~~TOP SECRET~~ [redacted]

NATIONAL RECONNAISSANCE OFFICE
WASHINGTON, D.C.

OFFICE OF THE DIRECTOR

March 12, 1969

MEMORANDUM FOR CHAIRMAN, UNITED STATES INTELLIGENCE BOARD

SUBJECT: Study of Requirements for [redacted] Satellite Reconnaissance Responsive to Warning/Indications Needs

The attached NRO Staff study was prepared in response to your letter of February 14, 1968 requesting an assessment of the feasibility and cost of a collection system that would meet the objectives set forth in the study by the Committee on Imagery Requirements and Exploitation (COMIREX), "Requirements for [redacted] Satellite Reconnaissance Responsive to Warning/Indications Needs" January 5, 1968.

The COMIREX requirements objectives call for an [redacted] reconnaissance system with real-time or near real-time readout capability. Although, as noted in the NRO study, only one type of near real-time readout system has been developed, tested and demonstrated through applied research and advanced development of the system elements to the degree which would warrant a decision for full scale development at this time, there are a number of promising new technological developments which may offer potentially more effective and, in the long term, more economic systems if full-scale development is initiated one or more years from now. These new developments are in various stages of progress ranging from early research on critical elements to engineering model tests. The rapidly advancing technology in fields having potential application to reconnaissance readout systems and the varied status of devices and components currently in research and development, makes it very difficult to make predictions of the technical feasibility, operational effectiveness and costs of systems based on some of the newer developments. The NRO study, as it relates

to these newer developments, is of necessity based on the limited data presently available and on projections of the performance which may be achieved as a result of on-going or planned research and development.

Particular attention has been given in the NRO study to identifying those factors in the COMIREX requirements objectives which need further refinement or clarification in order to completely define a Warning/Indications system. Also, requirements factors which have significant effects on system costs have been highlighted with a view to providing a basis for further tradeoff studies of requirements versus system capability and cost.

[redacted]

Alexander H. Flax

Attachment
NRO Staff Study
De[redacted]12678-69