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February 9, 1968

## MEMORANDUM FOR THE RECORD

SUBJECT: Meeting in Mr. Kirk's Office, DD/R&E, Concerning the Definition of Outer Space Problem

1. The meeting, on 8 February, was for the purpose of reviewing the definition question and to discuss possibilities for a fall-back position in the event the U. S. is eventually forced to acquiesce in a decision to define the line between territorial air space and outer space. The meeting was attended by Mr. Kirk and Mr. Brockway, DD/R&E, Mr. D. Anderson, OSD/ISA, Col. R. Ford, SAFSL, Mr. Allman, General Counsel's Office, and Maj L. McCarthy, AFXPD.
2. Mr. Anderson reviewed the status of negotiations on the definition question. French proposals for developing a definition had been successfully thwarted so far. The Soviets were in accord with us that a definition was impractical and unnecessary. The issue probably could be sidetracked for another year or so but it behooved the U. S. to have a fall-back position in event pressure by the French and others forced us to negotiate a space definition.
3. Mr. Brockway reviewed some technical considerations that DD/R&E had been looking at in this connection. These are shown in the attached chart. Mr. Kirk observed that, technically, the Von Karman Line looked pretty good and was under the altitude for satellite perigees, except possibly a satellite with very high eccentricity. The lowest feasible altitude for an unpowered circular orbit satellite was 60 n. m. On the other hand, the situation is confused by the X-15 and the various re-entry programs. Thus, it will be difficult to define a satisfactory boundary on a technical basis unless ground rules are set out concerning such questions.
4. Mr. Anderson volunteered to write a draft of a set of questions concerning the assumptions which should be used in trying to develop a future negotiating position. These would enable the implications for the U. S. of various technical approaches to be examined.
5. It was clearly the consensus of all, and vocally expressed by some of us, that we should not push too hard and too fast to develop a fall-back position, and that the desirability of avoiding a definition was self-evident and foremost.

  
Harry W. Hean

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Low alt. Set

X-15

$$\frac{M}{W/C} = 1.0$$

Low Karman Line

All (C) in ft

70

60

50

40

30

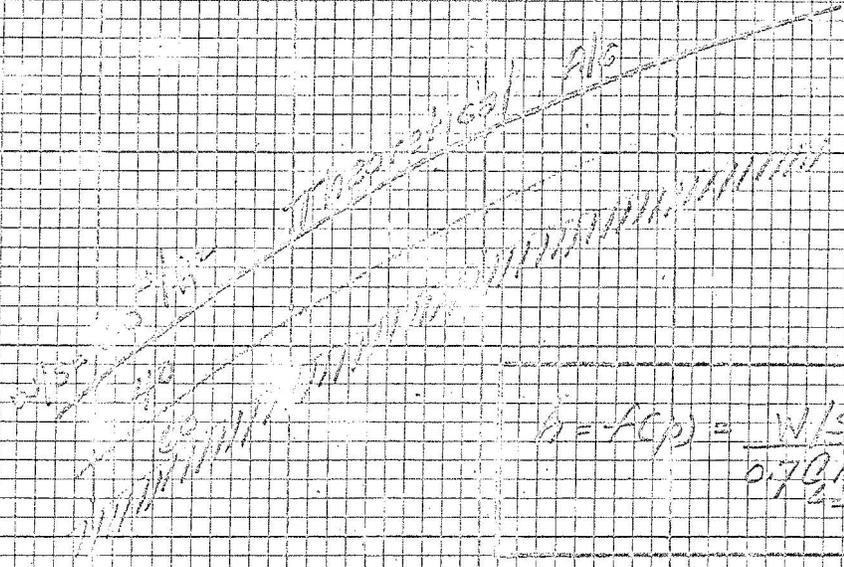
20

10

0

-10

-20



$$h = f(c_p) = \frac{W/S}{0.70 M^2} \sqrt{\gamma = 0.3}$$

Current A/c

Mach (M)

713 4/21/59