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(TMX 54579) OTS!

SPACE OPERATIONS CONTROL CENTER

SATELLITE SITUATION REPORT

VOL. 3, NO. 10

OTS PRICE

XEROX $ 1.10 ph

MICROFILM $ 0.80 mf

MAY 15, 1963

NASA

GODDARD SPACE FLIGHT CENTER

GREENBELT, MD.

SPACE OPERATIONS CONTROL CENTER
GODDARD SPACE FLIGHT CENTER, Greenbelt, Md.
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

VOLUME 3 NO. 10 MAY 15, 1963

t; SATELLITE SITUATION REPORT, VOLUME 3, NO. 10

THE FOLLOWING REPORT REFLECTS DATA COMPUTED AND COMPILED BY THE GODDARD SPACE FLIGHT CENTER, NORAD, AND SMITHSONIAN ASTROPHYSICAL OBSERVATORY AS OF 1430Z ON MAY 15, 1963.

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OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)	
1958 LAUNCHES									5/63
ALPHA 1	EXPLORER 1	US	1 FEB	105.0	33.18	1668	336		SAO
BETA 1	ROCKET BODY	US	17 MAR	138.3	34.25	4336	640		
BETA 2	VANGUARD 1	US	17 MAR	133.8	34.22	3939	648	108.023 &	
1959 LAUNCHES									
ALPHA 1	VANGUARD 2	US	17 FEB	125.3	32.85	3281	568		SAO
ALPHA 2	ROCKET BODY	US	17 FEB	129.5	32.90	3659	557		
ETA 1	VANGUARD 3	US	18 SEP	129.6	33.32	3718	509		SAO
MU 1*	LUNIK 1	USSR	2 JAN	450 D	0.01	1.315AU	0.9766AU		
NU 1*	PIONEER 4	US	3 MAR	398 D	1.30	1.142AU	0.9871AU		
IOTA 1	EXPLORER 7	US	13 OCT	101.1	50.27	1084	543		SAO
IOTA 2	ROCKET BODY	US	13 OCT	100.9	50.30	1072	534		
1960 LAUNCHES									
ALPHA 1*	PIONEER 5	US	11 MAR	312 D	3.35	0.995AU	0.8061AU		
BETA 1	ROCKET BODY	US	1 APR	99.0	48.36	737	697		
BETA 2	TIROS 1	US	1 APR	99.1	48.37	739	702		
BETA 3	NONE	US	1 APR	97.8	48.48	702	614		
BETA 4	NONE	US	1 APR	99.8	48.15	801	706		
GAMMA 2	TRANSIT 1B	US	13 APR	94.2	51.23	615	351		
GAMMA 4	NONE	US	13 APR	96.7	51.22	730	479		
EPSILON 3	NONE	USSR	15 MAY	92.1	64.96	497	259		
ZETA 1	MIDAS 2	US	24 MAY	94.2	33.04	500	474		
ETA 1	TRANSIT 2A	US	22 JUN	101.6	66.72	1052	619		
ETA 2	GREB	US	22 JUN	101.6	66.71	1048	620		
ETA 3	ROCKET BODY	US	22 JUN	101.4	66.68	1034	616		
IOTA 1	ECHO 1	US	12 AUG	115.2	47.22	1654	1286		SAO
IOTA 2	ROCKET BODY	US	12 AUG	118.0	47.23	1679	1509		SAO
IOTA 3	METAL OBJECT	US	12 AUG	118.2	47.22	1685	1519		
IOTA 4	METAL OBJECT	US	12 AUG	INSUFFICIENT OBSERVATIONS					
IOTA 5	METAL OBJECT	US	12 AUG	118.3	47.28	1671	1549		

6

OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1960 LAUNCHES								
NU 1	COURIER 1B	US	4 OCT	106.9	28.37	1204	975	
NU 2	ROCKET BODY	US	4 OCT	106.4	28.25	1224	912	
✓XI 1	EXPLORER 8	US	3 NOV	112.3	49.95	2254	419	SAO
XI 2	ROCKET BODY	US	3 NOV	112.0	49.96	2225	416	
XI 3	NONE	US	3 NOV	109.9	49.39	2042	408	
XI 4	NONE	US	3 NOV	110.9	50.50	2116	429	
PI 1	TIROS 2	US	23 NOV	98.2	48.52	749	600	
PI 2	ROCKET BODY	US	23 NOV	98.0	48.48	738	601	
PI 3	NONE	US	23 NOV	98.1	48.52	727	615	
PI 4	NONE	US	23 NOV	98.2	48.45	713	643	
1961 LAUNCHES								
ALPHA 1	SAMOS 2	US	31 JAN	94.8	97.42	537	477	
ALPHA 2	METAL OBJECT	US	31 JAN	94.8	97.42	535	473	
GAMMA 1*	VENUS PROBE	USSR	12 FEB	300 D	0.58	1.019AU	0.7183AU	
✓DELTA 1	EXPLORER 9	US	16 FEB	116.9	38.89	2536	558	SAO
DELTA 2	ROCKET BODY	US	16 FEB	118.5	38.84	2592	644	
DELTA 3	NONE	US	16 FEB	INSUFFICIENT OBSERVATIONS				
KAPPA 1	EXPLORER 10	US	25 MAR	POSITION UNCERTAIN				
NU 1	EXPLORER 11	US	27 APR	107.8	28.84	1775	491	
✓OMICRON 1	TRANSIT 4A	US	29 JUN	103.8	66.81	995	883	SAO
✓OMICRON 2	INJUN-SR-3	US	29 JUN	103.8	66.81	993	886	SAO
OMICRON 3-186**	METAL OBJECTS	US	29 JUN					
RHO 1	TIROS 3	US	12 JUL	100.3	47.81	833	723	
RHO 2	ROCKET BODY	US	12 JUL	100.3	47.88	798	753	
RHO 3	METAL OBJECT	US	12 JUL	98.8	47.92	791	617	
RHO 4	METAL OBJECT	US	12 JUL	101.9	47.84	935	772	
SIGMA 1	MIDAS 3	US	12 JUL	161.5	91.25	3534	3355	
SIGMA 3	METAL OBJECT	US	12 JUL	161.2	91.16	3550	3312	
SIGMA 4	METAL OBJECT	US	12 JUL	161.9	91.17	3569	3353	
UPSILON 1	EXPLORER 12	US	16 AUG	INSUFFICIENT OBSERVATIONS				
✓A DELTA 1	MIDAS 4	US	21 OCT	166.0	95.92	3731	3521	SAO

ORBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1961 LAUNCHES								
A DELTA 3	METAL OBJECT	US	21 OCT	165.6	95.85	3717	3502	
A DELTA 4	METAL OBJECT	US	21 OCT	166.4	95.87	3770	3515	
A ETA 1	TRANSIT 4B	US	15 NOV	105.6	32.43	1114	948	
A ETA 2	TRAAC	US	15 NOV	105.6	32.44	1092	972	
A ETA 3	ROCKET BODY	US	15 NOV	105.5	32.42	1094	955	
1962 LAUNCHES								
ALPHA 1*	RANGER 3	US	26 JAN	406.4D	.3988	1.163AU	0.9839AU	
ALPHA 2	ROCKET BODY	US	26 JAN	INSUFFICIENT OBSERVATIONS				
BETA 1	TIROS 4	US	8 FEB	100.3	48.26	858	795	
BETA 2	ROCKET BODY	US	8 FEB	101.3	48.14	939	708	
BETA 3	METAL OBJECT	US	8 FEB	99.4	48.42	773	694	
BETA 4	METAL OBJECT	US	8 FEB	100.2	48.26	832	715	
ZETA 1	ORB.SOL.OBS. 1	US	7 MAR	95.9	32.83	589	550	136.744
ZETA 2	ROCKET BODY	US	7 MAR	95.9	32.83	595	548	
ETA 1		US	7 MAR	89.7	90.90	310	208	
IOTA 1	COSMOS 2	USSR	6 APR	93.5	48.90	704	198	
KAPPA 1		US	9 APR	153.0	86.69	3413	2781	
KAPPA 3		US	9 APR	152.7	86.70	3363	2800	
KAPPA 4		US	9 APR	153.4	86.59	3401	2822	
MU 2	ROCKET BODY	US	23 APR	INSUFFICIENT OBSERVATIONS				
OMICRON 1	ARIEL	US/UK	26 APR	100.7	53.84	1197	389	136.406
OMICRON 2	ROCKET BODY	US/UK	26 APR	100.6	53.88	1185	397	
SIGMA 1		US	15 MAY	92.2	82.33	480	278	
OMEGA 1		US	18 JUN	91.4	82.12	342	332	
A ALPHA 1	TIROS 5	US	19 JUN	100.4	58.07	973	590	136.233;136.923
A ALPHA 2	ROCKET BODY	US	19 JUN	100.4	58.07	972	583	
A ALPHA 3	METAL OBJECT	US	19 JUN	101.7	58.20	1091	593	
A ALPHA 4	METAL OBJECT	US	19 JUN	99.1	57.97	867	565	
A EPSILON 1	TELSTAR 1	US	10 JUL	157.7	44.80	5636	955	SAO
A EPSILON 2	ROCKET BODY	US	10 JUL	157.5	44.81	5632	946	

OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)	
1962 LAUNCHES									
A XI 1	COSMOS 8	USSR	18 AUG	90.7	48.97	387	242		
A OMICRON 1		US	23 AUG	99.6	98.64	846	627		
A OMICRON 2		US	23 AUG	98.3	98.65	753	612		
A OMICRON 3		US	23 AUG	100.9	98.62	982	613		
A OMICRON 4		US	23 AUG	99.6	98.64	860	612		
A RHO 1*	MARINER 2	US	27 AUG	348 D	1.66	1.229AU	0.7046AU		
A RHO 2	ROCKET BODY	US	27 AUG						
A UPSILON 1		US	1 SEP	93.5	82.79	601	282		
A PSI 1	TIROS 6	US	18 SEP	98.7	58.29	715	681	136.233;136.921	
A PSI 2	ROCKET BODY	US	18 SEP	98.7	58.28	714	677		
A PSI 3	METAL OBJECT	US	18 SEP	99.4	58.44	762	697		
A PSI 4	METAL OBJECT	US	18 SEP	98.0	58.21	678	652		
B ALPHA 1	ALOUETTE	CANADA	29 SEP	105.5	80.48	1029	1004	$ 136.978;136.590	
B ALPHA 2	ROCKET BODY	US	29 SEP	105.5	80.46	1034	994		
B ALPHA 3	METAL OBJECT	US	29 SEP	105.4	80.56	1022	1000		
B ALPHA 4	METAL OBJECT	US	29 SEP	105.5	80.44	1037	997		
B GAMMA 1	EXPLORER 14	US	2 OCT	2184.6	37.84	97294	1495	136.440	
B GAMMA 2	ROCKET BODY	US	2 OCT	INSUFFICIENT OBSERVATIONS					
B ETA 1	RANGER 5	US	18 OCT	370 D	.44422	1.0681AU	0.9498AU		
B ETA 2	ROCKET BODY	US	18 OCT						
B THETA 1		USSR	20 OCT	94.5	48.97	756	241		
B THETA 2		USSR	20 OCT	90.9	48.94	417	224		
B KAPPA 1		US	26 OCT	143.5	71.41	5198	205		
B LAMBDA 1	EXPLORER 15	US	27 OCT	314.7	17.98	17601	317		
B LAMBDA 2	ROCKET BODY	US	27 OCT	INSUFFICIENT OBSERVATIONS					
√B MU 1	ANNA 1B	US	31 OCT	107.8	50.14	1182	1078	162;324	SAO
B MU 2	ROCKET BODY	US	31 OCT	107.5	50.13	1146	1086		
B MU 3		USSR	1 NOV	COMPUTATIONS IN PROGRESS					
B TAU 1		US	13 DEC	114.4	70.37	2615	239		
√B TAU 2	INJUN 3	US	13 DEC	115.3	70.37	2687	246	$ 136.868	SAO
B TAU 3		US	13 DEC	98.2	70.26	1118	225		
B TAU 4		US	13 DEC	113.5	70.40	2516	252		

OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCLI-NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)	
1962 LAUNCHES									
B TAU 5		US	13 DEC	114.3	70.37	2609	240		
B TAU 6		US	13 DEC	115.0	70.37	2671	241		
✓ B UPSILON 1	RELAY 1	US	13 DEC	185.0	47.51	7443	1319	136.140	SAO
B UPSILON 2	ROCKET BODY	US	13 DEC	184.8	47.46	7451	1294		
B CHI 1	EXPLORER 16	US	16 DEC	104.3	52.00	1186	743	$136.860;$136.200	
B PSI 1	TRANSIT 5A	US	19 DEC	99.2	90.63	728	703		
B PSI 2		US	19 DEC	97.9	90.73	729	582		
B PSI 3		US	19 DEC	99.1	90.63	742	688		
B PSI 4		US	19 DEC	100.3	90.49	824	715		
1963 LAUNCHES									
1963 3A		US	16 JAN	94.6	81.89	537	460		
1963 3B		US	16 JAN	93.9	81.87	497	432		
1963 3C		US	16 JAN	94.3	81.88	521	438		
1963 4A	SYNCOM	US	14 FEB	1426.6	33.51	37022	34185		
1963 4B	ROCKET BODY	US	14 FEB	605.3	29.30	34604	271		
1963 5A		US	19 FEB	97.8	100.48	803	498		
1963 5B		US	19 FEB	97.8	100.49	789	510		
1963 5C		US	19 FEB	97.1	100.48	755	478		
1963 5D		US	19 FEB	98.5	100.45	832	532		
1963 8B		USSR	COMPUTATIONS IN PROGRESS						
✓ 1963 9A	EXPLORER 17	US	3 APR	96.2	57.61	912	247	$136.316;136.559	SAO
1963 9B	ROCKET BODY	US	3 APR	95.6	57.62	851	243		
1963 10A		USSR	13 APR	91.5	48.92	442	265		
1963 10B		USSR	13 APR	91.3	48.94	431	253		
1963 12B		USSR	28 APR	89.3	65.01	283	191		
✓ 1963 13A	TELSTAR 2	US	7 MAY	225.0	43.73	10797	867	136.050	SAO
1963 13B	ROCKET BODY	US	7 MAY	225.0	42.76	10766	982		
1963 14A		US	9 MAY	167.0	87.43	3683	3606		
1963 15A#	FAITH 7	US	15 MAY	88.74	32.55	268	161		
1963 15B	ROCKET BODY	US	15 MAY	88.74	32.55	268	161		

3

Manned Space Capsule controlled by Astronaut Major Leroy Gordon Cooper which will be de-orbited by command on May 16, 1963 at 2303 Z.

* APHELION PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

** ONE HUNDRED AND EIGHTY 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.

PLEASE ADD THE FOLLOWING TO THE DECAYED OBJECTS LIST

OBJECT	CODE NAME	SOURCE	LAUNCH	DECAY
1962 UPSILON	COSMOS 5	USSR	28 MAY 62	2 MAY 63
1963 11B		USSR	22 APR 63	1 MAY 63
1963 12A		USSR	28 APR 63	8 MAY 63