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COMMITTEE ON THE PEACEFUL
USES OF OUTER SPACE

INFORMATION FURNISHED IN CONFORMITY WITH GENERAL ASSEMBLY RESOLUTION 1721 B (XVI) BY STATES LAUNCHING OBJECTS INTO ORBIT OR BEYOND

Letter dated 6 May 1965 from the Permanent Representative of the United States of America addressed to the Secretary-General

In accordance with the provisions of paragraphs 1 and 2 of General Assembly resolution 1721 B (XVI), I enclose a comprehensive report constituting a complete registration of all United States space vehicles in orbit or beyond, together with their orbital characteristics revised as of 31 December 1964. Such a comprehensive report was last submitted by the United States under cover of a letter to the Secretary-General dated 8 September 1964 and similar reports, in addition to the regular twice-monthly registration, will continue to be submitted semi-annually.

(Signed) Adlai E. STEVENSON

REGISTRATION DATA FOR U.S. SPACE LAUNCHES

As of December 31, 1964

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers
1958 Alpha 1	Jupiter C	B	1 Feb	104.3	33.18	1579	341
1958 Beta 1	Vanguard	D	17 Mar	138.4	34.25	4309	659
1958 Beta 2	Vanguard	B	17 Mar	134.0	34.23	3939	648
1959 Alpha 1	Vanguard	B	17 Feb	125.4	32.89	3284	557
1959 Alpha 2	Vanguard	D	17 Feb	129.7	32.89	3647	566
1959 Nu 1	Juno II	B	3 Mar	Heliocentric Orbit			
1959 Eta 1	Vanguard	B	18 Sep	129.8	33.33	3716	512
1959 Iota 1	Juno II	B	13 Oct	101.1	50.34	1076	549
1959 Iota 2	Juno II	D	13 Oct	100.9	50.31	1049	554
1960 Alpha 1	Thor Able Star	B	11 Mar	Heliocentric Orbit			
1960 Beta 1	Thor Able Star	D	1 Apr	99.1	48.41	741	691
1960 Beta 2	Thor Able Star	C	1 Apr	99.2	48.40	742	697
1960 Beta 3	Thor Able Star	D	1 Apr	97.9	48.49	700	613
1960 Beta 4	Thor Able Star	D	1 Apr	99.9	48.16	806	699
1960 Gamma 2	Thor Able Star	C	13 Apr	93.8	51.21	574	346
1960 Gamma 4	Thor Able Star	D	13 Apr	96.7	51.25	728	476
1960 Zeta 1	Atlas Agena	A	24 May	94.3	33.04	484	482
1960 Eta 1	Thor Able Star	C	22 Jun	101.6	66.71	1053	619
1960 Eta 2	Thor Able Star	B	22 Jun	101.6	66.71	1053	616

Satellite Category

A. Development of spaceflight techniques and technology
B. Space Research and exploration
C. Practical applications of space based technology
D. Non-functional objects

Nodal Period in minutes

Inclination to equator in degrees

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers
1960 Eta 3	Thor Able Star	D	22 Jun	101.4	66.68	1033	617
1960 Eta 4	Thor Able Star	D	22 Jun	101.5	66.69	1049	615
1960 Eta 5	Thor Able Star	D	22 Jun	101.5	66.71	1051	610
1960 Iota 1	Thor Delta	C	12 Aug	114.1	47.23	1512	1317
1960 Iota 2	Thor Delta	D	12 Aug	118.1	47.25	1681	1506
1960 Iota 3	Thor Delta	D	12 Aug	118.2	47.26	1679	1524
1960 Iota 4	Thor Delta	D	12 Aug	Current Elements not Maintained			
1960 Iota 5	Thor Delta	D	12 Aug	118.4	47.27	1682	1538
1960 Nu 1	Thor Able Star	C	4 Oct	107.0	28.31	1214	962
1960 Nu 2	Thor Able Star	D	4 Oct	106.6	28.22	1208	923
1960 Xi 1	Juno II	B	3 Nov	112.3	49.96	2245	419
1960 Xi 2	Juno II	D	3 Nov	111.8	49.97	2204	418
1960 Xi 3	Juno II	D	3 Nov	109.1	49.40	1970	401
1960 Xi 4	Juno II	D	3 Nov	110.4	50.49	2074	420
1960 Pi 1	Delta	C	23 Nov	98.2	48.53	735	613
1960 Pi 2	Delta	D	23 Nov	98.1	48.51	720	615
1960 Pi 3	Delta	D	23 Nov	98.2	48.53	724	616
1960 Pi 4	Delta	D	23 Nov	98.3	48.50	733	621
1961 Alpha 1	Atlas Agena	A	31 Jan	94.7	97.39	546	465
1961 Alpha 2	Atlas Agena	D	31 Jan	94.6	97.40	535	468
1961 Delta 2	Scout	D	16 Feb	118.5	38.86	2584	643
1961 Delta 3	Scout	D	16 Feb	Current Elements not Maintained			
1961 Kappa 1	Thor Delta	B	25 Mar	Position Uncertain			
1961 Nu 1	Juno II	B	27 Apr	1079	28.77	1772	488
1961 Omicron 1	Thor Able Star	C	29 Jun	103.8	66.82	993	886
1961 Omicron 2	Thor Able Star	A	29 Jun	103.8	66.82	998	882
1961 Omicron 3*	Thor Able Star	D	29 Jun	103.4	66.79	983	854

* 203 pieces of space debris associated with 1961 Omicron 3 have been identified

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1961 Rho 1	Thor Delta	C	12 Jul	100.4	47.91	828	726
1961 Rho 2	Thor Delta	D	12 Jul	100.3	47.92	810	738
1961 Rho 3	Thor Delta	D	12 Jul	98.8	47.94	803	603
1961 Rho 4	Thor Delta	D	12 Jul	102.0	47.85	931	774
1961 Sigma 1	Atlas Agena	A	12 Jul	161.5	91.23	3599	3292
1961 Sigma 3	Atlas Agena	D	12 Jul	161.1	91.16	3552	3309
1961 Sigma 4	Atlas Agena	D	12 Jul	161.9	91.22	3583	3341
1961 Upsilon 1	Delta	B	16 Aug	Current Elements not Maintained			
1961 A-Delta 1	Atlas Agena	A	21 Oct	166.0	95.80	3761	3492
1961 A-Delta 2	Atlas Agena	D	21 Oct	165.6	95.81	3733	3489
1961 A-Delta 4	Atlas Agena	D	21 Oct	166.4	95.84	3793	3494
1961 A-Eta 1	Thor Able Star	C	15 Nov	105.8	32.43	1101	957
1961 A-Eta 2	Thor Able Star	B	15 Nov	105.8	32.42	1111	949
1961 A-Eta 3	Thor Able Star	D	15 Nov	105.6	32.41	1100	946
1962 Alpha 1	Atlas Agena	B	26 Jan	Heliocentric Orbit			
1962 Alpha 2	Atlas Agena	D	26 Jan	Heliocentric Orbit			
1962 Beta 1	Delta	C	8 Feb	100.4	48.33	837	714
1962 Beta 2	Delta	D	8 Feb	101.4	48.16	942	703
1962 Beta 3	Delta	D	8 Feb	99.5	48.42	765	700
1962 Beta 4	Delta	D	8 Feb	100.3	48.30	847	698
1962 Zeta 1	Thor Delta	B	7 Mar	96.0	32.84	578	556
1962 Zeta 2	Thor Delta	D	7 Mar	96.0	32.83	591	542
1962 Kappa 1	Atlas	B	9 Apr	153.0	86.63	3381	2815
1962 Kappa 3	Atlas	D	9 Apr	152.6	86.67	3365	2801
1962 Kappa 4	Atlas	D	9 Apr	153.3	86.67	3421	2805
1962 Mu 2	Atlas Agena	D	23 Apr	Heliocentric Orbit			
1962 Omicron 1	Delta	B	26 Apr	100.5	53.89	1176	388
1962 Omicron 2	Delta	D	26 Apr	100.4	53.87	1158	394
1962 A-Alpha 1	Thor Delta	C	19 Jun	100.5	58.12	969	593

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers
1962 A-Alpha 2	Thor Delta	D	19 Jun	100.4	58.13	959	595
1962 A-Alpha 3	Thor Delta	D	19 Jun	101.7	58.21	1085	597
1962 A-Alpha 4	Thor Delta	D	19 Jun	99.1	58.00	853	578
1962 A-Epsilon 1	Thor Delta	C	10 Jul	157.8	44.81	5643	945
1962 A-Epsilon 2	Thor Delta	D	10 Jul	157.6	44.79	5631	944
1962 A-Omicron 1	Blue Scout	A	23 Aug	99.5	98.70	860	615
1962 A-Omicron 2	Blue Scout	D	23 Aug	98.2	98.64	752	599
1962 A-Omicron 3	Blue Scout	D	23 Aug	100.8	98.71	973	622
1962 A-Omicron 4	Blue Scout	D	23 Aug	99.5	98.69	854	619
1962 A-Rho 1	Atlas Agena B	B	27 Aug	Heliocentric Orbit			
1962 A-Rho 2	Atlas Agena B	D	27 Aug	Heliocentric Orbit			
1962 A-Psi 1	Thor Delta	C	18 Sep	98.7	58.33	714	682
1962 A-Psi 2	Thor Delta	D	18 Sep	98.7	58.32	709	680
1962 A-Psi 3	Thor Delta	D	18 Sep	99.4	58.42	768	690
1962 A-Psi 4	Thor Delta	D	18 Sep	98.0	58.21	683	646
1962 B-Alpha 1	Thor Agena B	B	29 Sep	105.5	80.49	1036	1000
1962 B-Alpha 2	Thor Agena B	D	29 Sep	105.4	80.48	1030	1001
1962 B-Alpha 3	Thor Agena B	D	29 Sep	105.4	80.50	1025	1000
1962 B-Alpha 4	Thor Agena B	D	29 Sep	105.5	80.43	1042	994
1962 B-Gamma 1	Thor Delta	B	2 Oct	Current Elements not Maintained			
1962 B-Gamma 2	Thor Delta	D	2 Oct	Current Elements not Maintained			
1962 B-Eta 1	Atlas Agena B	B	18 Oct	Heliocentric Orbit			
1962 B-Eta 2	Atlas Agena B	D	18 Oct	Heliocentric Orbit			
1962 B-Kappa 1	Thor Agena	A	26 Oct	129.5	71.39	3892	200
1962 B-Lambda 1	Thor Delta	B	27 Oct	312.1	18.04	17411	307
1962 B-Lambda 2	Thor Delta	D	27 Oct	Insufficient Observations			
1962 B-Mu 1	Thor Able Star	B	31 Oct	107.9	50.16	1183	1076
1962 B-Mu 2	Thor Able Star	D	31 Oct	107.6	50.18	1169	1064
1962 B-Tau 1	Thor Agena	A	13 Dec	107.8	70.37	2020	232

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1962 B-Tau 2	Thor Agena	A	13 Dec	111.8	70.38	2376	237
1962 B-Tau 4	Thor Agena	A	13 Dec	102.9	70.34	1570	225
1962 B-Tau 5	Thor Agena	A	13 Dec	107.7	70.32	2012	226
1962 B-Tau 6	Thor Agena	D	13 Dec	111.3	70.36	2344	225
1962 B-Upsilon 1	Thor Delta	C	13 Dec	185.1	4753	7437	1321
1962 B-Upsilon 2	Thor Delta	D	13 Dec	184.8	47.50	7394	1347
1962 B-Chi 1	Scout	B	16 Dec	104.8	52.05	1174	755
1962 B-Psi 1	Scout	A	19 Dec	99.1	90.65	733	698
1962 B-Psi 2	Scout	D	19 Dec	97.7	90.75	728	570
1962 B-Psi 3	Scout	D	19 Dec	99.1	90.65	735	695
1962 B-Psi 4	Scout	D	19 Dec	100.2	90.50	837	701
1963-3A	Thor Agena	A	16 Jan	94.4	81.89	530	456
1963-4A	Thor Delta	C	14 Feb	Current Elements not Maintained			
1963-4B	Thor Delta	D	14 Feb	Current Elements not Maintained			
1963-5A	Blue Scout	A	19 Feb	97.7	100.47	795	503
1963-5B	Blue Scout	D	19 Feb	97.7	100.46	798	501
1963-5C	Blue Scout	D	19 Feb	96.9	100.49	744	475
1963-5D	Blue Scout	D	19 Feb	98.3	100.49	845	515
1963-8A	Thor Delta	B	3 Apr	94.6	57.63	740	257
1963-13A	Thor Delta	C	7 May	225.3	42.76	10810	963
1963-13B	Thor Delta	D	7 May	225.1	42.78	10790	967
1963-14A	Atlas Agena	A	9 May	166.4	87.30	3683	3608
1963-14B	Atlas Agena	A	9 May	166.4	86.76	3974	3319
1963-14C	Atlas Agena	A	9 May	166.4	87.35	3663	3628
1963-14D	Atlas Agena	D	9 May	Current Elements not Maintained			
1963-14E	Atlas Agena	D	9 May	166.1	87.36	3644	3618
1963-14F	Atlas Agena	D	9 May	166.8	87.35	3680	3642
1963-14G	Atlas Agena	D	9 May	166.4	87.35	3675	3615
1963-14H	Atlas Agena	D	9 May	166.4	87.37	3650	3640

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers
1963-22A	Scout	A	16 Jun	99.7	90.01	758	733
1963-22B	Scout	D	16 Jun	99.7	90.02	759	731
1963-22C	Scout	D	16 Jun	101.2	90.25	892	743
1963-22D	Scout	D	16 Jun	98.1	89.85	769	572
1963-24A	Thor Delta	C	19 Jun	97.4	58.24	650	622
1963-24B	Thor Delta	D	19 Jun	97.3	58.24	642	621
1963-24C	Thor Delta	D	19 Jun	97.9	58.37	680	634
1963-24D	Thor Delta	D	19 Jun	96.9	58.09	638	582
1963-25B	Thor Agena	A	27 Jun	132.3	82.12	4104	339
1963-26A	Scout	A	28 Jun	102.0	49.76	1294	416
1963-27A	Thor Agena	A	29 Jun	94.7	82.32	523	485
1963-30A	Atlas Agena	A	18 Jul	167.8	88.43	3725	3680
1963-30B	Atlas Agena	A	18 Jul	167.8	88.37	3726	3673
1963-30C	Atlas Agena	D	18 Jul	167.5	88.43	3717	3659
1963-30D	Atlas Agena	A	18 Jul	167.8	88.32	4323	3076
1963-30E	Atlas Agena	D	18 Jul	168.3	88.43	3778	3661
1963-31A	Thor Delta	C	26 Jul	1438.0	32.25	35863	35787
1963-31B	Thor Delta	D	26 Jul	Current Elements not Maintained			
1963-38A	Thor Able Star	D	28 Sep	107.1	89.90	1117	1070
1963-38B	Thor Able Star	A	28 Sep	107.4	89.91	1134	1078
1963-38C	Thor Able Star	A	28 Sep	107.3	89.91	1134	1076
1963-38D	Thor Able Star	D	28 Sep	107.3	89.93	1140	1069
1963-38E	Thor Able Star	D	28 Sep	107.1	89.94	1117	1068
1963-39A	Atlas Agena	A	17 Oct	6481.8	38.06	116322	101237
1963-39B	Atlas Agena	A	17 Oct	2319.4	35.90	102371	953
1963-39C	Atlas Agena	A	17 Oct	6595.5	37.04	116483	103761
1963-42B	Thor Agena	A	29 Oct	91.2	89.99	397	276
1963-46A	Thor Delta	B	27 Nov	5602.3	36.40	192354	3865
1963-47A	Atlas Centaur	A	27 Nov	107.8	30.37	1774	474

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers
1963-47B	Atlas Centaur	D	27 Nov	107.3	30.07	1618	577
1963-47C	Atlas Centaur	D	27 Nov	107.5	30.05	1631	586
1963-47D	Atlas Centaur	D	27 Nov	108.0	29.90	1659	609
1963-47E	Atlas Centaur	D	27 Nov	108.6	30.44	1744	581
1963-47F	Atlas Centaur	D	27 Nov	108.7	30.47	1751	574
1963-47G	Atlas Centaur	D	27 Nov	107.8	30.00	1644	606
1963-47H	Atlas Centaur	D	27 Nov	105.9	30.39	1584	486
1963-49A	Thor Able Star	D	5 Dec	106.8	89.96	1095	1064
1963-49B	Thor Able Star	A	5 Dec	107.1	89.96	1116	1074
1963-49C	Thor Able Star	A	5 Dec	107.1	89.96	1121	1067
1963-49D	Thor Able Star	D	5 Dec	107.1	89.96	1122	1061
1963-49E	Thor Able Star	D	5 Dec	107.1	89.97	1115	1072
1963-49F	Thor Able Star	D	5 Dec	107.1	89.97	1123	1066
1963-53A	Scout	B	19 Dec	115.4	78.64	2340	614
1963-53B	Scout	D	19 Dec	115.8	78.64	2382	601
1963-53C	Scout	D	19 Dec	115.8	78.60	2389	597
1963-53D	Scout	D	19 Dec	115.9	78.59	2399	596
1963-53E	Scout	D	19 Dec	115.9	78.63	2390	608
1963-53F	Scout	D	19 Dec	115.9	78.62	2401	590
1963-53G	Scout	D	19 Dec	115.8	78.61	2373	610
1963-53H	Scout	D	19 Dec	115.8	78.61	2390	595
1963-54A	Thor Delta	C	21 Dec	99.4	58.51	752	704
1963-54B	Thor Delta	D	21 Dec	99.3	58.52	745	705
1963-54C	Thor Delta	D	21 Dec	101.1	58.47	923	696
1963-54D	Thor Delta	D	21 Dec	97.7	58.51	707	588
1964-1A	Thor Agena	A	11 Jan	103.4	69.92	932	913
1964-1B	Thor Agena	A	11 Jan	103.4	69.91	936	910
1964-1C	Thor Agena	A	11 Jan	103.4	69.91	932	912

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1964-1D	Thor Agena	A	11 Jan	103.5	69.92	935	910
1964-1E	Thor Agena	A	11 Jan	103.5	69.92	935	910
1964-2A	Thor Agena	D	19 Jan	101.3	99.08	846	795
1964-2B	Thor Agena	A	19 Jan	101.3	99.08	828	812
1964-2C	Thor Agena	A	19 Jan	101.3	99.08	840	804
1964-3A	Delta	C	21 Jan	194.7	46.31	7415	2085
1964-3B	Delta	D	21 Jan	194.8	46.32	7422	2083
1964-4A	Thor Agena	C	25 Jan	108.5	81.52	1233	1088
1964-4B	Thor Agena	D	25 Jan	108.9	81.50	1309	1046
1964-4C	Thor Agena	D	25 Jan	108.8	81.49	1309	1040
1964-4D	Thor Agena	D	25 Jan	108.8	81.54	1312	1036
1964-4E	Thor Agena	D	25 Jan	98.1	81.58	1038	295
1964-5A	Saturn	A	25 Jan	93.5	31.45	635	255
1964-11A	Thor Agena	A	28 Feb	94.6	82.08	511	490
1964-11B	Thor Agena	D	28 Feb	93.7	82.06	461	448
1964-11C	Thor Agena	D	28 Feb	93.8	82.08	469	454
1964-15A	Scout	B	27 Mar	100.6	51.70	1288	289
1964-15B	Scout	D	27 Mar	100.3	51.71	1253	291
1964-15C*	Scout	D	27 Mar	103.9	51.38	1509	373
1964-26A	Scout	A	4 Jun	103.1	90.50	951	860
1964-26B	Scout	D	4 Jun	103.9	90.19	979	907
1964-26C	Scout	D	4 Jun	102.3	90.82	952	786
1964-26D	Scout	D	4 Jun	103.1	90.50	950	861
1964-30A	Thor Agena	A	13 Jun	90.9	114.99	336	307
1964-31A	Thor Agena	A	18 Jun	101.6	99.78	839	830

* This non-functional object was identified after the submission of the report for the period ending March 31, 1964

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1964-31B	Thor Agena	A	18 Jun	101.6	32.72	840	830
1964-31C	Thor Agena	D	18 Jun	101.6	99.80	843	825
1964-33A	Thor Agena	A	2 Jul	94.2	82.02	529	497
1964-36B	Atlas Agena	A	6 Jul	89.3	92.26	235	235
1964-40A	Atlas Agena	A	17 Jul	6091.5	32.13	105169	103048
1964-40B	Atlas Agena	A	17 Jul	6070.5	40.20	113125	94584
1964-40C*	Atlas Agena	A	17 Jul	2349.9	38.30	104018	319
1964-41B	Atlas Agena	D	28 Jul	Barycentric Orbit			
1964-45B	Atlas Agena	A	14 Aug	127.1	28.70	3722	270
1964-47A	Thrust-Augmented Delta	C	19 Aug	1436.5	0.07	35799	35790
1964-47B	Thrust-Augmented Delta	D	19 Aug	694.5	16.80	28084	227
1964-48A	Thor Agena	A	21 Aug	90.5	114.28	309	287
1964-51A	Scout	B	25 Aug	103.9	72.21	1020	869
1964-51B	Scout	D	25 Aug	103.9	72.21	1015	870
1964-51C	Scout	D	25 Aug	103.7	72.23	987	880
1964-51D	Scout	D	25 Aug	103.8	72.23	1010	857
1964-51E	Scout	D	25 Aug	103.7	72.82	1022	846
1964-52A	Thor Agena	C	28 Aug	98.4	28.66	933	430
1964-52B	Thor Agena	D	28 Aug	98.4	28.65	934	429
1964-54A	Atlas Agena	B	5 Sep	3832.2	32.34	148408	1289
1964-60A	Thor Delta	B	4 Oct	2072.2	33.82	34523	666
1964-63A	Thor Able Star	D	6 Oct	106.3	32.22	1085	1030
1964-63B	Thor Able Star	A	6 Oct	106.6	32.22	1085	1055

* This object was identified after the submission of the report for the period ending July 31, 1964

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers
1964-63C	Thor Able Star	A	6 Oct	106.6	89.93	1088	1051
1964-63D	Thor Able Star	D	6 Oct	106.6	89.92	1088	1055
1964-63E	Thor Able Star	A	6 Oct	106.6	89.93	1088	1054
1964-63F	Thor Able Star	D	6 Oct	106.6	89.91	1085	1058
1964-64A	Scout	B	10 Oct	104.8	79.71	1080	889
1964-64B	Scout	D	10 Oct	104.7	79.71	1076	891
1964-68B	Atlas Agena	A	23 Oct	90.0	95.48	277	268
1964-72A	Thor Agena	A	4 Nov	95.0	82.05	526	511
1964-72B	Thor Agena	D	4 Nov	94.9	82.04	522	508
1964-72C	Thor Agena	D	4 Nov	94.8	82.06	515	508
1964-72D	Thor Agena	D	4 Nov	94.9	82.03	516	509
1964-73A	Atlas Agena	B	5 Nov	Heliocentric Orbit			
1964-74A	Scout	B	6 Nov	99.2	51.97	976	465
1964-76A	Scout	B	21 Nov	116.3	81.36	2485	541
1964-76B	Scout	B	21 Nov	116.2	81.35	2494	530
1964-76C	Scout	D	21 Nov	116.2	81.35	2494	533
1964-76D	Scout	D	21 Nov	116.3	81.34	2500	536
1964-76E	Scout	D	21 Nov	116.3	81.36	2501	534
1964-76F	Scout	D	21 Nov	116.3	81.29	2475	555
1964-76G	Scout	D	21 Nov	116.4	81.37	2502	541
1964-76H	Scout	D	21 Nov	116.0	81.28	2466	542
1964-76I	Scout	D	21 Nov	116.2	81.36	2490	530
1964-76J	Scout	D	21 Nov	116.1	81.34	2486	530
1964-77A	Atlas Agena	B	28 Nov	Heliocentric Orbit			
1964-77B	Atlas Agena	D	28 Nov	Heliocentric Orbit			
1964-83A	Thor Able Star	D	13 Dec	106.0	89.99	1065	1020
1964-83B	Thor Able Star	D	13 Dec	106.3	89.99	1084	1029

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1964-83C	Thor Able Star	A	13 Dec	106.3	89.99	1084	1031
1964-83D	Thor Able Star	A	13 Dec	106.3	89.99	1086	1029
1964-83E	Thor Able Star	D	13 Dec	106.3	89.98	1086	1028
1964-83F	Thor Able Star	D	13 Dec	106.3	89.99	1086	1027
1964-85A	Thor Agena	A	19 Dec	90.0	74.96	399	184
1964-86A	Thor Delta	B	21 Dec	457.7	20.15	26275	311
1964-87A	Thor Agena	A	21 Dec	89.0	70.08	252	226

Supplemental Information:

The following objects were launched by the Government of Italy from United States territory with the use of United States facilities:

1964-84A	Scout	B	15 Dec	94.8	37.77	803	202
1964-84B	Scout	D	15 Dec	93.9	37.80	697	194
1964-84C	Scout	D	15 Dec	93.5	37.34	591	215