REPORT

TO THE

PRESIDENT'S FOREIGN INTELLIGENCE

ADVISORY BOARD

ON THE

NATIONAL RECONNAISSANCE PROGRAM

MAY 1 TO DECEMBER 31, 1966

CONTROL NO: BYE 52037-67

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Additional imagery of typical targets for Crisis Indications and Strike Effectiveness Assessment is being obtained for detailed analysis by the National Photographic Interpretation Center. High quality imagery is being collected (from an aircraft-borne sensor) at various look and depression angles and then degraded through laboratory processing to simulate several variations in signal-to-noise ratio, dynamic range, and resolution. The effect of such variations on the utility and interpretability of the imagery will be examined by NPIC. This program of analysis and evaluation will continue through June 1967.

New SIGINT Payloads: A new SIGINT payload, DONKEY, will be flown in the Spring of 1967 to map the locations and frequencies of the Soviet **[redacted]** communications links. In addition, this payload will provide some intercept of selected channels while within the main beam of the transmitter. The frequency range of interest is from approximately 3450 to 3900 mcs.

In the Fall of 1967, another payload, SQUARE TWENTY, is to be flown on the **[redacted]** using a 10-foot parabolic dish. The purpose of this payload is to provide location and frequencies of **[redacted]** communications transmitters in the frequency range from approximately 1550 to 2000 mcs.
Both the DONKEY and SQUARE TWENTY missions are to provide information which can lead to a more comprehensive understanding of the disposition and traffic on the medium and high capacity communications facilities

DORIAN: Contracts for the approved Manned Orbiting Laboratory program through seven launchings were definitized with Eastman Kodak, General Electric, Douglas, and McDonnell and work is continuing on schedule in Phase II (hardware acquisition). Detailed engineering and test planning is in progress and configuration management procedures are well under way. Major specification reviews and approval are being conducted and the interfaces essentially have been defined.

The reentry test of the Gemini heat shield, modified with a hatch for MOL application, was accomplished successfully in November as a verification of the design.

Blanks for the 70-in. aperture optical subsystem have been delivered to Eastman Kodak and the production of flight-weight blanks is in progress. Drawings are complete for the optical development