

~~TOP SECRET~~

FUNDING SUMMARY

Present Program	6,559.6
New Requirements for Future Program	910.0
Long Lead Time Items still to be processed	<u>985.0</u>
Total required for FY 64	\$8,454.6

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Last 6 months FY 63

Total costs (actual) of the above	1,005.5
Routine (actual)	661.0
Major Procurements	334.5
This establishes a going rate per month	
Routine per month	110.1
Major Procurements	<u>57.7</u>
	167.8

This rounded off to 110.0 and 60.0 1st Half of FY 64

Routine	660.0
Major Procurements	<u>360.0</u>
	1,020.0

For the 2nd Half FY 64 there will be an additional Payload. Considering its costs will increase our totals about 15%.

Routine	759.0
Major Procurements	<u>419.0</u>
	1,178.0

We must recognize New Requirements for the future program such as Digitizing, Extension of Frequency Coverage, Stabilization, etc. These summarized elsewhere total

910.0

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in thousands of dollars)

PRESENT PROGRAM thru Dec 1963 - 1st Half FY 64

5170			
Obligated 2 months	\$329.7		
Planned		\$2,108.5	
5430			
Obligated 2 Months	305.3		
Planned		<u>1,022.0</u>	
	1st Half TOTAL		\$3,130.5
	2nd Half FY 64		
5170			
Planned		2,251.1	
5430			
Planned		<u>1,178.0</u>	
	2nd Half TOTAL		<u>\$3,429.1</u>
	TOTAL		\$6,559.6

NEW REQUIREMENTS FOR FUTURE PROGRAM

Digitalization of Data will result

New Payload Data System	\$200.0	5170
Collection System Modifications	300.0	300
Increased Power Supply capability	100.0	5170

Extension of the Frequency coverage upward
into C and then X Band will result in

R and D for C and X Band Components	50.0	80
Component Inventory for X and C band	30.0	

Stabilization of satellite systems will result

Damping systems for gravity gradient boom	100.0	5170
Earth Aspect measuring system	30.0	

Future Requirement for a third Field Hut for Quality
Control Analysis will result in additional
expenditures of100.0

New Requirements TOTAL \$910.0

FY-65

100
480 for 5170

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Code 5430

8 October 1963

ω Codes 5432 and 5438

"Proposed Localizer Satellite System"

1. The Countermeasures Branch was asked to review the subject paper and make technical comments regarding potential countermeasures usage of the device.
2. There is one area of design detail that we require more information on before an important part of the technical assessment can be made; i.e., we need to know (a) the method to be used to identify the main beam versus the sidelobes of the satellite with pulsed signals, and (b) the method for converting the output of the sum/difference beams into telemetric data when working against pulsed signals. The later item would need to be in enough detail that an assessment of dynamic range and saturation performance could be undertaken.
3. It is requested that arrangements be made to supply this additional information.

R. D. MISNER

M. J. SHEETS

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Code 5430

Field Engineering Services; stub for

1. In attempting to relieve Countermeasures Branch personnel of the responsibility for installation of new equipment, checking out of existing equipment, instruction of field operational personnel, etc., the employment of two HRB Singer engineers is necessary.
2. The company is the only source on the east coast known to have a facility clearance for this problem. They have an excellent background of experience and have provided field engineers for Army Security Agency (ASA), Air Force Security Service (AFSS) National Security Agency (NSA) and Central Intelligence Agency (CIA). Also they have supplied engineers to NSA and CIA to work on special signal analysis problems and special instrumentation. All of these people report they are well pleased with the engineers supplied.
3. The engineers supplied would work at NRL to become thoroughly indoctrinated with existing equipments and new equipments being planned for the field. Later they would take the new equipment to the field and integrate it into the existing system. As they become familiar with the system they would be responsible for the logistic support of the stations and work closely with NSG. Periodically they would go to the stations and completely check the system performance to assure it is up to standard. We hope in a years time these engineers would relieve us completely of the burden of worry about the field sites as far as routine operations are concerned.
4. HRB-Singer has a good reputation and their engineers are noted for their ability to integrate themselves into an operation without conflicting with the field implementation, etc. In contrast other organizations often try to take over and irritate the operational people by insisting changes should be made which have not been authorized, etc.
5. We look upon the employment of these two field engineers as lifting from our shoulders, the big burden of keeping the field operation working at top notch performance.

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6. I would suggest we not send the personnel and clearance forms with the stub as they are only the type of personnel offered not necessarily the ones we are supposed to be contracting for company services not individual services.

H. O. LORENZEN, Head
Countermeasures Branchcc:
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