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PROGRAM 241

MISSILE: SLV-2A No. 450 and SS-01B No. 1623

LAUNCHED: 1332:13.84 PST, 2 February 1966, Space Launch Complex 3, Pad 1

LAUNCH CONTROLLERS: Capt Durham & Capt Smathers

COUNTDOWN HISTORY:

First Countdown: The first countdown was initiated at 0601 PST on 1 February 1966 but was aborted at 1355 PST due to an SS-01B T/M problem.

Second Countdown: The second countdown was initiated at 0531 PST on 2 February 1966 and proceeded to liftoff with two holds being imposed. Hold number one was imposed at T-60 minutes to adjust the countdown to an optimum liftoff time. Hold number two was imposed at T-16 minutes for further evaluation of the SS-01B S-Band beacon.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	56.00	55.56
	MECO (Command For)	149.59	152.19
	VECO	158.59	161.12
	Separation	165.09	167.07
	Ignition	170.58	173.14
	Burnout (Shutdown by VM)	412.97	415.61

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,342	12,375
	Injection Inertial Velocity (fps)	25,815	25,821
	Apogee (nm)	235.5	235.4
	Perigee (nm)	99.60	99.37
	Period (min)	90.68	90.66
	Inclination Angle (deg)	74.98	75.05

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdowns.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second on the 160th orbit. Both air recoveries were successful.

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Control No. VWZBC 6-14

'Feustio' (PH)

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PROGRAM 770

4 MAR 1966

MISSILE: SLV-2A No. 428 and SS-01B No. 2703

LAUNCHED: 1145:01.81 PST, 9 February 1966, Complex 75-1, Pad 2

LAUNCH CONTROLLERS: Lt Franklin & Lt Klinger

COUNTDOWN HISTORY:

First Countdown: The first countdown was initiated at 0231 PST, on 2 February 1966, but was cancelled in Task 4 due to an LMSC AGE problem and interference with another operation.

Second Countdown: The second countdown was initiated at 0201 PST, on 4 February 1966, but was cancelled at 0920 PST due to a payload problem.

Third Countdown: The third countdown was initiated at 0201 PST, on 9 February 1966 and proceeded to liftoff with one hold imposed at T-20 minutes to adjust the countdown to an optimum liftoff time.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	MECO (Command for)	151.25	151.31
	VECO	160.25	160.25
	Separation	164.25	164.84
	Ignition	202.25	202.23
	Burnout (Shutdown by VM)	439.01	442.00

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,261	12,246
	Apogee (nm)	273.83	288.51
	Perigee (nm)	283.38	281.85
	Period (min)	94.76	94.85
	Inclination Angle (deg)	82.10	82.08

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem was encountered during the countdown:

1. An open wire in P-201 cable in the pad AGE (umbilical mast) caused the first countdown to be cancelled.

REMARKS: There were no recoverable capsules in the payload of this vehicle. This was the third launch under Program 770.

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Control No. VWZBC 6-18

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PROGRAM 241

23 MAR 1966

MISSILE: SLV-2A No. 452 and SS-01B No. 1622

LAUNCHED: 1402:03.04 PST, 9 March 1966, Complex 75-3, Pad 4

LAUNCH CONTROLLERS: Lt Burch & Lt Sobel

COUNTDOWN HISTORY: The countdown was initiated at 0631 PST on 9 March 1966, and proceeded to liftoff with no holds imposed.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	65.00	65.25
	MECO (Command For)	149.24	149.86
	VECO	158.24	158.78
	Separation	164.74	164.90
	Ignition	170.24	170.80
	Burnout (Shutdown by VM)	410.67	410.33

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,246.1	12,231.4
	Injection Inertial Velocity (fps)	25,815.7	25,829.8
	Apogee (nm)	235.52	237.97
	Perigee (nm)	99.61	97.97
	Period (min)	90.68	90.71
	Inclination Angle (deg)	75.00	75.04

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdown.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second on the 159th orbit. Both air recoveries were successful.

Control No. VWZBC 6-20

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1031

PROGRAM 241

MISSILE: SLV-2A No. 474 and SS-01B No. 1627

LAUNCHED: 1402:55.17 PST, 7 April 1966, Complex 1, Pad 1

LAUNCH CONTROLLERS: Capt Bellia and Capt Hilliard

COUNTDOWN HISTORY: The countdown was initiated at 0701 PST on 7 April 1966, and proceeded to liftoff with no holds imposed.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	57.00	57.35
	MECO (Command For)	149.50	149.37
	VECO	158.50	158.34
	Separation	165.00	164.49
	Ignition	170.50	170.29
	Burnout (Shutdown by VM)	411.72	415.18

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,308.7	12,138.9
	Injection Inertial Velocity (fps)	25,684.3	25,670.4
	Apogee (nm)	184.44	174.06
	Perigee (nm)	107.66	106.47
	Period (min)	89.87	89.68
	Inclination Angle (deg)	75.00	75.08

AEROSPACE GROUND EQUIPMENT PERFORMANCE: Phase IV of Terminal Countdown was approximately 1.5 minutes longer duration than predicted due to an abnormally low fuel storage tank pressure (DAC-AGE).

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 113th orbit and the second on the 177th orbit. Both air recoveries were successful.

Control No. VWZBC 6-24

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1032

PROGRAM 241

MISSILE: SLV-2A No. 465 and SS-01B No. 1625

LAUNCHED: 1225:25.87 PDT, 3 May 1966, Complex 75-3, Pad 5

LAUNCH CONTROLLERS: Capt McNab & Capt Sanders

COUNTDOWN HISTORY: The countdown was initiated at 0600 PDT on 3 May 1966 (one hour later than originally scheduled, because SLV-2A and SS-01B destruct and arming checks had been performed on R-1 day) and proceeded to liftoff with two holds being imposed. Hold number one was imposed at T-20 minutes to adjust the countdown to a nominal liftoff time. Hold number 2 was imposed at T-11 minutes because of no SLV-2A AGE power indication being received at the blockhouse. A circuit breaker in the EET was reset and the countdown resumed.

FLIGHT PERFORMANCE:

Event	Predicted Time	Actual Time
1. Solid Separation	65.00	65.37
MECO (Command for)	148.46	149.25
VECO	157.46	158.16
Separation	163.96	No Indication
Ignition	169.46	169.91
Engine Shutdown	411.57	392.23

2. The Thor Airborne Systems performed satisfactorily, however, the Agena apparently failed to separate from the booster-adapter following separation command.

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem occurred during the countdown.

Blockhouse landline recordings of payload channels exhibited excessive noise. All payload indications on TM were normal and the noise problem was determined to be in the AGE.

REMARKS: This vehicle impacted approximately 600 nautical miles down range.

~~CONFIDENTIAL~~ Control No. VWZBC 6-30

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PROGRAM NASA 8-4

MISSILE: SLV-2A No. 456 and S-01 No. 6202

LAUNCHED: 0055:34.84 PDT, 15 May 1966, Complex 75-1, Pad 1

LAUNCH CONTROLLERS: Capt Johnston and Capt Haber

COUNTDOWN HISTORY:

First Countdown: The first countdown was initiated at 1215 PDT, on 12 May 1966 and proceeded to Task 16 when it was aborted due to lack of confidence in the Ground Guidance System.

Second Countdown: The second countdown was initiated at 1215 PDT, on 13 May 1966 and proceeded to 2351 PDT when it was aborted due to lack of confidence in the S-01 control system.

Third Countdown: The third countdown was initiated at 1215 PDT, on 14 May 1966 and proceeded to liftoff with no holds imposed.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	MECO (Command For)	149.48	149.75
	VECO	158.48	158.71
	Separation	167.64	167.95
	Ignition (1st)	193.74	194.52
	Burnout (1st)	429.63	425.09

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	11,901	11,916
	Apogee (nm)	597.55	627.09
	Perigee (nm)	606.66	591.21
	Period (min)	107.39	108.06
	Inclination Angle (deg)	99.95	100.31

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problems were encountered during the countdowns:

1. An approximate 20 minute delay occurred in Task 8 while the umbilical mast flag had to be adjusted.

2. In Task 8 a pad TV camera malfunctioned and was replaced.

REMARKS: This was the first Thor-Agena launch under the NASA Program in calendar year 1966.

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#2181 66-42
CORONA 109 / KH-4A 1033-182

PROGRAM 241

1 5 JUN 1966

MISSILE: SLV-2A No. 469 and SS-01B No. 1630

LAUNCHED: 1900:32.97 PDT, 23 May 1966, Complex PALC-1, Pad 1

LAUNCH CONTROLLERS: Capt Smathers & Capt Hilliard

COUNTDOWN HISTORY: The countdown was initiated at 1131 PDT, 23 May 1966, and proceeded to liftoff with one hold imposed from 1730 to 1800 to adjust the countdown to a nominal liftoff time of 1900.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	57.00	57.07
	MECO (Command For)	149.90	152.02
	VECO	158.90	160.80
	Separation	165.40	167.69
	Ignition	170.90	172.93
	Burnout (Shutdown by VM)	414.21	419.10

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,316	12,203
	Injection Inertial Velocity (fps)	25,519	25,525
	Apogee (nm)	157.11	158.25
	Perigee (nm)	100.13	102.65
	Period (min)	88.96	89.02
	Inclination Angle (deg)	66.01	66.05

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problems occurred during the countdown:

1. Tasks 3 and 4 were delayed while LMSC adjusted the payload shroud retaining bands to comply with an engineering change order.

2. During the first eight tasks, voice communication from the RSO and MFSO to the LOCC was inoperative. Service was restored upon repair of an electrical patch.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 82nd orbit and the second on the 178th orbit. Both air recoveries were successful.

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Control No. VWZBC 6-35

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#2227 66-55

CORONA 110 / KH-4A 1034-182

PROGRAM 241

13 JUL 1966

MISSILE: SLV-2A No. 466 and SS-01B No. 1626

LAUNCHED: 1431:29.88 PDT, 21 June 1966, Complex SLC 1, Pad East

LAUNCH CONTROLLERS: Capt Sobel & Capt Sanders

COUNTDOWN HISTORY: The countdown was initiated at 0731 PDT on 21 June 1966, and proceeded to liftoff with no holds imposed.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	65.00	65.45
	MECO (Command For)	148.85	149.25
	VECO	157.85	158.12
	Separation	164.35	164.09
	Ignition	169.85	170.17
	Burnout (Shutdown by VM)	412.25	414.27

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,234.9	12,006.7
	Injection Inertial Velocity (fps)	25,686.6	25,711.2
	Apogee (nm)	192.50	202.39
	Perigee (nm)	109.51	106.46
	Period (min)	90.07	90.16
	Inclination Angle (deg)	80.00	80.11

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem was encountered during countdown:

1. In Task 9 (SS-01B Tanking) the LMSC (AGE) measurements for fuel and oxidizer transfer line pressure were intermittent.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second on the 161th orbit. Both air recoveries were successful.

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Control No. VWZBC 6-41

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PROGRAM NASA

MISSILE: SLV-2A No. 473 and SS-01B No. 6311

LAUNCHED: 1712:02.44 PDT, 23 June 1966, Complex SLC-2, Pad East

LAUNCH CONTROLLERS: Capt Johnston & Capt Haber

COUNTDOWN HISTORY: The countdown was initiated at 0649 PDT on 23 June 1966, and proceeded to liftoff with one hold imposed at T-16 minutes from 1634 to 1656 for range clearance (ship in the predicted solid motor drop area).

FLIGHT PERFORMANCE:

	EVENT	PREDICTED TIME	ACTUAL TIME
1.	Solid Separation	65.0	65.13
	MECO (Command For)	148.68	149.28
	VECO	157.68	158.26
	Separation	164.18	164.74
	Ignition	183.68	184.30
	First Burn Cutoff	415.83	421.62
	Second Burn (MPR)	4352.68	*
	Second Burn Cutoff	4365.00	*

*Reliable data not available.

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	EVENT	PREDICTED	ACTUAL
3.	MECO Inertial Velocity (fps)	12,517.3	12,333.00
	Injection Inertial Velocity (fps)	28,469.9	28,461.7
	Apogee (nm)	2,293.52	2,303.29
	Perigee (nm)	2,303.69	2,280.02
	Period (min)	181.67	181.31
	Inclination Angle (deg)	87.00	86.95

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdown.

REMARKS: This was the second Thor-Agena launch under the NASA program in the Calendar Year 1966.

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PROGRAM 241

FIRST THORAD

MISSILE: SLV-2G No. 506 and SS-01B No. 1631

LAUNCHED: 1346:03.29 PDT, 9 August 1966, Complex SLC 1, Pad West

LAUNCH CONTROLLERS: Capt Sanders and Lt Burch

COUNTDOWN HISTORY: The countdown was initiated at 0616 PDT on 9 August 1966, and proceeded to liftoff at the opening of the scheduled launch window with no holds imposed.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	102.00	102.61
	MECO (Command For)	220.01	217.16
	VECO	229.01	226.07
	Separation	235.51	232.68
	Ignition	241.01	238.11
	Burnout (Shutdown by VM)	480.31	479.98

2. Both THORAD and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,779	12,631
	Injection Inertial Velocity (fps)	25,661.1	25,662
	Apogee (nm)	164.91	164.60
	Perigee (nm)	105.06	104.20
	Period (min)	89.48	89.46
	Inclination Angle (deg)	100.01	100.11

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem was encountered during the countdown:

1. During SS-01B 10% oxidizer tanking, minor leakage occurred around a filter cap and the body of a valve in the AGE.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 115th orbit and the second on the 212th orbit. Both air recoveries were successful.

This was the first vehicle utilizing a THORAD/AGENA combination and the first use of CASTOR II Solid Motors.

Control No. VWZBC 6_45

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PROGRAM 241

MISSILE: SLV-2A No. 477 and SS-01B No. 1628

LAUNCHED: 1414:04.96 PDT, 20 September 1966, Complex SLC 3, Pad West

LAUNCH CONTROLLERS: Capt. Hilliard & Capt. Durham

COUNTDOWN HISTORY: The countdown was initiated at 0701 PDT on 20 September 1966 and proceeded to Liftoff, with one hold imposed by WTR at T-16 for range clearance (train in launch corridor).

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	56.00	56.70
	MECO (Command For)	149.07	153.81
	VECO	158.07	162.47
	Separation	164.57	168.52
	Ignition	170.07	174.54
	Burnout (Shutdown by VM)	415.29	422.27

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,283.1	12,235.0
	Injection Inertial Velocity (fps)	25,848.6	25,820.2
	Apogee (nm)	254.89	243.90
	Perigee (nm)	99.62	99.55
	Period (min)	91.06	90.85
	Inclination Angle (deg)	85.00	85.06

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during countdown.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second on the 160th orbit.. Both air recoveries were successful.

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CONTROL NUMBER
VWZBC 6-50

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SECOND THORAD

FILE - OPS 4-6

PROGRAM 846

MISSILE: SLV-2G No. 507 and SS-01B No. 1632

LAUNCHED: 1153:02.49 PST, 8 November 1966, Complex SLC-1, Pad West

LAUNCH CONTROLLERS: Lt. Burch and Lt. Sharkey

#2537 66-102
CORONA 113 / KH-4A 1037-1&2

COUNTDOWN HISTORY:

First Countdown Attempt: The countdown was initiated at 0431 PST, 7 November 1966, and proceeded to Task 9 (Orbital Stage Propellant Tanking) when it was aborted at T-59 minutes after the SS-01B fuel and oxidizer vent pressure indications were erroneous due to excess moisture in mast cable connectors.

Second Countdown: The countdown was initiated at 0431 PST, 8 November 1966, and proceeded to liftoff with one (1) hold imposed at T-2 minutes, 55 seconds when 100 percent fuel load was indicated, but less than the nominal fuel had been transferred to the SLV-2G. The required amount of fuel was transferred by manual operation of the equipment.

FLIGHT PERFORMANCE:

Event	Predicted Time	Actual Time
1. Solid Separation	102.00	102.87
MECO (Command For)	222.75	223.69
VECO	231.75	230.21
Separation	238.75	236.56
Ignition	243.75	242.12
Burnout (Shutdown by VM)	487.29	483.87*

2. Both THORAD and AGENA Airborne Systems performed satisfactorily.

Event	Predicted	Actual
3. MECO Inertial Velocity (fps)	12,799.0	12,870.0
Injection Inertial Velocity (fps)	25,710.9	25,735.2
Apogee (nm)	171.87	179.01
Perigee (nm)	98.15	94.45
Period (min)	89.48	89.54
Inclination Angle (deg)	100.00	100.07

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdown.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 66th orbit and the second on the 195th orbit. Both air recoveries were successful.

*Down Range Ship Report

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Control No. VWZBC 6-51

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PROGRAM 770

13 FEB 1967

MISSILE: SLV-2A No. 459 and SS-01B No. 2731

LAUNCHED: 0400:06.27 PST, 29 December 1966, Complex SLC-2, Pad West

LAUNCH CONTROLLERS: Capt. Haber & Lt. Franklin

COUNTDOWN HISTORY: The countdown was initiated at 1935 PST on 28 December 1966 and proceeded to liftoff with one (1) hold imposed at 0200 for sixty-six (66) minutes due to an accumulation of task delays which were caused by an R-1 day problem.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	65.00	64.94
	MECO (Command For)	149.85	151.42
	VECO	158.85	160.30
	Separation	165.35	167.37
	Ignition	200.85	202.32
	Burnout (Shutdown by VM)	438.39	441.35

2. Both THOR and AGENA Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,452.6	12,490.0
	Injection Inertial Velocity (fps)	24,987.2	24,990.5
	Apogee (nm)	271.78	269.13
	Perigee (nm)	274.54	273.20
	Period (min)	94.52	94.45
	Inclination Angle (deg)	75.10	75.03

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdown.

REMARKS: There were no recoverable capsules in the payload of this vehicle. This was the fourth launch under Program 770.

DOWNGRADED AT 3 YEAR INTERVALS; DECLASSIFIED AFTER 12 YEARS. DOD DIR 5200.10

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Control No. VWZBC 7-5

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PROGRAM 846

16 FEB 1967

MISSILE: SLV-2A No. 495 and SS-01B No. 1629

LAUNCHED: 1328:21.38 PST, 14 January 1967, Complex SLC 3, Pad West

LAUNCH CONTROLLERS: Captain Bellia and Captain Durham

COUNTDOWN HISTORY: The countdown was initiated at 0541 PST on 14 January 1967 and proceeded to liftoff with one hold for 18 minutes imposed at T-16 minutes for completion of work which was behind schedule.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	56.00	55.98
	MECO (Command For)	149.80	149.95
	VECO	158.80	158.97
	Separation	165.30	164.70
	Ignition	170.80	170.85
	Burnout (Shutdown by VM)	414.21	413.28

2. Both THOR/AGENA Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,307.8	12,360.0
	Injection Inertial Velocity (fps)	25,763.8	25,774.2
	Apogee (nm)	204.95	210.61
	Perigee (nm)	99.49	99.71
	Period (min)	90.11	90.18
	Inclination Angle (deg)	80.00	80.08

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdown.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second on the 193rd orbit. Both air recoveries were successful.

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PROGRAM 846

9 MAR 1967

MISSILE: SLV-2A No. 493 and SS-01B No. 1635

LAUNCHED: 1402:15.16 PST, 22 February 1967, Complex SLC-3, Pad West

LAUNCH CONTROLLERS: Captain Bellia and Captain Durham

COUNTDOWN HISTORY: The countdown was initiated at 0701 PST on 22 February 1967 and proceeded to liftoff with one hold imposed at T-11 seconds for one minute and fifteen seconds because Phase 5 of the terminal count was requiring longer than scheduled to complete.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	56.00	56.68
	MECO (Command For)	150.00	151.01
	VECO	159.00	160.00
	Separation	165.50	166.05
	Ignition	171.00	171.93
	Burnout (Shutdown by VM)	413.47	415.19

2. Both Thor and Agena airborne systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,324.1	12,365.0
	Injection Inertial Velocity (fps)	25,763.7	25,787.0
	Apogee (nm)	204.95	209.92
	Perigee (nm)	99.46	97.65
	Period (min)	90.11	90.18
	Inclination Angle (deg)	80.00	80.03

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem was encountered during the countdown.

1. In Task 6, during SS-01B Guidance Steering Commanding, abnormal indications for yaw gyro output were received at the blockhouse Guidance Console. Evaluation indicated that the problem was due to a defect in a meter monitoring system in the blockhouse console.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second on the 177th orbit. Both air recoveries were successful.

Control No. VWZBC 7-11

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File OPS 4-6 RS

PROGRAM 846

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MISSILE: SLV-2A No. 501 and SS-01B No. 1636

LAUNCHED: 1054:23.03 PST, 30 March 1967, Complex SLC-3, Pad West

LAUNCH CONTROLLERS: Captain Hilliard and Lieutenant Woodall

COUNTDOWN HISTORY: The countdown was initiated at 0331 PST on 30 March 1967, and proceeded to liftoff with two holds imposed. The first hold was imposed at T-16 minutes for analysis of wind trajectory data and the second hold was imposed at T-12 minutes for range clearance.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	56.0	56.26
	MECO (Command For)	151.33	152.11
	VECO	160.33	161.04
	Separation	166.83	167.26
	Ignition	172.33	173.00
	Burnout (Shutdown by VM)	413.33	419.83

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	12,281.1	12,345.0
	Injection Inertial Velocity (fps)	25,781.2	25,779.2
	Apogee (nm)	214.95	216.19
	Perigee (nm)	99.56	100.10
	Period (min)	90.30	90.34
	Inclination Angle (deg)	85.01	85.06

AEROSPACE GROUND EQUIPMENT PERFORMANCE: There were no AGE problems encountered during the countdown.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 81st orbit and the second capsule on the 145th orbit. Both air recoveries were successful.

DOWNGRADE AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

per VWZBC Ltr 13Oct67

~~DOWNGRADE AT 3 YEAR INTERVALS; DECLASSIFIED AUTOMATICALLY AFTER 12 YEARS DOD DIR 5200.10~~

Control No. VWZBC 7-21

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~~CONFIDENTIAL~~

File OPS 9-6

[redacted] ~~CONFIDENTIAL~~

PROGRAM 846

1 JUN 1967

MISSILE: SLV-2G No. 508 and SS-01B No. 1634

LAUNCHED: 1450:42.16 PDT, 9 May 1967, Complex SLC-1, Pad East

LAUNCH CONTROLLERS: Capt. Burch and Lt. Dubose

COUNTDOWN HISTORY: The countdown was initiated at 0616 hours PDT on 9 May 1967 and proceeded to liftoff with one hold imposed at T-26 minutes for a WECO Guidance Station problem. The hold was continued for Range clearance (boat and train in launch area).

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	102.00	102.67
	MECO (Command For)	219.92	220.35
	VECO	228.92	229.36
	Separation	235.92	235.51
	Ignition	240.92	241.25
	Burnout (shutdown by VM)	485.40	488.11*

2. Both THORAD and AGENA Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	13,163	13,192
	Injection Inertial Velocity (fps)	25,848.7	26,142.5
	Apogee (nm)	255.04	431.49
	Perigee (nm)	100.15	99.95
	Period (min)	91.04	94.40
	Inclination Angle (deg)	85.00	85.05

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem was encountered during the countdown:

1. In Task 9 a power supply unit in the LMSC (AGE) Fuel Transfer Set malfunctioned and was replaced.

REMARKS: This vehicle carried two recoverable capsules. The first capsule was ejected on the 96th orbit and the second capsule on the 215th orbit. Both air recoveries were successful.

*A malfunction in the velocity meter allowed the SS-01B engine to burn to a propellant depletion shutdown.

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File OPS 4-6

~~CONFIDENTIAL~~

1 AUG 1967

PROGRAM 770

MISSILE: SLV-2/443 and SS-01B/2704

LAUNCHED: 0230:48.37 PDT, 31 May 1967, SLC-2, West Pad

LAUNCH CONTROLLERS: Major Haber

COUNTDOWN HISTORY: The first countdown on 5 April 1967 was aborted due to a malfunction of a Propellant Isolation Valve (PIV) in an SS-01B during a launch from Cape Kennedy. The second countdown was initiated at 1916 hours PDT on 30 May 1967 and proceeded to liftoff at 0230:48.37 PDT on 31 May 1967.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	N/A	
	S-1 Command for MECO	149.32 sec	145.95 sec
	VECO	158.31 sec	154.89 sec
	Separation Complete	165.31 sec	161.63 sec
	1st Burn Ignition	187.31 sec	183.83 sec
	1st Burn Shutdown	426.06 sec	420.70 sec

2. Both Thorad and Agena airborne systems performed satisfactorily.

	Event	Predicted	Actual
3.	2nd Injection Inertial Velocity (fps)	24,239.3	24,239
	Apogee Altitude (nm)	500.02	503.4
	Perigee Altitude (nm)	508.74	510.4
	Period (min)	103.52	103.44
	Inclination Angle (deg)	70.00	70.05

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem occurred during the second countdown: In terminal countdown the DAC Fuel Counter sent a 100 percent fuel load indication prior to 97 percent fuel status.

REMARKS: The vehicle carried no recoverable capsules and was the first launch under Program 770 this year.

Control No. VWZBC 7-44

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PROGRAM 846

CONFIDENTIAL

MISSILE: SLV-2G No. 509 and SS-01B No. 1633

LAUNCHED: 1435:22.84 PDT, 16 June 1967, SLC-1, Pad West

LAUNCH CONTROLLERS: Capt Burch & Lt Kusek

COUNTDOWN HISTORY:

First Countdown: The first countdown was initiated at 0701 PDT on 13 June 1967 but was aborted at 1007 due to operational failure of an SS-01B/TM Commutator for Channels 15 and 16.

Second Countdown: The second countdown was initiated at 0701 PDT on 14 June 1967 but was aborted at 1607 when the SLV-2G Main LOX Tank Vent Valve failed to close as required at T-90 seconds.

Third Countdown: The third countdown was initiated at 0701 on 16 June 1967 and proceeded to liftoff. One hold was imposed at T-4 minutes 10 seconds after the Main Lox Tank Vent Valve failed to close as expected.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	102.00	103.06
	MECO (Command For)	220.27	219.61
	VECO	229.27	228.59
	Separation	236.27	234.80
	Ignition	241.27	240.56
	Burnout (Shutdown by VM)	483.17	483.25

2. Both THORAD and AGENA Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	13,254	13,295
	Injection Inertial Velocity (fps)	25,763	25,778
	Apogee (NM)	205.43	205.80
	Perigee (NM)	99.47	97.94
	Period (min)	90.13	90.11
	Inclination Angle (deg)	80.00	80.02

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem occurred during the final countdown: During Task 9, a flex section of the LMSC oxidizer transfer line on the umbilical mast flag had a vapor type leak.

REMARKS: The vehicle carried two recoverable capsules. The first capsule was ejected on the 97th orbit and recovered in the air. The second was ejected on the 240th orbit and recovered in the water.

DOWNGRADE AT 3 YEAR INTERVALS; DECLASSIFIED AFTER 12 YEARS DOD DIR 5200.10

DOWNGRADED AT 12 YEAR INTERVALS; NOT AUTOMATICALLY DECLASSIFIED. DOD DIR 5200.10

Per VWZBC Ltr, 13 Oct 67

Control No. WZBC 7-40

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~~CONFIDENTIAL~~ ~~SECRET~~

File OPS 4-6
"Feat 12" (MH).

PROGRAM 770

MISSILE: SLV-2A No. 496 and SS-01B No. 2732

LAUNCHED: 2048:10.94 PDT 24 July 1967, SLC-2, West Pad

LAUNCH CONTROLLERS: Capt Durham & Lt Gray

COUNTDOWN HISTORY: The countdown was initiated at 1306 PDT 24 July 1967 and proceeded to liftoff with two holds imposed. Hold number one at T-16 minutes for final evaluation of the upper air wind conditions prior to entering terminal count. Hold number two at T-2 minutes and 55 seconds was at the direction of the Air Force Program Office.

FLIGHT PERFORMANCE:

Event	Predicted Time	Actual Time
1. Solid Separation	65.00	65.23
MECO (Command For)	149.58	150.01
VECO	158.58	158.31
Separation	165.08	165.37
Ignition (1st)	190.58	190.31
Shutdown (1st)	430.87	N/A

2. Both Thor and Agena airborne systems performed satisfactorily.

Event	Predicted	Actual
3. Injection Inertial Velocity (1st)(fps)	25,965	25,953
Apogee (nm)	267.68	287.77
Perigee (nm)	276.77	253.11
Period (min)	94.52	94.35
Inclination Angle (deg)	75.00	75.02

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problems occurred during the countdown.

1. In Task 3, Valve NH 32 in the DAC AGE was leaking.

2. The landline indication of SS-01B vehicle battery bus voltage indicated an error that was consistent in magnitude, due to an electrical loading condition in the AGE.

REMARKS: This vehicle carried no recoverable capsules and was the second launch under Program 770 this year.

per UWZBC Ltr, 13 Oct 67

~~SECRET~~ ~~CONFIDENTIAL~~

Downgraded to Confidential IAW 205-2 July '71. MB

UWZBC 7-56

~~CONFIDENTIAL~~ OP2061 file OPS 4-4 RA

PROGRAM NASA

MISSILE: SLV-2A No. 478 and SS-01B No. 6802

LAUNCHED: 0721:07.47 PDT, 28 July 1967, SLC-2, Pad East

LAUNCH CONTROLLERS: Capt Hilliard and Capt Gabriel

COUNTDOWN HISTORY: The countdown was initiated at 2021 PDT on 27 July 1967 and proceeded to liftoff with no holds imposed.

FLIGHT PERFORMANCE:

	Event	Predicted Time	Actual Time
1.	Solid Separation	65.00	65.40
	MECO (Command For)	149.55	149.62
	VECO	158.55	157.99
	Separation	165.05	164.76
	Ignition	224.55	224.09
	Burnout (Shutdown by VM)	464.89	466.23

2. Both Thor and Agena Airborne Systems performed satisfactorily.

	Event	Predicted	Actual
3.	MECO Inertial Velocity (fps)	11,761	-
	Injection Inertial Velocity (fps)	25,590	25,574
	Apogee (nm)	498.50	489.80
	Perigee (nm)	223.98	224.56
	Period (min)	98.07	97.90
	Inclination Angle	86.00	85.99

AEROSPACE GROUND EQUIPMENT PERFORMANCE: The following AGE problem occurred during the countdown.

1. At 0135 LMSC reported that the nitrogen source pressure in the DAC tube bank trailer had decreased to a level which would prohibit satisfactory pressurization of the SS-01B. The problem resulted from two trailers being plumbed together.

REMARKS: There were no recoverable capsules carried aboard this vehicle.

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