

JOINT MESSAGEFORM

SECURITY CLASSIFICATION

SPACE BELOW RESERVED FOR COMMUNICATION CENTER

RFD Center  
(1-2)

411

| PRECEDENCE | TYPE MSG (Check) |       |        | ACCOUNTING SYMBOL | ORIG. OR REFERS TO | CLASSIFICATION OF REFERENCE |
|------------|------------------|-------|--------|-------------------|--------------------|-----------------------------|
| ACTION     | BOOK             | MULTI | SINGLE |                   |                    |                             |
| INFO       |                  |       |        |                   |                    |                             |

FROM:

6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF.

TO: SPACE SYSTEMS DIV LOSA CALIF

VWZD 29-9-262

SUBJECT: 8-HOUR LAUNCH FLASH REPORT

I. A SATELLITE VEHICLE CONSISTING OF THOR BOOSTER NO.

351 AND AGENA D ORBITAL STAGE NO. 1154 WAS LAUNCHED ON

THE SECOND ATTEMPT FROM VANDENBERG COMPLEX 75-1 PAD 2 AT

1634:49.58 PDT ON 29 SEPTEMBER 1962. THE PRIMARY

LAUNCH OBJECTIVE, TO PLACE THE AGENA SATELLITE WITH  
PAYLOAD IN A NEAR-POLAR ORBIT, WAS ACCOMPLISHED.

THE VTS RADAR PLOTBOARD INDICATED THE FOLLOWING

APPROXIMATE INJECTION CONDITIONS: ALTITUDE, 130

STATUTE MILES; PAD REFERENCED VELOCITY, 24900 FPS;

ELEVATION FLIGHT PATH ANGLE, APPROXIMATELY 0 DEG;

AZIMUTH FLIGHT PATH ANGLE, APPROXIMATELY 154 DEG.

THE ORBITAL PERIOD ATTAINED APPEARS TO BE NEAR-

NOMINAL, BASED ON FIRST PASS ACQUISITION.

SPECIAL INSTRUCTIONS

CLASSIFICATION CHANGED TO

By Authority of

205-2

APR 1966

DECLASSIFIED AT 3 YEAR INTERVAL,  
NO DISCLOSURE AFTER 15 YEARS

|       |      |
|-------|------|
| DATE  | TIME |
| MONTH | YEAR |

SYMBOL

C. S. Waller

SIGNATURE

C. S. Waller

TYPED NAME AND TITLE (Signature, if required)

C. S. WALLER, LT COL USAF

TYPED (or stamped) NAME AND TITLE

PHONE

866-5831

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FORM

173

REPLACES DD FORM 173, 1 OCT 49, WHICH WILL BE USED UNTIL EXHAUSTED

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6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF.

## PRELIMINARY VALUES OF SIGNIFICANT LAUNCH EVENTS ARE:

|                                          |            |
|------------------------------------------|------------|
| LIFTOFF (1634:49.58 PDT)                 | ZERO       |
| STEERING INITIATED                       | 91.76 SEC  |
| MECO (S1)                                | 146.63 SEC |
| VECO                                     | 155.60 SEC |
| ENABLE D1 AND D2 (S2)                    | 151.53 SEC |
| D1 ON                                    | 154.24 SEC |
| D1 OFF                                   | 155.69 SEC |
| D2 ON                                    | 155.81 SEC |
| D2 OFF                                   | 161.36 SEC |
| SEPARATION COMMAND (S3)                  | 162.07 SEC |
| SEPARATION COMPLETE                      | 164.7 SEC  |
| ULLAGE ROCKET IGNITION                   | 183.84 SEC |
| AGENA ENGINE IGNITION                    | 197.96 SEC |
| AGENA THRUST ATTAINMENT (90 PER CENT PC) | 199.07 SEC |
| AGENA BURNOUT (70 PER CENT PC)           | 435.83 SEC |
| VTS VERLORT RADAR FADE                   | 448 SEC    |
| VTS ACQUISITION BEACON FADE              | 485 SEC    |
| VTS TELEMETRY DATA FADE (LINK 1)         | 489 SEC    |

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6575 AEROSPACE TEST WG VANDENBERG AFB, CALIF.

II. ALL BOOSTER SUBSYSTEMS PERFORMED SATISFACTORILY AND, IN RESPONSE TO GROUND GUIDANCE SYSTEM COMMANDS, PROVIDED THE REQUIRED COAST APOGEE CONDITIONS.

GROUND GUIDANCE SYSTEM DATA INDICATE THAT BOOSTER COAST APOGEE ALTITUDE WAS 186.97 NM (NOMINAL: 186.93 NM) AND THE VELOCITY WAS 19,068 FPS (NOMINAL: 19,070 FPS).

III. ALL AGENA VEHICLE SUBSYSTEMS PERFORMED SATISFACTORILY DURING LAUNCH TO PROVIDE THE PROPER TRAJECTORY CONDITIONS AT AGENA ENGINE SHUTDOWN.

AT THE TIME OF SIGNAL FADE AT VTS, ALL VEHICLE SUBSYSTEMS WERE FUNCTIONING NORMALLY WITH AN ADEQUATE SUPPLY OF CONTROL GAS REMAINING AND THE ORBITAL TIMER WAS SET AT 5408 SEC (STEP 16), IN THE RESET-ON POSITION, IN THE INCREASE MODE, AND ALTERNATE RE-ENTRY DEARM STATE.

IV. THE AEROSPACE GROUND EQUIPMENT IN GENERAL FUNCTIONED SATISFACTORILY AND ORBITAL STAGE PRE-LAUNCH CHECKOUT; HOWEVER, THE FOLLOWING DISCREPANCIES WERE NOTED:

1) A LMSC FUEL VENT VALVE STUCK AND WAS CLOSED MANUALLY.

2) THE LMSC PAYLOAD AIR CONDITIONING VENT (AGE) MALFUNCTIONED.

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5595 AEROSPACE TEST WG VANDENBERG AFB, CALIF

Y. THOR-AGENA VEHICLE 351/1154 WAS LAUNCHED ON THE  
SECOND COUNTDOWN ATTEMPT.

THE FINAL COUNTDOWN WAS INITIATED AT 0835 PWT 29  
SEPTEMBER 1961 AND PROGRESSED TO LIFTOFF WITH NO  
INTERRUPTIONS OR HOLDS.

THE FOLLOWING PROBLEMS AND DELAYS WERE ENCOUNTERED:

1. TASK 1 - DAC REQUIRED ADDITIONAL TIME TO VERIFY  
R-1 AND R-2 DAY CHECKS.
2. TASK 2 - ADDITIONAL TIME WAS REQUIRED TO INSTALL THE  
AGENA UMBILICALS WHICH HAD BECOME CONTAMINATED  
DURING THE FIRST COUNTDOWN.
3. TASK 7 - THE TELEMETRY MONITOR READING OF  
AGENA REENTRY SELECTOR WAS INTERMITTENT AND  
REMAINED QUESTIONABLE THROUGHOUT COUNTDOWN.
4. TASK 9 - ADDITIONAL CHECKS WERE REQUIRED TO  
VERIFY OPERATION OF AGENA LINK 2 TELEMETRY.
5. TASK 11 - THE MFSO ENCOUNTERED A TELEMETRY  
RECEPTION DIFFICULTY WHICH EVENTUALLY CLEARED  
ITSELF.
6. TASK 16 - AN AGENA FUEL LINE VENT VALVE STUCK.  
NORMAL OPERATION RETURNED DURING CYCLING TESTS.

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THE FIRST COUNTDOWN WAS INITIATED AT 0840 PDT ON 27 SEPTEMBER 1962 AND PROCEEDED TO PHASE III OF THE TERMINAL COUNT WHEN IT WAS ABORTED AT 1700 DUE TO A THOR UMBILICAL PROBLEM. ONE HOLD OF 30 MIN DURATION WAS IMPOSED AT 1630 (T-11 MIN 15 SEC).

DURING THE COUNTDOWN THE FOLLOWING PROBLEMS WERE ENCOUNTERED:

- 1) IN TASK 3 THE AGE AIR CONDITIONING UNIT FOR THE PAYLOAD BLANKET WAS INOPERATIVE AND WAS REPLACED. THE PERFORMANCE OF THE REPLACEMENT UNIT WAS MARGINAL.
2. THE TELEMETRY MEASUREMENT OF AGENA LIFE-BOAT GUIDANCE GAS PRESSURE WAS QUESTIONABLE. THE LIFEBOAT SPHERE WAS OFF LOADED AND RELOADED TO VERIFY THAT LOADING WAS PROPER.
3. A FUEL VENT VALVE OF THE AGENA AGE STUCK. THE VALVE WAS CLOSED MANUALLY.
4. IN PHASE III THE THOR MAIN ELECTRICAL UMBILICAL WAS PULLED FROM THE THOR VEHICLE DUE TO IMPROPER INSTALLATION OF THE UMBILICAL. AFTER 30 MINUTES EVALUATION THE LAUNCH WAS CANCELLED BECAUSE INSUFFICIENT TIME REMAINED TO REPLACE

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6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF.

RECEIVED 8.1

0201 R9A

THE OPERATIONAL AND ACCOMPLISH LAUNCH BEFORE LOSS  
OF RANGE CLEARANCE (TRAINS) FOR THE REMAINDER OF  
THE LAUNCH WINDOW  
PAD DAMAGE

MORE THAN USUAL DAMAGE OCCURRED TO THE LMSC  
ELECTRICAL CABLES AND AIR CONDITIONING DUCTS AT THE  
BASE OF THE MAST; HOWEVER, PAD RECOVERY CAN BE  
ACCOMPLISHED AS SCHEDULED.

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