~~SECRET~~

File
1.1

23 October 1964

MEMORANDUM FOR: Chief, Special Projects Staff

SUBJECT : Weekly Status Report No. 5 on Project FULCRUM

1. Camera System

a. ITEK - Dr. Scott and Messrs. [redacted] and [redacted] attended the "customer review" meeting at ITEK on 22 October. Costing and manpower data have been revised as of 1 October to reflect the shift in tasking. 128 assigned personnel are on board as of 15 October, showing an increase of 39 since 25 September. A review of the milestones on the project schedule showed a number of slippages, but apparently none that affect the critical paths. The brassboard feasibility testing time has consequently been shortened from 4 to 3 weeks in January. A tour of the optical shop was most helpful in that a greater appreciation of the fabrication and test problems for the optical elements resulted. $1,000 has been released to ITEK to further study through a consultant the time required from the beginning of A & E to operational status for building construction for Phase II. Delivery time for the first qualification system has slipped four months (from 1 September 1966 to 1 January 1967), according to an ITEK study subsequent to our last meeting.

b. P. E. - Messrs. Maxey, Dirks, Crowley, and [redacted] and Dr. Scott attended a meeting at P. E. on 19 October at which the so-called "A" configuration was selected from three finalists. This configuration is an 80" focal length, f/4 oscillating system with the following additional major characteristics:

Film width - 9"

Total field angle - 6.4°

Film velocity - 60"/sec. past slit

Shutter speed - $\frac{1}{250}$ sec. (nominal)

Resolution - 160 l/mm (estimated); better than 5 foot (3 sigma)

BYE-0375-64
Copy 3 of 8

Handle via BYEMAN
Control System

~~SECRET~~

SUBJECT: Weekly Status Report No. 5 on Project FULCRUM

It has the advantage of no bearing or brushes for torquers but has mechanical engineering disadvantages.

The autofocus and re-imaging optics tasks will be picked up by ORD. The remaining tasks were renegotiated down to about $402,000 mainly because no external facilities had to be acquired.

c. STL - It appears that for the 4 inch film drum contemplated for the intermittent film transport study, rollers will have to be employed for achieving film flatness rather than relying on optical field flatteners. Dr. Scott will elaborate on when he visits STL next week.

2. Spacecraft

GE submitted their entire proposal on 22 October, and STL submitted most of their proposal on the same due date. Lockheed, through a misunderstanding (), will submit part of their proposal on 27 October and the rest on 29 October.

3. Recovery Systems

Response date remains 2 November. From the briefing last week on the capabilities of mobile recovery forces, one of the major items learned was that for a recovery system of the FULCRUM magnitude, a double parachute will be required.

4. Systems Engineering

Miles Ross is scheduled to be the STL project manager for this aspect of the program. Launch complex and booster specs are due 16 November.

5. Interface Aspects

ITEK has asked for drawings of the largest existing cutter/sealer. [redacted] is looking into.

[redacted]

BYE-0375-64
Copy 3 of 8

~~SECRET~~

SUBJECT: Weekly Status Report No. 4 on Project FULCRUM

Distribution:
Cy 1 - Addressee
2 - Crowley
3 - [redacted] (FULCRUM File)
4 - SPS Chrono
5 - Routing ([redacted], Dirks, Scott, [redacted])
6 - Chrono
7 - DD/S&T Registry
8 - DD/S&T Registry

O/DDS&T/SPS: [redacted]/5725 (23 Oct. 1964)

BYE-0375-64
Copy 3 of 8

~~SECRET~~