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10 FEB 1965
*11 Feb 1965
By H. D. C.*

MEMORANDUM FOR: Director, National Reconnaissance Office
SUBJECT : FULCRUM Work Statements

Attached for your information are work statements for the following FULCRUM contracts:

Camera: Itek
Perkin-Elmer

Alternate Fast Film Transport Studies: STL
RCA

SRAC: STL

Spacecraft: GE

Recovery Vehicle: AVCO

ALBERT D. WHEELON
Deputy Director
for
Science and Technology

Attachments: as stated

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O/DDS&T/SPS: :7905 (5 Feb 1965)

STL-0082-65
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GROUP 1
Excluded from automatic
downgrading and
declassification

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31-MAR 1965

CURRENT STATUS OF PROJECT FULCRUMI. PARTICIPATING CONTRACTORS:

A. PERKIN-ELMER - Camera

Tasks - continue analysis of FULCRUM system and various reports, drawings, etc. as furnished by the Government (from ITEK effort), including analysis and evaluation of breadboard and brassboard experimentation. Additionally, prepare a layout of facility and program plan should a developmental and production contract be awarded. Finally, prepare for a briefing to the Government by 26 April, including recommended modifications, additions, or alternatives to various FULCRUM camera system components.

Funding through 31 March	\$.562
April Requirements	.250
Total	<u>\$.812</u>

B. AVCO - Recovery Vehicle

Tasks - continuation of systems studies; configuration studies including multiple recovery vehicles of two and six buckets; refinement of reference design studies and trade-off studies associated with structure of heat shield.

Funding through 31 March	\$.290
April Requirements	.140
Total	<u>\$.430</u>

C. GENERAL ELECTRIC - Spacecraft

Tasks - Continuation of attitude control studies and trade offs, command system studies, initiation of preparation of systems requirements specifications, development of an engineering plan and refinement of design studies associated with structure and environmental control.

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C. GENERAL ELECTRIC (continued)

Funding through 31 March	\$.340
April Requirements	.170
Total	<u>\$.510</u>

D. RCA - Alternate Fast Film Transport System

Tasks - Design and fabricate a fast film transport system and brassboard; plan and continue brassboard test program; initiate preliminary design of prototype system; continue preliminary investigations in film transfer and re-entry vehicle packaging technique.

Funding through 31 March	\$.280
April Requirements	.100
Total	<u>\$.380*</u>

*Program will carry through June, and funds presently earmarked are sufficient.

E. STL - Systems Engineering, Assembly and Checkout

Tasks - Primary effort of SEAC is to establish a control program and program plan to coordinate the interface of the major component systems. It will assist the Government in conducting trade-off studies, systems specifications and space vehicle specifications.

Funding through 31 March	\$.715
April Requirements	.225
Total	<u>\$.940</u>

II. COMPLETED ACTIVITIES:

CONTRACTOR	TASKS	FUNDING
ITEK	Camera	\$3.859
STL	Alternate Fast Film Transport	.210

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GE/STL/LMSC	Spacecraft Competition	\$.185
GE/AVCO	R/V Competition	.123
STL	Alternate spacecraft Subsystems	.212
E-K	Film	.100
	Misc. Vulnerability Countermeasures Designs	<u>.057</u>

III. TOTAL FUNDING THROUGH 31 MARCH	\$ 6.933
APRIL REQUIREMENTS	<u>1.000</u> **
TOTAL FULCRUM FUNDING REQUIREMENTS THROUGH 30 APRIL	\$ 7.933

** Includes .100 for miscellaneous studies, etc.

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~~SECRET~~FULCRUM FUNDING SUMMARY

<u>TASK</u>	<u>CONTR</u>	<u>THRU 3-31-65</u>	<u>APRIL</u>	<u>TOTAL</u>
Camera	ITEK	\$ 3.859	\$ ---	\$ 3.859
Camera	P-E	.562	.250	.812
Alt Fast Film	RCA	.280	.100	.380
Alt Fast Film	STL	.210	---	.210
SEAC	STL	.715	.225	.940
S/C Request For Proposal	GE, STL, LMSC	.185	---	.185
S/C	GE	.340	.170	.510
F-4	STL	.212	---	.212
R/V Request For Proposal	GE, AVCO	.123	---	.123
R/V	AVCO	.290	.140	.430
Film	EK	.100	---	.100
Other	-	.057	.015	.072
Unallocated	-	---	.100	.100
Totals		\$ 6.933	\$ 1.000	\$ 7.933

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