

~~SECRET~~

OFFICE OF THE SECRETARY OF DEFENSE

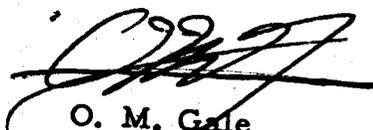
May 19, 1959

86

MEMO FOR Mr. Albert P. Toner
The White House

The attached items are submitted by the Department of Defense for possible inclusion in the daily summary for the President.

These items have also been sent to Dr. Killian.


O. M. Gale
Special Assistant

Attachments

6 items

*C.C. destroyed
5/20/59*

~~SECRET~~

WHEN WITH ATTACHMENTS

*4:55 p
5-741*

SECRET CONT. NO. 5-741

THE WHITE HOUSE
WASHINGTON

May 19, 1959

General Goodpaster:

Here is the original on today's item 7 (SN #549) with a few more details.

A. P. Toner *apb*

Attachment:
Orig. DOD 5-19-59 (Item #1) (S)

(Printed 8/11/59) R-2

3. DISCOVERER Launch Scheduled for 21 May 1959 ~~(Secret)~~
(Reference Item 2, May 15, 1959 Report)

DISCOVERER III is now scheduled to be launched from Vandenberg, 21 May 1959, between 1300 EST and 1700 EST.

Objectives include tests of capability to achieve polar orbit, and recovery system, using live animals.

The primary subsystem will consist of the re-entry capsule. Orbit ejection system consists of retro rocket, stabilization spin rocket, test instrumentations and supporting structure. Mounted in the forward end of the shield cavity will be the bio-medical recovery capsule containing the life cell with four rodent passengers and the recovery system.

DISCOVERER orbital empty weight will be 1633 lbs. Orbital objectives are: perigee 140 statute miles, apogee 482 statute miles, period 94.54 minutes with orbit inclination 90 degrees with respect to the equatorial plane. Vehicle will have battery power and stabilizing gas supply for 30 hours of operation on orbit. Ejection of recovery package will occur at approximately 27 hours after launch. After recovery package is ejected, an acquisition beacon with a separate battery will remain on the orbiting vehicle. This beacon will transmit for approximately 21 days, at which time the battery will be exhausted. The inactive vehicle is expected to remain on orbit for approximately 45 days.

The recovery capsule payload will be retrieved by aircraft backed up by ships in the vicinity of Hawaii. Modifications have been made to avoid ejection and impact in other than the planned recovery area. The basic change from the DISCOVERER II operation has been the installation of a more flexible timer with improvement in its accessibility from ground control stations. The preprogrammed orbital period can be reset by command to coincide with the actual orbital period. In addition, longer expanses of time during which command contact with the satellite can be exercised are being programmed to avoid inadvertent loss of command control. Further, by means of telemetry, a visual display of the orbital period setting of the timer is provided at the ground control stations.

DISCOVERER IV launch is scheduled for 18 June 1959.

SSN#1 to #5A9

(This one was handled to me by E. King NPT on 6/11/59 - at NPT to me 6/11/59)

C. C. destroyed
5/20/59

(Thermop destroyed 6/11/59)
4:55 P

~~SECRET~~

4. Project MIDAS ~~(Secret)~~

Development under Project MIDAS (Missile Defense Alarm Satellite) is directed to establish a reliable operational satellite-borne missile-alarm capability in the 1962 time period. Satellites on polar orbits will carry infrared detection scanners capable of keeping watch over large areas of the upper atmosphere. Infrared emanations from ballistic missiles being launched will be detected as the missiles rise above the atmosphere. The alarm will be transmitted instantaneously to far north readout stations located adjacent to BMEWS (Ballistic Missile Early Warning System) sites. Warning will then be relayed to the Zone of the Interior intelligence and operations centers, providing maximum alert time for retaliatory forces and for activation of both active and passive defenses.

Successful development would provide a system which complements BMEWS and permit an increase in warning time of 65% -- 100%.

MIDAS test program schedules an initial launch from Cape Canaveral in November 1959, followed every other month by one of three additional launches. These will use ATLAS boosted vehicles on orbits at altitudes near 300 nautical miles. A follow-on series of launches at higher orbital altitudes will be conducted from Vandenberg Air Force Base.

SN
550

(C. C. Salvendy)
5/20/59

~~SECRET~~

4:55P