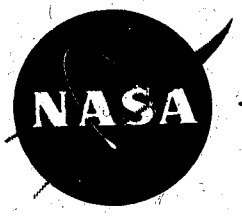
128.

SPACE OPERATIONS CONTROL CENTER

SATELLITE SITUATION REPORT

VOL. 4, NO. 10

MAY 31, 1964



GODDARD SPACE FLIGHT CENTER
GREENBELT, MD.

SPACE OPERATIONS CONTROL CENTER
GODDARD SPACE FLIGHT CENTER
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

VOLUME 4 NO. 10 MAY 31, 1964

SATELLITE SITUATION REPORT

THE FOLLOWING REPORT REFLECTS DATA COMPUTED AND COMPILED BY THE GODDARD SPACE FLIGHT CENTER, NORAD, AND SMITHSONIAN ASTROPHSICAL OBSERVATORY AS OF 1200Z ON MAY 31, 1964.

OBJECTS IN ORBIT

OBJEGT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1958 LAUNCHES									
ALPHA 1	EXPLORER 1	004	US	1 FEB	104.6	33.18	1605	341	
BETA 1	ROCKET BODY	016	US	17 MAR	138.4	34.28	4322	647	
BETA 2	VANGUARD 1	005	US	17 MAR	134.0	34.25	3958	630	108.012 &
1959 LAUNCHES									
ALPHA 1	VANGUARD 2	011	US	17 FEB	125.4	32.86	3283	558	
ALPHA 2	ROCKET BODY	012	US	17 FEB	129.8	32.91	3682	540	
ETA 1	VANGUARD 3	020	US	18 FEB	129.8	33.33	3717	511	
MU 1*	LUNIK 1	112	USSR	2 JAN	HELIOCENTRIC ORBIT				
NU 1*	PIONEER 4	113	US	3 MAR	HELIOCENTRIC ORBIT				
IOTA 1	EXPLORER 7	022	US	13 OCT	101.2	50.31	1074	551	
IOTA 2	ROCKET BODY	023	US	13 OCT	100.9	50.30	1056	548	
1960 LAUNCHES									
ALPHA 1*	PIONEER 5	027	US	11 MAR	HELIOCENTRIC ORBIT				
BETA 1	ROCKET BODY	028	US	1 APR	99.1	48.40	749	683	
BETA 2	TIROS 1	029	US	1 APR	99.2	48.40	739	700	
BETA 3	NONE	101	US	1 APR	97.9	48.49	704	609	
BETA 4	NONE	115	US	1 APR	99.9	48.15	803	703	
GAMMA 2	TRANSIT 1B	031	US	13 APR	94.0	51.22	589	346	
GAMMA 4	NONE	099	US	13 APR	96.7	51.27	721	484	
EPSILON 3	NONE	036	USSR	15 MAY	91.3	64.98	414	257	
ZETA 1	MIDAS 2	043	US	24 MAY	94.3	33.04	494	473	
ETA 1	TRANSIT 2A	045	US	22 JUN	101.6	66.72	1062	610	
ETA 2	GREB	046	US	22 JUN	101.6	66.71	1059	610	
ETA 3	ROCKET BODY	047	US	22 JUN	101.4	66.69	1041	610	

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1960 LAUNCHES (CONT'D)									
IOTA 1	ECHO I	049	US	12 AUG	114.4	47.29	1846	1010	
IOTA 2	ROCKET BODY	050	US	12 AUG	118.1	47.24	1679	1508	
IOTA 3	METAL OBJECT	051	US	12 AUG	118.2	47.24	1679	1524	
IOTA 4	METAL OBJECT	052	US	12 AUG	CURRENT ELEMENTS NOT MAINTAINED				
IOTA 5	METAL OBJECT	053	US	12 AUG	118.4	47.28	1684	1536	
NU 1	COURIER 1B	058	US	4 OCT	107.0	28.31	1212	963	
NU 2	ROCKET BODY	059	US	4 OCT	106.6	28.23	1210	921	
XI 1	EXPLORER 8	060	US	3 NOV	112.3	49.94	2249	417	
XI 2	ROCKET BODY	062	US	3 NOV	111.9	49.91	2213	413	
XI 3	NONE	069	US	3 NOV	109.3	49.39	1987	402	
XI 4	NONE	105	US	3 NOV	110.6	50.51	2083	424	
PI 1	TIROS 2	063	US	23 NOV	98.2	48.52	735	613	
PI 2	ROCKET BODY	064	US	23 NOV	98.1	48.50	721	614	
PI 3	NONE	074	US	23 NOV	98.2	48.49	733	607	
PI 4	NONE	075	US	23 NOV	98.3	48.50	730	623	
1961 LAUNCHES									
ALPHA 1	SAMOS 2	070	US	31 JAN	94.7	97.40	544	469	
ALPHA 2	METAL OBJECT	079	US	31 JAN	94.6	97.41	540	466	
GAMMA 1*	VENUS PROBE	080	USSR	12 FEB	HELIOCENTRIC ORBIT				
DELTA 2	ROCKET BODY	082	US	16 FEB	118.5	38.85	2586	639	
DELTA 3	NONE	085	US	16 FEB	CURRENT ELEMENTS NOT MAINTAINED				
KAPPA 1	EXPLORER 10	098	US	25 MAR	POSITION UNCERTAIN				
NU 1	EXPLORER 11	107	US	27 APR	108.0	28.78	1783	477	
OMICRON 1	TRANSIT 4A	116	US	29 JUN	103.8	66.82	999	880	150;400
OMICRON 2	INJUN-SR-3	117	US	29 JUN	103.8	66.83	1003	877	
OMICRON 3-206	METAL OBJECTS		US	29 JUN					
RHO 1	TIROS 3	162	US	12 JUL	100.4	47.90	823	732	

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1961 LAUNCHES (CONT'D)									
RHO 2	ROCKET BODY	165	US	12 JUL	100.3	47.92	822	726	
RHO 3	METAL OBJECT	166	US	12 JUL	98.8	47.92	797	610	
RHO 4	METAL OBJECT	167	US	12 JUL	102.0	47.85	930	776	
SIGMA 1	MIDAS 3	163	US	12 JUL	161.5	91.14	3510	3381	
SIGMA 3	METAL OBJECT	188	US	12 JUL	161.6	91.25	3591	3313	
SIGMA 4	METAL OBJECT	196	US	12 JUL	161.9	91.22	3579	3345	
UPSILON 1	EXPLORER 12	170	US	16 AUG	CURRENT ELEMENTS NOT MAINTAINED				
A DELTA 1	MIDAS 4	192	US	21 OCT	166.0	95.87	3730	3523	
A DELTA 3	METAL OBJECT	194	US	21 OCT	165.6	95.84	3715	3507	
A DELTA 4	METAL OBJECT	195	US	21 OCT	166.4	95.83	3774	3513	
A ETA 1	TRANSIT 4B	202	US	15 NOV	105.8	32.43	1101	957	
A ETA 2	TRAAC	205	US	15 NOV	105.8	32.41	1101	960	
A ETA 3	ROCKET BODY	204	US	15 NOV	105.6	32.42	1104	942	
1962 LAUNCHES									
ALPHA 1*	RANGER 3	221	US	26 JAN	HELIOCENTRIC ORBIT				
ALPHA 2*	ROCKET BODY	222	US	26 JAN	HELIOCENTRIC ORBIT				
BETA 1	TIROS 4	226	US	8 FEB	100.4	48.31	849	702	
BETA 2	ROCKET BODY	227	US	8 FEB	101.4	48.14	940	705	
BETA 3	METAL OBJECT	228	US	8 FEB	99.5	48.42	768	697	
BETA 4	METAL OBJECT	229	US	8 FEB	100.3	48.30	838	707	
ZETA 1	ORB.SOL.OBS. 1	255	US	7 MAR	96.0	32.84	582	553	
ZETA 2	ROCKET BODY	257	US	7 MAR	96.0	32.83	589	545	
KAPPA 1		271	US	9 APR	153.0	86.69	3378	2819	
KAPPA 3		273	US	9 APR	152.6	86.67	3366	2800	
KAPPA 4		274	US	9 APR	153.3	86.68	3425	2801	
MU 2	ROCKET BODY	282	US	23 APR	HELIOCENTRIC ORBIT				
OMICRON 1	ARIEL 1	285	US/UK	26 APR	100.5	53.87	1179	391	136.406
OMICRON 2	ROCKET BODY	288	US/UK	26 APR	100.5	53.86	1167	393	

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1962 LAUNCHES (CONT'D)									
A ALPHA 1	TIROS 5	309	US	19 JUN	100.5	58.11	964	597	
A ALPHA 2	ROCKET BODY	311	US	19 JUN	100.4	58.13	975	579	
A ALPHA 3	METAL OBJECT	312	US	19 JUN	101.7	58.21	1079	603	
A ALPHA 4	METAL OBJECT	313	US	19 JUN	99.1	58.01	851	581	
A EPSILON 1	TELSTAR 1	340	US	10 JUL	157.8	44.79	5641	946	
A EPSILON 2	ROCKET BODY	341	US	10 JUL	157.6	44.81	5626	949	
A OMICRON 1		369	US	23 AUG	99.5	98.70	861	614	
A OMICRON 2		370	US	23 AUG	98.2	98.66	753	599	
A OMICRON 3		378	US	23 AUG	100.8	98.71	970	623	
A OMICRON 4		388	US	23 AUG	99.5	98.68	854	620	
A RHO 1*	MARINER	374	US	27 AUG	HELIOCENTRIC ORBIT				
A RHO 2*	ROCKET BODY	375	US	27 AUG	HELIOCENTRIC ORBIT				
A UPSILON 1		385	US	1 SEP	91.3	82.79	410	271	
A PSI 1	TIROS 6	397	US	18 SEP	98.7	58.31	713	683	
A PSI 2	ROCKET BODY	398	US	18 SEP	98.7	58.33	704	686	
A PSI 3	METAL OBJECT	399	US	18 SEP	99.4	58.44	776	682	
A PSI 4	METAL OBJECT	400	US	18 SEP	98.0	58.22	690	639	
B ALPHA 1	ALOUETTE	424	CANADA	29 SEP	105.5	80.47	1034	1002	136.978 $136.591 $136.077
B ALPHA 2	ROCKET BODY	426	US	29 SEP	105.4	80.47	1029	1002	
B ALPHA 3	METAL OBJECT	510	US	29 SEP	105.4	80.50	1028	997	
B ALPHA 4	METAL OBJECT	511	US	29 SEP	105.5	80.43	1046	990	
B GAMMA 1	EXPLORER 14	432	US	2 OCT	CURRENT ELEMENTS NOT MAINTAINED				
B GAMMA 2#	ROCKET BODY	NNA	US	2 OCT	CURRENT ELEMENTS NOT MAINTAINED				
B ETA 1*	RANGER 5	439	US	18 OCT	HELIOCENTRIC ORBIT				
B ETA 2*	ROCKET BODY	440	US	18 OCT	HELIOCENTRIC ORBIT				
B KAPPA 1		444	US	26 OCT	134.4	71.41	4422	199	
B LAMBDA 1	EXPLORER 15	445	US	27 OCT	312.6	18.04	17440	307	

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1962 LAUNCHES (CONT'D)									
B LAMBDA 2#	ROCKET BODY	NNA	US	27 OCT	INSUFFICIENT OBSERVATIONS				
B MU 1	ANNA 1B	446	US	31 OCT	107.9	50.16	1174	1085	162;324
B MU 2	ROCKET BODY	447	US	31 OCT	107.6	50.15	1162	1070	
B NU 3*		450	USSR	1 NOV	HELIOCENTRIC ORBIT				
B TAU 1		502	US	13 DEC	110.4	70.35	2258	233	
B TAU 2	INJUN 3	504	US	13 DEC	113.0	70.33	2492	239	
B TAU 4		508	US	13 DEC	107.4	70.38	1989	223	
B TAU 5		513	US	13 DEC	110.3	70.35	2245	232	
B TAU 6		520	US	13 DEC	112.4	70.42	2443	235	
B UPSILON 1	RELAY 1	503	US	13 DEC	185.1	47.52	7447	1311	136.140 $136.620
B UPSILON 2	ROCKET BODY	515	US	13 DEC	184.9	47.53	7431	1310	
B CHI 1	EXPLORER 16	506	US	16 DEC	104.4	52.01	1188	741	
B PSI 1	TRANSIT 5A	509	US	19 DEC	99.1	90.64	730	702	
B PSI 2		514	US	19 DEC	97.7	90.75	726	575	
B PSI 3		519	US	19 DEC	99.1	90.63	731	700	
B PSI 4		523	US	19 DEC	100.2	90.48	839	700	
1963 LAUNCHES									
1963 03A		527	US	16 JAN	94.5	81.89	528	462	
1963 04A	SYNCOM 1	553	US	14 FEB	CURRENT ELEMENTS NOT MAINTAINED				
1963 04B	ROCKET BODY	532	US	14 FEB	CURRENT ELEMENTS NOT MAINTAINED				
1963 05A		533	US	19 FEB	97.7	100.50	798	501	
1963 05B		534	US	19 FEB	97.7	100.51	797	503	
1963 05C		535	US	19 FEB	96.9	100.51	752	471	
1963 05D		536	US	19 FEB	98.3	100.50	833	529	
1963 08B		566	USSR	2 APR	BARYCENTRIC ORBIT				
1963 09A	EXPLORER 17	564	US	3 APR	95.2	57.62	797	257	
1963 13A	TELSTAR 2	573	US	7 MAY	225.3	42.74	10807	965	136.050

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1963 LAUNCHES (CONT'D)									
1963 13B	ROCKET BODY	575	US	7 MAY	225.1	42.64	10791	965	
1963 14A		574	US	9 MAY	166.4	87.31	3712	3579	
1963 14B		579	US	9 MAY	166.4	87.24	3738	3554	
1963 14C		608	US	9 MAY	166.4	87.35	3652	3639	
1963 14D		589	US	9 MAY	CURRENT ELEMENTS NOT MAINTAINED				
1963 14E		602	US	9 MAY	166.1	87.36	3641	3621	
1963 14F		628	US	9 MAY	166.8	87.39	3691	3631	
1963 14G		629	US	9 MAY	166.4	87.34	3651	3639	
1963 14H		702	US	9 MAY	166.4	87.38	3756	3534	
1963 17A		580	USSR	22 MAY	93.0	48.95	588	254	
1963 17C		582	USSR	22 MAY	94.3	49.20	638	330	
1963 22A		594	US	16 JUN	99.7	90.01	759	732	150;400
1963 22B		603	US	16 JUN	99.7	90.00	762	729	
1963 22C		610	US	16 JUN	101.2	90.18	882	754	
1963 22D		611	US	16 JUN	98.1	89.83	778	566	
1963 24A	TIROS 7	604	US	19 JUN	97.4	58.23	653	619	136.233; 136.921
1963 24B	ROCKET BODY	605	US	19 JUN	97.4	58.22	647	617	
1963 24C	METAL OBJECT	606	US	19 JUN	97.9	58.37	684	631	
1963 24D	METAL OBJECT	607	US	19 JUN	96.9	58.10	644	576	
1963 25B		614	US	27 JUN	132.4	82.11	4113	341	
1963 26A	RESEARCH SATELLITE FOR GEOPHYSICS	612	US	28 JUN	102.1	49.73	1299	414	
1963 27A		613	US	29 JUN	94.7	82.32	523	488	
1963 27B		615	US	29 JUN	93.3	82.30	441	433	
1963 30A		622	US	19 JUL	167.8	88.45	3744	3661	
1963 30B		635	US	19 JUL	167.8	88.41	3731	3674	
1963 30C		630	US	19 JUL	167.5	88.50	3712	3665	
1963 30D		624	US	19 JUL	167.9	88.34	4109	3300	
1963 30E		631	US	19 JUL	168.3	88.44	3770	3669	

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1963 LAUNCHES (CONT'D)									
1963 31A	SYNCOM 2	634	US	26 JUL	1439.3	32.63	35903	35796	$136.980; $136.468$1814.069; $1815.794$1820.177
					CURRENT ELEMENTS NOT MAINTAINED				
1963 31B	ROCKET BODY	625	US	26 JUL	107.1	89.91	1106	1081	
1963 38A		669	US	28 SEP	107.4	89.90	1134	1077	
1963 38B		670	US	28 SEP	107.3	89.91	1133	1077	136.652
1963 38C		671	US	28 SEP	107.3	89.92	1140	1070	
1963 38D		672	US	28 SEP	107.1	89.92	1114	1072	
1963 38E		745	US	17 OCT	6484.8	38.59	116494	101136	
1963 39A		674	US	17 OCT	2319.4	35.90	102372	953	
1963 39B		675	US	17 OCT	6512.4	37.81	116069	102212	
1963 39C		692	US	29 OCT	92.5	89.99	508	290	
1963 42B		682	USSR	1 NOV	102.4	58.94	1404	339	
1963 43A	POLYOT 1	683	USSR	1 NOV	101.5	58.66	1322	333	
1963 43B		684	USSR	1 NOV	99.4	58.99	1161	303	
1963 43C		685	USSR	1 NOV	101.2	59.81	1282	344	
1963 43D		686	US	27 NOV	5553.84	35.438	193894	1873	136.112
1963 46A	EXPLORER 18	693	US	27 NOV	107.8	30.36	1785	464	
1963 47A	CENTAUR 2	694	US	27 NOV	107.3	30.06	1623	574	
1963 47B		696	US	27 NOV	107.5	30.07	1628	591	
1963 47C		697	US	27 NOV	108.0	29.92	1652	616	
1963 47D		698	US	27 NOV	108.7	30.51	1748	577	
1963 47E		699	US	27 NOV	108.7	30.48	1771	554	
1963 47F		700	US	27 NOV	107.8	30.00	1635	615	
1963 47G		701	US	27 NOV	107.8	30.39	1680	561	
1963 47H		739	US	5 DEC	106.8	89.95	1096	1063	
1963 49A		703	US	5 DEC	107.1	89.97	1125	1065	150;400
1963 49B		704							

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1963 LAUNCHES (CONT'D)									
1963 49C		705	US	5 DEC	107.1	89.95	1118	1070	54;162;324;648
1963 49D		706	US	5 DEC	107.1	89.96	1125	1059	
1963 49E		715	US	5 DEC	107.1	89.98	1121	1068	
1963 49F		753	US	5 DEC	107.1	89.97	1136	1053	
1963 53A	EXPLORER 19	714	US	19 DEC	115.7	78.63	2363	609	
1963 53B		721	US	19 DEC	115.8	78.57	2383	601	
1963 53C		722	US	19 DEC	115.9	78.66	2386	612	
1963 53D		723	US	19 DEC	115.9	78.66	2392	603	
1963 53E		724	US	19 DEC	115.8	78.64	2385	599	
1963 53F		725	US	19 DEC	115.9	78.66	2392	599	
1963 53G		726	US	19 DEC	115.8	78.65	2382	606	
1963 53H		732	US	19 DEC	115.8	78.63	2355	632	
1963 54A	TIROS 8	716	US	21 DEC	99.4	58.52	747	709	136.233 136.924
1963 54B		717	US	21 DEC	99.3	58.50	743	708	
1963 54C		720	US	21 DEC	101.1	58.49	913	706	
1963 54D		736	US	21 DEC	97.7	58.52	716	580	
1963 55B		719	US	21 DEC	91.0	64.53	360	291	
1964 LAUNCHES									
1964 1A		727	US	11 JAN	103.4	69.92	933	912	
1964 1B	GGSE	728	US	11 JAN	103.4	70.10	979	866	
1964 1C	EGRS	729	US	11 JAN	103.4	69.91	934	911	136.805
1964 1D	SOLAR RADIATION	730	US	11 JAN	103.5	69.93	932	914	136.887
1964 1E		731	US	11 JAN	103.5	69.92	935	911	
1964 2A		733	US	19 JAN	101.3	99.05	838	808	
1964 2B		734	US	19 JAN	101.3	99.05	829	811	
1964 2C		735	US	19 JAN	101.3	99.06	832	811	
1964 3A	RELAY 2	737	US	21 JAN	194.7	46.33	7419	2080	136.141 $136.621

OBJECTS IN ORBIT

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1964 LAUNCHES (CONT'D)									
1964 03B		738	US	21 JAN	194.8	46.32	7419	2086	
1964 04A	ECHO 2	740	US	25 JAN	108.7	81.51	1303	1036	136.020; 136.170
1964 04B		741	US	25 JAN	108.9	81.51	1310	1047	
1964 04C		742	US	25 JAN	108.8	81.48	1307	1042	
1964 04D		743	US	25 JAN	108.8	81.55	1307	1041	
1964 04E		749	US	25 JAN	99.5	81.55	1177	293	
1964 05A	SATURN 5	744	US	29 JAN	94.3	31.43	708	259	
1964 06A	ELEKTRON 1	746	USSR	30 JAN	169.3	60.86	7119	402	
1964 06B	ELEKTRON 2	748	USSR	30 JAN	1356.4	60.07	67924	500	
1964 06C		750	USSR	30 JAN	168.2	60.84	7034	399	
1964 06D		751	USSR	30 JAN	1384.2	59.98	69016	512	
1964 10A	COSMOS 25	757	USSR	27 FEB	91.5	49.01	442	256	
1964 10B		758	USSR	27 FEB	89.9	48.99	312	221	
1964 11A		759	US	29 FEB	94.6	82.07	516	490	
1964 11B		760	US	29 FEB	94.4	82.06	499	481	
1964 11C		761	US	29 FEB	94.5	82.08	508	480	
1964 13A	COSMOS 26	766	USSR	18 MAR	90.5	48.97	339	257	
1964 15A	ARIEL 2	771	US/UK	27 MAR	101.2	51.67	1341	289	136.447
1964 15B		775	US/UK	27 MAR	101.1	51.69	1329	289	
1964 16D		785	USSR	2 APR	HELIOCENTRIC ORBIT				
1964 19B	POLYOT 2	784	USSR	12 APR	92.3	58.06	472	304	
1964 23B		798	USSR	18 MAY	89.6	64.89	260	202	
1964 25A	SATURN 6	800	US	29 MAY	88.1	31.77	168	168	

PLEASE ADD THE FOLLOWING TO THE DECAY OBJECTS LIST:

OBJECT	CODE NAME	CATALOGUE NUMBER	SOURCE	LAUNCH	DECAY
1962 B-THETA 1		441	USSR	20 OCT	18 MAY 64
1964 13B		767	USSR	18 MAR	17 MAY 64
1964 19A		783	USSR	12 APR	30 APR-01 MAY 64
1964 22A		796	US	27 APR	26 MAY 64
1964 23A	COSMOS 30	797	USSR	18 MAY	26 MAY 64
1964 24A		799	US	19 MAY	22 MAY 64
1964 21B		792	USSR	25 APR	11 MAY 64

* APHELION PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

** TWO HUNDRED AND FOUR METAL OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1961 OMICRON 1 AND 1961 OMICRON 2. OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED OBJECTS LISTS.

$ TRANSMITTING ON COMMAND ONLY.

& TRANSMITTING WHEN IN SUNLIGHT ONLY.

NO CATALOGUE NUMBER ASSIGNED.