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STRATEGIC RECONNAISSANCE

During the past several months the Office of the Assistant for Development Planning has been working intensively on an overall study of reconnaissance and intelligence for the future Air Force. We are both quite familiar with this activity, having participated in the initiation of the study, as well as much of the activity in its pursuit.

During my recent trip to Washington I had opportunity, along with Mark Maier, to discuss this subject briefly with Gene Kiefer, who has been directly associated with the study since its very start. In the course of this conversation Gene briefly summarized the broad conclusions of the study, as he feels sure they will appear in final form. Principal among these conclusions are:

1. The air vehicles, in the present production program and now in the development program, will provide a satisfactory array of air vehicles to do the "normal" job of post-D-Day reconnaissance. The bulk of the reconnaissance job can be done satisfactorily by reconnaissance versions of those aircraft and missiles whose primary function is weapons delivery. There is still some question as to whether this broad conclusion applies to the area of close battle-field surveillance; it does apply to all the other areas and would appear to eliminate the requirement of large numbers of specialized "reconnaissance only" vehicles for post-D-Day operations.

2. The most fruitful field for new developments in the reconnaissance and intelligence is in the area of new types of sensing equipment other than photographic. These generally come under the heading of infra-red, radar, and other unique sensing devices developed for the purpose of expanding our all-weather capability and providing a capability for collection of intelligence on subjects not subject to normal photography. As you know, this is a wide open field.

3. The most important area in which something useful can be done for reconnaissance and intelligence is in processing the tremendous amount of raw data collected from all intelligence sources. At the present time it is clear that all intelligence agencies of the government are suffering from an acute case of indigestion in this matter. The DPO study will make a number of specific recommendations in this area. These recommendations will be in the area of

organization and training and in the application of the techniques used in modern electronic computers to mechanize a large portion of this job.

4. There is an urgent need for the development of pre-D-Day reconnaissance systems. This matter has, as you know, been bounced around higher levels in Washington for some time. It is, of course, fraught with political and diplomatic implications. There are several projects now underway in this field. Principal among them are Project Gopher, which is well along in development; the development of a super-altitude Canberra, which is now in the study stage; and ultimately the development of the Satellite vehicle. I understand from Kieffer that two other projects in this field have been initiated by ARDC, one with Fairchild and one with Ball. Gena did not feel that either of these projects looked too good to him.

It is my opinion that in the area of Conclusion No. 4 above, Lockheed might make a real contribution.

There are many target areas in Russia about which a great deal more specific information is urgently needed. Other intelligence operations, including broad search projects such as "Gopher" and certain covert intelligence operations, will add to the list of such places from time to time. A means whereby this specific information can be acquired rapidly and effectively is vitally needed. The studies to date indicate that the most practical means of acquiring this data is to over-fly Russian territory with high performance manned aircraft. A preliminary analysis of the problem indicates that such an aircraft should have a one-man crew, that it should carry approximately 300 to 500 pounds of special sensing equipment, including cameras, that it should have a radius of action of 1000 miles, and that it should be designed to fly at extreme altitudes.

The total requirement for such a specialized aircraft should not exceed 20. It was Kieffer's opinion that the best approach to providing the required specialized small force equipped with these aircraft would be for one of the aircraft manufacturers to take on the complete project. This would include development, manufacturing, maintenance and operation, and providing all personnel except the pilots - these to be provided by the Air Force. He further stated that to succeed, it would be necessary to design the airplane without regard to the Handbook of Instruction for Aircraft Designers.

The possibility of the corporation taking on such a project is extremely intriguing. There are, however, a number of possible disadvantages to becoming involved in such a venture:

1. The whole project would of necessity have to be conducted in an atmosphere of exceptionally high security.
2. From the corporation point of view this would not be a production project. The aircraft involved would probably have to be hand-built using experimental type tooling.

3. It would require the use of a small group of highly competent engineers and technicians who would not be available for the more normal operations of the corporation during the period of the project.

4. The corporation would be committed to the project as long as the vehicles remained either potentially or actually useful for the purpose for which they were designed. In my opinion the duration of the project could be from 6 to 8 years. I would expect that during this period the gross income from such a project would amount to somewhere between 150 and 300 million dollars.

The advantages of taking on such a project would appear to be primarily:

1. The corporation would be directly contributing to the solution of one of the most vital and difficult problems facing the security agencies of the country today.

2. The corporation would be gaining very considerably in reputation with the Defense Department. This would certainly do no harm in connection with other company operations.

3. The corporation should acquire an extremely valuable fund of technical information and experience concerning the design, manufacture and operation of an aircraft of exceptional performance, one pushing to the limit the state-of-the-art in all areas.

4. While not large, a gross business of between 150 and 300 million dollars probably should not be sneezed at.

I recommend that this matter be further explored from the standpoint of corporation policy. If management is interested I would suggest that the problem be turned over to R. A. Bailey's group for further exploration. Development Planning to work very closely with Bailey in order to make sure that all the work which has been done in this general area be available to him as background and environmental data. Should the results of the M.P.D.P. study be such that a real contribution can be made, I would suggest that a relatively complete proposal be prepared and submitted personally to the Commanding General, ARDC; Chief of Staff of the Air Force; the Secretary of Defense and possibly eventually to the President and the National Security Council.

I would like to reiterate that this matter is an extremely sensitive one from the security standpoint and that this paper should be considered in the "eyes only" category.

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