

JOINT MESSAGEFORM

SECURITY CLASSIFICATION

SPACE BELOW RESERVED FOR COMMUNICATION CENTER

LXXI

W
270,7
1163

PRIORITY		TYPE MSG (N/A)		ACCOUNTING SYMBOL	ORIG. OR REFERS TO	CLASSIFICATION OF REFERENCE
ACTION INFO	BOOK	MULTI	SINGLE			

FROM: 645TH AIRSPACE TEST WING, VANDENBERG AFB, CALIF. **VWED**

TO: SPACE SYSTEMS DIV. LOMA, CALIF.

SUBJECT: EIGHT-HOUR FLIGHT REPORT

I. SUMMARY V620-03-9-409

A VEHICLE CONSISTING OF DELTA BOOSTER NO. 383 AND S-01A ORBITAL STAGE NO. 1143 WAS LAUNCHED ON THE FIRST ATTEMPT FROM VANDENBERG COMPLEX 75-1, PAD 2, AT 1600:00.20 PDT, ON 23 SEPTEMBER 1963. THE PRIMARY LAUNCH OBJECTIVE, TO PLACE THE S-01A SATELLITE WITH PAYLOAD IN A NEAR-POLAR ORBIT, WAS ACCOMPLISHED.

THE COUNTDOWN PROCEEDED SMOOTHLY WITHOUT ANY MAJOR DIFFICULTIES BEING ENCOUNTERED OR ANY HOLD BEING IMPOSED. LIFTOFF OCCURRED AT THE OPENING OF THE LAUNCH WINDOW.

DATE	TIME
23	
MONTH	YEAR
Sep	63

SYMBOL		SIGNATURE	
TYPED NAME AND TITLE (Signature required) F. L. WRIGHT MAJ. U.SAF		TYPED (if possible) NAME AND TITLE	
PHONE 866/3771	PAGE NO. 1	DOWNGRADED AT 3 YEAR BIRTHDAY, DECLASSIFIED AFTER 12 YEARS DOD DIRECTIVE 5200.10	
SECURITY CLASSIFICATION			

ROCKET MISSILEFORM - CONFIRMATION SHEET

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FROM:

459TH AIRSPACE TEST WING, VANNUSSING AFB, CALIF. VVZD

THE ACCT PERFORMANCE OF ALL STAGES, GROUND GUIDANCE AND SPACE COMMUNICATIONS APPEARED TO BE SATISFACTORY.

THE VERBOSITY RADAR AND GROUND GUIDANCE INDICATED THAT THE NOMINAL TRAJECTORY WAS CLOSELY FOLLOWED THROUGH BOOSTER. INFORMATION BASED ON FIRST PASS ACQUISITION INDICATED THE ATTAINMENT OF AN ADEQUATE ORBIT AND THAT THE BASIC VEHICLE SUBSYSTEMS WERE FUNCTIONING SATISFACTORY.

PERFORMANCE SUMMARY

PERFORMANCE VALUES OF SIGNIFICANT LAUNCH EVENTS ARE:

LAUNCH (4:00:00.00) (00)

ZERO

W-1 MOTOR SHUT OFF SOLID MOTORS

27.5 SEC

SOLID MOTOR TERMINATION

35.9 SEC

SOLID MOTOR INTENSIFY

45.1 SEC

STEERING DEVIATION

92.40 SEC

STOP STEERING

141.4 SEC

S-1 COMMAND FOR MISSILE (LOCKED OUT) 146.90 SEC

MISSILE (PROPELLANT DEPLETION)

147.04 SEC

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FROM

654TH AIRBORNE TEST WING, FORTRESS AFB, CALIF. 7721

VIDEO 151.74 SEC

SEPARATION COMMAND (S-2) 160.57 SEC

SEPARATION COMPLETE 162.09 SEC

WALLACE ROCKET IGNITION 164.92 SEC

S-2A ENGINE IGNITION 167.88 SEC

S-2A THROTTLE ATTACHMENT (90 PERCENT TQ) 169.1 SEC

DOWN S-2A STEERING 180.01 SEC

DOWN LAUNCHER AND BRACON ACQUISITION 230 SEC

DOWN S-2A STEERING 250.95 SEC

ENABLE S-2A VELOCITY METER 252.28 SEC

S-2A ENGINE SHUTDOWN (VELOCITY METER) 419.43 SEC

VIR VERBANT RADAR LOSS OF TRACK 423 SEC

VIR ACQUISITION RADAR FARE 435 SEC

VIR VELOCITY DATA FARE (LINK 1) 437 SEC

VIR VELOCITY SIGNAL STRENGTH FARE (LINK 1) 440 SEC

VELOCITY RADAR FARE 497 SEC

S-2A PERFORMANCE

ALL S-2A SUB-SYSTEMS PERFORMED ADEQUATELY
FOR ACHIEVEMENT OF THE PRIMARY TEST OBJECTIVES.

MAJOR ENGINE CUTOFF (MECO) OCCURRED BY PROPEL-

LANT DEPLETION AS PLANNED.

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JOINT MESSAGE - CONTINUATION SHEET

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FROM

6395TH AIRBORNE WING, WHEEL VANDERBILT AFB, CALIF.

VWLB

FINAL EVALUATION FROM INDICATE THAT
PROPELLANT UTILIZATION WAS SATISFACTORY.

IV. GUIDANCE SYSTEM

PERFORMANCE OF THE GUIDANCE SYSTEM
APPEARS TO HAVE BEEN SATISFACTORY. THE MECO
ENGINE, WHICH WAS LOCKED OUT OF EFFECTIVE-
NESS, PROVIDED PROPELLANT DEPLETION BY 0.14
SEC. GUIDANCE SYSTEM COMMANDS COMPENSA-
TED FOR THE EXTRA VELOCITY PROVIDED BY THE
ALT-1A. QUICK LOG EVALUATION OF THE TRAJECT-
ORY VECTOR AT GUIDANCE TERMINATION PREDICTED
THE FOLLOWING VALUES:

DIRECTIONAL ALTITUDE OF 104.33 NM (NORMAL)
100.925 NM

DIRECTIONAL FLIGHT PATH ANGLE - 0.043 DEG
(NORMAL - 0.012 DEG)

ORBITAL PERIOD OF 10.02 MIN (NORMAL 10.075 MIN)

ORBITAL DECELERATION ANGLE OF 75.042 DEG
(NORMAL 74.000 DEG)

BASED ON FIRST PASS ACQUISITION THE ORBITAL
PERIOD APPEARS TO BE NORMAL.

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FROM

1395TH AIRBORNE TEST WING, VANDENBERG AFB, CALIF.

VW12

V. 3-SEA PERFORMANCE

ALL 3-SEA VEHICLE SUB-SYSTEMS PERFORMED SATIS-
FACTORILY DURING LAUNCH TO PROVIDE ADEQUATE
ORBITAL TRAJECTORY CONDITIONS FOR ORBITAL IN-
JECTION. AT THE TIME OF TELEMETRY SIGNAL FADE
AT VTB, THE ORBITAL TIMER WAS SET AT 1440 SEC
(STEP 163) IN THE RESET-IN PORTION, IN THE DE-
CREASE MODE, AND ALTERNATE RE-ENTRY DEARM
STATE.

VI. SPACE-BASED COMMUNICATIONS

TELEMETRY DATA FROM ALL INETS WERE SATIS-
FACTORILY RECEIVED AND RECORDED.

WILSON RANGE MAINTAINED CONTINUOUS TRACK
OF THE 3-SEA BEACON TO HORIZON SIGNAL FADE.

VII. COMMENTS

THE COMBATANT WAS ORBITED AT ALTITUDE ON
13 SEPTEMBER 1968 AND PROCEEDED TO REPORT AT
THE BEGINNING OF THE SCHEDULED LAUNCH WINDOW.
NO MALFUNCTIONS WERE OBSERVED.

THE FOLLOWING PROBLEMS WERE ENCOUNTERED:

A. IN TASK 4 A RELAY MALFUNCTIONED IN THE

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TEST MEASUREMENT CONTINUATION SHEET

REPORT CLASSIFICATION

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FORM

SLATER AIRCRAFT TEST WING, WASHINGTON, D.C. CALIB.

FWED

SLAC AIR POWER TRANSFER CIRCUITRY AND
WAS REPLACED.

[REDACTED]

B. THE SLAC BOOSTER CHAMBER MEASUREMENT
(MANDATORY FOR LAUNCH) WAS RUN THROUGH-
OUT THE COUNTDOWN. THE MEASUREMENT WAS
NAIVED BY THE AIR FORCE. THE MEASUREMENT
YIELDED USEFUL DATA FOLLOWING LIFT OFF.
DURING 3-4.5 PM URGENT FUEL LOADING. A
HUGE LEAK OCCURRED IN THE BOOST SUPPLY
LINE. LEAKAGE WAS DECREASED BY TIGHTENING
A FITTING BUT LEAKAGE CONTINUED
THROUGH LIFT OFF.

D. IN TABLE 1, INITIAL CHECKS INDICATED SLAC
BATTERY BUS VOLTAGE WAS BELOW SPECIFICA-
TION. SUBSEQUENT CHECKS INDICATED THE
VOLTAGE WAS WITHIN LIMITS.

THE AIRCRAFT-RELATED EQUIPMENT

THE AIRCRAFT WERE SATISFACTORILY TO SUPPORT
CHECKOUT AND LAUNCH WITH THE FOLLOWING
EXCEPTIONS:

[REDACTED]

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[REDACTED]

DATE

BY

OF

SECURITY CLASS

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100 MESSAGE TRANSMISSION SHEET

SECRET CLASSIFICATION

15TH AIRSPACE TEST WING, VANDERBILT AFB, CALIF. WED

- A. A BOMB LEAK OCCURRED IN A TYPING ON THE
BOARD.
- B. A RELAY FAILED TO ACTIVATE IN THE LINEC
CIRCUIT FOR TRANSFERING FROM EXTERNAL
TO INTERNAL POWER. REPLACEMENT OF THE
RELAY RESTORED NORMAL OPERATION.
- C. A LAUNCH-READY ALARM ON THE LINEC
BLOCKING PAYLOAD CONSOLE MALFUNCTIONED
IN TASK 14. NO REPAIRS WERE MADE.

IX. PAN DAMAGE

PAN DAMAGE WAS GENERALLY GREATER THAN
NORMAL DUE TO AN AFTER-FIRE AT THE BASE OF
THE MAST CAUSING EXTENSIVE DAMAGE TO CABLING
AND PLENUMS. THE EXCESSIVE AMOUNT OF WATER
REQUIRED TO EXTINGUISH THE FIRE MAY HAVE
DAMAGED THE LAUNCHER. NORMAL TURN AROUND
CAN BE MAINTAINED.

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