

I assumed EDT, but asked her to check for
sure. Alice should be notified as soon as
we know and our copy and VP copy clarified.

sm

THE WHITE HOUSE
WASHINGTON

April 27, 1959

To: General Goodpaster

From: A. P. Toner

Ref: Memo of 4/27 on DIS-
COVERER II

This is the full contents
from Defense.

Attachment

Orig. Item #4 of DOD 4/27/59.

(1. ref'd 8/3)

~~SECRET~~

SSN#19
SSN#33

1. JUPITER Missile Firing (Secret)

Sixteenth JUPITER missile (Missile No. 17) is scheduled for firing from Atlantic Missile Range at 2030 EDT, 29 April.

Primary missions of this firing include sixth flight test of warhead and fuze working together as a system. This is the third flight test of warhead with dual radar fuze and the first flight of full weight warhead (1600 pounds).

Lift off weight is planned at 111,354 pounds, and range at 1302.4 nautical miles.

2. Important Missile Launching (Secret)

SSN#19
SSN#33

Atlantic Missile Range

TITAN (A-6)

Test No. 762

Date and Time

28 April, 1200 E

4/27/59 to 28
4/28 - 9:05 A.M. -
Time Hope "E" (measured EST
(This would be 13:00 EDT)
A.D. is not a day

(c.c. of this pg destroyed)
4/30/59.

SecDef Cont. No. 5-629

~~SECRET~~

DoD 4-27-59

~~SECRET~~

3. Launch of THOR Missile No. 164 (Secret)
(Reference Item 1, April 21, 1959 Report)

THOR Missile No. 164 was launched on the Atlantic Missile Range at 0005 E, 25 April 1959.

Sup. to
SN 536

Major test objectives were to evaluate missile system accuracy and reliability; to determine performance of RV arming and fuzing system; to determine warhead performance and compatibility with the re-entry vehicle and missile system during flight and at impact. Missile No. 164 was in an operational configuration with instrumentation added. Recovery was not planned.

Ignition and lift off were normal. Main engine cut off on guidance command at 157 seconds; verniers cut off 5.9 seconds later. The re-entry vehicle separated approximately 172 seconds after lift off, concurrent with firing of retro rockets. All of the above times are close to nominal. The re-entry vehicle landed in the intended impact area approximately 1300 n.m. downrange. Details on accuracy will be provided in approximately five days after all relevant data are analyzed.

↑
1.2 sec
1.2 sec
1.2 sec

All test objectives will be evaluated from telemetry, radar and ballistic camera data. From the preliminary flash test report this appears to have been a completely successful launch.

c.c. of the pg.
destroyed 4/30/59

~~SECRET~~

DoD 4-27-59

S:307

~~SECRET~~

*Apr 11 Wright R. 10/10/59 + Wash in.
SSN # 26538*

4. DISCOVERER II Recovery Capsule and Finale of Vehicle
(Secret) (Reference Item 2, April 23, 1959 Report)

DISCOVERER II recovery capsule was approximately hemispherical in shape, 12 3/4 inches radius, 18 inches deep. It contained recovery equipment, life cell equipment and radiation film packs.

The life cell equipment included a magnesium container consisting of Air Conditioner, fan, oxygen system, telemetry transducers, small motors and life simulation thermo-couples. Weight of life cell was 15 pounds.

The recovery equipment included VHF Beacon, batteries, dye marker, flashing light and programmer to control beacon, flashing light and deployment of a 16 ft. parachute. Weight of recovery equipment was 45 pounds.

Several pounds of emulsion film packs were carried to measure cosmic radiation. The film packs require recovery with analysis under laboratory conditions.

If the Soviets should have recovered this capsule, none of the above would give them anything likely to be more advanced than their present knowledge. However, from such bits of evidence as the marks of the explosion made for separation of the capsule from the vehicle, and the explosion made by the retroactive rocket, from springs and from the accelerometer with a wire leading to the package that releases the parachute, they might be able to reconstruct our sophisticated system of ejection and, thus, increase their knowledge.

Project SPACE TRACK has reported that DISCOVERER II, the vehicle itself, is no longer in orbit with probable "burn-in" early on turn 206 prior to 1140 EST on April 26, 1959. Observational data was solid through turn 203, including a South Pole Station sighting. Period on last observed turn was 87.6 minutes, considered to be very close to critical point with further reduction in period resulting in heating to ignition level and consequent destruction. Conclusion that DISCOVERER II was definitely down was reached at 1140 EST on 26 April, when Millstone radar, well within range of orbit turn 206, failed to detect passage of the vehicle.

*(Also see memo 8.4.1/27
re: in phone conversation)*

*(Carbon destroyed 8/11/59)
(G. Tuttle 8/3/59)*

*(note: this item was at
specific request 4/21/59
Galt by ~~1125~~ - May
E. phone to ACT on 4/25/59
P's interest)
DoD 4-27-59
5:30P*

~~SECRET~~

~~Reference Defense reports~~

DISCOVERER. ~~Reference Defense~~ Defense reports that the only part of

the DISCOVERER II capsule that would be particularly useful to the

Soviets is the sophisticated ejection system which we believe to be

superior to any system that they possess. We believe that the Soviets

have instruments similar to the remainder of those contained in the

capsule (eg., a horizon scanner for stabilizing the capsule; a film

pack for measuring accumulated radiation). They ~~would be able to deduce~~ ^{would}

from ^{instruments in} the capsule the radio frequency on which information was transmitted,

but we ~~may~~, of course, ^{will use a different} change frequencies in ~~the~~ future tests.

~~Reference~~ Defense now believes that it was a mistake to include

an automatic ejector in the capsule and ~~that~~ next time the ~~automatic~~ ejector

will only function if the satellite is on exact schedule. ~~Ejection~~ Ejection

will not occur if the satellite is off course.

*Small
A
J
4/27/59
b*

(Note: Above information via phone from Gale to Russell 4/27/59 - per
Maj. Eisenhower's request to APT for info. on 4/25/59 (Saturday)
for the P. written report from Defense will follow.)

*Confirmed
or written
Report 4/27/59
Rec DOD
4/27/59
item 72
File
Defense
4/27/59*

SECRET