HISTORICAL OFFICE

OFFICE OF INFORMATION

INDEX OF MISSILE LAUNCHINGS BY MISSILE PROGRAM

JULY 1950 - JUNE 1960

FIRST TEN YEARS OF EFFORT BY THE ATLANTIC MISSILE RANGE

Group 4

Downgraded at 3 year intervals

COPY NO. 99

> The lessons of history correctly interpreted are vital to the national safety
>
> - Jerome Ellison

AIR FORCE MISSILE TEST CENTER

AIR RESEARCH AND DEVELOPMENT COMMAND

PATRICK AIR FORCE BASE, FLORIDA

 MTL 60-2544

DEC 15 1960

Tab 16

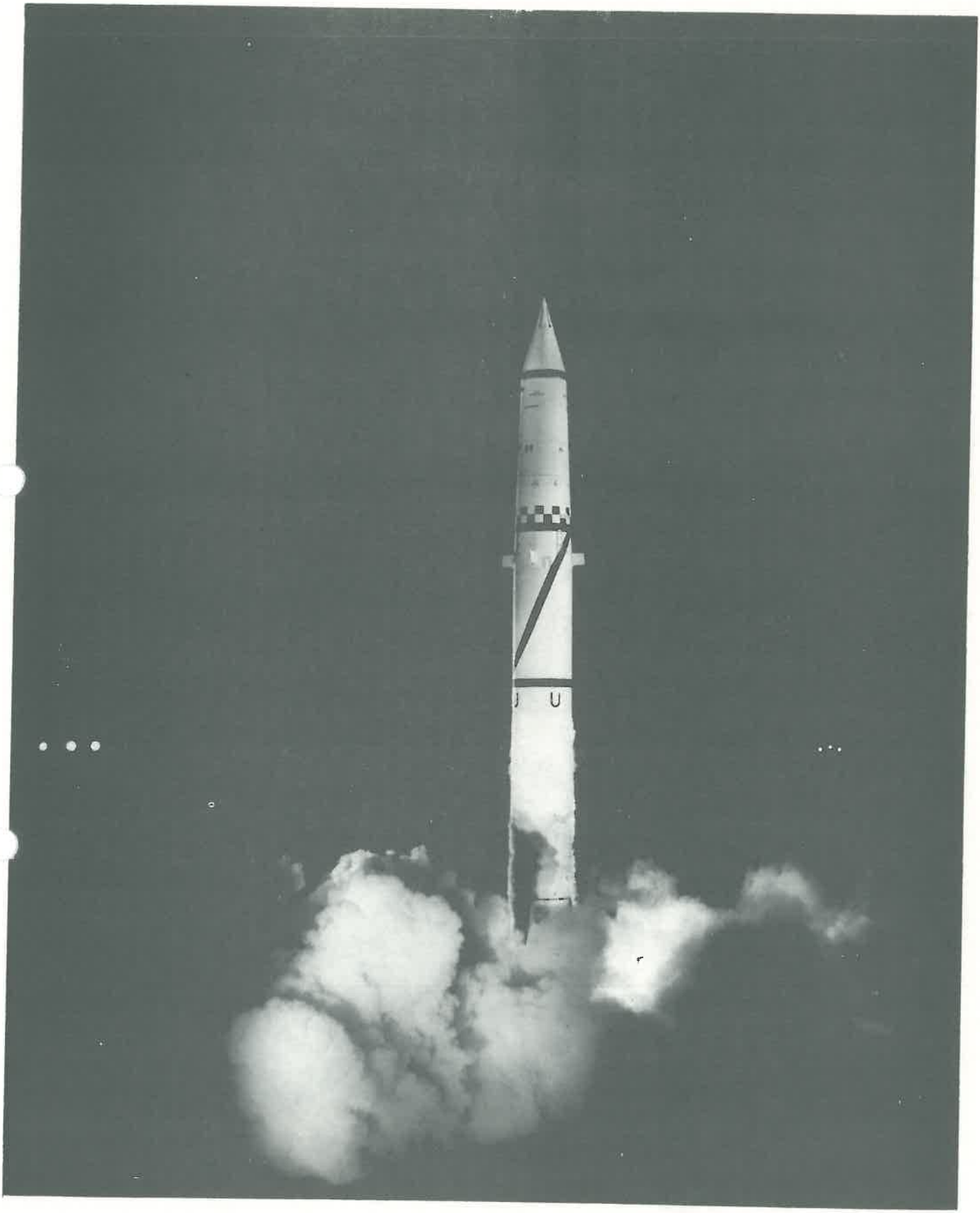
MISSILE	REDSTONE
SPONSOR	Army
CONTRACTOR	Chrysler Corporation

First R&D launch	20 Aug 53
Last R&D launch	5 Nov 58

Superseded by JUPITER program after 5 Dec 55 launch.

REDSTONE R&D launchings	18
Engineer user launchings	3
Total to date	21

REDSTONE engineer user launchings were initiated in July 1959.



17. ARMY'S REDSTONE TACTICAL BALLISTIC MISSILE. LAUNCHED FROM CAPE CANAVERAL, LAUNCHING SITE OF THE AIR FORCE MISSILE TEST CENTER.

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REDSTONE LAUNCHINGS

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
			JULY - DECEMBER 1953	
1	1	RS #1	20 Aug 53	1st REDSTONE launched. Largest missile launched to date at AMR.
			JANUARY - JUNE 1954	
2	1	RS #2	27 Jan 54	Speed, Mach 5.
3	2	RS #3	5 May 54	Exploded on pad just after lift-off.
			JULY - DECEMBER 1954	
4	1	RS #4	18 Aug 54	Satisfactory flight.
5	2	RS #6	17 Nov 54	Altitude of 129,000 ft.
			JANUARY - JUNE 1955	
6	1	RS #8	9 Feb 55	Test results satisfactory.
7	2	RS #9	20 Apr 55	First night flight.
8	3	RS #10	24 May 55	First to carry complete guidance up to cut-off.
			JULY - DECEMBER 1955	
9	1	RS #7	30 Aug 55	First REDSTONE to carry DOFL fuze.
10	2	RS #11	22 Sep 55	First to carry complete, active guidance system.
11	3	RS #12	5 Dec 55	Carried AZUSA as passenger.

Superseded by JUPITER program.

No more REDSTONE program launchings until May 1958 when training launchings were initiated.

REDSTONE LAUNCHINGS

(For Training Purposes)

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
			JANUARY - JUNE 1958	
12	1	46	11 Feb 58	Landed on target. Assigned objectives to support JUPITER program.
13-	2	43	27 Feb 58	Met test objectives. Assigned objectives to support JUPITER program.
14	3	1002	16 May 58	Training of 40th Field Artillery Group (Heavy). R&D objectives met.
15	4	48	11 Jun 58	Overshot target. Carried objectives in support of JUPITER program.
16	5	54	24 Jun 58	Landed on target. Carried objectives in support of JUPITER program.
			JULY - DECEMBER 1958	
17	1	56	17 Sep 58	Met test objectives.
18	2	57	5 Nov 58	Last R&D test launch.
			JANUARY - JUNE 1959	
No REDSTONES launched during first half 1959.				
			JULY - DECEMBER 1959	
19	1	2003	21 Jul 59	Engineer user test.
20	2	2004	4 Aug 59	Engineer user test.
			JANUARY - JUNE 1960	
21	1	2020	21 Mar 60	Engineer user test.

Tab 17

MISSILE	JUPITER
SPONSOR	Army
CONTRACTOR	Chrysler Corporation

First launch 14 Mar 56

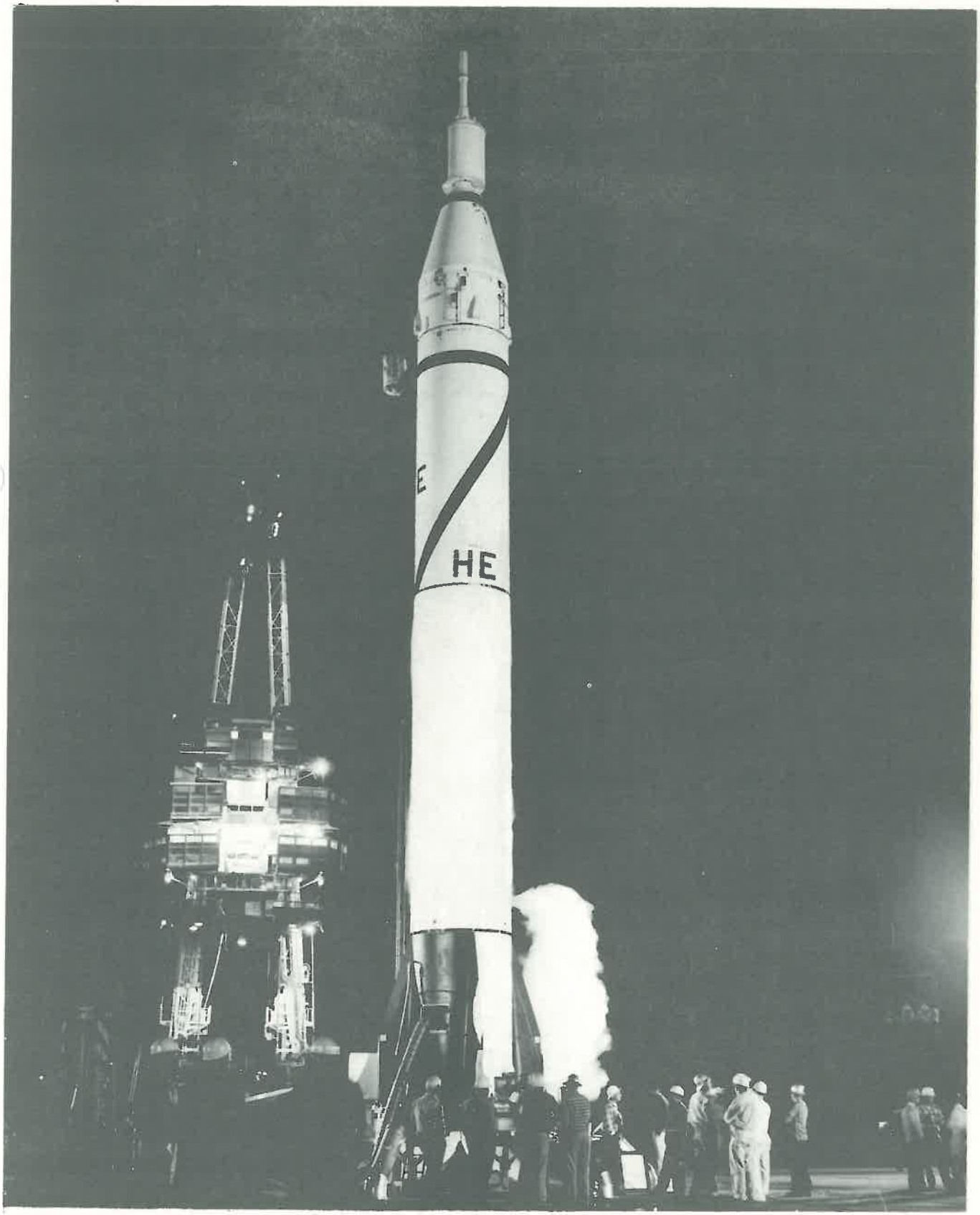
Placed first U.S. satellite in orbit 31 Jan 58.

Declared operationally ready after 6 May 59 launch.

Last R&D series launch 4 Feb 1960.

JUPITER A (modified REDSTONE missiles) launched	20
JUPITER C series launched	9
JUPITER missiles launched	29
Total launched at AMR	58

Program completed



AN ARMY JUPITER-C MISSILE, CARRYING A SATELLITE AS ITS PAYLOAD, BEING PREPARED FOR LAUNCHING AT CAPE CANAVERAL, LAUNCHING SITE OF THE AIR FORCE MISSILE TEST CENTER.

JUPITER LAUNCHINGS

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
			JANUARY - JUNE 1956	
1	1	JUPITER A No. 18	14 Mar 56	First launched under JUPITER program. Third fully guided REDSTONE.
2	2	JUPITER A No. 19	15 May 56	Guidance test.
			JULY - DECEMBER 1956	
3	1	JUPITER A No. 13	19 Jul 56	First Chrysler built JUPITER A. Tested complete inertial guidance system.
4	2	JUPITER A No. 20	8 Aug 56	Test objectives met.
5	3	JUPITER C No. 27	19 Sep 56	First JUPITER C launch started Phase II re-entry tests.
6	4	JUPITER A No. 14	18 Oct 56	Used final type inertial guidance.
7	5	JUPITER A No. 25	30 Oct 56	Carried warhead. Broke-up in mid-air and landed on Cape.
8	6	JUPITER A No. 28	13 Nov 56	Carried warhead for deep water impact.
9	7	JUPITER A No. 15	29 Nov 56	Used U-DETA fuel.
10	8	JUPITER A No. 22	18 Dec 56	Used U-DETA fuel.

JUPITER LAUNCHINGS

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
			JANUARY - JUNE 1957	
11	1	JUPITER A No. 16	18 Jan 57	Phase I, test guidance.
12	2	JUPITER No. 1-A	1 Mar 57	First operational prototype JUPITER. Exploded at T+75 sec.
13	3	JUPITER A No. 32	14 Mar 57	1st JUPITER shipped directly from Chrysler plant and launched without static test.
14	4	JUPITER A No. 30	27 Mar 57	Phase I guidance test.
15	5	JUPITER No. 1-B	26 Apr 57	2nd JUPITER missile Phase III. Disintegrated at T+93 sec.
16	6	JUPITER-C No. 34	15 May 57	2nd JUPITER C. 3-stage re-entry vehicle. First to carry nose cone. Separation did not occur. No recovery made.
17	7	JUPITER No. 1	31 May 57	3rd JUPITER missile Phase III. Set record in distance and altitude for single stage missile.
18	8	JUPITER A No. 31	26 Jun 57	Phase I guidance test.

JUPITER LAUNCHINGS

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
			JULY - DECEMBER 1957	
19	1	JUPITER A No. 35	12 Jul 57	Met all test objectives.
20	2	JUPITER A No. 37	25 Jul 57	Met test objectives.
21	3	JUPITER C No. 40	8 Aug 57	3rd JUPITER-C. First recovery of long range nose cone by Navy. within 3 hours.
22	4	JUPITER #2	28 Aug 57	4th JUPITER. Met test objectives.
23	5	JUPITER A No. 38	10 Sep 57	First to use prototype tactical launching equipment.
24	6	JUPITER A No. 39	2 Oct 57	Met test objectives.
25	7	JUPITER #3	22 Oct 57	1st prototype JUPITER to employ all inertial guidance.
26	8	JUPITER A No. 41	30 Oct 57	Range Safety destruct.
27	9	JUPITER #3A	26 Nov 57	Thrust failure caused premature impact. Partial success.
28	10	JUPITER A No. 42	10 Dec 57	Met test objectives.
29	11	JUPITER #4	18 Dec 57	Thrust failure caused premature impact.

JUPITER LAUNCHINGS

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
		JANUARY - JUNE 1958		
30	1	JUPITER-A #45	14 Jan 58	Met test objectives.
31	2	JUPITER-C ~~#27~~ 29	31 Jan 58	Placed EXPLORER I, first U.S. satellite, in earth orbit.
32	3	JUPITER-C #26	5 Mar 58	Carried EXPLORER II. Try for orbit failed.
33	4	JUPITER-C #24	26 Mar 58	Placed satellite (EXPLORER III) in orbit.
34	5	JUPITER #5	18 May 58	First recovery of IREM nose cone.
		JULY - DECEMBER 1958		
35	1	JUPITER 6A	17 Jul 58	First fully guided JUPITER. 2nd nose recovery.
36	2	JUPITER #44C	26 Jul 58	Placed EXPLORER IV in earth orbit.
37	3	JUPITER #47C	24 Aug 58	Carried EXPLORER V. Failed to orbit.
38	4	JUPITER #7	27 Aug 58	2nd fully guided flight.
39	5	JUPITER #9	9 Oct 58	Fire in tail section caused Range Safety destruct.
40	6	JUPITER #49C	22 Oct 58	Satellite payload of NACA high visibility sphere 12 ft. diameter. Failed to orbit.
41	7	JUPITER #13	13 Dec 58	Carried monkey named GORDO. Nose not recovered.

Note: REDSTONE missiles no. 43, 46, 48, and 54 carried test objectives in support of the JUPITER program. (See Tab 16)

JUPITER LAUNCHINGS

TOTAL TO DATE	DURING PERIOD	MISSILE NUMBER	DATE LAUNCHED	REMARKS
		JANUARY - JUNE 1959		
42	1	JUPITER #21	21 Jan 59	First test of production model direct from factory.
43	2	JUPITER #22	27 Feb 59	Met test objectives.
44	3	JUPITER #22A	3 Apr 59	Met test objectives.
45	4	JUPITER #12	6 May 59	JUPITER declared operationally ready after this launch.
46	5	JUPITER #17	14 May 59	Met test objectives.
47	6	JUPITER #18	28 May 59	Carried two monkeys ABLE and BAKER. Recovered in good health.
		JULY - DECEMBER 1959		
48	1	JUPITER #15	9 Jul 59	All objectives accomplished.
49	2	JUPITER #19	26 Aug 59	All objectives accomplished.
50	3	JUPITER #23	16 Sep 59	Structural failure & explosion 13 seconds after launch.
51	4	JUPITER #24	30 Sep 59	Met test objectives.
52	5	JUPITER #31	21 Oct 59	All objectives accomplished. Nose cone hit target.
53	6	JUPITER CM 33	4 Nov 59	All objectives accomplished.
54	7	JUPITER #25	18 Nov 59	First short range test. Met test objectives.
55	8	JUPITER AM-32	9 Dec 59	Met test objectives.
56	9	JUPITER AM-26	16 Dec 59	Met test objectives.
		JANUARY - JUNE 1960		
57	1	JUPITER #28	25 Jan 60	Met test objectives.
58	2	JUPITER #30	4 Feb 60	Last of JUPITER R&D series.