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2 February 1961

MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report

1. The following locations were visited by [redacted] during the period 11 January through 25 January 1961:

(a) [redacted] Palo Alto, California
(b) [redacted] Facilities, Vandenberg AFB, California
(c) STC, Sunnyvale, California
(d) [redacted]

2. The following individuals were contacted during the period:

(a) [redacted]
(b)
(c)
(d)
(e) [redacted] C. Murphy, Headquarters, Palo Alto
(f)
(g)
(h)
(i)
(j)
(k)
(l)
(m)
(n)
(o)
(p)
(q)
(r)

3. Recommendation was made and action taken to have fork lift facilities available to off-load Hairo Rocket material from Headquarters C-5A at Vandenberg AFB. A base fork lift driver is to be made available for this purpose also.

4. The suitcase is now complete and ready for transporting the ARGON payload to [redacted] via commercial airlines. It is not necessary to arrange for the fast transport of this payload as is done with CORONA package du-

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to the fact that the primary information obtained from the ANNOX package is not intelligence data and it will also require considerable time-consuming action by [redacted] before results will be obtained.

5. The reason for trains delaying launches was explained and security does not enter into the picture as previously believed throughout Headquarters. It is primarily a range safety problem, and although the SP Railroad will not recognize such action via the written word, they offer no objection to such launchings with their equipment in the area when the countdown reaches approximately "T" minus 10-15 minutes.

6. Palo Alto was alerted to Headquarters recommendations for two CORONA missions to be launched during March due favorable weather conditions over area of primary interest. [redacted] was satisfied that this lead time would allow their efforts to be channeled so that his people could go either way, depending on outcome of future scheduling decisions from Dr. Charyk's office.

7. Scheduling procedures, as presently carried out, are cumbersome and confusing. As a schedule is published and sent to the field for implementation, such unpredictable occurrences as system and subsystem checkout failures, instrument tolerances, launching pad break down, etc., immediately induce schedule slippages. These factors, in turn, have to be relayed back to Dr. Charyk's office for schedule modification. In the meantime, field personnel continue working toward target dates that have already slipped until new launch schedule dates are again forwarded from Dr. Charyk's office. They cannot follow their own recommendations due to impossibility of assuring themselves that higher authority will approve their recommendations. Then the same events occur again. It is possible that Headquarters CORONA missions for the month of March will be in jeopardy due to this unfortunate scheduling procedure. Scheduling should be accomplished on the job by RTD. Higher authority should intercede only if clearly defined conflict of interests occur between separate government agencies or projects.

8. It was determined that a Headquarters communications man should be sent to Palo Alto for duty during the periods of multi-day CORONA operations. This will not be necessary for ANNOX missions. However, for continuity the same person should be sent each time.

9. Plans were being formulated to gear the Sunnyvale facility to accomplish the NAB testing that is presently being done at Vandenberg. Reasoning is that this will eliminate certain duplicate testing. Reliability in first series has increased. First actual mating of THOR, AGENA, and payload will be accomplished on first pad systems test. Payload mating will be simulated prior to this test. Necessary security planning to effectively decoy this new activity at Sunnyvale is being accomplished by [redacted] The Vandenberg NAB 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 ARGON Section has moved into a new building. This move has eliminated congestion in the [redacted] caused by the lack of space due to both CORONA and ARGON work being done in the same room. Minor security problems were effectively handled by [redacted]

11. As of 25 January, the policy was to delay an ARGON 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 out and the launching still stay on schedule.

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

13. Witnessed the preparation for accomplishing the Ratio Test of the ARGON camera package. This test is in addition to the HATS Test and does not have to be used with the CORONA instrument. The Ratio Test determines the measured relationship between the Stellar and main cameras. It was explained why the launch limits of the ARGON 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 IDEALIST missions. The limits imposed by the Sun Position Indicator, as determined by BMD, 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 STC and tracking station when uncleared personnel question the difference in telemetry between ARGON 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 ARGON 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 STC. The vital control center with its multiple huge television screens, upholstered chairs, wall-to-wall carpeting, sound-proofing, and vast communications console 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 readout of SAMOS data will be accomplished. Further readout will be done at Westover AFB.

17. There has been no complication in passing the Bio-Medical packages from the recovered capsules to interested parties to date. The only question raised so far has been an inquiry as to what material was packed around the Bio packages that might neutralize the Bio package data. [redacted] Bio Expert, has easily skirted the security implications of these questions. Preliminary reports indicate that the recipients of Bio packages are well satisfied with findings. University of Chicago, Randolph Aviation School of Medicine, and Cambridge Research Laboratories have all benefitted from these missions.

18. The re-entry of Discoverer V "Lemmons George" is scheduled for 20 February as determined by Space Track Agency (keeps tab on all satellites). A probability factor of .0039 has been determined by Lockheed studies for the vehicle to fall into competitive territory in a recognizable condition.

19. [redacted] Sink Fling Expert, presented a study that determined that normally "F" minus 15 days should be the latest date to change the life of the Sink Fling. Only a very strong recommendation should be presented before changing the life as late as "F" minus 7 days. To lower the limits would seriously hamper completion of countdown procedures due to the fact that his changing necessitates going into the inner workings of the capsule, not merely drilling into the capsule from the outside.

20. Assisted Lt/Colonel Murphy in the preparation of the initial planning data for the next CORONA mission. The very important V/H computations were fully and carefully explained and it was brought out that the actual film consumption computed in flight is accurate within five percent. This will have a bearing on future Headquarters Command decisions.

21. During the tour at Vandenberg, was escorted through the HAB and "I" building, shown the 1325 engine that is presently being rebuilt to meet specifications of the new THOR booster. The payload of this vehicle was to be the well publicized "mommy shot" if it had been launched last December. Was also shown 1102, the engine for the next MIDAS shot, and the follow-on SAMOS AGENA. Later in the day we visited the launch pad of the SAMOS II, which was successfully launched 31 January. The security precautions and the action taken to complete the actual mating of the CORONA instrument with the AGENA was illustrated and explained by [redacted] as we toured the pad from which the first AGENA launch will be made.

22. During the discussion with Lt/Colonel Murphy, the E/T capability of the launching of THOR boost vehicles was explained. It is a completely automatic, internal countdown that can actually extend the upper-launch limits of CORONA missions 9 to 13 minutes, the length of time required for the automatic countdown. This capability will be used whenever necessary.

23. Headquarters is setting up a channel to obtain certain solar flare information that will be used in arriving at a determination as to when solar flare activity will negate mission results.

24. [redacted]

25. [redacted]

26. Due the mutual benefit 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.

[redacted]
Major USAF
COMUSMA Officer

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