11 December 1964

MEMORANDUM FOR: Chief, Special Projects Staff

SUBJECT: Weekly Status Report No. 12 on Project

FULCRUM

1. Camera System

A. ITEK - Itek submitted a proposal covering Phase IC, the purpose of which was to maintain a continuity of effort during the transitional period between Phases I and II. Areas discussed in the proposal covered the following items:

- (1) Camera system (Further design optimization)
- (2) Liaison activities
- (3) System thermal considerations
- (4) Field service definition
- (5) Optical engineering and fabrication
- (6) Test equipment design
- (7) Ground support
- (8) Long-lead item procurement

The \$4,773,591 cost estimate covered a period beginning in December 64 and ending in May 65 and was exclusive of any current Phase I costs. Included in the total cost figure was \$1,677,841 for long-lead items.

BYE-0484-64 Copy 3 of 6

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SUBJECT: Weekly Status Report No. 12 on Project FULCEUM

- B. P.E. The second monthly progress report was received and progress appeared to be quite satisfactory. IMC calculations reflecting the revised 30° stereo angle considerations are near completion.
- C. STL Mr. Reeves called on expediting some critical security clearances, and the Office of Security was dutifully informed.
- D. RCA A \$28,892,000 CPFF contract was executed on 7 December. The work statement calls for by-weekly letter reports on the analytical study of the mechanical configuration and the motion control servos necessary for obtaining the performance required for the film handling system.

2. Spacecraft

Mesers. Maxev. Crowley, Dirks, , McMahon, visited GE on 9 December to discuss the working procedures to be accomplished during Phase IB, GE having been informed by letter on 7 December that they had won the Phase I Spacecraft competition.

3. Recovery System

Messrs. Maxey, ______, and McDonald met with AVCO personnel on 11 December to discuss the proposed work statement. AVCO was provided with the results of the aerodynamic studies on the Discoverer configuration. It was agreed that a token contract with Irving Air Chute would be let by AVCO and that arrangements would be made to have AVCO personnel briefed on current recoverer operations. Copies of the revised work statement were prepared by AVCO.

4. Systems Engineering

Messrs. Crowley, and Frank (STL) visited The Martin Company in Denver on 11 December to discuss cost estimates and other performance data on both the Titan II and Titan III. Unit costs of Titan II vehicles off-the-pad was given as 2.8 million dollars (40-45 units) with no launch construction costs and 3.5 million dollars

BYE-0484-64 Page 2 SUBJECT: Weekly Status Report No. 12 on Project FULCEUM

including a 25 million dollar launch construction cost (2 pads) amortized over the 40 units. Mr. Frank is scheduled for a return visit on 16 December for further discussions. Mr. Maxey discussed with Dr. Mettler of STL future systems engineering efforts at STL.

5. Interface Aspects

Messrs. Maxey and Dirks briefed members of the "Physics Maffia" at M.I.T. on the night of 11 December on technical progress in the FULCRUM program.

Distribution:

Cy 1 - Maxey, SPS C hrono

2 - Crowley

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BYE-0484-64 Page 3