

*Noted by
Person for*

22 October 1958

MEMORANDUM FOR: Special Assistant to the Director
for Planning and Development

SUBJECT : Advisory Panel Meeting

1. After hearing the results of Kelly Johnson's design studies and those of Bob Widmer, I believe that three issues will have to be resolved at the next meeting of the Advisory Panel on 12 November 1958. The first of these is the question of a relative radar detectability of the two designs. Both contractors have had the benefit of Frank Rodgers advice and model testing. I am discussing with Frank the possibility that he get the best estimates of both contractors and incorporate them in his Monte Carlo type analysis for presentation to the Advisory Panel.
2. The second issue involves a number of factors including the relative aerodynamic performances, the additional heating problems which might be encountered at Mach 4 as against Mach 3, and the area which can be covered with certain design ranges of the reconnaissance vehicle utilizing staging or refueling. In this area we will have to rely, I suspect, on the knowledge and forthrightness of the contractors plus our own examination of the best target geometry.
3. The third issue is that of the relative complexity, reliability and times to develop ramjets which operate on the one hand in a speed regime of Mach 2 to Mach 4 and on the other hand over a speed range of high supersonic to about Mach 3. On the last point we should perhaps consider inviting Perry Pratt and Ray Marquardt to attend the meeting on 12 November. However, this would add, undesirably, no doubt, to the presentation time. As an alternative, but somewhat less satisfactory than having them present to answer directly questions from the Panel, we could discuss this last area privately with people from P & W and Marquardt on their home ground prior to the meeting on 12 November.
4. I have informed Kelly Johnson of the discouraging results of the J-79 powered F-101 using HEF fuel. Kelly told me in turn that while he was unaware of the F-101 test with its discouraging results from the radar

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detectability standpoint, he was looking into the results of an X-7 Marquardt ramjet powered test also using HEF fuel which gave somewhat discouraging aerodynamic performance results. Col. Leo Geary has promised to get further information to me on the radar tests of the HEF fueled F-101.

5. Kelly is now planning to arrive in Washington on 10 November and will be back here on the 13th, after the Cambridge meeting on the 12th. Just talked to Perry Pratt. He is coming in Friday and will be prepared to discuss the ramjet engine points listed above.



EUGENE P. KIEFER

(b)(6)

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