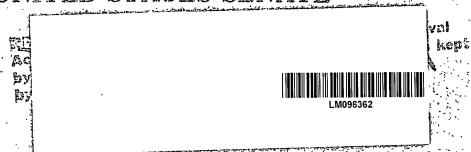


REPORT TO THE
COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE



Incremental Programming:

A Further Look
(Supplemental Data —
Fiscal Year 1974 Budget Requests)

Department of Defense

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

701535 096362



# COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20046

B-167034

The Honorable John C. Stennis, Chairman Committee on Armed Services 5 5000 United States Senate

Dear Mr. Chairman:

As you requested on June 5, 1972, we have examined the information obtained from the Department of Defense (DOD) on 5 selected RDT&E programs included in DOD's budget request for fiscal year 1974 for application of incremental programming principles.

Our report (Incremental Programming: A Further Look, B-167034) on the execution of 1973 programs was sent to you on April 18, 1973. We requested 1974 information from DOD on the same 10 weapon system programs and two Federal Contract Research Centers (FCRCs). However, funding plans for the Subsonic Cruise Armed Decoy and the missile for the TRIDENT system were not firm and data was not made available.

Programs were planned within the context of the guidance which DOD believes was agreed upon in an exchange of letters between you and the Assistant Secretary of Defense, Comptroller. Under this guidance, "costs incurred" are used as a basis for incremental programming. Therefore, costs estimated to be incurred during the incremental period of performance include subcontracts awarded and leadtime orders placed for project-related materiel and equipment in addition to work performed and materiel used. This matter was discussed in some detail in our April 1973 report. We suggested that the Committee consider clarifying its guidance to DOD.

Under the cited criteria, nearly all of the work to be performed with fiscal year 1974 funds is shown by DOD to conform to incremental programming principles and coincide with the fiscal year. Due to time limitations we did not verify the information furnished. We examined it only to extract planned periods of work performance to be funded with fiscal year 1974 funds, for correlation with the information obtained previously on the planned use of fiscal year 1973 funds. A brief summary of DOD's budget request for each weapon system and FCRC is included as an appendix.

12,3

As agreed to by your office, we are sending copies to the Chairmen of the House and Senate Committees on Appropria tions, the Chairman of the House Committee on Armed Services,  $H \lesssim v$  and the Secretary of Defense.

Sincerely yours,

Comptroller General of the United States

# SUMMARY OF

## PROGRAMS REVIEWED FOR

## INCREMENTAL PROGRAMMING

# FISCAL YEAR 1974

	Budget request
	(millions)
WEAPON SYSTEMS:	
Army: Heavy Lift Helicopter (HLH) SAM-D missile Site Defense program	\$ 59.925 193.866 170.070
Utility Tactical Transport Aircraft System (UTTAS)	108.885
Navy: AEGIS missile	43.174
TRIDENT: Submarine system Missile system	125.977 (a)
Vertical/Short Takeoff and Landing aircraft (V/STOL)	26.300
Air Force: Airborne Warning and Control System (AWACS) B-l aircraft Subsonic Cruise Armed Decoy (SCAD)	197.800 473.500 (a)
FEDERAL CONTRACT RESEARCH CENTERS:	
Navy: Applied Physics Laboratory, Johns Hopkins University Air Force:	<sup>b</sup> 33.060
Lincoln Laboratory, Massachusetts Institute of Technology	47.260

<sup>&</sup>lt;sup>a</sup>Programs not firm; amounts not available.

bNavy RDT&E funding.

#### HEAVY LIFT HELICOPTER

For the HLH program, as well as the SAM-D, Site Defense, and UTTAS programs, data pertaining to periods of performance was developed by the Army within the context of the definition of "costs to be incurred" during the incremental time period. This definition of costs includes not only the estimate of actual costs to be incurred, such as salaries and wages paid and materiel used, but also all other liabilities which have to be created during the time period to further the project, such as subcontracts awarded and leadtime orders placed for project-related materiel and equipment.

The fiscal year 1974 RDT&E program estimate for the HLH is \$59.925 million. Plans show all work is to be performed by June 30, 1974. Performers are estimated to require the following funds during the fiscal year.

	Amount
	(millions)
ATC components and prototype Boeing-Vertol  PPFRT engineDetroit Diesel Allison Division  DSTR engineBoeing-Vertol sub- contract to Detroit Diesel  PMO  AMRDL	\$36.6 14.9 5.7 1.9
Total	\$59.9

#### SAM-D MISSILE.

The SAM-D engineering development program was planned under incremental funding principles using "costs" and "work performed" synonymously. A work authorization to a Government organization supporting the project manager was considered the same as a contract. The fiscal year 1974 estimate allows for in-house effort to be carried to June 30, 1974, only.

The fiscal year 1974 RDT&E program estimate is \$193.866 million. The Raytheon Company, the prime contractor, will require an estimated \$165.371 million. The period of performance is from mid-July 1973 to mid-July 1974.

The amount for Raytheon includes an estimated \$38.793 million for the Martin Company, the major subcontractor. Martin's period of performance coincides with Raytheon's. Also included for Raytheon are amounts for smaller subcontracts (each under \$10 million). There are approximately 17 subcontracts planned in fiscal year 1974 for materiel and long leadtime components. These 17 subcontracts will be primarily fixed-price contracts. To be awarded in fiscal year 1974, they are considered to represent costs incurred in fiscal year 1974 even though in some cases deliveries of materiel will extend through subsequent fiscal years.

In fiscal year 1974, 21 missiles and the demonstration model Fire Control Group are scheduled for delivery. Also in fiscal year 1974 design and fabrication will continue on the prototype equipment that is scheduled for delivery and testing in subsequent years.

In-house effort, to coincide or end with the fiscal year except in some instances when equipment is to be procured or fabricated, is estimated as follows:

			Amount
			(millions)
SAM-D MICOM ECOM MECOM MUCOM TACOM TECOM HDL	•	of \$0.896) .671) 2.574) .051)	\$4.000 4.655 1.641 1.519 7.069 3.283 1.254
Other	Government	agencies	1.594

## APPENDIX

Small contracts are estimated to require \$3.230 million in fiscal year 1974. Planned are contracts with IBM (Dec. 1973 to June 1974), SRI (Oct. 1973 to June 1974), Technology Service Corp. (Oct. 1973 to June 1974), and five additional small contracts.

#### SITE DEFENSE PROGRAM

The fiscal year 1974 RDTGE program for the Site Defense program is \$170.070 million, prepared on an incremental "costs to be incurred" basis. Performers' periods of performance are therefore shown to coincide with the fiscal year. Estimated funds to be required are as follows:

	Amount
	(millions)
System prime contractorMcDonnell Douglas Missile subsystem prime contractorMartin-	\$ 92.8
Marietta	38.7
System engineering technical assistance Teledyne Brown Other contractors (\$30,000 to \$300,000 con-	7.8
tracts)	1.6
In-HouseProject manager's office, SD, SAFSO Other Government agenciesAF SAMSO, Picati: y Arsenal, CE-HNDSE, KMR, CE-WES, ECOM, MICO.	4.6
AEC	24.6
Total .	\$ <u>170.1</u>

#### UTILITY TACTICAL TRANSPORT AIRCRAFT SYSTEM

The UTTAS program data pertaining to periods of performance was developed within the context of the definition of "costs to be incurred" during the incremental time period.

The fiscal year 1974 RDT&E program estimate is \$108.885 million. Follow-on incremental funding is planned coincident with the fiscal year. Costs include liabilities necessary to further the project during the period for materiel ordered or subcontracts awarded.

•	Amount
	(millions)
PrototypeSikorsky PrototypeBoeing-Vertol Air vehicle supportGE EngineGE Other contracts In-House:	\$ 26.700 44.600 17.200 14.400 3.350
Project manager's office AVSCOM AMRDL ECOM WECO	1.930 .120 .400 .150 .035
Total	\$108.885

#### AEGIS MISSILE

The estimated costs to be incurred for the AEGIS fiscal year 1974 RDT&E program are \$43.174 million. None of the funds are for the period beyond June 1974. Estimated amounts to be required are as follows:

	Amount
•	(millions)
Prime contractorRCA Technical assistanceAPL/JHU Raytheon Technical supportVitro Other contracts In-house:     NSWSES     Long Beach Shipyard     Ship Engineering Center     Project support Other	\$25.100 3.440 2.000 .985 .956 3.046 2.128 1.552 1.752 2.215
Total	\$43.174

#### TRIDENT SYSTEM

We were told that the TRIDENT <u>missile</u> system program is not firm and that information backing up a budget request for fiscal year 1974 is not available.

The fiscal year 1974 RDT&E estimate for the TRIDENT <u>sub-marine</u> system is \$125.977 million. With the exception of one contract extending into July, no funded periods are planned to extend beyond June 1974, even for those contracts with periods of performance of more than 12 months. Budget estimates to be required by performers are as follows:

	:	Amount	Period				
	(m:	illions)					
GE Knolls Atomic Power							
Laboratory	\$	43.000		1973			
RCA		9.646	July	1973	to	June	1974
General Dynamics, Elec-			•				
tric Boat		6.167	July	1973	to	June	1974
ITT		7.184		1973			
Westinghouse		3.000		1973			
IBM		1.680		1973			
Teledyne-Isotopes		1.745		1973			
Other contractors:		2	,				
Selected		.548	a <sub>Vario</sub>	านร	-		
To be selected		38.280	aVario	nic			
In-house:		50.200	V 44 2 1 (	70.3			
NUSC		6.193	J117 v	1973	fΛ	Tune	1974
NSRDL/A		2.560		1973			
NAVSEC/Wash		2.185		1973			
Other							
other		3.789	Jury	1973	LO	June	19/4
Total	\$ ]	125.977					

<sup>&</sup>lt;sup>a</sup>No funded period beyond June 1974.

# VERTICAL/SHORT TAKEOFF AND LANDING AIRCRAFT

Estimated costs to be incurred between July 1973 and June 1974 for the V/STOL for the Sea Control Ship Prototype program are \$26.3 million. Fiscal year 1974 RDT&E funds are planned as follows:

	Amount	Period				
	(millions)					
North American Rockwell  Pratt and Whitney In-hou e	\$ 8.50 13.93 3.45 	Nov. July	1973 1973 1973 1973	to to	June June	1974 1974
Total	\$ <u>26.30</u>			,		

#### APPENDIX

# AIR FORCE BUDGET REQUEST FOR AIRBORNE WARNING AND CONTROL SYSTEM

Incremental programming plans for fiscal year 1974 RDT&E for AWACS provide \$197.8 million. Major performers are expected to require funds as follows:

	Amount		Period
	(millions)		
Prime contractor (Boeing) Subcontractors:	\$179.2	Oct.	1973 to June 1974
Westinghouse IBM Hazeltine Other	(20.5) (11.2) (7.8) (7.3)	Sept. Sept.	1973 to June 1974 1973 to June 1974 1973 to June 1974 1973 to June 1974
Mitre, in-house, etc.	18.6	July	1973 to July 10,
Total	\$197.8		

# AIR FORCE BUDGET REQUEST FOR

#### B-1 AIRCRAFT

Incremental programming plans for fiscal year 1974 RDT&E for the B-1 include \$473.5 million to be committed during the period of performance of July 1, 1973, to June 30, 1974, as follows:

	Amount
	(millions)
AirframeNorth American EngineGeneral Electric AvionicsBoeing Other	a \$ 305.2 a 82.0 a 28.3 58.0
Total	\$ <u>473.5</u>

<sup>&</sup>lt;sup>a</sup>Includes subcontractor incremental programming based on subcontractor funding plans.

# NAVY BUDGET REQUEST FOR APPLIED PHYSICS LABORATORY, JOHNS HOPKINS UNIVERSITY

The planned Navy funding at the laboratory in fiscal year 1974 is \$33.060 for RDT&E appropriations and \$10.615 from other appropriations, a total of \$43.675 million. The fiscal year 1974 budget estimate provides for the 12-month period July 1, 1973, through June 30, 1974, at the fiscal year 1973 rate adjusted by \$3.5 million, a 5.5 percent cost-of-living increase.

Navy plans call for RDT&E funding to be aligned with the fiscal year. Sponsors of technical programs, RDT&E and non-RDT&E, are encouraged to continue to negotiate technical and financial requirements on an October 1 to September 30 basis, consistent with congressional testimony which distinguished between the period to be contracted for or negotiated and the period to be funded.

It is the intent of the Naval Ordnance Systems Command to issue the initial fiscal year 1974 modification to the contract on July 1, 1973. Within 5 days after the issuance of the fiscal year 1974 continuing resolution, sponsors are to certify that funds cited on funding documents, to have been prepared in May, are available for obligation.

When programs are uncertain regarding the exact amount of fiscal year 1974 RDT&E obligation authority which will be made available as of the first of the new fiscal year and when the full 12-months funding increment cannot be authorized for obligation on July 1, 1973, partial funding providing for no less than 3 months' effort will be authorized. Additional RDT&E funding, along with non-R&D funding, will be authorized by issuance of a follow-on contract modification by October 1, 1973.

# AIR FORCE BUDGET REQUEST FOR LINCOLN LABORATORY

Lincoln Laboratory's funding plans for fiscal year 1974 are based on all work being performed between July 1, 1973, and June 30, 1974, as follows:

	Amount			
	(millions)			
Air Force basic Lincoln line Separately funded Air Force programs	\$18.00 9.86			
Total Air Force program		\$27.86		
Other DOD agencies: Army ARPA Navy ASD	9.50 8.25 1.45 .20			
Total other DOD		19.40		
Total		\$47.26		