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[redacted]
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14 MAR 1961

MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report

1. Following pursuant [illegible] contacted by [redacted] during field trip to Palo Alto, [redacted] during period 28 February through 6 March 1961:

A. Lt Colonel Murphy, Headquarters, Palo Alto
B. [redacted] Headquarters, Palo Alto
C. Colonel Lee Battle, BMD
D. Lt Colonel Ralph Ford, BMD
E. [redacted] Lockheed, Palo Alto
F. [redacted] Argus Project, Palo Alto
G. [redacted] Corona Project, Palo Alto
H. [redacted] Missiles and Space, Pentagon
I. [redacted] Special Projects, Pentagon
J. [redacted] USAF, Special Projects, Pentagon
K. Lt Colonel R. [redacted], BMD, SSD, Sunnyvale
L. [redacted] Discoverer Project, Lockheed, Palo Alto
M. [redacted] Lockheed, [redacted]
N. Captain William Johnson, BMD

2. Purpose of the trip was to further familiarization with [redacted] Sunnyvale, Lockheed, and Headquarters combination, attend post mortem meeting for ARGON mission 9014A (Discoverer XX), and to be introduced to certain cleared personnel at BMD, Los Angeles. Because BMD people attended ARGON meeting at Palo Alto, it was not necessary to proceed to Los Angeles.

3. Read the systems manual that Lockheed has written explaining "Project GUSHER", the follow-on program scheduled to become operational during the spring season of 1962. Basically the system will employ the Thor-Agena vehicle, recoverable capsule, and carry a heavier payload. This increased weight is due to the fact that stereographic photography will be obtained utilizing two, instead of one, KH4-designed and manufactured cameras and improved design film. Two problem areas noted were that the S3 ground G. E. ballast compensator will still have to be installed in the capsule and a method will have to be developed to either accurately predict a revised recovery area or compensate the "lop-sided" recoverable capsule condition that will exist if either camera malfunctions. This would allow transport of payload to only one side of the capsule, which would introduce the "lop-sided" effect.

4. The post mortem meeting was attended by representatives of Headquarters, Lockheed, Ballistic Missile Division, General Electric, [redacted] Wright Air Development Division, Army Mapping Service, Special Project, Pentagon; Missiles and Space Office, USAF, Pentagon; and Dr. Charyk's office.

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5. Several symptoms of malfunction of the ARGON camera and clock were considered. Telemetry indicated transport of film but lack of camera shutter telemetry indicated no working of shutters. The ARGON clock was not operating as indicated by telemetry. Twenty-eight volt power was being introduced, but any one of a dozen components within both instruments could have caused inner power failure. Temperature and vibration conditions are being investigated, however, they were within tolerances on pre-launch checkout, launch, and telemetry indicators in flight.

6. While no positive malfunction cause was determined, several recommendations to pin-point the trouble were presented and approved. The two significant recommendations were the addition of pertinent telemetry monitoring points within the instrument systems and the approving of additional qualification testing to be done before the next ARGON mission.

7. The problem of the orbital programmer malfunction was not discussed during this meeting. To date no reports of the investigation of this problem have been released.

8. Requested Lockheed Chief Programmer Engineer, [redacted] to present study on feasibility of introducing an alternate [redacted] program within the present camera on-off system that we now have. If feasible from an engineering standpoint, this will increase the operational selectivity capability when making necessary command decisions during a CORONA mission.

9. Coordinated with Lt Colonel Murphy in adjusting the Part I, [redacted] report. Purpose of this report is to advise Headquarters and [redacted] of the actual flight times and flight path of the CORONA vehicle. The adjustment will allow [redacted] additional time in making forecasts that will be transmitted to Headquarters.

10. Noted that new communications equipment was installed at the [redacted] during my visit. This gear was brought in to increase the reliability of communication between Headquarters, Palo Alto, and Ballistics Missile Division.

11. Discussed airlift and packing and storage problems with [redacted] new Lockheed materiel representative at [redacted]. He is aware of the somewhat indecisive scheduling problems and the careless packing that has been recently noted. He stated that it is of vital concern to him, which is a positive step in the right direction.

12. Discussed security problem area existing in Hawaii with [redacted]. Suggested that he contact Headquarters Security and request permission to visit Lt Colonel Abola, Hawaii, along with [redacted] Lt Colonel Ford, and [redacted] BMD. Problem involved secondary steps

to be taken to fully orient the Agency representative who is on duty during GEMINI and APOLLO missions, with his responsibilities and actions while in Hawaii.

13. Coordinated with ESSA and presented their office with positive solar flare data that they were not aware existed. This will aid their technicians in computing solar flare indicators that could affect launching of Discoverer missions.

/s/
[redacted]
Major USAF
Special Projects Branch, DCS-M/P

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