

FORM

ADVERSE APPROXIMATE ESTIMATE VARIATIONS ARE CASE

REFERENCED VELOCITY 11,600 FPM ELEVATION FLIGHT

PATH ANGLE APPROXIMATELY 5 DEG AZIMUTH FLIGHT

PATH ANGLE APPROXIMATELY 154 DEG

PRELIMINARY VALUES OF SIGNIFICANT LAUNCH EVENTS

ARE

1ST TEST (1000.11.57)

TIME

SYSTEMS INITIATED

97.8 SEC

1000 (01)

143.15 SEC

1000

152.14 SEC

1000 AND 1000

156.22 SEC

1000

157.00 SEC

1000

159.91 SEC

1000

160.18 SEC

1000

167.29 SEC

SEPARATION COMMAND (1000)

168.0 SEC

SEPARATION COMPLETE

170.5 SEC

1000 ROCKET IGNITION

180.6 SEC

1000 ROCKET IGNITION

191.8 SEC

1000 TARGET ATTACHMENT (76 PER CENT PC)

196.0 SEC

1000 TARGET (76 PER CENT PC)

204.8 SEC

1000

1000

210 SEC

UNCLASSIFIED

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SECURITY

DETAILS

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EXPERIMENTAL TEST BY VANDERBERG AFB, CALIF

VIS ACQUISITION BEACON FADE	493	SEC
VIS TELEMETRY DATA FADE (LINE 1)	400	SEC
VIS TELEMETRY SIGNAL FADE (LINE 2)	372	SEC
VIS TELEMETRY SIGNAL FADE (LINE 3)	324	SEC

~~SECRET~~

II. ALL VISOR OPERATIONS PERFORMED SATISFACTORILY AND ACCORDING TO GROUND GUARANTEE SYSTEM COMMANDS. PROVIDED ACCEPTABLE COAST APOUSE CONDITIONS.

GROUND GUARANTEE SYSTEM DATA INDICATE THAT HIGHER COAST APOUSE ALTITUDE WAS 104 FT PER (NORMAL: 104.14 FT) AND THE VELOCITY WAS 12.956 FT/S (NORMAL: 10.0 FT/S).

III. ALL S-B VEHICLE OPERATIONS PERFORMED SATISFACTORILY DURING LAUNCH TO PROVIDE ADEQUATE TRAJECTORY CONTROL AT ENGINE SHUTDOWN, HOWEVER, THE FOLLOWING DISCREPANCIES WERE NOTED:

CONTROL GAS CONSUMPTION, AS INFERRED FROM TELEMETERED CONTROL GAS SUPPLY PRESSURE, WAS GREATER THAN USUAL. HORIZON ACQUISITION AND FIRST ORBIT. THE ENGAGED HORIZON OF 2.50 FT AT VIS FADE WAS APPROXIMATELY 10% BE LOW THAN USUAL. ALTHOUGH SOME EXCESSIVE ROLL TORQUE WAS NOTED DURING THE

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WHEEL ARRANGEMENT TYPE WGVANDERBERG AFG, CALIF.
 TECHNICAL PROBLEM, THE RECONSTRUCTION DID NOT APPEAR TO BE
 SIGNIFICANTLY CHANGED FROM THAT OBSERVED ON S-01
 VEHICLES OF THIS CONFIGURATION. THE REPORTER CON-
 TROL WAS PERFORMED AT APPROXIMATELY 2:50 PM
 WAS APPROXIMATELY 500 OR LOWER THAN USUAL.

AT THE TIME OF SIGNAL PAUSE AT VTR, ALL VEHICLE
 SUBSYSTEMS WERE FUNCTIONING NORMALLY AND THE
 ORBITAL TIMER WAS SET AT 1816 SEC (STEP 18), IN THE
 RESET-ON POSITION, IN THE INCREASE MODE, AND ALTERN-
 ATE 22-000000000000 STATE.

IV. COUNTDOWN. VEHICLE S/N 1101/167/1115 WAS
 LAUNCHED ON THE FIRST COUNTDOWN ATTEMPT. THE
 COUNTDOWN WAS INTERRUPTED ON SCHEDULE AT 0600 PST ON
 14 NOVEMBER 1955 AND PROCEEDED WITH NO HOLDS TO
 LIFT OFF AT THE SELECTED TIME.

TECHNICAL PROBLEMS IN THE PAYLOAD DELAYED ITS
 ARRIVAL AT THE PAD UNTIL 0705 PST (PAYLOAD SCHEDULED
 TO BE AT PAD AT START OF COUNTDOWN). IT WAS NECESS-
 SARY, THEREFORE, TO DELAY PAYLOAD MATING AND

VEHICLE ERECTION (STEPS 2 AND 3) WHILE AWAITING
 ARRIVAL OF THE PAYLOAD, AND WITH APPROPRIATE
 [REDACTED]

INITIALS

DD FORM 173-1

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SPACE AIRCRAFT TEST BY YANKEES ATD, CALIF.

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LAUNCH, VEHICLE DISTRICT CHECKS (TABLES 4, 5, AND 6) WERE COMPLETED WITH THE VEHICLE HORIZONTAL. DISTRICT CHECKS ARE USUALLY PERFORMED WITH THE VEHICLE VERTICAL, IMMEDIATELY FOLLOWING THE DISTRICT CHECKS, PAYLOAD MATING AND VEHICLE SEPARATION (TABLES 7 AND 8) WERE ACCOMPLISHED. THE SEPARATION OF THE SUBSYSTEM TABLES WERE PERFORMED AT NORMAL ALTITUDE.

THE ALIGNMENT AND LANDLINE MEASUREMENTS OF S-1 AIRCRAFT SPHERE TEMPERATURE WERE INOPERATIVE THROUGHOUT THE SUBSYSTEM.

7. AIRSPACE GROUND EQUIPMENT. THE AIRSPACE GROUND EQUIPMENT FUNCTIONED SATISFACTORILY TO ACCOMPLISH LAUNCH AND ORBITAL STAGE PER-ORBIT CHECKS. WITH NO PROBLEMS NOTED. THE LANDLINE MEASUREMENT OF S-1 AIRCRAFT GAS SPHERE TEMPERATURE WAS INOPERATIVE, BUT THE PROBLEM WAS DUE TO A DEFECTIVE TRANSDUCER IN THE S-1 VEHICLE AND NOT IN THE AIRSPACE GROUND EQUIPMENT.

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SYSTEM REPAIRS TEST W/S VANDERBEEKS AFB, CALIF

V. PAR DAMAGE. PAR DAMAGE WAS NORMAL WITH THE
USUAL DAMAGE TO THE AMIC AIR CONDITIONING DUCTS
AND TO THE LAUNCH AND SAC ELECTRICAL EQUIPMENT NEAR
THE BASE OF THE LAUNCHER. RECOVERY CAN BE AC-
COMPLISHED WITHIN NORMAL TIME.

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