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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 8 September 1964 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 30 June 1964. Such a comprehensive report was last submitted by the United States under cover of a letter to the Secretary-General dated 26 March 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 UNITED STATES SPACE LAUNCHES

As of 30 June 1964

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1958 Alpha 1	Jupiter C	B	1 Feb	104.6	33.18	1604	341
1958 Beta 1	Vanguard	D	17 Mar	138.4	34.28	4322	647
1958 Beta 2	Vanguard	B	17 Mar	134.0	34.25	958	630
1959 Alpha 1	Vanguard	B	17 Feb	125.4	32.87	3284	557
1959 Alpha 2	Vanguard	D	17 Feb	129.7	32.85	3662	551
1959 Eta 1	Vanguard	B	18 Sep	129.8	33.34	3723	506
1959 Mu 1	Juno II	B	3 Mar	Heliocentric orbit - current elements not maintained			
1959 Iota 1	Juno II	B	13 Oct	101.2	50.31	1074	551
1959 Iota 2	Juno II	D	13 Oct	100.9	50.29	1052	551
1960 Alpha 1	Thor Able Star	B	11 Mar	Heliocentric orbit - current elements not maintained			
1960 Beta 1	Thor Able Star	D	1 Apr	99.1	48.40	749	683
1960 Beta 2	Thor Able Star	C	1 Apr	99.2	48.38	742	697
1960 Beta 3	Thor Able Star	D	1 Apr	97.9	48.49	704	609
1960 Beta 4	Thor Able Star	D	1 Apr	99.9	48.16	799	706
1960 Gamma 2	Thor Able Star	C	13 Apr	93.9	51.23	586	347
1960 Gamma 4	Thor Able Star	D	13 Apr	96.7	51.27	721	484
1960 Zeta 1	Atlas Agena	A	24 May	94.3	33.01	502	465
1960 Eta 1	Thor Able Star	C	22 Jun	101.6	66.72	1062	610
1960 Eta 2	Thor Able Star	B	22 Jun	101.6	66.71	1058	611
1960 Eta 3	Thor Able Star	D	22 Jun	101.4	66.71	1045	606
1960 Iota 1	Thor Delta	C	12 Aug	114.3	47.32	1859	985
1960 Iota 2	Thor Delta	D	12 Aug	118.1	47.24	1679	1508
1960 Iota 3	Thor Delta	D	12 Aug	118.2	47.24	1679	1524

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 (Kilometres)	Perigee (Kilometres)
1960 Iota 4	Thor Delta	D	12 Aug		Current elements not maintained		
1960 Iota 5	Thor Delta	D	12 Aug	118.4	47.30	1696	1524
1960 Nu 1	Thor Able Star	C	4 Oct	107.0	28.31	1212	963
1960 Nu 2	Thor Able Star	D	4 Oct	106.6	28.27	1205	926
1960 XI 1	Juno II	B	3 Nov	112.3	49.94	2247	419
1960 XI 2	Juno II	D	3 Nov	111.9	49.95	2221	405
1960 XI 3	Juno II	D	3 Nov	109.3	49.39	1985	399
1960 XI 4	Juno II	D	3 Nov	110.6	50.51	2084	422
1960 Pi 1	Delta	C	23 Nov	98.2	48.52	735	613
1960 Pi 2	Delta	D	23 Nov	98.1	48.50	721	614
1960 Pi 3	Delta	D	23 Nov	98.2	48.49	733	607
1960 Pi 4	Delta	D	23 Nov	98.3	48.50	730	623
1961 Alpha 1	Atlas Agena	A	31 Jan	94.7	97.40	543	469
1961 Alpha 2	Atlas Agena	D	31 Jan	94.6	97.41	537	489
1961 Delta 2	Scout	D	16 Feb	113.5	38.84	2592	636
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	108.0	28.78	1783	477
1961 Omicron 1	Thor Able Star	C	29 Jun	103.8	66.83	1002	877
1961 Omicron 2	Thor Able Star	A	29 Jun	103.8	66.83	1003	877
1961 Omicron 3*	Thor Able Star	D	29 Jun	103.4	66.78	991	846
1961 Rho 1	Thor Delta	C	12 Jul	100.4	47.90	823	732
1961 Rho 2	Thor Delta		12 Jul	100.3	47.90	813	735
1961 Rho 3	Thor Delta		12 Jul	98.8	47.94	796	610
1961 Rho 4	Thor Delta	D	12 Jul	102.0	47.85	930	776
1961 Sigma 1	Atlas Agena	A	12 Jul	161.5	91.28	3522	3369
1961 Sigma 3	Atlas Agena	D	12 Jul	160.6	91.36	3500	3316
1961 Sigma 4	Atlas Agena	D	12 Jul	161.9	91.22	3579	3345
1961 Upsilon 1	Delta	B	16 Aug		Current elements not maintained		
1961 A-Delta 1	Atlas Agena	A	21 Oct	166.0	95.87	3730	3523

* 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 (Kilometres)	Perigee (Kilometres)
1961 A-Delta 3	Atlas Agena	D	21 Oct	165.6	95.84	3715	3507
1961 A-Delta 4	Atlas Agena	D	21 Oct	166.4	95.83	3774	3513
1961 A-Eta 1	Thor Able Star	C	15 Nov	105.8	32.44	1111	948
1961 A-Eta 2	Thor Able Star	B	15 Nov	105.8	32.41	1101	960
1961 A-Eta 3	Thor Able Star	D	15 Nov	105.6	32.42	1104	942
1962 Alpha 1	Atlas Agena	B	26 Jan	Heliocentric orbit - Current elements not maintained			
1962 Alpha 2	Atlas Agena	D	26 Jan	Insufficient observations			
1962 Beta 1	Delta	C	8 Feb	100.4	48.31	849	702
1962 Beta 2	Delta	D	8 Feb	101.4	48.16	950	694
1962 Beta 3	Delta	D	8 Feb	99.5	48.42	766	700
1962 Beta 4	Delta	D	8 Feb	100.3	48.30	838	707
1962 Zeta 1	Thor Delta	B	7 Mar	96.0	32.83	598	537
1962 Zeta 2	Thor Delta	D	7 Mar	96.0	32.83	583	550
1962 Kappa 1	Atlas	B	9 Apr	153.0	86.69	3378	2819
1962 Kappa 3	Atlas	D	9 Apr	152.6	86.67	3365	2800
1962 Kappa 4	Atlas	D	9 Apr	153.3	86.68	3425	2801
1962 Mu 2	Atlas Agena	D	23 Apr	Heliocentric orbit - Current elements not maintained			
1962 Omicron 1	Delta	B	26 Apr	100.5	53.88	1172	397
1962 Omicron 2	Delta	D	26 Apr	100.5	53.87	1167	392
1962 A-Alpha 1	Thor Delta	C	19 Jun	100.5	58.11	965	597
1962 A-Alpha 2	Thor Delta	D	19 Jun	100.4	58.11	954	600
1962 A-Alpha 3	Thor Delta	D	19 Jun	101.7	58.22	1077	606
1962 A-Alpha 4	Thor Delta	D	19 Jun	99.1	58.00	850	581
1962 A-Epsilon 1	Thor Delta	C	10 Jul	157.8	44.80	5643	944
1962 A-Epsilon 2	Thor Delta	D	10 Jul	157.6	44.80	5632	942
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	98.65	753	599
1962 A-Omicron 3	Blue Scout	D	23 Aug	100.8	98.71	976	619
1962 A-Omicron 4	Blue Scout	D	23 Aug	99.5	98.70	858	616
1962 A-Rho 1	Atlas Agena B	B	27 Aug	Heliocentric orbit - Current elements not maintained			
1962 A-Rho 2	Atlas Agena B	D	27 Aug	Heliocentric orbit - Current elements not maintained			

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International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1962 A-Upsilon 1	Thor Agena	A	1 Sep	91.1	82.80	395	266
1962 A-Psi 1	Thor Delta	C	18 Sep	98.7	58.31	706	690
1962 A-Psi 2	Thor Delta	D	18 Sep	98.7	58.33	704	686
1962 A-Psi 3	Thor Delta	D	18 Sep	99.4	58.44	771	687
1962 A-Psi 4	Thor Delta	D	18 Sep	98.0	58.21	694	636
1962 B-Alpha 1	Thor Agena B	B	29 Sep	105.5	80.47	1037	999
1962 B-Alpha 2	Thor Agena B	D	29 Sep	105.4	80.48	1031	999
1962 B-Alpha 3	Thor Agena B	D	29 Sep	105.4	80.52	1020	1005
1962 B-Alpha 4	Thor Agena B	D	29 Sep	105.5	80.43	1046	990
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 - current elements not maintained			
1962 B-Eta 2	Atlas Agena B	D	18 Oct	Heliocentric orbit - current elements not maintained			
1962 B-Kappa 1	Thor Agena	A	26 Oct	133.5	71.42	4349	190
1962 B-Lambda 1	Thor Delta	B	27 Oct	312.5	18.04	17436	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	1178	1081
1962 B-Mu 2	Thor Able Star	D	31 Oct	107.6	50.15	1175	1057
1962 B-Tau 1	Thor Agena	A	13 Dec	110.2	70.36	2243	229
1962 B-Tau 2	Thor Agena	A	13 Dec	113.0	70.34	2486	238
1962 B-Tau 4	Thor Agena	A	13 Dec	106.9	70.36	1947	222
1962 B-Tau 5	Thor Agena	A	13 Dec	110.1	70.35	2236	222
1962 B-Tau 6	Thor Agena	D	13 Dec	112.3	70.34	2436	233
1962 B-Upsilon 1	Thor Delta	C	13 Dec	185.1	47.51	7445	1314
1962 B-Upsilon 2	Thor Delta	D	13 Dec	184.9	47.52	7425	1316
1962 B-Chi 1	Scout	B	16 Dec	104.3	52.01	1188	741
1962 B-Psi 1	Scout	A	19 Dec	99.1	90.64	730	702
1962 B-Psi 2	Scout	D	19 Dec	97.7	90.75	720	581
1962 B-Psi 3	Scout	D	19 Dec	99.1	90.64	733	698
1962 B-Psi 4	Scout	D	19 Dec	100.2	90.48	839	700
1963 3A	Thor Agena	A	16 Jan	94.5	71.89	528	462
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	100.50	796	503
1963 5B	Blue Scout	D	19 Feb	97.7	100.50	797	502
1963 5C	Blue Scout	D	19 Feb	96.9	100.51	752	471
1963 5D	Blue Scout	D	19 Feb	98.3	100.51	844	518

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International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1963 9A	Thor Delta	B	3 Apr	95.1	57.62	789	256
1963 13A	Thor Delta	C	7 May	225.3	42.75	10814	958
1963 13B	Thor Delta	D	7 May	225.1	42.64	10791	965
1963 14A	Atlas Agena	A	9 May	166.4	87.31	3730	3560
1963 14B	Atlas Agena	A	9 May	166.4	87.31	3783	3508
1963 14C	Atlas Agena	A	9 May	166.4	87.35	3652	3639
1963 14D	Atlas Agena	D	9 May	Current Elements Not Maintained			
1963 14E	Atlas Agena	D	9 May	166.1	87.44	3645	3618
1963 14F	Atlas Agena	D	9 May	166.8	87.39	3691	3631
1963 14G	Atlas Agena	D	9 May	166.4	87.34	3651	3639
1963 14H	Atlas Agena	D	9 May	166.4	87.09	3790	3496
1963 22A	Scout	A	16 Jun	99.7	90.01	759	731
1963 22B	Scout	D	16 Jun	99.7	90.00	755	735
1963 22C	Scout	D	16 Jun	101.2	90.21	799	737
1963 22D	Scout	D	16 Jun	98.1	89.82	774	569
1963 24A	Thor Delta	C	19 Jun	97.4	58.25	650	622
1963 24B	Thor Delta	D	19 Jun	97.4	58.23	648	617
1963 24C	Thor Delta	D	19 Jun	97.9	58.38	682	633
1963 24D	Thor Delta	D	19 Jun	96.9	58.10	644	576
1963 25B	Thor Agena	A	27 Jun	132.4	82.13	4115	338
1963 26A	Scout	A	28 Jun	102.1	49.76	1295	418
1963 27A	Thor Agena	A	29 Jun	94.7	82.32	524	486
1963 27B	Thor Agena	D	29 Jun	93.1	82.30	434	421
1963 30A	Atlas Agena	A	18 Jul	167.8	88.42	3770	3635
1963 30B	Atlas Agena	A	18 Jul	167.8	88.40	3736	3669
1963 30C	Atlas Agena	D	18 Jul	167.5	88.40	3711	3665
1963 30D	Atlas Agena	A	18 Jul	167.9	88.35	4160	3248
1963 30E	Atlas Agena	D	18 Jul	168.3	88.44	3770	3669
1963 31A	Thor Delta	C	26 Jul	1439.3	32.63	35903	35796
1963 31B	Thor Delta	D	26 Jul	Current Elements Not Maintained			
1963 38A	Thor Able Star	D	28 Sep	107.1	89.91	1106	1081
1963 38B	Thor Able Star	A	28 Sep	107.4	89.90	1134	1077
1963 38C	Thor Able Star	A	28 Sep	107.3	89.91	1133	1077
1963 38D	Thor Able Star	D	28 Sep	107.3	89.91	1130	1080
1963 38E	Thor Able Star	D	28 Sep	107.1	89.92	1113	1072
1963 39A	Atlas Agena	A	17 Oct	6480.8	38.30	116383	101152

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International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1963 39B	Atlas Agena	A	17 Oct	2319.4	35.90	102372	952
1963 39C	Atlas Agena	A	17 Oct	6518.0	37.22	116329	102087
1963 42B	Thor Agena	A	29 Oct	92.4	89.98	507	281
1963 46A	Thor Delta	B	27 Nov	5599.5	35.29	194077	2073
1963 47A	Atlas Centaur	A	27 Nov	107.8	30.36	1785	464
1963 47B	Atlas Centaur	D	27 Nov	107.3	30.06	1623	574
1963 47C	Atlas Centaur	D	27 Nov	107.5	30.05	1666	552
1963 47D	Atlas Centaur	D	27 Nov	108.0	29.91	1655	613
1963 47E	Atlas Centaur	D	27 Nov	108.7	30.39	1754	571
1963 47F	Atlas Centaur	D	27 Nov	108.7	30.47	1768	558
1963 47G	Atlas Centaur	D	27 Nov	107.8	30.00	1635	615
1963 47H	Atlas Centaur	D	27 Nov	107.7	30.40	1669	570
1963 49A	Thor Able Star	D	5 Dec	106.8	89.96	1097	1063
1963 49B	Thor Able Star	A	5 Dec	107.1	89.97	1125	1065
1963 49C	Thor Able Star	A	5 Dec	107.1	89.96	1126	1063
1963 49D	Thor Able Star	D	5 Dec	107.1	89.96	1125	1059
1963 49E	Thor Able Star	D	5 Dec	107.1	89.98	1120	1068
1963 49F	Thor Able Star	D	5 Dec	107.1	89.97	1136	1053
1963 53A	Scout	B	19 Dec	115.6	78.62	2371	596
1963 53B	Scout	D	19 Dec	115.8	78.64	2396	587
1963 53C	Scout	D	19 Dec	115.8	78.63	2450	537
1963 53D	Scout	D	19 Dec	115.9	78.65	2428	567
1963 53E	Scout	D	19 Dec	115.9	78.64	2373	605
1963 53F	Scout	D	19 Dec	115.9	78.62	2399	592
1963 53G	Scout	D	19 Dec	115.8	78.58	2389	598
1963 53H	Scout	D	19 Dec	115.8	78.60	2391	597
1963 54A	Thor Delta	C	21 Dec	99.4	58.51	751	706
1963 54B	Thor Delta	D	21 Dec	99.3	58.50	743	708
1963 54C	Thor Delta	D	21 Dec	101.1	58.49	913	706
1963 54D	Thor Delta	D	21 Dec	97.7	58.52	716	580
1963 55B	Thor Agena	A	21 Dec	90.9	64.54	344	292
1964 1A	Thor Agena	A	11 Jan	103.4	69.93	937	908
1964 1B	Thor Agena	A	11 Jan	103.4	69.93	939	906
1964 1C	Thor Agena	A	11 Jan	103.4	69.91	933	911
1964 1D	Thor Agena	A	11 Jan	103.5	69.91	934	911
1964 1E	Thor Agena	A	11 Jan	103.5	69.92	935	911
1964 2A	Thor Agena	D	19 Jan	101.3	99.06	834	811

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International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1964 2B	Thor Agena	A	19 Jan	101.3	99.04	827	813
1964 2C	Thor Agena	A	19 Jan	101.3	99.07	833	811
1964 3A	Delta	C	21 Jan	194.7	46.34	7416	2083
1964 3B	Delta	D	21 Jan	194.8	46.47	7377	2128
1964 4A	Thor Agena	C	25 Jan	108.7	81.47	1332	1003
1964 4B	Thor Agena	D	25 Jan	108.9	81.51	1310	1046
1964 4C	Thor Agena	D	25 Jan	108.8	81.48	1307	1042
1964 4D	Thor Agena	D	25 Jan	108.8	81.54	1310	1038
1964 4E	Thor Agena	D	25 Jan	100.7	81.58	1294	292
1964 5A	Saturn	A	29 Jan	94.2	31.44	699	257
1964 11A	Thor Agena	A	28 Feb	94.6	82.08	513	492
1964 11B	Thor Agena	D	28 Feb	94.3	82.06	493	481
1964 11C	Thor Agena	D	28 Feb	94.4	82.09	499	483
1964 15A	Scout	B	27 Mar	101.1	51.66	1337	287
1964 15B	Scout	D	27 Mar	101.0	51.64	1323	286
1964 26A	Scout	A	4 Jun	103.1	90.48	956	855
1964 26B	Scout	D	4 Jun	103.9	90.19	989	898
1964 26C	Scout	D	4 Jun	102.3	90.83	948	792
1964 26D	Scout	D	4 Jun	103.1	90.40	942	868
1964 30A	Thor Agena	A	13 Jun	91.7	114.98	362	350
1964 30B	Thor Agena	D	13 Jun	91.9	114.97	386	353
1964 31A	Thor Agena	A	18 Jun	101.6	99.83	838	831
1964 31B	Thor Agena	A	18 Jun	101.6	99.83	841	829
1964 31C	Thor Agena	D	18 Jun	101.6	99.85	840	827
1964 32A	Thor Agena	A	19 Jun	90.6	85.02	412	182
1964 32B	Thor Agena	D	19 Jun	90.0	85.11	300	169