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18 August 1964

MEMORANDUM FOR THE RECORD

SUBJECT: Discussion at Lockheed. In attendance: Kelly Johnson, McCone, General Stewart and Colonel Ledford

1. The purpose of the meeting was to generally review the status of the OXCART program and the effect on desired readiness dates if the speed test with an AF-12 is attempted in September.
2. The attached communication from McCone to Kelly Johnson was used as an agenda for the meeting.
3. Speed Test. Johnson stated on orders received from McMillan on Wednesday, August 12, 37 Lockheed personnel had been transferred [redacted] to Edwards. The engines on plane 121 had been removed and boxed for shipment and loaded on a C-130, but had not been moved. Several valves and other parts for plane 122 were being diverted to Edwards. The order received from McMillan called for placing the speed test on the highest priority, to be accomplished in September. It is recognized that this would delay further flights on 121 and 122 for two to four weeks (probably the latter) -- would limit testing to flights of 129 during September -- and would place two rather than four operational planes in a state of readiness for 1 November.
4. Readiness Program. Prior to the "speed run orders" it was planned to have planes 125, 27, 28 and 132 checked out and tested and in a state of operational readiness at Mach 2.8, altitude 80,000 ft., range 2500 n.m. for a Cuban capability (Operation SKYLARK). The deficiencies were inlet control, engines with the most up-to-date modifications and both of these caused what Johnson described as most conservative estimates. He expected to exceed both the speed and the range mentioned above.
5. Program 2 called for operational readiness of plane 131 at Mach 3.2, 3,000 mile range and 85,000 ft. by January 15. Inlet control and the advance J engine are both critical. 131 is used as a test bed for a variety of ECM developments and for air-borne side-looking radar.

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6. Program 3 - designed for Mach 3.2 at full range, certain modifications and the introduction of Tacan equipment to facilitate contact for refueling introduces delays in this program and if all modifications are incorporated, then the readiness date of the 8 planes in the operational program will be between May and December 1965.

7. In this connection there are 11 planes in the A-12 program. Three of them, 121, 122 and 129 are considered test beds, the remaining 8 operational aircraft.

8. The Range Problem. The Hamilton inlet control on 121 and 122 give a high fuel consumption and elapse time in going through the sound barrier -- 1.9 Mach to 1.2 Mach. Plane 129 with Lockheed control is somewhat better. However, this problem is not answered and therefore the range is affected. It is expected that the J-type engine with after burners and with the Lockheed control will improve the situation but not correct it. (Currently the area between actual performance and wind tunnel test is about 20%.) (Convair engineers are extremely worried over the difference between actual performance and the wind tunnel tests which vary as much as 100%.)

9. The specifications call for a range of 4,044 miles. It is hoped that 129 will test out at 3,320 miles. Changes in specifications including the amount of reserve fuel account for 450 n. m. of the difference. Increased weight of engine, acceleration through the sound barrier and other operational difficulties account for 390 n. m.

10. Testing of quadruple range of 3,300 n. m. will be made in the near future with plane 129. This plan flew on August 17.

11. Cameras seem to be O. K. However, the effect of high temperatures on the windows has as yet not been tested.

12. Most specific with respect to attempting speed tests, the following observations were made:

a. Plane 121 is considered the engine test bed and cannot be equipped with a suitable engine for testing purposes for 3 to 4 weeks. Flights during this period with substitute engines would contribute little.

b. Plane 122 is used to test controls and two to three weeks more delay is expected in receiving equipment to replace that which has been cannibalized.

c. Plane 129 was ready to fly on August 17.

13. In summary the test program called for the flying of 3 test beds from August 10 until November 1. The speed test program would remove 2 planes (121 and 122) from the test program until September 15th at the earliest.

14. It was planned to bring 4 operational planes, 125, 27, 28, and 32 up to operational readiness during October and to check them out thoroughly to meet the November 5th deadline. The speed test program would reduce this to 2 airplanes and since they would be flown extensively on simulated missions and to gain experience, fear was expressed that one or both of them might encounter mechanical difficulties, thus removing the entire capability. Furthermore, the decreased testing program might not bring forth all of the bugs and problems early enough to insure accomplishment of necessary modifications and retrofits to operational planes. Hence, it was Kelly Johnson's opinion that the speed test program would delay the operational readiness by at least a month.

15. McCone agrees with this, however, I question and am deeply concerned over the possibility of attaining the operational readiness by November 1. Certainly this cannot be done unless:

a. Lockheed be instructed to place the operational readiness of the A-12 on the highest priority and that no one interfere. NRO must understand this and SAC, who are now becoming more active with their RS-71 program must recognize this priority.

b. NRO, CIA and the operational people [redacted] must recognize that we seek in Project SKYLARK an operational readiness against Cuba and therefore we must be constrained to introduce only such modifications, ECM equipment and other gadgets as are required for this mission. (This should include the Bird Watcher.)

16. The pilot training program would be upset by the speed tests, but this deficiency could probably be overcome.

17. The time when the speed test could be conducted was discussed and it became apparent that the whole idea was premature. The 3 AF-12's at Edwards had not been brought up-to-date with modifications and betterments indicated as necessary to meet the 3.2 Mach condition because emphasis had been placed on armament, missile adaption, etc.

Hence these planes were behind the A-12's. What is involved is taking the most deficient plans and pushing them ahead on a crash basis. This Kelly Johnson feels unwise, although he noted that some but not all modifications had been made on all planes during the recent weeks when the planes had been grounded.

18. In conclusion the following summarizes the answers to the questions in my communication to Mr. Johnson:

a. Johnson feels that 4 operational vehicles will be ready on 1 November to operate against Cuba at 2.8 Mach and 80,000 ft. McCone has reservations and believes this can only be accomplished on the conditions outlined above.

b. Johnson feels the feasibility of a speed run with the AF-12 is questionable and recommends against it for the reasons mentioned.

c. The interceptor aircraft at Edwards had been concentrating on armament and not on speed. The program is going satisfactorily but is not foundation for a speed test.

d. Johnson expressed concern over the Air Force reconnaissance program. He said Lockheed was scheduled to produce one plane a month and funding was such that they were required to order components and parts from their subcontractors a few at a time. This produced gaps of several months in the subcontractors production effort. Johnson further stated that a large number of Air Force officers are coming in for orientation and undoubtedly would assume supervision.

19. The ^{TAG Board} test bed program was reviewed briefly and will be the subject of a report.

20. With respect to the Lockheed organization, Johnson claims he has the "bases covered." I was of the impression that the organization is overloaded and believe it most important to get the A-12 fully checked out and off of his mind so as to turn him loose to work on the AF-12 and the RS-71.

JAM:mcm

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