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DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING
WASHINGTON, D. C. 20301



MEMORANDUM FOR DEPUTY SECRETARY OF DEFENSE

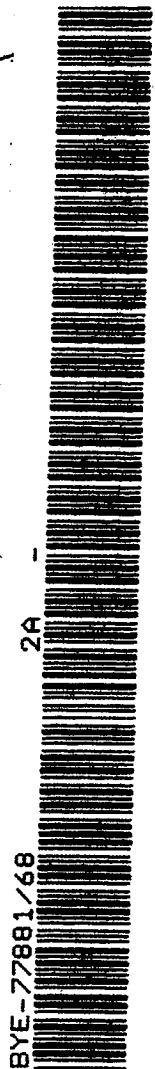
SUBJECT: MOL and the National Intelligence Program

This memorandum is in response to our MOL discussions on 16 February after we briefed the State Department personnel on the program.

The total cost of the National Intelligence Program today is between \$4-5 billion annually. The cost of four main programs, the Consolidated Cryptological Program, the National Reconnaissance Program, the Central Intelligence Program, and the Consolidated Intelligence Program, account for about \$4 billion per year. It is estimated that about \$1 billion additional is used by other government agencies and the DOD operational forces in intelligence related activities not included in the four main programs.

The cost of the National Intelligence Programs are closely controlled and should remain essentially constant for the next ten years. A 2% per year increase has been estimated to cover a "cost of living" increase.

By 1973-1974 the MOL will be used at the rate of about two per year manned or perhaps, three per year unmanned. The manned MOL will cost about \$85 million on a recurring basis and the unmanned MOL will cost about \$65 million. The annual MOL recurring cost would be between \$170 to \$195 million per year. The reduction of the number of Gambit Cubed (medium resolution) flights per year will reduce the MOL recurring costs. The present Gambit Cubed cost about [redacted] per year launched. It may increase to [redacted] as the cost rise over the next five years. Using the manned MOL, the Gambit Cubed flights might be reduced from six per year to about three per year by 1974. The net recurring cost for the high resolution photography from the MOL would then be about (\$170 [redacted]) [redacted] per year out of a \$5 billion cost for the total intelligence program.



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The intelligence content from the [redacted] resolution photography can be expected to improve over the Gambit Cubed photography by as much as a factor of [redacted]. In addition to the improved photographic content for mensuration and analysis, a manned reconnaissance capability can be exploited to photograph significant activities and exposed equipment which would normally be missed by a pre-programmed unmanned system. Exposure, focus, and cloud avoidance can all be exploited to get maximum return from the manned high resolution system.

In the future a dramatic improvement can be made in the MOL system by adding a real time read out system. Such a system would return high resolution photographs to any selected command within hours of the observations. This system is not a part of the present MOL program because of our intent to complete the limited objective of the R&D program at minimum cost and lowest technical complexity.

It is technically sound to consider extending the manned MOL from 30 days to 60 days by a growth version of the T-III launch vehicle. This could be accomplished for a nonrecurring investment of between \$200-\$300 million.

If the capability is extended much beyond 60 days, serious questions remain regarding man's physiological capability and whether an economic advantage would materialize in the face of a launch rate of two per year.

The development of rendezvous and resupply would require up to about \$1.5 billion to develop a basic system within the capabilities of existing launch vehicles.

Specialized versions of the 60 days extended MOL could combine an ocean surveillance radar with optical sensors to provide high confidence intelligence data as a part of decisions on naval force deployments.

In summary, for a total R&D investment of about \$3.0 billion, spread from 1963-1973, and a follow-on recurring cost of about \$100 million per year we can obtain hard intelligence on which we can confidently base deployment decisions, force levels and mixes, major R&D decisions, and crises management decisions. The MOL will also provide improved safeguard photographs on test ban treaties, space treaties, and future arms control or disarmament treaties if treaty issues have to be taken to the United Nations.

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signed 2-26-68
JOHN S. FOSTER, JR.
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Consolidated Cryptological Program
 Consolidated Intelligence Program
 National Reconnaissance Program
 Central Intelligence Agency
 Total Intelligence Program



Note: Total does not include indirect intelligence related costs of other government agencies or Unified and Specified operating forces. These costs are about an additional 20% of the total.

(1963-1973)

MOL Nonrecurring 3000

MOL Recurring (2 manned flights per year after R&D Program Complete)

Offset by reducing G³ flights by three per year

NET COST FOR HIGH RESOLUTION MISSIONS (MOL)

85 170 170 170 170 170 170



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Notes: Net cost for MOL (manned) amounts to slightly less than 2% of total program costs. It is about the same amount in dollars as the "cost of living" increase.

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