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IDEALIST/OXCART/TAGBOARD

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CONTROL SYSTEM~~ISI~~ NATIONAL RECONNAISSANCE OFFICE  
WASHINGTON, D.C.

OFFICE OF THE DIRECTOR

December 19, 1966

MEMORANDUM FOR THE DIRECTOR OF RECONNAISSANCE, CIA

SUBJECT: Aircraft/Drone Vulnerability Studies

Vulnerability studies of specific aircraft and drones generally have been made as individual studies or on the basis of comparison of relatively similar reconnaissance vehicles. Most of the extensive vulnerability effort on each system has been directed at supporting the design of ECM subsystems; hence, the vulnerability analyses have to some degree been conditioned by the differing approaches to the specific ECM employed. As a result of questions raised, particularly by Dr. Hornig, at recent EXCOM meetings, it is apparent that there is a need for a comprehensive, quantitative vulnerability study which will provide probable survivability estimates of various systems on a comparable basis.

In response to this need, I request that CIA chair a joint CIA/DOD study group to accomplish the comparative vulnerability study. I believe that the CIA Vulnerability Analysis Group is best qualified to take the lead in this effort. Maximum use should be made of the NRO Staff, the Air Staff, the Foreign Technology Division of AFSC, and NSA as members of the study group and in support of the effort in order to assure a unified community agreement on the validity of the study.

The study should include the SR-71, U-2R, OXCART, TAGBOARD and COMPASS ARROW systems. These systems should be tested against standard point and area defensive models (either known or predicted) in the areas of expected operational utilization for both present day defenses and against projections of defenses five to ten years hence.

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A standard data base of aircraft parameters affecting the analyses should be established. The studies should include survivability/vulnerability estimates with and without ECM equipments installed or programmed for the several systems.

Although the need for the detailed information is pressing, I do not intend to suggest any deadline which might detract from the accuracy or completeness of the study. However, I would appreciate it if you would submit to me by December 28th the composition of the joint CIA/DOD study group and an outline of the proposed study plan along with an estimated time table to be followed. The NRO Staff will assist you in arranging for DOD participation and in such other ways as you request.

*Alexander H. Flax*

Alexander H. Flax

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