

UNITED NATIONS

GENERAL  
ASSEMBLY



Distr.  
GENERAL

A/AC.105/INF.61  
30 March 1964

ORIGINAL: ENGLISH

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 26 March 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 31 December 1963. Such a comprehensive report was last submitted by the United States under cover of a letter to Your Excellency dated 3 September 1963 and similar reports, in addition to the regular twice monthly registration, will continue to be submitted semi-annually,

(Signed) Adlai E. STEVENSON

UN-3554/162

64-07267

/...

REGISTRATION DATA FOR U.S. SPACE LAUNCHES

As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1958 Alpha 1	Jupiter C	B	1 Feb 58	104.9	33.19	1620	357
1958 Beta 1	Vanguard	D	17 Mar 58	138.5	34.31	4326	651
1958 Beta 2	Vanguard	B	17 Mar 58	134.1	34.24	3964	633
1959 Alpha 1	Vanguard	B	17 Feb	125.2	32.88	3273	568
1959 Alpha 2	Vanguard	D	17 Feb	129.5	32.90	3663	555
1959 Eta 1	Vanguard	B	18 Sep	129.7	33.34	3758	471
1959 Nu 1*	Juno II	B	3 Mar	398 D	1.30	1.142AU	0.9871AU
1959 Iota 1	Juno II	B	13 Oct	101.1	50.33	1075	551
1959 Iota 2	Juno II	D	13 Oct	100.9	50.29	1044	561
1960 Alpha 1*	Thor Able	B	11 Mar	312 D	3.35	0.995AU	0.8061AU
1960 Beta 1	Thor Able	D	1 Apr	99.0	48.39	736	697
1960 Beta 2	Thor Able	C	1 Apr	99.1	48.38	747	693
1960 Beta 3	Thor Able	D	1 Apr	97.8	48.48	705	610
1960 Beta 4	Thor Able	D	1 Apr	99.8	48.15	803	704
1960 Gamma 2	Thor Able Star	C	13 Apr 60	94.1	51.25	589	358
1960 Gamma 4	Thor Able Star	D	13 Apr 60	96.8	51.24	721	487
1960 Zeta 1	Atlas Agena	A	24 May 60	94.4	33.04	495	483
1960 Eta 1	Thor Able Star	C	22 Jun 60	101.6	66.68	1056	611
1960 Eta 2	Thor Able Star	B	22 Jun 60	101.6	66.68	1051	613

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

\*Apelion perihelion in astronomical units, inclination to ecliptic.



REGISTRATION DATA FOR U.S. SPACE LAUNCHES (cont'd)  
As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Modal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1960 Eta 3	Thor Able Star	D	22 Jun 60	101.4	66.66	1033	613
1960 Iota 1	Thor Delta	C	12 Aug	114.7	47.21	1674	1218
1960 Iota 2	Thor Delta	D	12 Aug	118.0	47.25	1696	1492
1960 Iota 3	Thor Delta	D	12 Aug	118.2	47.23	1700	1504
1960 Iota 4	Thor Delta	D	12 Aug		INSUFFICIENT OBSERVATIONS		
1960 Iota 5	Thor Delta	D	12 Aug	118.3	47.27	1674	1546
1960 Nu 1	Thor Able Star	C	4 Oct 60	107.1	28.35	1212	974
1960 Nu 2	Thor Able Star	D	4 Oct 60	106.6	28.26	1198	945
1960 Xi 1	Juno II	B	3 Nov	112.3	49.97	2258	412
1960 Xi 2	Juno II	D	3 Nov	111.9	49.93	2230	404
1960 Xi 3	Juno II	D	3 Nov	109.4	49.40	2002	204
1960 Xi 4	Juno II	D	3 Nov	110.7	50.50	2096	426
1960 Pi 1	Delta	C	23 Nov	98.2	48.53	748	601
1960 Pi 2	Delta	D	23 Nov	98.0	48.52	709	629
1960 Pi 3	Delta	D	23 Nov	98.1	48.53	727	615
1960 Pi 4	Delta	D	23 Nov	98.2	48.50	731	624
1961 Alpha 1	Atlas Agena	A	31 Jan 61	94.7	97.42	538	467
1961 Alpha 2	Atlas Agena	D	31 Jan 61	94.6	97.42	539	459
1961 Delta 1	Scout	B	16 Feb	110.7	38.95	2164	356
1961 Delta 2	Scout	D	16 Feb	118.4	38.84	2584	648
1961 Delta 3	Scout	D	16 Feb		INSUFFICIENT OBSERVATIONS		
1961 Kappa 1	Thor Delta	B	25 Mar		POSITION UNCERTAIN		
1961 Nu 1	Juno II	B	27 Apr	107.8	28.77	1788	475
1961 Omicron 1	Thor Able Star	C	29 Jun 61	103.8	66.82	994	881
1961 Omicron 2	Thor Able Star	A	29 Jun 61	103.8	66.79	988	887

REGISTRATION DATA FOR U.S. SPACE LAUNCHES (cont'd)  
As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometers)	Perigee (Kilometers)
1961 Omicron 3*	Thor Able Star	D	29 Jun 61	103.3	66.75	984	849
1961 Rho 1	Thor Delta	C	12 Jul	100.3	47.88	818	738
1961 Rho 2	Thor Delta	D	12 Jul	100.3	47.90	799	751
1961 Rho 3	Thor Delta	D	12 Jul	98.8	47.93	796	610
1961 Rho 4	Thor Delta	D	12 Jul	101.9	47.84	941	766
1961 Sigma 1	Atlas Agena	A	12 Jul 61	161.4	91.20	3580	3305
1961 Sigma 3	Atlas Agena	D	12 Jul 61	161.1	91.22	3558	3300
1961 Sigma 4	Atlas Agena	D	12 Jul 61	161.8	91.23	3592	3326
1961 Upsilon 1	Delta	B	16 Aug		INSUFFICIENT OBSERVATIONS		
1961 A-Delta 1	Atlas Agena	A	21 Oct 61	165.9	95.92	3741	3505
1961 A-Delta 3	Atlas Agena	D	21 Oct 61	165.5	95.86	3709	3506
1961 A-Delta 4	Atlas Agena	D	21 Oct 61	166.3	95.86	3762	3519
1961 A-Eta 1	Thor Able Star	C	15 Nov 61	105.9	32.44	1121	948
1961 A-Eta 2	Thor Able Star	B	15 Nov 61	105.9	32.43	1107	964
1961 A-Eta 3	Thor Able Star	D	15 Nov 61	105.7	32.45	1117	938
1962 Alpha 1**	Atlas Agena	B	26 Jan	406.4D	.3988	1.163AU	0.9839AU
1962 Alpha 2**	Atlas Agena	D	26 Jan		INSUFFICIENT OBSERVATIONS		
1962 Beta 1	Delta	C	8 Feb	100.3	48.32	839	713
1962 Beta 2	Delta	D	8 Feb	101.3	48.14	943	703
1962 Beta 3	Delta	D	8 Feb	99.4	48.40	768	699
1963 Beta 4	Delta	D	8 Feb	100.2	48.27	836	710
1962 Zeta 1	Thor Delta	B	7 Mar	95.9	32.83	589	549

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

\*\*Aphelion perihelion in astronomical units, inclination to ecliptic.

REGISTRATION DATA FOR U.S. SPACE LAUNCHES (cont'd)  
As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1962 Zeta 2	Thor Delta	D	7 Mar	95.9	32.84	591	548
1962 Kappa 1	Atlas	B	9 Apr 62	152.9	86.60	3430	2759
1962 Kappa 3	Atlas	D	9 Apr 62	152.6	86.66	3356	2802
1962 Kappa 4	Atlas	D	9 Apr 62	153.3	86.65	3423	2796
1962 Mu 2	Atlas Agena	D	23 Apr	INSUFFICIENT OBSERVATIONS			
1962 Omicron 1	Delta	B	26 Apr	100.6	53.85	1180	394
1962 Omicron 2	Delta	D	26 Apr	100.5	53.84	1186	380
1962 A-Alpha 1	Thor Delta	C	19 Jun	100.4	58.09	980	582
1962 A-Alpha 2	Thor Delta	D	19 Jun	100.4	58.09	972	582
1962 A-Alpha 3	Thor Delta	D	19 Jun	101.7	58.21	1079	604
1962 A-Alpha 4	Thor Delta	D	19 Jun	99.1	57.99	865	566
1962 A-Epsilon 1	Thor Delta	C	10 Jul	157.6	44.80	5645	940
1962 A-Epsilon 2	Thor Delta	D	10 Jul	157.5	44.79	5632	940
1962 A-Omicron 1	Blue Scout	A	23 Aug 62	99.5	98.68	852	614
1962 A-Omicron 2	Blue Scout	D	23 Aug 62	98.2	98.68	755	589
1962 A-Omicron 3	Blue Scout	D	23 Aug 62	100.7	98.68	964	623
1962 A-Omicron 4	Blue Scout	D	23 Aug 62	99.5	98.68	843	622
1962 A-Rho 1*	Atlas Agena B	B	27 Aug	COMPUTATIONS IN PROGRESS			
1962 A-Rho 2*	Atlas Agena B	D	27 Aug	COMPUTATIONS IN PROGRESS			
1962 A-Upsilon 1	Thor Agena	A	1 Sep 62	92.1	82.79	483	273
1962 A-Psi 1	Thor Delta	C	18 Sep	98.7	58.32	716	680
1962 A-Psi 2	Thor Delta	D	18 Sep	98.6	58.31	709	682
1962 A-Psi 3	Thor Delta	D	18 Sep	99.4	58.44	756	702
1962 A-Psi 4	Thor Delta	D	18 Sep	98.0	58.19	685	645
1962 B-Alpha 1	Thor Agena B	B	29 Sep	105.5	80.47	1029	1004
1962 B-Alpha 2	Thor Agena B	D	29 Sep	105.5	80.46	1023	1005
1962 B-Alpha 3	Thor Agena B	D	29 Sep	105.4	80.48	1032	990
1962 B-Alpha 4	Thor Agena B	D	29 Sep	105.5	80.41	1031	1002
1962 B-Gamma 1	Thor Delta	B	2 Oct	2184.6	41.16	96222	2567
1962 B-Gamma 2	Thor Delta	D	2 Oct	INSUFFICIENT OBSERVATIONS			
1962 B-Eta 1*	Atlas Agena B	B	18 Oct	366D	.39011	1.052AU	.9490AU
1962 B-Eta 2*	Atlas Agena B	D	18 Oct	COMPUTATIONS IN PROGRESS			
1962 B-Kappa 1	Thor Agena	A	26 Oct 62	137.4	71.37	4685	196
1962 B-Lambda 1	Thor Delta	B	27 Oct	314.2	17.98	17565	318

\* Aphelion perihelion in astronomical units, inclination to ecliptic.

REGISTRATION DATA FOR U.S. SPACE LAUNCHES (cont'd)  
As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1962 B-Lambda 2	Thor Delta	D	27 Oct	INSUFFICIENT OBSERVATIONS			
1962 B-Mu 1	Thor Able Star	B	31 Oct 62	107.9	50.15	1196	1065
1962 B-Mu 2	Thor Able Star	D	31 Oct 62	107.6	50.14	1165	1068
1962 B-Tau 1	Thor Agena	A	13 Dec 62	111.6	70.33	2374	228
1962 B-Tau 2*	Thor Agena	A	13 Dec 62	113.7	70.33	2559	233
1962 B-Tau 4	Thor Agena	A	13 Dec 62	109.3	70.33	2160	227
1962 B-Tau 5	Thor Agena	A	13 Dec 62	111.5	70.32	2364	228
1962 B-Tau 6	Thor Agena	D	13 Dec 62	113.2	70.33	2512	235
1962 B-Upsilon 1	Thor Delta	C	13 Dec	185.0	47.51	7438	1323
1962 B-Upsilon 2	Thor Delta	D	13 Dec	184.8	47.90	7468	1274
1962 B-Chi 1	Scout	B	16 Dec	104.3	52.05	1194	736
1962 B-Psi 1	Scout	A	19 Dec 62	99.0	90.62	740	683
1962 B-Psi 2	Scout	D	19 Dec 62	97.7	90.75	712	584
1962 B-Psi 3	Scout	D	19 Dec 62	99.0	90.63	728	694
1962 B-Psi 4	Scout	D	19 Dec 62	100.1	90.47	846	684
1963 3A	Thor Agena	A	16 Jan 63	94.4	81.89	522	462
1963 4A	Thor Delta	C	14 Feb	INSUFFICIENT OBSERVATIONS			
1963 4B	Thor Delta	D	14 Feb	604.4	33.12	34374	253
1963 5A	Blue Scout	A	19 Feb 63	97.6	100.50	800	492
1963 5B	Blue Scout	D	19 Feb 63	97.6	100.50	807	485
1963 5C	Blue Scout	D	19 Feb 63	96.9	100.51	756	462
1963 5D	Blue Scout	D	19 Feb 63	98.3	100.48	841	514
1963 9A	Thor Delta	B	3 Apr	95.5	57.62	844	246
1963 13A	Thor Delta	C	7 May	225.2	42.76	10813	962
1963 13B	Thor Delta	D	7 May	225.0	42.73	10796	967
1963 14A	Atlas Agena	A	9 May 63	166.4	87.33	3650	3634
1963 14B	Atlas Agena	A	9 May 63	166.4	87.33	3671	3616
1963 14C	Atlas Agena	A	9 May 63	166.4	87.34	3680	3606
1963 14D	Atlas Agena	D	9 May 63	166.3	87.35	3673	3609

\* The United States report for the period ending 15 July 1963 should be amended to show that 1962 B-Tau 3 rather than 1962 B-Tau 2 was no longer in orbit as of 2400Z on 15 July 1963.



## REGISTRATION DATA FOR U.S. SPACE LAUNCEES (cont'd)

As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)	
1963 14E	Atlas Agena	D	9 May 63	166.0	87.47	3667	3589	
1963 14F	Atlas Agena	D	9 May 63	166.8	87.42	3670	3646	
1963 14G	Atlas Agena	D	9 May 63	166.4	87.33	3650	3634	
1963 14H	Atlas Agena	D	9 May 63	166.4	87.42	3700	3586	
1963 22A	Scout	A	16 Jun 63	99.6	90.01	764	718	
1963 22B	Scout	D	16 Jun 63	99.6	90.00	765	716	
1963 22C	Scout	D	16 Jun 63	101.2	90.20	900	726	
1963 22D	Scout	D	16 Jun 63	98.1	89.83	782	553	
1963 24A	Thor Delta	C	19 Jun	97.4	58.22	652	619	
1963 24B	Thor Delta	D	19 Jun	97.3	58.23	639	627	
1963 24C	Thor Delta	D	19 Jun	97.9	58.37	663	652	
1963 24D	Thor Delta	D	19 Jun	96.9	58.09	638	582	
1963 25B	Thor Agena	A	27 June 63	132.4	82.14	4111	339	
1963 26A	Scout	A	28 Jun 63	102.1	49.75	1291	426	
1963 27A	Thor Agena	A	29 Jun 63	94.7	82.32	519	484	
1963 27B	Thor Agena	D	29 Jun 63	93.9	82.31	476	457	
1963 30A	Atlas Agena	A	18 Jul 63	167.8	88.42	3713	3685	
1963 30B	Atlas Agena	A	18 Jul 63	167.8	88.41	3732	3666	
1963 30C	Atlas Agena	D	18 Jul 63	167.4	88.51	3716	3653	
1963 30D	Atlas Agena	A	18 Jul 63	167.9	88.51	3939	3469	
1963 30E	Atlas Agena	D	18 Jul 63	168.2	88.43	3755	3677	
1963 31A	Thor Delta	C	26 Jul	1436.2	33.88	35794	35786	
1963 31B	Thor Delta	D	26 Jul	INSUFFICIENT OBSERVATIONS				
1963 38A	Thor Able Star	D	28 Sep 63	107.0	89.91	1117	1060	
1963 38B	Thor Able Star	A	28 Sep 63	107.3	89.90	1131	1071	
1963 38C	Thor Able Star	A	28 Sep 63	107.3	89.90	1130	1071	
1963 38D	Thor Able Star	D	28 Sep 63	107.3	89.93	1135	1066	
1963 39A	Atlas Agena	A	17 Oct 63	105 hrs.	38.30	111137	102098	
1963 39B	Atlas Agena	A	17 Oct 63	39 hrs.	36.69	103852	208	
1963 39C	Atlas Agena	A	17 Oct 63	INSUFFICIENT OBSERVATIONS				
1963 42A	Thor Agena	A	29 Oct 63	89.7	89.90	272	239	
1963 42B	Thor Agena	A	29 Oct 63	92.9	89.97	555	283	
1963 46A	Thor Delta	B	27 Nov	5584.0	33.35	195572	194	

## REGISTRATION DATA FOR U.S. SPACE LAUNCHES (cont'd)

As of 31 December 1963

International Designation	Launch Vehicle	Satellite Category	Date of Launch	Nodal Period	Inclination	Apogee (Kilometres)	Perigee (Kilometres)
1963 47A	Atlas Centaur	A	27 Nov	107.7	30.39	1771	484
1963 47B	Atlas Centaur	D	27 Nov	107.1	30.08	1618	584
1963 47C	Atlas Centaur	D	27 Nov	107.4	30.08	1644	581
1963 47D	Atlas Centaur	D	27 Nov	107.9	29.94	1637	637
1963 47E	Atlas Centaur	D	27 Nov	108.2	30.62	1797	509
1963 47F	Atlas Centaur	D	27 Nov	108.5	30.49	1741	588
1963 47G	Atlas Centaur	D	27 Nov	107.7	30.00	1650	605
1963 49A	Thor Able Star	D	5 Dec 63	106.7	89.98	1077	1073
1963 49B	Thor Able Star	A	5 Dec 63	107.1	89.96	1122	1059
1963 49C	Thor Able Star	A	5 Dec 63	107.0	89.97	1123	1050
1963 49D	Thor Able Star	D	5 Dec 63	107.0	89.97	1117	1058
1963 53A	Scout	B	19 Dec	115.9	78.61	2399	590
1963 53B	Scout	D	19 Dec	115.9	78.62	2387	596
1963 53C	Scout	D	19 Dec	116.0	78.64	2399	597
1963 53D	Scout	D	19 Dec	116.0	78.59	2398	596
1963 53E	Scout	D	19 Dec	115.9	78.60	2396	594
1963 53F	Scout	D	19 Dec	115.9	78.62	2398	592
1963 53G	Scout	D	19 Dec	115.9	78.60	2395	591
1963 54A	Thor Delta	C	21 Dec	99.3	58.49	763	693
1963 54B	Thor Delta	D	21 Dec	99.3	58.49	753	693
1963 54C	Thor Delta	D	21 Dec	101.0	58.46	929	690
1963 55A	Thor Agena	A	21 Dec 63	64.9	89.70	337	178
1963 55B	Thor Agena	A	21 Dec 63	64.5	91.70	394	317