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DEPARTMENT OF THE AIR FORCE

WASHINGTON



OFFICE OF THE UNDER SECRETARY

MEMORANDUM FOR THE RECORD

SUBJECT: Visit of Kelly Johnson of Lockheed

On June 12, 1969 Kelly Johnson met with me briefly to review a number of topics which he believed might be of interest to me. The following were the topics discussed by Mr. Johnson:

1. The TAGBOARD drone is now approaching a reasonable degree of reliability. The next flight is to be on June 24. If it goes the distance, and all subsystems perform well, we can consider the vehicle ready for operational use. The special purpose aircraft achieved its goal in altitude, range, and speed on three separate occasions. The last time it was flown the flight was perfect, but the camera failed immediately due to a loose piece of solder. The problem is quality control.

2. The production of the 12 U-2R's is now completed. He is now talking to the Navy about



He feels that the U-2R is a great deal safer than the EC-121 and does not require a fighter escort. We informed him we preferred unmanned aircraft.

3. The Navy is also interested in the U-2R as a communication relay station. They do not like land based aircraft, consequently Kelly Johnson is proposing to demonstrate the U-2R with six feet of the wing tips

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folded. This will enable the U-2R's to be handled by the elevators aboard the largest aircraft carriers.



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5. Kelly Johnson is running out of business. For the first time in many years there is no airplane in his skunk works and he has to take the skunk works apart.

6. Lockheed performed a study showing the cost of purchasing aircraft has been rising at a rate twice as great as the economy. In response to my question as to why this has occurred Kelly Johnson stated that the labor in the aircraft business tends to follow the labor rates of the automobile workers. They have had a very rapid recent labor rate growth. In addition to the direct wage growth there have been a lot of fringe benefits like dental care added to the labor union contract. Materials have also risen at an unpredictable rate. It is almost impossible to estimate costs he said, and it is even worse in development contracts.

7. Kelly Johnson attributed the present pressurization problem in the C-5A to the weight reduction program which attempted to cut the weight too much. It is difficult to seal the large openings at the forward and aft end of the aircraft. He felt that the C-5A price (about \$26M) compared favorably with the price for the 747 (about \$24M). The initial price of the 747 was \$21M but these aircraft are being sold at a loss. Based on this comparison the C-5A is a good buy, Kelly Johnson said.

8. Kelly Johnson described Lockheed's AMSA proposal. Kelly does not agree with our requirements. He has designed an airplane with interchangeable engines mounted on pylons. For low altitude subsonic flight it would use the same engines as are on the 747. For high altitude flight, it would use the same engines proposed for the SST. Because the engines would be mounted on pylons, changing them for different missions would not be too difficult. In the high altitude flight regime, the aircraft would have a Mach 3 speed at 80,000 ft. altitude. His aircraft would weigh 535,000 pounds. He estimated it would cost between \$40M and \$50M.

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Kelly Johnson said that he does not believe that bomber aircraft can survive at low altitude. He says there are serious flaws in our low altitude studies which do not give sufficient attention to ground fire or to MIGs.

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