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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 6595TH AEROSPACE TEST WING (AFSC)
VANDENBERG AIR FORCE BASE, CALIFORNIA 93437

REPLY TO ATTN OF: VWZAC

SUBJECT: Commanders Summary

27 DEC 1966

TO: VWOO

1. Operation: Busy Peacock

SLV-3/7001 Launch Vehicle
SV-5D/FV-1 Flight Vehicle
Project "PRIME"

2. Range Operations Number: 5972

3. Launch Time: 1415:02.17 PST from SLC-3E, Vandenberg AFB, Calif.

4. Countdown History - Countdown was started at 0541 PST, 21 Dec 66. Significant problems encountered were: Shroud lanyard, flight vehicle tape recorder, and a delay for a passenger train. These resulted in holds that delayed the launch approximately 2 hours and 4 minutes.

5. Flight Performance

a. Launch Vehicle - Launch Vehicle performance was nominal. Guidance and subsystems operation were normal. The predicted and actual flight parameters were:

Event		Predicted		Actual
Lift-off		1211:20.41		1415:02.17
BECO Discrete	T+	128.98	T+	129.89
Staging	T+	132.08	T+	133.08
SECO Discrete	T+	295.78	T+	295.46
Shroud Jettison Discrete	T+	301.75	T+	301.41
VECO Discrete	T+	311.78	T+	311.47
R/V Separation Discrete	T+	314.78	T+	314.47
Retro Rocket Fire Command	T+	315.08	T+	314.86

b. Flight Vehicle - The first flight of a maneuverable re-entry vehicle was nominal from separation through ballute deploy. Guidance and flight control performance were excellent. The ability to communicate through the ion sheath significantly exceeded all expectations. All ships and aircraft acquired and tracked the vehicle during expected times and useable data was recorded. The TRADEX radar acquired earlier than expected and terminal area guidance was excellent. The vehicle responded normally until the main chute deploy command was sent from the terminal area. Best estimate is the vehicle entered the ocean at approximately mach 0.3 and was destroyed. Search was initiated with negative results.

Richard W Palmer

RICHARD W PALMER, Lt Colonel, USAF
Chief, SLV III Boosted Systems Office

Cy to: SPO

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

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BUSY NIECE UNCLASSIFIED

35D

LAUNCH DATE: 22 January 1967 TIME: 0744:53.763 PST

LAUNCH SITE: ABRES B-2

OPS NO. 7257

PRIMARY PAYLOAD: MARK 12R. Sharp nose, cone configured with contoured aft end. Included roll control system, jettisonable attitude control system, PCM/FM TLM, C-Band beason, and under water locator beacon.

AUXILIARY PAYLOAD: MARK 12 development decoy. Sharp nose, right circular cone configuration (teflon-covered graphite nose tip and cesium-seeded teflon heat shield). No TLM, no electrical interface. Ejected from MOD IV PEM.

MISSION RESULTS: Successful. The MARK 12R re-entry vehicle survived re-entry and broke into small pieces at impact. The pieces scattered over an area approximately 150 feet long by 50 feet wide at a water depth of 210 feet. Recovery operations were successful. All sensors acquired good data.

ANOMALIES: HIRS positioned signal measurement was unsatisfactory, however, HIRS maneuvered was accomplished.

NUMBER OF LAUNCH ATTEMPTS: 1

COUNTDOWN HOLDS AND REASONS FOR HOLDS: Planned 30 minute hold was extended 45 minutes to replace a booster inert fluid check valve.

SUBJ C[illegible] G.S. [illegible]N
SCHED[illegible] 11652
AUTOMATIC[illegible]
AT TWO YEAR INTERVALS
DECLASSIFIED ON DECEMBER 31

CLASSIFICATION CHANGED TO
UNCLASSIFIED
By Authority of DOD ISPR 5200-1R
By JEROME E. SCHROEDER, TSgt, USAF
Historian
Date 22 FEB 1979

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3 FEB 1970 NA
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SCHEDULL OF [illegible] R 11652
AUTOMATICALLY [illegible]
AT TWO YEAR INTERVALS
DECLASSIFIED ON DECEMBER 31, 1975

DOWNGRADE AT 3 YEAR INTERVALS;
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DOD DIR 5200.10

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OPS4-2

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 6595TH AEROSPACE TEST WING (AFSC)
VANDENBERG AIR FORCE BASE, CALIFORNIA 93437

REPLY TO ATTN OF: VWZAC

10 MAR 1967

SUBJECT: Commander's Summary

TO: VWCO

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

1. Operation: Giant Chief

2. Range Operations Number: 4477

3. Launch Time: 1505:00.02 PST from SLV-3E, Vandenberg AFB, Calif.

4. Countdown History: The first countdown (4 March) was aborted because of an SLV-3 P/U system anomaly. The second countdown was initiated at 0700 PST, 5 March. Two holds were imposed for downrange radar calibrations and an emergency hold at T -32 seconds for failure to observe a GD/C land-line function (operation of a slave vent on the launcher hold down release system). Total hold time was 81 minutes.

5. Flight Performance: SLV-3 performance was satisfactory. The SV-5D successfully demonstrated cross-range maneuverable flight and performance was satisfactory until recovery. The SV-5D was not in proper configuration on the main parachute, and air recovery was not attempted. Although the water flotation bag inflated, the vehicle separated from the bag, possibly because of being towed when the main chute did not collapse immediately after water impact. The C-band blackout regime (ion sheath) was much shorter than predicted. The ARIS and three EC-121 aircraft acquired and tracked the vehicle. No data was acquired by the range tracker (T-AGM). Predicted and actual event times were as follows:

Event	Predicted	Actual
Liftoff	1330-2100 PST	1505:00.02 PST
BECO Command	T + 128.56	T + 128.99
Staging	T + 131.66	T + 132.10
SECO Command	T + 300.90	T + 301.83
Shroud Jettison Command	T + 306.90	T + 307.85
VECO Command	T + 313.90	T + 314.83
Separation Command	T + 316.90	T + 317.83
Retrofire Command	T + 317.90	T + 318.16
SV-5D Terminal Guidance Initiate	T + 1319.	T + 1299.3
SV-5D Ballute Deploy	T + 1589.1	T + 1567.2
SV-5D Main Chute Sequence Initiate	T + 1673.6	T + 1647.2
SV-5D Water Impact	T + 3133.	T + 3060.

RICHARD W. PALMER, Lt Colonel, USAF
Chief, SLV-III Boosted Systems Office

Cy To: SSD (SPO)

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file OPS-4 5-1

ATLAS 38D

BUSY SUNRISE

LAUNCH DATE: 7 April 1967 TIME: 0319:23.678 PST

LAUNCH SITE: ABRES B-2

OPS NO. 2997

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SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652
AUTOMATICALLY DOWNGRADED
AT TWO YEAR INTERVALS
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PRIMARY PAYLOAD: AX-1. Predamaged R/V with cone-sphere configuration oblique-wound phenolic refrasil heatshield and a laminated phenolic refrasil disc nose tip. Included an attitude control system, two PAM/FM/FM telemetry systems, a C-band beacon, and was designed to allow heating to open holes in the heat shield at approx. 100,000 feet.

AUXILIARY PAYLOADS: MOD II PEM ejected a Large Exoatmospheric chaff cloud with 64,000 titanium foil dipoles wound and packaged in spools, and a small exoatmospheric chaff cloud with 90 Vee dipoles wound on three spools. Chaff deployment was nominal.

SPP-202 with
1) Very low frequency receiver group
2) Ionspheric very low frequency noise experiment (ejected during powered flight)
3) Radio frequency spectrometer
4) 50 to 60 cycle receivers.

MISSION RESULTS: All objectives were satisfactorily completed. All data sensors recorded normally.

ANOMALIES: None
(R/V began breaking up at 61.6 KM instead of nominal 30 KM).

NUMBER OF LAUNCH ATTEMPTS: 3

COUNTDOWN HOLDS AND REASONS FOR HOLDS:

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1st Attempt: 90 Minute hold was called for trains and DR radar. Fourteen additional minutes hold was called for a train. This was extended 36 minutes for TRADEX, Payload TLM, ARIS TLM. Further extension necessitated reservicing LN2 which could not be accomplished before TRAP 7 aircraft had to leave station.

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By Authority of DOD ISPR 5200-1R
22 FEB 1979
By JEROME E. SCHROEDER, TSgt, USAF
Historian

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 6595TH AEROSPACE TEST WING (AFSC)
VANDENBERG AIR FORCE BASE, CALIFORNIA 93437

REPLY TO ATTN OF: VWZAC

26 APR 1967

SUBJECT: Commander's Summary

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

TO: VWOO

1. Operation: Busy Tournament

2. Range Operations Number: 7845

3. Launch Time: 1735:01.32 PST from SLV-3E, Vandenberg AFB, Calif.

4. Countdown History: The first countdown (18 April) was aborted because of an SLV-3 vernier engine # 1 hydraulic leak. The second countdown was initiated at 0800 PST, 19 April. Four holds were imposed for the following reasons: 1) GD/C completion of work on vernier engine replacement and subsequent checks; 2) adjustment of the countdown clock; 3) recalibration of Mark II radar angle bias; and 4) excessive upper air winds in the launch area. Total hold time was 185 minutes.

5. Flight Performance: SLV-3 performance was satisfactory. The SV-5D successfully demonstrated maximum crossrange (700 n.m.) maneuverable flight and was successfully air recovered by a JC-130 at 1825 PST. Boarding time was 23 minutes. The range tracker (T-AGM) and two of the four range telemetry aircraft reported acquisition of useable telemetry and/or tracking data. All acquisition aids in the terminal area acquired the SV-5D and provided the TRADEX radar at Roi Namur with pointing data; however, TRADEX failed to acquire in time to transmit ground guidance commands. Nevertheless, the on-board guidance system enabled the SV-5D to fly a near-nominal trajectory, and all recovery sequence items were properly performed. Predicted and actual event times were as follows:

Event	Predicted	Actual
Lift-off	1400-2110 PST	1735:01.32 PST
BECO Command	T + 128.74	T + 128.80
Staging	T + 131.74	T + 131.91
SECO Command	T + 301.72	T + 300.94
Shroud Jettison Command	T + 307.72	T + 306.95
VECO Command	T + 314.72	T + 313.94
Separation Command	T + 317.72	T + 316.91
Retrofire Command	T + 318.02	T + 317.25
SV-5D Terminal Guidance Initiate	T +1380.	Not Achieved
SV-5D Ballute Deploy	T +1653.7	T +1686.5
SV-5D Main Chute Sequence Initiate	T +1737.	T +1738.7
SV-5D Air Recovery	T +2760.	T +3000 (approx.)

Richard W Palmer

RICHARD W PALMER, Lt Colonel, USAF
Chief, SLV-III Boosted Systems Office

Cy to: SSD (SPO)

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42

COMMANDER'S SUMMARY

ATLAS 92D

LAUNCH DATE: 27 July 1967 TIME: 1200.03.157 PDT

LAUNCH SITE: ABRES B-3

OPS NO. 1342

PAYLOADS: OV1-11, -12 and -86. Office of Aerospace Research Orbital Vehicles.

MISSION RESULTS: Successful

ANOMALIES: OV1-11 orbit was not confirmed.

NUMBER OF LAUNCH ATTEMPTS: 2

COUNTDOWN HOLDS AND REASONS FOR HOLDS: The first countdown initiated on 25 July 1967 reached T-3 minutes, then recycled to T-5 minutes where it was scrubbed due to OVI payload telemetry problems. There were three holds during this count totaling 68 minutes for OVI payload telemetry problems.

The second countdown proceeded normally (no holds) to lift-off.

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ATLAS 69D

COMMANDER'S SUMMARY

LAUNCH DATE: 11 October 1967 TIME: 0430:03.710 PDT

LAUNCH SITE: ABRES B-3

OPS NO. 0251

PRIMARY PAYLOAD:

a. Endo Decoy: sharp nose, slender right circular cone configuration. (Teflon heatshield), with internal VHF reflector and wake seeding system. (MOD IV PEM).

b. DPRR (pigtail) with conical solid tungsten ballast and graphite body shell. A 25-foot trailing wire of braided tungsten wire and Teflon coated graphite yarn was attached. (MOD II PEM).

c. Re-entry chaff (VHF-VEE's): 90 end-weighted, two arm V dipoles cut to resonate at a frequency corresponding to 0.51 times the TRADEX VHF wavelength. (MOD II PEM).

d. Large exoatmospheric chaff cloud with 206,000 titanium foil dipoles of various lengths wound and packaged in spools, and a paddle-wheel configured Specular Reflector to remain near the center of the chaff cloud. (MOD II PEM).

JEROME E. SCHROEDER, TSgt, USAF
Historian
CLASSIFICATION CHANGED TO
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By Authority of DOD ISPR 5200-1R
DECLASSIFIED BY NA Date 22 FEB 1979
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SECONDARY PAYLOAD: Series 13 TVX (flown as ballast with no separation).

MISSION RESULTS: Successful. All objectives were met.

ANOMALIES: Two PEM measurements failed to function properly; however, proper ejection was verified by downrange radar data.

NUMBER OF LAUNCH ATTEMPTS: 1

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COUNTDOWN HOLDS AND REASONS FOR HOLDS: A 95 minute hold was called for Ops. 1264 (Planned). 88 minutes of hold were called for the following: 8 minutes - satellite pass, 20 minutes - Nike Radar problem, 60 minutes - Nike and Press Radar problems. A 32 minute hold was later called for downrange radar.

GROUP 4
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DOD DIR 5200.10

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UWTA 7-172

~~SECRET~~ File OPS 5-11

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COMMANDER'S SUMMARY

ATLAS 94D

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LAUNCH DATE: 7 November 1967 TIME: 0517:54.598 PST

LAUNCH SITE: ABRES B-2

OPS NO. 4919

PRIMARY PAYLOAD: AX-2 (Mark IIA Mod 5B(H) Modified)R/V, cone/cylinder/flare configuration. Contained attitude control, 2 TLM systems, and a 1 1/2 in. hole to be opened before re-entry.

SECONDARY PAYLOADS:

a. ENDO Decoy. Sharp nose, slender right circular cone. Teflon, graphite and fused silica heatshields, VHF reflector and wake seeding. (MOD IV PEM)

b. Large Exoatmospheric Cloud. Mk 1A prototype with second generation specular reflector. 206,000 titanium foil dipoles, various length, wound on spools. Paddle-wheel configured specular reflector at center of cloud. (MOD II PEM).

c. Small Exoatmospheric Chaff Cloud. (PA 127-3) 90 steel foil dipoles wound on 3 spools. Mk 4, Mod 1032 decoy at center of cloud. (MOD II PEM).

MISSION RESULTS: Partially successful.

ANOMALIES: Mod II PEM did not eject chaff clouds. Signal was sent from Atlas but was not received or was received and not acted upon by PEM.

NUMBER OF LAUNCH ATTEMPTS: 2

COUNTDOWN HOLDS AND REASONS FOR HOLDS: 1 November 1967: 77 minutes hold for downrange radar, 10 minutes for excessive terminal area cloud coverage, and 15 minutes booster malfunction. 7 November 1967: 4 hours and 25 minutes Press radar, 55 minutes for trains in launch area, and 2 minutes for lowering He. pressure.

CLASSIFIED BY NA
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SCHEDULE OF EXECUTIVE ORDER 11652
AUTOMATICALLY DOWNGRADED
AT TWO YEAR INTERVALS
DECLASSIFIED ON DECEMBER 31, 25

CLASSIFICATION CHANGED TO
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By Authority of DODISPR 5200.1R
22 FEB 1979

By JEROME E. SCHROEDER, TSgt, USAF Date
Historian

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1p-4 Group-4

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File
OPS 5-1
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COMMANDER'S SUMMARY

ATLAS 107F

LAUNCH DATE: 6 April 1968 TIME: 0159:41.958 PST

LAUNCH SITE: ABRES A-2

OPS. NO. 6968

PRIMARY PAYLOAD: OV1-13 and OV1-14 (Polar Orbit)

OV1-13 Measures charged particles
Determines CDS solar cell performance
Studies space friction and lubricants

OV1-14 Studies space radiation

AUXILIARY PAYLOAD: None.

MISSION RESULTS: Successful. Both vehicles were placed into their planned orbits.

ANOMALIES: None.

COUNTDOWN HOLDS AND REASONS FOR HOLDS:

7 minutes hold for C-Band beacon problem.
7 minutes hold to remove C-Band troubleshooting equipment.
11 minutes hold for a train in hazard corridor.
15 minutes hold due to GERTS Guidance Computer software problem.
118 minutes hold due to GERTS Guidance Computer software problem.

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PROGRAM SESP

MISSILE: SLV-III No. 7004 and No. 14, OP NR: 2918

LAUNCHED: 1357:44.565 PDT, 16 August 1968, Complex SLC-3, Pad East

LAUNCH CONTROLLERS: Capt Bellia and Lt Conrad

COUNTDOWN HISTORY: The countdown was initiated at 0830 PDT, 16 August 1968. Two holds and one recycle were imposed during the countdown. The first 20 minute hold was called for Burner II problems and the remaining time was required due to a problem with the Atlas GN_2 purge system.

FLIGHT PERFORMANCE:

1.

Event	Predicted Time	Actual Time
BECO	127.352	127.236
Heat Shield Separation	173.18	Did not occur
SECO	305.345	311.082
VECO	325.69	336.111*
Separation	325.92	346.121

* Initiated by the Autopilot Programer.

2. The Atlas Airborne System performed satisfactorily but the Burner II Airborne System did not.

3.

Event	Predicted Time	Actual Time
Injection Inertial Velocity (fps)	24,533	Did not occur
Apogee Altitude (NM)	400	Did not occur
Perigee Altitude (NM)	400	Did not occur
Period (Min)	99.63	Did not occur
Inclination Angle (Deg)	88.7	Did not occur

REMARKS: The Burner II Airborne System was unable to perform satisfactorily because the heat shield did not separate.

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