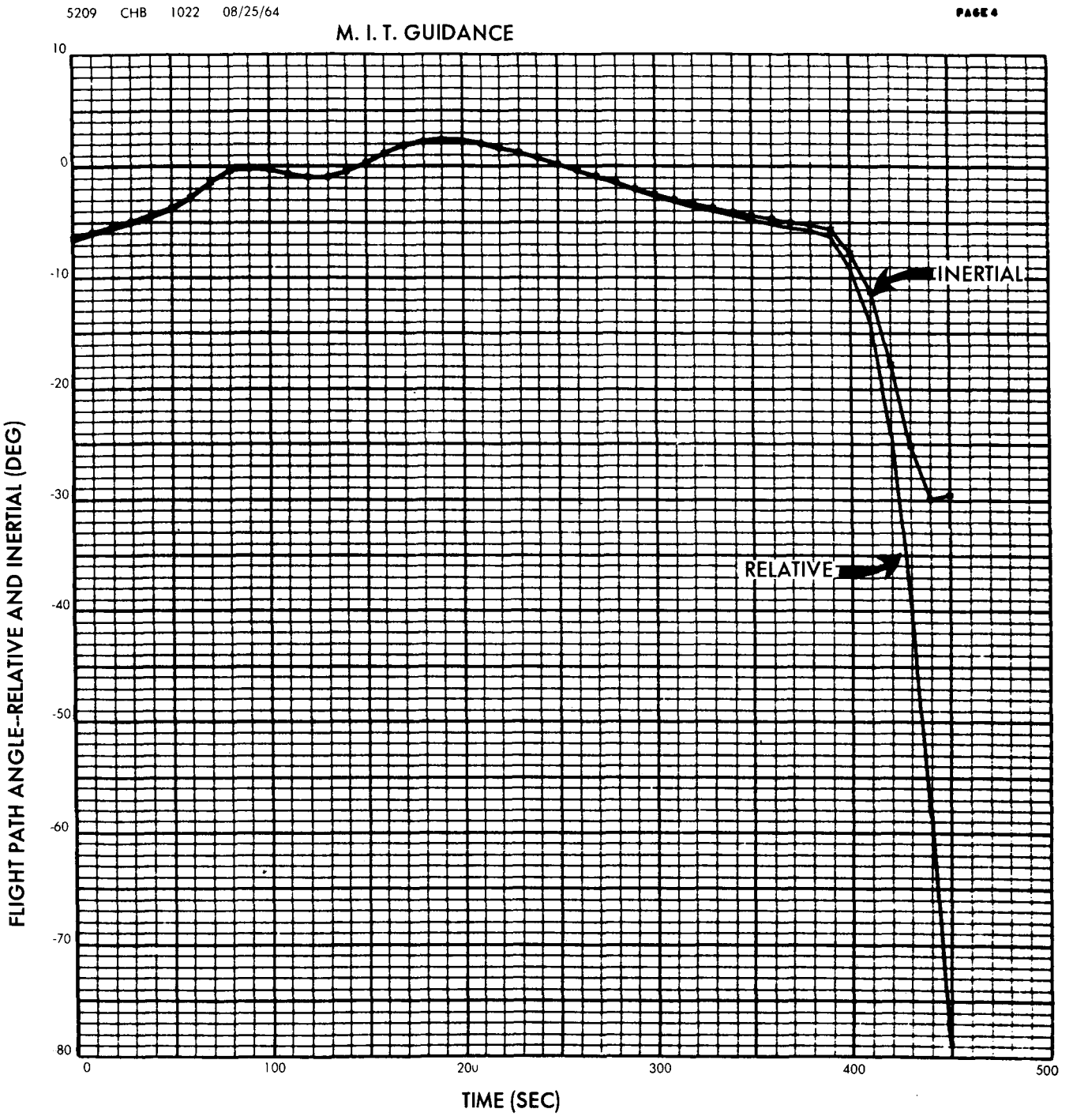

FIGURE 3 INERTIAL AND RELATIVE FLIGHT PATH ANGLE

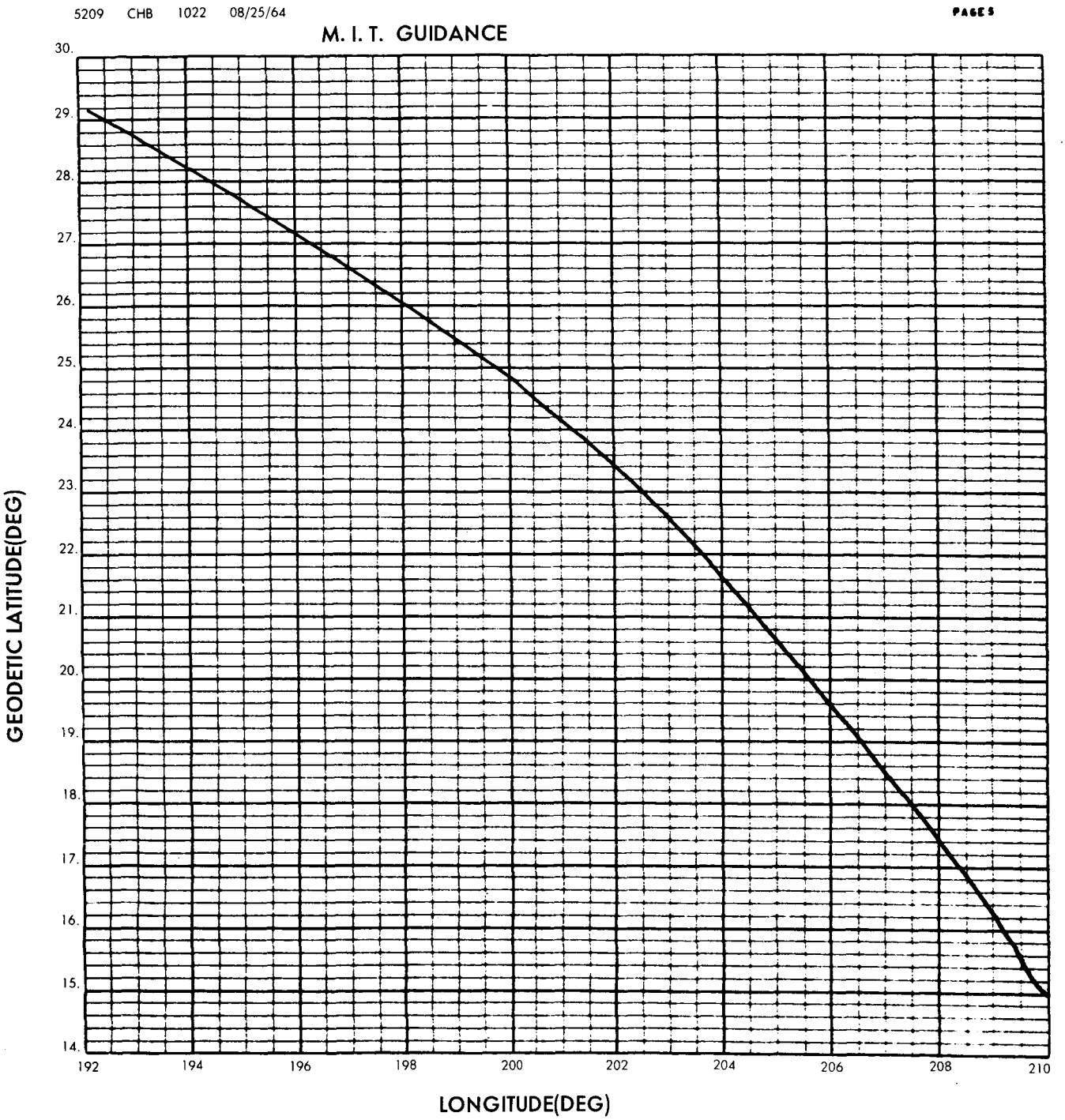

FIGURE 4 GEODETIC LATITUDE AND LONGITUDE

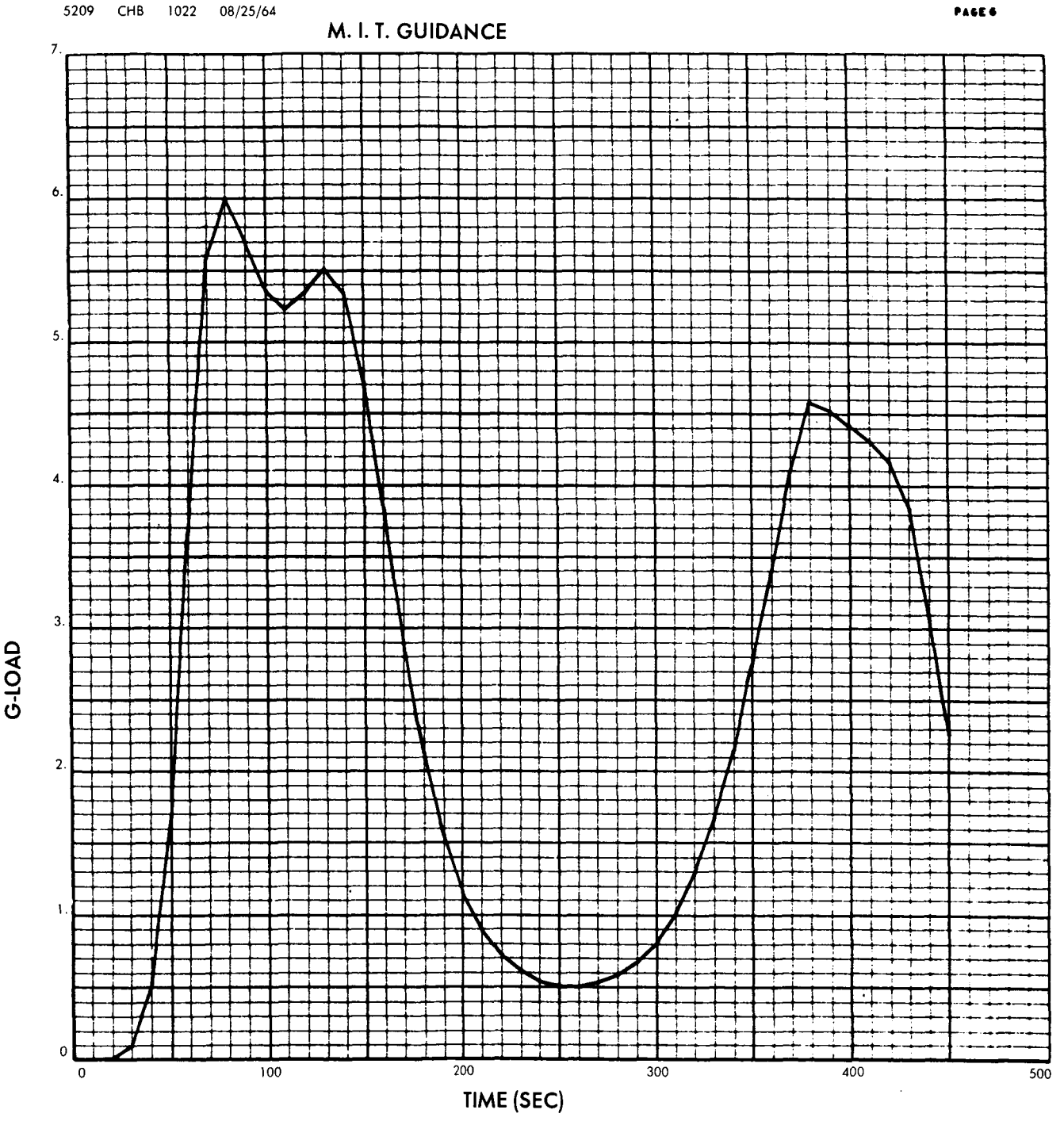

FIGURE 5 G-LOAD

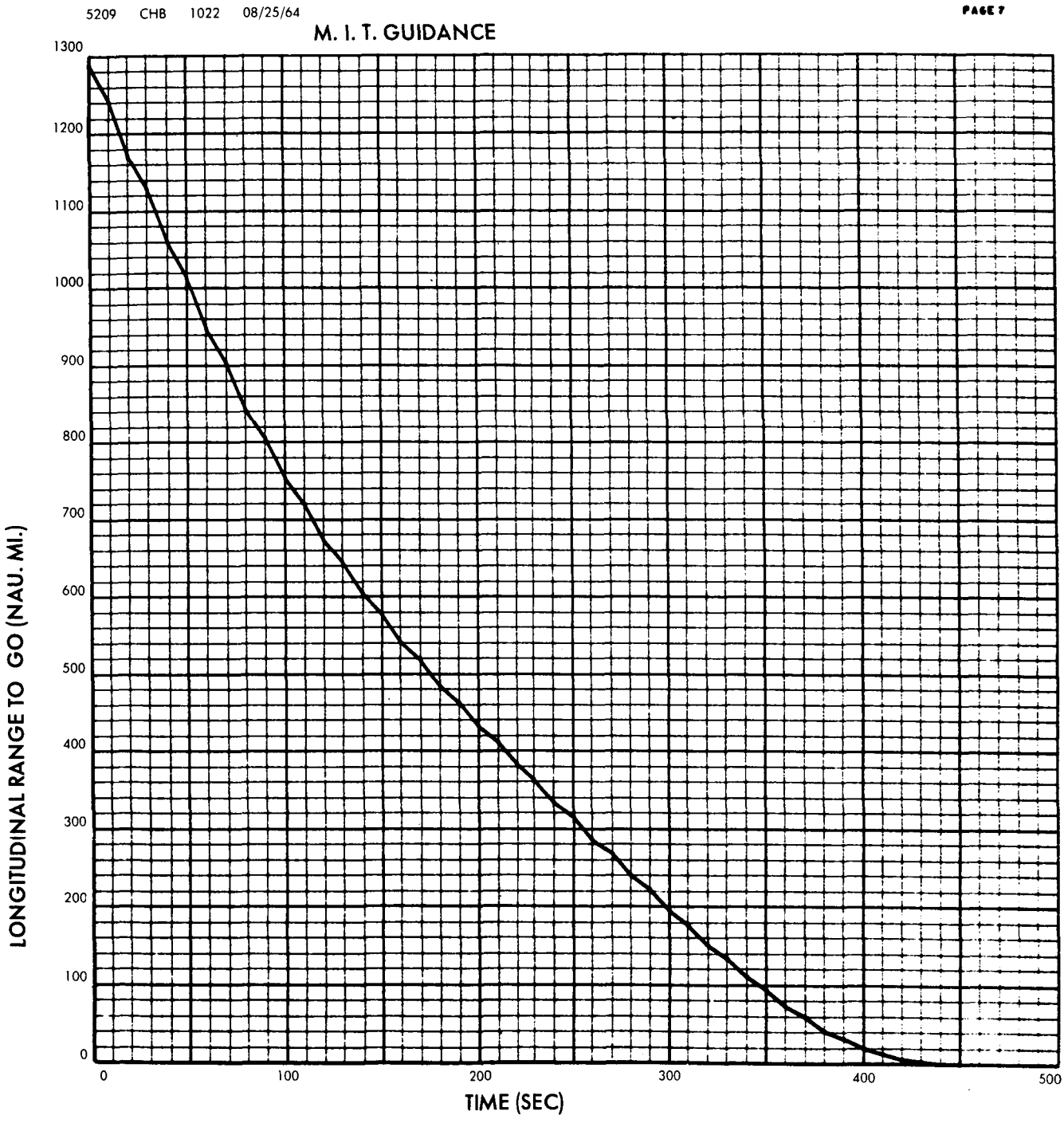

FIGURE 6 LONGITUDNAL RANGE TO GO

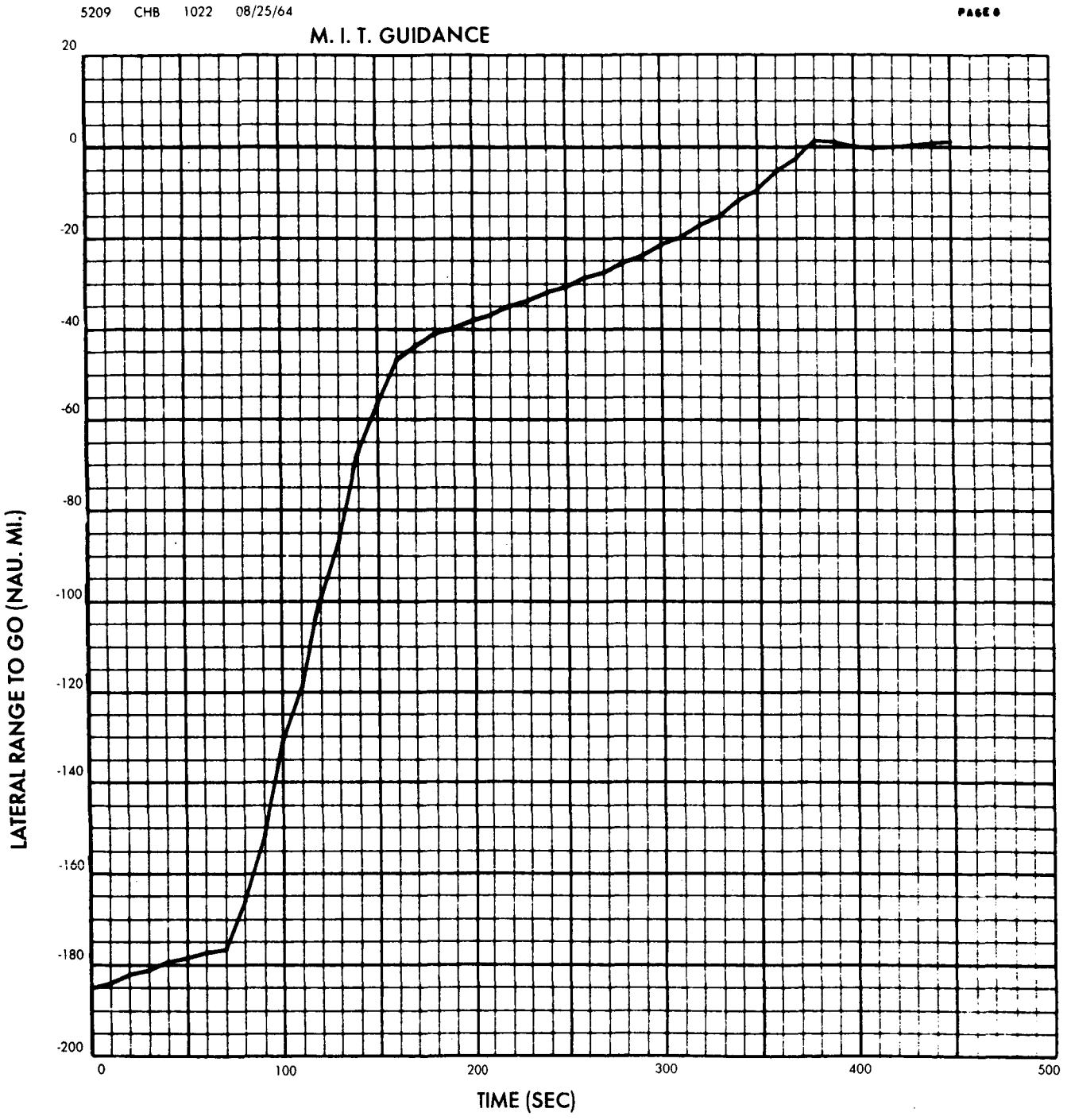

FIGURE 7 LATERAL RANGE TO GO

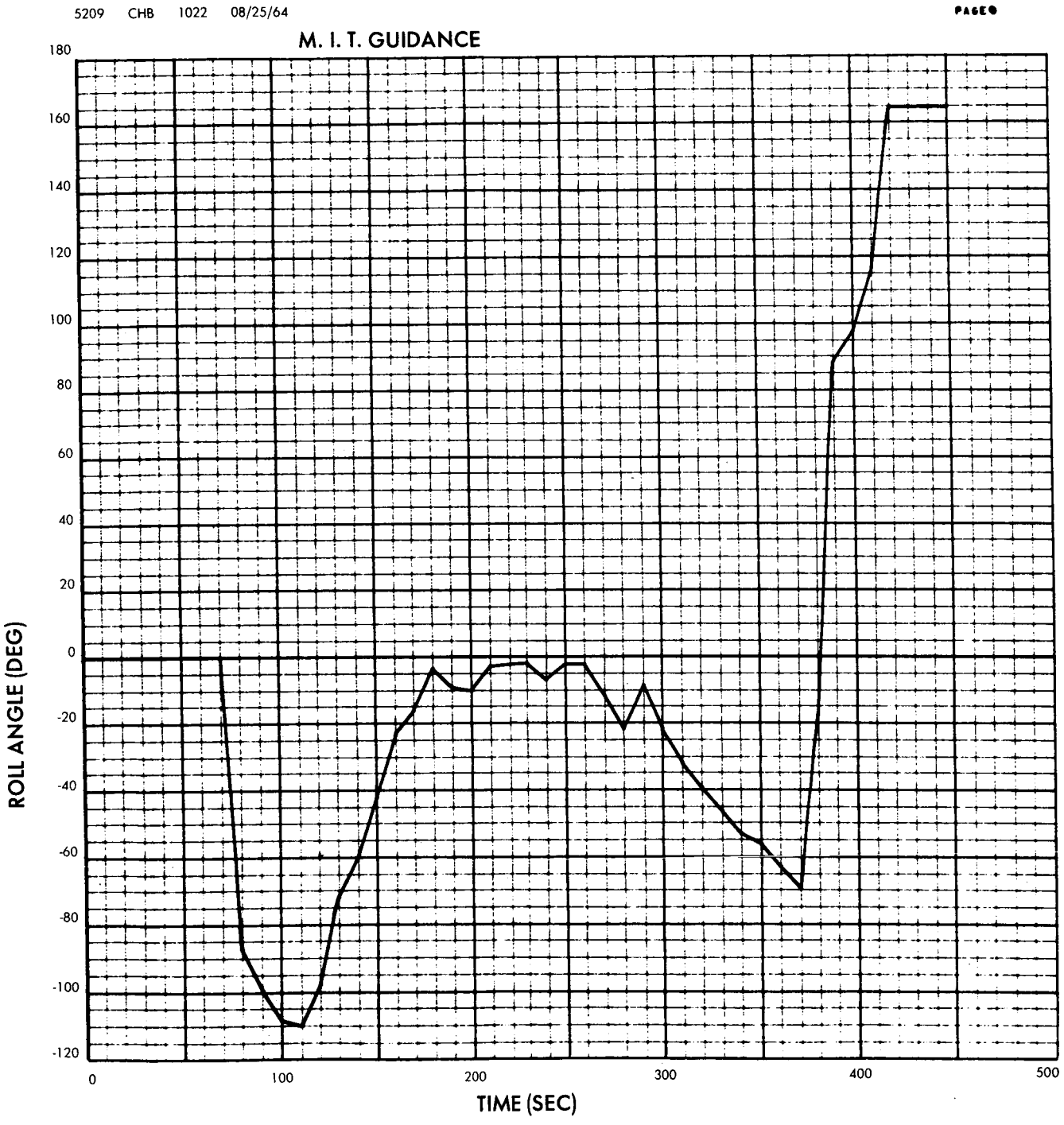

FIGURE 8 ROLL ATTITUDE

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NEW RUN RUN NO. 1.

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2	1	-0	997	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	701	-0	-0.	-0.	-0.	-0.	TIME
7	1	1	997	701	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	475	-0	-0.	-0.	-0.	-0.	
7	1	396	997	475	-0	-0.	-0.	-0.	-0.	VLAT
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	476	-0	-0.	-0.	-0.	-0.	
7	1	397	997	476	-0	-0.	-0.	-0.	-0.	VLON
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	477	-0	-0.	-0.	-0.	-0.	
7	1	78	997	477	-0	-0.	-0.	-0.	-0.	GLOAD
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	478	-0	-0.	-0.	-0.	-0.	
7	1	379	997	478	-0	-0.	-0.	-0.	-0.	LON RT
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	479	-0	-0.	-0.	-0.	-0.	
7	1	380	997	479	-0	-0.	-0.	-0.	-0.	LAT RT
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	480	-0	-0.	-0.	-0.	-0.	ALT.
7	1	61	997	480	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	481	-0	-0.	-0.	-0.	-0.	VI
7	1	30	997	481	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	482	-0	-0.	-0.	-0.	-0.	VA
7	1	133	997	482	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	483	-0	-0.	-0.	-0.	-0.	BIDEG
7	2	31	388	483	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	484	-0	-0.	-0.	-0.	-0.	BADEG
7	2	134	388	484	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
7	-0	-0	-0	485	-0	-0.	-0.	-0.	-0.	ROLP
7	1	381	997	485	-0	-0.	-0.	-0.	-0.	
7	6	-0	-0	-0	-0	-0.	-0.	-0.	-0.	
8	6	40	-0	-0	3	-0.	-0.	-0.	-0.	
1	2	-0	1	-0	-0	-0.	-0.	-0.	-0.	
2	61	-1	700	-0	-0	-0.	-0.	-0.	-0.	
8	17	481	-0	-0	3	-0.	-0.	-0.	-0.	
19	1	2	-0	-0	-0	2.0000000E 03	-0.	-0.	-0.	

EV 1

OR 0
1 997 0. EQUAL TO 0. 0. -0.

VELOCITY = 0.36058421E 05

FLIGHT PATH ANGLE = -0.63951797E 01

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HEADING ANGLE	=	0.11839423E 03
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LONGITUDE OF THE RE-ENTRY POINT	=	0.19218835E 03
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LONGITUDE OF THE LANDING SITE	=	0.21000000E 03
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VRCT	=	0.70000000E 03	C10	=	0.		
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YL	= 0.13419896E 08	ROLL	= 0.	ACC	= 0.	RTGN	= -0.18517959E 03	FPAA	= -0.66128909E 01
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YL	= 0.13406240E 08	ROLL	= 0.	ACC	= 0.31104123E 02	RTGN	= -0.18341184E 03	FPAA	= -0.60042553E 01
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Z	= 0.99792415E 07	ZD	= -0.17155631E 05	RDOT	= -0.34112438E 04	FLP	= 0.	PSIV	= 0.11933855E 03
XL	= -0.15147024E 08	TAG	= 0.10000000E 01	GLOAD	= 0.14668650E-01	FLY	= 0.52043988E 02	VA	= 0.34942690E 05
YL	= 0.13397268E 08	ROLL	= 0.	ACC	= 0.31027031E 02	RTGN	= -0.18225231E 03	FPAA	= -0.56023636E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.13010997E 03	RTGL	= 0.11729811E 04	PSAV	= 0.12044189E 03

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1 AUG.   1969   22  HR   32 MIN  41.55 SEC TMST  631607.7812  J.D. 244 435.4393     7 DAY  7 HR 26.9 MIN
X     = -0.10210657E 08   XD    = -0.29190546E 05   ALT   =  0.30926100E 06   LAT   =  0.28001798E 02   VI    =  0.36131214E 05
Y     =  0.15741581E 08   YD    = -0.12534045E 05   R     =  0.21219637E 08   LONG  =  0.19444461E 03   FPAI  = -0.52262532E 01
Z     =  0.99105044E 07   ZD    = -0.17212623E 05   RDOT  = -0.32911522E 04   FLP   =  0.               PSIV  =  0.11951810E 03
XL    = -0.15150931E 08   TAG   =  0.10000000E 01   GLOAD =  0.31313428E-01   FLY   =  0.11039642E 03   VA    =  0.34952201E 05
YL    =  0.13392849E 08   ROLL  =  0.               ACC   =  0.30839450E 02   RTGN  = -0.18168244E 03   FPAA  = -0.54030612E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.27599106E 03   RTGL  =  0.11504446E 04   PSAV  =  0.12062817E 03

1 AUG.   1969   22  HR   32 MIN  45.55 SEC TMST  631611.7812  J.D. 244 435.4393     7 DAY  7 HR 26.9 MIN
X     = -0.10327293E 08   XD    = -0.29126734E 05   ALT   =  0.29614475E 06   LAT   =  0.27808969E 02   VI    =  0.36136864E 05
Y     =  0.15691265E 08   YD    = -0.12623224E 05   R     =  0.21206715E 08   LONG  =  0.19480988E 03   FPAI  = -0.50315331E 01
Z     =  0.98415435E 07   ZD    = -0.17267326E 05   RDOT  = -0.31693472E 04   FLP   =  0.               PSIV  =  0.11969600E 03
XL    = -0.15154837E 08   TAG   =  0.10000000E 01   GLOAD =  0.67639905E-01   FLY   =  0.23783150E 03   VA    =  0.34958285E 05
YL    =  0.13388429E 08   ROLL  =  0.               ACC   =  0.30409680E 02   RTGN  = -0.18111442E 03   FPAA  = -0.52016253E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.59457877E 03   RTGL  =  0.11278811E 04   PSAV  =  0.12091287E 03

1 AUG.   1969   22  HR   32 MIN  49.55 SEC TMST  631615.7812  J.D. 244 435.4394     7 DAY  7 HR 26.9 MIN
X     = -0.10443665E 08   XD    = -0.29058577E 05   ALT   =  0.28352150E 06   LAT   =  0.27614896E 02   VI    =  0.36135902E 05
Y     =  0.15640600E 08   YD    = -0.12708383E 05   R     =  0.21194286E 08   LONG  =  0.19517418E 03   FPAI  = -0.48327549E 01
Z     =  0.97723716E 07   ZD    = -0.17317607E 05   RDOT  = -0.30443596E 04   FLP   =  0.               PSIV  =  0.11987212E 03
XL    = -0.15158741E 08   TAG   =  0.10000000E 01   GLOAD =  0.13787678E-00   FLY   =  0.48570139E 03   VA    =  0.34957736E 05
YL    =  0.13384008E 08   ROLL  =  0.               ACC   =  0.29651844E 02   RTGN  = -0.18054993E 03   FPAA  = -0.49960383E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.12142535E 04   RTGL  =  0.11052944E 04   PSAV  =  0.12099599E 03
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 1 AUG.   1969    22  HR   32 MIN  53.67 SEC TMST  631619.9062  J.D. 244 435.4394     7 DAY  7 HR 27.0 MIN
X     = -0.10563374E 08   XD    = -0.28980369E 05   ALT   =  0.27103800E 06   LAT   =  0.27413522E 02   VI    =  0.36122007E 05
Y     =  0.15588010E 08   YD    = -0.12788217E 05   R     =  0.21182004E 08   LONG  =  0.19554873E 03   FPAI  = -0.46198605E 01
Z     =  0.97008434E 07   ZD    = -0.17360850E 05   RDOT  = -0.29094266E 04   FLP   =  0.               PSIV  =  0.12005164E 03
XL    = -0.15162767E 08   TAG   =  0.10000000E 01   GLOAD =  0.27853164E-00   FLY   =  0.98005813E 03   VA    =  0.34944237E 05
YL    =  0.13379448E 08   ROLL  =  0.               ACC   =  0.28561857E 02   RTGN  = -0.17997473E 03   FPAA  = -0.47759252E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.24501454E 04   RTGL  =  0.10819837E 04   PSAV  =  0.12118310E 03

 1 AUG.   1969    22  HR   32 MIN  57.67 SEC TMST  631623.9062  J.D. 244 435.4395     7 DAY  7 HR 27.1 MIN
X     = -0.10679123E 08   XD    = -0.28890916E 05   ALT   =  0.25948400E 06   LAT   =  0.27217173E 02   VI    =  0.36085454E 05
Y     =  0.15536725E 08   YD    = -0.12851206E 05   R     =  0.21170645E 08   LONG  =  0.19591066E 03   FPAI  = -0.43992855E 01
Z     =  0.96313404E 07   ZD    = -0.17387395E 05   RDOT  = -0.27679922E 04   FLP   =  0.               PSIV  =  0.12022328E 03
XL    = -0.15166669E 08   TAG   =  0.10000000E 01   GLOAD =  0.52104858E 00   FLY   =  0.18277771E 04   VA    =  0.34908027E 05
YL    =  0.13375025E 08   ROLL  =  0.               ACC   =  0.28251686E 02   RTGN  = -0.17942957E 03   FPAA  = -0.45479779E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.45694428E 04   RTGL  =  0.10593727E 04   PSAV  =  0.12136279E 03

 1 AUG.   1969    22  HR   33 MIN   1.67 SEC TMST  631627.9062  J.D. 244 435.4395     7 DAY  7 HR 27.1 MIN
X     = -0.10794475E 08   XD    = -0.28781053E 05   ALT   =  0.24852525E 06   LAT   =  0.27019937E 02   VI    =  0.36013600E 05
Y     =  0.15485230E 08   YD    = -0.12892019E 05   R     =  0.21159881E 08   LONG  =  0.19627103E 03   FPAI  = -0.41571980E 01
Z     =  0.95617755E 07   ZD    = -0.17390406E 05   RDOT  = -0.26107392E 04   FLP   =  0.               PSIV  =  0.12039197E 03
XL    = -0.15170569E 08   TAG   =  0.10000000E 01   GLOAD =  0.87208168E 00   FLY   =  0.30494203E 04   VA    =  0.34836462E 05
YL    =  0.13370600E 08   ROLL  =  0.               ACC   =  0.31333078E 02   RTGN  = -0.17890344E 03   FPAA  = -0.42979298E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.76235510E 04   RTGL  =  0.10367735E 04   PSAV  =  0.12154062E 03
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1 AUG. 1969 22 HR 33 MIN 5.67 SEC TMST 631631.9062 J.D. 244 435.4396 7 DAY 7 HR 27.2 MIN

X	= -0.10909333E 08	XD	= -0.28642531E 05	ALT	= 0.23823725E 06	LAT	= 0.26822074E 02	VI	= 0.35891562E 05
Y	= 0.15433631E 08	YD	= -0.12901217E 05	R	= 0.21149788E 08	LONG	= 0.19662942E 03	FPAI	= -0.38846376E 01
Z	= 0.94922616E 07	ZD	= -0.17359963E 05	RDOT	= -0.24315738E 04	FLP	= 0.	PSIV	= 0.12055704E 03
XL	= -0.15174468E 08	TAG	= 0.10000000E 01	GLOAD	= 0.13665565E 01	FLY	= 0.47778433E 04	VA	= 0.34714644E 05
YL	= 0.13366175E 08	ROLL	= 0.	ACC	= 0.40758417E 02	RTGN	= -0.17840438E 03	FPAA	= -0.40165499E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.11944609E 05	RTGL	= 0.10142124E 04	PSAV	= 0.12171641E 03

1 AUG. 1969 22 HR 33 MIN 9.67 SEC TMST 631635.9062 J.D. 244 435.4396 7 DAY 7 HR 27.3 MIN

X	= -0.11023564E 08	XD	= -0.28465462E 05	ALT	= 0.22872275E 06	LAT	= 0.26623945E 02	VI	= 0.35701545E 05
Y	= 0.15382077E 08	YD	= -0.12867548E 05	R	= 0.21140467E 08	LONG	= 0.19698522E 03	FPAI	= -0.35708263E 01
Z	= 0.94229562E 07	ZD	= -0.17284215E 05	RDOT	= -0.22235757E 04	FLP	= 0.	PSIV	= 0.12071758E 03
XL	= -0.15178367E 08	TAG	= 0.10000000E 01	GLOAD	= 0.20121188E 01	FLY	= 0.70233146E 04	VA	= 0.34524764E 05
YL	= 0.13361748E 08	ROLL	= 0.	ACC	= 0.57374179E 02	RTGN	= -0.17794188E 03	FPAA	= -0.36927033E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.17558287E 05	RTGL	= 0.99172630E 03	PSAV	= 0.12188992E 03

1 AUG. 1969 22 HR 33 MIN 13.67 SEC TMST 631639.9062 J.D. 244 435.4397 7 DAY 7 HR 27.3 MIN

X	= -0.11136992E 08	XD	= -0.28240196E 05	ALT	= 0.22010900E 06	LAT	= 0.26426016E 02	VI	= 0.35426316E 05
Y	= 0.15330762E 08	YD	= -0.12780202E 05	R	= 0.21132046E 08	LONG	= 0.19733767E 03	FPAI	= -0.32052319E 01
Z	= 0.93540636E 07	ZD	= -0.17151723E 05	RDOT	= -0.19807801E 04	FLP	= 0.	PSIV	= 0.12087262E 03
XL	= -0.15182263E 06	TAG	= 0.10000000E 01	GLOAD	= 0.27901217E 01	FLY	= 0.97273905E 04	VA	= 0.34249576E 05
YL	= 0.13357320E 08	ROLL	= 0.	ACC	= 0.79874720E 02	RTGN	= -0.17752558E 03	FPAA	= -0.33154771E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.24318477E 05	RTGL	= 0.96936364E 03	PSAV	= 0.12206083E 03

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  1 AUG.   1969    22  HR   33 MIN  17.67 SEC TMST  631643.9062  J.D. 244 435.4397     7 DAY  7 HR 27.4 MIN
X     = -0.11249411E 08   XD     = -0.27959261E 05   ALT    =  0.21254375E 06   LAT    =  0.26228861E 02   VI     =  0.35052880E 05
Y     =  0.15279918E 08   YD     = -0.12631224E 05   R      =  0.21124672E 08   LONG   =  0.19768584E 03   FPAI   = -0.27797222E 01
Z     =  0.92858296E 07   ZD     = -0.16953948E 05   RDOT   = -0.16999341E 04   FLP    =  0.               PSIV   =  0.12102114E 03
XL    = -0.15186159E 08   TAG    =  0.10000000E 01   GLOAD  =  0.36516510E 01   FLY    =  0.12718746E 05   VA     =  0.33876090E 05
YL    =  0.13352891E 08   ROLL   =  0.                ACC    =  0.10601463E 03   RTGN   = -0.17716363E 03   FPAA   = -0.28763634E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.31796866E 05   RTGL   =  0.94718366E 03   PSAV   =  0.12222877E 03

  1 AUG.   1969    22  HR   33 MIN  21.67 SEC TMST  631647.9062  J.D. 244 435.4397     7 DAY  7 HR 27.5 MIN
X     = -0.11360589E 08   XD     = -0.27620024E 05   ALT    =  0.20617900E 06   LAT    =  0.26033114E 02   VI     =  0.34577396E 05
Y     =  0.15229797E 08   YD     = -0.12418665E 05   R      =  0.21118495E 08   LONG   =  0.19802872E 03   FPAI   = -0.22915797E 01
Z     =  0.92185225E 07   ZD     = -0.16688539E 05   RDOT   = -0.13825753E 04   FLP    =  0.               PSIV   =  0.12116233E 03
XL    = -0.15190053E 08   TAG    =  0.10000000E 01   GLOAD  =  0.45001132E 01   FLY    =  0.15659834E 05   VA     =  0.33400476E 05
YL    =  0.13348461E 08   ROLL   =  0.                ACC    =  0.13234691E 03   RTGN   = -0.17686014E 03   FPAA   = -0.23723731E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.39149585E 05   RTGL   =  0.92525236E 03   PSAV   =  0.12239336E 03

  1 AUG.   1969    22  HR   33 MIN  25.80 SEC TMST  631652.0312  J.D. 244 435.4398     7 DAY  7 HR 27.5 MIN
X     = -0.11473699E 08   XD     = -0.27212867E 05   ALT    =  0.20101450E 06   LAT    =  0.25833409E 02   VI     =  0.33988236E 05
Y     =  0.15179129E 08   YD     = -0.12138686E 05   R      =  0.21113522E 08   LONG   =  0.19837572E 03   FPAI   = -0.17271089E 01
Z     =  0.91503607E 07   ZD     = -0.16349691E 05   RDOT   = -0.10243773E 04   FLP    =  0.               PSIV   =  0.12129972E 03
XL    = -0.15194068E 08   TAG    =  0.10000000E 01   GLOAD  =  0.52536409E 01   FLY    =  0.18254940E 05   VA     =  0.32811132E 05
YL    =  0.13343891E 08   ROLL   =  0.                ACC    =  0.15604949E 03   RTGN   = -0.17660715E 03   FPAA   = -0.17890895E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.45637350E 05   RTGL   =  0.90296682E 03   PSAV   =  0.12255918E 03
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REFERENCE TRAJECTORY CALCULATION BEGAN AT 0.72624998E 02SECONDS

VL IS NEGATIVE NO REFERENCE TRAJECTORY REQUIRED

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1 AUG. 1969 22 HR 33 MIN 29.80 SEC TMST 631656.0312 J.D. 244 435.4398 7 DAY 7 HR 27.6 MIN

X	= -0.11581683E 08	XD	= -0.26772353E 05	ALT	= 0.19746250E 06	LAT	= 0.25642439E 02	VI	= 0.33340271E 05
Y	= 0.15131197E 08	YD	= -0.11820979E 05	R	= 0.21110152E 08	LONG	= 0.19870494E 03	FPAI	= -0.11321611E 01
Z	= 0.90857055E 07	ZD	= -0.15971200E 05	RDOT	= -0.65875880E 03	FLP	= -0.48115398E 03	PSIV	= 0.12142527E 03
XL	= -0.15197959E 08	TAG	= 0.30000000E 01	GLOAD	= 0.57783254E 01	FLY	= 0.20045673E 05	VA	= 0.32162978E 05
YL	= 0.13339459E 08	ROLL	= -0.13750000E 01	ACC	= 0.17275625E 03	RTGN	= -0.17640784E 03	FPAA	= -0.11736075E 01
ZL	= 0.53821331E 07	RLDOT	= -0.54999999E 01	DRAG	= 0.50128618E 05	RTGL	= 0.88173975E 03	PSAV	= 0.12271624E 03

1 AUG. 1969 22 HR 33 MIN 33.80 SEC TMST 631660.0312 J.D. 244 435.4399 7 DAY 7 HR 27.7 MIN

X	= -0.11687800E 08	XD	= -0.26263471E 05	ALT	= 0.19535975E 06	LAT	= 0.25454277E 02	VI	= 0.32645935E 05
Y	= 0.15084652E 08	YD	= -0.11437867E 05	R	= 0.21108228E 08	LONG	= 0.19902618E 03	FPAI	= -0.56921857E 00
Z	= 0.90225217E 07	ZD	= -0.15657663E 05	RDOT	= -0.32432348E 03	FLP	= -0.17440263E 05	PSIV	= 0.12172597E 03
XL	= -0.15201850E 08	TAG	= 0.30000000E 01	GLOAD	= 0.59894834E 01	FLY	= 0.11253849E 05	VA	= 0.31470901E 05
YL	= 0.13335025E 08	ROLL	= -0.57166664E 02	ACC	= 0.18484323E 03	RTGN	= -0.17350958E 03	FPAA	= -0.59047156E 00
ZL	= 0.53821331E 07	RLDOT	= -0.20000000E 02	DRAG	= 0.51890023E 05	RTGL	= 0.86147622E 03	PSAV	= 0.12305838E 03

1 AUG. 1969 22 HR 33 MIN 37.80 SEC TMST 631664.0312 J.D. 244 435.4399 7 DAY 7 HR 27.7 MIN

X	= -0.11791542E 08	XD	= -0.25594931E 05	ALT	= 0.19417050E 06	LAT	= 0.25267593E 02	VI	= 0.31935757E 05
Y	= 0.15039617E 08	YD	= -0.11092144E 05	R	= 0.21107215E 08	LONG	= 0.19933803E 03	FPAI	= -0.36846565E-00
Z	= 0.89601324E 07	ZD	= -0.15548520E 05	RDOT	= -0.20537548E 03	FLP	= -0.20745647E 05	PSIV	= 0.12232491E 03
XL	= -0.15205739E 08	TAG	= 0.30000000E 01	GLOAD	= 0.59956825E 01	FLY	= 0.90577589E 03	VA	= 0.30767178E 05
YL	= 0.13330590E 08	ROLL	= -0.87499995E 02	ACC	= 0.19149259E 03	RTGN	= -0.16618445E 03	FPAA	= -0.38246071E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.51913529E 05	RTGL	= 0.84252505E 03	PSAV	= 0.12371279E 03

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1 AUG.   1969   22  HR   33 MIN  41.80 SEC TMST  631668.0312  J.D. 244 435.4400     7 DAY  7 HR 27.8 MIN
X     = -0.11892555E 08   XD     = -0.24910913E 05   ALT    =  0.19333350E 06   LAT    =  0.25081893E 02   VI     =  0.31230404E 05
Y     =  0.14995897E 08   YD     = -0.10770979E 05   R      =  0.21106552E 08   LONG   =  0.19964004E 03   FPAI   = -0.24008371E-00
Z     =  0.88981319E 07   ZD     = -0.15452202E 05   RDOT   = -0.13086285E 03   FLP    = -0.20443031E 05   PSIV   =  0.12293562E 03
XL    = -0.15209626E 08   TAG    =  0.30000000E 01   GLOAD  =  0.59083323E 01   FLY    = -0.74297039E 03   VA     =  0.30068643E 05
YL    =  0.13326155E 08   ROLL   = -0.92081409E 02   ACC    =  0.18977746E 03   RTGN   = -0.15875359E 03   FPAA   = -0.24935910E-00
ZL    =  0.53821331E 07   RLDOT  =  0.               DRAG   =  0.51141321E 05   RTGL   =  0.82402084E 03   PSAV   =  0.12438170E 03

1 AUG.   1969   22  HR   33 MIN  45.80 SEC TMST  631672.0312  J.D. 244 435.4400     7 DAY  7 HR 27.9 MIN
X     = -0.11990825E 08   XD     = -0.24224569E 05   ALT    =  0.19272575E 06   LAT    =  0.24897290E 02   VI     =  0.30538649E 05
Y     =  0.14953409E 08   YD     = -0.10478068E 05   R      =  0.21106116E 08   LONG   =  0.19993241E 03   FPAI   = -0.17391113E-00
Z     =  0.88365052E 07   ZD     = -0.15361947E 05   RDOT   = -0.92694627E 02   FLP    = -0.19856122E 05   PSIV   =  0.12354007E 03
XL    = -0.15213512E 08   TAG    =  0.30000000L 01   GLOAD  =  0.57679698E 01   FLY    = -0.21065552E 04   VA     =  0.29383822E 05
YL    =  0.13321718E 08   ROLL   = -0.96055911E 02   ACC    =  0.18624469E 03   RTGN   = -0.15148188E 03   FPAA   = -0.18074473E-00
ZL    =  0.53821331E 07   RLDOT  =  0.               DRAG   =  0.49918882E 05   RTGL   =  0.80590601E 03   PSAV   =  0.12504608E 03

1 AUG.   1969   22  HR   33 MIN  49.80 SEC TMST  631676.0312  J.D. 244 435.4401     7 DAY  7 HR 27.9 MIN
X     = -0.12086358E 08   XD     = -0.23542499E 05   ALT    =  0.19221000E 06   LAT    =  0.24713895E 02   VI     =  0.29864634E 05
Y     =  0.14912036E 08   YD     = -0.10213310E 05   R      =  0.21105771E 08   LONG   =  0.20021543E 03   FPAI   = -0.16388100E-00
Z     =  0.87752319E 07   ZD     = -0.15275319E 05   RDOT   = -0.85420706E 02   FLP    = -0.19056053E 05   PSIV   =  0.12413158E 03
XL    = -0.15217398E 08   TAG    =  0.30000000F 01   GLOAD  =  0.56102217E 01   FLY    = -0.37502359E 04   VA     =  0.28716758E 05
YL    =  0.13317279E 08   ROLL   = -0.10113354E 03   ACC    =  0.18225234E 03   RTGN   = -0.14446035E 03   FPAA   = -0.17043029E-00
ZL    =  0.53821331E 07   RLDOT  = -0.39005528E 01   DRAG   =  0.48553930E 05   RTGL   =  0.78815475E 03   PSAV   =  0.12569877E 03
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1 AUG. 1969 22 HR 33 MIN 53.80 SEC TMST 631680.0312 J.D. 244 435.4401 7 DAY 7 HR 28.0 MIN

X	= -0.12179171E 08	XD	= -0.22865113E 05	ALT	= 0.19166200E 06	LAT	= 0.24531814E 02	VI	= 0.29208544E 05
Y	= 0.14871662E 08	YD	= -0.99779048E 04	R	= 0.21105391E 08	LONG	= 0.20048941E 03	FPAI	= -0.21276978E-00
Z	= 0.87142991E 07	ZD	= -0.15191021E 05	RDOT	= -0.10846690E 03	FLP	= -0.18114608E 05	PSIV	= 0.12470542E 03
XL	= -0.15221281E 08	TAG	= 0.30000000E 01	GLOAD	= 0.54702957E 01	FLY	= -0.55367285E 04	VA	= 0.28067565E 05
YL	= 0.13312840E 08	ROLL	= -0.10699577E 03	ACC	= 0.17910352E 03	RTGN	= -0.13774837E 03	FPAA	= -0.22141766E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.47354673E 05	RTGL	= 0.77074751E 03	PSAV	= 0.12633481E 03

1 AUG. 1969 22 HR 33 MIN 57.80 SEC TMST 631684.0312 J.D. 244 435.4402 7 DAY 7 HR 28.1 MIN

X	= -0.12269289E 08	XD	= -0.22195974E 05	ALT	= 0.19098375E 06	LAT	= 0.24351161E 02	VI	= 0.28566774E 05
Y	= 0.14832188E 08	YD	= -0.97597485E 04	R	= 0.21104878E 08	LONG	= 0.20075467E 03	FPAI	= -0.29840071E-00
Z	= 0.86537064E 07	ZD	= -0.15104524E 05	RDOT	= -0.14877723E 03	FLP	= -0.17754639E 05	PSIV	= 0.12526686E 03
XL	= -0.15225164E 08	TAG	= 0.30000000E 01	GLOAD	= 0.53641891E 01	FLY	= -0.54699973E 04	VA	= 0.27432709E 05
YL	= 0.13308400E 08	ROLL	= -0.10712345E 03	ACC	= 0.17579122E 03	RTGN	= -0.13126917E 03	FPAA	= -0.31073604E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.46445405E 05	RTGL	= 0.75369018E 03	PSAV	= 0.12695985E 03

1 AUG. 1969 22 HR 34 MIN 1.80 SEC TMST 631688.0312 J.D. 244 435.4402 7 DAY 7 HR 28.1 MIN

X	= -0.12356751E 08	XD	= -0.21535502E 05	ALT	= 0.19013225E 06	LAT	= 0.24172026E 02	VI	= 0.27935647E 05
Y	= 0.14793574E 08	YD	= -0.95508031E 04	R	= 0.21104190E 08	LONG	= 0.20101144E 03	FPAI	= -0.40815502E-00
Z	= 0.85934694E 07	ZD	= -0.15013484E 05	RDOT	= -0.19900206E 03	FLP	= -0.17201233E 05	PSIV	= 0.12582146E 03
XL	= -0.15229045E 08	TAG	= 0.30000000E 01	GLOAD	= 0.52887928E 01	FLY	= -0.63101451E 04	VA	= 0.26808594E 05
YL	= 0.13303958E 08	ROLL	= -0.11014519E 03	ACC	= 0.17396756E 03	RTGN	= -0.12494487E 03	FPAA	= -0.42531331E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.45805319E 05	RTGL	= 0.73698960E 03	PSAV	= 0.12757993E 03

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1 AUG. 1969 22 HR 34 MIN 5.80 SEC TMST 631692.0312 J.D. 244 435.4403 7 DAY 7 HR 28.2 MIN

X	= -0.12441579E 08	XD	= -0.20879321E 05	ALT	= 0.18905300E 06	LAT	= 0.23994510E 02	VI	= 0.27311301E 05
Y	= 0.14755771E 08	YD	= -0.93506102E 04	R	= 0.21103272E 08	LONG	= 0.20125994E 03	FPAI	= -0.54702985E 00
Z	= 0.85336055E 07	ZD	= -0.14917346E 05	RDOT	= -0.26074991E 03	FLP	= -0.17076697E 05	PSIV	= 0.42637072E 03
XL	= -0.15232925E 08	TAG	= 0.30000000E 01	GLOAD	= 0.52488734E 01	FLY	= -0.62644600E 04	VA	= 0.26191385E 05
YL	= 0.13299516E 08	ROLL	= -0.11014519E 03	ACC	= 0.17267094E 03	RTGN	= -0.11875553E 03	FPAA	= -0.57042068E 00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.45473690E 05	RTGL	= 0.72064400E 03	PSAV	= 0.12819692E 03

1 AUG. 1969 22 HR 34 MIN 9.80 SEC TMST 631696.0312 J.D. 244 435.4403 7 DAY 7 HR 28.3 MIN

X	= -0.12523794E 08	XD	= -0.20229990E 05	ALT	= 0.18772525E 06	LAT	= 0.23818704E 02	VI	= 0.26689420E 05
Y	= 0.14718773E 08	YD	= -0.91456821E 04	R	= 0.21102103E 08	LONG	= 0.20150028E 03	FPAI	= -0.69035283E 00
Z	= 0.84741410E 07	ZD	= -0.14813142E 05	RDOT	= -0.32157117E 03	FLP	= -0.17398006E 05	PSIV	= 0.12692669E 03
XL	= -0.15236804E 08	TAG	= 0.30000000E 01	GLOAD	= 0.52476192E 01	FLY	= -0.53233454E 04	VA	= 0.25576952E 05
YL	= 0.13295072E 08	ROLL	= -0.10701277E 03	ACC	= 0.17199183E 03	RTGN	= -0.11254978E 03	FPAA	= -0.72038089E 00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.45485480E 05	RTGL	= 0.70467479E 03	PSAV	= 0.12882385E 03

1 AUG. 1969 22 HR 34 MIN 13.80 SEC TMST 631700.0312 J.D. 244 435.4403 7 DAY 7 HR 28.3 MIN

X	= -0.12603427E 08	XD	= -0.19587578E 05	ALT	= 0.18617950E 06	LAT	= 0.23644678E 02	VI	= 0.26063731E 05
Y	= 0.14682627E 08	YD	= -0.89239709E 04	R	= 0.21100713E 08	LONG	= 0.20173251E 03	FPAI	= -0.81634164E 00
Z	= 0.84151159E 07	ZD	= -0.14697198E 05	RDOT	= -0.37133955E 03	FLP	= -0.17906594E 05	PSIV	= 0.12750110E 03
XL	= -0.15240681E 08	TAG	= 0.30000000E 01	GLOAD	= 0.52983083E 01	FLY	= -0.41180139E 04	VA	= 0.24959207E 05
YL	= 0.13290627E 08	ROLL	= -0.10295124E 03	ACC	= 0.17284056E 03	RTGN	= -0.10618939E 03	FPAA	= -0.85246907E 00
ZL	= 0.53821331E 07	RLDOT	= 0.38095064E 01	DRAG	= 0.45935021E 05	RTGL	= 0.68910057E 03	PSAV	= 0.12947362E 03

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  1 AUG.   1969    22  HR   34 MIN  17.80 SEC TMST  631704.0312  J.D. 244 435.4404     7 DAY  7 HR 28.4 MIN
X     = -0.12680506E 08   XD     = -0.18952982E 05   ALT    =  0.18446900E 06   LAT    =  0.23472515E 02   VI     =  0.25431234E 05
Y     =  0.14647411E 08   YD     = -0.86807493E 04   R      =  0.21099156E 08   LONG   =  0.20195660E 03   FPAI   = -0.91211882E 00
Z     =  0.83565839E 07   ZD     = -0.14566287E 05   RDOT   = -0.40483483E 03   FLP    = -0.18445187E 05   PSIV   =  0.12809696E 03
XL    = -0.15244557E 08   TAG    =  0.30000000E 01   GLOAD  =  0.53539250E 01   FLY    = -0.21431083E 04   VA     =  0.24335204E 05
YL    =  0.13286181E 08   ROLL   = -0.96627362E 02   ACC    =  0.17321006E 03   RTGN   = -0.99647940E 02   FPAA   = -0.95320155E 00
ZL    =  0.53821331E 07   RLDOT  =  0.               DRAG   =  0.46423178E 05   RTGL   =  0.67392358E 03   PSAV   =  0.13014996E 03

  1 AUG.   1969    22  HR   34 MIN  21.80 SEC TMST  631708.0312  J.D. 244 435.4404     7 DAY  7 HR 28.5 MIN
X     = -0.12755061E 08   XD     = -0.18325614E 05   ALT    =  0.18265675E 06   LAT    =  0.23302314E 02   VI     =  0.24790757E 05
Y     =  0.14613208E 08   YD     = -0.84175344E 04   R      =  0.21097495E 08   LONG   =  0.20217252E 03   FPAI   = -0.97699879E 00
Z     =  0.82986077E 07   ZD     = -0.14418690E 05   RDOT   = -0.42270768E 03   FLP    = -0.18823461E 05   PSIV   =  0.12871198E 03
XL    = -0.15248432E 08   TAG    =  0.30000000E 01   GLOAD  =  0.54322559E 01   FLY    = -0.94892172E 03   VA     =  0.23703750E 05
YL    =  0.13281734E 08   ROLL   = -0.92885931E 02   ACC    =  0.17489185E 03   RTGN   = -0.92961898E 02   FPAA   = -0.10218065E 01
ZL    =  0.53821331E 07   RLDOT  =  0.               DRAG   =  0.47118413E 05   RTGL   =  0.65913698E 03   PSAV   =  0.13085104E 03
EQUILIBRIUM GLIDE PHASE BEGAN AT        0.12662500E 03SECONDS WITH VELOCITY =       0.24487053E 05  AND RDOT =      -0.42619139E 03

  1 AUG.   1969    22  HR   34 MIN  25.80 SEC TMST  631712.0312  J.D. 244 435.4405     7 DAY  7 HR 28.5 MIN
X     = -0.12827130E 08   XD     = -0.17718710E 05   ALT    =  0.18082475E 06   LAT    =  0.23134204E 02   VI     =  0.24140841E 05
Y     =  0.14580107E 08   YD     = -0.81221745E 04   R      =  0.21095811E 08   LONG   =  0.20238022E 03   FPAI   = -0.95870413E 00
Z     =  0.82412666E 07   ZD     = -0.14242817E 05   RDOT   = -0.40391882E 03   FLP    = -0.18448585E 05   PSIV   =  0.12933895E 03
XL    = -0.15252305E 08   TAG    =  0.60000000E 01   GLOAD  =  0.54940528E 01   FLY    =  0.47866661E 04   VA     =  0.23063262E 05
YL    =  0.13277285E 08   ROLL   = -0.75454779E 02   ACC    =  0.17333102E 03   RTGN   = -0.86220685E 02   FPAA   = -0.10035016E 01
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ZL = 0.53821331E 07 RLDOT = 0. DRAG = 0.47648614E 05 RTGL = 0.64472931E 03 PSAV = 0.13156993E 03

1 AUG. 1969 22 HR 34 MIN 29.92 SEC TMST 631716.1562 J.D. 244 435.4405 7 DAY 7 HR 28.6 MIN

X	= -0.12898998E 08	XD	= -0.17128104E 05	ALT	= 0.17914675E 06	LAT	= 0.22963230E 02	VI	= 0.23468108E 05
Y	= 0.14547296E 08	YD	= -0.77848028E 04	R	= 0.21094283E 08	LONG	= 0.20258587E 03	FPAI	= -0.81877746E 00
Z	= 0.81829586E 07	ZD	= -0.14024376E 05	RDOT	= -0.33532777E 03	FLP	= -0.18115330E 05	PSIV	= 0.12997639E 03
XL	= -0.15256298E 08	TAG	= 0.60000000E 01	GLOAD	= 0.55077364E 01	FLY	= 0.60709218E 04	VA	= 0.22398307E 05
YL	= 0.13272697E 08	ROLL	= -0.71472649E 02	ACC	= 0.17316827E 03	RTGN	= -0.79456963E 02	FPAA	= -0.85781369E 00
ZL	= 0.53821331E 07	RLDOT	= 0.39937140E 01	DRAG	= 0.47763826E 05	RTGL	= 0.63023775E 03	PSAV	= 0.13230735E 03

1 AUG. 1969 22 HR 34 MIN 33.92 SEC TMST 631720.1562 J.D. 244 435.4406 7 DAY 7 HR 28.7 MIN

X	= -0.12966395E 08	XD	= -0.16573837E 05	ALT	= 0.17782100E 06	LAT	= 0.22799941E 02	VI	= 0.22813153E 05
Y	= 0.14516822E 08	YD	= -0.74517410E 04	R	= 0.21093100E 08	LONG	= 0.20277711E 03	FPAI	= -0.63880112E 00
Z	= 0.81273198E 07	ZD	= -0.13792006E 05	RDOT	= -0.25434274E 03	FLP	= -0.17012398E 05	PSIV	= 0.13058189E 03
XL	= -0.15260169E 08	TAG	= 0.60000000E 01	GLOAD	= 0.54566809E 01	FLY	= 0.82825820E 04	VA	= 0.21796847E 05
YL	= 0.13268246E 08	ROLL	= -0.64040604E 02	ACC	= 0.17016982E 03	RTGN	= -0.73116360E 02	FPAA	= -0.66987677E 00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.47303731E 05	RTGL	= 0.61654025E 03	PSAV	= 0.13301461E 03

1 AUG. 1969 22 HR 34 MIN 37.92 SEC TMST 631724.1562 J.D. 244 435.4406 7 DAY 7 HR 28.7 MIN

X	= -0.13031623E 08	XD	= -0.16045197E 05	ALT	= 0.17684675E 06	LAT	= 0.22639277E 02	VI	= 0.22171031E 05
Y	= 0.14487679E 08	YD	= -0.71209548E 04	R	= 0.21092265E 08	LONG	= 0.20296052E 03	FPAI	= -0.41594144E-00
Z	= 0.80726454E 07	ZD	= -0.13542463E 05	RDOT	= -0.16095024E 03	FLP	= -0.15949168E 05	PSIV	= 0.13118093E 03
XL	= -0.15264039E 08	TAG	= 0.60000000E 01	GLOAD	= 0.53251384E 01	FLY	= 0.92922081E 04	VA	= 0.21121974E 05
YL	= 0.13263795E 08	ROLL	= -0.59774325E 02	ACC	= 0.16542587E 03	RTGN	= -0.67140066E 02	FPAA	= -0.43659935E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.46146582E 05	RTGL	= 0.60317513E 03	PSAV	= 0.13369817E 03

1 AUG. 1969 22 HR 34 MIN 41.92 SEC TMST 631728.1562 J.D. 244 435.4407 7 DAY 7 HR 28.8 MIN

X	= -0.13094797E 08	XD	= -0.15547150E 05	ALT	= 0.17626725E 06	LAT	= 0.22481365E 02	VI	= 0.21548774E 05
Y	= 0.14459840E 08	YD	= -0.68009438E 04	R	= 0.21091821E 08	LONG	= 0.20313644E 03	FPAI	= -0.15803435E-00
Z	= 0.80189951E 07	ZD	= -0.13280925E 05	RDOT	= -0.59436255E 02	FLP	= -0.14470769E 05	PSIV	= 0.13169976E 03
XL	= -0.15267907E 08	TAG	= 0.60000000E 01	GLOAD	= 0.51228842E 01	FLY	= 0.10280391E 05	VA	= 0.20508493E 05
YL	= 0.13259342E 08	ROLL	= -0.54609073E 02	ACC	= 0.15847517E 03	RTGN	= -0.61640731E 02	FPAA	= -0.16605043E-00
ZL	= 0.53821331E 07	RLDOT	= 0.45510002E 01	DRAG	= 0.44376909E 05	RTGL	= 0.59012807E 03	PSAV	= 0.13434449E 03

1 AUG. 1969 22 HR 34 MIN 45.92 SEC TMST 631732.1562 J.D. 244 435.4407 7 DAY 7 HR 28.9 MIN

X	= -0.13156053E 08	XD	= -0.15087552E 05	ALT	= 0.17611525E 06	LAT	= 0.22326301E 02	VI	= 0.20954342E 05
Y	= 0.14433248E 08	YD	= -0.64984175E 04	R	= 0.21091802E 08	LONG	= 0.20330530E 03	FPAI	= 0.13848208E-00
Z	= 0.79664141E 07	ZD	= -0.13008489E 05	RDOT	= 0.50645980E 02	FLP	= -0.12351038E 05	PSIV	= 0.13217929E 03
XL	= -0.15271774E 08	TAG	= 0.60000000E 01	GLOAD	= 0.48609842E 01	FLY	= 0.11441728E 05	VA	= 0.19921972E 05
YL	= 0.13254888E 08	ROLL	= -0.47188659E 02	ACC	= 0.14926213E 03	RTGN	= -0.56814584E 02	FPAA	= 0.14565890E-00
ZL	= 0.53821331E 07	RLDOT	= 0.31645666E 01	DRAG	= 0.42090772E 05	RTGL	= 0.57737396E 03	PSAV	= 0.13493046E 03

1 AUG. 1969 22 HR 34 MIN 49.92 SEC TMST 631736.1562 J.D. 244 435.4408 7 DAY 7 HR 28.9 MIN

X	= -0.13215549E 08	XD	= -0.14666608E 05	ALT	= 0.17641200E 06	LAT	= 0.22174145E 02	VI	= 0.20394163E 05
Y	= 0.14407819E 08	YD	= -0.62206581E 04	R	= 0.21092229E 08	LONG	= 0.20346765E 03	FPAI	= 0.45611832E-00
Z	= 0.79149323E 07	ZD	= -0.12732474E 05	RDOT	= 0.16235145E 03	FLP	= -0.10279057E 05	PSIV	= 0.13259290E 03
XL	= -0.15275639E 08	TAG	= 0.60000000E 01	GLOAD	= 0.45507158E 01	FLY	= 0.11939646E 05	VA	= 0.19368694E 05
YL	= 0.13250433E 08	ROLL	= -0.40725755E 02	ACC	= 0.13887656E 03	RTGN	= -0.52697825E 02	FPAA	= 0.48026901E-00
ZL	= 0.53821331E 07	RLDOT	= 0.33793569E 01	DRAG	= 0.39387035E 05	RTGL	= 0.56490215E 03	PSAV	= 0.13544843E 03

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 1 AUG.   1969    22  HR   34 MIN  53.92 SEC TMST  631740.1562  J.D. 244 435.4408     7 DAY  7 HR 29.0 MIN
X     = -0.13273439E 08   XD     = -0.14285140E 05   ALT    =  0.17715450E 06   LAT    =  0.22024911E 02   VI     =  0.19873295E 05
Y     =  0.14383442E 08   YD     = -0.59730750E 04   R      =  0.21093098E 08   LONG   =  0.20362407E 03   FPAI   =  0.78209251E 00
Z     =  0.78645527E 07   ZD     = -0.12458131E 05   RDOT   =  0.27126383E 03   FLP    = -0.80872352E 04   PSIV   =  0.13293296E 03
XL    = -0.15279504E 08   TAG    =  0.60000000E 01   GLOAD  =  0.42048962E 01   FLY    =  0.12095637E 05   VA     =  0.18853536E 05
YL    =  0.13245976E 08   ROLL   = -0.33766988E 02   ACC    =  0.12748407E 03   RTGN   = -0.49338961E 02   FPAA   =  0.82439785E 00
ZL    =  0.53821331E 07   RLDOT  =  0.37115802E 01   DRAG   =  0.36375457E 05   RTGL   =  0.55269620E 03   PSAV   =  0.13588890E 03

 1 AUG.   1969    22  HR   34 MIN  57.92 SEC TMST  631744.1562  J.D. 244 435.4409     7 DAY  7 HR 29.1 MIN
X     = -0.13329883E 08   XD     = -0.13943239E 05   ALT    =  0.17832400E 06   LAT    =  0.21878575E 02   VI     =  0.19395376E 05
Y     =  0.14359988E 08   YD     = -0.57599199E 04   R      =  0.21094391E 08   LONG   =  0.20377517E 03   FPAI   =  0.11040386E 01
Z     =  0.78152600E 07   ZD     = -0.12189751E 05   RDOT   =  0.37370847E 03   FLP    = -0.58095034E 04   PSIV   =  0.13319254E 03
XL    = -0.15283367E 08   TAG    =  0.60000000E 01   GLOAD  =  0.38348624E 01   FLY    =  0.11922961E 05   VA     =  0.18379964E 05
YL    =  0.13241519E 08   ROLL   = -0.25977817E 02   ACC    =  0.11546592E 03   RTGN   = -0.46776497E 02   FPAA   =  0.11650407E 01
ZL    =  0.53821331E 07   RLDOT  =  0.43574122E 01   DRAG   =  0.33157515E 05   RTGL   =  0.54073643E 03   PSAV   =  0.13624307E 03

 1 AUG.   1969    22  HR   35 MIN   1.92 SEC TMST  631748.1562  J.D. 244 435.4409     7 DAY  7 HR 29.1 MIN
X     = -0.13385038E 08   XD     = -0.13640442E 05   ALT    =  0.17988775E 06   LAT    =  0.21735079E 02   VI     =  0.18962800E 05
Y     =  0.14337312E 08   YD     = -0.55850387E 04   R      =  0.21096075E 08   LONG   =  0.20392160E 03   FPAI   =  0.14094590E 01
Z     =  0.77670236E 07   ZD     = -0.11930359E 05   RDOT   =  0.46643216E 03   FLP    = -0.35566347E 04   PSIV   =  0.13336357E 03
XL    = -0.15287228E 08   TAG    =  0.60000000E 01   GLOAD  =  0.34511229E 01   FLY    =  0.11386385E 05   VA     =  0.17950180E 05
YL    =  0.13237061E 08   ROLL   = -0.17346641E 02   ACC    =  0.10320072E 03   RTGN   = -0.45056020E 02   FPAA   =  0.14889889E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.29822331E 05   RTGL   =  0.52899849E 03   PSAV   =  0.13650091E 03
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1 AUG. 1969 22 HR 35 MIN 5.92 SEC TMST 631752.1562 J.D. 244 435.4410 7 DAY 7 HR 29.2 MIN

X	= -0.13439042E 08	XD	= -0.13364936E 05	ALT	= 0.18179350E 06	LAT	= 0.21594301E 02	VI	= 0.18574245E 05
Y	= 0.14315267E 08	YD	= -0.54416437E 04	R	= 0.21098098E 08	LONG	= 0.20406398E 03	FPAI	= 0.16716000E 01
Z	= 0.77197831E 07	ZD	= -0.11694853E 05	RDOT	= 0.54182532E 03	FLP	= -0.31843741E 04	PSIV	= 0.13349605E 03
XL	= -0.15291089E 08	TAG	= 0.60000000E 01	GLOAD	= 0.30907254E 01	FLY	= 0.10194611E 05	VA	= 0.17563719E 05
YL	= 0.13232601E 08	ROLL	= -0.17346641E 02	ACC	= 0.92475256E 02	RTGN	= -0.43691544E 02	FPAA	= 0.17678066E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.26700930E 05	RTGL	= 0.51749863E 03	PSAV	= 0.13671420E 03

1 AUG. 1969 22 HR 35 MIN 9.92 SEC TMST 631756.1562 J.D. 244 435.4410 7 DAY 7 HR 29.3 MIN

X	= -0.13491986E 08	XD	= -0.13110410E 05	ALT	= 0.18396500E 06	LAT	= 0.21455986E 02	VI	= 0.18227139E 05
Y	= 0.14293744E 08	YD	= -0.53238831E 04	R	= 0.21100385E 08	LONG	= 0.20420272E 03	FPAI	= 0.18812236E 01
Z	= 0.76734249E 07	ZD	= -0.11489213E 05	RDOT	= 0.59835408E 03	FLP	= -0.28207305E 04	PSIV	= 0.13361855E 03
XL	= -0.15294948E 08	TAG	= 0.60000000E 01	GLOAD	= 0.27393395E 01	FLY	= 0.90304250E 04	VA	= 0.17218501E 05
YL	= 0.13228140E 08	ROLL	= -0.17346641E 02	ACC	= 0.82136195E 02	RTGN	= -0.42414696E 02	FPAA	= 0.19914680E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.23651784E 05	RTGL	= 0.50623244E 03	PSAV	= 0.13691258E 03

1 AUG. 1969 22 HR 35 MIN 13.92 SEC TMST 631760.1562 J.D. 244 435.4410 7 DAY 7 HR 29.3 MIN

X	= -0.13543954E 08	XD	= -0.12878765E 05	ALT	= 0.18633175E 06	LAT	= 0.21319874E 02	VI	= 0.17919069E 05
Y	= 0.14272642E 08	YD	= -0.52328338E 04	R	= 0.21102864E 08	LONG	= 0.20433824E 03	FPAI	= 0.20451891E 01
Z	= 0.76278355E 07	ZD	= -0.11306985E 05	RDOT	= 0.63949045E 03	FLP	= -0.87875164E 03	PSIV	= 0.13371214E 03
XL	= -0.15298806E 08	TAG	= 0.60000000E 01	GLOAD	= 0.24292336E 01	FLY	= 0.83421243E 04	VA	= 0.16911757E 05
YL	= 0.13223679E 08	ROLL	= -0.60133079E 01	ACC	= 0.72684049E 02	RTGN	= -0.41387198E 02	FPAA	= 0.21670636E 01
ZL	= 0.53821331E 07	RLDOT	= 0.49999999E 01	DRAG	= 0.20970701E 05	RTGL	= 0.49516049E 03	PSAV	= 0.13707560E 03

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1 AUG. 1969 22 HR 35 MIN 17.92 SEC TMST 631764.1562 J.D. 244 435.4411 7 DAY 7 HR 29.4 MIN

X	= -0.13595055E 08	XD	= -0.12674795E 05	ALT	= 0.18884325E 06	LAT	= 0.21185849E 02	VI	= 0.17647449E 05
Y	= 0.14251833E 08	YD	= -0.51751035E 04	R	= 0.21105486E 08	LONG	= 0.20447102E 03	FPAI	= 0.21725184E 01
Z	= 0.75829586E 07	ZD	= -0.11135544E 05	RDOT	= 0.66898857E 03	FLP	= -0.35660741E 03	PSIV	= 0.13372839E 03
XL	= -0.15302662E 08	TAG	= 0.60000000E 01	GLOAD	= 0.21424113E 01	FLY	= 0.73883383E 04	VA	= 0.16640002E 05
YL	= 0.13219216E 08	ROLL	= -0.27633081E 01	ACC	= 0.64500351E 02	RTGN	= -0.41015712E 02	FPAA	= 0.23041207E 01
ZL	= 0.53821331E 07	RLDOT	= -0.54999999E 01	DRAG	= 0.18492349E 05	RTGL	= 0.48422513E 03	PSAV	= 0.13715169E 03

1 AUG. 1969 22 HR 35 MIN 21.92 SEC TMST 631768.1562 J.D. 244 435.4411 7 DAY 7 HR 29.5 MIN

X	= -0.13645362E 08	XD	= -0.12480483E 05	ALT	= 0.19144525E 06	LAT	= 0.21053697E 02	VI	= 0.17406205E 05
Y	= 0.14231233E 08	YD	= -0.51271265E 04	R	= 0.21108196E 08	LONG	= 0.20460142E 03	FPAI	= 0.22516000E 01
Z	= 0.75387034E 07	ZD	= -0.10996640E 05	RDOT	= 0.68385010E 03	FLP	= -0.68320110E 03	PSIV	= 0.13378306E 03
XL	= -0.15306517E 08	TAG	= 0.60000000E 01	GLOAD	= 0.18898363E 01	FLY	= 0.64857330E 04	VA	= 0.16399275E 05
YL	= 0.13214751E 08	ROLL	= -0.60133079E 01	ACC	= 0.57641323E 02	RTGN	= -0.40307913E 02	FPAA	= 0.23899293E 01
ZL	= 0.53821331E 07	RLDOT	= 0.49999999E 01	DRAG	= 0.16304044E 05	RTGL	= 0.47348720E 03	PSAV	= 0.13726386E 03

1 AUG. 1969 22 HR 35 MIN 25.92 SEC TMST 631772.1562 J.D. 244 435.4412 7 DAY 7 HR 29.5 MIN

X	= -0.13694927E 08	XD	= -0.12303914E 05	ALT	= 0.19408675E 06	LAT	= 0.20923180E 02	VI	= 0.17193390E 05
Y	= 0.14210783E 08	YD	= -0.51006064E 04	R	= 0.21110944E 08	LONG	= 0.20472966E 03	FPAI	= 0.22940240E 01
Z	= 0.74949713E 07	ZD	= -0.10872451E 05	RDOT	= 0.68820973E 03	FLP	= -0.27794697E 03	PSIV	= 0.13380321E 03
XL	= -0.15310371E 08	TAG	= 0.60000000E 01	GLOAD	= 0.16707831E 01	FLY	= 0.57586191E 04	VA	= 0.16186294E 05
YL	= 0.13210286E 08	ROLL	= -0.27633081E 01	ACC	= 0.51778559E 02	RTGN	= -0.39872538E 02	FPAA	= 0.24368416E 01
ZL	= 0.53821331E 07	RLDOT	= -0.54999999E 01	DRAG	= 0.14413308E 05	RTGL	= 0.46287584E 03	PSAV	= 0.13733480E 03

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1 AUG. 1969 22 HR 35 MIN 29.92 SEC TMST 631776.1562 J.D. 244 435.4412 7 DAY 7 HR 29.6 MIN

X	= -0.13743801E 08	XD	= -0.12134740E 05	ALT	= 0.19672525E 06	LAT	= 0.20794113E 02	VI	= 0.17004155E 05
Y	= 0.14190422E 08	YD	= -0.50812634E 04	R	= 0.21113687E 08	LONG	= 0.20485599E 03	FPAI	= 0.22972120E 01
Z	= 0.74516866E 07	ZD	= -0.10773585E 05	RDOT	= 0.68158046E 03	FLP	= -0.57800598E 03	PSIV	= 0.13385517E 03
XL	= -0.15314223E 08	TAG	= 0.60000000E 01	GLOAD	= 0.14766976E 01	FLY	= 0.50626385E 04	VA	= 0.15997432E 05
YL	= 0.13205820E 08	ROLL	= -0.65133079E 01	ACC	= 0.46970599E 02	RTGN	= -0.39170995E 02	FPAA	= 0.24418617E 01
ZL	= 0.53821331E 07	RLDOT	= 0.49999999E 01	DRAG	= 0.12738819E 05	RTGL	= 0.45241975E 03	PSAV	= 0.13743541E 03

1 AUG. 1969 22 HR 35 MIN 33.92 SEC TMST 631780.1562 J.D. 244 435.4413 7 DAY 7 HR 29.7 MIN

X	= -0.13792025E 08	XD	= -0.11978892E 05	ALT	= 0.19932275E 06	LAT	= 0.20666313E 02	VI	= 0.16836250E 05
Y	= 0.14170108E 08	YD	= -0.50777849E 04	R	= 0.21116387E 08	LONG	= 0.20498060E 03	FPAI	= 0.22718695E 01
Z	= 0.74087728E 07	ZD	= -0.10685578E 05	RDOT	= 0.66740936E 03	FLP	= -0.25093389E 03	PSIV	= 0.13388073E 03
XL	= -0.15318075E 08	TAG	= 0.60000000E 01	GLOAD	= 0.13114749E 01	FLY	= 0.45166041E 04	VA	= 0.15829377E 05
YL	= 0.13201352E 08	ROLL	= -0.31799748E 01	ACC	= 0.42966100E 02	RTGN	= -0.38667629E 02	FPAA	= 0.24164628E 01
ZL	= 0.53821331E 07	RLDOT	= -0.49999999E 01	DRAG	= 0.11308924E 05	RTGL	= 0.44206409E 03	PSAV	= 0.13750414E 03

1 AUG. 1969 22 HR 35 MIN 37.92 SEC TMST 631784.1562 J.D. 244 435.4413 7 DAY 7 HR 29.7 MIN

X	= -0.13839638E 08	XD	= -0.11828677E 05	ALT	= 0.20184875E 06	LAT	= 0.20539639E 02	VI	= 0.16686070E 05
Y	= 0.14149794E 08	YD	= -0.50797726E 04	R	= 0.21119015E 08	LONG	= 0.20510367E 03	FPAI	= 0.22160310E 01
Z	= 0.73661742E 07	ZD	= -0.10616179E 05	RDOT	= 0.64520686E 03	FLP	= -0.42374228E 03	PSIV	= 0.13392948E 03
XL	= -0.15321925E 08	TAG	= 0.60000000E 01	GLOAD	= 0.11725011E 01	FLY	= 0.40226505E 04	VA	= 0.15679443E 05
YL	= 0.13196884E 08	ROLL	= -0.60133079E 01	ACC	= 0.39944845E 02	RTGN	= -0.37977726E 02	FPAA	= 0.23583798E 01
ZL	= 0.53821331E 07	RLDOT	= 0.49999999E 01	DRAG	= 0.10112268E 05	RTGL	= 0.43182918E 03	PSAV	= 0.13759413E 03

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1 AUG. 1969 22 HR 35 MIN 41.92 SEC TMST 631788.1562 J.D. 244 435.4414 7 DAY 7 HR 29.8 MIN

X	= -0.13886670E 08	XD	= -0.11688430E 05	ALT	= 0.20427650E 06	LAT	= 0.20413960E 02	VI	= 0.16551517E 05
Y	= 0.14129450E 08	YD	= -0.50937008E 04	R	= 0.21121542E 08	LONG	= 0.20522534E 03	FPAI	= 0.21386483E 01
Z	= 0.73238372E 07	ZD	= -0.10554030E 05	RDOT	= 0.61766601E 03	FLP	= -0.11690032E 03	PSIV	= 0.13395385E 03
XL	= -0.15325773E 08	TAG	= 0.60000000E 01	GLOAD	= 0.10514317E 01	FLY	= 0.36258125E 04	VA	= 0.15544698E 05
YL	= 0.13192414E 08	ROLL	= -0.18466415E 01	ACC	= 0.37397184E 02	RTGN	= -0.37448107E 02	FPAA	= 0.22772388E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.90692415E 04	RTGL	= 0.42167366E 03	PSAV	= 0.13765731E 03

1 AUG. 1969 22 HR 35 MIN 45.92 SEC TMST 631792.1562 J.D. 244 435.4414 7 DAY 7 HR 29.9 MIN

X	= -0.13933151E 08	XD	= -0.11552255E 05	ALT	= 0.20658350E 06	LAT	= 0.20289181E 02	VI	= 0.16429594E 05
Y	= 0.14109040E 08	YD	= -0.51115756E 04	R	= 0.21123949E 08	LONG	= 0.20534576E 03	FPAI	= 0.20388652E 01
Z	= 0.72817252E 07	ZD	= -0.10504702E 05	RDOT	= 0.58452224E 03	FLP	= -0.62843818E 03	PSIV	= 0.13399768E 03
XL	= -0.15329621E 08	TAG	= 0.60000000E 01	GLOAD	= 0.95366266E 00	FLY	= 0.32290299E 04	VA	= 0.15422854E 05
YL	= 0.13187943E 08	ROLL	= -0.11013308E 02	ACC	= 0.35758265E 02	RTGN	= -0.36798147E 02	FPAA	= 0.21720164E 01
ZL	= 0.53821331E 07	RLDOT	= 0.49999999E 01	DRAG	= 0.82240383E 04	RTGL	= 0.41161290E 03	PSAV	= 0.13773439E 03

1 AUG. 1969 22 HR 35 MIN 49.92 SEC TMST 631796.1562 J.D. 244 435.4415 7 DAY 7 HR 29.9 MIN

X	= -0.13979098E 08	XD	= -0.11422368E 05	ALT	= 0.20875050E 06	LAT	= 0.20165195E 02	VI	= 0.16318980E 05
Y	= 0.14088546E 08	YD	= -0.51367085E 04	R	= 0.21126214E 08	LONG	= 0.20546500E 03	FPAI	= 0.19220306E 01
Z	= 0.72397930E 07	ZD	= -0.10461971E 05	RDOT	= 0.54732994E 03	FLP	= -0.96442125E 02	PSIV	= 0.13403038E 03
XL	= -0.15333467E 08	TAG	= 0.60000000E 01	GLOAD	= 0.86751269E 00	FLY	= 0.29912755E 04	VA	= 0.15312140E 05
YL	= 0.13183471E 08	ROLL	= -0.18466415E 01	ACC	= 0.34084788E 02	RTGN	= -0.36206075E 02	FPAA	= 0.20484651E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.74820745E 04	RTGL	= 0.40162303E 03	PSAV	= 0.13779946E 03

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1 AUG. 1969 22 HR 35 MIN 53.92 SEC TMST 631800.1562 J.D. 244 435.4415 7 DAY 7 HR 30.0 MIN

X	= -0.14024536E 08	XD	= -0.11297075E 05	ALT	= 0.21076275E 06	LAT	= 0.20041942E 02	VI	= 0.16217838E 05
Y	= 0.14067939E 08	YD	= -0.51670246E 04	R	= 0.21128322E 08	LONG	= 0.20558318E 03	FPAI	= 0.17897793E 01
Z	= 0.71980204E 07	ZD	= -0.10425748E 05	RDOT	= 0.50652302E 03	FLP	= -0.39032360E 03	PSIV	= 0.13406044E 03
XL	= -0.15337311E 08	TAG	= 0.60000000E 01	GLOAD	= 0.79529773E 00	FLY	= 0.27153806E 04	VA	= 0.15210846E 05
YL	= 0.13178998E 08	ROLL	= -0.81799744E 01	ACC	= 0.33039034E 02	RTGN	= -0.35626156E 02	FPAA	= 0.19083113E 01
ZL	= 0.53821331E 07	RLDOT	= -0.49999999E 01	DRAG	= 0.68582270E 04	RTGL	= 0.39170130E 03	PSAV	= 0.13785973E 03

1 AUG. 1969 22 HR 35 MIN 57.92 SEC TMST 631804.1562 J.D. 244 435.4416 7 DAY 7 HR 30.1 MIN

X	= -0.14069476E 08	XD	= -0.11173811E 05	ALT	= 0.21260500E 06	LAT	= 0.19919342E 02	VI	= 0.16124739E 05
Y	= 0.14047210E 08	YD	= -0.51990930E 04	R	= 0.21130260E 08	LONG	= 0.20570036E 03	FPAI	= 0.16420441E 01
Z	= 0.71563731E 07	ZD	= -0.10398202E 05	RDOT	= 0.46205686E 03	FLP	= -0.81446140E 02	PSIV	= 0.13410410E 03
XL	= -0.15341155E 08	TAG	= 0.60000000E 01	GLOAD	= 0.73258849E 00	FLY	= 0.25261559E 04	VA	= 0.15117850E 05
YL	= 0.13174524E 08	ROLL	= -0.18466415E 01	ACC	= 0.32089333E 02	RTGN	= -0.34947277E 02	FPAA	= 0.17514432E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.63186713E 04	RTGL	= 0.38185197E 03	PSAV	= 0.13793277E 03

1 AUG. 1969 22 HR 36 MIN 1.92 SEC TMST 631808.1562 J.D. 244 435.4416 7 DAY 7 HR 30.1 MIN

X	= -0.14113933E 08	XD	= -0.11055364E 05	ALT	= 0.21426575E 06	LAT	= 0.19797340E 02	VI	= 0.16038832E 05
Y	= 0.14026338E 08	YD	= -0.52370072E 04	R	= 0.21132016E 08	LONG	= 0.20581663E 03	FPAI	= 0.14839218E 01
Z	= 0.71148324E 07	ZD	= -0.10372889E 05	RDOT	= 0.41534842E 03	FLP	= -0.75729822E 02	PSIV	= 0.13413316E 03
XL	= -0.15344998E 08	TAG	= 0.60000000E 01	GLOAD	= 0.68119437E 00	FLY	= 0.23488570E 04	VA	= 0.15031781E 05
YL	= 0.13170048E 08	ROLL	= -0.18466415E 01	ACC	= 0.31439555E 02	RTGN	= -0.34360487E 02	FPAA	= 0.15833625E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.58751938E 04	RTGL	= 0.37205256E 03	PSAV	= 0.13798874E 03

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 1 AUG.   1969    22  HR   36 MIN   5.92 SEC TMST  631812.1562  J.D. 244 435.4416     7 DAY  7 HR 30.2 MIN
X     = -0.14157922E 08   XD    = -0.10939448E 05   ALT   =  0.21573625E 06   LAT   =  0.19675901E 02   VI    =  0.15958925E 05
Y     =  0.14005310E 08   YD    = -0.52776622E 04   R     =  0.21133580E 08   LONG  =  0.20593204E 03   FPAI  =  0.13152340E 01
Z     =  0.70733841E 07   ZD    = -0.10351911E 05   RDOT  =  0.36630756E 03   FLP   = -0.70727768E 02   PSIV  =  0.13416260E 03
XL    = -0.15348838E 08   TAG   =  0.60000000E 01   GLOAD =  0.63618895E 00   FLY   =  0.21937119E 04   VA    =  0.14951729E 05
YL    =  0.13165572E 08   ROLL  = -0.18466415E 01   ACC   =  0.30926193E 02   RTGN  = -0.33765288E 02   FPAA  =  0.14038506E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.54871295E 04   RTGL  =  0.36230788E 03   PSAV  =  0.13804379E 03

 1 AUG.   1969    22  HR   36 MIN   9.92 SEC TMST  631816.1562  J.D. 244 435.4417     7 DAY  7 HR 30.3 MIN
X     = -0.14201450E 08   XD    = -0.10824430E 05   ALT   =  0.21700625E 06   LAT   =  0.19554976E 02   VI    =  0.15883950E 05
Y     =  0.13984116E 08   YD    = -0.53188677E 04   R     =  0.21134944E 08   LONG  =  0.20604664E 03   FPAI  =  0.11362609E 01
Z     =  0.70320101E 07   ZD    = -0.10336404E 05   RDOT  =  0.31498180E 03   FLP   = -0.39592593E 03   PSIV  =  0.13420235E 03
XL    = -0.15352678E 08   TAG   =  0.60000000E 01   GLOAD =  0.60054961E 00   FLY   =  0.20343396E 04   VA    =  0.14876818E 05
YL    =  0.13161094E 08   ROLL  = -0.11013308E 02   ACC   =  0.30697002E 02   RTGN  = -0.33100304E 02   FPAA  =  0.12131961E 01
ZL    =  0.53821331E 07   RLDOT =  0.49999999E 01   DRAG  =  0.51812734E 04   RTGL  =  0.35262020E 03   PSAV  =  0.13810877E 03

 1 AUG.   1969    22  HR   36 MIN  13.92 SEC TMST  631820.1562  J.D. 244 435.4417     7 DAY  7 HR 30.3 MIN
X     = -0.14244522E 08   XD    = -0.10711886E 05   ALT   =  0.21806925E 06   LAT   =  0.19434516E 02   VI    =  0.15813240E 05
Y     =  0.13962754E 08   YD    = -0.53628931E 04   R     =  0.21136099E 08   LONG  =  0.20616046E 03   FPAI  =  0.95036019E 00
Z     =  0.69906922E 07   ZD    = -0.10322472E 05   RDOT  =  0.26228083E 03   FLP   = -0.63546078E 02   PSIV  =  0.13423576E 03
XL    = -0.15356516E 08   TAG   =  0.60000000E 01   GLOAD =  0.57136269E 00   FLY   =  0.19709626E 04   VA    =  0.14806072E 05
YL    =  0.13156616E 08   ROLL  = -0.18466415E 01   ACC   =  0.30263883E 02   RTGN  = -0.32469520E 02   FPAA  =  0.10150156E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.49299669E 04   RTGL  =  0.34297661E 03   PSAV  =  0.13816607E 03
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1 AUG. 1969 22 HR 36 MIN 17.92 SEC TMST 631824.1562 J.D. 244 435.4418 7 DAY 7 HR 30.4 MIN

X	= -0.14287147E 08	XD	= -0.10601152E 05	ALT	= 0.21891925E 06	LAT	= 0.19314511E 02	VI	= 0.15746109E 05
Y	= 0.13941211E 08	YD	= -0.54089418E 04	R	= 0.21137040E 08	LONG	= 0.20627355E 03	FPAI	= 0.75805964E 00
Z	= 0.69494277E 07	ZD	= -0.10310135E 05	RDOT	= 0.20832497E 03	FLP	= -0.60905821E 02	PSIV	= 0.13426551E 03
XL	= -0.15360353E 08	TAG	= 0.60000000E 01	GLOAD	= 0.54752808E 00	FLY	= 0.18890717E 04	VA	= 0.14738859E 05
YL	= 0.13152136E 08	ROLL	= -0.18466415E 01	ACC	= 0.30040410E 02	RTGN	= -0.31856016E 02	FPAA	= 0.80987089E 00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.47251332E 04	RTGL	= 0.33337617E 03	PSAV	= 0.13821872E 03

1 AUG. 1969 22 HR 36 MIN 21.92 SEC TMST 631828.1562 J.D. 244 435.4418 7 DAY 7 HR 30.5 MIN

X	= -0.14329332E 08	XD	= -0.10491533E 05	ALT	= 0.21955250E 06	LAT	= 0.19194939E 02	VI	= 0.15681882E 05
Y	= 0.13919481E 08	YD	= -0.54560405E 04	R	= 0.21137764E 08	LONG	= 0.20638594E 03	FPAI	= 0.56001062E 00
Z	= 0.69082088E 07	ZD	= -0.10299552E 05	RDOT	= 0.15327273E 03	FLP	= -0.58850909E 02	PSIV	= 0.13429517E 03
XL	= -0.15364188E 08	TAG	= 0.60000000E 01	GLOAD	= 0.52894720E 00	FLY	= 0.18253360E 04	VA	= 0.14674571E 05
YL	= 0.13147655E 08	ROLL	= -0.18466415E 01	ACC	= 0.29867262E 02	RTGN	= -0.31238153E 02	FPAA	= 0.59845434E 00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.45657111E 04	RTGL	= 0.32381893E 03	PSAV	= 0.13827065E 03

1 AUG. 1969 22 HR 36 MIN 25.92 SEC TMST 631832.1562 J.D. 244 435.4419 7 DAY 7 HR 30.5 MIN

X	= -0.14371081E 08	XD	= -0.10382771E 05	ALT	= 0.21996425E 06	LAT	= 0.19075780E 02	VI	= 0.15619957E 05
Y	= 0.13897562E 08	YD	= -0.55038540E 04	R	= 0.21138265E 08	LONG	= 0.20649766E 03	FPAI	= 0.35714547E-00
Z	= 0.68670296E 07	ZD	= -0.10290224E 05	RDOT	= 0.97364253E 02	FLP	= -0.57371911E 02	PSIV	= 0.13432461E 03
XL	= -0.15368023E 08	TAG	= 0.60000000E 01	GLOAD	= 0.51552594E 00	FLY	= 0.17794630E 04	VA	= 0.14612610E 05
YL	= 0.13143173E 08	ROLL	= -0.18466415E 01	ACC	= 0.29733684E 02	RTGN	= -0.30616804E 02	FPAA	= 0.38176830E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.44509691E 04	RTGL	= 0.31430307E 03	PSAV	= 0.13832191E 03

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1 AUG. 1969 22 HR 36 MIN 29.92 SEC TMST 631836.1562 J.D. 244 435.4419 7 DAY 7 HR 30.6 MIN

X	= -0.14412395E 08	XD	= -0.10274616E 05	ALT	= 0.22015175E 06	LAT	= 0.18957025E 02	VI	= 0.15559723E 05
Y	= 0.13875450E 08	YD	= -0.55520327E 04	R	= 0.21138542E 08	LONG	= 0.20660872E 03	FPAI	= 0.15041101E-00
Z	= 0.68258860E 07	ZD	= -0.10281643E 05	RDOT	= 0.40846876E 02	FLP	= -0.84530273E 02	PSIV	= 0.13435376E 03
XL	= -0.15371855E 08	TAG	= 0.60000000E 01	GLOAD	= 0.50755545E 00	FLY	= 0.17513328E 04	VA	= 0.14552362E 05
YL	= 0.13138690E 08	ROLL	= -0.27633081E 01	ACC	= 0.29634025E 02	RTGN	= -0.29992686E 02	FPAA	= 0.16082534E-00
ZL	= 0.53821331E 07	RLDOT	= -0.54999999E 01	DRAG	= 0.43834291E 04	RTGL	= 0.30482709E 03	PSAV	= 0.13837254E 03

1 AUG. 1969 22 HR 36 MIN 33.92 SEC TMST 631840.1562 J.D. 244 435.4420 7 DAY 7 HR 30.7 MIN

X	= -0.14453277E 08	XD	= -0.10166342E 05	ALT	= 0.22011300E 06	LAT	= 0.18838649E 02	VI	= 0.15500518E 05
Y	= 0.13853147E 08	YD	= -0.55994728E 04	R	= 0.21138591E 08	LONG	= 0.20671914E 03	FPAI	= -0.59634381E-01
Z	= 0.67847741E 07	ZD	= -0.10274116E 05	RDOT	= -0.16133192E 02	FLP	= -0.71311070E 02	PSIV	= 0.13438694E 03
XL	= -0.15375687E 08	TAG	= 0.60000000E 01	GLOAD	= 0.50401900E 00	FLY	= 0.17401630E 04	VA	= 0.14493254E 05
YL	= 0.13134206E 08	ROLL	= -0.23466414E 01	ACC	= 0.29557365E 02	RTGN	= -0.29342931E 02	FPAA	= -0.63777745E-01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.43540588E 04	RTGL	= 0.29539257E 03	PSAV	= 0.13842736E 03

1 AUG. 1969 22 HR 36 MIN 38.05 SEC TMST 631844.2812 J.D. 244 435.4420 7 DAY 7 HR 30.7 MIN

X	= -0.14494984E 08	XD	= -0.10055320E 05	ALT	= 0.21983475E 06	LAT	= 0.18716979E 02	VI	= 0.15440171E 05
Y	= 0.13829947E 08	YD	= -0.56487888E 04	R	= 0.21138403E 08	LONG	= 0.20683233E 03	FPAI	= -0.27826617E-00
Z	= 0.67424110E 07	ZD	= -0.10265505E 05	RDOT	= -0.74987378E 02	FLP	= -0.71500067E 02	PSIV	= 0.13441678E 03
XL	= -0.15379638E 08	TAG	= 0.60000000E 01	GLOAD	= 0.50518587E 00	FLY	= 0.17447749E 04	VA	= 0.14432957E 05
YL	= 0.13129580E 08	ROLL	= -0.23466414E 01	ACC	= 0.29498897E 02	RTGN	= -0.28691483E 02	FPAA	= -0.29768525E-00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.43655984E 04	RTGL	= 0.28570159E 03	PSAV	= 0.13847919E 03

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1 AUG. 1969 22 HR 36 MIN 42.05 SEC TMST 631848.2812 J.D. 244 435.4421 7 DAY 7 HR 30.8 MIN

X	= -0.14534990E 08	XD	= -0.99476400E 04	ALT	= 0.21933400E 06	LAT	= 0.18599385E 02	VI	= 0.15381675E 05
Y	= 0.13807258E 08	YD	= -0.56959906E 04	R	= 0.21137989E 08	LONG	= 0.20694147E 03	FPAI	= -0.49164726E-00
Z	= 0.67013667E 07	ZD	= -0.10256513E 05	RDOT	= -0.13198643E 03	FLP	= -0.10228572E 03	PSIV	= 0.13444511E 03
XL	= -0.15383467E 08	TAG	= 0.60000000E 01	GLOAD	= 0.51131967E 00	FLY	= 0.17650714E 04	VA	= 0.14374533E 05
YL	= 0.13125093E 08	ROLL	= -0.33165756E 01	ACC	= 0.29466385E 02	RTGN	= -0.28058905E 02	FPAA	= -0.52609446E 00
ZL	= 0.53821331E 07	RLDOT	= -0.38797368E 01	DRAG	= 0.44200817E 04	RTGL	= 0.27634297E 03	PSAV	= 0.13852895E 03

1 AUG. 1969 22 HR 36 MIN 46.05 SEC TMST 631852.2812 J.D. 244 435.4421 7 DAY 7 HR 30.9 MIN

X	= -0.14574563E 08	XD	= -0.98387363E 04	ALT	= 0.21860625E 06	LAT	= 0.18482173E 02	VI	= 0.15322487E 05
Y	= 0.13784383E 08	YD	= -0.57407968E 04	R	= 0.21137348E 08	LONG	= 0.20704997E 03	FPAI	= -0.70647293E 00
Z	= 0.66603581E 07	ZD	= -0.10247982E 05	RDOT	= -0.18892575E 03	FLP	= -0.36983361E 03	PSIV	= 0.13448147E 03
XL	= -0.15387294E 08	TAG	= 0.60000000E 01	GLOAD	= 0.52193955E 00	FLY	= 0.17670299E 04	VA	= 0.14315610E 05
YL	= 0.13120606E 08	ROLL	= -0.11821182E 02	ACC	= 0.29573826E 02	RTGN	= -0.27384281E 02	FPAA	= -0.75616340E 00
ZL	= 0.53821331E 07	RLDOT	= -0.32826233E 01	DRAG	= 0.45132940E 04	RTGL	= 0.26702698E 03	PSAV	= 0.13858766E 03

1 AUG. 1969 22 HR 36 MIN 50.05 SEC TMST 631856.2812 J.D. 244 435.4422 7 DAY 7 HR 30.9 MIN

X	= -0.14613697E 08	XD	= -0.97280242E 04	ALT	= 0.21765150E 06	LAT	= 0.18365331E 02	VI	= 0.15262055E 05
Y	= 0.13761335E 08	YD	= -0.57827299E 04	R	= 0.21136478E 08	LONG	= 0.20715781E 03	FPAI	= -0.92322727E 00
Z	= 0.66193822E 07	ZD	= -0.10239917E 05	RDOT	= -0.24591228E 03	FLP	= -0.57409880E 03	PSIV	= 0.13452787E 03
XL	= -0.15391120E 08	TAG	= 0.60000000E 01	GLOAD	= 0.53687873E 00	FLY	= 0.17666151E 04	VA	= 0.14255674E 05
YL	= 0.13116117E 08	ROLL	= -0.18002663E 02	ACC	= 0.29781255E 02	RTGN	= -0.26661253E 02	FPAA	= -0.98840691E 00
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.46438928E 04	RTGL	= 0.25775491E 03	PSAV	= 0.13865761E 03

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  1 AUG.   1969    22  HR   36 MIN  54.05 SEC TMST  631860.2812  J.D. 244 435.4422     7 DAY  7 HR 31.0 MIN
X     = -0.14652385E 08   XD     = -0.96155255E 04   ALT    =  0.21646950E 06   LAT    =  0.18248852E 02   VI     =  0.15199931E 05
Y     =  0.13738125E 08   YD     = -0.58220093E 04   R      =  0.21135380E 08   LONG   =  0.20726495E 03   FPAI   = -0.11416123E 01
Z     =  0.65784391E 07   ZD     = -0.10231510E 05   RDOT   = -0.30283698E 03   FLP    = -0.70178555E 03   PSIV   =  0.13458177E 03
XL    = -0.15394946E 08   TAG    =  0.60000000E 01   GLOAD  =  0.55597927E 00   FLY    =  0.17916719E 04   VA     =  0.14194232E 05
YL    =  0.13111627E 08   ROLL   = -0.21389936E 02   ACC    =  0.29964642E 02   RTGN   = -0.25903821E 02   FPAA   = -0.12225099E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.48105297E 04   RTGL   =  0.24852628E 03   PSAV   =  0.13873627E 03

  1 AUG.   1969    22  HR   36 MIN  58.05 SEC TMST  631864.2812  J.D. 244 435.4422     7 DAY  7 HR 31.1 MIN
X     = -0.14690619E 08   XD     = -0.95012596E 04   ALT    =  0.21506125E 06   LAT    =  0.18132740E 02   VI     =  0.15135574E 05
Y     =  0.13714762E 08   YD     = -0.58585764E 04   R      =  0.21134056E 08   LONG   =  0.20737139E 03   FPAI   = -0.13607444E 01
Z     =  0.65375319E 07   ZD     = -0.10221974E 05   RDOT   = -0.35942807E 03   FLP    = -0.85440083E 03   PSIV   =  0.13464140E 03
XL    = -0.15398770E 08   TAG    =  0.60000000E 01   GLOAD  =  0.58156872E 00   FLY    =  0.18236011E 04   VA     =  0.14130709E 05
YL    =  0.13107136E 08   ROLL   = -0.25104216E 02   ACC    =  0.30250582E 02   RTGN   = -0.25122391E 02   FPAA   = -0.14575282E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.50345817E 04   RTGL   =  0.23934118E 03   PSAV   =  0.13882191E 03

  1 AUG.   1969    22  HR   37 MIN   2.05 SEC TMST  631868.2812  J.D. 244 435.4423     7 DAY  7 HR 31.1 MIN
X     = -0.14728392E 08   XD     = -0.93847695E 04   ALT    =  0.21342825E 06   LAT    =  0.18017004E 02   VI     =  0.15068138E 05
Y     =  0.13691260E 08   YD     = -0.58918629E 04   R      =  0.21132506E 08   LONG   =  0.20747707E 03   FPAI   = -0.15801677E 01
Z     =  0.64966659E 07   ZD     = -0.10210819E 05   RDOT   = -0.41551342E 03   FLP    = -0.10087869E 04   PSIV   =  0.13470757E 03
XL    = -0.15402592E 08   TAG    =  0.60000000E 01   GLOAD  =  0.61291929E 00   FLY    =  0.18679430E 04   VA     =  0.14064281E 05
YL    =  0.13102644E 08   ROLL   = -0.28371366E 02   ACC    =  0.30613908E 02   RTGN   = -0.24315376E 02   FPAA   = -0.16929853E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.53073430E 04   RTGL   =  0.23020152E 03   PSAV   =  0.13891570E 03
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1 AUG. 1969 22 HR 37 MIN 6.05 SEC TMST 631872.2812 J.D. 244 435.4423 7 DAY 7 HR 31.2 MIN

X	= -0.14765695E 08	XD	= -0.92660682E 04	ALT	= 0.21157325E 06	LAT	= 0.17901661E 02	VI	= 0.14997111E 05
Y	= 0.13667632E 08	YD	= -0.59216675E 04	R	= 0.21130733E 08	LONG	= 0.20758196E 03	FPAI	= -0.17989514E 01
Z	= 0.64558487E 07	ZD	= -0.10197410E 05	RDOT	= -0.47079631E 03	FLP	= -0.11890591E 04	PSIV	= 0.13477925E 03
XL	= -0.15406413E 08	TAG	= 0.60000000E 01	GLOAD	= 0.64937560E 00	FLY	= 0.19106652E 04	VA	= 0.13994417E 05
YL	= 0.13098150E 08	ROLL	= -0.31895131E 02	ACC	= 0.31106460E 02	RTGN	= -0.23488773E 02	FPAA	= -0.19278917E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.56261129E 04	RTGL	= 0.22110892E 03	PSAV	= 0.13901669E 03

1 AUG. 1969 22 HR 37 MIN 10.05 SEC TMST 631876.2812 J.D. 244 435.4424 7 DAY 7 HR 31.3 MIN

X	= -0.14802520E 08	XD	= -0.91474856E 04	ALT	= 0.20950100E 06	LAT	= 0.17786735E 02	VI	= 0.14921834E 05
Y	= 0.13643891E 08	YD	= -0.59489205E 04	R	= 0.21128743E 08	LONG	= 0.20768603E 03	FPAI	= -0.20093537E 01
Z	= 0.64150932E 07	ZD	= -0.10178162E 05	RDOT	= -0.52319902E 03	FLP	= -0.64541697E 03	PSIV	= 0.13484198E 03
XL	= -0.15410233E 08	TAG	= 0.60000000E 01	GLOAD	= 0.69462793E 00	FLY	= 0.23196969E 04	VA	= 0.13920173E 05
YL	= 0.13093656E 08	ROLL	= -0.15548339E 02	ACC	= 0.30552365E 02	RTGN	= -0.22698473E 02	FPAA	= -0.21540068E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.60195291E 04	RTGL	= 0.21205988E 03	PSAV	= 0.13910971E 03

1 AUG. 1969 22 HR 37 MIN 14.05 SEC TMST 631880.2812 J.D. 244 435.4424 7 DAY 7 HR 31.3 MIN

X	= -0.14838875E 08	XD	= -0.90297279E 04	ALT	= 0.20723000E 06	LAT	= 0.17672300E 02	VI	= 0.14841674E 05
Y	= 0.13620044E 08	YD	= -0.59736475E 04	R	= 0.21126552E 08	LONG	= 0.20778928E 03	FPAI	= -0.22081284E 01
Z	= 0.63744325E 07	ZD	= -0.10151592E 05	RDOT	= -0.57184332E 03	FLP	= -0.84037646E 03	PSIV	= 0.13489088E 03
XL	= -0.15414051E 08	TAG	= 0.60000000E 01	GLOAD	= 0.74560405E 00	FLY	= 0.24454649E 04	VA	= 0.13840821E 05
YL	= 0.13089161E 08	ROLL	= -0.18965125E 02	ACC	= 0.31173992E 02	RTGN	= -0.21961140E 02	FPAA	= -0.23678874E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.64645822E 04	RTGL	= 0.20305571E 03	PSAV	= 0.13918972E 03

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1 AUG.   1969   22  HR   37 MIN  18.05 SEC TMST  631884.2812  J.D. 244 435.4425     7 DAY  7 HR 31.4 MIN
X     = -0.14874753E 08   XD    = -0.89083102E 04   ALT   =  0.20476800E 06   LAT   =  0.17558403E 02   VI    =  0.14755080E 05
Y     =  0.13596110E 08   YD    = -0.59922332E 04   R     =  0.21124170E 08   LONG  =  0.20789168E 03   FPAI  = -0.24035623E 01
Z     =  0.63338850E 07   ZD    = -0.10121638E 05   RDOT  = -0.61879521E 03   FLP   = -0.10922129E 04   PSIV  =  0.13495097E 03
XL    = -0.15417869E 08   TAG   =  0.60000000E 01   GLOAD =  0.80516954E 00   FLY   =  0.25704612E 04   VA    =  0.13755303E 05
YL    =  0.13084664E 08   ROLL  = -0.23021091E 02   ACC   =  0.32060109E 02   RTGN  = -0.21184992E 02   FPAA  = -0.25783742E 01
ZL    =  0.53821331E 07   RLDOT =  0.                DRAG  =  0.69822097E 04   RTGL  =  0.19411003E 03   PSAV  =  0.13928405E 03

1 AUG.   1969   22  HR   37 MIN  22.05 SEC TMST  631888.2812  J.D. 244 435.4425     7 DAY  7 HR 31.5 MIN
X     = -0.14910136E 08   XD    = -0.87826471E 04   ALT   =  0.20212300E 06   LAT   =  0.17445067E 02   VI    =  0.14661099E 05
Y     =  0.13572115E 08   YD    = -0.60040515E 04   R     =  0.21121604E 08   LONG  =  0.20799314E 03   FPAI  = -0.25958023E 01
Z     =  0.62934646E 07   ZD    = -0.10087830E 05   RDOT  = -0.66399824E 03   FLP   = -0.13514945E 04   PSIV  =  0.13502360E 03
XL    = -0.15421685E 08   TAG   =  0.60000000E 01   GLOAD =  0.87601393E 00   FLY   =  0.27234942E 04   VA    =  0.13662694E 05
YL    =  0.13080166E 08   ROLL  = -0.26392240E 02   ACC   =  0.33214172E 02   RTGN  = -0.20369209E 02   FPAA  = -0.27856337E 01
ZL    =  0.53821331E 07   RLDOT =  0.                DRAG  =  0.76009698E 04   RTGL  =  0.18522718E 03   PSAV  =  0.13939455E 03

1 AUG.   1969   22  HR   37 MIN  26.05 SEC TMST  631892.2812  J.D. 244 435.4426     7 DAY  7 HR 31.5 MIN
X     = -0.14945008E 08   XD    = -0.86522219E 04   ALT   =  0.19930225E 06   LAT   =  0.17332336E 02   VI    =  0.14558297E 05
Y     =  0.13548088E 08   YD    = -0.60082855E 04   R     =  0.21118861E 08   LONG  =  0.20809357E 03   FPAI  = -0.27837529E 01
Z     =  0.62531893E 07   ZD    = -0.10049058E 05   RDOT  = -0.70704610E 03   FLP   = -0.16782805E 04   PSIV  =  0.13510890E 03
XL    = -0.15425499E 08   TAG   =  0.60000000E 01   GLOAD =  0.95681386E 00   FLY   =  0.28680111E 04   VA    =  0.13561570E 05
YL    =  0.13075668E 08   ROLL  = -0.30334985E 02   ACC   =  0.34752031E 02   RTGN  = -0.19516968E 02   FPAA  = -0.29885279E 01
ZL    =  0.53821331E 07   RLDOT =  0.                DRAG  =  0.83074191E 04   RTGL  =  0.17641203E 03   PSAV  =  0.13952198E 03
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1 AUG. 1969 22 HR 37 MIN 30.05 SEC TMST 631896.2812 J.D. 244 435.4426 7 DAY 7 HR 31.6 MIN

X	= -0.14979347E 08	XD	= -0.85161481E 04	ALT	= 0.19631450E 06	LAT	= 0.17220258E 02	VI	= 0.14444972E 05
Y	= 0.13524060E 08	YD	= -0.60037650E 04	R	= 0.21115951E 08	LONG	= 0.20819287E 03	FPAI	= -0.29667942E 01
Z	= 0.62130805E 07	ZD	= -0.10004361E 05	RDOT	= -0.74763117E 03	FLP	= -0.20363335E 04	PSIV	= 0.13520890E 03
XL	= -0.15429313E 08	TAG	= 0.60000000E 01	GLOAD	= 0.10524598E 01	FLY	= 0.30354318E 04	VA	= 0.13450275E 05
YL	= 0.13071167E 08	ROLL	= -0.33855867E 02	ACC	= 0.36725368E 02	RTGN	= -0.18625913E 02	FPAA	= -0.31864164E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.91380048E 04	RTGL	= 0.16767095E 03	PSAV	= 0.13966922E 03

1 AUG. 1969 22 HR 37 MIN 34.05 SEC TMST 631900.2812 J.D. 244 435.4427 7 DAY 7 HR 31.7 MIN

X	= -0.15013129E 08	XD	= -0.83736978E 04	ALT	= 0.19317125E 06	LAT	= 0.17108895E 02	VI	= 0.14319575E 05
Y	= 0.13500070E 08	YD	= -0.59894811E 04	R	= 0.21112884E 08	LONG	= 0.20829094E 03	FPAI	= -0.31443458E 01
Z	= 0.61731639E 07	ZD	= -0.99527656E 04	RDOT	= -0.78545227E 03	FLP	= -0.24367403E 04	PSIV	= 0.13532511E 03
XL	= -0.15433125E 08	TAG	= 0.60000000E 01	GLOAD	= 0.11634046E 01	FLY	= 0.32254925E 04	VA	= 0.13327296E 05
YL	= 0.13066666E 08	ROLL	= -0.37069698E 02	ACC	= 0.39197570E 02	RTGN	= -0.17696043E 02	FPAA	= -0.33787178E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.10106157E 05	RTGL	= 0.15901095E 03	PSAV	= 0.13983863E 03

1 AUG. 1969 22 HR 37 MIN 38.05 SEC TMST 631904.2812 J.D. 244 435.4427 7 DAY 7 HR 31.7 MIN

X	= -0.15046328E 08	XD	= -0.82243538E 04	ALT	= 0.18988450E 06	LAT	= 0.16998319E 02	VI	= 0.14180427E 05
Y	= 0.13476159E 08	YD	= -0.59643805E 04	R	= 0.21109673E 08	LONG	= 0.20838762E 03	FPAI	= -0.33148462E 01
Z	= 0.61334701E 07	ZD	= -0.98929618E 04	RDOT	= -0.81995073E 03	FLP	= -0.29234857E 04	PSIV	= 0.13545811E 03
XL	= -0.15436935E 08	TAG	= 0.60000000E 01	GLOAD	= 0.12878184E 01	FLY	= 0.33903333E 04	VA	= 0.13190973E 05
YL	= 0.13062164E 08	ROLL	= -0.40771210E 02	ACC	= 0.42264919E 02	RTGN	= -0.16730742E 02	FPAA	= -0.35638014E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.11191830E 05	RTGL	= 0.15043977E 03	PSAV	= 0.14003174E 03

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1 AUG.   1969   22  HR   37 MIN  42.05 SEC TMST  631908.2812  J.D. 244 435.4428     7 DAY  7 HR 31.8 MIN
X     = -0.15078914E 08   XD     = -0.80670483E 04   ALT    =  0.18646725E 06   LAT    =  0.16888611E 02   VI     =  0.14029666E 05
Y     =  0.13452371E 08   YD     = -0.59271650E 04   R      =  0.21106330E 08   LONG   =  0.20848280E 03   FPAI   = -0.34782217E 01
Z     =  0.60940330E 07   ZD     = -0.98239890E 04   RDOT   = -0.85092513E 03   FLP    = -0.34502473E 04   PSIV   =  0.13561104E 03
XL    = -0.15440745E 08   TAG    =  0.60000000E 01   GLOAD  =  0.14267083E 01   FLY    =  0.35656856E 04   VA     =  0.13039518E 05
YL    =  0.13057661E 08   ROLL   = -0.44057355E 02   ACC    =  0.45864416E 02   RTGN   = -0.15726216E 02   FPAA   = -0.37416314E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.12404213E 05   RTGL   =  0.14196707E 03   PSAV   =  0.14029296E 03

1 AUG.   1969   22  HR   37 MIN  46.05 SEC TMST  631912.2812  J.D. 244 435.4428     7 DAY  7 HR 31.9 MIN
X     = -0.15110851E 08   XD     = -0.79005201E 04   ALT    =  0.18293350E 06   LAT    =  0.16779867E 02   VI     =  0.13853344E 05
Y     =  0.13428759E 08   YD     = -0.58765456E 04   R      =  0.21102870E 08   LONG   =  0.20857628E 03   FPAI   = -0.36351590E 01
Z     =  0.60548911E 07   ZD     = -0.97449033E 04   RDOT   = -0.87834270E 03   FLP    = -0.38892516E 04   PSIV   =  0.13578763E 03
XL    = -0.15444553E 08   TAG    =  0.60000000E 01   GLOAD  =  0.15808170E 01   FLY    =  0.38886673E 04   VA     =  0.12871072E 05
YL    =  0.13053157E 08   ROLL   = -0.45004303E 02   ACC    =  0.49672020E 02   RTGN   = -0.14679182E 02   FPAA   = -0.39129966E 01
ZL    =  0.53821331E 07   RLDOT  = -0.32162891E 01   DRAG   =  0.13749548E 05   RTGL   =  0.13360348E 03   PSAV   =  0.14050747E 03

1 AUG.   1969   22  HR   37 MIN  50.05 SEC TMST  631916.2812  J.D. 244 435.4429     7 DAY  7 HR 31.9 MIN
X     = -0.15142102E 08   XD     = -0.77234301E 04   ALT    =  0.17929825E 06   LAT    =  0.16672196E 02   VI     =  0.13661483E 05
Y     =  0.13405379E 08   YD     = -0.58113085E 04   R      =  0.21099307E 08   LONG   =  0.20866790E 03   FPAI   = -0.37868908E 01
Z     =  0.60160876E 07   ZD     = -0.96547113E 04   RDOT   = -0.90228090E 03   FLP    = -0.44853354E 04   PSIV   =  0.13599183E 03
XL    = -0.15448360E 08   TAG    =  0.60000000E 01   GLOAD  =  0.17503316E 01   FLY    =  0.41220911E 04   VA     =  0.12683754E 05
YL    =  0.13048651E 08   ROLL   = -0.47416520E 02   ACC    =  0.54409114E 02   RTGN   = -0.13587437E 02   FPAA   = -0.40792801E 01
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.15229468E 05   RTGL   =  0.12536055E 03   PSAV   =  0.14080100E 03
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1 AUG. 1969 22 HR 37 MIN 54.05 SEC TMST 631920.2812 J.D. 244 435.4429 7 DAY 7 HR 32.0 MIN

X	= -0.15172624E 08	XD	= -0.75352042E 04	ALT	= 0.17557775E 06	LAT	= 0.16565718E 02	VI	= 0.13448189E 05
Y	= 0.13382290E 08	YD	= -0.57303427E 04	R	= 0.21095657E 08	LONG	= 0.20875744E 03	FPAI	= -0.39320468E 01
Z	= 0.59776706E 07	ZD	= -0.95518412E 04	RDOT	= -0.92218681E 03	FLP	= -0.51949896E 04	PSIV	= 0.13622512E 03
XL	= -0.15452165E 08	TAG	= 0.60000000E 01	GLOAD	= 0.19347987E 01	FLY	= 0.42877599E 04	VA	= 0.12475719E 05
YL	= 0.13044145E 08	ROLL	= -0.50464944E 02	ACC	= 0.59789211E 02	RTGN	= -0.12454929E 02	FPAA	= -0.42390860E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.16839834E 05	RTGL	= 0.11772051E 03	PSAV	= 0.14113675E 03

1 AUG. 1969 22 HR 37 MIN 58.05 SEC TMST 631924.2812 J.D. 244 435.4429 7 DAY 7 HR 32.1 MIN

X	= -0.15202370E 08	XD	= -0.73357586E 04	ALT	= 0.17178850E 06	LAT	= 0.16460566E 02	VI	= 0.13211695E 05
Y	= 0.13359559E 08	YD	= -0.56325723E 04	R	= 0.21091937E 08	LONG	= 0.20884470E 03	FPAI	= -0.40675031E 01
Z	= 0.59396934E 07	ZD	= -0.94344929E 04	RDOT	= -0.93712806E 03	FLP	= -0.59991332E 04	PSIV	= 0.13648800E 03
XL	= -0.15455970E 08	TAG	= 0.60000000E 01	GLOAD	= 0.21334529E 01	FLY	= 0.43870423E 04	VA	= 0.12245232E 05
YL	= 0.13039637E 08	ROLL	= -0.53822765E 02	ACC	= 0.65803726E 02	RTGN	= -0.11288219E 02	FPAA	= -0.43891384E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.18580188E 05	RTGL	= 0.10928621E 03	PSAV	= 0.14151713E 03

1 AUG. 1969 22 HR 38 MIN 2.05 SEC TMST 631928.2812 J.D. 244 435.4430 7 DAY 7 HR 32.1 MIN

X	= -0.15231289E 08	XD	= -0.71216135E 04	ALT	= 0.16794600E 06	LAT	= 0.16356895E 02	VI	= 0.12948845E 05
Y	= 0.13337254E 08	YD	= -0.55162816E 04	R	= 0.21088163E 08	LONG	= 0.20892943E 03	FPAI	= -0.42007977E 01
Z	= 0.59022142E 07	ZD	= -0.93019269E 04	RDOT	= -0.94852984E 03	FLP	= -0.66609784E 04	PSIV	= 0.13679152E 03
XL	= -0.15459772E 08	TAG	= 0.60000000E 01	GLOAD	= 0.23646367E 01	FLY	= 0.48450356E 04	VA	= 0.11989408E 05
YL	= 0.13035128E 08	ROLL	= -0.53968757E 02	ACC	= 0.72356353E 02	RTGN	= -0.10074184E 02	FPAA	= -0.45376387E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.20591717E 05	RTGL	= 0.10148376E 03	PSAV	= 0.14195692E 03

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1 AUG. 1969 22 HR 38 MIN 6.05 SEC TMST 631932.2812 J.D. 244 435.4430 7 DAY 7 HR 32.2 MIN

X	= -0.15259323E 08	XD	= -0.68919352E 04	ALT	= 0.16407075E 06	LAT	= 0.16254878E 02	VI	= 0.12656912E 05
Y	= 0.13315455E 08	YD	= -0.53800367E 04	R	= 0.21084355E 08	LONG	= 0.20901136E 03	FPAI	= -0.43301401E 01
Z	= 0.58653016E 07	ZD	= -0.91517135E 04	RDOT	= -0.95563837E 03	FLP	= -0.76522869E 04	PSIV	= 0.13713844E 03
XL	= -0.15463574E 08	TAG	= 0.60000000E 01	GLOAD	= 0.26106491E 01	FLY	= 0.49111001E 04	VA	= 0.11705619E 05
YL	= 0.13030618E 08	ROLL	= -0.57308382E 02	ACC	= 0.80042117E 02	RTGN	= -0.88184103E 01	FPAA	= -0.46827973E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.22731641E 05	RTGL	= 0.93859315E 02	PSAV	= 0.14246238E 03

1 AUG. 1969 22 HR 38 MIN 10.05 SEC TMST 631936.2812 J.D. 244 435.4431 7 DAY 7 HR 32.3 MIN

X	= -0.15286406E 08	XD	= -0.66469424E 04	ALT	= 0.16017825E 06	LAT	= 0.16154706E 02	VI	= 0.12334435E 05
Y	= 0.13294242E 08	YD	= -0.52231943E 04	R	= 0.21080528E 08	LONG	= 0.20909022E 03	FPAI	= -0.44526507E 01
Z	= 0.58290279E 07	ZD	= -0.89819086E 04	RDOT	= -0.95758649E 03	FLP	= -0.86806475E 04	PSIV	= 0.13752993E 03
XL	= -0.15467374E 08	TAG	= 0.60000000E 01	GLOAD	= 0.28659618E 01	FLY	= 0.49318348E 04	VA	= 0.11392476E 05
YL	= 0.13026107E 08	ROLL	= -0.60397301E 02	ACC	= 0.88101447E 02	RTGN	= -0.75288467E 01	FPAA	= -0.48216439E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.24959547E 05	RTGL	= 0.86429790E 02	PSAV	= 0.14303820E 03

1 AUG. 1969 22 HR 38 MIN 14.05 SEC TMST 631940.2812 J.D. 244 435.4431 7 DAY 7 HR 32.3 MIN

X	= -0.15312472E 08	XD	= -0.63839288E 04	ALT	= 0.15628300E 06	LAT	= 0.16056590E 02	VI	= 0.11980364E 05
Y	= 0.13273696E 08	YD	= -0.50462432E 04	R	= 0.21076696E 08	LONG	= 0.20916570E 03	FPAI	= -0.45812503E 01
Z	= 0.57934711E 07	ZD	= -0.87926105E 04	RDOT	= -0.95690435E 03	FLP	= -0.94793739E 04	PSIV	= 0.13797566E 03
XL	= -0.15471172E 08	TAG	= 0.60000000E 01	GLOAD	= 0.31250773E 01	FLY	= 0.53562716E 04	VA	= 0.11049212E 05
YL	= 0.13021595E 08	ROLL	= -0.60531602E 02	ACC	= 0.95833094E 02	RTGN	= -0.62013397E 01	FPAA	= -0.49682590E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.27219958E 05	RTGL	= 0.79213552E 02	PSAV	= 0.14369904E 03

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1 AUG. 1969 22 HR 38 MIN 18.05 SEC TMST 631944.2812 J.D. 244 435.4432 7 DAY 7 HR 32.4 MIN

X	= -0.15337453E 08	XD	= -0.61025717E 04	ALT	= 0.15240175E 06	LAT	= 0.15960756E 02	VI	= 0.11592668E 05
Y	= 0.13253899E 08	YD	= -0.48486470E 04	R	= 0.21072876E 08	LONG	= 0.20923752E 03	FPAI	= -0.47155924E 01
Z	= 0.57587160E 07	ZD	= -0.85813281E 04	RDOT	= -0.95303008E 03	FLP	= -0.10663611E 05	PSIV	= 0.13847864E 03
XL	= -0.15474970E 08	TAG	= 0.60000000E 01	GLOAD	= 0.34126991E 01	FLY	= 0.52702755E 04	VA	= 0.10673944E 05
YL	= 0.13017082E 08	ROLL	= -0.63700039E 02	ACC	= 0.10507230E 03	RTGN	= -0.48439906E 01	FPAA	= -0.51225112E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.29737224E 05	RTGL	= 0.72228642E 02	PSAV	= 0.14445394E 03

1 AUG. 1969 22 HR 38 MIN 22.05 SEC TMST 631948.2812 J.D. 244 435.4432 7 DAY 7 HR 32.5 MIN

X	= -0.15361272E 08	XD	= -0.58031253E 04	ALT	= 0.14854600E 06	LAT	= 0.15867450E 02	VI	= 0.11168991E 05
Y	= 0.13234936E 08	YD	= -0.46294993E 04	R	= 0.21069080E 08	LONG	= 0.20930536E 03	FPAI	= -0.48513681E 01
Z	= 0.57248551E 07	ZD	= -0.83449292E 04	RDOT	= -0.94457508E 03	FLP	= -0.11867295E 05	PSIV	= 0.13904183E 03
XL	= -0.15478767E 08	TAG	= 0.60000000E 01	GLOAD	= 0.37064179E 01	FLY	= 0.51097141E 04	VA	= 0.10264488E 05
YL	= 0.13012567E 08	ROLL	= -0.66704685E 02	ACC	= 0.11455433E 03	RTGN	= -0.34642858E 01	FPAA	= -0.52800333E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.32301498E 05	RTGL	= 0.65494347E 02	PSAV	= 0.14531373E 03

1 AUG. 1969 22 HR 38 MIN 26.05 SEC TMST 631952.2812 J.D. 244 435.4433 7 DAY 7 HR 32.5 MIN

X	= -0.15383849E 08	XD	= -0.54831212E 04	ALT	= 0.14472625E 06	LAT	= 0.15776954E 02	VI	= 0.10709503E 05
Y	= 0.13216888E 08	YD	= -0.43911768E 04	R	= 0.21065318E 08	LONG	= 0.20936890E 03	FPAI	= -0.50092795E 01
Z	= 0.56919881E 07	ZD	= -0.80837129E 04	RDOT	= -0.93512259E 03	FLP	= -0.12783314E 05	PSIV	= 0.13967497E 03
XL	= -0.15482561E 08	TAG	= 0.60000000E 01	GLOAD	= 0.39883514E 01	FLY	= 0.54696091E 04	VA	= 0.98213815E 04
YL	= 0.13008052E 08	ROLL	= -0.66835322E 02	ACC	= 0.12317213E 03	RTGN	= -0.20629429E 01	FPAA	= -0.54635750E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.34760767E 05	RTGL	= 0.59030658E 02	PSAV	= 0.14629757E 03

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1 AUG. 1969 22 HR 38 MIN 30.05 SEC TMST 631956.2812 J.D. 244 435.4433 7 DAY 7 HR 32.6 MIN

X	= -0.15405112E 08	XD	= -0.51446166E 04	ALT	= 0.14095250E 06	LAT	= 0.15689546E 02	VI	= 0.10216330E 05
Y	= 0.13199827E 08	YD	= -0.41366171E 04	R	= 0.21061600E 08	LONG	= 0.20942788E 03	FPAI	= -0.51949095E 01
Z	= 0.56602186E 07	ZD	= -0.77970972E 04	RDOT	= -0.92502842E 03	FLP	= -0.13919451E 05	PSIV	= 0.14037636E 03
XL	= -0.15486355E 08	TAG	= 0.60000000E 01	GLOAD	= 0.42465456E 01	FLY	= 0.50445346E 04	VA	= 0.93468798E 04
YL	= 0.13003535E 08	ROLL	= -0.70079026E 02	ACC	= 0.13169722E 03	RTGN	= -0.65410102E 00	FPAA	= -0.56796617E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.37013381E 05	RTGL	= 0.52855971E 02	PSAV	= 0.14741330E 03

1 AUG. 1969 22 HR 38 MIN 34.05 SEC TMST 631960.2812 J.D. 244 435.4434 7 DAY 7 HR 32.7 MIN

X	= -0.15424993E 08	XD	= -0.47968726E 04	ALT	= 0.13722550E 06	LAT	= 0.15605512E 02	VI	= 0.96932739E 04
Y	= 0.13183813E 08	YD	= -0.38673784E 04	R	= 0.21057926E 08	LONG	= 0.20948202E 03	FPAI	= -0.53750472E 01
Z	= 0.56296471E 07	ZD	= -0.74828442E 04	RDOT	= -0.90801480E 03	FLP	= -0.13768342E 05	PSIV	= 0.14112857E 03
XL	= -0.15490147E 08	TAG	= 0.60000000E 01	GLOAD	= 0.44701638E 01	FLY	= 0.73028295E 04	VA	= 0.88445271E 04
YL	= 0.12999017E 08	ROLL	= -0.62058192E 02	ACC	= 0.13725943E 03	RTGN	= 0.73697408E 00	FPAA	= -0.58925971E 01
ZL	= 0.53821331E 07	RLDOT	= 0.11000000E 02	DRAG	= 0.38963009E 05	RTGL	= 0.46987217E 02	PSAV	= 0.14865267E 03

1 AUG. 1969 22 HR 38 MIN 38.05 SEC TMST 631964.2812 J.D. 244 435.4434 7 DAY 7 HR 32.7 MIN

X	= -0.15443640E 08	XD	= -0.45596130E 04	ALT	= 0.13372950E 06	LAT	= 0.15525270E 02	VI	= 0.91599626E 04
Y	= 0.13168898E 08	YD	= -0.36041010E 04	R	= 0.21054481E 08	LONG	= 0.20953152E 03	FPAI	= -0.49663824E 01
Z	= 0.56004699E 07	ZD	= -0.70799224E 04	RDOT	= -0.79298917E 03	FLP	= 0.19845703E 04	PSIV	= 0.14133847E 03
XL	= -0.15493938E 08	TAG	= 0.60000000E 01	GLOAD	= 0.46153850E 01	FLY	= 0.15961160E 05	VA	= 0.83198900E 04
YL	= 0.12994499E 08	ROLL	= 0.70876370E 01	ACC	= 0.13517174E 03	RTGN	= 0.16551024E 01	FPAA	= -0.54693012E 01
ZL	= 0.53821331E 07	RLDOT	= 0.20000000E 02	DRAG	= 0.40210164E 05	RTGL	= 0.41453230E 02	PSAV	= 0.14935963E 03

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1 AUG. 1969 22 HR 38 MIN 42.05 SEC TMST 631968.2812 J.D. 244 435.4435 7 DAY 7 HR 32.8 MIN

X	= -0.15461587E 08	XD	= -0.44003894E 04	ALT	= 0.13073025E 06	LAT	= 0.15450034E 02	VI	= 0.86529401E 04
Y	= 0.13154687E 08	YD	= -0.35456888E 04	R	= 0.21051528E 08	LONG	= 0.20957819E 03	FPAI	= -0.47628855E 01
Z	= 0.55731861E 07	ZD	= -0.65527120E 04	RDOT	= -0.71847375E 03	FLP	= 0.15931264E 05	PSIV	= 0.13992018E 03
XL	= -0.15497728E 08	TAG	= 0.60000000E 01	GLOAD	= 0.46163597E 01	FLY	= 0.22141503E 04	VA	= 0.77863464E 04
YL	= 0.12989979E 08	ROLL	= 0.82087633E 02	ACC	= 0.14589970E 03	RTGN	= 0.14447215E 01	FPAA	= -0.52944134E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.40210978E 05	RTGL	= 0.36304274E 02	PSAV	= 0.14832070E 03

1 AUG. 1969 22 HR 38 MIN 46.05 SEC TMST 631972.2812 J.D. 244 435.4435 7 DAY 7 HR 32.9 MIN

X	= -0.15478740E 08	XD	= -0.41732026E 04	ALT	= 0.12772750E 06	LAT	= 0.15380902E 02	VI	= 0.81596944E 04
Y	= 0.13140397E 08	YD	= -0.35986612E 04	R	= 0.21048569E 08	LONG	= 0.20962356E 03	FPAI	= -0.53719403E 01
Z	= 0.55480486E 07	ZD	= -0.60178594E 04	RDOT	= -0.76391664E 03	FLP	= 0.15919657E 05	PSIV	= 0.13792136E 03
XL	= -0.15501516E 08	TAG	= 0.60000000E 01	GLOAD	= 0.45711735E 01	FLY	= 0.71800786E 03	VA	= 0.72561259E 04
YL	= 0.12985458E 08	ROLL	= 0.87417597E 02	ACC	= 0.14525117E 03	RTGN	= 0.98637517E 00	FPAA	= -0.60432318E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.39839603E 05	RTGL	= 0.31507703E 02	PSAV	= 0.14668143E 03

1 AUG. 1969 22 HR 38 MIN 50.05 SEC TMST 631976.2812 J.D. 244 435.4435 7 DAY 7 HR 32.9 MIN

X	= -0.15494965E 08	XD	= -0.39374105E 04	ALT	= 0.12454000E 06	LAT	= 0.15317944E 02	VI	= 0.76726653E 04
Y	= 0.13125919E 08	YD	= -0.36380786E 04	R	= 0.21045420E 08	LONG	= 0.20966761E 03	FPAI	= -0.60686230E 01
Z	= 0.55250368E 07	ZD	= -0.54891691E 04	RDOT	= -0.81115053E 03	FLP	= 0.15850289E 05	PSIV	= 0.13578088E 03
XL	= -0.15505303E 08	TAG	= 0.60000000E 01	GLOAD	= 0.45488260E 01	FLY	= -0.19518919E 03	VA	= 0.67308093E 04
YL	= 0.12980936E 08	ROLL	= 0.90705535E 02	ACC	= 0.14482783E 03	RTGN	= 0.59528231E 00	FPAA	= -0.69217128E 01
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.39628727E 05	RTGL	= 0.27048369E 02	PSAV	= 0.14491998E 03

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1 AUG.   1969   22  HR   38 MIN  54.05 SEC TMST  631980.2812  J.D. 244 435.4436    7 DAY  7 HR 33.0 MIN
X     = -0.15510222E 08   XD    = -0.36892602E 04   ALT   =  0.12115525E 06   LAT   =  0.15261088E 02   VI    =  0.71922791E 04
Y     =  0.13111308E 08   YD    = -0.36650692E 04   R     =  0.21042071E 08   LONG  =  0.20971018E 03   FPAI  = -0.68992620E 01
Z     =  0.55041233E 07   ZD    = -0.49684510E 04   RDOT  = -0.86396570E 03   FLP   =  0.15745936E 05   PSIV  =  0.13348391E 03
XL    = -0.15509089E 08   TAG   =  0.60000000E 01   GLOAD =  0.45280275E 01   FLY   = -0.11207702E 04   VA    =  0.62110469E 04
YL    =  0.12976413E 08   ROLL  =  0.94071354E 02   ACC   =  0.14436905E 03   RTGN  =  0.27148775E-00   FPAA  = -0.79958514E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.39464432E 05   RTGL  =  0.22924528E 02   PSAV  =  0.14302161E 03

1 AUG.   1969   22  HR   38 MIN  58.05 SEC TMST  631984.2812  J.D. 244 435.4436    7 DAY  7 HR 33.1 MIN
X     = -0.15524460E 08   XD    = -0.34269997E 04   ALT   =  0.11755225E 06   LAT   =  0.15210259E 02   VI    =  0.67183398E 04
Y     =  0.13096616E 08   YD    = -0.36781749E 04   R     =  0.21038499E 08   LONG  =  0.20975104E 03   FPAI  = -0.78955185E 01
Z     =  0.54852756E 07   ZD    = -0.44567692E 04   RDOT  = -0.92287865E 03   FLP   =  0.15571809E 05   PSIV  =  0.13101547E 03
XL    = -0.15512873E 08   TAG   =  0.60000000E 01   GLOAD =  0.45033698E 01   FLY   = -0.20520070E 04   VA    =  0.56970314E 04
YL    =  0.12971889E 08   ROLL  =  0.97507014E 02   ACC   =  0.14367326E 03   RTGN  =  0.15273510E-01   FPAA  = -0.93225865E 01
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.39266079E 05   RTGL  =  0.19135268E 02   PSAV  =  0.14097171E 03

1 AUG.   1969   22  HR   39 MIN   2.05 SEC TMST  631988.2812  J.D. 244 435.4437    7 DAY  7 HR 33.1 MIN
X     = -0.15537619E 08   XD    = -0.31482165E 04   ALT   =  0.11370625E 06   LAT   =  0.15165348E 02   VI    =  0.62506270E 04
Y     =  0.13081904E 08   YD    = -0.36753929E 04   R     =  0.21034681E 08   LONG  =  0.20978999E 03   FPAI  = -0.91019502E 01
Z     =  0.54684542E 07   ZD    = -0.39560787E 04   RDOT  = -0.98879716E 03   FLP   =  0.15093495E 05   PSIV  =  0.12836517E 03
XL    = -0.15516656E 08   TAG   =  0.60000000E 01   GLOAD =  0.44759272E 01   FLY   = -0.40085924E 04   VA    =  0.51893188E 04
YL    =  0.12967363E 08   ROLL  =  0.10487349E 03   ACC   =  0.14348940E 03   RTGN  = -0.17175167E-00   FPAA  = -0.10984569E 02
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.39041839E 05   RTGL  =  0.15680699E 02   PSAV  =  0.13876160E 03
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1 AUG. 1969 22 HR 39 MIN 6.05 SEC TMST 631992.2812 J.D. 244 435.4437 7 DAY 7 HR 33.2 MIN

X	= -0.15549618E 08	XD	= -0.28473553E 04	ALT	= 0.10957825E 06	LAT	= 0.15126248E 02	VI	= 0.57883890E 04
Y	= 0.13067238E 08	YD	= -0.36545331E 04	R	= 0.21030577E 08	LONG	= 0.20982672E 03	FPAI	= -0.10605566E 02
Z	= 0.54536071E 07	ZD	= -0.34702166E 04	RDOT	= -0.10653347E 04	FLP	= 0.14232388E 05	PSIV	= 0.12553923E 03
XL	= -0.15520438E 08	TAG	= 0.60000000E 01	GLOAD	= 0.44474236E 01	FLY	= -0.61961512E 04	VA	= 0.46888228E 04
YL	= 0.12962836E 08	ROLL	= 0.11352617E 03	ACC	= 0.14319902E 03	RTGN	= -0.28563963E-00	FPAA	= -0.13132703E 02
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.38806666E 05	RTGL	= 0.12562172E 02	PSAV	= 0.13640685E 03

1 AUG. 1969 22 HR 39 MIN 10.05 SEC TMST 631996.2812 J.D. 244 435.4438 7 DAY 7 HR 33.3 MIN

X	= -0.15560361E 08	XD	= -0.25175623E 04	ALT	= 0.10512275E 06	LAT	= 0.15092782E 02	VI	= 0.53298489E 04
Y	= 0.13052700E 08	YD	= -0.36097286E 04	R	= 0.21026142E 08	LONG	= 0.20986091E 03	FPAI	= -0.12523226E 02
Z	= 0.54406637E 07	ZD	= -0.30064980E 04	RDOT	= -0.11556997E 04	FLP	= 0.12219764E 05	PSIV	= 0.12259563E 03
XL	= -0.15524218E 08	TAG	= 0.60000000E 01	GLOAD	= 0.44060423E 01	FLY	= -0.93406606E 04	VA	= 0.41971959E 04
YL	= 0.12958309E 08	ROLL	= 0.12739392E 03	ACC	= 0.14277710E 03	RTGN	= -0.31683399E-00	FPAA	= -0.15982894E 02
ZL	= 0.53821331E 07	RLDOT	= 0.43704706E 01	DRAG	= 0.38452129E 05	RTGL	= 0.97837504E 01	PSAV	= 0.13400004E 03

1 AUG. 1969 22 HR 39 MIN 14.05 SEC TMST 632000.2812 J.D. 244 435.4438 7 DAY 7 HR 33.3 MIN

X	= -0.15569707E 08	XD	= -0.21493273E 04	ALT	= 0.10027150E 06	LAT	= 0.15064657E 02	VI	= 0.48718310E 04
Y	= 0.13038408E 08	YD	= -0.35282800E 04	R	= 0.21021307E 08	LONG	= 0.20989204E 03	FPAI	= -0.15029628E 02
Z	= 0.54295027E 07	ZD	= -0.25819314E 04	RDOT	= -0.12633559E 04	FLP	= 0.79562595E 04	PSIV	= 0.11975090E 03
XL	= -0.15527997E 08	TAG	= 0.60000000E 01	GLOAD	= 0.43313116E 01	FLY	= -0.12857176E 05	VA	= 0.37187305E 04
YL	= 0.12953780E 08	ROLL	= 0.14825001E 03	ACC	= 0.14113289E 03	RTGN	= -0.24129966E-00	FPAA	= -0.19860281E 02
ZL	= 0.53821331E 07	RLDOT	= 0.10500000E 02	DRAG	= 0.37799557E 05	RTGL	= 0.73548864E 01	PSAV	= 0.13187950E 03

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1 AUG.   1969   22  HR   39 MIN  18.05 SEC TMST  632004.2812  J.D. 244 435.4439     7 DAY  7 HR 33.4 MIN
X     = -0.15577509E 08   XD     = -0.17524936E 04   ALT    =  0.94979250E 05   LAT    =  0.15041335E 02   VI     =  0.44093920E 04
Y     =  0.13024560E 08   YD     = -0.33861510E 04   R      =  0.21016030E 08   LONG   =  0.20991942E 03   FPAI   = -0.18111810E 02
Z     =  0.54199223E 07   ZD     = -0.22148331E 04   RDOT   = -0.13707581E 04   FLP    =  0.39643604E 04   PSIV   =  0.11736661E 03
XL    = -0.15531775E 08   TAG    =  0.60000000E 01   GLOAD  =  0.42659162E 01   FLY    = -0.14376181E 05   VA     =  0.32578140E 04
YL    =  0.12949250E 08   ROLL   =  0.16458333E 03   ACC    =  0.13783659E 03   RTGN   = -0.41378841E-01   FPAA   = -0.24882578E 02
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.37281929E 05   RTGL   =  0.52874246E 01   PSAV   =  0.13068157E 03

1 AUG.   1969   22  HR   39 MIN  22.05 SEC TMST  632008.2812  J.D. 244 435.4439     7 DAY  7 HR 33.5 MIN
X     = -0.15583776E 08   XD     = -0.13887065E 04   ALT    =  0.89341500E 05   LAT    =  0.15022317E 02   VI     =  0.39576750E 04
Y     =  0.13011368E 08   YD     = -0.32047000E 04   R      =  0.21010403E 08   LONG   =  0.20994261E 03   FPAI   = -0.21243963E 02
Z     =  0.54117721E 07   ZD     = -0.18613394E 04   RDOT   = -0.14340233E 04   FLP    =  0.38719418E 04   PSIV   =  0.11474563E 03
XL    = -0.15535551E 08   TAG    =  0.60000000E 01   GLOAD  =  0.41688274E 01   FLY    = -0.14041039E 05   VA     =  0.28170937E 04
YL    =  0.12944719E 08   ROLL   =  0.16458333E 03   ACC    =  0.13176427E 03   RTGN   =  0.18423711E-00   FPAA   = -0.30600131E 02
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.36412800E 05   RTGL   =  0.35822123E 01   PSAV   =  0.12955253E 03

1 AUG.   1969   22  HR   39 MIN  26.05 SEC TMST  632012.2812  J.D. 244 435.4440     7 DAY  7 HR 33.5 MIN
X     = -0.15588687E 08   XD     = -0.10758012E 04   ALT    =  0.83554750E 05   LAT    =  0.15007359E 02   VI     =  0.35266494E 04
Y     =  0.12998960E 08   YD     = -0.29951706E 04   R      =  0.21004626E 08   LONG   =  0.20996167E 03   FPAI   = -0.24209536E 02
Z     =  0.54050161E 07   ZD     = -0.15194935E 04   RDOT   = -0.14461902E 04   FLP    =  0.37078757E 04   PSIV   =  0.11166263E 03
XL    = -0.15539327E 08   TAG    =  0.60000000E 01   GLOAD  =  0.39884604E 01   FLY    = -0.13446077E 05   VA     =  0.24039478E 04
YL    =  0.12940187E 08   ROLL   =  0.16458333E 03   ACC    =  0.12272434E 03   RTGN   =  0.41282700E-00   FPAA   = -0.36983820E 02
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.34869877E 05   RTGL   =  0.22294454E 01   PSAV   =  0.12819297E 03
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1 AUG. 1969 22 HR 39 MIN 30.05 SEC TMST 632016.2812 J.D. 244 435.4440 7 DAY 7 HR 33.6 MIN

X	= -0.15592461E 08	XD	= -0.82135311E 03	ALT	= 0.77821750E 05	LAT	= 0.14996121E 02	VI	= 0.31249680E 04
Y	= 0.12987434E 08	YD	= -0.27657664E 04	R	= 0.20998899E 08	LONG	= 0.20997678E 03	FPAI	= -0.26808652E 02
Z	= 0.53995858E 07	ZD	= -0.12005583E 04	RDOT	= -0.14093991E 04	FLP	= 0.34837609E 04	PSIV	= 0.10811749E 03
XL	= -0.15543101E 08	TAG	= 0.60000000E 01	GLOAD	= 0.37514795E 01	FLY	= -0.12633357E 05	VA	= 0.20273028E 04
YL	= 0.12935654E 08	ROLL	= 0.16458333E 03	ACC	= 0.11157979E 03	RTGN	= 0.63910952E 00	FPAA	= -0.44043850E 02
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.32762240E 05	RTGL	= 0.12088666E 01	PSAV	= 0.12652511E 03

1 AUG. 1969 22 HR 39 MIN 34.05 SEC TMST 632020.2812 J.D. 244 435.4441 7 DAY 7 HR 33.7 MIN

X	= -0.15595341E 08	XD	= -0.62930257E 03	ALT	= 0.72323250E 05	LAT	= 0.14988143E 02	VI	= 0.27628415E 04
Y	= 0.12976844E 08	YD	= -0.25291642E 04	R	= 0.20993406E 08	LONG	= 0.20998825E 03	FPAI	= -0.28812044E 02
Z	= 0.53953644E 07	ZD	= -0.91694248E 03	RDOT	= -0.13315179E 04	FLP	= 0.31748641E 04	PSIV	= 0.10421873E 03
XL	= -0.15546873E 08	TAG	= 0.60000000E 01	GLOAD	= 0.34213564E 01	FLY	= -0.11513187E 05	VA	= 0.16966317E 04
YL	= 0.12931120E 08	ROLL	= 0.16458333E 03	ACC	= 0.97319844E 02	RTGN	= 0.85372701E 00	FPAA	= -0.51702234E 02
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.29857290E 05	RTGL	= 0.48695768E-00	PSAV	= 0.12443679E 03

1 AUG. 1969 22 HR 39 MIN 38.05 SEC TMST 632024.2812 J.D. 244 435.4441 7 DAY 7 HR 33.7 MIN

X	= -0.15597575E 08	XD	= -0.49721526E 03	ALT	= 0.67199750E 05	LAT	= 0.14982869E 02	VI	= 0.24477086E 04
Y	= 0.12967192E 08	YD	= -0.22989926E 04	R	= 0.20988286E 08	LONG	= 0.20999653E 03	FPAI	= -0.30027662E 02
Z	= 0.53921919E 07	ZD	= -0.67726479E 03	RDOT	= -0.12248776E 04	FLP	= 0.28500411E 04	PSIV	= 0.10019707E 03
XL	= -0.15550644E 08	TAG	= 0.60000000E 01	GLOAD	= 0.30683123E 01	FLY	= -0.10335263E 05	VA	= 0.14174040E 04
YL	= 0.12926584E 08	ROLL	= 0.16458333E 03	ACC	= 0.82296506E 02	RTGN	= 0.10423161E 01	FPAA	= -0.59787995E 02
ZL	= 0.53821331E 07	RLDOT	= 0.	DRAG	= 0.26802566E 05	RTGL	= 0.16899885E-01	PSAV	= 0.12173607E 03

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  1 AUG.   1969    22  HR   39 MIN  42.05 SEC TMST  632028.2812  J.D. 244 435.4441     7 DAY  7 HR 33.8 MIN
X     = -0.15599388E 08   XD     = -0.41686508E 03   ALT    =  0.62538750E 05   LAT    =  0.14979705E 02   VI     =  0.21828305E 04
Y     =  0.12958428E 08   YD     = -0.20868693E 04   R      =  0.20983626E 08   LONG   =  0.21000213E 03   FPAI   = -0.30370435E 02
Z     =  0.53898822E 07   ZD     = -0.48574570E 03   RDOT   = -0.11036143E 04   FLP    =  0.25185594E 04   PSIV   =  0.96380517E 02
XL    = -0.15554414E 08   TAG    =  0.60000000E 01   GLOAD  =  0.27119058E 01   FLY    = -0.91331926E 04   VA     =  0.11899873E 04
YL    =  0.12922048E 08   ROLL   =  0.16458333E 03   ACC    =  0.67338982E 02   RTGN   =  0.11903467E 01   FPAA   = -0.68035606E 02
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.23685221E 05   RTGL   = -0.25783021E-00   PSAV   =  0.11804875E 03

  1 AUG.   1969    22  HR   39 MIN  46.05 SEC TMST  632032.2812  J.D. 244 435.4442     7 DAY  7 HR 33.9 MIN
X     = -0.15600964E 08   XD     = -0.37649239E 03   ALT    =  0.58370250E 05   LAT    =  0.14978089E 02   VI     =  0.19671704E 04
Y     =  0.12950462E 08   YD     = -0.19003372E 04   R      =  0.20979459E 08   LONG   =  0.21000558E 03   FPAI   = -0.29907823E 02
Z     =  0.53882427E 07   ZD     = -0.34165962E 03   RDOT   = -0.98084315E 03   FLP    =  0.22163293E 04   PSIV   =  0.93121717E 02
XL    = -0.15558182E 08   TAG    =  0.60000000E 01   GLOAD  =  0.23855089E 01   FLY    = -0.80371988E 04   VA     =  0.10104032E 04
YL    =  0.12917511E 08   ROLL   =  0.16458333E 03   ACC    =  0.53693135E 02   RTGN   =  0.12886920E 01   FPAA   = -0.76106522E 02
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.20842967E 05   RTGL   = -0.39483393E-00   PSAV   =  0.11250398E 03

  1 AUG.   1969    22  HR   39 MIN  50.05 SEC TMST  632036.2812  J.D. 244 435.4442     7 DAY  7 HR 33.9 MIN
X     = -0.15602437E 08   XD     = -0.36401081E 03   ALT    =  0.54681000E 05   LAT    =  0.14977507E 02   VI     =  0.17944951E 04
Y     =  0.12943189E 08   YD     = -0.17404894E 04   R      =  0.20975770E 08   LONG   =  0.21000735E 03   FPAI   = -0.28828318E 02
Z     =  0.53870906E 07   ZD     = -0.24167242E 03   RDOT   = -0.86528172E 03   FLP    =  0.19620387E 04   PSIV   =  0.90733371E 02
XL    = -0.15561950E 08   TAG    =  0.60000000E 01   GLOAD  =  0.21102843E 01   FLY    = -0.71150506E 04   VA     =  0.87057227E 03
YL    =  0.12912972E 08   ROLL   =  0.16458333F 03   ACC    =  0.42157244E 02   RTGN   =  0.13374544E 01   FPAA   = -0.83679863E 02
ZL    =  0.53821331E 07   RLDOT  =  0.                DRAG   =  0.18451549E 05   RTGL   = -0.44362339E-00   PSAV   =  0.10212017E 03
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   1 AUG.   1969    22  HR   39 MIN  54.05 SEC TMST  632040.2812  J.D. 244 435.4443     7 DAY  7 HR 34.0 MIN
X     = -0.15603901E 08   XD    = -0.37999243E 03   ALT   =  0.51431750E 05   LAT   =  0.14977467E 02   VI    =  0.16668918E 04
Y     =  0.12936510E 08   YD    = -0.16107951E 04   R     =  0.20972521E 08   LONG  =  0.21000780E 03   FPAI  = -0.27198512E 02
Z     =  0.53862424E 07   ZD    = -0.19867874E 03   RDOT  = -0.76189427E 03   FLP   =  0.17523338E 04   PSIV  =  0.90120212E 02
XL    = -0.15565716E 08   TAG   =  0.60000000E 01   GLOAD =  0.18830588E 01   FLY   = -0.63545861E 04   VA    =  0.76191363E 03
YL    =  0.12908432E 08   ROLL  =  0.16458333E 03   ACC   =  0.32916495E 02   RTGN  =  0.13443765E 01   FPAA  = -0.89586535E 02
ZL    =  0.53821331E 07   RLDOT =  0.               DRAG  =  0.16479427E 05   RTGL  = -0.45605620E-00   PSAV  =  0.12445254E 03
 EV   2

 OR   0
 61 700   4.9953750E 04     LESS  THAN    5.0000000E 04  -0.              -0.
   20     -0     -0     -0     -0     -0     -0.              -0.              -0.              -0.
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