CORONA MISSION 9021

OPERATIONAL BRIEFING

1. This is the first operational CORONA briefing for mission 9021.

2. It is to be a 4 day orbit with an ETA for recovery at 2142 EDT, 7 August (next Monday night). Recovery is possible on any of the three preceding days between the times of 2157 EDT and 2248 EDT.

   a. To obtain a maximum of 3 hours of daylight in the recovery area, the 1st and 4th days will provide that margin.

   b. The 2nd and 3rd days will provide 2 & 37 hours and 2 & 11 hours respectively.

   c. All of the recovery passes fall within the 24-hour surface recovery capability area and within this area the SCUBA team can be deployed to the capsule within one hour's time after the impact point has been determined.

   d. A decision to recover has to be made 5 passes (or 7½ hrs.) prior to recovery time to effectively utilise the entire recovery force. To obtain maximum utilisation of the force the decision must be made 8 passes (or 12 hrs.) prior to recovery time.

3. 16,087 feet of film would be needed to photograph all of the area that has been programmed to be filmed. We are film limited to 7229 feet of available film. We are over-programmed 122%.

   1st day - 53%
   2nd day - 65%
   3rd day - 53%
   4th day - 51%

4. A command decision is to be made at this briefing to either operate or not operate the camera on passes 3D and 5D. The two passes are controlled together so that if one pass is deemed fruitful to operate the camera over, both will have to be photographed. The two passes require 5.5% of the total film. Passes 1A, 2A and 2D have been programmed to have the camera on over these areas at launch. This is a precaution to insure that the camera will operate over areas of interest in event command control cannot be obtained at the various command tracking stations. These passes will use 11.5% of the film. A re-cap shows that if the decision is made to operate on 3D and 5D, 17% of the film will be used upon completion of the 5D pass.
5. The decision message has to be in COMNO's hands by 2000 local time. The MENU board lists additional info that should be considered in the plans as the mission progresses.

6. IX and Intelligence will present their briefings.
MEMORANDUM FOR DEPUTY DIRECTOR (FLAIRS), CIA

SUBJECT: Revised DISCOVERER Schedule

1. Reference memorandum, subject as above, dated 10 December 1960.

2. This memorandum confirms the revision to the DISCOVERER program resulting from referenced memorandum and further discussions on 15, 16 December 1960. The approved schedule is attached hereto.

3. Please take necessary action to implement the attached schedule and to notify the proper personnel.

JOSEPH V. Shaft
Under Secretary of the Air Force

1 incl
Discoverer Schedule
dtd 8 Jan 1961

Info copy to: Lt Gen R.A. Schriever

Copy No. 3 of 6 cys.
### Discoverer Schedule

8 January 1961

<table>
<thead>
<tr>
<th>Launch No.</th>
<th>Agent</th>
<th>Payload Type</th>
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<td>A</td>
<td>21 Jan</td>
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<td>21</td>
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<td>3 Mar</td>
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<td>1106*</td>
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<td>31 Mar</td>
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<td>1107</td>
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<td>25 Apr</td>
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<td>38</td>
<td>1025*</td>
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*Although 1106 is scheduled as shown, 1025 will be prepared for possible launch on 21 March instead of 1106. If 1104 is successful, then 1025 will replace 1106, which will then be rescheduled later as an operational launch. If 1104 is not successful, 1106 and 1025 will remain as shown. Decision will be made on 17 January or as soon as possible thereafter.*
MEMORANDUM FOR DEPUTY DIRECTOR (FLAMES), CIA

SUBJECT: Discoverer Schedule


2. This memorandum confirms the further revision to the Discoverer program as outlined below:

   a. SAMOS is now scheduled for launch 26 January 1961. Since the tracking station can work only one vehicle at a time, I104 will be rescheduled at the earliest possible date subsequent to SAMOS launch.

   b. I102 will be rescheduled for launch subsequent to launch of I104.

   c. Continue to schedule both I106 and I125 for the same launch date. The criteria for decision is whether pictures were obtained from earth and stellar oriented cameras in I104, with decision to be made within a few days subsequent to recovery, essentially right after film processing. Hold commitment to GE until decision is made and accept the resulting slippage on I125 in schedule.

3. Please take necessary action to implement the above changes and to notify the proper personnel.

(Signed)
JOSEPH V. CHARYK
Under Secretary of the Air Force

Info cy to: L/G Schriesver

Maj Howard
MEMORANDUM FOR: Mr. John Parnageley, HPG-EB/P

SUBJECT: Trip Report

1. Purpose: To attend a conference at Thaek Corporation on the status of the G11 program.

2. General:
   a. G11 Station - The April date previously established appears to still be possible. The only clear reason for concern was the lack of decision on which clock to use. The decision on using the "A" clock had not been communicated to Thaeck in time for the meeting. The Thaek group have stated nothing about the "A" clock and were concerned with counting problems, etc., if the "A" clock were chosen.

   b. Characteristics of the "Joteren" Clock:
      (1) Accuracy - 1/1000th of a second. This is accomplished by coupling to timing "pipe" (600 per second), reading clock to tenths of a second, and interpolating by counting timing "pipe".
      (2) Reliability - No operational experience, but tests have shown very high reliability.
      (3) Reset Capability - Can be reset in orbit if command channel can be made available.
      (4) Drift - $10^{-6}$ (same as C10).
      (5) Readout - Clock or digital.

   c. G11 Characteristics:
      (1) The following camera characteristics differ from C10 and are of interest to THB for computer program changes and exploitation planning.
(2) There are 200 timing "pips" per second instead of 160 "pips" per second on the C1.

(3) The lens system rotates continuously and the chimney oscillates.

(4) The sweep direction is opposite to that in the C1. (C1 sweep from left to right in the camera.)

(5) Lens No. receives 475 lines per millimeter on the bench and 120 lines per millimeter on A.C. 1801 film.

(6) Sweep time is approximately 24% slower.

(7) A lens - "plow" - is located right at the image plane. It has its own dam for ING.

d. "INC Problems - Some time was spent with Mr. Wolf of Itek discussing INC on C1 and C111. Previously a great deal of confusion existed on whether INC or ING was provided. Most of the data available indicated INC, though ING seemed to be the most plausible. The discussion recapitulated the problem - INC and not ING is provided on C1 and C111.

e. DED Computer Services - Mention. Button and Powers talked about the possibility of DED providing its own computer services. This seems to be a very interesting possibility. DED not only has the equipment and mathematicians, scientists, etc., but also has people already cleared operationally and familiar with photogrammetric analysis. The undersigned recommends DED be contacted to further this discussion.

f. Camera Relative Orientation - It is believed that the present system of camera orientation accomplished on the test course is useful only to determine the orientation between the vehicle and the camera system and does not determine the relative orientation between the three cameras. The orientation procedure now accomplished by DED should be evaluated and the requirement for the vehicle/camera orientation should be reviewed.

PEG must communicate with DED-107 concerning the continued requirement for camera logs for the C111 program. This log must include depression angles of the horizon cameras, as the present C1 log does.
FOR HESS'S PARAHOSKY AND KIEFER FROM COLONEL BATTLE
PLEASE PASS TO DR. CHARYK.

DURING A ROUTINE FLOW CHECK OF THE THOR A FUEL LEAK WAS FOUND WHICH MAKES IT NECESSARY TO REPLACE THE THOR FUEL DUCT. THIS REQUIRES REMOVAL OF THE THOR FROM THE LAUNCHER, REPLACEMENT OF THE FUEL DUCT, AND REPEAT OF ELECTRICAL SYSTEMS AND FLOW CHECKS ALREADY ACCOMPLISHED. SINCE LAUNCH OF 1104 WAS BEING HELD FOR SAMOS THE FLOW CHECK HAD NOT PREVIOUSLY BEEN MADE.

OUR WORK SCHEDULE CALLS FOR A MAXIMUM EFFORT (7 DAYS OF 24 HR WORK) WHICH WILL PLACE 1104 AT 8-4 DAY ON 6 FEBRUARY WITH LAUNCH POSSIBLE ON 10 FEBRUARY. SINCE THIS TIME SCALE ALLOWS FOR NO DELAY OR TROUBLE A LAUNCH DAY OF 14 FEBRUARY CAN BE MORE CONSERVATIVELY EXPECTED.
OUR PRESENT INSTRUCTIONS REQUIRE US TO PROCEED WITH PREPARATIONS FOR LAUNCH OF 1104 BEFORE 1102. (ON THIS SCHEDULE, 1102 WILL LAUNCH 6 DAYS AFTER 1104. HOWEVER, 1102 IS PRESENTLY AT R-9 DAY AND WITH NO MAJOR TROUBLE COULD BE LAUNCHED ON 5 FEBRUARY; PROVIDED IT WERE ACCORDED PRIORITY OVER 1104.

IF THESE CIRCUMSTANCES SHOULD ALTER THE DECISION ON ORDER OF LAUNCH, WE WOULD BE ABLE TO FOLLOW THE ALTERNATIVE IF SO DIRECTED BY NOON ON 1 FEBRUARY.

END OF MESSAGE

This document contains information referring to Project ARGON
MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report

1. The following locations were visited by Major during the period 21 January through 25 January 1963:

   Palm Springs, California
   NASA's Launch Facility, Vandenberg AFB, California
   Edwards AFB, California
   Edwards AFB, Edwards AFB, California

2. The following individuals were contacted during the period:

   [Blacked Out]

3. Recommendations were made and action taken to have fork lift facilities available to off-load sixteen rocket motors from Headquarters 0-5s at Vandenberg AFB. A base fork lift driver is to be made available for this purpose also.

4. The satellite is now complete and ready for transporting the ANKE payload to Eastern via commercial airlines. It is not necessary to arrange for the first transport of this payload as is done with GONER package thr-
to the fact that the primary information obtained from the ACE
package is not intelligence data and it will also require consider-
able time-consuming action by intelligence before results will be
obtained.

5. The reason for testing delaying launch was explained and
accuracy does not enter into the picture as previously believed
throughout Headquarters. It is presently a range safety problem,
and although the sixelements will not recognize such action via the
written word, they offer no objection to such launching with their
equipment in the case when the condition remains approximately
within 10-35 minutes.

6. Palo Alto was elected to Headquarters recommendations for
two GOMA missions to be launched during March due favorable weather
conditions over area of primary interest. Mr. Forrest was satisfied
that this lead time would allow their efforts to be commenced so that
his people could go either way, depending on outcome of future
scheduling decisions from Mr. Young's office.

7. Scheduling procedure, as presently carried out, are unsat-
sfactory and continuing. As a substitute to published and sent to the
field
for implementation, each responsible commander on project and
under
project datum elements, intelligence, launching and launch
pore, etc., immediately issues separate directives. These directives,
In
turn, have to be relayed back to Mr. Young's office for schedule
verification. In the meantime, field personnel wants working toward
target dates that have already slipped until one launches schedule dates
are again forwarded from Mr. Young's office. They cannot follow their
own recommendations due to impossibility of assuring themselves that
higher authority will approve their recommendations. Thus the new
schedule occurs again. It is possible that Headquarters GOMA missions
for the month of March will be in jeopardy due to this unfortunate
scheduling procedure. Scheduling should be accomplished on the job by
HQ. Higher authority should intervene only if clearly defined conflict of
interests occur between separate government agencies or projects.

8. It was determined that a Headquarters recommendation should
be sent to Palo Alto for duty during the periods of multi-day GOMA
operations. This will not be necessary for ACE missions. However,
for continuity the same process should be sent each time.

9. Plans were being formulated to pay the Edwards facility to
accomplish the ISS testing that is presently being done at Vandenberg.
Assuming is that this will eliminate certain duplicate testing. Null-
sibility in first series has increased. First actual testing of ISS,
ACE, and payload will be accomplished on first pad systems test. Pay-
load testing will be scheduled prior to this test. Necessary security
planning to effectively screen this new activity at Edwards is being
accomplished by Edwards. The Vandenberg ISS facility will continue
to be manned and equipped to handle additional testing and maintenance as might be required by results of the pad system run.

10. The A RSVP Section has moved into a new building. This move has eliminated congestion in the area caused by the lack of space due to both CORONA and A RSVP work being done in the same room. Minor security problems were effectively handled by

11. As of 25 January, the policy was to delay an A RSVP launch if ground telemetry indicated that the clock channel was out. Further decisions were to be made as to which of the other channels could be cut and the launching still stay on schedule.

12. Pictures of the Mark V capsule were taken and will be forwarded to Lt/Colonel Ahoia, FM, Hawaii, for his information and necessary action before recovery time of the A RSVP package.

13. Witnessed the preparation for accomplishing the Final Test of the A RSVP camera package. This test is in addition to the HASS Test and does not have to be used with the CORONA instrument. The Final Test determines the measured relationship between the Stellar and main cameras. It was explained why the launch limits of the A RSVP shots differ from the CORONA shots. Fifty degrees of angular solar illumination into the lens of the Stellar camera is the limit that has been established whereby Stellar photography can be successfully obtained. This angular illumination is not the solar altitude above the horizon, as it is when solar angle is computed for the CORONA and TELALOT missions. The limits imposed by the Sun Position Indicator, as determined by NED, remain the same as the limits in the CORONA program.

14. Attended the discussion that determined the cover story that will be used in the SUCU and tracking station when unsecured personnel question the difference in telemetry between A RSVP and CORONA. For the present they are to be told that it is due to malfunctioning in the payload components and further investigation is warranted.

15. Was escorted into the clean room and witnessed the A RSVP instrument being tested during a system run. The test was being conducted under accelerated conditions so as to preserve the cycle life of the instrument.

16. Toured the SUCU. The vital control center with its multiple huge television screens, upholstered chairs, wall-to-wall carpeting, sound-proofing, and vast communications consoles was in vivid contrast to the Headquarters control center where operational command decisions are made during a mission. Was shown the room where the quality review of A RSVP data will be accomplished. Further review will be done at Westover AFB.
21. Headquarters is setting up a channel to obtain certain solar flare information that will be used in deciding whether or not to post solar flare activity will impact mission results.

22. During my visit to Edwards AFB, was amazed at the continuing improvement in the condition and utilization of the facilities. Major operations officer, and Major new Flight planners were very effective monitoring the fast changes in their first participation on a major problem solving session. The things that they both learned was that the flight planning must be a gathering place for personnel immediately prior to launching a missile. The plans to change the possibility of receiving an approval for a flight an hour or as little as 15 minutes before scheduled take-off. I am certain that their activity will be directed towards such a possibility in the future.

23. A firm policy and procedures for obtaining SLV coverage should be established at Headquarters and WSEP level. We cannot accept any discussions, resulting from establishing such coverage, 30 hours in advance, could easily have resulted in a serious composite had the flight been other than an unidentified operation.

24. See the actual benefits derived by Headquarters and field. It is recommended that such a field trip, although of shorter duration, be made at least four to six times a year.

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RF:

FOR MESSRS. PARAGOSKY,

THE FOLLOWING NORTH STAR PRESTO REPORT TO CHIEF OF STAFF,
HQ USAF AND COMMANDER, HQ ARDC IS QUOTED FOR YOUR INFORMATION.

QUOTE:
VDZTD 14-2-312; SUBJECT: NORTH STAR PRESTO REPORT, LAUNCH OF
DISCOVERER XX AND XXI. THIS MESSAGE IN THREE PARTS. PART I.
DISC XX, AGENA 1104 IS RESCHEDULED FOR 2000Z 17 FEB. ALL PARAMETERS
AND RECOVERY INFORMATION REMAIN THE SAME AS GIVEN IN OUR NORTH
STAR REPORT VDZTD 30-1-286 OF 30 JAN. PART II. 1. DISC
XXI, AGENA 1102, RM 2 IS SCHEDULED FOR LAUNCH AT 1930Z 18 FEB FROM
PAD 75-5-5, VANDENBERG AFB. 2. ORBITAL PARAMETERS ARE:

1ST BURN
A. PERIOD - 92.0 MIN
B. APOGEE - 334 SN
C. PERIGEE - 130 SN

AFTER SECOND BURN
A. 94.76 MIN
B. 492 SN
C. 141 SN

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3. A RESEARCH AND DEVELOPMENT MIDAS RADIOMETER PAYLOAD WILL BE USED TO OBTAIN BACKGROUND DATA IN THE CARBON DIOXIDE AND WATER ABSORPTION BANDS OF THE INFRARED SPECTRUM. RESTART EXPERIMENT WILL BE PERFORMED OVER ALASKA ON FIRST ORBIT. APL DOPPLER AND TRACKING LIGHTS WILL NOT BE CARRIED. NO RE-ENTRY IS PLANNED. ACTIVE WORKING LIFE OF PAYLOAD IS TWO DAYS. RECOVERY FORCES WILL NOT BE UTILIZED. TRACKING STATIONS WILL BE USUAL DISCOVERER STATIONS, PLUS AND TRACKING STATIONS ONE AND TWELVE, SPACETRACK, DISCOVERER XXI WILL UTILIZE MD-3, BLOCK 1 (130,000 LBS THRUST) BOOSTER ENGINE, AND AGENA B SECOND STAGE. PART III. THE ABILITY TO LAUNCH DISC XX AND XXI ON CONSECUTIVE DAYS IS POSSIBLE DUE TO THE FOLLOWING CONDITIONS: (1) THE DELAYS IN THE LAUNCH OF DISC XX DUE TO SANS INTERFERENCE AND TECHNICAL PROBLEMS ENCOUNTERED HAVE PERMITTED THE PREPARATION OF DISC XXI TO CATCH UP TO DISC XX. (2) THE TEST OBJECTIVES OF THE TWO VEHICLES ARE DIFFERENT. DISC XX IS A STANDARD RECOVERABLE MISSION WHILE DISC XXI HAS A NON-RECOVERABLE MIDAS SUPPORT RADIOMETRIC PAYLOAD. (3) THE T/H READOUT REQUIREMENTS OVER THE TRACKING STATIONS ARE DIFFERENT AND 3Y PROPER LAUNCH TIMING OF DISC XXI, THE PROBABILITY OF BOTH VEHICLES BEING OVER A TRACKING STATION AT THE SAME TIME IS VERY SMALL. (4) THE 6354TH TEST BG IS NOW OPERATING FROM THEIR NEW CONTROL CENTER WHICH IS ADQUATELY EQUIPPED TO HANDLE MULTIPLE SATELLITE OPERATIONS.

END OF QUOTE.
AMENDMENTS FOR THE RECORD
SECRET

3 MAR 1961

In accordance with the policy of the Air Force, intelligence information continues to be evaluated and refined as new data becomes available. This ensures that the most current and accurate intelligence is maintained. The attached intelligence report presents the most recent and accurate information available on the situation.

1. Following the events in Berlin, the situation remains tense. It is of utmost importance that all military personnel are vigilant and prepared for any possible developments. The Air Force is ready to respond to any threats.

2. The report also highlights the need for continued cooperation between the military and the diplomatic efforts. Effective communication is crucial in maintaining peace and stability.

3. The intelligence community is working diligently to gather and analyze the latest information. This effort is vital in ensuring that the Air Force is fully informed and prepared.

4. The report concludes with a call for continued vigilance and preparedness. The Air Force must remain prepared for any possible developments.

The attached intelligence report provides a comprehensive overview of the current situation. It is essential for all military personnel to study and understand the information contained within.

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to be taken to study under the Army representative, who is on duty
during during and after weekends, with the responsibility and authori-
ty to answer.

31. Conferences with and update to the officer with preceding
other direct data that they were not aware of. This will only take
precautionary steps in preparing other data indications that would affect
the overall situation.

[Signature]

[Date]

Special Assistant Secretary, 123.45/7