MEMORANDUM FOR GENERAL STEWART

SUBJECT: Response to Secretary of Defense on MOL Program

Since I consider the implications of Mr. McNamara's memorandum of 9 December to be quite far-reaching and serious, I would like to offer a few suggestions on how to possibly salvage some of our space program.

When the MOL program was approved at the level of 1.5 billion dollars, it was to be a six-flight program (one unmanned test; five manned) which had as its primary purpose the optical reconnaissance mission, but also contained secondary military and tertiary objectives. At that time it was difficult to conceive of an automatic mode of conducting the reconnaissance task. The entire payload job was estimated to cost about $500 million. At the present, we have a program whose total price is near $3 billion and which has only a single principal objective. The payload cost now is estimated at about $1 billion. The role of man is questionable. Because of the sole identification of the program with the reconnaissance mission, there is very little actual support from the Air Force. Conversely, the price for achieving very high resolution is becoming so high that the reconnaissance community is dubious about the worth. Although they presently challenge mostly only the added cost caused by man, when man is removed, they will challenge the very basic requirement for very high resolution orbital photography.

When looking at the current national financial situation, we are heading towards a dangerous future since very little effort is being devoted to preparing ourselves for modern defense and offense which undoubtedly has to include the space environment. As a matter of fact, if the manned portion of the
MOL/DORIAN system is terminated in FY 69, there will be hardly any viable space program left, other than reconnaissance. To recoup this kind of a loss, the country will require many more years of new planning, designing and negotiating. Therefore, I believe it is of vital interest to our national defense to maintain the MOL manned capability, regardless of possible inefficiencies which are inherent in an underfunded budget. I would suggest that we pursue a program which publicly, and in fact, maintains the option of manned flight even though it may be later than presently desirable.

I suggest that in our answer to Mr. McNamara, after having discussed and examined a number of detailed alternatives, we highlight three courses of action:

(1) Manned/automatic MOL program as currently conceived with the first manned flight in August 71 with FY 69 at $600 million.

(2) MOL program reshaped to provide for unmanned testing of automatic features including full payload operation prior to the planned introduction of man into the system with a first flight of the all-up unmanned system in August 71 and first manned flight on #6 with FY 69 at $400 million.

(3) A wholly unmanned DORIAN program with a public MOL termination, first flight January 71 at a cost in FY 69 at $350 million.

I would recommend that we do all we can to maintain the current program, but if the Government's financial situation is, indeed, such that we cannot afford the $600 million program in FY 69, that we pursue alternative #2. This alternative has as its inherent feature the reintroduction of an all manned system in FY 70 which could lead to a budget requirement of possibly $600 million. It allows, however, the option to postpone the manned system reintroduction for another year at which time the total fiscal funding requirement may be less than $600 million. In the meantime, while having this year's lease on life, we could carry out a concentrated, but not necessarily
expensive, effort of broadening the MOL and making it, indeed, into a useful military tool. The similarity with a single-minded purpose of the Apollo Program and the necessity of expanding to the Apollo Applications Program to utilize the very expensive capability is very apparent. I really believe that we need this year's chance to develop a MOL Applications Program.

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MOL Program