8 January 1965

MEMORANDUM FOR: Chief, Special Projects Staff

SUBJECT:

Weekly Status Report No. 16 on Project

FULCRUM

1. Camera System

A. ITEK - Mr. McMahon and Mr. Celi from Itek visited Mr. Green at Eastman Kodak on 4 January to discuss film indexing problems and ripples in some of the 4404 film delivered to Itek. EK was asked officially if and when they could provide seven inch 4404 film with the pre-punched 1/8 inch holes every 31 feet. Mr. Green said that he would consult with EK's film experts to determine whether or not there had been a temporary lapse in quality control in the case of the film delivered to Itek.

- B. P.E. Mr. Crowley visited P.E. on 6 January to represent the Project Office for the FULCRUM briefing for Dr. McMillan presented by P. E. personnel.
- C. STL Mr. Reeves visited the Project Office on 5 January to discuss the Preliminary Design Report previously submitted and to consult on the remaining Phase I effort. The film transport configurations were of two general classes: (1) Operating intermittently and braking to a complete standstill between exposures and (2) the second class operating continuously and leaving patches of unexposed film between exposures. The design within the first class selected for further detail design is a pure intermittent system in which the film is stopped between exposures and accelerated rapidly to speed immediately prior to photographic intervals. The system selected

HANGLE VIA EYEMAN CONTROL CYSTEM ONLY

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from the second class for further design in detail is a continuous system involving film reversal between exposures. This technique allows placement of successive frames adjacent to each other without the acceleration penalty of the intermittent design.

D. RCA - Mr. Dirks visited RCA on 7 January for a review of the film drive study project. Layout and control system analysis of the "sheet feed" approach to the film handling problem is proceeding along with some fundamental film handling experiments. The remaining three weeks of the contract will be devoted primarily to a control system and error analysis for one configuration. A plan for prototype hardware development for the purpose of demonstrating performance will be completed by the end of January.

2. Spacecraft

On 30 December the Phase IB contract was negotiated with G. E. The contract was a fixed prize, renegotiable downward (unlimited) and renegotiable upward limited to \$199,537 including fee.

Messrs. Carlson, Soloman, Chalmers, Fiul, Cahew, and Leon visited the Project Office on 6 January to discuss STL's spacecraft backup and vulnerability studies for the remainder of Phase I.

3. Recovery System

Dr. Adams visited Mr. Makey on 6 January to discuss the general status of the Avco contract.

4. Systems Engineering

Messrs. Frank and Grady visited the Project Office on

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7 January to discuss with Mr. Dirks SEAC analyztical support. A twix summarising the Project Office tasking for this support was sent to STL on 8 January.

5. Interface Aspects

Messrs. Harney and Redpath of Itek and of the Project Office visited G. E. on 8 January to discuss TT&C interface aspects.

O/DDS&T/SPS/ /mes/5725 (26 January 1965)

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