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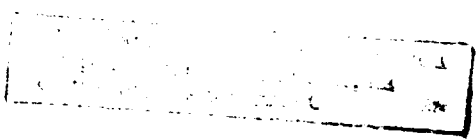
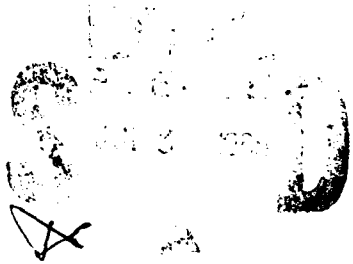
DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1986



SUBMITTED TO CONGRESS FEBRUARY 1985

OPERATION & MAINTENANCE, NAVY

BOOK 2 OF 3



BUDGET ACTIVITY 7: ->7--
CENTRAL SUPPLY AND MAINTENANCE

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Department of the Navy
Operation & Maintenance, Navy

Justification of Estimates for Fiscal Year 1986

Introductory Statement
(Dollars in Thousands)

	<u>FY 1984 Actual</u>	<u>FY 1985 Estimate</u>	<u>FY 1986 Request</u>
Total Direct Program	\$21,986,941	\$25,334,741	\$25,797,700
Transferred from Other Accounts	-40,360	-	-
Transferred to Other Accounts	-	12,300	-
Unobligated Balance Lapsing	303,047	-	-
Supplemental Appropriations Request	-	-230,800	-
<hr/>			
Appropriation	\$22,249,628	\$25,116,241	\$25,797,700

The FY 1986 request for the Operation and Maintenance, Navy appropriation is \$25,797.7 million. This appropriation finances the day-to-day costs of operating naval forces, including fuel, supplies, and maintenance costs of ships, aircraft (including Marine aircraft), and other weapons systems, as well as the support establishment ashore for naval forces. The FY 1986 request represents an increase over the current estimate for FY 1985 of \$463 million. Major changes between the years include transfers related to proposed revisions to the Department's expense/investment criteria (+\$210.7 million) and the Administration's proposed 5 percent decrease in civilian pay rates (-\$116.3 million). Other major changes between FY 1985 and FY 1986 are discussed in the budget activity summaries below:

This book includes: → (to front cover)
Strategic Forces. The Strategic Forces budget activity provides for the financial requirements for the Navy's Fleet Ballistic Missile Force. This range of activities covers the operating costs of the nuclear submarines, supporting submarine tenders, launch area support ships and other craft, their maintenance and base operation support, as well as weapon systems and missile overhaul, repair, and maintenance. The Naval Space Command is also included in this activity.

For Budget Activity 1, the Ship Maintenance and Modernization program decreases in FY 1986, reflecting the impact of one fewer FBM submarine and one fewer support ship in the overhaul program. The Trident program increases, reflecting an additional number of operational submarines and the Kings Bay development.

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1984			FY 1985			FY 1986			Book-BA-Page
	Personnel		O&M,N	Personnel		O&M,N	Personnel		O&M,N	
	MIT	E/S	Funding	MIT	E/S	Funding	MIT	E/S	Funding	
BUDGET ACTIVITY 7: CENTRAL SUPPLY & MAINTENANCE										
Chief of Naval Operations	38	22	19,901	38	25	27,837	37	25	30,787	2-7-005
Field Operations	24	22	19,825	25	25	27,758	23	25	30,629	2-7-016
Maintenance of Real Property	0	0	19	0	0	20	0	0	96	2-7-018
Base Operations	14	0	57	14	0	59	14	0	62	
Naval Air Systems Command	706	4,905	2,848,506	781	5,182	2,900,354	779	5,373	2,379,009	2-7-020
Aircraft Rework & Maintenance	0	0	1,950,190	0	0	1,866,340	0	0	1,247,479	
Air-Launched Weapons Rework and Maintenance	0	0	74,267	0	0	113,928	0	0	103,495	2-7-025
Other Aviation Systems Maintenance	0	0	199,329	0	0	238,727	0	0	269,598	2-7-031
Maintenance Support	0	0	26,594	0	0	22,991	0	0	30,496	2-7-038
Procurement Operations	193	1,109	37,907	225	1,269	44,132	223	1,452	48,291	2-7-042
Command & Administration	37	595	24,378	39	589	23,261	39	589	22,346	2-7-047
Field Operations	476	3,201	215,700	515	3,324	274,749	515	3,332	273,658	2-7-049
Logistic Support Activities	0	0	109,965	2	0	106,067	2	0	138,757	2-7-056
Engineering Services	0	0	101,771	0	0	87,305	0	0	99,402	2-7-074
Contractor Technical and Maintenance Support	0	0	95,805	0	0	108,441	0	0	130,971	2-7-082
Maintenance of Real Property	0	0	5,370	0	0	5,917	0	0	6,017	2-7-085
Base Operations	0	0	7,230	0	0	8,496	0	0	8,499	2-7-088
Naval Sea Systems Command	1,330	9,905	1,373,525	1,459	10,152	1,486,758	1,486	10,347	1,766,697	
Ship-Launched Weapons Rework and Maintenance	0	0	67,774	0	0	68,354	0	0	82,414	2-7-090
Other Ship Systems Maint	0	200	158,120	0	261	203,239	0	275	307,322	2-7-099
Procurement Operations	513	5,248	202,060	573	5,444	209,251	560	5,579	208,520	2-7-120
Command & Administration	45	787	39,428	44	782	33,788	44	787	32,392	2-7-130
Field Operations	678	3,603	173,951	721	3,504	178,028	708	3,545	173,013	2-7-133
Logistic Support Activities	70	13	314,398	75	106	327,331	75	106	461,392	2-7-143
Engineering Services	24	0	195,159	46	0	238,291	99	0	236,309	2-7-181

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1984			FY 1985			FY 1986			
	Personnel E/S		O&M,N	Personnel E/S		O&M,N	Personnel E/S		O&M,N	
	MFI	Civ	Funding	MFI	Civ	Funding	MFI	Civ	Funding	
Maintenance Support	0	54	94,344	0	55	93,502	0	55	137,080	2-7-217
Contractor Technical & Maintenance Support	0	0	45,600	0	0	48,548	0	0	44,980	2-7-238
Intermediate Maintenance	0	0	11,313	0	0	15,323	0	0	14,842	2-7-254
Maintenance of Real Property	0	0	12,811	0	0	14,243	0	0	12,297	2-7-259
Base Operations	0	0	58,567	0	0	56,860	0	0	56,136	2-7-261
Naval Electronic Systems Command	137	2,065	279,317	193	2,071	316,508	181	2,092	367,934	
Electronic Systems Rework and Maintenance	0	0	67,289	0	0	77,248	0	0	84,766	2-7-269
Procurement Operations	36	825	36,095	38	841	36,069	37	861	36,292	2-7-276
Command & Administration	15	157	7,827	15	154	6,106	14	154	5,911	2-7-281
Field Operations	86	1,083	48,874	140	1,076	47,788	130	1,077	50,859	2-7-283
Logistic Support Activities	0	0	26,256	0	0	32,702	0	0	46,276	2-7-286
Engineering Services	0	0	54,813	0	0	70,234	0	0	84,446	2-7-299
Contractor Technical and Maintenance Support	0	0	7,045	0	0	5,428	0	0	6,552	2-7-330
Maintenance Support	0	0	22,962	0	0	33,329	0	0	39,265	2-7-333
Maintenance of Real Property	0	0	2,208	0	0	1,193	0	0	1,100	2-7-341
Base Operations	0	0	5,948	0	0	6,411	0	0	6,467	2-7-343
Naval Supply Systems Command	2,304	20,273	1,211,415	2,065	21,285	1,236,879	2,053	21,109	1,283,853	
Supply Operations	291	7,743	222,464	281	8,439	246,835	281	8,022	265,661	2-7-345
Inventory Control Operations	262	5,878	221,176	258	5,891	224,287	288	5,881	245,873	2-7-351
Procurement Operations	105	546	52,051	113	571	72,426	114	578	89,612	2-7-358
Command & Administration	79	383	29,766	80	355	31,756	80	355	33,321	2-7-362
Field Operations	35	226	6,532	11	211	7,438	11	212	7,518	2-7-365
Service-wide Transportation	0	0	442,321	0	0	406,233	0	0	394,760	2-7-368
Retail Sales Operations	1,528	2,519	79,231	1,318	2,816	82,234	1,275	3,057	87,662	2-7-376
Maintenance of Real Property	0	250	22,552	0	250	25,529	0	250	24,237	2-7-381
Base Operations	4	2,728	135,322	4	2,752	140,141	4	2,754	135,209	2-7-386

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1984			FY 1985			FY 1986				
	Personnel E/S		O&M,N	Personnel E/S		O&M,N	Personnel E/S		O&M,N		
	MFT	Civ	Funding	MFT	Civ	Funding	MFT	Civ	Funding		
<u>Naval Facilities Engineering</u>											
<u>Command</u>	1,077	4,430	282,515	1,161	4,427	344,491	1,202	4,528	413,810		2-7-390
Command and Administration	52	344	17,512	52	369	17,859	52	369	17,563		2-7-392
Field Operations	469	1,248	54,650	587	1,257	58,194	617	1,253	97,486		2-7-397
Logistic Support Activities	0	0	44,027	0	0	62,813	0	0	100,295		2-7-407
Maintenance of Real Property	66	1,471	93,798	61	1,446	127,711	61	1,522	109,984		2-7-410
Base Operations	490	1,367	72,528	461	1,355	77,904	472	1,384	88,382		
<u>Chief of Naval Material</u>											
<u>Headquarters</u>	364	941	-487,152	413	996	-488,097	438	1,019	-209,794		
Command & Administration	113	416	19,217	116	432	20,017	113	434	20,040		2-7-416
Field Operations	251	525	35,937	296	564	38,081	324	585	47,487		2-7-418
Industrial Preparedness	0	0	2,261	0	0	2,563	0	0	2,377		2-7-423
Industrial & Stock Fund Spt	0	0	-545,000	0	0	-549,200	0	0	-280,300		2-7-426
Base Operations	0	0	433	1	0	442	1	0	602		2-7-428
<u>Anti-Submarine Warfare</u>											
<u>Project Office</u>	22	0	460,402	21	0	478,448	23	0	512,296		
ASW Maintenance	0	0	158,941	0	0	150,772	0	0	160,242		2-7-430
ASW Maintenance Support	0	0	46,399	0	0	52,362	0	0	53,214		2-7-434
ASW Support	22	0	255,062	21	0	275,314	23	0	298,840		2-7-438
<u>CINCPACFLT</u>											
<u>Base Operations</u>	64	0	0	69	0	0	64	0	0		
TOTAL BA 7	6,042	42,541	5,988,429	6,200	44,138	6,303,178	6,263	44,493	6,538,592		

Budget Activity: 7 - Central Supply and Maintenance (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986	Change
		Budget Request	Appropriation	Current Estimate	Budget Request	
Chief of Naval Operations	19901	31116	27875	27837	30787	+2950
Naval Air Systems Command	2848506	2971844	2901874	2900354	2379009	-521345
Naval Sea Systems Command	1373525	1520341	1477570	1486758	1766697	+279939
Naval Electronic Systems Command	279317	345753	323949	316508	361934	+45426
Naval Supply Systems Command	1211415	1255859	1225563	1236879	1283853	+46974
Naval Facilities Engineering Command	282515	396100	343429	344491	413810	+69319
Hdqtrs, Naval Material Command	57848	61911	60097	61103	70506	+9403
Industrial and Stock Fund Support	-545000	-102931	-689631	-549200	-280300	+268900
Anti-Submarine Warfare Project Office	<u>460402</u>	<u>477907</u>	<u>469500</u>	<u>478448</u>	<u>512296</u>	<u>+33848</u>
Total, Budget Activity	5988429	6957900	6140226	6303178	6538592	+235414

B. Reconciliation of Increases and Decreases

1. FY 1985 President's Budget	6,957,900
2. Congressional Adjustments	-817,674
A. ADP Leasing	(-21,984)
B. Audiovisual Assets	(-2,284)
C. Civilian Overtime Costs	(-9,320)
D. Contract Support Services	(-20,252)
E. Debt Collection	(-3,393)
F. Depot Maintenance	(-20,000)
G. Engineering Support Services	(-9,000)
H. Environmental Differential Pay	(-5,334)

Budget Activity: 7 - Central Supply and Maintenance (cont'd)

B. <u>Reconciliation of Increases and Decreases</u>		
I. Environmental Restoration	(-40,200)	
J. Excess Material	(-10,271)	
K. FMS Pricing	(-8,065)	
L. Foreign Currency Rates	(-7,228)	
M. Foreign National Pay	(-359)	
N. Fuel Rebate	(-352,700)	
O. Improper Use of O&M	(-5,675)	
P. Logistic Support Activities	(-52,000)	
Q. Logistic Field Operations	(-25,000)	
R. MSC Transportation	(-25,000)	
S. NSF Pricing	(-1,685)	
T. Obligation Performance	(-2,506)	
U. Other Base Operations	(-6,000)	
V. P-3A Mods	(+4,900)	
W. Payroll & Timekeeping	(-8,195)	
X. Prompt Payment Practices	(-2,086)	
Y. Public Works Operations	(-10,000)	
Z. SURTASS/TAGOS Operations	(-2,583)	
AA. Shipyard Work Measurement	(-10,000)	
AB. Stock Fund Pricing	(-150,000)	
AC. Telephone Usage	(-1,765)	
AD. Travel	(-4,689)	
AE. Vehicle Utilization	(-5,000)	
3. FY 1985 Appropriation		6,140,226
4. Pay Supplemental		182,372
A. Classified	(120,815)	
B. Wage Board	(60,577)	
C. Foreign National Direct Hire	(980)	
5. Other Increased		239,149
A. Programmatic Increases	(230,086)	
B. Pricing Adjustments	(9,063)	
6. Other Decreases		-258,569
A. Functional Transfers	(-714)	
B. Programmatic Decreases	(-256,367)	
C. Pricing Adjustments	(-1,488)	
7. FY 1985 Current Estimate		6,303,178

Budget Activity: 7 - Central Supply and Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

8. Pricing Adjustments		238,071
A. Civilian Personnel Compensation (Direct)	(-37,375)	
1) US Direct Hire Pay Adjustment	-47,672	
2) Foreign National Direct Hire Pay Adjustment	146	
3) Other Direct Pricing Adjustments	10,151	
B. Stock Fund	(497,031)	
1) Fuel	351,529	
2) Non-Fuel	145,502	
C. Industrial Fund Rates	(-322,651)	
D. FN Indirect	(207)	
E. Other Pricing Adjustments	(100,859)	
9. Functional Program Transfers		-377,324
A. Transfers In	(232,889)	
1) Intra-Appropriation	32,856	
2) Inter-Appropriation	200,033	
B. Transfers Out	(-610,213)	
1) Intra-Appropriation	-32,240	
2) Inter-Appropriation	-577,973	
10. Program Increases		728,638
A. Annualization of FY 1985 Increases	(11,842)	
B. Other Program Growth in FY 1986	(716,796)	
11. Program Decreases		-353,971
A. Annualization of FY 1985 Decreases	(-130)	
B. One-Time FY 1985 Costs	(-16,525)	
C. Other Program Decreases in FY 1986	(-337,316)	
12. FY 1986 President's Budget Request		6,538,592

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Field Operations
Budget Activity: 7 Central Supply and Maintenance
Claimant: Chief of Naval Operations (CNO) (Op-09RF)

I. Description of Operations Financed.

The Aviation Intermediate Maintenance Support Office (AIMSO) accomplishes numerous technical projects, broad and specific, which address various problems that degrade intermediate level (I-level) maintenance. Projects address specific intermediate level logistic element and system problems in order to develop improved management tools and techniques for better utilization of intermediate level resources in support of assigned workload. AIMSO advises CNO and Commandant of the Marine Corps (CMC) on various problems, solutions, and alternative management methods to improve logistic system support for the Intermediate Maintenance Activities (IMA's).

Specific project and improvement activities are categorized into eight broad areas that support the specific mission of AIMSO.

a. Mobilization. Efforts include the development and maintenance of I-level mobilization plans, establishment of a specific mobilization role for AIMSO, and the assurance that all current and future efforts consider the needs of mobilization.

b. Acquisition. AIMSO's involvement in acquisition is to enhance the acquisition process of I-level needs, represent the views of the I-level during the process, and on a selective basis, actual participation in specific acquisition programs.

c. Information. The AIMSO effort within this category is to act as the I-level "clearinghouse" and "crossfeeder." This involves being the central focal point, reporting all efforts accomplished having some application to aviation I-level, and passing good information and ideas to and between all 87 Intermediate Maintenance Activities (IMA's) worldwide.

d. I-level Spokesman. AIMSO represents the I-level of maintenance in the headquarters community and acts as the recognized expert on all I-level matters.

e. Operational Support. The most immediate improvement in I-level maintenance comes from AIMSO's ability to identify fleet problems, develop solutions to those problems, and implement the resolution or turnover to another responsible activity for institutionalization. The majority of efforts within this category have as their objective a specific improvement in capability, management practice, use of resources, or specific training.

Activity Group: Field Operations (Cont'd)

f. Analysis. To support the requirements of AIMS, OPNAV, and the Type Commanders (TYCOM's), the capability to properly analyze and evaluate I-level operation is absolutely mandatory. To this end, AIMS has instituted several efforts which have as their primary objective establishment of this capability.

g. Long-Range Planning. As one of the key requirements of improvement in I-level maintenance, long-range planning focused at the I-level must be accomplished. So this can be done, efforts to define the role of AIMS in the planning process are being pursued. The Objective of these efforts is to influence long-range hardware acquisition and operational plans to consider the unique needs of the I-level.

h. NAMP. In addition to efforts which support unique I-level requirements, AIMS has been assigned responsibility for OPNAV Instruction 4790.2C, the Naval Aviation Maintenance Program (NAMP) Manual, a 3,000 page document. This responsibility includes preparing, negotiating, and constructing all changes of the document; interpreting the OPNAV policy contained in the document; and distributing the documents to the fleet. In addition, major new programs entering the fleet are evaluated and included in the document.

The Naval Data Automation Command (NAVDAC) coordinates the development, testing, support, standardization and acquisition of major Automated Information Systems (AIS's), ADP equipment (ADPE), data communications equipment and services, and information systems policies and standards. NAVDAC provides this Navy-wide support through specific task assignments to the Navy Regional Data Automation Centers (NARDAC's) and Navy Data Automation Facilities (NAVDAF's) for the required programming, computer processing and technical support. These tasks fall into four major functional areas as follows: (1) Systems Software, Data Communications and Standards program which support systems software acquisition, maintenance, installation, and problem resolution for DoN non-tactical information systems and provide technical services ranging from development and maintenance of regional data processing networks to support Navy-wide information systems, standards development and performance evaluation; (2) Computer Program Development programs manage the development and implementation of policies and procedures related to applications software engineering and quality assurance, provide technical guidance and assistance in applications and supporting technology areas to all Navy ADP activities, consolidate functionally duplicative systems, and install newly consolidated systems at multiple sites; (3) Computer System Operations programs provide technical direction of computer systems operation Navy-wide, including development of policies, plans, standards and procedures governing establishment, growth and management of DoN non-tactical data processing installations, and design, development, implementation and maintenance of computer hardware and its related operational systems for all echelons of the Navy; and (4) Plans, Resources and Support programs develop DoN information systems plans, translate DoN approved information systems concepts and objectives into timephased resource requirements and formulate major policy on all aspects of Navy information systems management.

Within the four major functional areas are 14 programs that cross these functional areas. They are:

Activity Group: Field Operations (cont'd)

a. Naval Bases/Stations - Provides ADP support to 110 bases and stations in 16 functional areas through development of functionally standard, centrally designed and maintained multi-site/multi-year systems.

b. Minicomputer Technical Support - Provides centralized support for 200 large-scale, multi-user minicomputer systems throughout the Navy.

c. Microcomputer Technical Support - Provides continued technical support to activities purchasing microcomputers from the joint Navy/Air Force contract. Supports recompetition of joint contracts and ensures consistent and effective management of microcomputing resources.

d. ADP Technical Standards - Serves as the Department of the Navy and Information Processing Standards for Computers Program (IPSC) Coordinator. Supports development, coordination, publication and maintenance of standards for Navy and research and acquisition of automated tools for standards development.

e. IBM System Software - Provides technical support services for installation and maintenance of centrally required standard system software and telecommunications software for Navy CONUS and EXCONUS Level II and III activities and NAVDAF's

f. Univac/Burroughs Software Optimization - Detects and eliminates inefficiencies in existing information systems; identifies tools and establishes concepts, guidelines and procedures to be used by system developers to improve system reliability and maintainability. Promotes and facilitates end users support by Navy information system development activities. Identifies, evaluates and promotes use of information system design and implementation tools.

g. Univac/Burroughs System Software Support - Provides technical support for standard Univac and Burroughs system software located within Navy and Marine Corps activities.

h. DoN Hardware Acquisition and Management - This program provides for hardware umbrella contracts for ADP equipment used to support users Navy-wide replacement of obsolete equipment, security reviews and risk assessments.

i. Type Commanders Headquarters Automated Information System (THAIS) - Provides 7 Type Commanders with a standardized, integrated automated information system to manage logistics, operations, maintenance and administration of ships and aircraft that must remain in operational readiness.

j. Navy Network Interface Program (NNIP) - Provides definition of an architecture for Navy data networks and provides the framework for consolidation, technological enhancements, strategic planning and improved support. Includes contracts for Navy use for hardware, software and technical services.

k. Application and Software Resource Management - Provides functional sponsors and managers a framework to identify duplications, incompatibilities and omissions in Automated Information System (AIS) support as well as providing management tools to encourage sharing of existing application software systems.

Activity Group: Field Operations (cont'd)

1. Financial Management - The Navy ADP Budget System provides automated support to Commander, Naval Data Automation Command (COMNAVDAC) in compilation, review/revision, preparation, and submission of the Navy ADP Budget. The "Financial Management Information System" (FMIS) is an automated system that provides NAVDAC management the capability to expeditiously access financial information from its activities, while the information is still relevant. Additionally, FMIS provides a standard method of measuring activity performance and acts as a communication network between the NARDAC's and NAVDAC for the exchange of financial data.

m. ADP Technology Transfer - Within the ADP Technology programs there are several different initiatives. A database machine prototype is being evaluated for potential use throughout the Navy by users and developers. An office automation prototype will allow evaluation and increased understanding in the area of office automation prior to administering policy and standards to the rest of Navy. Investigation of new software languages for developers as well as unsophisticated end users are being pursued. Workbench technology provides a combination of hardware and software to expedite development of application systems. Through evaluation of UNIX software expertise will be gained to provide better guidance and support for small system users in Navy.

n. Information System Career Management - Several approaches are being taken to enhance the skills of ADP staffs. Once training requirements common to many activities are identified courses are developed for classroom or computer aided instruction as appropriate.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985</u>	<u>Current Estimate</u>	<u>FY 1986</u>	<u>Change</u>
			<u>Appropriation</u>		<u>Budget Request</u>	
Aircraft Intermediate Maintenance Support Office	2,459	6,469	5,845	5,807	5,308	-499
Naval Data Automation Command	<u>17,366</u>	<u>24,568</u>	<u>21,951</u>	<u>21,951</u>	<u>25,321</u>	<u>+3,370</u>
Total Field Operations	19,825	31,037	27,796	27,758	30,629	+2,871

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$27,758
2. Pricing Adjustments		-819
A. Civilian Personnel Compensation (Direct) (-39)		
1) U.S. Direct Hire Pay Adjustment	-32	
2) Other Direct Pricing Adjustments	-7	
B. Industrial Fund Rates	(-988)	
C. Other Pricing Adjustments	(208)	
3. Functional Program Transfers		
4. Program Increases		\$6,896
A. Annualization of FY 1985 Increases	(21)	
1) Increase for annualization associated with the four additional AIMSO clerical positions in FY 1985 (+1 work year).	21	
B. Other Program Growth in FY 1986	(6,875)	
1) Increase reflects continuation of NAVDAC's efforts to address the standardization of Navy wide automated systems in the following program areas: Minicomputer Technical Support increased support of large-scale, multi-user minicomputer systems procured via the umbrella contract.(\$744); Microcomputer Technical Support - To continue support of joint Navy/Air Force microcomputer contract including recompetition of existing contracts plus additional acquisitions of portable, deployable, multiple user systems. (\$567); IMB Software Support - To continue system software and telecommunications software support for current CONUS and EXCONUS Level II and III activities plus an additional	5,826	

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases. (cont'd)

B. Other Program Growth in FY 1986 (cont'd)

10 sites. (\$972); Univac/Burroughs Software Optimization - Expansion of quality assurance program to include procedure development and prototype development, promote end user support efforts by development activities, identify and evaluate use of information systems design and implementation tools. (\$380); Type Commanders Headquarters Automated Information System (THAIS) - To provide increased developmental costs projected for completion of full operating capability. (\$152); Navy Network Interface Program (NNIP) - To support data communications interface equipment and local area network equipment, design and prototype local area network plans for major bases/stations, ensure security through access control/security devices, and continue support for interoperability with Shipboard Non-tactical ADP Program (SNAP). (\$1,522); Information Systems Career Management - Identify courses required by a number of activities for ADP staffs and assign responsibility for course development and presentation to activities according to their expertise and capabilities. (\$87); DON Hardware acquisition and Management - support for the NAVDAC mission of independently testing and evaluating major AIS acquisitions will increase significantly. In particular, the NISTARS evaluation program will increase from one activity to three.

B. Reconciliation of Increases and Decreases. (cont'd)

B. Other Program Growth in FY 1986 (cont'd)

Additional AISs will be undertaken. NAVDAC is undertaking significantly improved Navy-wide information resources inventory procedures which will include many additional activities and types of hardware. ADPE inventory comprehensiveness and accuracy are receiving heightened emphasis by SECNAV, OSD and Congress. NAVDAC is undertaking a new program to formulate and execute a new Navy-wide Fleet Word Processing Equipment acquisition. (\$654); and increase to Basis and Stations (\$281), ADP Technical Standards (\$136), Univac/Burroughs System Software Support (\$201), Application Software Resource Management (\$116), Financial Management (\$4); and ADP Technology Transfer (\$10).

- 2) Increase reflects the addition of and/or expansion of AIMS projects to improve intermediate-level performance. Increase will be in the following areas: Mobilization (\$168); Information Exchange (\$130); I-level Spokesman (\$27); Analysis (\$654); and Long-Range Planning (\$70). 1,049

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases. (cont'd)

B. Other Program Growth in FY 1986 (cont'd)

5. Program Decreases -\$3,206

A. Other Program Decreases in FY 1986 (-3,206)

1) Decreases associated with the -1,468

following NAVDAC program areas:
Naval Bases/Stations - Major portion of development for prototype sites completed. Continued developmental support as well as maintenance and exportation of completed modules. (\$747). ADP Standards - Completion of major development effort on standards that required updating and reprinting. (\$277); Univac/Burroughs Technical Support - Decrease due to partial elimination of local changes to software. Burroughs utility library will be converted in FY 1985 and continued support is for maintenance only. (\$94); Financial Management - Development effort completed. (\$79); ADP Technology - Evaluation of several prototypes completed and costs transferred to customers. (\$81); DoN Hardware Management - Phase IIA hardware procurements as well as a significant number of one-time projects will be completed. (\$190).

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases. (cont'd)

5. Program Decreases (cont'd)

A. Other Program Decreases in FY 1986 (cont'd)

2) Decrease is a result of -1,738
the scaling down, delay or
completion of AIMS0 projects in
the following areas:
Acquisition (\$183); NAMP (\$60);
Operational Support (\$1,495)

6. FY 1986 President's Budget Request \$30,629

Activity Group: Field Operations (cont'd)

III. Performance Criteria.

A. <u>Naval Data Automation Command</u>	FY 1984		FY 1985		FY 1986	
	W/Y	\$000	W/Y	\$000	W/Y	\$000
		<u>\$17,366</u>		<u>\$21,951</u>		<u>\$25,321</u>
Naval Bases/Stations	14	1,102	33	2,137	20	1,592
Minicomputer Technical Support	8	558	9	510	24	1,195
Microcomputer Technical Support	5	292	6	269	16	796
ADP Technical Standards	14	865	27	1,395	23	1,195
IMB System Software	15	794	16	712	35	1,665
Univac/Burroughs Software Optimization	5	471	13	1,083	15	1,354
Univac/Burroughs System Software Support	38	2,070	33	1,565	31	1,593
DoN Hardware Acquisition and Management	28	2,496	53	4,134	50	4,381
Type Commanders Hdqtrs Automated Information System (THAIS)	33	4,925	35	5,182	36	5,334
Navy Network Interface Program (NNIP)	2	3,089	3	3,692	4	4,967
Application Software Resource Management	1	140	4	302	4	378
Financial Management	3	245	2	150	0	75
ADP Technology Transfer Information System	1	305	4	698	3	597
Career Management	0	14	1	122	2	199

B. Aircraft Intermediate Maintenance Support Office

	FY 1984		FY 1985		FY 1986	
	No Projs	\$000	No Projs	\$000	No Projs	\$000
		<u>\$2,459</u>		<u>\$5,807</u>		<u>\$5,308</u>
Mobilization	2	30	3	187	3	363
Acquisition	1	52	2	175	-	-
Information	2	50	4	313	5	457
I-level Spokesman	1	1	3	34	3	62
Operational Support	9	430	18	2,084	12	675
Analysis	4	414	6	844	9	1,534
Long-Range Planning			1	146	1	222
NAMP	2	181	3	562	2	526
Fixed Operating Expenses		1,301		1,462		1,469

Activity Group: Field Operations (cont'd)

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>24</u>	<u>25</u>	<u>23</u>
Officer	5	7	5
Enlisted	19	18	18
B. <u>Civilian</u>	<u>22</u>	<u>25</u>	<u>25</u>
USDH	22	25	25

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Maintenance of Real Property
 Budget Activity: 7 Central Supply & Maintenance
 Claimant: Chief of Naval Operations (CNO) (OP-09BF)

I. Description of Operations Financed.

This program provides maintenance, and minor construction of buildings, structures, grounds, and utility systems required for Aircraft Intermediate Maintenance Support Office to perform its mission.

The major elements of this program are:

a. Facilities Maintenance - Finances scheduled, day-to-day recurring maintenance, and emergency service work needed to preserve facilities.

b. Minor Construction - Finances the erection, installation or assembly of real property facilities; the addition, extension alteration, conversion or replacement of existing real property facilities; the relocation of real property facilities; and the installation of equipment which is made part of a facility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 Budget Request	Change
		Budget Request	Appro- piation	Current Estimate		
Facilities Maintenance	19	20	20	20	21	+1
Minor Construction	-	-	-	-	75	+75
Total, Maintenance of Real Property	<u>19</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>96</u>	<u>+76</u>

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$20
2. Pricing Adjustments		1
A. Industrial Fund Rates	(1)	
3. Functional Program Transfers		
4. Program Increases		75
A. Other Program Growth in FY 1986	(75)	
1) Funding for partial renovation of the 2nd deck of the AMSO Headquarters building (#106) located at Naval Air Station (NAS) Patuxent River, Maryland. Significant rehabilitation is necessary, as existing spaces are of 1943 vintage, without proper lighting, insulation, etc.	75	
5. Program Decreases		
6. FY 1986 President's Budget Request		\$96

III. Performance Criteria and Evaluation.

Maintenance of Real Property

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Backlog, Maint/Repair (\$000)	0	0	0
Total Buildings (KSF)	10	10	10

IV. Personnel Summary (End Strength).

No military or civilian personnel assigned to this activity group.

Department of the Navy
 Operation & Maintenance, Navy
 Exhibit OP-5

Activity Group: Base Operations Support
 Budget Activity: 7 Central Supply and Maintenance
 Claimant: Chief of Naval Operations (CNO) (OP-09B)

I. Description of Operations Financed.

This program provides the base support services required by the Aircraft Intermediate Maintenance Support Office (AIMSO).

The major elements of this program are:

Base Communications. Includes costs for administrative telephones, telecommunications centers, industrial security networks, and paging networks.

Utility Operations. Includes operating expenses for purchased electricity, electricity generating plants, purchased steam and hot water, heat plants, utility distribution systems, waste systems, air conditioning and refrigeration plants.

Other Engineering Support - Engineering services, custodial services, refuse/garbage collection and disposal, snow removal, and fire protection and firefighting.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u> <u>Budget</u> <u>Request</u>	<u>Change</u>
		<u>Budget</u> <u>Request</u>	<u>Appro-</u> <u>priation</u>	<u>Current</u> <u>Estimate</u>		
Base Communications	17	18	18	18	19	+1
Operation of Utilities	27	28	28	28	29	+1
Other Engineering Support	13	13	13	13	14	+1
Total, Base Operations Support	57	59	59	59	62	+3

Activity Group: Base Operations Support (Cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$59
2. Pricing Adjustments		3
A. Industrial Fund Rates	(1)	
B. Other Pricing Adjustments	(2)	
3. Functional Program Transfers		
4. Program Increases		
5. Program Decreases		
6. FY 1986 President's Budget Request		\$62

III. Performance Criteria and Evaluation.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Base Operations (\$000)	57	59	61
Operating of Utilities (\$000)	27	28	29
Total Energy Consumed (MBTU's)	340	340	340
Total non-energy consumed (K Gal)	1	1	1
Base Communications (\$000)	17	18	18
Number of Instruments	55	55	55
Number of Mainlines	5	5	5
Ownership Operations (\$000)	13	13	14
Other Engineering Sup (\$000)	13	13	14

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>14</u>	<u>13</u>	<u>14</u>
Officer	3	2	3
Enlisted	11	11	11

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Aircraft Rework and Maintenance
Budget Activity: 7 Central Supply Activities
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed

A. Airframe Rework - This program provides for the inspection, repair reconfiguration and conversion of fleet aircraft. It primarily addresses maintenance on the aircraft major structure and airframe systems. The objective of the program is to maintain a safe, flyable platform over the life of the weapon system by periodic return to the depot for required maintenance. Under the Standard Depot Level Maintenance (SDLM) program, maintenance is performed only to the level that is technically justified and cost effective. Operational Service Period (OSP) initiatives related to increasing OSPs on selected aircraft are reflected in this submission, as are Maintenance Requirements Review Board manhour reductions. This submission also reflects the assignment of airframe reworks to the least-cost source of repair. The Aircraft Service Period Adjustment (ASPA) program adjusts individual aircraft period end dates for selected aircraft when material condition warrants. Under ASPA guidelines, only aircraft that upon inspection cannot safely be extended for another 12-month tour are inducted in the depot for SDLM. Expected savings from these initiatives are included in the requirements forwarded by this submission and are consistent with the recommendations made by the President's Private Sector Survey on Cost Control. Airframe requirements reflect the transition of concurrent structural component rework from the component program to airframes for FY 1984, and concurrent avionics component rework from components to airframes in FY 1985.

B. Engine Rework - The engine rework program accomplishes the repair, modification and overhaul of aircraft engines, gearboxes and torque meters installed in Navy aircraft. The program objective is to return depot-repairable engines to ready-for-issue status to support fleet engine pool requirements. Under the Engine Analytical Maintenance Program (EAMP), engines are repaired at the lowest echelon of maintenance. Only engines that are beyond the repair capability of intermediate maintenance activities are scheduled for induction in the depots. Depot-level maintenance may also be performed concurrent with aircraft SDLM if such maintenance is operationally necessary and cost effective. Engine SDLM reworks are directly related to aircraft rework, and a variance in the aircraft rework schedule will be accompanied by a commensurate variance to the engine rework schedule. Engine field team assistance is included in this budget submission to provide on site depot level maintenance on an as needed basis.

C. Component Rework - The purpose of the component rework program is to accomplish depot-level repair of aeronautical components that are beyond the repair capability of intermediate maintenance activities. The major portion of the component repair program, "2R", is the repair of unserviceable items which are included in the inventory management of the Navy's supply system. This includes avionic, navigational, instrument, hydraulic, mechanical, airframe and engine components, and applicable support equipment. Also included in this program is contractor repair of aeronautical components for aircraft systems and equipment which have not yet reached their Navy material support date (Repair of Repairables - ROR). The requirements stated for all years have been decremented for a lack of

Activity Group: Aircraft Rework and Maintenance (cont'd)

I. Description of Operations Financed (cont'd)

carcass availability. Also reflected in this budget are reduced requirements related to reliability and maintainability design improvements which have increased the mean-time-between-failure for F/A-18 components. The FY 1985 program reflects mid-year implementation of the transfer of aviation depot level repairables to the Navy Stock fund. Repairables reworked in support of USN and USNR aircraft undergoing SDLM at the naval air rework facilities are included in the component rework program through FY 1984. The SDLM support component rework requirement has been decremented in FY 1984 for the transition of concurrent structural component reworks to the airframe program, and eliminated in FY 1985 for the further transfer of concurrent avionics rework.

D. Modification Installation - This program provides the installation of modifications to improve safety reliability, maintainability and/or readiness of in-service aircraft, and special modifications that extend their useful service life beyond that which was originally engineered. These modifications are of special significance in that they reduce the need to procure new aircraft systems by providing an updated, serviceable weapon system to meet operational commitments. Requirements for the aircraft modification program are generated by the Operational Safety Improvement Program (OSIP). The Aircraft Procurement, Navy (APN) appropriation procures the modification kits identified by the OSIP, which are then installed to produce the necessary improvements in the aircraft system. The O&M,N modification program funds the cost of labor and material needed for the installation of these kits. The objective is a coordinated and balanced program between kit procurement and kit installation. Modifications are installed concurrent with SDLM, on a "drive-in" basis, and by field modification teams for aircraft not scheduled for rework to ensure similar configuration of aircraft within a given unit, and to update flight and maintenance systems of trainer aircraft to a configuration compatible with the fleet.

E. Aircraft Support Services - This program provides unscheduled services to the fleet. The services are budgeted on the basis of historical levels of effort and projected emergent requirements. This program enhances fleet readiness by providing expeditious solutions for the correction of unplanned maintenance problems incurred during fleet operations. Services include salvage of material, fleet maintenance training, customer service, small/uneconomical lot manufacturing, preservation and depreservation, aircraft salvage and recovery, and support of depot maintenance operations.

Activity Group: Aircraft Rework and Maintenance (cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

	FY 1984	FY 1985			FY 1986 Budget Request	Change
		Budget Request	Appro- priation	Current Estimate		
Airframe Rework	\$363,692	\$454,515	452,624	\$475,836	\$464,638	-11,198
Engine Rework	227,755	344,208	343,731	334,755	328,396	-6,359
Component Repair	1,082,287	740,757	735,611	688,995	70,503	-618,492
Mod. Installation	231,715	307,821	299,138	312,362	351,831	39,469
Support Service	<u>44,741</u>	<u>69,859</u>	<u>69,190</u>	<u>54,392</u>	<u>32,111</u>	<u>-22,281</u>
Total, Aircraft Rework and Maintenance	\$1,950,190	\$1,917,160	\$1,900,294	\$1,866,340	\$1,247,479	\$-618,861

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate	1,866,340
2. Pricing Adjustment	-347
A. Stock Fund	(-1,797)
1) Non Fuel	-1,797
B. Industrial Fund Rates	(-25,397)
C. Other Pricing Adjustments	(26,847)
3. Functional Program Transfers	-574,846
A. Transfers In	(16,988)
1) Inter-Appropriation Stock Funding of Aviation Depot Level Repairables - Airframes Rework - change in obligational authority resulting from full-year implementation of AVDLR stock funding initiative begun 1 April 1985.	14,464
2) Stock Funding of Aviation Depot Level Repairables - Engine Rework - change in obligational authority resulting from full-year implementation of AVDLR stock funding initiative begun 1 April 1985.	2,524

Activity Group: Aircraft Rework and Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

B. Transfers Out	(-591,834)	
1) Intra-Appropriation Transfer of TH-57 site support services to Fleet Flying Hour Program transfer (includes program growth of \$7,760 between FY 1985 and FY 1986 as shown below).	-19,281	
2) Inter-Appropriation Stock Funding of Aviation Depot Level Repairables - Component Rework - Transfer of obligation authority resulting from implementation of AVDLR stock funding initiative begun 1 April 1985	-572,553	
4. Program Increases		52,337
A. Other Program Growth in FY 1986	(52,337)	
1) Increase to Modification Installation to support depot installation of modification kits funded in APN appropriation.	44,577	
2) Increase in Support Services for TH-57 site support (included in the transfers out item above).	7,760	
5. Program Decreases		-96,005
A. Other Program Decreases in FY-86	(-96,005)	
1) Decrease in Airframe Rework Program	-60,245	
2) Decrease in Engine Rework Program	-7,828	
3) Decrease to the Component Rework (ROR)	-22,517	
4) Decrease in Support Service Program	-5,415	
6. FY 1986 President's Budget Request		\$1,247,479

Activity Group: Aircraft Rework and Maintenance (cont'd)

III. <u>Performance Criteria</u>		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Airframe Rework</u>				
Stan. Depot Level Maintenance (SDLM)	Units Cost	770 \$229,421	696 \$289,581	537 \$259,189
SDLM/Modifications	Units Cost	121 \$64,642	143 \$112,793	186 \$150,346
SDLM/Conversion	Units Cost	15 \$9,895	5 \$3,472	10 \$6,709
SDLM/Crash Damage	Units Cost	17 \$17,687	10 \$10,643	10 \$10,041
SUBTOTAL SDLM	Units Cost	923 \$321,645	854 \$416,489	743 \$426,285
Mid-Term Inspection	Units Cost	65 \$6,001	95 \$10,177	72 \$9,180
Air Worthiness	Units Cost	78 \$2,135	73 \$3,174	90 \$4,599
Emergency Repairs	Cost	\$33,765	\$45,861	24,514
Field Inspection	Units Cost	4 \$146	3 \$135	1 \$61
SUBTOTAL Other	Units Cost	147 42,047	171 59,347	163 38,353
TOTAL Airframe Rework	Cost	\$363,692	\$475,836	\$464,638
B. <u>Engine Rework</u>				
Engine Overhaul	Units Cost	252 \$18,222	256 \$24,122	175 \$18,913
Engine Repair	Units Cost	1,876 \$204,546	2,178 \$295,869	1,972 \$300,648
SUBTOTAL O/H & Repair	Units Cost	2,128 \$222,768	2,434 \$319,991	2,147 \$319,561
Gear Boxes/T.M. (O/H)	Units Cost	204 \$2,203	292 \$4,956	323 \$5,500
Gear Boxes/T.M. (Repair)	Units Cost	144 \$1,857	118 \$1,777	47 \$818

Activity Group: Aircraft Rework and Maintenance (cont'd)

III. <u>Performance Criteria. (cont'd)</u>		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Special Repair	Units	7	288	-0-
	Cost	\$92	\$5,519	-0-
Field Team	Cost	<u>\$835</u>	<u>\$2,512</u>	<u>\$2,517</u>
SUBTOTAL Gear Boxes	Units	355	698	370
Field Team and Special	Cost	<u>\$4,987</u>	<u>\$14,764</u>	<u>\$8,835</u>
TOTAL Engine Rework	Cost	\$227,755	\$334,755	\$328,396
 C. <u>Component Rework</u>				
2R Cog (Av. Repairables - ASO)		\$988,298	\$599,810	-0-
Repair of Repairables (ROR)		59,855	89,185	70,503
SDLM Support		34,134	-0-	-0-
TOTAL Component Rework		<u>\$1,082,287</u>	<u>\$688,995</u>	<u>\$70,503</u>
 D. <u>Modification Installation</u>				
Concurrent with Aircraft Rework		\$34,497	\$48,038	\$58,445
Drive-In Mod		3,509	4,828	4,414
Field Mod Team		14,428	37,161	20,546
Trainer		702	381	314
Comm'l Mod Install		176,431	221,954	268,112
Verification Install		2,148	-0-	-0-
TOTAL Modification Inst.		<u>\$231,715</u>	<u>\$312,362</u>	<u>\$351,831</u>
 E. <u>Support Services</u>				
Preservation/Depreservation		\$6,448	\$ 7,931	\$5,372
Salvage		592	746	569
Acceptance/Transfer		2,542	3,207	1,892
Customer/Fleet Training		3,706	4,676	2,380
Customer Services		5,956	7,223	5,365
Other Support Items		17,534	18,584	16,233
Material Support (Govt. Control)		7,700	11,025	0
Aircraft Recovery		263	1,000	300
TOTAL Support Services		<u>\$44,741</u>	<u>\$54,392</u>	<u>\$32,111</u>
 TOTAL Aircraft Rework and Maintenance Requirement				
		2,098,488	1,995,408	1,415,163
Constraint		1,950,190	1,866,340	1,247,479
Backlog		148,298	62,756	167,684
Executable Backlog		29,700	62,756	167,684

IV. Personnel Summary

Non-applicable

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Air-Launched Weapons Rework
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Missile maintenance requirements financed by this program include missile testing, repair, rework, Navy approved modifications and on-site technical assistance to maintenance facilities. Quantities of missiles requiring a test are computed based on the length of time that a missile can remain ready for issue in the Fleet. When the test is due, or a missile fails in the Fleet, the missile is returned to a Naval Weapons Station where it is tested, disassembled and repaired, and reassembled. Major missile sections requiring repair beyond the capability of the naval weapons stations are forwarded to a designated overhaul point for rework. This program provides for all action required to maintain the asset readiness posture prescribed by the Chief of Naval Operations. In addition, this program provides for missile engineering expense directly associated with the repair of the weapon.

The air-launched ordnance and ammunition maintenance requirements financed by this program provide for the renovation of air-launched ordnance, ammunition and explosive devices and on-site technical assistance to maintenance facilities. Maintenance is performed on Navy-owned ordnance/ammunition items outside the purview of the Army single manager, including material in Navy retail outlets, depot repairable Navy material located in Army inland depots and items excluded from the single manager charter such as aircraft installed Cartridge Actuated Devices (CADs) and Aircrew Escape Propulsion Systems (AEPS). The FY 1985 budget displays an increase for 4Z Cog components relative to ordnance maintenance which will remain Appropriation Purchases Account material. This program provides for all action required to maintain the asset readiness posture prescribed by the Chief of Naval Operations. In addition, this program provides for ordnance engineering expense directly associated with the repair of the weapon.

The special weapons maintenance and support program provides for maintenance and on-site technical assistance to maintenance facilities for weapons training devices.

Activity Group: Air-Launched Weapons Rework (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Air-Launched Missile Rework	\$58,530	\$79,084	\$77,084	\$77,251	\$63,826	\$-13,425
Air-Launched Ordnance and Ammunition Rework	9,927	34,609	34,609	30,223	32,554	2,331
Special Weapons Maintenance and Support	<u>5,810</u>	<u>6,424</u>	<u>6,424</u>	<u>6,454</u>	<u>7,115</u>	<u>661</u>
Total, Air-Launched Weapons Rework	\$74,267	\$120,117	\$118,117	\$113,928	\$103,495	\$-10,433

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate						\$113,928
2. Pricing Adjustments						-3,302
A. Stock Fund				(-1,080)		
1) Non-Fuel				-1,080		
B. Industrial Fund Rates				(-3,693)		
C. Other Pricing Adjustments				(1,471)		
3. Functional Program Transfers						-
4. Program Increases						5,647
A. Other Program Growth in FY 1986				(5,647)		
1) Increased funding for the full year implementation of the Airborne Armament Equipment (4Z Cog) maintenance program transferred to the Air-Launched Weapons Rework Program on 1 April 1985.						2,519
2) Development of work measurement standards required for Expendable Ordnance (2E Cog), Aircraft Gun Systems (6B Cog) and Airborne Armament Equipment (4Z Cog) to ensure that						

Activity Group: Air-Launched Weapons Rework (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

	maintenance production operations provide effective maintenance support at the least cost.	1,046	
3)	Increased quantity of maintenance actions required on nuclear weapons due to the projected number of limited life component and parachute exchanges required during FY 1986.	535	
4)	Increased renovation of bombs/components based on projected assets requiring repair.	1,547	
5.	Program Decreases		-12,778
A.	Other Program Decreases in FY 1986	(-12,778)	
1)	Completion of the Sparrow AIM-7F Product Optimization Program (POP) modification in FY 1985.	-5,562	
2)	Completion of the AIM/RIM-7M missile identification retrofit which provides an identification signal to the aircraft that distinguishes between an AIM/RIM-7M and AIM-7F missile allowing utilization of the enhanced 7M capability.	-1,803	
3)	Reduced modification funding for the SHRIKE thermal protection retrofit, the HARPOON Block IC program, and the PHOENIX AIM-54A electronic assemblies upgrade.	-4,201	
4)	Decrease in the quantity of maintenance actions required on the SHRIKE missile system due to a decrease in projected maintenance due date expirations in FY 1986.	-854	
5)	Completion of the HARPOON missile subsystem test set modification.	-358	
6.	FY 1986 President's Budget Request		\$103,495

III. Performance Criteria.

FY 1984 FY 1985 FY 1986

A. Air-Launched Missile Rework

Sidewinder	Units	1,716	1,376	800
	Cost	\$9,051	\$8,812	\$5,841
Sparrow	Units	1,547	1,862	1,790
	Cost	\$17,364	\$21,899	\$13,695

Activity Group: Air-Launched Weapons Rework (cont'd)

III. Performance Criteria (cont'd)

FY 1984 FY 1985 FY 1986

A. Air-Launched Missile Rework (cont'd)

Walleye	Units	890	1,045	1,066
	Cost	\$4,258	\$3,136	\$4,743
Shrike	Units	1,556	1,601	1,040
	Cost	\$3,593	\$4,649	\$3,034
Standard Arm	Units	95	91	98
	Cost	\$2,988	\$2,144	\$2,775
Phoenix	Units	1,348	1,395	1,406
	Cost	\$6,986	\$9,554	\$7,851
Harpoon	Units	491	521	530
	Cost	\$13,721	\$25,705	\$24,040
Harm	Units	-	56	105
	Cost	\$161	\$1,079	\$1,533
Tow	Units	488	-	-
	Cost	\$408	\$153	\$155
Hellfire	Units	-	-	-
	Cost	-	\$ 85	\$ 86
Maverick	Units	-	-	8
	Cost	-	\$ 17	\$ 55
Skipper	Units	-	-	-
	Cost	-	\$ 18	\$ 18
Totals	Units	8,131	7,947	6,843
	Cost	\$58,530	\$77,251	\$63,826

B. Air-Launched Ordnance and Ammunition Rework

Aircrew Escape Propulsion System	Units	-	991	753
	Cost	\$435	\$1,497	\$2,065
Cartridge Actuated Propulsion System	Units	5,077	9,965	9,073
	Cost	\$853	\$1,160	\$1,187
Bombs/Components	Units	301,405	31,610	67,463
	Cost	\$3,218	\$2,990	\$4,772

Activity Group: Air-Launched Weapons Rework (cont'd)

III. <u>Performance Criteria (cont'd)</u>		FY 1984	FY 1985	FY 1986
B. <u>Air-Launched Ordnance and Ammunition Rework cont'd)</u>				
Pyrotechnics	Units	7,562	8,014	13,902
	Cost	\$592	\$633	\$555
Ammunition	Units	2,136,409	94,944	259,836
	Cost	\$635	\$294	\$348
Rockets/Launchers	Units	15,298	23,934	4,265
	Cost	\$742	\$1,571	\$774
Chaff/Dispensers	Units	552	118,598	74,350
	Cost	\$35	\$101	\$104
Aircraft Gun Systems	Units	324	470	507
	Cost	\$2,083	\$3,787	4,064
Airborne Weapons Control and Release Equipment	Units	N/A	N/A	N/A
	Cost	\$149	\$173	\$170
Bomb Racks	Units	N/A	815	1,834
	Cost	\$481	\$6,133	\$9,887
Buddy Stores	Units	N/A	67	30
	Cost	\$-	\$2,730	\$1,084
Fuel Tanks	Units	N/A	1,244	766
	Cost	\$-	\$7,430	\$4,283
Submarine Warfare Airborne Devices	Units	N/A	N/A	N/A
	Cost	\$133	\$149	\$145
Missile Launchers	Units	N/A	98	613
	Cost	\$571	\$1,575	\$3,116
Total	Units	2,466,627	290,750	433,402
	Cost	\$9,927	\$30,223	\$32,554
C. <u>Special Weapons Maintenance</u>				
War Reserve/Trainers	Units	9,591	7,860	11,134
	Cost	\$5,810	\$6,454	\$7,115
Total Requirements		\$78,492	\$120,692	\$125,152
Total Funding		74,267	113,928	103,495
Total Backlog		4,225	6,764	21,657
Total Executable Backlog		0	6,764	21,657
IV. <u>Personnel Summary.</u>	Not Applicable			

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Other Aviation Systems Maintenance
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Funding in Other Aviation Systems Maintenance provides for the following:

A. The Calibration program funds labor and materials at calibration laboratories and annexes, four Naval Air Systems Command (NAVAIR) standards laboratories, the Navy Bureau of Standards, and other Navy, Army, and Air Force calibration laboratories under government contract. The calibration laboratories calibrate support equipment and standards which are beyond the capability of fleet intermediate level capability. The NAVAIR standards laboratories calibrate standards from the lower echelon laboratories.

B. The Overhaul of Support Equipment (SE) program provides funding for depot level maintenance of aviation support equipment under the cognizance of NAVAIR, Inventory Control Points and Type Commanders. Support equipment is inducted into depot facilities for inspection, disassembly, repair and verification of repair in accordance with established maintenance specifications. SE maintenance includes end item repair, check, test, component replacement, painting and corrosion control when incidental to rework, and incorporation of all engineering changes. The Service Life Extension Program for support equipment is also accomplished under the SE program. In addition, the program finances the Aviators Breathing Oxygen repair program, rework specification production, and quick engine change pool management.

C. The Meteorological Support program leases facsimile equipment for dissemination of weather data to approximately sixty stations, and the installation, maintenance and support of meteorological equipment and shipboard readout equipment.

D. Target Maintenance provides depot level maintenance for targets, and support for equipment and training pods essential for fleet training.

E. The Airborne Mine Countermeasures program provides ready-for-issue mine countermeasures equipment in sufficient quantities to support peacetime operating and training requirements and a sufficient inventory of equipment to support a wartime requirement until a production flow of material can be established. The program finances the overhaul of equipment as well as the calibration of hydrodynamic components in their operating environment prior to fleet issue.

F. Overhaul of Aircraft Cameras supports the overhaul and repair of aerial cameras. This program provides film processing and printing, and analysis for photographic mobile van complexes in support of fleet operational training flights. In addition, the program provides technical, material and operational readiness in support of tactical aerial reconnaissance pod systems.

G. The Coast Guard program provides for maintenance and support of Navy-owned electronic equipment in Coast Guard aircraft.

Activity Group: Other Aviation Systems Maintenance (cont'd)

I. Description of Operations Financed. (cont'd)

H. Aviation Tactical Software provides for the maintenance of systems software, and the incorporation of software changes necessary to ensure maximum operational capability of all naval aircraft/weapon systems which employ digital computers.

II. Financial Summary. (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Calibration	\$60,259	\$73,841	\$73,634	\$73,412	\$71,310	\$-2,102
Overhaul of SE	78,512	99,907	92,736	93,134	108,281	15,147
Meteorological Support	2,784	3,311	3,311	3,313	3,219	-94
Target Maintenance	5,190	7,424	6,789	6,789	13,534	6,745
Airborne Mine Countermeasures	9,192	10,171	10,171	10,171	10,595	424
Overhaul of A/C Cameras	2,789	3,548	3,548	3,548	3,401	-147
Coast Guard	1,929	2,155	2,155	2,202	2,332	130
Aviation Tactical Software	<u>38,674</u>	<u>52,658</u>	<u>50,158</u>	<u>46,158</u>	<u>56,926</u>	<u>10,768</u>
Total, Other Aviation Systems Maintenance	\$199,329	\$253,015	\$242,502	\$238,727	\$269,598	\$30,871

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate	\$238,727
2. Pricing Adjustments	-16,317
A. Stock Fund	(-159)
1) Non-Fuel	-159
B. Industrial Fund Rates	(-19,311)
C. Other Pricing Adjustments	(3,153)

Activity Group: Other Aviation Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

3. Functional Program Transfers		1,023
A. Transfers In	(1,023)	
1) Inter-Appropriation		
Stock Funding of Aviation Depot Level		
Repairables-Change in obligational authority		
resulting from full-year implementation of		
AVDLR stock funding initiative, begun		
1 April 1985.	1,023	
4. Program Increases		46,341
A. Other Program Growth in FY 1986	(46,341)	
1) Increase to support additional		
conversion/repair efforts for the		
QST-33, QST-35, Vandal, and newly		
introduced AQM-37C targets; implementation		
of a tow reeling machine modification		
program; and increased TAS component		
repair.	6,557	
2) Increase maintenance support for the		
MK-105 magnetic minesweeping systems in		
preparation for activation of one		
additional MH-53E squadron.	616	
3) Increase maintenance requirements for		
HH-65 aircraft communications equipment.	239	
4) Increase in support equipment reworked		
and for modification installations		
related to support equipment	23,673	
5) Increase for eight additional tactical		
software configuration items and		
additional support for ongoing		
configuration items	11,675	
6) Increase in calibration hours for more		
complex calibrateable items	3,581	
5. Program Decreases		-176
A. Other Program Decreases in FY 1986	(-176)	
1) Decreases in maintenance support for		
Aircraft Cameras due to reduction in		
requirements	-82	

Activity Group: Other Aviation Systems Maintenance (cont'd)

2) Decrease in maintenance support for meteorological equipment

-94

6. FY 1986 President's Budget Request

\$269,598

III. <u>Performance Criteria.</u>		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Calibration</u>				
Type I Lab	Units	11,869	7,320	6,890
	Cost	\$3,632	\$2,862	\$2,267
Type II Lab	Units	12,310	12,332	11,298
	Cost	\$2,856	\$3,675	\$2,915
Type III Lab				
NIF	Units	152,010	148,320	128,952
	Cost	\$29,186	\$36,190	\$32,238
Non-NIF	Units	77,678	77,385	82,802
	Cost	\$13,983	\$15,090	\$17,890
Commercial	Units	21,204	26,924	27,708
	Cost	\$10,602	\$15,595	\$16,000
TOTAL	Units	275,071	272,281	257,650
	Cost	\$60,259	\$73,412	\$71,310
<u>Overhaul of SE</u>				
Mobile Electric Power Plants (MEPP's) & Air Conditioner	Units	393	367	411
	Cost	\$13,661	\$16,606	\$18,498
Tractors and Firetrucks	Units	301	295	327
	Cost	\$6,863	\$8,730	\$10,074
Hydraulic, Pneumatic, and Oxygen/Nitrogen Servicing	Units	548	540	607
	Cost	\$7,508	\$9,662	\$11,293
Armament Handling Equipment	Units	11,201	10,287	10,565
	Cost	\$10,051	\$10,801	\$11,305
Automatic Test Equipment and On-Site Rework	Units	304	278	289
	Cost	\$32,089	\$34,100	\$38,903
Peculiar Support Equipment and Miscellaneous Avionics	Units	3,391	4,095	5,187
	Cost	\$8,340	\$13,235	\$18,208
TOTAL	Units	16,138	15,862	17,386
	Cost	\$78,512	\$93,134	\$108,281

Activity Group: Other Aviation Systems Maintenance (cont'd)

III. <u>Performance Criteria (cont'd)</u>		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Meteorological Support</u>				
Major Overhaul of Systems/Subsystems (Units)		12	12	12
Minor Overhaul of Systems/Subsystems (Units)		30	40	39
<u>Target Maintenance</u>				
Aerial Targets (Units)		182	64	163
Surface Targets (Units)		53	16	92
<u>Airborne Mine Countermeasures</u>				
<u>Repair</u>				
<u>Mechanical</u>	Units	61	5	5
	Cost	\$408	\$548	\$778
Acoustical	Units	22	10	20
	Cost	\$1,580	\$1,500	\$1,942
<u>Overhaul</u>				
<u>Mechanical</u>	Units	20	15	14
	Cost	\$4,022	\$4,300	\$3,804
Acoustical	Units	8	9	10
	Cost	\$1,658	\$2,978	\$3,115
<u>Calibration</u>				
<u>Mechanical</u>	Units	100	100	100
	Cost	\$154	\$100	\$92
Acoustical	Units	87	150	100
	Cost	\$900	\$745	\$864
<u>"Intense Look"</u> *	Units	10	-	-
	Cost	\$470	-	-

* "Intense Look" is the project title for the Suez Canal sweeping operation

Activity Group: Other Aviation Systems Maintenance (cont'd)

III. Performance Criteria. (cont'd) FY 1984 FY 1985 FY 1986

Overhaul of Aircraft Cameras

Major Systems Rework (Units)	1,190	1,337	1,314
Other Maintenance Actions (Units)	777	891	875

Coast Guard (Units Maintained)

Radar	604	612	609
Communication	391	479	549
Navigation	142	182	190
Peculiar Support Equipment Calibration & Repair	260	276	288
Consumable Parts	482	499	505

Aviation Tactical Software

<u>Weapons System</u>	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>Config. Items</u>	<u>No. of SCPs</u>	<u>Config. Items</u>	<u>No. of SCPs</u>	<u>Config. Items</u>	<u>No. of SCPs</u>
TACAMO	1	5	1	5	1	6
S-3A	2	54	5	60	5	70
A-7	2	40	2	52	2	57
F-4	1	1	1	2	1	2
SH-2, 3 TACNAV	1	4	2	6	2	10
A-4M	1	12	1	14	1	16
F-14	2	64	2	71	2	74
CAINS	5	5	6	6	7	7
A-6	2	50	2	41	1	44
AWG-21	1	3	1	3	1	4
EA-6B	2	18	2	24	3	18
P-3C	4	44	6	48	6	66
P-3B	2	4	3	6	3	6
AN/AYK-14	2	6	2	6	2	6
MTASS	2	7	2	13	2	16
AEDAS/GSS	2	6	2	7	2	9
F-18	6	60	7	70	7	84
EWSSA	2	10	5	25	8	40
HARM	-	-	-	-	1	13
AIM-7M	-	-	-	-	1	4
AV-8B	-	-	-	-	1	72
HIS-2	-	-	-	-	1	5

(SCPs - Software Change Proposals)
(Config. - Configuration Items)

Activity Group: Other Aviation Systems Maintenance (cont'd)

III. Performance Criteria. (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Requirements	\$239,029	\$292,899	\$307,681
Total Funding	199,329	238,727	269,598
Total Backlog	39,700	54,172	38,083
Total Executable Backlog	-	42,229	25,222

IV. Personnel Summary.

Not applicable

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Maintenance Support
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Air Systems Command)

1. Description of Operations Financed.

This activity group provides maintenance support services for aviation systems and equipment utilized in aircraft, calibration and support equipment, targets, airborne mine countermeasures, and air launched missiles and ordnance. Services include technical investigations, reviews and evaluations of maintenance requirements and integrated logistic support plans. The Air-Launched Missile Maintenance Support line specifically finances on-site technical assistance and support to fleet operating units, quality evaluation of in-service weapons, review and evaluation of maintenance requirements, review and development of integrated logistic support plans, and contractor interim support for air-launched missiles transferred from the Weapons Procurement, Navy appropriation in FY 1986.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	Budget Request	FY 1985 Appropriation	Current Estimate	FY 1986 Budget Request	Change
Aircraft Maintenance Support	\$5,282	\$3,120	\$2,611	\$2,611	\$2,581	-30
Air-Launched Missile Maintenance Support	14,109	15,691	14,914	14,914	22,422	7,508
Calibration Maintenance Support	5,230	5,052	3,755	3,755	3,771	16
Support Equipment Maintenance Support	999	1,208	1,014	1,014	1,051	37
Target Maintenance Support	397	418	353	353	366	13
Airborne Mine Countermeasures Maintenance Support	577	354	344	344	305	-39
Total, Maintenance Support	\$26,594	\$25,843	\$22,991	\$22,991	\$30,496	\$7,505

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate	\$22,991
2. Pricing Adjustments	718
A. Industrial Fund Rates	(202)
B. Other Pricing Adjustments	(516)

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

3. Functional Program Transfers		6,477
A. Transfers In	(6,477)	
1) Inter-Appropriation Transfer from Weapons Procurement, Navy to fund Contractor Integrated Logistic Support for air-launched missiles interim support.	6,477	
4. Program Increases		310
A. Other Program Growth in FY 1986	(310)	
1) Increased analysis and evaluation of Air-Launched Missile performance data due to a projected increase in captive carry activity and the number of air-to-surface weapon exercises to be covered.	221	
2) Increased effort required for the preparation and review of maintenance plans, evaluation of integrated logistic support plans and development of maintainability, reliability and service ability parameters for weapons systems in the Navy inventory.	89	
5. Program Decreases		-
6. FY 1986 President's Budget Request		\$30,496

III. Performance Criteria.

		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Sidewinder	Workyears	11.3	13.0	14.6
	Cost	\$739	\$829	\$931
Sparrow	Workyears	12.3	13.8	15.4
	Cost	\$803	\$853	\$959
Walleye	Workyears	5.9	4.7	4.8
	Cost	\$501	\$348	\$363
Shrike	Workyears	4.0	7.2	7.3
	Cost	\$303	\$557	\$572
Standard Arm	Workyears	.3	.3	.3
	Cost	\$23	\$24	\$24
Phoenix	Workyears	11.2	9.2	10.8
	Cost	\$721	\$555	\$652
Harpoon	Workyears	11.4	7.3	7.9
	Cost	\$617	\$559	\$604

7 033

Activity Group: Maintenance Support (cont'd)

III. <u>Performance Criteria (cont'd)</u>		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Harm	Workyears	.4	1.6	1.6
	Cost	\$30	\$145	\$148
Tow	Workyears	.6	1.3	1.3
	Cost	\$50	\$99	\$101
Hellfire	Workyears	-	.1	.2
	Cost	-	\$5	\$10
Skipper	Workyears	-	.1	.1
	Cost	-	\$7	\$7
Aircrew Escape Propulsion System	Workyears	3.2	4.4	4.4
	Cost	\$209	\$289	\$294
Cartridge Actuated Devices	Workyears	10.9	9.5	9.5
	Cost	\$720	\$641	\$653
Bombs/Components	Workyears	16.1	11.5	11.5
	Cost	\$1,268	\$896	\$913
Pyrotechnics	Workyears	3.1	3.1	3.1
	Cost	\$206	\$208	\$211
Ammunition	Workyears	.8	.8	.8
	Cost	\$66	\$66	\$67
Rockets/Launchers	Workyears	3.3	3.3	3.3
	Cost	\$275	\$253	\$258
Aircraft Gun Systems	Workyears	.6	.6	.6
	Cost	\$51	\$51	\$51
Airborne Weapons Control and Release Equipment	Workyears	.1	.1	.1
	Cost	\$10	\$10	\$10
Bomb Racks	Workyears	.1	.1	.1
	Cost	\$11	\$11	\$11
Submarine Warfare Airborne Devices	Workyears	.1	.1	.1
	Cost	\$7	\$7	\$7
Missile Launchers	Workyears	.2	.2	.2
	Cost	\$12	\$13	\$13
Engineering Technical Assistance Missiles	Workyears	40.5	45.1	44.7
	Cost	\$2,276	\$2,709	\$2,683

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria (cont'd)

		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Engineering Technical Assistance Ordnance	Workyears Cost	25.1 \$1,415	34.5 \$2,029	34.5 \$2,053
Depot Maint. Support	Workyears Cost	300.9 \$16,281	230.7 \$11,827	232.8 \$12,424
<u>Contractor Integrated Logistic Support</u>				
Sidewinder	Workyears Cost	-	-	.8 \$106
Sparrow	Workyears Cost	-	-	5.2 \$675
Phoenix	Workyears Cost	-	-	5.9 \$763
Harpoon	Workyears Cost	-	-	37.9 \$4,933

IV. Personnel Summary

Not applicable

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Procurement Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

This activity group finances personnel and support costs for Naval Plant Representative Offices, Project Management Offices - AIR and the Theater Nuclear Warfare Office.

The Inspection and Contract Administration Program finances the six Naval Plant Representative Offices (NAVPROs) located at Bethpage, Burbank, Dallas, Lynn, Stratford and St. Louis, which provide Contract Administration Services as outlined in the Defense Acquisition Regulations 1-406 including administrative contracting officer functions in the six assigned major weapon systems' manufacturing plants. The 72 functions listed in the Defense Acquisition Regulations are statutory requirements that must be performed under the Procurement Act of 1958 as amended (Public Law 85-804). The Naval Plant Representative Offices provide a single onsite government interface for the Department of Defense, National Aeronautics and Space Administration, and Foreign Military Sales Representatives with the assigned major weapon systems manufacturers. The NAVPROs assure that the manufacturer's quality assurance, engineering, industrial management, logistics and production, contractual processes, procedures and products conform to contractual requirements.

The Project Management Office - AIR (PMOA) program provides dedicated overall management for programs designated by the Secretary of Defense as major systems acquisition programs (SECNAVINST 5000.1A). The PMOA also has management responsibilities for naval aviation programs, subsystems and components. These include control of all resources (all support necessary for specific major systems acquisition programs); integrated planning, acquisition, initial support and readiness; also, directing implementation and appraising the performance of technical and business tasks assigned to the Naval Air Systems Command functional elements.

The Theater Nuclear Warfare Project Office (PM-23) was established to modernize the Navy's theater nuclear forces and the fleet's capabilities to operate in a nuclear environment.

Activity Group: Procurement Operations (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Break-out.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Inspection and Contract Administration	\$27,527	\$31,092	\$30,774	\$32,321	\$35,511	+\$3,190
Project Management Office-AIR	8,251	8,935	8,844	9,054	10,049	+995
Theater Nuclear Warfare Project Office	<u>2,129</u>	<u>2,718</u>	<u>2,718</u>	<u>2,757</u>	<u>2,731</u>	<u>-26</u>
Total, Procurement Operations	\$37,907	\$42,745	\$42,336	\$44,132	\$48,291	+\$4,159

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate						\$44,132
2. Pricing Adjustments						-1,644
A. Civilian Personnel Compensation (Direct)				(-1,785)		
1) U.S. Direct Hire Pay Adjustment				-1,427		
2) Other Pricing Adjustments				-358		
B. Stock Fund				(-1)		
1) Non-Fuel				-1		
C. Other Pricing Adjustments				(142)		
3. Program Increases						6,021
A. Other Program Growth in FY 1986				(6,021)		
1) Inspection and Contract Administration (NAVPRO):				4,812		
a) Increase to fund salaries and support costs, including Permanent Change of Station (PCS) and training for an additional 53 workyears associated with Contract Administration Services (CAS). This increase supports a new SECNAV initiative to reduce the backlog of overage orders, control growth of contractor overhead costs, and reduce fraud, waste and abuse (1,773).						

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

FY 1986

b) Increase for salaries and support costs, including PCS and training for an additional 70 workyears associated with the Buy Our Spares Smart (BOSS) program. BOSS is a new initiative to improve spare parts acquisition through breakout, competition, intensified pricing and value engineering (3,039).		
2) Project Management Office AIR (PMOA):	1,209	
a) Increased travel and support requirements due to recently assigned programs (209).		
b) Increase to provide PMA contractor support for several weapons systems (S-3, WSIP, E-6A, ASPJ, H-1/OV-10) scheduled to enter production in FY 1986. These support services are not integral to the execution of procurement programs and must be funded as expense in the Operations and Maintenance appropriation (1,000).		
4. Program Decreases		-218
A. Other Program Decreases in FY 1986	(-218)	
1) Inspection and Contract Administration (NAVPRO):		
Decrease of 7 end strength and 4 workyears as a result of economies and efficiencies in workforce.	-182	
2) Theater Nuclear Warfare Project Office:	-36	
Reduction of technical guidance necessary to establish contractual criteria for nuclear weapons design and evaluation.		
5. FY 1986 President's Budget Request		\$48,291

Activity Group: Procurement Operations (cont'd).

III. <u>Performance Criteria.</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Inspection and Contract Administration (NAVPRO)</u>			
(Dollars in Millions)			
Number of NAVPROs	6	6	6
Total Number of Contracts	32,966	37,587	42,370
Value of all goods and services accepted	\$7,732	\$8,511	\$9,091
Return on Investment	\$387	\$448	\$502
Value and number of procurement actions	\$1,569 8,788	\$1,648 9,113	\$1,755 9,386
Value and number of unpriced orders negotiated	\$1,646 5,218	\$1,790 4,274	\$2,079 4,452
Value and number of unpriced order backlog	\$2,341 3,744	\$1,716 3,281	\$1,390 3,057

Naval Plant Representative Offices (NAVPROs) are Contract Administration Services (CAS) activities required to administer an increasing number of contracts which generate a large backlog of overage orders. The level of backlog is over two billion and action has been taken to reduce it with increased end strength. Our ability to reduce backlog is dependent upon resources and the amount of work. With current resources we are achieving a return on our investment on total "goods and services accepted" through: cost savings (cost avoidance by timely contract negotiations), technical cost advisories provided to procurement contract officers, actual negotiations with the contractors, withholding of non-conforming materials, recoupment actions in defective pricing, breakout of spare parts, and increased competition. Intensified pricing will also be provided for more intensified review of subcontract costs, analysis of three year vice one year pricing history for each item included in the spares order and review of a larger sampling of the bill of material and proposed labor hours that appear in the contractor's proposal.

B. Project Management Office-AIR (PMOA)

Number of Programs Managed	43	44	44
Total funds managed (Dollars in Millions)	\$9,482	\$11,284	\$13,117
Funding actions initiated	9,400.	9,565	10,110
<u>Management of Engineering Change Proposal Process.</u>			
Number of ECPs	3,460	3,755	3,780

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd).

C. Theater Nuclear Warfare Project Office

PM-23, as the acquisition manager for theater nuclear warheads, does not have the normal performance milestones associated with contractor effort (e.g. annual fee determination or price determination for the next procurement lot). The actual acquisition of nuclear weapons is done by the Department of Energy. We help set requirements, justify the needs, resolve interface problems during development, evaluate for acceptance and establish logistic support capabilities.

Another area of involvement in acquisition is the EMPRSS II where DNA uses our technical assistance to run their pulser contract. We are also establishing a barge building/systems integration contract that will be administered by the Naval Sea Systems Command (NAVSEA).

IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>193</u>	<u>225</u>	<u>223</u>
Officer	176	205	203
Enlisted	17	20	20
B. <u>Civilian</u>	<u>1,109</u>	<u>1,269</u>	<u>1,452</u>
USDH	1,109	1,269	1,452

Department of the Navy
 Operation and Maintenance, Navy
 Exhibit OP-5

Activity Group: Command and Administration
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Command and Administration is responsible for the development, acquisition, improvement, and support of aircraft, aviation weapons and related equipment and support systems. Command and Administration functions are policy development, long-range planning and programming, management and distribution of resources, review and evaluation of programs and performance, implementation and management control of depot level aviation maintenance programs at the Naval Air Rework Facilities, support of aeronautical depot maintenance, review of acquisition and depot maintenance programs, and coordination of interservice depot maintenance. Command and Administration finances personnel compensation, travel, and other administrative and support services related to Command and Administration personnel.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Command and Administration	\$24,378	\$22,849	\$22,614	\$23,261	\$22,346	-\$915
Total, Command and Administration	\$24,378	\$22,849	\$22,614	\$23,261	\$22,346	-\$915

B. Reconciliation of Increases and Decreases

	<u>FY 1986</u>
1. FY 1985 Current Estimate	\$23,261
2. Pricing Adjustments	-639
A. Civilian Personnel Compensation (Direct)	(-702)
1) U.S. Direct Hire Pay Adjustment	-750
2) Other Direct Pricing Adjustments	48
B. Stock Fund	(-11)
1) Non-fuel	-11
C. Other Pricing Adjustments	(74)

Activity Group: Command and Administration (cont'd)

C. Reconciliation of Increases and Decreases (cont'd) FY 1986

3. Functional Program Transfers		168
A. Transfers In	(168)	
1) Inter-Appropriation Expense/Investment Criteria Revision - Amounts transferred from Other Procurement, Navy pursuant to the proposed DoD initiative for elimination of \$3 thousand investment threshold and adoption of central management criteria as the governing factor.	168	
4. Program Decreases		-444
A. Other Program Decreases in FY 1986	(-444)	
1) Reduction in travel support required due to the Naval Aviation Logistics Center (NALC) reorganization.	-235	
2) Reduction in contractor support for computer and equipment maintenance, and other purchased services due to decreased support requirements.	-209	
5. FY 1986 President's Budget Request		\$22,346

<u>III. Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of Field Activities Supported	29	29	29
Total Civilian Population Supported	41,977	41,676	42,354
Total Military Population Supported	3,914	4,091	4,110
Total Funding Managed (dollars in billions)	\$16.7	\$20.0	\$22.6

<u>IV. Personnel Summary (End Strength).</u>			
A. <u>Military</u>	<u>37</u>	<u>39</u>	<u>39</u>
Officer	31	33	33
Enlisted	6	6	6
B. <u>Civilian</u>	<u>595</u>	<u>589</u>	<u>589</u>
USDH	595	589	589

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Field Operations
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

This activity group finances personnel and operating expenses required to develop long-range plans for the effective operation of naval aviation logistics systems; on-site instruction and training of organizational and intermediate level maintenance personnel, and technical documentation programs. This activity group also funds weapon system engineering and logistics support, secondary supply point functions, common military support functions, and operational support of the Navy Test Pilot School. Funds are provided at four major field activities: 1) Naval Aviation Logistics Center (NAVAVNLOGCEN); 2) Naval Weapons Engineering Support Activity (NAVWPENGSUPPACT); 3) Naval Aviation Engineering Services Unit (NAESU); and 4) NAVAIR Technical Services Facility (NAVAIRTECHSERVFAC). These funds finance civilian personnel compensation, travel, automatic data processing, and related support costs required for engineering and technical support for Naval Air Systems Command and its designated project managers. Funding for the Operational Support-Field program is also provided for personnel salaries, benefits, travel, transportation, administrative and support services. Funds previously budgeted under this activity group to operate and refurbish the Solomon's Island complex were realigned to Base Operations under the Naval Air Systems Command.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986 Budget Request</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appro- piation</u>	<u>Current Estimate</u>		
Operational Support-Field	\$71,784	\$77,998	\$74,383	\$80,375	\$84,122	\$3,747
Military Support:	5,702	8,015	7,935	5,757	5,250	-507
Naval Avionics Center (NAVAVIONICEN)	(1,008)	(1,224)	(1,213)	(1,113)	(1,262)	(149)
Naval Air Engineering Center (NAVAIRENGCEN)	(4,419)	(4,591)	(4,544)	(4,644)	(3,988)	(-656)
Solomon's Island	(275)	(2,200)	(2,178)	0	0	0

Activity Group: Field Operations (cont'd)

A. Sub-Activity Group Breakout (cont'd).

	FY 1984	FY 1985			FY 1986 Budget Request	Change
		Budget Request	Appro- priation	Current Estimate		
NAVAVNLOGCEN	\$20,381	\$24,725	\$23,171	\$21,070	\$22,021	\$951
Weapon Systems Support (WSS)	61,928	111,354	103,019	105,603	96,411	-9,192
Test Pilot School (TPS)	12,463	14,203	14,052	14,998	16,668	1,670
NAVWPNEINGSUPPACT	12,212	13,504	11,961	12,726	13,695	969
NAESU	22,897	25,827	22,848	25,430	26,410	980
NAVAIRTECHSERFAC	<u>8,333</u>	<u>8,283</u>	<u>8,194</u>	<u>8,790</u>	<u>9,081</u>	<u>291</u>
Total, O&M,N	\$215,700	\$283,909	\$265,563	\$274,749	\$273,658	\$-1,091

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate	\$274,749
2. Pricing Adjustments	-18,800
A. Civilian Personnel Compensation	(-3,966)
1) U.S. Direct Hire Pay Adjustment	-4,189
2) Other Direct Pricing Adjustments	223
B. Stock Fund	(-477)
1) Fuel	12
2) Non-fuel	-489
C. Industrial Fund Rates	(-15,874)
E. Other Pricing Adjustments	(1,517)
3. Functional Program Transfers	2,170
A. Transfers In	(2,170)
1) Inter-Appropriation	
a) Expense/Investment Criteria Revision- Amounts transferred from Other Procure- ment Navy pursuant to the proposed DoD initiative for elimination of \$3 thousand investment threshold and adoption of central management criteria as a governing factor.	1,638

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

b)	Stock Funding of Aviation Depot Level Repairables - change in obligational authority resulting from full-year implementation of AVDLR stock funding initiative begun 1 April 1985.	532
4.	Program Increases	16,532
A.	Other Program Growth in FY 1986	(16,532)
1)	Operational Support Field:	5,361
a)	Annualization of FY 1985 end strength increases and associated support costs for industrial preparedness planning, aviation training updates and readiness improvements for direct fleet support. (521)	
b)	Provides full implementation of the Buy Our Spares Smart (BOSS) Program, a Department of Defense initiative that promotes efficient acquisition of replenishment spares through increased breakout competition, value engineering, and intensified cost price analysis. Includes ten additional workyears. (4,840)	
2)	NAVAVNLOGCEN	831
a)	Fund increase in ADP support costs at NARDAC, Washington. (250)	
b)	Manage technical directorate management system that is used for determining fleet pre-position modification kits, including excess equipment, at 14 locations. (303)	
c)	Conduct a Weapon Systems Management Logistics Management (WSM/LM) study to determine rework requirements and management of weapon systems. (278)	
3)	WSS:	5,985
a)	Engineering support for the AV-8 airframe, F-402 engine, and establishment of a Logistics Support Analyses/Maintenance Planning Data Base. (538)	
b)	Provides for Automated Test Equipment In-Service Engineering to support new and revised test program sets being transitioned from contractor support to Navy organic support. This includes the LAMPS MKIII, F-14, APX-100 and angle rate bombing system. (3,776)	

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases. (cont'd)

- c) Application interfaces for master data record coding, an updated data directory, and improvements to the aviation maintenance information 3-M Data System. (670)
- d) Engineering and logistics support for the A-6E (TRAM) structures, aircraft mechanical systems, avionics, and electrical systems (1,001).
- 4) TPS: 1,469
 - a) Funds required to provide fuel (676), parts (383), maintenance (142) and increased range time (86) for additional F/A-18 aircraft being transitioned into TPS during FY 1985/1986.
 - b) Increase in fuel usage due to the integration of UH-60 in replacement of AH-1S aircraft. The exchange is necessary to preserve safety of flight (182).
- 5) Naval Weapons Engineering Support Activity: 850
 - a) Provides eleven additional workyears and support for the Buy Our Spares Smart (BOSS) Program. (564)
 - b) Provides funds for production support of various NAVAIR program. (286)
- 6) Naval Aviation Engineering Service Unit: 1,533
 - Annualization of FY85 end strength increase for Civilian Technical Specialists who provide technical services and training on A-6, F-14, P-3, E-2 and other aircraft.
- 7) Naval Air Technical Services Facility: 503
 - a) Increase of two work years, contracts and supplies for the BOSS Program. (62)
 - b) Increased effort in NAVAIRTECHSERFAC Quality Assurance Program (229)
 - c) Funding is required to correct fire safety defect by lowering the sprinkler system; replace/repair worn out carpet; replace office equipment and relocate NATSF Quality Assurance. (212)

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases. (cont'd)

4. Program Decreases		-993
A. Other Program Decreases in FY 1986	(-993)	
1) Military Support: Decrease support of secondary stock point function at NAVAVIONICCEN (-156). Decrease purchasing support to BRASO Branch Aviation Supply Office (ASO) for 4R & 5R COG materials from NAC. ASO will be required to assume this without transfer of funds. (-537)	-693	
2) NAVAVNLOGCEN: Termination of NAVAIRWORKFAC's modernization study.	-300	
5. FY 1986 President's Budget Request		\$273,658

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>OSF</u>			
Number of Competitive Contracts	31	33	36
Number of Requests for Cost Analyses/Estimates	600	750	780
Number of Engineering Change Proposals Staffed	3,462	3,755	3,777
Number of A/C Maint. Programs Managed			36
Number of Test and Evaluation Master Plans (TEMPS) developed	68	70	75
<u>NAVAVIONICCEN</u>			
Support Provided for Military and Common Services Functions (Workyears)	2	2	2
Support Provided for Secondary Stock Point Function (Workyears)	24	24	18
<u>NAVAIRENGCEN</u>			
Number of Inter-Service Tenants Provided Support	19	19	19
Number of Active/Retired Military Personnel and Dependents Supported	6,000	6,000	6,000
<u>NAVAVNLOGCEN (Workyears)</u>			
Engineering and Support Operations	106	111	111
Logistics Systems Development	82	82	82
Management Systems Development	44	46	46
Staff	66	66	66
Management Support of Depot Level Maintenance	64	65	65
Total	<u>362</u>	<u>370</u>	<u>370</u>

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>WSS</u>			
NAVAIR Bulletins	400	513	525
Local Technical Directives	24,347	26,781	27,120
Publications Documentation (reported in pages in FY 84,85,86)	65,648	68,930	72,376
Modification Documents	960	1,056	1,109
Logistic Support Documents	7,180	7,898	8,293
Technical Documents	58,456	61,500	62,000
Reliability Centered Maintenance Documents	74,757	82,340	85,000
<u>TPS</u>			
Number of TPS Aircraft Supported	35	35	37
Aircraft Maintenance M/Y	148	148	154
TPS Aircraft Flight Hours	7,200	7,550	7,290
Other Aircraft Flight Hours	1,384	1,410	1,410
Hours Per Month Per Instructor	22	22	22
Hours per Month Per Student	15	15	15
Number of Pilots Trained	40	44	44
Number of Non-Pilots Trained	20	16	16
Number of Instructors	21	23	23
<u>NAESU (Workyears)</u>			
Mission of A/C:			
Attack	75.9	83.9	91.1
Fighter	78.1	87.8	96.5
Patrol	69.8	76.9	83.3
EW	44.1	55.0	64.8
Rotary	26.8	29.3	31.6
Anti-Submarine	35.7	37.0	38.2
GSE/ATE	56.3	58.0	59.5
Other A/C	63.0	63.0	63.0
Admin	108.3	113.1	114.0
Total	558.0	604.0	642.0

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation FY 1984 FY 1985 FY 1986

NAVAIRTECHSERFAC

Number of Technical Manuals Managed	33,632	36,000	38,500
Number of Technical Directives Reproduced	1,200	1,275	1,350
Number of Aeronautical Engineering Drawings Maintained (thousands of drawings)	8,400	9,100	9,800
Number of Items Required to be Identified as Breakout Candidates	12,500	22,000	22,000

IV. Personnel Summary (End Strength.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>476</u>	<u>515</u>	<u>515</u>
Officer	294	335	331
Enlisted	182	180	184
B. <u>Civilian</u>	<u>3,201</u>	<u>3,324</u>	<u>3,332</u>
USDH	3,201	3,324	3,332

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Logistic Support Activities
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command

Pages 7-057 and 7-058 are in response to the House Appropriations
Committee requirement contained on page 50 of the HAC Report #98-1086 of
26 September 1984.

NAVAL AVIATION LOGISTICS COMMAND MANAGEMENT INFORMATION SYSTEM (NALCOMIS)
REDESIGN STATUS REPORT

Purpose

To respond to the Congressional action item on NALCOMIS by providing a status report on the technical redesign of NALCOMIS. The status report, as directed by the House Appropriations Committee, will address the status of the redesign, as well as, the computer sizing and cost requirements for the redesigned system.

Discussion

a. Redesign Status. A Request for Proposals (RFP) to provide technical software redesign of NALCOMIS was mailed to interested corporations in September 1984. The RFP calls for the redesign of the existing software which contains translation inefficiencies inherited from the Perkin Elmer based hardware system. It is stressed that the highly successful functional design currently in operation at the prototype site will be retained. Several proposals were received in response and were evaluated to establish a competitive range in October 1984. A request for Best and Final Offers (BFO) was issued in November and the resulting BFO's are currently under final evaluation. The Procurement Review Board convened on 15 January to select the winning bid. Official contract award was announced on 27 January with redesign effort to commence immediately thereafter.

b. Computer Sizing. Because computer sizing is the sole reason for redesign of the NALCOMIS software, the Navy is highly confident that the new programs will fit the SNAP I hardware. Nevertheless, the Program Office has structured its acquisition strategy to protect the government by addressing up front the risks associated with a technical ADP redesign, i.e. computer sizing, with provisions to terminate the contract. If technical risks prove to be unacceptable, the contract will provide only for the technical redesign of NALCOMIS, the first element of more than twenty line item elements. The remaining elements of the redesign are contained in option items and are contingent upon Navy acceptance of a contractor-developed Executive Decision Paper (EDP). The comprehensive EDP must address size, performance (i.e. response time), and critical risk assessment of the proposed redesign. A Cost Plus Award Fee type contract was selected to provide the contractor incentive for performance. This contract type was selected to maximize the incentive to the contractor while maximizing government options and minimizing resource investment.

NAVAL AVIATION LOGISTICS COMMAND MANAGEMENT INFORMATION SYSTEM (NALCOMIS)
REDESIGN STATUS REPORT

c. Cost requirements for the redesigned system. Program budget projections for the technical ADP software redesign for fiscal year 1985 and 1986:

FY 85	Software design/development	\$4.93M
FY 86	Software design/development	\$7.09M
	Total	<u>\$12.02M</u> (Note 1)

Note 1: Contract costs for NALCOMIS redesign for FY 85 expenditure include the basic contract for development of the Executive Decision Paper (EDP). Based on contractor performance and Navy acceptance of the EDP, Option 1 for Intermediate Maintenance Activity (IMA)/Supply Support Center (SSC) software development and training will be exercised. Total costs are \$4.93M in FY 85 for the cost plus award fee contract. Option 2 consists of Organizational Maintenance Activity (OMA) software development and training and will be exercised contingent on satisfactory contractor performance of the basic contract and Option 1.

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Logistic Support Activities
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Logistic Support Activities ensures effective support for aviation systems and equipment; provides reviews of systems in order to simplify, coordinate, or delete as necessary; provides for standardization and configuration control and ensures that reliability and maintainability are designed into aviation systems and equipment. This activity group provides funds for the following:

The Standardization program finances preparation of standardization documents necessary for the procurement and maintenance of major weapons systems, subsystems, equipment, and components relative to Naval aircraft. Use of standardized equipment reduces acquisition lead times and life cycle costs while improving operational readiness.

The Nuclear Weapons Safety and Security program supports the nuclear weapons delivery capabilities of U.S. Navy aircraft, their associated nuclear weapons and trainers, as well as NATO Nuclear Anti-Submarine Warfare (ASW) aircraft.

The Automatic Test Equipment (ATE) In-Service Engineering program provides for maintenance of electronic software test programs used by intermediate level (ashore and afloat) and depot maintenance personnel. These test programs are written in computer language to provide the stimulus and response necessary for automatic testing, trouble-shooting and verification of weapon systems, engines, missiles and ATE.

The Automatic Test Equipment Center is responsible for performing ATE systems engineering and logistic services to ensure that ATE systems are provided to effectively satisfy application requirements and operational needs, and to ensure that technical, configuration, and logistics elements compatibility is maintained between the ATE systems and the avionics systems and subsystems being supported.

The Installation of Aviation Ground Support Equipment program involves the alteration of existing facilities to the extent necessary to receive aviation ground support equipment and ensure that it is totally operational in all respects.

The Electromagnetic Interference program (EMI) addresses EMI problems existing in fleet aircraft. Through aircraft class evaluations, fleet investigation teams, fleet EMI problem reporting, and EMI data base management, EMI problems are identified and solutions recommended.

The Contingency Reserve Aircraft program manages the storage and removal of aircraft and parts from aircraft that are in the Navy's active inventory at the Military Aircraft Storage and Disposition Center (MASDC) at Davis - Monthan Air Force Base.

Activity Group: Logistic Support Activities (cont'd)

I. Description of Operations Financed (cont'd)

The Interservice Equipment Oil Analysis program provides technical support to oil analysis laboratories.

The Safety program supports safety management and engineering efforts necessary to support aircraft, weapons, and support systems for Naval Air Systems Command headquarters and its field activities.

The Navy Occupational Safety and Health programs are designed to prevent mishaps, reduce injury and property damage costs, improve employee morale and well being and ensure compliance with regulatory requirements.

The Material Disposal program reclaims parts and assemblies from stricken Navy aircraft at MASDC and Naval Air Rework Facilities. This program also provides for the reclamation and disposal of obsolete/damaged ground support equipment, obsolete tools and production equipment.

The Naval Aviation Logistics Command Management Information System (NALCOMIS) is a modern and effective management information system that will respond to aircraft maintenance and material management requirements aboard aircraft carriers, amphibious aviation helicopter assault ships (LPHs and LHAs), Marine aircraft group, and Naval/Marine Corps air stations. Specific objectives are to increase aircraft material readiness, reduce inventory loss and improve repairable turnaround time.

The Naval Aviation Logistics Data Analysis System (NALDA) provides the administration and cost for the maintenance of low and high speed remote terminals installed at all the necessary geographical locations in support of the entire Naval aviation logistics community to solve logistics and maintenance problems.

The Integrated Logistic Support (ILS) Management of Support Equipment (SE) program provides management information systems for aircraft and SE rework. It also supports inventory management, ILS management, and contractor maintenance engineering at the prime contractor and field activities for common SE, such as, avionics, handling and servicing, electronic warfare and ATE.

The Range Support program provides for logistic support of training range systems, for maintenance and operating costs of six telemetry receiving stations, installation of equipment for fleet training ranges, and support of the Tactical Aircraft Combat Training System (TACTS); for all costs necessary to support a fully instrumented range at the Pacific Missile Range Facility (PMRF); and, for costs associated with the Mobile Sea Range for instrumentation maintenance, target support, data collection systems, tracking systems, and the integration of systems for open ocean exercises.

Activity Group: Logistic Support Activities (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Request</u>	<u>FY 1985 Budget prietation</u>	<u>Appro- Estimate</u>	<u>FY 1986 Current Request</u>	<u>Budget Change</u>
Standardization	3,629	4,468	4,468	4,468	5,741	1,273
Nuclear Weapons Safety & Security Ashore	2,156	2,607	2,607	2,607	2,694	87
Automatic Test Equipment Test Programs - In- Service Engineering	12,963	10,531	8,058	8,058	9,590	1,532
Automatic Test Equipment Center	4,764	5,350	5,350	5,350	5,440	90
Installation Aviation Ground Support Equip	1,129	2,475	2,170	2,170	3,601	1,431
Electromagnetic Interference (EMI)	4,708	3,984	3,984	4,784	4,803	19
Contingency Reserve Aircraft	3,585	2,532	2,532	2,532	3,193	661
Interservice Equipment Oil Analysis	523	754	754	754	720	-34
Safety	244	132	132	132	686	554
Navy Occupational Safety & Health (NAVOSH)	893	1,016	1,016	1,016	877	-139
Material Disposal	5,051	5,344	5,344	3,506	3,258	-248
Naval Aviation Logistics Command Information System (NALCOMIS)	12,555	16,013	15,853	15,853	16,028	175
Naval Aviation Logistics Data Analysis (NALDA)	4,740	2,559	2,506	5,208	9,553	4,345
Depot Maintenance Data Collection Systems	720	0	0	0	0	0
Carrier Aircraft Readiness Improvement (CARI)	681	0	0	0	0	0
Other Support Services	3,106	1,817	1,799	1,799	2,263	464
ILS Mgmt of Support Equipment	10,727	9,150	8,765	12,617	22,498	9,881
Range Support	37,791	35,121	34,644	35,213	47,812	12,599
Total, Logistic Support Activities	109,965	103,853	99,982	106,067	138,757	32,690

Activity Group: Logistic Support Activities (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$106,067
2. Pricing Adjustments		1,434
A. Stock Fund	(-88)	
1) Non-Fuel	-88	
B. Industrial Fund Rates	(-1,052)	
C. Other Pricing Adjustments	(2,574)	
3. Functional Program Transfers		11,039
A. Transfers In:	(11,039)	
1) Inter-Appropriation:	11,039	
Funds transferred from Aircraft Procurement, Navy to the ILS Management of Support Equipment Program to provide for inventory management, integrated logistics management and contractor maintenance engineering support at the prime contractor and field activities for common support equipment (i.e. avionics, handling and servicing, electronic warfare, and automatic test equipment) (+7,800).		
Expense/Investment Criteria Revision - Amount transferred from Other Procurement, Navy pursuant to the proposed DOD initiative for elimination of \$3 thousand investment threshold and adoption of central management criteria as a governing factor (+3,239).		
4. Program Increases		20,854
A. Other Program Growth in FY 1986	(20,854)	
1) Standardization:	1,476	
These funds will permit execution of the following efforts: Perform extensive document reviews and updating of the most widely used NAVAIR overage standardization documents; Ensure that DOD Parts Control Program is addressed/implemented in NAVAIR acquisitions; Support competitive procurement by NAVAIR to minimize problems related to erroneous parts substitution; Increase competition		

Activity Group: Logistic Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

in Qualified Products List (QPL's) used by NAVAIR; Support Acquisition Improvement Program Initiative #14 (Improving Contract Requirements) through tailoring specification requirements in contracts and limiting indirect "chain referencing"; and support metric implementation.

- | | |
|---|-------|
| 2) Nuclear Weapons Safety/Security:
These funds will ensure NAVAIR compliance with DOE/DOD Memoranda of Understanding and NATO Programs of Cooperation. | 47 |
| 3) ATE In-Service Engineering:
These funds provide for approximately 250 additional maintenance actions on test program sets. | 1,314 |
| 4) ATE Center:
This increase provides for ATE data base transactions, CPU hours for automatic test program generator, and ATE tape breakage/burnout replacement. | 294 |
| 5) Installation of Aviation GSE:
These funds provide the following additional installations: Four(4) Mobile Maintenance Van Complexes, Four (4) Engine Test Stands, Three (3) Flight Line Electrical Distribution Systems. | 1,338 |
| 6) Electromagnetic Interference (EMI):
These funds will support conduct of electromagnetic environmental effects (E ³) surveys of air capable ships to determine safe operating criteria for aircraft and missiles. | 142 |
| 7) Contingency Reserve Aircraft:
These funds provide for increased material and workload requirements associated with CNO's annual represervation, CNO's updated configuration of mobilization aircraft and aviation depot level repairable items required for mobilization and withdrawal aircraft. | 809 |

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

8) Interservice Equipment Oil Analysis: 31
These funds will be used in support
of spectrometer maintenance.

9) Safety: 549
These funds provide for management and
technical support of NAVAIR aviation safety
programs: for management information systems
(mishap/hazard data, aircraft report
recommendations, NATOPS changes,
safety engineering changes); aviation safety
officer and government flight representative
training and conferences; support of oversight
inspections of both NAVAIR activities and
contractor flight operations; support type
commander safety and NATOPS manual conferences;
and provide technical inputs into specifications
for aircraft flight incident recorders (+225).

This increase will also support the major system
safety requirement of ensuring life cycle safety
engineering capability. Presently, safety
engineering is performed primarily during aircraft
development phase by the aircraft contractor.
Production and out-of-production aircraft
have little or no safety evaluation. The
life cycle system safety capability includes:
Development/training of in-house Navy
personnel to ensure analysis of airframe
changes; performance of service life extension
safety analysis; development of risk management
of methodologies for life of aircraft; performance
of trade studies and safety technology transfer
between different aircraft; and development of
aircraft mishap lessons learned data bank (+324).

10) Material Disposal: 37
These funds support increased requirements
for R-1820 engine parts reclamation, and
support equipment reclamation programs.

11) NALDA: 1,067
These funds provide for increased user
support (TYCOMS/WINGs, CFAs/IMAs) and
timesharing costs at the corporate data
base centralized computer complex and for
redesign to enhance user friendly
accessibility.

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

12) Other Support Services: 406
This increase provides for continued development and maintenance of the Aviation Weapons Longe Range Logistics Plan.

13) ILS Management of Support Equipment: 1,983
This increase is for the Support Equipment Resources Management Information System (SERMIS) program which provides improved procedures for scheduling and production status of support equipment for rework, and for the Augmented Management program which improves effectiveness of supply support during the augmented support period.

14) Range Support: 11,361

1) Range Instrumentation: (+11,250)

a) These funds provide for the ongoing installation of fleet training range equipment. Each installation varies in cost based on the sophistication of equipment as well as type and location of the range. Major installation costs for FY 86 include: computer mod software, Atlantic Fleet Weapons Training Facility (AFWTF); underwater training range expansion, AFWTF; antisubmarine warfare, Southern California (SOCAL); Tactical Aircrew-Combat Training Systems (TACTS) ranges; Weapons Impact Scoring Systems (WISS); and noise jammer simulator, Pacific Missile Range Facility (PMRF) (+8,662).

b) For 2D2 support - the result of a realignment of funding responsibility, range electronic warfare (EW) simulator and general range maintenance support, TACTS repair of repairables (ROR) and lead field activity support for existing TACTS ranges (+1,238).

c) Provides funding for preprocurement planning for upcoming training range equipment acquisitions (e.g. TACTS, range EW simulators, underwater systems etc.), configuration management and ILS support (+1,350).

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- 2) Mobile Sea Range: (+111)
This increase will maintain a basic level of effort for instrumentation support of fleet exercises and provide full instrumentation for four exercises.

5. Program Decreases -637

A. Other Program Decreases in FY 1986 (-637)

- 1) NAVOSH: -131
Reduction in planned occupational safety and health training efforts for Command activities, curtailment of on-site standardized course development and presentation, and deferral of specialized work center course development under the computerized PLATO training system.

- 2) NALCOMIS: -506
This overall program decrease is attributed to decreased fleet implementation costs for the NALCOMIS Repairable Management Module (NRMM); however, the technical redesign (i.e. software design and development) of the ADP software referred to as "NATIVE MODE" is scheduled to be completed during FY 1986.

6. FY 1986 President's Budget Request \$138,757

Activity Group: Logistics Support Activities (cont'd)

III. <u>Performance Criteria</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Standardization (In Units)			
A complete and accurate set of military specifications and standards is essential to establishing a complete technical data package for competitive reprocurments. Several of the items listed below have a direct impact on enhancing competition in NAVAIR acquisitions, particularly the DOD Parts Control Program implementation, Qualified Products List (QPL) actions, and projects to prepare new and/or update overage documents.			
Project Completed DD-1585 Actions	674	760	900
QPL Actions	173	195	265
Standardization Document Improvement Proposal DD-1426	173	195	260
Engineering Support Request DD-339	138	150	210
Comment and Review Actions	1000	1130	1400
5 Year Overage Document Review Program	900	1020	1100
International Standardization Document Program (Implementation Data) ASCC Air Std's/Working Parties, 10 11, 12, 14, 15, 17, 20 and 104; Air Std's Reviewed	150	170	220
Military Documents Reviewed re ASCC	150	170	220
NAVAIR Implementation Report Reviewed for NATO Working Parties A1, AE, ASP, AA, GGS; NATO Documents Reviewed	120	135	175
Military Documents Reviewed re NATO	160	180	200
NAVAIR Contracts using DOD Parts Control Program	30	36	40
Computerization of System Spec references to facilitate tailoring	1	3	10
Metric Document Actions	60	70	120

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria (cont'd) FY 1984 FY 1985 FY 1986

Nuclear Weapon Safety and Security - Ashore

Engineering Assurance Tasks for
Nuclear Certification of Out-of-
Production Aircraft:
(Number of Aircraft) - 4 4

Basic Design Engineering Support
of Weapons:
(Number of Weapons) 4 7 11

Nuclear Safety Program (Includes all
supporting logistics elements in
the Stockpile to Target Sequences)
Number of Weapon Systems Supported:

Domestic	6	7	7
Foreign	2	3	3
Safety Studies	3	5	6

ATE Test Programs - In-Service Engineering

This program maintains approximately 5,000 Test Programs Sets of
which 2,300 maintenance actions are required each year.

(In Units of Test Program Sets)

Safety of Flight 83 80 82

Strategic/Tactical Avionics Systems 840 820 840

Multiple/Batch Processing of
 Similar Systems 700 650 720

Mission and Flight Essential Systems 85 80 85

ATE Center (In Units)

Engineering Change Proposals Reviewed 45 50 60

Field Bulletins Reviewed 72 80 80

Support Equipment Requirements
 Data Packages 540 600 600

Automatic Test Equipment (ATE)
 Data Base Transactions 1,350 1,500 1,600

Test Program Sets Verifications Conducted 280 320 350

Operational Logistic Support Plans Prepared 4 5 5

Activity Group: Logistics Support Activities

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Tailored Outfitting Lists Generated	310	360	365
Unsatisfactory Reports Processed	180	200	250
Publications/Work Packages Reviewed	130	140	150
Off-line Maintenance Procedures Work Packages	63	70	70
Central Processing Unit Hours Provided for Automatic Test Program Generation	11,250	12,500	13,900
ATE Software Change Requests Processed	135	150	160
ATE Tapes Replaced Due to Breakage and/or Burn-out	450	500	780
<u>Installation of Aviation GSE (Units)</u>			
Engine Test Stands	15	6	10
Compressor Test Stand	-	4	-
Cryogenic Facilities	3	4	4
Mobile Maintenance Van Complexes	3	4	8
Hybrid Test Sets	1	2	5
Miscellaneous GSE	7	2	11

NOTE: There is no direct correlation between the number of equipment installations and total cost of installation. A number of site-peculiar variables, i.e. soil conditions, building alteration requirements, length of primary utility runs, HVAC requirements, physical security requirements, etc. that determine cost of each installation. It is not unusual for there to be a substantial difference in cost of installing similar systems at different locations.

EMI

Aircraft (No. of A/C)			
Test Preparation	3	3	3
Evaluation	3	3	3
Test Analysis	3	3	3
Fleet Assist			
Fleet Investigation Team Visits (No. of Visits)	8	8	8

Activity Group: Logistics Support Activities

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
EMI Data Base Develop, Maintain, Analyze (% completed)	60	80	85
EMI Test Capability Augment and Upgrade (3 year effort starting in FY 85) (% Completed)	-	35	35
Electromagnetic Environmental Effects Survey of Air Capable Ships for Aircraft and Missiles (No. of Surveys)		-	7
<u>Contingency Reserve Aircraft</u>			
Inputs (A/C)	78	55	38
Withdrawals (A/C)	25	16	27
Maintenance in Storage (A/C)	1,340	1,380	1,420
Represervations (A/C)	62	23	63
Man Hours Required	73,748	51,280	68,170
<u>Interservice Equipment Oil Analysis</u>			
No. of Joint Oil Analysis Labs supported	137	137	137
No. of Carrier Type Labs Supported	20	20	20
No. of Mobile Van Labs Supported	1	2	2
<u>Safety (In Units)</u>			
Field Activities Receiving Training	26	22	54
Aircraft Contractor Safety Audits	2	1	4
Safety Inputs into Contracts	158	150	180
Safety Data Items Reviewed	214	200	220
Field Activity Safety Audits/Inspections	4	2	17
Spec/Standards Inputs	15	12	28
System Safety Investigations	-	3	-
Aircraft Project Safety Audits	4	2	5
Ordnance Safety Board Support	25	10	22
Engineering Change Proposal Analysis Support	-	6	162
Safety Engineers at Field Activities	15	12	20

Activity Group: Logistics Support Activities

III. Performance Criteria (cont'd) FY 1984 FY 1985 FY 1986

Navy Occupational Safety and Health (NAVOSH)

Number of Inspections Conducted	20	25	20
Number of Personnel Trained (000)	10	20	18
Reduction in Disability Frequency (%)	15	3	3

Material Disposal (Units)

Aircraft Reclamation (SARDIP)	14	16	19
Engine Reclamation (RILOP)	117	146	315
Support Equipment Reclamations (SERP)	139	330	394
Routine Reclamation (A/C)	54	77	49
Strike-on-Arrival (A/C)	65	64	62

NALCOMIS

Sites Implemented:

Marine Aircraft Groups (MAGs)	1	6	-
Large Naval Air Stations	2	4	-
Medium Naval Air Stations	-	4	-
Small Naval Air Stations	-	2	-
Total Sites	(3)	(16)	-

In FY 1986 funds will be used to complete the technical redesign of NALCOMIS "NATIVE MODE" software, specifically the Organizational Maintenance Activity level design and development; software maintenance of the NALCOMIS Repairables Management Module (NRMM) and "NATIVE MODE" by the Central Design Activity at the Navy Management Systems Support Office (NAVMASSO); maintenance of the sixteen (16) sites being implemented during FY 1985, and long-lead implementation preparation (e.g. ship alteration preparation and site implementation preparation for FY 1987 sites); hardware management overhead and program management costs.

NALDA

Sub-system/programs operated	6	6	8
Sub-system/programs maintained	6	6	8
Number of activities/users supported and trained.	220	242	294
Telecommunications lines/modems/multiplexes/controller	48	56	62
CPU/time-sharing usage cycles	120	132	160
Reports maintained/modified/updated	400	480	526

Number of 3-M aviation maintenance transactions including maintenance performance, material and parts usage, flight and aircraft readiness statistics	40,800	44,400	48,000
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Activity Group: Logistics Support Activities

III. <u>Performance Criteria (cont'd)</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of 3-M aviation report outputs for the fleet, headquarters commands, shore activities and support units:			
<u>Recurring</u> (monthly/quarterly to approximately 1100 customers)	780	840	900
<u>On-Demand</u> (one-time)	840	900	960
<u>Depot Maintenance Data Collection Systems</u>			
Number of Master Data Records Revised (Coded and Loaded) into Aviation 3-M System	74,569	-	-
<u>Carrier Aircraft Readiness Improvement</u>			
Readiness Improvement Reviews	6	-	-
<u>Other Support Services</u>			
Security Alarm Systems (Number of Systems)	9	11	12
Back-up data/services to present the Navy's defense against contractor claims (Number of actions)	30	30	30
Aviation Weapons Long Range Logistic Plan (\$000)	441	425	428
Support for Simulation Package for Evaluation by Computer Techniques, Readiness, Utilization and Maintenance (SPECTRUM) (\$000)	1,500	-	-
<u>ILS Management of SE (W/Y)</u>			
NAVAIR Field Activities	24	50	62
NAVORD Field Activities	53	51	57
Commercial Effort	30	66	154
<u>Range Support</u>			
Range Instrumentation:			
Range Instrumentation and Integrated Logistic Support (W/Y)	13	11	14
Telemetry Stations Supported	6	6	6
Range Installations*	3	3	6
Tactical Aircraft Combat Training System Integrated Logistic Support (W/Y)	4	5.6	9

Activity Group: Logistics Support Activities (cont,d)

III. Performance Criteria (cont'd) FY 1984 FY 1985 FY 1986

* Each installation varies in cost based on complexity and type of equipment and the installation site.

Pacific Missile Range Facility (PMRF): Range scheduling, safety, surveillance and operations (Civilian/Military W/Y at PMRF)	191	188	189
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Range Services - Operations and Maintenance of Instrumentation Systems, Launch, Recovery, Photography, Data Collection and Reduction, and Base Facilities (Contractor W/Y)	406	413	415
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Range improvements, software development and depot level maintenance of all technical equipment (Civilian W/Y at Pacific Missile Test Center)	40	40	40
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Mobile Sea Range:			
Phase I Fleet Exercises	4	4	4
Target Operations	64	72	72
Instrumentation Vans in Fleet Exercise	1	2	4
Ship Installation of Equipment/Vans	20	25	40

IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	-	2	2
Officer	-	-	-
Enlisted	-	2	2

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Engineering and Support Services
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Engineering and Support Services finances engineering and logistical support for aircraft launch and recovery, visual landing aids, wind measurement and aircraft/ship interface management; installation and modernization of airfield lighting and marking systems, emergency arresting gear and visual approach guidance systems; engineering and technical services in support of the Navy/Marine Corps mission; design and maintenance engineering for all in-service ground support equipment; and design engineering effort associated with generating remedial design changes essential to operational readiness of in-service fleet aircraft and related equipment.

This activity group provides for reliability and maintainability implementation during the conceptual, validation, development, and production phases of major programs; service life extension of specific aircraft models or series; the preparation, update, reproduction and distribution of technical weapon systems manuals; and the investigation of deficiencies involving aviation life support equipment.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Expeditionary Airfields	\$4,815	\$7,786	\$6,595	\$6,317	\$5,915	\$-402
Shorebased Landing Aids	2,092	3,532	3,449	3,323	3,201	-122
Aviation Mobile Facilities	3,964	9,520	4,319	4,144	5,424	+1,280
Maintenance Mgmt Plans & Engineering	5,493	-0-	-0-	-0-	-0-	-0-
Analytical Maintenance Program	11,973	-0-	-0-	-0-	-0-	-0-

Activity Group: Engineering and Support Services (cont'd)

A. Sub-Activity Breakout (cont'd)

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Aircraft Structural Life Surveillance	6,197	5,379	5,185	4,993	7,912	+2,919
Ground Support Equip Engineering Support	10,493	11,591	10,910	10,506	9,659	-847
Survival Equipment	2,820	2,326	2,246	3,002	4,168	+1,166
Technical Publications	12,601	12,324	11,915	14,368	19,956	+5,588
Catapults and Arresting Gear	20,398	21,523	20,954	20,188	19,472	-716
Reliability and Maintainability	1,854	1,242	1,207	1,162	1,551	+389
Engineering Services	<u>19,071</u>	<u>20,973</u>	<u>15,633</u>	<u>19,302</u>	<u>22,144</u>	<u>+2,842</u>
Total Engineering & Support Services	\$101,771	\$96,196	\$82,413	\$87,305	\$ 99,402	+\$12,097

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate						\$87,305
2. Pricing Adjustments						-390
A. Industrial Fund Rates					(-1,891)	
B. Other Pricing Adjustments					(1,501)	
3. Functional Program Transfers						1,232
A. Transfers In				(1,232)		
1) Inter-Appropriation				1,232		
a) Engineering Services:						
Transfer of follow on test and evaluation for the HARM weapon system from the Research, Development, Test and Evaluation, Navy appropriation. (900)						
b) Engineering Services:						
Amount transferred from Other Procurement, Navy pursuant to the proposed DOD initiative for elimination of \$3 thousand investment						

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

threshold and adoption of central management criteria as a governing factor. (332)

4. Program Increases		14,896
A. Other Program Growth in FY 1986	(14,896)	
1) Technical Publications:	5,086	
Increase provides for update and revision to operational, maintenance and repair manuals pertaining to in-service aircraft, engines, and components; maintenance of the Engineering Data Maintenance Information Control System and drawing repository; and update of technical manuals that pertain to ordnance, missiles, avionics, and ground support equipment. This increase reduces the backlog of technical manuals requiring updating.		
2) Mobile Facilities:	1,645	
Increase supports rapid deployment capabilities of the the Marine Corp by configuring 38 mobile facilities in the backlog.		
3) Survival Equipment:	1,256	
Increase to investigate and resolve major fleet identified aircrew equipment design deficiencies through engineering change proposal (ECP) preparation and implementation. New ECPs include the LAMPS MARK III helmet, AH-1T Gunsight helmet, installation of reflective tape on helmets, CWU Blue Flight Suit, SRU-21/P Survival Vest, Search and Rescue Crew Equipment, MK-124 Flare, Oxygen Mask, and Anti-Exposure Modifications.		
4) Aircraft Structural Life Surveillance:	2,857	
Increase provides for Service Life Assessment program/Service Life Extension program investigations for the F-14, F-18, C-2, P-3 A&B, UH-1N, SH-60, AND UC-12B aircraft.		
5) Reliability and Maintainability:	352	
a) Provides for improved prediction and measurement techniques for built-in-test, a process which evaluates the storage reliability requirement for electronic equipment early in the production process. (152)		

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases

b) Provides for the Product Deficiency Reporting Evaluation Program, a deficiency reporting network which identifies the Navy's defective material problems. (200)		
6) Engineering Services: Provides for follow-on test and evaluation for improved 20mm ammunition, Low Level Laser Guided Bomb Kit, BSU-85 Air Inflatable Retarder, AGM-65E MAVERICK, and the AIM-54C PHOENIX.	1,450	
7) Catapults and Arresting Gear: Supports catapult trough cover program.	2,250	
5. Program Decreases:		-3,641
A. Other Program Decreases in FY 1986	(-3,641)	
1) Expeditionary Airfields: Reduction in AM-2 matting resurfacing.	-451	
2) Shorebased Landing Aids: Reduction in arresting gear installations.	-265	
3) Ground Support Equipment: Reduction of in-service engineering on support equipment.	-510	
4) Catapults and Arresting Gear:	-2,415	
a) Reduction for shock analysis of equipment installed in the CUN-71. (-800)		
b) Reduction for the introduction of shock hardened system, and new display and distribution systems for wind measurement systems. (-715)		
c) Reduction for the Central Maintenance Program which corrects improperly conducted maintenance on launch and recovery equipment. (-900)		
6. FY 1986 President's Budget Request		\$99,402

Activity Group: Engineering and Support Services (cont'd)

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Expeditionary Air Fields</u>			
In-Service Engineering (WYs)	20	16	15
Field Technical Services (WYs)	11	12	12
Expeditionary Airfield Equipment Maintenance/ Resurface AM-2 matting (\$000's)	2,029	3,491	3,290
<u>Shorebased Landing Aids</u>			
Arresting Gear Installations	8	8	6
Lighting Systems Installations	13	12	14
Lighting Systems Modernizations	4	13	13
<u>Aviation Mobile Facilities</u>			
Number of Mobile Facilities Configured	112	126	164
<u>Maintenance Management Plans and Engineering Number of:</u>			
Source, Maintainability, and Recoverability Code Changes (\$000)	2,900	-	-
Maintenance Plans Prepared/Revised	34	-	-
<u>Operational Logistic Support</u>			
Plan/Integrated Logistic Support Program/Planning Revisions for Avionics, Engines, Life Support System	3	-	-
<u>Analyses in Support of Engine Monitoring System (EMS), Engine Test Cell Correlation, Engine Corrosion Control</u>			
	23	-	-
<u>Engineering Investigations of Airframe and Engine Problems on Out-of-Production System</u>			
	16	-	-
<u>Analyses in Support of Level of Repair (LOR), Quantitative Techniques for Determining Maintainability and Provisioning Parameters, Scheduled Removal Component (SRC) Tracking Improvement, Engineering Change Proposal (ECP) Cost Model.</u>			
	8	-	-

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria and Evaluation FY 1984 FY 1985 FY 1986
Analytical Maintenance Program:

The Reliability Centered Maintenance (RCM)/Analytical Maintenance Program (AMP) concept and its application has demonstrated the feasibility of identifying minimum valid maintenance requirements and their frequencies for all levels of maintenance. A significant impact has occurred in the substantiated reduction of depot visits, expressed in terms of Operating Service Period (OSP). This interval between depot visits has increased for most aircraft on which RCM analysis has been performed. This results in greater aircraft availability to the fleet. Only valid depot requirements are planned to be accomplished, which eliminates duplication of many organizational and intermediate tasks previously performed at the depot.

Aircraft Structural Life Surveillance Program

<u>Structural Appraisal of Fatigue Effects Program (SAFE)</u>	<u>Aircraft in Program</u>		
Maintenance of Basic Data File (Flight Loads Data)	5,000	5,000	5,000
Data Analysis and Reporting In-House Program/Fleet Support	3,900	4,000	4,500
SAFE Program Expansion (New Aircraft into SAFE)	1 model A-4E/F	2 models F-14 F-18	2 models A-3B KA-3B

Service Life Assessment Program/Service Life Extension Program (SLAP/SLEP)

<u>SLAP and/or SLEP Requirement Investigations, SLEP Specification Preparation, Structural Tests</u>	<u>A/C Models in Program</u>		
	7	5	12

Performance criteria for the SLAP/SLEP Program are measured not only by the number of aircraft models in the program, but by the type and magnitude of the effort for each of the models. Programs requiring structural tests, for example, require effort level and program costs appreciably greater than those for analytical work.

Survival Equipment Engineering

Number of recurring support functions provided:	75	75	75
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Recurring functions provided include review and approval of engineering change proposals (ECPs), analysis of reported failures or defects, quality control, and technical review pertaining to aviation life support equipment.

Activity Group: Engineering and Support Services (cont'd)

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1985</u>
Number of ECPs implemented.	12	14	19
The cost per ECP varies with the complexity of the item to be modified.			
<u>Technical Publication</u>			
Number of Technical Manual pages to be updated for in-service out-of-production Weapon Systems	90,007	97,741	129,584
<u>Catapults and Arresting Gear</u>			
In-Service Engineering/ Fleet Problem Response (WYs)	97	93	89
Fleet Technical Services (WYs)	39	36.5	33.5
Test Site Maintenance & Repair (\$000)	1,000	500	0
4R Cog Depot Repair (\$000)	1,742	1,810	1,888
Aircraft Ship Compatibility (WYs)	20	21	20
ACLS Certification (Ships/Air Stations) (\$000)	2,190	1,728	1,804
Fire Fighting and Rescue (WYs)	.5	2	2
<u>Ground Support Equipment Engineering Support</u>			
Number of Program Planning Documents to be Revised/Issued	1,062	1,106	1,046
Number of Fleet Revealed Deficiencies to be Investigated:	7,864	7,861	6,634
Number of Design Changes to be issued:	538	561	531
Number of Training Packages Revised/ Issued:	23	25	24
Number of Maintenance Plans to be Revised/Issued:	1,505	1,585	1,500
Number of Technical Plans and Directives to be Issued:	79	83	78
Number of Support Equipment Requirement Data Packages to be Processed:	4,752	4,951	4,687

Activity Group: Engineering and Support Services (cont'd)

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of Procurement Data Packages to be Revised/Produced:	5,148	5,348	5,081
Number of Pre-award Surveys to be Conducted:	792	830	781
<u>Engineering Services</u>			
Major categories of Basic Design Engineering (BDE) functions performed:			
Review and Resolve Design Deficiencies and Fleet Problems Entered in the AWCAP	1,600	1,750	1,800
Perform Engineering Actions Affecting Hardware Design; e.g., Prepare/Process ECPs, DCNs, Waivers/Deviations, Beneficial Suggestions, Specification Revisions, QDRs, etc.	2,200	2,500	2,550
Maintain Up-to-Date Engineering Data Packages of Drawings, Specifications, Parts Lists, etc.	86,500	87,500	87,500
Generate Updated Source Data for Technical Manuals	252	275	275
Generate Updated Source Data for Aircraft Tactical Manuals (Naval Warfare Publications 55 Series)	12	15	15
Respond to Ballistics Data Requests from Fleet and NAVAIR Activities	45	50	55
Perform Safety Studies/Investigations	102	110	110
Support Follow-on Test and Evaluation OT-III by OPTEVFOR	9	2	6
<u>Reliability & Maintainability</u>			
Work-years of Engineering Support	18.9	9.7	15

IV. Personnel Summary. Not Applicable

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Contractor Technical and Maintenance Support
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

This activity group provides Contractor Engineering and Technical Maintenance Support Services (CETS) to Fleet Air Type Commanders' aviation maintenance personnel at the organizational and intermediate levels of maintenance for the purpose of elevating the technical skills of enlisted maintenance personnel to a point that they are capable of doing the maintenance on weapon systems and equipment required for operational readiness. The CETS services are provided by Contractor Field Services (CFS) representatives furnished by DOD contractors. These CFS representatives provide instruction, information and training in the installation, operation and maintenance of weapon systems, equipment and components and may use hands-on training incidental to other forms of training to demonstrate functions associated with a particular task during the instructional process.

The C-2 Contract Support program supports the C-2 aircraft's primary role of providing rapid response to the personnel/critical supply requirements of carrier task groups. The CNO standard of Mission Capability (MC) must be attained, sustained, and preferably exceeded to fulfill the C-2A role as a primary link in the Fleet logistics pipeline. Cumulative effects of aircraft age, lack of manpower and available skills, and control of limited supply assets have contributed to C-2A MC problems. Contractor support enables attainment of increased MC, approaching the CNO standard.

The F/A-18 Contractor Maintenance Support (CMS) Program provides for contractor personnel to support the F/A-18 operations at the NAS Lemoore, NAS Pt. Mugu, China Lake, MCAS El Toro, NAS Cecil Field, MCAS Beaufort as well as supporting deployments to NAS Fallon, MCAS Yuma, Edwards AFB and Nellis AFB. Personnel provide inventory and material control, supply support, technical data support and site management. The management of the repair program in support of the F/A-18 flying program provides for material movement, accountability management, parts tracking, purchasing and other allied functions vitally required to assure intermediate/depot, contractor and subcontractor repair of F/A-18 components, sub-assemblies and systems. All of the above efforts are accomplished prior to Material Support Date (MSD). Post MSD contractor services support the operations of a Wholesale Support Site (WSS) that concentrate all F/A-18 unique wholesale material at a dedicated site at NAS Lemoore. Contractor services are required at ASO to perform distribution control functions of WSS material. The WSS program maximizes material availability by means of a real time data base, intensive expediting, and positioning of wholesale assets close to both users and repair sources. A transfer of funds from APN to O&M,N in FY 1986 has been accomplished to properly provide maintenance engineering support for peculiar support equipment and interim support efforts.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
CETS	\$75,117	\$79,055	\$79,055	\$78,216	\$84,777	\$+6,561
CMS	18,099	12,459	12,189	27,590	43,828	+16,238
C-2 Contract Support	<u>2,589</u>	<u>2,662</u>	<u>2,635</u>	<u>2,635</u>	<u>2,366</u>	<u>-269</u>
Total O&M,N	\$95,805	\$94,176	\$93,879	\$108,441	\$130,971	\$22,530

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate						108,441
2. Pricing Adjustments						4,662
A. Other Pricing Adjustments					(4,662)	
3. Functional Program Transfers						29,700
A. Transfers In					(29,700)	
1) Inter-Appropriation					29,700	

Transfer from APN to O&M,N to provide integrated logistics management support for maintenance/field activities in support of initial operations. Support consists of Logistic Support Representatives (LSR) from the prime contractor for Bonded Store Room facilities and manpower for initial spares management. This includes contractor maintenance engineering support for peculiar support equipment for the following weapon system: F/A-18; A-6E; F-14A; AV8B; EA-6B; P-3C; E-2C; S-3; H-2; H-1; SH-60B; CH-53. It also includes Enhanced Comprehensive Asset Management System (ECAMS). An interim on-line interaction computerized GSE monitoring system supporting F/A-18 A/C and F404 engines Engine Life Analysis (ELA). Involves monitoring F404 engine performance. Contractor Integrated Logistic Support (CILS). Provides on-site personnel for operation and maintenance support of the Radar Test Station.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

4. Program Increases 3,615

A. Other Program Growth in FY 1986 (3,615)

1) CETS Increase of 33.3 work years 3,198

is essential for support of the continuing introduction of the F/A-18 aircraft which is currently undergoing several airframe and avionics equipment modifications attendant to Fleet introduction. Additionally, the increase is vital to the H-60 helicopter support during its introduction to the Atlantic Fleet, and the activation of two H-60 support sites at NAS Sigonella and NAS Cubi Pt.

Also, as complex and sophisticated new systems and modifications of mature systems are being introduced, additional work years are required to support the increase use of more complex Common Automatic Test Equipment (CATE), which is emerging as a result of these introductions.

2) CMS funds are needed to support 417

newly identified requirements of the Airborne Self Protection Jammer (ASPJ) electronic countermeasures system. The ASPJ (AN/ALQ-165) provides combat survivability against modern diversified radar controlled weapon systems.

5. Program Decreases -15,447

A. Other Program Decreases in FY 1986 (-15,447)

1) CMS/WSS is scheduled to begin -5,751

phase out. The need for dedicated supply support at the Wholesale Support Site (WSS) at NAS Lemoore and NAS Cecil Field decreases as organic support is established.

2) CMS Reduction in support from the APN transferred amount for ECAMS (-3,998), ELA (-1,815) and CILS (-3,501). -9,314

Activity Group: Contractor Technical and Maintenance Support (cont'd)

C. Reconciliation of Increases and Decreases (cont'd).

3) Reduction in C-2 cost is anticipated as a result of competitive versus sole source contracting efforts -382

6. FY 1986 Congressional Budget Request 130,971

III. Performance Criteria and Evaluation.

Contractor Engineering and Technical Services (CETS)

<u>Aircraft Mission</u>	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>MY</u>	<u>\$000</u>	<u>MY</u>	<u>\$000</u>	<u>MY</u>	<u>\$000</u>
Attack	157.6	14,199	155.0	14,564	156.1	15,287
Fighter	192.5	16,269	193.1	17,131	200.6	18,551
Patrol	42.3	3,802	41.5	3,719	43.7	4,082
Anti-Sub	134.6	11,992	134.1	13,001	138.8	14,032
Rotary Wing	70.7	5,821	71.0	5,815	74.4	6,382
Electronic Warfare	141.5	11,111	141.0	12,879	146.0	13,892
GSE/CATE	88.9	8,167	87.2	8,581	92.0	9,395
Other	29.2	3,756	28.9	2,526	33.6	3,156
TOTAL	857.3	75,117	851.8	78,216	885.2	84,777

Contractor Maintenance Support (CMS):

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
No. of Bases Supported	6	10	13
No. of Squadrons Supported	12	20	53
No. of Aircraft Supported	151	185	484
No. of Flight Hours	41,276	63,751	149,460
No. of PGSE Maintenance manhours			355,888

C-2 Support Services:

Contractor Maintenance/
Logistic Support at "O"
and "I" Levels (WORKYEARS)

22 21 21

IV. Personnel Summary (End Strength).

Not Applicable

Department of the Navy
Operation and Maintenance Navy
Exhibit OP-5

Activity Group: Maintenance of Real Property
 Budget Activity: Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Maintenance of Real Property funds provide for facilities maintenance to NAVAIR field activities under each respective host-tenant agreement. The Naval Air Engineering Center (NAEC) at Lakehurst, New Jersey is the only NAVAIR activity which does not operate under a tenant status; NAEC is a host activity for the entire Lakehurst Naval Base.

Minor Construction funds finance the following two areas:

- 1) Minor Construction (Equipment Installation) - The costs for work directly related to the installation of equipment, i.e., secondary utilities, special foundations and pads, equipment air conditioning, etc., that are required for the equipment to operate, are defined as Equipment Installation costs.
- 2) The costs for all other work that is not directly related to the installation of the equipment, but is required for the equipment to function in its intended operational environment, i.e., primary utilities, area lighting, personnel, air conditioning, security fencing, etc., are defined as construction costs and limited to \$200K per project. These funds are disbursed to O&M,N activities (NAVAVNLOGCEN Patuxent River, NAVAIRTECHSERFAC Philadelphia, NAVAIRENGCEN Lakehurst, and PACMISRANFAC Barking Sands).

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Maintenance of Real Property	\$2,432	\$2,104	\$1,932	\$3,899	\$3,295	\$-604
Minor Construction	<u>2,938</u>	<u>2,141</u>	<u>2,018</u>	<u>2,018</u>	<u>2,722</u>	<u>+704</u>
Total						
Maintenance of Real Property	\$5,370	\$4,245	\$3,950	\$5,917	\$6,017	+100

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases

1.	FY 1985 Current Estimate			\$5,917
2.	Pricing Adjustments			69
	A. Stock Fund		(-29)	
	1) Non-fuel			
	B. Industrial Fund Rates		(-53)	
	C. Other Pricing Adjustments		(151)	
3.	Program Increases			623
	A. Other Program Growth in FY 1986		(623)	
	1) Minor Construction:		623	
	Increase provides for minor construction for the following projects: three (3) mobile maintenance van complexes, three (3) engine test stands, and			
4.	Program Decreases			-592
	A. Other Program Decreases in FY 1986		(-592)	
	1) Maintenance and Repair Real Property:		-592	
	Decreased facilities maintenance support at NAVAIR field activities (NAVWESA, NALC, NAEC, NAESU, NATSF and Solomon's Island).			
5.	FY 1986 President's Budget Request			\$6,017

III. Performance Criteria and Evaluation

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Maintenance of Real Property</u>			
Backlog, Maintenance/Repair (\$000)	9,744	10,236	10,729
Total Buildings (KSF)	2,171	2,171	2,171

IV. Personnel Summary

Not applicable

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group Base Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Air Systems Command)

I. Description of Operations Financed.

Base Operations funds provide for utility operations, other engineering support, and morale, welfare and recreation support at Naval Air Systems Command (NAVAIR) field activities under each respective host-tenant agreement. The Naval Air Engineering Center (NAEC) is the only NAVAIR activity which does not operate under a tenant status. NAEC is a host activity for the entire Lakehurst, New Jersey Naval Base.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout.

	FY 1984	FY 1985			FY 1986 Budget Request	Change
		Budget Request	Appro- priation	Current Estimate		
Morale, Welfare and Recreation Activities	\$0	\$108	\$108	108	\$124	+16
Utility Operations	2,707	2,687	2,687	3,007	3,130	+123
Other Engineering Support	1,936	1,597	1,474	1,658	1,629	-29
Base Communications	<u>2,587</u>	<u>3,344</u>	<u>3,042</u>	<u>3,723</u>	<u>3,616</u>	<u>-107</u>
Total, Base Operations	\$7,230	\$7,736	\$7,311	\$8,496	8,499	+3

C. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate	\$8,496
2. Pricing Adjustments	70
A. Industrial Fund Rates	(145)
B. Other Pricing Adjustments	(215)
3. Program Increases	187
A. Other Program Growth in FY 1984	(21)
1) Morale Welfare and Recreation Activities: Increase to fund cost increases in support of military child care facilities.	
2) Utility Operations: To finance increased costs for operating sewage plants and increased heat and water usage at at field activities.	(166)
5. Program Decreases	-254

Activity Group: Base Operations

A. Other Program Decreases in FY 1986

1. Base Communications:
 Decreased level of tele-
 communications usage for head-
 quarters and field activities. (-254)

6. FY 1986 President's Budget Request 8,499

III. Performance Criteria and Evaluation FY 1984 FY 1985 FY 1986

Base Operations (\$000)

Operations of utilities	2,707	3,007	3,130
Total energy consumed (MBTU's)	27,422	27,206	27,590
Total non-energy consumed (K Gals)	29,729	22,725	22,988

Base Communications (\$000)

Number of Instruments	2,587	3,723	3,616
Number of Mainlines	5,159	5,225	5,268
Daily Average Message Traffic	2,364	2,434	2,459
	2,176	2,203	2,216

Personnel Operations (\$000)

Morale, Welfare & Rec (\$000)	0	108	124
	0	108	124

Ownership Operations (\$000)

Other Engineering Sup (\$000)	1,936	1,658	1,629
	1,936	1,658	1,629

IV. Personnel Summary

Not applicable

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Ship Launched Weapons Rework & Maintenance
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed

This activity group provides support for Navy weapons systems ashore and afloat. Various types of support include depot maintenance, repair, and refurbishment of surface-to-surface missiles and missile launchers, guns, and small and large caliber conventional ammunition. The activity group also funds maintenance, repair, and calibration of mines and various types of nuclear weapons. Requirements for these programs may vary each year due to variables such as ship overhaul schedule, age of equipment, and newer, more complex equipment entering the Fleet.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Missile Systems Rework	13,329	11,877	11,799	12,541	19,108	6,567
Medium Range Msl Weapons Sys	1,428	4,532	3,893	3,795	4,801	1,006
Long Range Msl weapons Sys	3,928	5,871	5,483	5,386	5,715	329
Gun Wpn Sys Overhaul & Spt	34,430	33,515	33,181	29,762	34,103	4,341
Vertical Launch System	1,331	3,435	3,211	2,365	3,975	1,610
Mine Maintenance	2,354	2,615	2,594	4,104	4,196	92
Ammunition	9,121	8,971	8,917	8,527	3,322	-5,205
Nuclear Weapons Support	1,853	1,842	1,833	1,874	2,272	398
NATO Seasparrow	0	0	0	0	4,922	4,922
TOTAL, SHIP LAUNCH WPN RWK/MAINT	67,774	72,658	70,911	68,354	82,414	14,060

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$68,354
2. Pricing Adjustments		1,663
A. Stock Fund	(-43)	
1) Non-Fuel	-43	
B. Industrial Fund Rates	(1,439)	
C. Other Pricing Adjustments	(267)	
3. Program Increases		25,613
A. Other Program Growth in FY 1986	(25,613)	
1) <u>Missile Systems Rework</u>	7,272	
Rework of an additional 508 components for SM-1 and SM-2 missiles. Particular dollar and unit increases are as follows:		
Electronics (SM-2 only)	\$1,601 (123)	
Ordnance	224 (142)	
Rocket Motor Regrain	5,447 (243)	
	<u>\$7,272</u>	
Requirements increase in FY 1986 based on an increase in population. This line supports 17 more ships in FY 1986 than in FY 1984. The additional funds in FY 1986 will prevent an increase in the FY 1985 projected backlog.		
2) <u>Medium Range Missile Systems</u>	884	
Rework of an additional System Tracking and Illuminating Radar (STIR) antenna and a Combined Antenna System (CAS) Antenna, part of the FFG-7 Class MK 92 fire control system which requires overhaul every four years.		
3) <u>Long Range Missile Systems</u>	2,730	
Increase supports rework of one AN/SPG-55B radar battery (2,250) not previously required and increase in number of long lead mandatory replacement parts for future refurbishments from two to four sets (480).		
4) <u>Gun Weapon System Overhaul</u>	7,032	
Increase of two MK 86 overhauls (1,270). In FY 1986 10 complete CIWS systems will be overhauled for the first time (5,112). Increase of workload toward establishing a CIWS depot overhaul facility at NOS Louisville (650).		

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

5) <u>Vertical Launch System</u>	2,433
Increase of 43 VLS canisters tested or repaired.	
6) <u>Nuclear Weapons Support</u>	340
Increase will support additional limited life component exchanges and related work to be performed on ASW, Tomahawk and ground-delivered nuclear weapons. Ready for issue status will increase from 85% to 96%.	
7) <u>NATO SEASPARROW</u>	4,922
This new program will refurbish sub-systems of this point defense system, which is installed on CV/CVN, DDG, and AOE ship classes. Some of these equipments have been operational for over 10 years without overhaul.	
4. Program Decreases	-13,216
A. Other Program Decreases	(-13,216)
1) <u>Missile Systems Rework</u>	-1,006
Rework of 103 fewer UHF Telemetry, SM-1 electronic, and Terrier components.	
2) <u>Long Range Missile Systems</u>	-2,494
Decreases include MK 10 Loader Power Drive refurbishments (-1,294) and reduction of other refurbishments/repair (-1,200).	
3) <u>Gun Weapon System Overhaul</u>	-3,393
Two fewer 5"/54 caliber guns are planned for replacement (-2,358), Decrease in other gun related equipment overhauls, including 52 fewer radar antenna scanners and 21 fewer loader assembly improvements for 3" 50 caliber guns (-1,035).	
4) <u>Vertical Launch System</u>	-907
In FY 1985, establishment of depot facility for VLS will be completed.	
5) <u>Mine Maintenance</u>	-6
6) <u>Ammunition</u>	-5,410
Reduced funding will decrease asset readiness to 68% for selected service rounds and 36% for selected training rounds. In addition, maintenance capability in coastal shore activities will be reduced.	
5. FY 1986 President's Budget Request	\$82,414

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation

A. SURFACE WARFARE SYSTEMS

1. Missile Systems Rework

The program provides factory level renovation and repair of missile airframe, electronics, ordnance and rocket motor propulsion. This repair is required to correct in-service wear, damage, functional failure, and deteriorated sub-assemblies to maintain asset readiness at the CNO Objective (86 percent). Electronics are contractor maintained items. Ordnance, rocket motors, and handling equipment are maintained at Naval Ordnance facilities.

	FY 1984		FY 1985		FY 1986	
	\$	Units*	\$	Units*	\$	Units*
Total Funding	13,329	1,785	12,541	1,801	19,108	2,206
TERRIER	959	40	645	26	150	10
TARTAR	0	0	0	0	0	0
STD MSL-1	11,112	1,625	8,000	1,389**	12,956	1,658**
STD MSL-2	524	90	2,728	341**	4,834	494**
UHF Telemetry	734	30	1,168	45	1,168	44

* Units are the number of major components receiving depot maintenance.

Number of ships supported are as follows:

	FY 1984	FY 1985	FY 1986
Extended Range Missile Combatants (CG,CGN,DDG)	31	31	31
Medium Range Missile Combatants (CG,CGN,DDG,FFG)	78	85	95
Mobile Logistics Force (AOE,AE,AOR,AO)	27	27	27

** Unit costs increase due to the mix of components reworked each year. Rocket motor regrain is required to ensure proper burn time and maintain the accuracy of the missiles. The breakout of these particular costs is as follows:

Missile	Components	FY 1985		FY 1986	
		\$	Units	\$	Units
STD MSL-1	Electronics	7,506	831	7,296	745
	Ordnance	494	558	654	694
	Rocket Motor	0	-	5,006	219
	Regrain				
		<u>8,000</u>	<u>1,389</u>	<u>12,956</u>	<u>1,658</u>
STD MSL-2	Electronics	1,296	108	2,897	231
	Ordnance	1,432	233	1,496	239
	Rocket Motor	0	--	441	24
	Regrain				
		<u>2,728</u>	<u>341</u>	<u>4,834</u>	<u>494</u>

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Medium Range Missile Weapons System

Provides direct repair and rework of TARTAR weapon systems and components. Guided Missile Launching Systems (GMLS) are reworked in all years. FY 1985 marks the start of a major program to rework MK 92 fire control antennas (Combined Antenna System (CAS) and System Tracking and Illuminating Radar (STIR)) for FFG 7 class ships. The low-mix maintenance concept (less on-board maintenance) used on this class ship necessitates rework of these antennas every four years.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	1,428	1	3,795	8	4,801	10
GMLS MK 11	1,428	1	2,600	2	2,717	2
SM-2 Directors & Radars (including AN/SPG-51D & MK 73)			375	4	392	4
MK 92 Antennas						
STIR			370	1	764	2
CAS			450	1	928	2

3. Long Range Missile Weapons Systems

Provides direct repair and refurbishment of TERRIER weapon systems, including MK 10 equipment, MK 5 launchers, weapon direction system equipment, and Guided Missile Launcher System (GMLS) MK 10 Loader Power Drive. The New Threat Upgrade (to counter the Backfire bomber threat) requires a new radar and director turn-around program.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	3,928		5,386		5,715	
1. MK 5 GMLS	2,100	3	577	1	0	
2. AN/SPG-55B Radars (# Batteries)	-	-		-	2,250	1
Directors (# of Batteries)	845	1	926	1	974	1
Long Lead Parts (NSF)	145	1.5	261	2	752	4
3. MK 10 loader Power Drive	0		2,475	11	1,176	5
4. Other (Component mix changes each year)	838	40	1,147	55	563	55

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

4. Gun Weapons System Overhaul & Support

The program supports gun weapon system replacement overhaul and other gun improvement programs, including repair of modules and entire equipments of the Close-in Weapon System (CIWS), antenna scanner overhaul, and development of in-house capability to overhaul both CIWS modules and MK86 GFCS modules of varying complexity. The establishment of in-house depot capability is currently scheduled for completion in FY 1987.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total	34,430		29,762		34,103	
1. Gun Wpn Sys. Replacement	16,447	34	18,507	32	16,593	30
2. MK 86 Overhaul & Upgrade	3,726	6	3,670	5	5,029	7
3. CIWS Overhaul	8,132	4,334	500	3*	5,634	10
4. CIWS Depot Establishment	4,079	55WY	2,771	35.2WY	3,487	43.3WY
5. Other Depot** Maintenance	2,046	210	4,314	422	3,360	349

* In FY 1985, limited repair will be done on each of 3 systems. In FY 1986 10 systems will be fully overhauled.

** Units include major equipments and also the number of technical assistance actions.

5. Vertical Launch System

This program provides for planning, preparation, implementation, and support of depot level maintenance facilities for the Vertical Launching System in DD-963 class ships and prospectively in DDG-51 and CG-47 class ships. This work is also performed in support of VLS trainers. All elements of support are in place in FY 85.

Two distinct types of VLS related depots have been established. One type, the interim Depot Level Maintenance Facility (DLMF) overhauls failed repair parts and higher assemblies. The second type overhauls and refurbishes fired missile canisters.

	FY 1984	FY 1985	FY 1986
Canisters repaired or tested	0	7	50
Total Funding	\$1,331	\$2,365	\$3,975
DMLF repair, Canister repair, inspect & issue	0	404	2,672
Tech documentation & repair plans	250	1,054	1,303
Depot establishment	1,081	907	0

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. UNDERSEA WARFARE SYSTEMS

1. Mine Depot Maintenance

The program supports conversion, overhaul, modification, repair, and inspection of mine components and test equipment with the goal of meeting the CNO established Asset Readiness Objective (ARO) of 92 percent.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Asset Readiness (%)		63		76		75
 Total Funding	 2,354		 4,104		 4,196	
 Component Screening & Overhaul	 \$1,717	36,617	 \$3,447	62,672	 \$3,525	61,842
Test Equipment Repairs	637	392	657	396	671	388

* Units are the number of components and equipments.

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. AMMUNITION SYSTEMS

1. Ammunition

Provides all depot maintenance actions to retain ammunition in a serviceable condition and to restore unserviceable ammunition. Classes maintained include: major and minor calibers of gun ammunition (including 16" shells), small arms and landing force ammunition, pyrotechnics and chemical ammunition, demolition explosives and Marine Corps ammunition in the custody of the Navy.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>
Funding	9,121		8,527		3,322	
Units Renovated*		498,415		2,541,883		459,290

*Unit cost varies from year to year due to the mix of ammunition repaired. In FY 1985 a substantial amount of small caliber ammunition is programmed for renovation.

2. Nuclear Weapons Support

Provides assembly, rework, modernization, repair, ~~maintenance~~³, calibration, limited life component exchange and related operations for Anti-Submarine Warfare (ASW), TOMAHAWK and ground-delivered nuclear weapons.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>
Total Funding	1,853	405	1,874	409	2,272	485
Ready for Issue status (objective is 100%)		100		85		96

Units = Number of limited life component exchanges.

Activity Group: Ship Launched Weapons Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. NATO SEASPARROW Depot Maintenance

Provides the funding necessary to depot overhaul select sub-systems of the NATO SEASPARROW Surface Missile System (NSSMS) and Target Acquisition System. This refurbishment program is limited to those equipments which are susceptible to excessive wear and severe degradation due to harsh environments. The NSSMS Director, NSSMS Liquid Cooler, NSSMS low light level TV, and TAS Antennas require overhaul every 5 years: the NSSMS Launcher is on a 10 - year cycle. Operation of this program emphasizes the equipments' inspection, repair, refurbishment and testing.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	0		0		\$4,922	
1. NSSMS GMLS Refurbishment	0		0		668/2	
2. NSSMS Director	0		0		1,300/10	
3. NSSMS Liquid Cooler/LLTV/ TAS Antenna/ Lch Guide	0		0		1,332/18	
4. Tech Repair Standards	0		0		1,622	

IV. Personnel Summary N/A

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Other Ship Systems Maintenance
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed.

Other Ship System Maintenance activity group funds the depot overhaul and maintenance of: shipboard electronic and HM&E equipment; calibration, salvage and underwater ship repair equipment; small arms; and shipboard computer programs. Requirements for these programs are not constant each year but vary according to factors such as ship overhaul schedules, age of equipment, and new, more complex equipment entering the Fleet.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Search Radar Maintenance	14,999	23,343	21,949	19,813	26,364	6,551
Coast Guard Support	6,827	9,628	9,551	8,524	8,578	54
Small Arms Repair	1,807	1,862	1,845	1,803	1,909	106
ZF Cog Electronics	20,079	29,577	28,774	24,711	23,137	-1,574
TMDE/METCAL	12,668	10,702	10,641	9,692	12,538	2,846
ZF Cog Electronics ASW	21,720	31,170	28,968	30,543	35,496	4,953
Surface Mine Countermeasures	1,379	2,729	2,638	1,722	1,732	10
INSWAR	2,170	1,677	1,596	1,596	4,152	2,556
Pollutn Abate Eqp Maint	305	598	552	549	579	30
Salvage Equipment Maint	4,702	8,216	7,548	7,437	8,387	950
Underwater Ship Husbandry	398	769	720	664	655	-9
ZS Cog Material H,M&E	30,247	39,192	38,842	36,531	41,866	5,335
Boat Rehab	994	986	976	972	1,021	49
Inactive Ship Maint	0	601	402	722	75,422	74,700
ARGIS Systems Maint	3,514	11,170	11,074	9,774	11,093	1,319
Ship Systems Software Maint	36,311	53,018	50,732	48,186	54,393	6,207
TOTAL, OTHER SHIP SYSTEMS MAINT	158,120	225,238	216,808	203,239	307,322	104,083

Activity Group: Other Ship Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$203,239
2. Pricing Adjustments		1,579
A. Civilian Personnel Compensation (Direct)	(-560)	
1) U.S. Direct Hire Pay Adjustment	-580	
2) Other Direct Pricing Adjustments	20	
B. Stock Fund	(-755)	
1) Non-Fuel	-755	
C. Industrial Fund Rates	(-2,118)	
D. Other Pricing Adjustments	(5,012)	
3. Program Increases		110,066
A. Other Program Growth in FY 1986	(110,066)	
1) <u>Search Radar</u>	6,664	
Increased funding will overhaul an additional 131 components on an additional 93 ships, which is required to reduce the FY 86 backlog. The additional units are needed as replacement units in operational ships and to provide pipeline units for emergency situations.		
2) <u>Coast Guard</u>	1,260	
Rework of an additional 3 MK 22 Mod 0 and one 5"/38 gun mounts plus material support for gun weapon systems.		
3) <u>Small Arms Repair</u>	63	
The increase will provide for the repair of additional service weapons to meet the increased demand by Fleet and base commanders due to increasing terrorist threats.		
4) <u>2F Cog Electronics</u>	2,208	
Increased funding required for repair of an additional 59 AN/WSN-2/5 Inertial Measuring Units due to increased fleet population.		
5) <u>TMDE/METCAL</u>	2,796	
The additional funding will provide for engines on an additional 13 gas turbine ships to be calibrated (1,346). It will allow for 5,100 additional standards at NAVSEA activities to be calibrated (1,150). In addition, 5 more workyears will be funded to ensure interchangeability of components and assemblies of various weapon systems (300).		

Activity Group: Other Ship Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- 6) 2F Cog Electronics ASW 5,222
Increase funds 1,923 additional transducer and hydrophone repairs (2,264), repair of 13 additional pieces of other sonar equipment (2,601), and restoration of 6 additional masts and Electronic/Electrical adapters for type 18 periscopes to be restored (357).
- 7) INSPECWAR 2,607
Increased funding will provide maintenance for an additional Dry Deck Shelter and 2 additional swimmer delivery vehicles. Funds will also be used to develop modifications to the prototype DDS to incorporate SSN-608 interface requirements. Other increases will be used to correct deficiencies and recertify faulty breathing apparatus (MK XV/LAR V) and maintain equipment shelters.
- 8) Salvage Equipment Maintenance 630
Increase in funds supports maintenance of supplies, repair parts and consumables in all Emergency Ship Salvage Maintenance (ESSM) bases. The four existing bases have drawn down existing stock levels and the two new bases require stocking to reach operational levels.
- 9) 2S Cog Material H&M,E 7,685
Funds depot maintenance for 19 more marine gas turbines, 19 diesel engines, 7 shafts and 5 more air compressors.
- 10) Inactive Ship Maintenance 74,669
Program has been recently restructured to fund a major effort to upgrade the condition of the ships in the inactive fleet starting in FY 86. Surveys and material upgrade will be performed in 3 hulls (\$32.8 million); material upgrade only on 3 hulls (\$35.3 million); surveys only on 6 hulls (\$2.0 million); and preservation upgrades on 2 hulls (\$4.6 million).
- 11) AEGIS System Maintenance 919
Increase funds repair of 28 additional electronic chassis and 115 high power tubes required to support two additional AEGIS cruisers.

Activity Group: Other Ship Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

12) Ship Systems Software Maintenance 5,233

- a) FCDSSA SM (806)
Funding provided for an additional 8 work-years to support the Joint Tactical Information Data Systems (248). Additional funding decreases the FY 1986 backlog of software maintenance of tactical data systems and provides support for two additional surface ship platforms (558).
- b) Sonar Systems SM (119)
Increased funding provided to support the sonar system software of an additional 7 LAMPS MK III systems.
- c) Long Range SM (470)
Increased funding supports transition of 12 tactical and support computer programs from contractor design agents to the Navy computer maintenance facility. These programs support upgraded TERRIER Weapon Systems for ships with the CG/SM-2 capability and initial installation of the SM-2 Block II (extended range) New Threat Upgrade Program.
- d) Medium Range SM (322)
Increase will support maintenance of computer programs for the MK 92 fire control system on additional FFG-7's entering the fleet and transitioning from SCN to O&M,N funding support.
- e) AEGIS Ship Systems SM (1,796)
Increase funds 116 computer program equivalents, required to support two additional AEGIS cruisers
- f) Tactical Embedded Computer SM (1,720)
In FY 1986 software maintenance is required for an additional 3,000 tactical embedded computers in the fleet. In addition, increased engineering support is required for approximately 9,900 in-service computers, peripherals and displays associated with the AN/UYK-43 computers.

Activity Group: Other Ship Systems Maintenance (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

13) <u>Other Adjustments</u>	110
a) Surface Mine Countermeasures (44)	
b) Pollution Abatement (7)	
c) Underwater Ship Husbandry (12)	
d) Boat Rehabilitation (47)	
4. Program Decreases	-7,562
A. Other Program Decreases in FY 1986	(-7,562)
1) <u>Coast Guard</u>	-1,560
Realignment of the MK 92 ordalt installation program to the Fleet Modernization Program (-1,135). Rework of 12 fewer sonar equipments for high endurance cutters (-425).	
2) <u>2F COG Electronics</u>	-4,264
Decreased funding for SINS MK-3 since they are being replaced by ESGN on SSN 637 Class submarines. Decreased funding required for SINS MK-2 since the fleet population is decreasing. In addition, repair or refurbishment of 46 fewer other navigation systems is planned in FY 1986.	
3) <u>TMDE METCAL</u>	-279
3,400 fewer calibrations will be performed for the Fleet.	
4) <u>2S COG Material H,M&E</u>	-1,459
Perform depot maintenance on 1 fewer crane, 2 fewer winches, 30 fewer line voltage regulators, 6 less MCM cables, 2 fewer motor generators and 8 salinity panels.	
5. FY 1986 President's Budget Request	\$307,322

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation

A. SURFACE WARFARE SYSTEMS

1. Search Radar Depot Maintenance

Provides depot maintenance of all Fleet search radar major components (2F Cog equipment) as well as maintenance of Navy-owned radars in Coast Guard vessels.

The 2F Cog restoration program provides major maintenance and repair of search radar equipment in support of Fleet operations. Equipment is removed from ships as necessary and shipped to the appropriate repair facility for restoration. Requirements are based on replacement commitments to specific ships during ROH/RAV periods and/or time usage factors. Restored material provides equipment for approximately twenty-five percent of the cost of new procurement. Coast Guard Support provides maintenance of Navy-owned search radar equipment on high and medium endurance Coast Guard cutters as required by Public Law 207. This allows for the ready consolidation of Coast Guard vessels with the Navy in time of a national emergency.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	14,999	19,813	26,364
2F Cog Restoration	13,755	18,415	24,903
Coast Guard Radar	1,244	1,398	1,461

	<u>FY 1984</u> <u>Units/Ships</u>	<u>FY 1985</u> <u>Units/Ships</u>	<u>FY 1986</u> <u>Units/Ships</u>
Leading Indicator Number of components/ Ships Serviced	342/168	487/262	618/355
<u>2F Cog</u>			
Carriers	17/7	21/8	25/11
Major Combatants	224/103	351/190	443/255
Auxiliaries	63/40	77/46	112/71
<u>Coast Guard</u>	38/18	38/18	38/18

Units = Number of radar components to be restored. (Each system has multiple components.)

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Coast Guard Support - Depot Maintenance

Provides for the maintenance and overhaul support of Navy-owned weapons and ASW systems installed in U.S. Coast Guard ships.

Funding supports the following systems:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
1) Guns and Fire Control Systems			
WMEC	4	2	2
WHEC	4	5	6
2) Sonars			
WHEC	6	6	6

This represents number of hulls supported. Gun and fire control system quantities will vary by hull. Sonar equipment also varies.

WHEC = High Endurance Cutter (378 ft.)
WMEC = Medium Endurance Cutter (270 ft.)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of Systems	98	124	113
Total Funding	\$6,827	\$8,524	\$8,578

1 Gun Systems Rehab. and Material Spt.	3,116	10	3,387	11	4,793	15
2 Sonar Maintenance/ Overhaul	3,000	86	3,721	110	3,458	98
3 MK 92 O/A Installation	375	2	1,085	3		0*
4 Depot Support	336	-	331	-	327	

* Transfer to BA 2 (Fleet Modernization Program)

3. Small Arms Repair

The program provides for total Navy intermediate and depot level maintenance for all Navy-owned weapons .50 caliber and below. Repair dollars are used to provide for allowance items for small arms to meet critical allowance needs.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Many of the repaired items will be utilized by forward site reserve units and Construction Battalions which require heavy small arms support and usage in the event of mobilization.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$1,807	\$1,803	\$1,909
No. Of Service Weapons Repaired	4,228	7,039	10,410
No. Of Marksmanship Weapons Repaired	283	1,280	1,006

B. ELECTRONIC SYSTEMS

1. 2F Cog Electronics

This program provides for refurbishment of the Navy Tactical Data System (NTDS) and navigational systems. Periscope and submarine communications antenna refurbishment has transferred to other programs.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ Units	\$ Units	\$ Units
Total	20,079	24,711	23,137

a. NTDS - Supports requirement to extend useful lifetime of ten year old equipment by an additional ten to fifteen years. Requirements are dictated by NTDS equipped ships in ROH and age of installed system.

Ship Suites*	12,330	6	10,447	6**	10,457	7**
Memory Units/Components*	240	43	1,319	178	1,500	211
Subtotal	(12,570)	(49)	(11,766)	(184)	(11,957)	(218)

* Unit costs should not be used for annual comparison because of different costs of different equipments being restored each year. Also, long lead funding and NTDS program/support funding are included in the ship suites lines; however, they are not reflected in the number of units.

** In FY 1985, funding will provide refurbishment of only selected equipments in 5 ship suites. In FY 1986, funding will provide refurbishment of 6 partial and 1 Complete NTDS Suite.

b. Navigation - Maintains operational readiness of inertial navigation and stabilized gyrocompass systems on board surface combatants and submarines and depth detectors on SSNS and SSBNS. Requirements are based on demand history and projected increases in fleet population.

AN/WSN-2/5 Inertial						
Measuring Units*	1,436	33	3,731	68	6,100	127
SINS MK-3*	4,484	254	5,992	311	3,858	221
SINS MK-2*	934	49	1,293	60	298	17
Other Nav. & Inter. Com.*	655	76	1,929	72	924	26
Subtotal	(7,509)	(412)	(12,945)	(511)	(11,180)	(391)

* Unit costs should not be used for annual comparison because of different costs of different equipments being restored each year.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Test, Measurement and Diagnostic Equipment/Metrology Calibration (TMDE/METCAL)

Identifies electronic test equipment requirements for monitoring and maintaining the performance level of systems/equipments and establishes calibration support required to maintain mechanical and ordnance TMDE. TMDE is any device which measures, calibrates, gages, tests, inspects, monitors, diagnoses or otherwise examines the operating or physical characteristics of a system/equipment or materials/supplies. Depot maintenance supports (1) calibration of all mechanical and ordnance calibration standards; (2) calibration of fleet mechanical and ordnance TMDE (including gas turbine ship support) which is beyond the capability/capacity of fleet calibration activities; and (3) maintenance of interface gages and master tooling for the interchangeability of components and assemblies of weapon systems.

<u>FY 1984 Units</u>			
	<u>W/Y</u>	<u>Calibration*</u>	<u>No. of Ships</u> <u>(\$)</u>
Fleet Calibration Overflow		39,100	3,987
Gas Turbine Ship Support			4,151
Standards Calibration		19,400	3,655
Special Interface Gage Prog	9		<u>875</u>
Total Financed Program			12,668

<u>FY 1985 Units</u>			
	<u>W/Y</u>	<u>Calibration*</u>	<u>No. of Ships</u> <u>(\$)</u>
Fleet Calibration Overflow		34,700	4,161
Gas Turbine Ship Support			2,763
Standards Calibration		10,900	2,182
Special Interface Gage Prog	6		<u>586</u>
Total Financed Program			9,692

<u>FY 1986 Units</u>			
	<u>W/Y</u>	<u>Calibration*</u>	<u>No. of Ships</u> <u>(\$)</u>
Fleet Calibration Overflow		31,300	4,061
Gas Turbine Ship Support			4,228
Standards Calibration		16,000	3,349
Special Interface Gage Prog	11		<u>900</u>
Total Financed Program			\$12,538

* Calibration is not a uniform workload standard. A calibration may take from .25 workhours to over 80 workhours. Therefore, there does not exist a direct relationship between dollars and calibration.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. UNDERSEA WARFARE SYSTEMS

1. 2F Cog Electronics - ASW

The program supports repair/restoration of 2F Cog Undersea Warfare Equipment such as sonar systems, depth sounders, acoustic countermeasures, periscopes, and undersea communication systems installed or to be installed in attack submarines, ballistic missile submarines, major surface combatants, and support ships. Restoration repair is performed at Naval Shipyard transducer repair facilities, NAVSEA field activities, and by various contractors.

Program requirements are based on quantities of installed equipment, the age of equipment, the cycle time required to repair items, the position of the installed equipment on the ship, issue rates of equipment to the fleet and emergent fleet problems.

Transducers, hydrophones, scanning switches and domes are major components of a sonar system.

- a. Transducers receive and send signals and are used on active systems.
- b. Hydrophones, used on passive systems, only receive signals.
- c. Scanning switches are electro-mechanical switches made primarily of silver, which is necessary for a sonar system to process audio and visual signals.
- d. Domes protect the electronics of sonar systems from physical damage.
- e. "Sonar equipment" designates various other components of sonar systems that are refurbished with program funds.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
<u>Ships Supported</u>						
(ROHs & SRAs)	126		159		167	
SSBNS	6		4		2	
SSNS	25		31		35	
Surface Combatants (ASW & AAW)	80		98		106	
Support Ships	15		26		24	
	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$ Units		\$ Units		\$ Units	
Total Funding	21,720	8,281	30,543	10,759	35,496	12,701
<hr/>						
<u>SSBN</u>						
<u>Transducers & Hydrophones</u>	487	371	506	370	583	427
<u>Sonar Equipment (In House)</u>	975	50	789	37	790	39
<u>(Commercial)</u>	362	12	375	11	454	12
<u>Periscopes</u>	519	47	241	27	292	28
<u>SSN/ASW/AAW Ships</u>						
<u>Transducers and Hydrophones</u>	8,125	6,983	10,922	9,385	13,107	11,268
<u>Scanning Switches</u>	1,543	72	3,359	196	3,320	194
<u>Domes</u>	228	24	236	25	237	24
<u>Sonar Equipment* (In-House)</u>	2,595	147	3,474	149	3,475	143
<u>(Commercial)</u>	3,966	111	8,339	114	10,630	133
<u>Periscopes</u>	2,107	43	1,458	24	1,764	29
<u>Support Ships</u>						
<u>Transducers & Hydrophones</u>	539	411	559	412	559	395
<u>Commer. Sonar Equipment</u>	274	10	285	9	285	9

*Unit costs vary due to a different mix of equipment overhauled each year.

2. Surface Mine Countermeasures

Provides depot level and intermediate maintenance of in-service mine countermeasures systems, hardware, equipment, and material for minesweeping, mine hunting, mine neutralization, and mine countermeasure components.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total	1,379		1,722		1,732	

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
<u>Depot Maintenance *</u>						
Mine Hunting Systems	25	10	264	13	276	18
Mine Counter-measure Systems	40	24	95	35	92	42
Mine Neutralization Systems	30	18	137	33	139	41
<u>Intermediate* Maintenance</u>						
Mine Hunting Systems	311	24	368	23	472	23
Countermeasures Support Maintenance	34	50	284	60	273	67
Mine Neutralization Maintenance	158	17	574	29	480	38

* Units are the number of systems maintained.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
<u>Maintenance Support**</u>						
Mine Hunting Maintenance	227	3	--	--	--	--
Countermeasures System Maintenance	529	7	--	--	--	--
Neutralization System Maintenance	25	5	--	--	--	--

** Transferred to Mine Maintenance Support beginning FY85.

D. OCEAN ENGINEERING SYSTEMS

1. Inshore Special Warfare Equipment Depot Maintenance

Provides funds for the inspection, testing, repair, and alteration of Swimmer Delivery Vehicles (SDV) and Dry Deck Shelters (DDS), underwater Breathing Apparatus, Equipment Shelters, and installation of communication equipment.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$ 2,170	\$ 1,596	\$ 4,152

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Efforts funded:	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
1. Maintenance of SDV's (No. of Vehicles)	\$906	20	\$1,096	23	\$1,232	25
2. Maintenance of DDS's (No. of Shelters)	264	1	500	1	2,085	2
Operational Cycles				2		6
Number of Submarines Configured				1		3
3. Breathing Apparatus (No. of MK XV/LARV)	-		-		614	540
4. Equipment Shelters	-		-		221	12
5. MIL VAN Equipment Installation	1,000	2 vans				

2. Pollution Abatement Equipment Depot Maintenance

This program overhauls, repairs, and maintains the Navy's entire inventory of open-sea pollution abatement equipment (skimmers, pumps, booms, boats, etc.), located at two continental United States Emergency Ship Salvage Material (ESSM) Bases.

Total Funding (\$000)	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
	\$305		\$549		\$579	
1) Number of equip repairs	262	275	503	375	530	370
2) Number of equip pieces inventoried	43	750	46	750	49	750

3. Salvage Equipment Depot Maintenance

Program repairs, overhauls, and maintains eighty percent (80%) of the Navy salvage equipment inventory (winches, compressors, pumps, generators, welding machines, etc.) located at six Emergency Ship Salvage Material (ESSM) bases worldwide. Program also funds the repair, maintenance, and overhaul of the Navy's two unmanned submersible vehicles (Deep Drone on CURV II), which are utilized for ship and aircraft salvage, special search, and pollution abatement missions.

Total Funding (\$000)	FY 1984	FY 1985	FY 1986
	\$4,702	\$7,437	\$8,387

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>Units</u>	<u>Units</u>	<u>Units</u>
1) Number of Equip. repairs	2,100	3,500	3,504
2) Number of equip pieces inventoried	10,000	10,000	10,000
3) Number of vehicle repairs	14	18	18
4) Number of operational ESSM Bases	4	4	6

4. Underwater Ship Husbandry

Program provides for modifying existing tools to underwater usage, and developing techniques and procedures for the underwater accomplishment of routine hull maintenance. Program emphasis is on the development of underwater techniques that do not require drydock time and avoid associated costs, which may range from \$150K (FF Class Ships) to \$300K (CVN's). Actual work is performed on an emergent requirement basis as procedures, techniques, and tools are perfected.

Program provides for the updating of work and training manuals, and the conduct of training exercises for various fleet activities in new techniques and procedures.

<u>Total Funding (\$000)</u>	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>398</u>		<u>664</u>		<u>655</u>	
	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>
1) Number of equipment modifications	152	1	115	1	-	-
2) Number of techniques and procedures developed	-	-	410	2	598	3
3) Number of training exercises conducted	170	4	-	-	-	-
4) Number of manuals updated (by chapter)	76	1	139	1.5	57	.5

E. 2S COG ELECTRONICS - HM&E

Provides for repair/refurbishment of equipments such as propellers, shafts, main feed pumps, generators and gas turbine engines for the operating fleet and ship overhauls. Requirements are driven by fleet maintenance, CASREPT demands and emergent overhaul requirements as influenced by advanced age of components. Program will enhance capabilities to resolve CASREPTS, meet overhaul schedules, and deployments. Units equate to pieces of equipment repaired.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

<u>Items of Repair</u>	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	30,247	389	36,531	479	41,866	480

INPUT/OUTPUT TABLE

Hull Equipment	1,200	26	5,175	53	4,000	50
Propulsion Equipment	21,900	190	23,456	200	29,766	245
Auxiliary Equipment	5,547	60	6,200	40	6,600	45
Electrical Equipment	1,600	113	1,700	186	1,500	140

Unit cost should not be used for annual comparisons because of the vastly different sizes, types, condition and mix of equipments in each category.

F. BOAT REHABILITATION

Provide boats and landing craft, either new or repaired to replace those that are no longer economically repairable and to fill new allowances. Approximately 3,500 boats are in service ranging from 14 feet to 165 feet.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$994	\$972	\$1,021
Number of boats rehabilitated/issued	114	57	86
1. Issued	\$193	\$110	\$195
2. Rehabilitated	\$801	\$862	\$826

G. INACTIVE SHIP MAINTENANCE SUPPORT

This program will upgrade ships in the inactive fleet to a condition which will allow them to be available for timely replacement of wartime fleet attrition. Currently, if a national emergency were to arise, the reserve fleet would take too long to reactivate.

The program takes place in three main steps; Survey, Material Upgrade, and Preservation upgrade. During the Survey, the ship is opened up and inspected to determine the condition of the ship and its equipment. In Material Upgrade, which is based on information gained during the survey, bottom hull maintenance is performed (such as drydocking, blasting, painting, etc. of the hull). A Material Upgrade is followed by a Preservation Upgrade. Preservation Upgrade involves efforts such as replacing lubricants, renewing seals on hull openings, and applying preservatives to equipment. These Preservation efforts are designed to keep deterioration of stored ships to a minimum.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

In order to meet the material upgrade schedule, surveys must commence four to seven months prior to start of a material upgrade. Lead time is required for completion of surveys and development of upgrade specifications. The schedule below constitutes the prioritized plan to upgrade the material condition and preservation of the inactive fleet.

The costs cited below are for minimum upgrades and are estimated based on previous or similar work done on similar ships.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
TOTAL FUNDING	-	\$722*	\$75,422
<hr/>			
Funding Subtotals			
LSD 29		400	7,200
DD 941		300	22,122
AO 51		22	6,700
LST 1173			7,300 ^{1/}
LSD 31			7,800 ^{2/}
DD 940			17,700 ^{2/}
LST 1177			300
DD 937			400
DD 931			400
DD 951			400
DD 942			400
AFT 113			100
CVS 12			2,300 ^{3/}
CVA 31			2,300 ^{3/}

* In FY 1985 funding provides for surveys and planning only.

^{1/} Includes 300 for Surveys and Planning.

^{2/} Includes 400 for Survey and Planning.

^{3/} Provides funding for Preservation Upgrade only.

In the event of mobilization, each of the upgraded ships could be reactivated in 45 days. Without the upgrade, it would take 5 months to reactivate LSDs and LSTs, 6 months for DDs, 26 months for CVSs and 29 months for CVAs.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

H. AEGIS SYSTEM MAINTENANCE

AEGIS System Maintenance covers depot repair of inoperative AEGIS Combat System electronic components and high power tubes. Repair of electronic components such as power supplies, printed circuit boards and electronic chassis is accomplished at the depot operated by RCA, Moorestown, New Jersey. Repair of power tubes including cross-field amplifiers, 10KW traveling wave tubes, 40 watt tubes and continuous wave illuminator tubes is conducted at the Naval Weapons Support Center (NSWC), Crane, Indiana. Reclamation of failed, but repairable tubes and electronic components is cost effective in that unit repair costs are only 50% of new procurement costs and the repair turn-around time is less than 60% of the procurement lead time required for new items. The significant increase in the FY 85 request reflects the requirement for greater capacity to handle repair backlog and increasing AEGIS cruiser force levels.

	<u>FY 1984</u> \$	<u>FY 1985</u> \$	<u>FY 1986</u> \$
Total Funding	3,514	9,774	11,093

	<u>FY 1984</u> \$ Units	<u>FY 1985</u> \$ Units	<u>FY 1986</u> \$ Units
1. RCA Moorestown/Elec. Components Repaired	3,189/811	8,698/2,470	9,185/2,498
2. NSWC Crane/Tubes Repaired	325/71	1,076/185	1,908/300

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

I. SHIP SYSTEMS SOFTWARE MAINTENANCE

Ship Systems Software funds the maintenance of complex computer programs for specific shipboard weapon and command and control systems.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$36,311	\$48,186	\$54,393

Specific maintenance program descriptions are as follows:

1. FCDSSA Software Maintenance

Provides for the planning, designing, producing, testing, and delivery of updated tactical computer programs and associated documentation for tactical command and control systems on surface combatants and selected aircraft. In addition, this program provides technical assistance and computer programs to shore establishments and supports communication systems, satellite systems, and navigation systems.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
FCDSSA	\$21,193		\$20,686		\$21,357	
Efforts Funded						
1. Surface Tac. Data Sys (No. of Ships Supported)	\$7,685	140	\$7,357	147	\$7,786	149
2. Air Tac. Data Sys. (No. of Aircraft Supported)	\$1,322	93	\$1,201	93	\$1,340	93
3. Spt. Software, Commun. & Tac. Intelligence Systems	\$1,285		\$12		\$12	
4. Facility Requirements, Maintenance and General Costs	\$10,901		\$12,116		\$12,219	
A. Computer Center Operations/Maintenance	5,465		5,839		5,910	
B. Utilities and Plant Maintenance	2,687		3,199		3,180	
C. Management and Administration	2,749		3,078		3,129	

2. Sonar Systems Software Maintenance

This program maintains computer programs for all components of the LAMPS MK III integrated aircraft/shipboard weapons system.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$ 2,904	\$ 2,968	\$ 3,215

1. SH-60B Software Maint. (No. of Programs Maintained)	\$88/ 6	\$606/21	\$800/28
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Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. AN/SQQ-28 Software Maint. (No. of Programs Maintained)	1,743/ 6	1,632/21	1,768/28
3. LAMPS System Level Software & Configuration Support (No. of Program Maintained)	900/ 6	600/21	500/28
4. SH-60B Software Maint. for Simulators	173/ 6	130/21	147/28

3. Long Range Software Maintenance

Provides problem analysis, coding, proofing and system checkout for shipboard operational computer programs for the Terrier missile systems. The computer programs control all switchboard defense systems such as the launching system, fire control system, and radar detecting tracking system to provide quick reaction control. These programs are constantly updated to reflect upgraded Terrier system capability such as the SM-2 extended range missile, part of the new threat upgrade (NTU) program to combat the Backfire bomber threat.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units*	\$	Units*	\$	Units*
Long Range Software Maintenance	1,323	85	1,810	89	2,323	101

* Programs Maintained

4. Medium Range Software Maintenance

Tactical computer program maintenance provides maintenance and modification to operational computer programs and the auxiliary programs used to support and test the operational programs. Maintenance is performed at the computer program facility, Port Hueneme, CA.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Medium Range Software Maintenance	1,366	69	1,710	83	2,075	99

5. AEGIS Ship Systems Tactical Computer Program Maintenance

AEGIS Ship System Software Maintenance is conducted at the AEGIS Computer Center (ACC), Dahlgren, VA. The ACC contains major AEGIS Combat Systems equipments capable of emulating shipboard operations. AEGIS System Software Maintenance provides for (1) Computer Program Production Engineering, (2) Computer Program Maintenance, and (3) AEGIS Combat System Backfit and Modernization. Computer Program Production Engineering involves the receipt, verification, and validation of developmental computer programs. Computer Program Maintenance involves program certification prior to ship and training site delivery and subsequent resolution of problems associated with these computer programs. This requirement is driven by fleet and operational needs. AEGIS Combat System Backfit and Modernization includes all work to upgrade the modernization alterations that revise military or technical characteristics.

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

This is driven by state-of-the-art developments to meet emergent threats as well as ship availability and overhaul dates.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ Units	\$ Units	\$ Units
Total Funding			
AEGIS Ship System Software Maintenance/ Computer Program Equivalents Supported	8,126/343	9,870/438	12,090/554

Computer Program Production Engineering/ Computer Program Deliveries	707/ 1	882/ 2	1,083/ 3
Computer Program Maintenance/ Computer Program Problem Resolutions	5,769/248	6,962/308	8,482/379
AEGIS Combat System Backfit & Modernization/Computer Program Modifications	1,650/ 15	2,026/ 18	2,525/ 23

*Computer Program Equivalents (CPE) supported is an aggregate output measure computed from the following AEGIS functions/outputs:

- Computer Program Production Engineering/Computer Program Deliveries
- Computer Program Maintenance/Computer Program Problem Resolution (CPPR)
- Computer Program Modifications/Computer Program Modifications

where: 1 Computer Program Delivery = 20 CPE
 1 CPPR = 1 CPE
 1 Computer Program Modification = 5 CPE

Activity Group: Other Ship Systems Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

6. Tactical Embedded Computer Software Maintenance

Provides engineering support acquisition management, life cycle support, and configuration control of existing and future tactical embedded computer systems. Maintenance actions, which include lab review, new documentation, new tapes, and testing; vary in cost from \$2K to \$25K.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$	\$	\$
Total Funding	1,399	11,142	13,333
In-Service Engineering Agent	\$0	\$5,118	\$6,530
No. AN/UYK-43(V) and AN/UYK-44(V) computers supported	-	350	350
No. of In-Service computers, peripherals, displays	-	-	9,900
Software maintenance	\$1,399	\$6,024	\$6,803
No. Fleet computers supported (in-service)	2,134	7,000	10,000
No. Maintenance actions	390	1,400	1,210

IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Civilian</u>	<u>200</u>	<u>261</u>	<u>275</u>
USDH	200	261	275

DEPARTMENT OF THE NAVY
OPERATIONS & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Procurement Operations
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed

Procurement operations provides for centralized procurement and contract administration services; and technical services in support of the design, acquisition, construction, overhaul, repair, and alteration of ships and shipboard weapons.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE	BUDGET REQUEST	
Project Management Offices	34,339	33,823	33,620	35,701	33,966	-1,735
ASW Project Office	2,593	2,659	2,659	2,716	2,651	-65
REGIS Ship Procurement Spt	4,820	5,861	5,791	5,487	6,821	534
NAVPROS	9,879	10,229	10,141	11,059	11,700	641
SUPSHIPS	148,540	148,500	146,304	152,172	152,055	-117
Shipbuilding Sched Office	1,889	2,164	2,116	2,116	2,127	11
TOTAL, PROCUREMENT OPERATIONS	202,060	203,236	200,631	209,251	208,520	-731

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$209,251
2. Pricing Adjustments		-4,752
A. Civilian Personnel Compensation (Direct)	(-4,905)	
1) USDH Pay Adjustment	-6,663	
2) Other Direct Pricing Adjustment	1,758	
B. Industrial Fund	(-330)	
C. Other Pricing Adjustment	(483)	
3. Functional Transfers		466
A. Transfers in	(466)	
1) Inter-Appropriation - Amounts transferred from Other Procurement, Navy pursuant to the proposed DOD initiative for the elimination of \$3 thousand investment threshold and adoption of central management criteria as the governing factor.	466	
4. Program Increases		4,605
A. Other Program Growth in FY 1986	(4,605)	
1) <u>Project Management Office</u>	24	
2) <u>AEGIS Ship Procurement Support</u>	710	
Increase provides additional support for CG-47 class (179) and the lead ship of the DDG-51 Class (531).		
3) <u>NAVPROS</u>	932	
Increase of 1 workyear effort for Spare Part acquisition (29); 31 workyears of effort for contract administration services related to the procurement of material and services (890); provides additional support services (13).		
4) <u>Supervisor of Shipbuilding</u>	2,860	
Increase provides support for a net addition of 50 workyears to accomodate the change in availability type workload (2,097); increase in travel for ship checks, sea trials, contract award receivers, SUPSHIP operations review team, and master ship repair reviews (99); increased time sharing costs and equipment maintenance by contract (214); additional equipment, furniture, consumable supplies and other support costs to support projected increase in end strength (450).		
5) <u>Shipbuilding Support Office</u>	79	
Increased support for 6 additional acquisition studies (79),		

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

5. Program Decreases		-1,050
A. Other Program Decreases in FY 1986	(-1,050)	
1) <u>Project Management Office</u>	-876	
Reflects decrease of 11 workyears (-548); reduced travel (-48); decrease in the purchase of ADP equipment (-117); rental and maintenance cost (-126); and reduced purchase services and supplies (-37).		
2) <u>ASW Project Office</u>	-3	
3) <u>Supervisor of Shipbuilding</u>	-171	
Decrease in rental requirements (-114) and reduced professional and management contractor support (-57).		
6. FY 1986 President's Budget		\$208,520

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation

A. PROJECT MANAGEMENT OFFICES

1. Project Management Offices

Project Management Offices are responsible for integration and coordination of major ship and weapon system acquisition projects. Funding supports salaries, benefits, and administrative support costs for engineers and administrative personnel responsible for the planning, direction, design, development, and production for assigned programs.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$34,339	\$35,701	\$33,966
Workyears	728	749	738
Major Acquisition Projects	26	27	27

Civilian Salaries	31,444	32,943	31,424
Travel	1,239	1,122	1,093
Printing and Reproduction	6	28	29
Equipment	594	1,007	831
ADP/Non-ADP	(466)	(985)	(784)
Furniture	(128)	(22)	(47)
Supplies	155	150	151
Purchased Services	585	335	317
Other	316	116	121

2. ASW Project Office

Anti-Submarine Warfare Project Office provides civilian salaries and administrative support to coordinate anti-submarine warfare programs within the Naval Material Command.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	2,593	2,716	2,651
Workyears	54	58	59

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. CONTRACT ADMINISTRATION

1. AEGIS Ship Procurement Support

AEGIS Ship procurement support complements SUPSHIP/NAVPRO/DCAS functions. Provision of technical representatives is in accordance with DOD Instruction 4105.64 which directs project managers to provide dedicated, technical oriented procurement representatives at prime contractor plants to perform quality assurance, system engineering, combat system integration and testing. The AEGIS Ship Procurement Support currently funds technical representatives at four sites: RCA Moorestown, ISD Pascagoula, GD Pomona, and BIW Bath. They have been a key ingredient in the success of AEGIS Ships. Starting in 1986, technical representatives are also programmed for the DDG 51 construction yards which are as yet unidentified. These sites represent only a fraction of the twenty-two primary production locations that support the AEGIS shipbuilding program. Typical functions performed include:

- Manufacturing and production surveillance and problem resolution
- Point of contact for Government Furnished Equipment
- Production and Test Plan review and acceptance
- Engineering design review
- Test evaluation and quality assurance
- Administrative services
- System Integration and problem resolution

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding:	\$4,820	\$5,487	\$6,021
Number of ships under construction supported	11	13	15

Project Manager's Technical Representatives for AEGIS contracts are at the following sites:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
1. RCA, Moorestown, NJ	\$2,174	\$2,318	\$2,423
2. Ingalls Shipbldg, Pascagoula, MS	1,228	1,771	1,714
3. General Dynamics, Pomona, CA	284	280	271
4. Bath Iron Works, Bath, ME	1,134	1,118	1,082
5. DDG 51 yards	0	0	531

2. Naval Plant Representative Office (NAVPRO)

The four NAVPROs (Great Neck, NY; Laurel, Md; Minneapolis, Minn; Pomona, CA) administer Navy and other DOD contracts at weapon system manufacturers to ensure that private contractors conform to contractual requirements.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	9,879	11,059	11,700
Workyears	298	350	382
Number of Contracts Administered	9,926	12,304	15,826

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. Supervisors of Shipbuilding

Provides salaries and associated administrative support costs for 16 Supervisors of Shipbuilding, Conversion, and Repair (SUPSHIPS). SUPSHIPS are responsible for ensuring that private contractors meet government specifications in the construction, repair and alteration of Navy ships by administering Navy and other Defense Department contracts at assigned private sector shipyards. This includes administration of shipbuilding, design, conversion and facility contracts; procuring and administering overhauls, repairs, alterations and inactivations performed on Navy ships under Master Ship Repair Contracts. Funding also supports the Industrial Management Office, Philadelphia which provides contract administration for ship overhauls and repairs in private yards in the Philadelphia area.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$148,540	\$152,172	\$152,055
Total Workyears	4,217	4,167	4,217

Workload Summary (Direct Work Years)

New Construction/Conversion	1,840	1,722	1,774
Post-Shakedown Availabilities	271	228	201
Regular Overhauls	725	895	687
Selected Restricted Avail- abilities/Phased Maintenance	636	879	1,098
Fixed Workload	745	443	457

The significant driver of workload in FY 85 and outyears is in ship repair vice new construction. Increased workyears for repair are predominantly in the areas of Selected Restricted Availabilities (SRA's) and Phased Maintenance Availabilities (PMA's). These are short, manpower intensive availabilities where a lot of industrial work is compressed into a short period of time.

The Workload Summary data are further detailed below. It accounts for the total number of ships under construction, in an ongoing availability (execution) status, or in in a pre-availability (planning) status. Thus, the effort required for new work is compared to the effort required to continue ongoing construction and availabilities that cross fiscal years. Accordingly, the total number of availabilities and ships in construction in any particular fiscal year may differ from that indicated by other programs because of the duration of construction or availability.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

SUPSHIP WORKLOAD SUMMARY:

The total SUPSHIP workload is computed by profiling manpower requirements on an individual availability by availability basis (i.e., new construction PSA, ROH, SRA or Fixed Load). Each availability type has a particular manpower profile summarized on a month by month basis in computing SUPSHIP requirements. The Workload and Staffing Profile (WASP) system is complemented by the Workload Accounting System (WAS) which provides actual feedback data to the WASP. SUPSHIPS submit quarterly reports (starting in FY 1984) stating the actual manpower utilized for each availability. Based upon composite WAS inputs individual availability profiles may be modified (i.e. to reflect increased or decreased manpower requirements).

Workload requirements and staffing are calculated within the following categories:

1. New Construction (N/C) Pre-launch/Post-launch

N/C pre-launch data reflects the cumulative number of hulls (units) and the SUPSHIP manpower to administer the contract for each of those hulls prior to ship launch. SUPSHIP manpower application begins with the start of construction (normally 12-24 months after contract award). The pre-launch period is generally more than half of the ship construction duration; however, SUPSHIP manpower application during this period is less intense than later in the construction phase. In this phase, SUPSHIP approves Engineering and Quality Assurance (QA) procedures, orders Government Furnished Material (GFM) and spare parts, consents to subcontracts and approves other company procedures and schedules. During the N/C post-launch period which runs from launch until 4 months after ship delivery, SUPSHIP manpower requirements are proportionately very high. Efforts may involve ship testing, sea trials management, trial deficiency corrections, engineering changes, contract change negotiation, government furnished material ordering, spare parts management, etc.

2. Post Shakedown Availability (PSA) Planning/Execution

The PSA planning phase covers the period from 6 months before PSA start to PSA start. The SUPSHIP technically engineers and plans the work package, orders material, and formalizes the work package into a contract. The execution phase runs from PSA start until 3 months after PSA completion. During the PSA availability the SUPSHIP performs the normal contract administration functions: quality assurance, test and trials management, engineering change administration, material and spare parts management, change order negotiation, etc.

3. Regular Overhaul (ROH) Planning/Execution:

The ROH planning phase runs from 18 months prior to overhaul start to the start of overhaul. During this time the SUPSHIP plans all alteration and repair work, orders all government furnished material, develops the solicitation package, and normally awards the contract. The overhaul execution phase commences at overhaul start and runs through the guarantee and contract closeout period (4 months after overhaul departure and ship completion). The typical contract administration functions (as mentioned in item 2 above) are performed during the ROH availability period.

III. Performance Criteria and Evaluation (cont'd)

4. Selected Restricted Availability/Phased Maintenance Availability Planning/Execution

The Selected Restricted Availability/Phased Maintenance Availability SRA/PMA planning phase runs from 12 months prior to availability start to availability start. The planning for an SRA is exactly the same as the planning for an ROH. The planning for PMA's is performed by the contractor with the SUPSHIP reviewing and approving the contractor's specification preparation work. The SUPSHIP also orders GPM and negotiates all changes. The SRA/PMA execution phase runs from ship arrival until 3 months after availability completion. The contract administration functions performed are all similar to those performed to administer an overhaul. It should be noted that a PMA requires more people for contract administration than that required by a normal SRA because PMA contracts are always cost plus award fee type contracts.

5. Fixed Load

Fixed load manpower is the number of people required to administer all Commercial Industrial Support (CIS) and Repair Availabilities and Technical Availabilities (RATA). CIS includes work performed by contractors that exceeds the local capacity/capability of ship's forces, tenders, repair ships, and Shore Intermediate Maintenance Activities (SIMA's). It consists of maintenance level work such as bilge/tank cleaning and repair or replacement of parts, components or assemblies removed from ships. RATA includes: restricted availabilities which are emergent unscheduled availabilities assigned for the accomplishment of specific items of work by an industrial activity with the ship present during which time the ship is rendered incapable of fully performing its assigned missions and tasks; and technical availabilities which are unscheduled availabilities for the accomplishment of specific items of work by a repair activity, during which the ship's ability to perform fully its assigned missions and tasks is not affected. For example, a ship needing one of its radios repaired can still be operational while that item is under repair at a contractor's facility. Additionally, numerous other amounts of manpower are included under this heading for planning shipyard execution, new construction configuration control, facilities administration, personnel administration, and memorials administration.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

SUPSHIP Manpower Requirements (Manyyears) Summary

Direct Funded Only

	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
New Construction	1,840	1,722	1,774
PSA	271	228	201
ROH	725	895	687
SRA/PMA	636	879	1098
Fixed Load	<u>745</u>	<u>443</u>	<u>457</u>
Total	4,217	4,167	4,217

SUPSHIP total requirements include the requirement for direct funded, reimbursable funded and FMS funded billets. The manpower requirements are increasing primarily to plan and execute the short, intense SRA/PMA workload. The number of new starts for these availabilities doubles from FY 84 to FY 86.

	<u>FY 1984</u> \$ Units*	<u>FY 1985</u> \$ Units*	<u>FY 1986</u> \$ Units*
Total Funding (\$000)	148,540	152,172	152,055
1. New Construction	64,763 (141)	62,848 (124)	64,015 (109)
Pre-Launch	111	95	75
Post-Launch	30	29	34
2. Post Shakedown Avail	9,507 (52)	8,369 (43)	7,299 (39)
Planning	23	18	16
Execution	29	25	23
3. Regular Overhauls	25,549 (132)	32,717 (127)	24,785 (107)
Planning	88	56	44
Execution	44	71	63
4. SRA/PMA	22,430 (223)	32,108 (281)	39,534 (395)
Planning	151	173	239
Execution	72	108	156
5. Fixed Load	26,291	16,130	16,422

() Denotes Non-ADD

* Units = number of hulls

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. SHIPBUILDING SUPPORT OFFICE

The NAVSEA Shipbuilding Support Office (NAVSHIPSO) supports the NAVSEA Acquisition and Logistics Directorate and all Ship Acquisition Project Managers (SHAPM's) by conducting advance planning, expediting the delivery of shipbuilding components and materials, and assisting in the acquisition and major repair source selections. This office also maintains the Naval Vessel Register and the Ship's Data Book for the Department of the Navy. This is a two-volume publication which contains the names, characteristics, assignments and disposition of all the Ships and Service Craft in the Active Fleet, Reserve Fleet, Inactive Fleet, MSC and the U.S. Army vessels.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$1,889	\$2,116	\$2,127
Acquisitions supported			
New Construction	16	23	27
Conversions	6	6	2

	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>	<u>\$</u>	<u>Units</u>
Studies in support of:	\$1,776		\$1,998		\$1,996	
Acquisition		565		515		515
Supporting Operations		73		79		85
Long Term Projections		-		12		12

Travels to support source selections, program reviews, industrial plant capacity assessments, etc. (# of trips)	94	150	98	161	109	165
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Printed Reports (Naval Vessel Register, Mfg. Lead Time Tabulations, etc.)	19	11	20	11	22	11
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IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>513</u>	<u>573</u>	<u>560</u>
Officer	393	442	431
Enlisted	120	131	129
B. <u>Civilian</u>	<u>5,248</u>	<u>5,444</u>	<u>5,579</u>
USDH	5,248	5,444	5,579

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Command and Administration
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed:

This program provides salaries and administrative support for the personnel assigned to NAVSEA headquarters who provide technical direction and management for acquiring and supporting ships, weapons systems, and related equipment.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Command & Administration	<u>39,428</u>	<u>34,007</u>	<u>33,772</u>	<u>33,788</u>	<u>32,392</u>	<u>-1,396</u>
TOTAL, Command & Admin	39,428	34,007	33,772	33,788	32,392	-1,396

Activity Group: Command and Administration (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$33,788
2. Pricing Adjustments		-713
A. Civilian Personnel Compensation (Direct)	(-870)	
1) U.S. Direct Hire Pay Adjustment	-1,033	
2) Other Direct Pricing Adjustments	163	
B. Industrial Fund Rates	(-7)	
C. Other Pricing Adjustments	(164)	
3. Program Increases		257
A. Other Program Growth in FY 86	(257)	
1) Increase of 3 workyears of effort (134); Increase in purchased services for higher building maintenance costs largely due to increased cost of contractual labor (114) and increased furniture (9).		
4. Program Decreases		-940
A. Other Program Decreases in FY 86	(-940)	
1) Decrease in rental and maintenance of ADP equipment (-485) due to purchase versus lease initiatives; Decrease in travel (-237); Decrease in printing and furniture requirements (-134); Decrease in supplies and other support costs requirements (-84).		
5. FY 1986 President's Budget Request		\$32,392

Activity Group: Command and Administration (cont'd)

III. Performance Criteria and Evaluation

Command and Administration

Provides salaries, benefits, and administrative support costs for Headquarters staff responsible for policy, planning, technical guidance, resource allocation, management and support of NAVSEA operations.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$39,428	\$33,788	\$32,392
Workyears	943	768	771

Civilian Salaries	33,229	29,037	28,301
Travel	1,860	1,285	1,070
Printing and Reproduction	338	366	333
Equipment	2,264	1,835	1,353
ADP/Non-ADP	(1,823)	(1,713)	(1,217)
Furniture	(441)	(122)	(136)
Supplies	359	382	370
Purchased Services	977	460	580
Other	401	423	385

IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military E/S</u>	<u>45</u>	<u>44</u>	<u>44</u>
Officer	32	34	34
Enlisted	13	10	10
B. <u>Civilian E/S</u>	<u>787</u>	<u>782</u>	<u>787</u>
USDH	787	782	787

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Field Operations
 Budget Activity: 7 Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed

Field operations provides the salaries and operating costs for a variety of support functions at Naval shore activities. Typical support functions include design and development of computer software for shore activities, engineering and administrative services for major weapons systems and shipboard equipment, and overhaul planning.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Operational Support-Field	130,425	128,032	127,506	135,697	134,485	-1,292
NAVSEA Field Divisions	12,493	13,130	12,725	12,681	12,399	-282
ICSTF	3,074	3,768	3,701	3,696	3,889	193
SEAADSO	7,456	0	0	0	0	0
PERA CV	3,382	3,993	3,713	3,709	3,469	-240
PERA SS	7,398	7,482	7,298	7,262	8,898	1,636
PERA CRUDES	5,749	10,816	10,281	9,870	5,849	-4,021
PERA CSS/ASC	3,974	5,307	5,136	5,113	4,104	-1,009
TOTAL, FIELD OPERATIONS	173,951	172,608	170,360	178,028	173,013	-5,015

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$178,028
2. Pricing Adjustments		-3,466
A. Civilian Personnel Compensation (Direct)	(-4,891)	
1) US Direct Hire Pay Adjustment	-5,193	
2) Other Direct Pricing Adjustments	302	
B. Industrial Fund Rates	(6)	
C. Other Pricing Adjustments	(1,419)	
3. Functional Program Transfers		-2,125
A. Transfers In	(978)	
1) Intra-Appropriation	940	
a) <u>Personnel and Training Analysis Office</u>		
Funds transfer into Operational Support-		
Field, amounting to 17 workyears, from the		
following programs (940):		
<u>BA 1</u>		
Unique and Related Sonars	35	
Ship Intermed. Level Maint.	84	
NAVELEX	70	
<u>BA 2</u>		
Intermed. Maint. Upgrade	114	
<u>BA 7</u>		
ASW Support Program	100	
<u>BA 8</u>		
Initial Training	537	
2) Inter-Appropriation	38	
a) <u>Naval Air Test Center Relocation Site</u>		
Funds and two billets transfer into		
Operational Support-Field from RDT&E,N		
for NATC (38).		
B. Transfers Out	(-3,103)	
1) Intra-Appropriation	-3,103	
a) <u>Surface Ship Maint. & Perf.</u>		
<u>Monitoring Program (SSMPMS)</u>		
Funds transfer from PERA CRUDES to SSMPMS		
(BA2) (-3,021).		
b) <u>Travel Support</u>		
Funds transfer from PERA SS to LANTFLT		
(-17).		
c) <u>CIVPERS Services</u>		
Funds transfer from PERA CRUDES to LANTFLT		
(-65).		
4. Program Increases		3,666
A. Other Program Growth	(3,666)	

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

1) <u>Operational Support-Field</u>	1,742
Increase of 19 workyears of effort (includes 9 workyears for spare parts acquisition initiatives and 10 workyears for the Surface Ship Extended Operating Cycle Program (799); realignment of the Navy Ship Model Program and Beneficial Suggestion Awards Program to Operational Support from Other Support Program, Logistics Support Services Activity (Sub-Activity Group) (356); increase in office equipment and supplies (52); increase in purchased services and other support costs due to increased maintenance costs resulting from an increase in contractual labor (215); increase in office automation support (320).	
2) <u>NAVSEA Field Divisions</u>	241
Increase of 7 workyears at Naval Sea Centers for the Surface Ship Extended Operating Cycle Program.	
3) <u>ICSTF</u>	110
Provides for equipment maintenance and software support for 29 additional equipments.	
4) <u>PERA SS</u>	1,573
Provides management and engineering support for submarine overhaul and Extended Operating Cycle (EOC) availability planning and test development support programs (303); management and engineering support for submarine alternations and maintenance programs (152); logistics and other technical support for submarine overhauls and EOC availability planning (987); 2 additional workyears of effort (72); and other operating expenses (59). Increase due to an additional 6 submarine maintenance availabilities.	
5. Program Decreases	-3,090
A. Other Program Decreases	(-3,090)
1) <u>Operational Support-Field</u>	-71
Decrease in travel and printing.	
2) <u>NAVSEA Field Divisions</u>	-391
Reduces funds for purchase of services, such as maintenance and repair of buildings and communications.	

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

3) PERA CV -331

Results in reduced PERA CV efforts including the modernization planning management Non-Standard Long Lead Time material procurement and Carrier Engineered Maintenance programs (-93); integrated maintenance management (-118); and material management programs (-43); reduces overhead effort by two workyears (-77).

4) PERA CRUDES -1,184

Decrease of 1 workyear related to overhead (-35); reduction to engineering services support (-1,149).

5) PERA CSS/ASC -1,113

Results in the reduction of overhaul planning (-413); engineering support (-127); ADP support (-75); baseline data management (-76); service craft modernization (-36); and test programs (-50); and reduced overhead costs (-336).

6. FY 1986 President's Budget Request

\$173,013

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation

A. OPERATIONAL SUPPORT-FIELD

Provides basic salaries, benefits, and administrative support costs for personnel responsible for the management of ship and combat systems not assigned to designated project management offices. Tasks performed include contract administration, and material management coordination for ship and weapon system integration; acquisition policy and planning development; engineering and technical logistic support; and ship design and maintenance oversight.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	<u>\$130,425</u>	<u>\$135,697</u>	<u>\$134,405</u>
Workyears	<u>2,917</u>	<u>2,989</u>	<u>3,025</u>
<hr/>			
Civilian Salaries	118,229	126,773	124,289
Travel	3,924	2,499	2,496
Printing and Reproduction	428	488	484
Equipment	4,775	2,930	3,393
ADP/Non-ADP	(2,660)	(2,602)	(3,034)
Furniture	(2,115)	(328)	(359)
Supplies	821	619	681
Purchased Services	1,472	1,106	1,236
Other	776	1,282	1,826

Effective FY 1986, Navy Leased Quarters, Beneficial Suggestions awards and the Ship Model Program are transferred to Operational Support Field from Logistic Support Activities, Other Support Program subactivity groups.

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. NAVSEA FIELD DIVISIONS

Funds salaries and support costs of overhead personnel for the Naval Sea Support Centers and the Naval Sea Systems Command Logistics Support Engineering Activity (NAVSEALOGSUPENGACT). The Sea Centers provide technical services to the fleet, such as installation, support, operation, and maintenance of ship-board equipment and systems. NAVSEALOGSUPENGACT performs engineering and related functions associated with establishing and maintaining effective life-cycle supply support for hull, mechanical, electrical, and selected electronic equipments.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY-1986</u>
Total Funding(\$000)	<u>\$12,493</u>	<u>\$12,681</u>	<u>\$12,399</u>
Total Workyears	266	220	227

SEACENS			
Civilian Personnel Salaries	\$8,567	\$8,521	\$8,476
Other Purchase Services	842	1,084	1,339
Communications	576	600	545
Travel	355	372	384
Utilities and Rents	584	408	252
Supplies	343	341	325
Equipment	245	357	416
Transportation	8	0	0
Printing and Reproduction	70	77	84
Real Property Maintenance	903	921	578

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. INTEGRATED COMBAT SYSTEMS TEST FACILITIES

Provides support for integration testing and in-service engineering testing for multiple ship class combat systems computer programs.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$3,074	\$3,696	\$3,889
Workyears	14	21	21

Efforts Funded

1. Test and Evaluation	187	317	336
2. Computer Program Spt	734	747	706
3. Equipment Installation	290	296	297
4. Equipment Maintenance	1,118	1,429	1,570
5. Facility Operations	343	418	493
6. Management/Admin/Financial	402	489	487

D. SEA AUTOMATED DATA SYSTEMS ACTIVITY (SEAADSA)

This program is consolidated with Logistics Support Activity group, and Data Support subactivity group in FY 1985.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$7,456	-	-
Workyears	191	-	-

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

E. PLANNING AND ENGINEERING FOR REPAIR AND ALTERATIONS (PERA)

Provides integrated planning for overhauls and for life cycle maintenance management of aircraft carriers, submarines, cruisers and destroyers, combat support ships, and amphibious and service craft. The primary functions of PERA's are long-range planning, engineering support, material support, standardization, and package integration.

1. <u>PERA Aircraft Carrier</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000) and Benefits	\$3,382	\$3,709	\$3,469
Expense Operating Budget	1,705	1,820	1,763
Direct Funded Salaries (non-add)	(968)	(891)	(805)
Workyears: Direct	26	23	21
Number of Ship Availabilities	16	16	16

Efforts Funded:

1. Modernization Planning Management	425	679	553
2. Integrated Maintenance Management	347	379	372
3. Material Management Programs	252	152	138
4. ILS Program Support	260	186	168
5. Technical Support Studies	393	493	475

2. <u>PERA Submarines</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$7,398	\$7,262	\$8,898
Expense Operating Budget	3,366	4,547	4,648
Direct Funded Salaries and Benefits (non-add)	(1,884)	(2,325)	(2,265)
Workyears: Direct	65	64	66
Number of Submarine Availabilities	77	81	87

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Efforts Funded:

1. Logistic & Other Tech Support	1,544	345	1,348
2. Mgmt. & Engn. Spt. for Submarine ovhl & EOC Avail. Planning & Test Development spt Programs*	1,562	1,848	2,205
3. Mgmt. & Engn. Spt. for Submarine Alterations & Maintenance Programs	926	522	697

* Logistics and planning for EOC availabilities and preparation of work packages is done in the PERA SS line vice BA 2.

3. <u>PERA Cruisers/Destroyers</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$5,749	\$9,870	\$5,849
Expense Operating Budget	3,518	3,842	4,389
Direct Funded Salaries and Benefits (non-add)	(2,236)	(2,245)	(2,172)
Work Years Direct	67	64	63
Number of Ship Availabilities	250	250	250

Efforts Funded:

1. Engineering svc. Support	2,231	3,103	1,460
2. Engineered Operating Cycle	-0-	2,925*	0

* This effort was transferred from BA-2 (DD-EOC program) in FY 85. Subsequently, this effort transferred to the Surface Ship Maintenance and Performance Monitoring Program (BA-2) effective FY 1986.

4. PERA Combat Support Ships/Amphibious and Service Craft

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$3,974	\$5,113	\$4,104
Expense Operating Budget	2,154	2,279	1,933
Direct Funded Salaries and Benefits (non-add)	(1,434)	(1,138)	(1,088)
Work Years: Direct	44	34	34
Number of Ship Availabilities	137	190	207

Activity Group: Field Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

PERA Combat Support Ships/Amphibious and Service Craft (cont'd)

Efforts Funded:

1. Overhaul Planning	874	1,445	1,086
2. Engineering Support	291	454	347
3. ADP	237	369	304
4. Baseline Data and Management	200	283	217
5. Service Craft Modernization Program	91	113	87
6. Test Program	127	170	130

IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>678</u>	<u>721</u>	<u>708</u>
Officer	336	407	393
Enlisted	342	314	315
B. <u>Civilian</u>	<u>3,603</u>	<u>3,504</u>	<u>3,545</u>
USDH	3,603	3,504	3,545

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Logistics Support Activities
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed.

Programs included in this activity group provide support to Fleet and shore station operations in such areas as:

- a. Technical documentation required for ship design and maintenance
- b. Ammunition movement, handling and disposal
- c. Safety of personnel and security of ships, shore stations, and sensitive weapons and material
- d. Equipment inventory control and accounting
- e. Management information systems and ADP support
- f. Underutilized capacity at ordnance stations
- g. Salvage operations and diving
- h. Inactivation of ships
- i. Other engineering and technical services in support of Fleet equipments, including surface missile systems and marine gas turbines.

Activity Group: Logistics Support Activities (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
	FY 1984	BUDGET REQUEST	APPRO- PRIATION		
Emergency Salvage	3,642	1,232	1,189	1,196	309
Pollution Abatement	0	0	0	0	0
Quality Evaluation Program	12,288	16,782	15,009	14,642	6,188
Surface Warfare Journal	287	353	353	300	3
Small Arms Management	2,529	1,864	1,850	2,297	310
SMS Logistics & Tech Support	3,567	5,511	5,393	4,950	773
RSS&I	61,576	53,458	53,022	57,640	3,637
Property Disposal of Ordnance	5,268	10,554	7,532	4,417	3,119
Nuclear Weapons Safety/Secur	4,881	6,266	6,123	5,984	226
Safety - General	3,366	3,232	3,216	3,152	1,248
NAVOSH Program	2,237	1,953	1,946	1,916	458
Radiation Control & Health	712	766	754	753	-29
Sensitive Ordnance Security	11,814	12,779	12,560	12,507	498
Ship Design Services	2,943	1,887	1,873	1,861	-67
NAVSEA Material Support	1,591	2,805	2,756	1,950	945
INSURV	1,701	638	633	1,231	-54
M Maint & Material Mgmt	12,598	15,873	14,912	14,767	250
Fed/Milt Stand & Specs	2,251	2,751	2,736	2,527	3,417
Energy Conservation	339	618	618	615	-6
Marine Gas Turbines	9,069	11,963	11,684	11,011	4,192
SNAP	12,583	16,528	16,206	16,025	-2,440
PHM Logistic Support	5,057	5,077	5,072	4,744	5,913
Standardization	298	399	300	344	64
Acquisition Planning	1,389	1,719	1,552	2,273	132
SAMIS	5,388	4,980	4,734	4,489	2,973
Logistic Support Program	17,764	20,908	19,626	19,523	20,924
Integrated Log Spt Tech Imprv	1,300	2,169	1,972	2,069	117
Navy Diving Program	3,425	3,813	3,726	3,599	770
Inactivation of Ships	20,193	5,136	5,047	4,632	57,552
Shipyard Modernization Prog	11,962	10,656	10,532	10,352	31,905
VAMOSC	623	614	574	561	91
Data Support	1,976	4,711	4,362	4,263	622
Underutilized Plant Capacity	90,095	91,473	91,473	110,129	-9,930
Other Support Prog Act	686	604	604	612	-49
TOTAL, LOGISTICS SUPPORT SERV	314,398	320,152	310,019	327,331	134,061

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$327,331
2. Pricing Adjustments		8,402
A. Civilian Personnel Compensation (Direct)	(-118)	
1) US Direct Hire Pay Adjustment	-139	
2) Other Direct Pricing Adjustments	21	
B. Stock Fund	(-1)	
1) Non-Fuel	-1	
C. Industrial Fund Rates	4,630	
D. Other Pricing Adjustments	3,891	
3. Functional Program Transfers		26,091
A. Transfers In	(27,470)	
1) Intra-Appropriation	27,470	
a) Expense/Investment Criteria		
Revision - Amounts transferred		
from Other Procurement, Navy		
pursuant to the proposed DOD		
initiative for elimination of		
\$3 thousand investment threshold		
and adoption of central management		
criteria as governing factor.		
Shipyard Modernization	26,282	
SAMIS	1,188	
B. Transfers Out	(-1,379)	
1) Intra-Appropriation	-1,379	
a) <u>SMPP/MDPP/DART</u>		
Funding is transferred to BA2 to the		
new Surface Ship Equipment Maintenance		
Monitoring Systems line from the		
Integrated Logistic Support Technical		
Improvement SMPP/MOPP/DART line. (-592)		
b) <u>Sensitive Ordnance Security</u>		
Transfer of 23 billets for security and		
inventory (AA&E) to CINCLANTFLT. (-787)		
4. Program Increases		121,826
A. Other Program Growth in FY 1986	(121,826)	
1) <u>Emergency Salvage</u>	258	
Increase due to emergency salvage		
requirement regarding two classified		
items.		

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- 2) Quality Evaluation 5,837
The growth in QE will be applied to ships combat systems and equipment readiness assessment. Funding (2,902) provides quantitative assessment of readiness parameters by ship class and is used to measure need for and effectiveness of readiness improvements. Funding (2,935) will be used for missile (SM-1/2, NSS, BPD) performance analysis, additional SUBROC requirements because of extension of fleet removal date, evaluation of SLMM components related to safe life, SM-2 maintenance quality analysis, propulsion and electro explosives, evaluation programs for new weapons, RAM and 5" GP, and quality determinations for Marine Corps munitions in Maritime Prepositioning Ships.
- 3) Small Arms Management 255
Increased funding will provide an additional .7 manyear of effort to perform the missing, lost, stolen, or recovered (MLSR) function (46). Also, will provide 3.5 manyears of effort to partially perform the segregation, serialization, and Inventory of weapons in Depot storage (209).
- 4) SMS Logistics and Tech Support 653
Program growth is due to the increased resources required to support the new FFG-7s entering the fleet.
- 5) RSS&I 2,240
Increase funds an additional 31 thousand short tons of regular RSS&I to support the expanding Fleet requirements based on current Fleet schedules (614). Additional funds are required to support full implementation of Fleet Optical Scanning and marking system (FOSAMS), since the design and development effort will be completed in FY 1985. (1,626)
- 6) Property Disposal of Ordnance 3,001
Increase is required to reduce the 37,000 short ton, 35,600 line item backlog awaiting reclamation, sales, demilitarization, or relocation by 8,000 S/T (1,871). Supports inventory accounting and reporting functions, new receipts inspection/verification, and

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

physical inventories on 20,000 L/I (170).
Maintains demilitarization facilities/
equipment and installs available new
demilitarization equipment at 1 activity (960).

- | | |
|--|-------|
| 7) <u>Safety</u> | 1,158 |
| Increase provides funding for the Combat Vessel Test Program for tests on 8 major weapons systems (600); for the HERO retest program to evaluate 30 major weapon systems (525); and for evaluation of an additional 5 lithium battery systems (33). | |
| 8) <u>NAVOSH</u> | 471 |
| Increase provides funding for Safety School Training for an additional 320 personnel. | |
| 9) <u>Sensitive Ordnance Security</u> | 985 |
| Increase funds Security Shore and Shipboard Equipment (locks, hasps and weapon containers) (201). Increase also funds the inventory of an additional 34,000 tons of ammunition and 141,000 arms in risk categories I-IV (784). | |
| 10) <u>Ship Design Services</u> | 670 |
| Increase will be used to reduce backlog of outdated design practices. | |
| 11) <u>NAVSEA Material Support</u> | 1,012 |
| Fully funds HM&E related computer support (884). Strip Ship will reclaim an additional 28 pieces of equipment (128). | |
| 12) <u>INSURV</u> | 64 |
| Increase provides funding for development of additional Combat Systems Trials Test programs. | |
| 13) <u>Maintenance and Material Management</u> | 1,192 |
| Reflects the increase in on-board SNAP units which require development of an initial logistic data base. (685) Expand Reliability Centered Maintenance (RCM) effort. (507) | |
| 14) <u>Fed/Mil Standards and Specifications</u> | 3,334 |
| Increase will allow 41 additional Specs or Standards to be updated or developed. This has a direct impact on the operating fleet by minimizing the number of outmoded, deficient or overly expensive equipments put on ships during the overhaul/repair cycle. (354) | |

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Ship Survivability Design is a FY 1986 new start which updates survivability design documents. Survivability design documents pertaining to nuclear effect, non-nuclear effects and susceptibility require upgrading to implement both changed policy and more stringent hardening requirements. (693) HM&E standardization is a FY 1986 new start which will develop 22 standard Navy specifications that will enable a procurement activity to procure standard spare parts (2,287).

15) Marine Gas Turbine (MGT) 4,849
Increase is for MGT support of the LCAC class introduced into the Fleet in FY 1986 (1,700); to develop life cycle management for diesel engines (452); and to increase the current capability for depot repair of MGT Ship Engineering Control Systems in order to maintain the turn-around-times required to keep ship downtime to a minimum (2,697).

16) SNAP 1,412
Increase in field support as the number of systems to be supported increases from 328 to 450.

17) PHM Logistic Support 5,709
Increase results from adjustments in the range and depth of the Contractor Logistics Support shore materials, technical problem resolution, and development of additional ship maintenance information for the PHM class.

18) Standardization 51
Funds development of a procedure to automate routine updates of Components Characteristics File information into the standardization data base.

19) SAMIS 1,761
Increase is for NARDAC Computer Support and SAMIS implementation for additional site terminal support at planned user sites.

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

20) <u>Logistic Support Program</u>	20,134
Spare Parts Breakout funding supports 2,254 additional full screen breakout reviews of spare parts with an annual buy value greater than \$10K. This includes 18 additional Acquisition Method Coding Conferences, 19 Contractor Technical Information Coding packages and 10 Technical Data Acquisition packages (12,075). SECAS funding primarily supports validations of 12 additional ships and shore activities and assignment of Automated Integrated Language System Identification Numbers (AILSIN) for 176 additional ships (5,128). PAFOS funding supports supply readiness program and depot level provisioning program and increased support for the provisioning allowance program (2,029). ILO funding generates and maintains procedures, and provides assistance for Ship Planned Maintenance System documentation training for ILO site staffs (902).	
21) <u>Integrated Log Spt Tech Imprv</u>	1,310
Program increase will fund development of a Command level logistics guide to assist program managers in the preparation & execution of logistic responsibilities; expand audit program; and commence effort to institutionalize an ILS tracking system to be used at industrial sites.	
22) <u>Navy Diving Program</u>	744
Program increase to meet additional testing and fleet support requirements: includes 1 rescheduled deep sea dive, the testing of 10 pieces of experimental diving equipment, 40 Diver Air Purity Analyses, 160 surface support diving tests, 10 diving system certifications, 9 field evaluations, and 5 configuration management systems developed.	
23) <u>Inactivation of Ships</u>	58,661
Submarine - Increase provides for the inactivation of 3 nuclear submarines.	
24) <u>Shipyard Modernization</u>	5,270
Increases funds six additional magnetic silencing systems (2,352), the maintenance of two additional nuclear hulls (471), 579	

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

man weeks of FAMI-IMA Combat Systems training (1,297) and technical improvements for propeller profiler support, a new start (100). This increase will also fund additional pierside security at shipyards. (1,050)

25) Data Support 635
Increase for Central Design agent for NAVSEA Automated Data System Activity efforts for SUPSHIPS (183), PERA's (231), and increased Data Communications requirements (150). Additional Data Support requirement for Headquarters graphics (36) and line placing (35).

26) Other Program Increases 160
a) Nuclear Weapons Safety and Security 55
b) Acquisition Planning 37
c) VAMOSC 68

5. Program Decreases -22,258

A. Other Program Decreases in FY 1986 (-22,258)

1) NAVOSH -80
One less safety inspection will be performed.

2) Ship Design Service -795
Decrease due to elimination of purchase of Remote site computing time. Design computing service will be reduced to 70%. These remote services cannot be provided by current in-house facilities.

3) INSURV -170
Material Inspections will receive 3.2 workyears less support in FY 1986.

4) Maintenance and Material Management -1,405
Documentation Maintenance - 3,100 fewer complex Technical Feedback Reports (TFBR) will be answered (-506). MDS II - Delays the effort to coordinate current ADP maintenance systems, using SNAP computers, into one central maintenance system (-899).

Activity Group: Logistics Support Activities (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

5) <u>Marine Gas Turbine</u>	-854	
The major existing diesel engines problems in the areas of supply support, technical documentation, operational guidance, shipyard practices and procedures, product improvements and maintenance improvements were resolved in FY 1985.		
6) <u>SNAP</u>	-4,541	
Decrease is due to the completion of installation support for SNAP I systems and decreasing installation support for SNAP II systems.		
7) <u>Integrated Log Spt Tech Imprv</u>	-671	
<u>SMPP/MIP/DART</u> Number of ROHs planned and evaluated decreases from 4 to 3. Additionally, the following programs are eliminated: maintenance support for SFOMS; technical assistance analyses; prototype class techplans; and issuing standard test procedures. Decreases also associated with the completion of development of age reliability curves and procedures. (-671)		
8) <u>Inactivation of Ships</u>	-1,077	
Two fewer surface ships will be inactivated.		
9) <u>Underutilized Plant Capacity</u>	-12,587	
Decreased requirements at the ordnance facilities to maintain mobilization capacity. Funding at the FY 1986 budget request amount is adequate to maintain 85% mobilization capacity at these facilities.		
10) <u>Other Program Decreases</u>		-78
a. <u>Surface Warfare Journal</u>	-9	
b. <u>Radiation Control and Health</u>	-8	
c. <u>Energy Conservation</u>	-32	
d. <u>Other Support Program Act</u>	-29	
6. <u>FY 1986 President's Budget Request</u>		\$461,392

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation

A. EMERGENCY SALVAGE OPERATIONS

Program provides the capability to respond to operational salvage and stranding requirements for Navy ships, submarines, cargoes, and high interest items (missiles, ordnance, and other objects). Funding pays for ships, equipment personnel, and other material required for emergent salvage operations.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	\$3,642		\$1,196		\$1,505	
Ship Salvage Operations	108	3	719	4	749	4
Submarine and High Interest Salvage Ops	3,534*	1	477	2	756	4

*Funding for KAL 007 salvage operation

B. SURFACE WARFARE SYSTEMS

1. Quality Evaluation

The quality evaluation program provides for quantitative test and evaluation appraisals of the safety, readiness, effectiveness, and shelf or service life characteristics of in-service expendable munitions. The results of the appraisals are provided to acquisition and in-service munitions program managers.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$/	WY	\$/	WY	\$/	WY
Total Funding	12,288		14,642		20,830	
Nuclear Weapons Eval (Workyears)	1,555/22		1,767/25		1,847/26	
Conventional Weapons Eval (Workyears)	10,733/150		12,875/179		16,081/218	
Ship Maintenance Analysis	-		-		2,902/ 39	

2. Surface Warfare Journal

Surface Warfare Journal is published to 350,000 officers and enlisted personnel of the Surface Warfare community to increase professionalism, improve readiness, and increase retention.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$/Units	\$/Units	\$/Units
Total Funding	287	300	303
Issues Published per year (50,000 copies per issue)	6	6	6

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. Small Arms Management

Provides centralized life cycle Navy program management for small arms, weapons, and mounts as well as combat equipment, 2,665 individual unit allowances for Navy Marine Corps Aviation, Coast Guard, and Military Sealift Command Organization.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$/ Units		\$/ Units		\$/ Units	
Total Funding	2,529		2,297		2,607	
Allowance Management	418	7.0	441	7.0	452	7.0
Serial Report for DOD Registry	525	8.0	519	7.4	531	7.4
In-Service Engineering Agent	482	7.0	441	7.0	452	7.0
Engineering Design Agent	337	4.9	356	4.9	365	4.9
Small Arms Inventory (# in Thousands)		375		376		377
Missing, Lost, Stolen or recovered government property program	562	8.9	540	8.6	598	9.3
Serialization, Screening, Segregation						
Inventory of weapons in Depot storage	205		-	-	209	3.5

4. Surface Missile System (SMS) Integrated Logistic Support

SMS Integrated Logistic Support provides logistics and technical support, assurance of quality instructions and availability of spares, supports data management, and installation and training equipment support of the Standard TERRIER, TARTAR, and surface missile systems in the Fleet.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
Total Funding/WYs	\$ 3,567/30.5		\$ 4,950/45.9		\$ 5,723/53	
<u>Product Improvement</u>	936		1,040		1,034	

The objective of this program is to ensure that up-to-date quality assurance instructions are employed in the inspection and test of missiles and components, that the configuration, parts and components are verified, and when necessary, parts are made available from the material repository to support urgent fleet requirements.

<u>Test Equipment Logistics Support</u>	298	282	288
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The object of this program is to support test equipment, depot level repair/maintenance planning, and metrology.

<u>Operations/Technical/Logistics Support</u>	2,333	3,628	4,401
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The objective of this program is to manage technical data for SMS engineering, ILS functions and operational forces.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. AMMUNITION SYSTEMS

1. Receipt, Segregation, Storage, and Issue (RSS&I) of Ammunition

Provides personnel and material associated with the movement, handling, and storage of ammunition required to support Naval, Marine Corps, and Coast Guard forces.

Regular RSS&I - Provides for the loading and unloading of ammunition from fleet ships and for all other handling within the Naval weapons stations and other NAVSEA industrial funded ammunition activities. Program requirements are based on: Fleet operating schedules; ships entering and retiring from the Fleet, overhaul schedules; new weapon systems installed on ships; and stock adjustments.

Rollback/Prepositioning of Ammunition - Provides for the rollback of excess and non-ready-for-issue stocks from storage outside of the continental United States and the prepositioning of war reserve and peacetime requirements to deployed fleet units, depots.

AE/AOE/Homeporting - Provides funding for the loading and unloading of mobile logistics support ships to permit ship hull and machinery maintenance at industrial piers where necessary services are available.

Approved Basic Stock Level Ammunition (ABSLA) Excess Relocation - Provides for the relocation of excess explosive stocks at coastal weapons stations.

Intra-DOD Warehousing - Provides for common service warehousing support of Air Force Cartridge and Propellant Actuated Devices.

OPSCAN - Supports a Productivity Enhancing Capital Investment (PECI) Project which improves the timeliness and accuracy of non-nuclear expendable ordnance material inventory management through the application of optical scanning technology to ammunition logistics.

Inventory - Supports an OPNAV mandated annual inventory of all ammunition stocks stored at CONUS weapons stations.

FOSAMS - Fleet Optical Scanning and Marking System. Expands the application of optical scanning technology to Fleet units.

	FY 1984		FY 1985		FY 1986	
	\$	WY	\$	WY	\$	WY
Total Funding	61,576	751	57,640	729	61,277	738

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Regular RSS&I	53,090	465,702	48,906	430,615	50,694	461,370
Rollback/Prepositioning Ammunition	1,116	6,791	1,234	5,076	1,264	5,391

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Receipt, Segregation, Storage, and Issue (RSS&E) of Ammunition cont'd)

AE/AOE	2,644	29,554	2,207	28,382	2,261	31,248
Homeporting						
Units = Number of short tons						

ABSLA Excess Relocation	577		1,110		1,137	
Intra-DOD Warehousing	400		679		695	
OPSCAN	315		0		0	
Inventory	3,434		1,944		1,991	
FOSAMS (Fleet OPSCAN)	0		1,560		3,235	

2. Property Disposal of Ordnance

Supports personnel, materials, and facilities to make safe and dispose of ordnance which can no longer be maintained or has left the Navy inventory. These weapons and weapon components are then made available for: disposal, reuse, reclamation, or sale. (Revenues from sales are deposited in the general Treasury).

	FY 1984	FY 1985	FY 1986
	\$ Units	\$ Units	\$ Units
Total Funding	5,268	4,417	7,536

1. Disp Admin Accty reporting, Receipt Inspec, Shipment, & Quality Assurance (No. of Line Items)	2,134 (25,550)	1,755 (28,150)	2,150 (20,300)
2. Disp Tech Spt, Demil Test & Eval, & Equip Maint (WY's)	2,085 (22.94)	1,840 (23.9)	1,328 (18.64)
3. Disp Demil, Declass, & Inert Ord Procs (Short Tons)	841 (1,700)	594 (2,340)	2,640 (10,400)
4. Disp Reclamations, & property sales (No. of Line Items)	105 (1,562)	62 (923)	468 (4,200)
5. Disp Equip Installation (WY's)	-0-	121 (1.3)	870 (10.2)

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

6. Destruction of Ammunitions, Explosives, & Other Dangerous Articles (No. of Short Tons)	103 (220)	45 (150)	80 (280)
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D. SAFETY AND SECURITY

1. Nuclear Weapons Safety and Security

The safety portion of the program provides for implementation of the DON Nuclear Weapons safety program and includes the distribution and control of technical publications and supporting in-service engineering functions related to nuclear safety. The security portion of the program provides for upgrading and hardening nuclear weapons-capable Navy activities, including maintenance of specialized security systems and sensors, upgrading ordnance communications, and leasing security vehicles. Shipboard security includes upgrading security alarm systems and improved tactical communications.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$/Units</u>		<u>\$/Units</u>		<u>\$/Units</u>	
Total Funding	4,881		5,984		6,210	
Safety Studies/ In-Serv Eng actions	(2,350)	755	(2,820)	766	(2,801)	751
Nuclear Security:	(2,531)		(3,164)		(3,409)	
Ordnance Station Security	2,231		2,504		2,105	
Shipboard Security/ Ship Installations	300	12	660	22	1,304	42

2. Safety - General

Provides support for the assessment of hazards of electromagnetic radiation and the damage potential of accidents involving explosives and weapons systems.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$</u>	<u>WYRS</u>	<u>\$</u>	<u>WYRS</u>	<u>\$</u>	<u>WYRS</u>
Total Funding	3,366	34.7	3,152	34.1	4,400	38.8
Weapons System Explosive Review Board	1,279	12.7	1,274	12.7	1,374	12.7
Combat Vessel Test Program (Systems Analyzed)	221	4	-		600	8
HERO Program	1,000	12.9	1,000	12.3	1,500	17.0
Lithium Batteries (Explosion Hazards)	300	3.0	300	3.0	300	3.0

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Safety Publications	476	6.1	488	6.1	536	6.1
Naval Explosives Safety Improvement Program	90	-	90	-	90	

3. Navy Occupational Safety and Health (NAVOSH)

Provides technical support for guidance and procedures regarding detection, evaluation, and control of workplace hazards such as asbestos, mercury, work in confined spaces, lead and other hazardous material/processes. Correction of equipment and facilities deficiencies is included. Also provides for the operation and maintenance of the NAVSEA safety school curriculum, training modules, and career development programs.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	2,237		1,916		2,374	
<hr/>						
NAVOSH Technical Support						
Safety Investigations	388	/8	578	/12	523	/11
NAVSEA Safety School	1,459		938		1,451	
People Trained		/915		/588		/908
Lithium (Health Hazards) Batteries	390		400		400	

4. Radiation Control and Health

The program directs the Navy-wide radiological control effort for personnel who handle, stow, or maintain Navy nuclear weapons.

	FY 1984		FY 1985		FY 1986	
	\$/Units		\$/Units		\$/Units	
Total Funding	712		753		724	
<hr/>						
1. Surveys and Tech Services	\$603		\$508		\$506	
2. Tech Assts, Training and Prog Spt	37		49		53	
3. Program Implementation	11		39		25	
4. Radiological Lab Services	61		157		140	

5. Sensitive Ordnance Security

Provides physical security and accountability of Navy arms, ammunition and explosives with guards, inventory personnel, and security equipment.

	FY 1984	FY 1985	FY 1986
Total Funding	11,814	\$12,507	\$13,005
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Ordnance Inventory	\$3,006	\$1,718	\$2,851
Ammo Inventoried			
Risk Categories I - IV* (Tons)	82,427	47,987	82,427

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Arms Inventoried (# of Items)

Risk Categories I - IV*	338,826	197,226	338,826
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* Ordnance Inventory explanation of Risk Category:

Risk Category I contains non-nuclear missiles and rockets in ready-to-fire condition.

Risk Category II contains grenades, mines, demolition, explosives, and light automatic weapons.

Risk Category III contains .50 caliber and large ammo equipment, and explosive projectile and major ancillary equipment,

Risk Category IV contains ammo with non-explosive projectile, non-automatic weapons (hand guns, etc.), riot control material (tear gas, flares) & equipment/material not covered above.

Physical Security	\$ 6,280	\$ 7,794	\$ 7,650
Workyears	157	170	170
Security Vehicles leased	43	46	46
Security Equipment leased	-	-	-
Patrol Boats Supported	3	3	3
Technical-Surveyors-Inspections	\$ 1,102	\$ 645	\$ 685
Shore Surveys/Audits/Inspections	94	48	37
Ship Surveys/Audits/Inspections	93	121	108
In-Service Engineering	\$ 264	\$ 280	\$ 305
Inventory/Security (CINCs)	\$ 947	\$ 1,917	\$ 1,130
Workyears	30	54	31
Shore & Shipboard Equipment	\$ 69	0	\$ 201
Locks, hasps, containers	28	-	350
Lockshop (Crane)	\$ 146	\$ 153	\$ 183

E. SHIP SYSTEMS

1. Ship Design Services

a. Ship Design Engineering Methodology - Develops and updates Navy unique ship design criteria and practices. Currently backlog is more than 150 practices requiring upgrading. Also updates design synthesis models which provide the baseline data on ship performance and cost for all classes of ship design. Updated criteria make discrepancies between Navy and contractor estimates and designs readily identifiable. Design synthesis models increase the emphasis on performance/cost tradeoffs through all stages of design development.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

b. Automated Engineering Data Support - Provides computer support to design engineers for automated calculations essential to ship design, construction, and maintenance. Computer programs, such as simulation models, are available and used extensively for solving the numerous "what if" questions ranging from structural and vibrational analysis of small foundations to hull definition and ship design weight estimates. Cost benefit ratios favoring automation are conservatively 100:1 for calculation, 3:1 for drafting and 20:1 for scientific data management. Cost avoidance for calculations alone is estimated at \$30 million or greater. Funds provide (1) service support for the in-house facility, (2) supplies and equipment maintenance for the in-house facility, and (3) remote facility computing time.

c. Configuration control - Performed technical validation of total ship configuration baselines and life-cycle system and component changes to ship/ship class design and related logistic support (funded in FY 84 only).

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$/Units</u>		<u>\$/Units</u>		<u>\$/Units</u>	
Total Funding	2,943		1,861		1,794	

a. Ship Design Engineering Methodology						
Practices updated	179	3	150	2	787	12
Models updated	35	1	45	1	86	2
Subtotal	\$214		\$195		\$873	
b. Automated Engineering Data Support						
In-House Computer Time Includes Support Service	\$847		\$894		\$921	
Remote Facility Computing Time	\$882		\$772		\$0	
Average # of Users	300		320		204	
c. Configuration Control	1,000	10	0	0	0	0

Activity Group: Logistica Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. NAVSEA Material Support

Maintains and monitors NAVSEA In-store (on the shelf) assets. Removes needed equipment from stricken or inactive ships and prepares it for shipment. Also provides a management information system to monitor program development. The program objective is to ensure that government furnished material which is in storage or on-board inactive ships is delivered on-time to meet contractual shipbuilding schedules to avoid costly delays and/or to establish accelerated ship overhaul schedules. The program has three main parts: (A) Material Upkeep, which seeks to preserve stored equipment from deterioration and thereby protect a \$161.4 million inventory; (B) Strip Ship, in which equipment needed for new construction or for overhauls is removed from stricken ships, thereby avoiding the cost of new equipment procurement; and, (C) Data Systems Support, which procures data processing from the Naval Regional Data Automation Centers in support of Hull, Mechanical and Electrical related tasks such as definition and monitoring of the billion dollar acquisition of 2S, 2F, and 2J cog equipment.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	1,591		1,950		2,895	
Material Upkeep	763		960		981	
Pieces of equipment preserved		197		268		273
Strip Ship Program*						
DDG-33 (EX-PARSONS)	0		498			
DD-945 (EX-HULL)					555	
Pieces of Equipment Removed				120		148
HM&E Data Systems Support.	828	13.8	492	8.2	1,359	22.4

*Variations in Strip Ship unit cost are a result of end-use of the vessel (i.e., sale, donation, target, etc.) after it is "stripped"; location on the ship of equipment being removed; and variations in manday rates (i.e. East Coast VS West Coast and private yard VS public yard).

3. Inspection and Survey (INSURV) Material Inspections

Provides skilled technicians to support the work of the President of the Board of Inspection and Survey (PRESINSURV). The Material Inspections (MI) of ships of the active fleet conducted by INSURV gives the Chief of Naval Operations an impartial factual report of the material condition of each ship on a triennial basis. These survey reports highlight any condition which degrades the ship's capability to perform its mission or which indicates that the ship is not being properly maintained. A useful by-product of the Material Inspection is the detailed information on individual system/equipment deficiencies, which is used in planning corrective maintenance.

	FY 1984		FY 1985		FY 1986	
	\$	/Units	\$	/Units	\$	/Units
Total Funding	1,701		1,231		1,177	
INSURV MI's	1,282		1,159		1,039	
Total WY's		26.5		22.8		19.6
Baseline Studies		419		72		138

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

In addition to material inspections, fleet baseline studies of systems/equipment equipment problems on specified ship classes are conducted. These are also initiated by PRESINSURV.

4. Maintenance and Material Management (3M)

The program is comprised of the following Fleet support efforts: (A) Planned Maintenance System (PMS) provides each ship with the maintenance procedures required to maintain ship reliability; updates each ship's procedures twice a year; and provides replacements upon request. (B) SNAP Data Base Program, provides and maintains configuration data bases for SNAP I and II installations; (C) Maintenance Data System (MDS), provides data that is used by SYSCOMs and the Fleet to plan for maintenance needs and Fleet improvements; (D) Navy Oil Analysis Program (NOAP), provides analysis of Machinery lube oil to predict repair needs; and (E) Surface Ship Machinery Condition Assessment (SSMCA) whose objective is to eliminate unnecessary overhaul of machinery by recommending repairs based on machine condition in lieu of elapsed time.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	12,598	14,767	15,017

A detailed description of the four elements of the program follows:

A. Planned Maintenance System (PMS)

PMS Library funding provides for updates of maintenance procedures to 2300 Fleet and Shore Activities. It also provides maintenance procedures upon request. PMS Documentation Maintenance provides for revision/update of maintenance documents; for answering complex and routine technical feedback reports related to Hull, Mechanical and Electrical (HM&E) systems; and for processing other feedback reports. Reliability Centered Maintenance (RCM) is an effort to redevelop PMS documentation. PMS documentation developed under the RCM methodology results in a system approach versus an equipment approach to maintenance. Previously implemented on FFG-7, DD-963 and FF-1052 classes and on new construction ships. Combat Systems Readiness Review (CSRR) is a detailed evaluation of the Combat System's condition prior to deployment. CSRR/CSRT provides Combat System test plans which use PMS documentation to test material readiness of ships prior to deployment. It has been proven by INSURV that performance of PMS requirements improves Fleet readiness. RCM effort reduces manhour requirements of PMS without adversely affecting readiness.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PMS Library	2,400	2,500	2,600
PMS Documentation Maintenance	5,525	6,225	5,927
Reliability Centered Maintenance (RCM)	-0-	587	1,112
Combat System Readiness Review/Combat System Readiness Test (CSRR/CSRT)	-0-	300	300
Total	7,925	9,612	9,939

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. SNAP Data Base

Provides for initial development of ships' SNAP I and II logistic data base (Scheduled to complete in FY 1988). Also provides for initial development of data files which handle configuration changes of logistic data in a mechanized format. This latter effort is required to allow ships with SNAP I and II systems to accomplish automatic update related to configuration change. Reduces shipboard administration workload and improves quality of data used in identifying problems in equipment reliability and logistic support.

Data Base Development	300	500	700
Data Base Maintenance	-0-	-0-	500
Total	<u>300</u>	<u>500</u>	<u>1,200</u>

C. Maintenance Data System (MDS)

Provides for collection of maintenance records from the Fleet and establishment of data bases for use of the Fleet and SYSCOMs. Data obtained from MDS system is used to plan for maintenance needs and Fleet improvements. Also included in MDS is an effort to upgrade maintenance management in the Fleet and at Shore activities (MDS II). Included in MDS II is the effort to coordinate current ADP maintenance systems, using SNAP computers, into one central maintenance system at the organizational and intermediate levels, to support TYCOM maintenance management and to provide an improved interface with depot maintenance. This will improve reliability, maintainability and logistic support of fleet equipment, which impacts the operational readiness of the ship.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
MDS I	1,589	2,646	2,465
MDS II	300	1,189	590
Total	<u>1,889</u>	<u>3,835</u>	<u>3,055</u>

D. Navy Oil Analysis Program (NOAP)

Minimizes need for periodic maintenance and improves machine availability onboard ships.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
NOAP	824	820	823

E. Surface Ship Machinery Condition Assessment (SSMCA)

FY 1985 and outyear funding transferred to Surface Ship Improvement Program in BA-2.

Total	1,660	0	0
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5. Federal/Military Specs/Stds

There are three main parts to the program:

Prepare, Update F/M Spec/Stds - Prepare and update Federal and Military Specifications and Standards needed for ship equipment acquisition, maintenance, repair and overhaul.

Federal/Military Specs/Stds (HM&E Standardization) - Develop standard specifications that will enable any procurement activity to acquire a standard unit or piece parts support. The objective of this effort is to increase

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Fleet readiness by minimizing the diversity of HM&E equipment and systems and their supporting documentation.

Federal/Military Specs/Stds (Ship Survivability Design) - Survivability design documents for nuclear effects, non-nuclear effects and susceptibility require upgrading to implement substantially changed policy and more stringent hardening requirements. The current survivability design documentation reflects World War II "Lessons Learned" and does not adequately account for current/postulated threats or advanced technology that has evolved in recent years.

	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
Funding Total	2,251	2,527	5,944
Update Specs and Stds	2,251/1832	2,527/1846	2,964/1887
Standardize Specs			2,287 22
Survivability Doc. Update			693 9

6. Energy Conservation

Program provides support for planning, coordinating and implementing the NAVSEA Energy Conservation (EC) Program. The program covers the full-range of EC, governing current and future ships as well as NAVSEA shore activities and consists of four main efforts: A. Ship Energy Conservation Assist Team (SECAT) Visits during which the SECAT demonstrates to ships force energy conservation measures which utilize existing equipment. B. New Ship Design Analysis - Review new ship designs for implementation of energy conservation initiatives. C. Ship Energy Conservation supports issuance of energy conservation regulations, application of related R&D projects and expedited hull cleaning and coating. D. Energy Conservation (EC) - checklists will be developed for several ship classes. The checklists compile many energy conservation strategies for easy reference by shipboard personnel.

	<u>FY 1984</u> <u>\$/ Units</u>	<u>FY 1985</u> <u>\$/ Units</u>	<u>FY 1986</u> <u>\$/ Units</u>
Total Funding	339	615	609
A. SECAT Visits Savings	239 8 visits 46K BBLs*	360 12 visits 69K BBLs	360 12 visits 69K BBLs
B. New Ship Design Analysis	0	30 1 Anal	42 2 Anal
C. Ship Energy Conservation Savings	100 19K BBLs	97 19K BBLs	82 18 BBLs
D. EC Checklists (CL)	0	128 5 CL	125 5 CL

*BBLs = Barrels of oil Saved

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

7. Marine Gas Turbine

In FY 1986, 124 U.S. Navy combatant ships will use 557 Marine Gas Turbines (MGTs) for propulsion or electrical power generation. The replacement cost of these assets is well in excess of \$1 billion. The program provides life cycle engineering and technical support services for the MGTs and associated MGT Ship Engineering Control Systems (ECS) as well as selected diesel engines, (i.e., Fairbanks Morse and Detroit Diesel Allison 71 Series). Efforts support an increasing and aging MGT /ECS population by maintaining a high level of fleet readiness with a limited number of spare engines. Funding provides for: ship assistance teams to augment ships' personnel in accomplishing depot level repairs in place; engineering support for emergent fleet problems; technical manual maintenance and update; program management support (configuration management and reliability maintainability data systems management) necessary for planning on board inspections and repairs. The depot level repairs, accomplished on board, are specifically designated by the MGT program office on a case-by-case basis.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	8,069		11,011		15,203	
Total Diesel Funding	687		1,080		697	
Total MGT funding	7,382		9,931		14,506	
MGT Engines Supported		471		514		527
Combatant Ships with MGT		100		113		124
On Board Repairs		64		111		96
Cost Avoidance/Yr		27M		51M		47M

If the repairs are not done on board, but at the depot, the additional cost to NAVSEA refit and restoration line would be as indicated above in the cost avoidance line. Furthermore, the supply of spare engines will be quickly exhausted because repair requirements will exceed depot repair capacities.

8. Shipboard Non Tactical ADP Program (SNAP)

The SNAP I and II programs are an effort to replace obsolete nontactical automated support on the larger ships and to introduce standard nontactical ADP equipment on smaller ships of the Fleet in order to reduce clerical and administrative burdens. Higher goals of readiness require the effort toward decreasing time spent on administration so that increased time can be spent on operational functions. Morale is also improved by workload reduction. SNAP I replaces obsolete equipment on large ships such as aircraft carriers and auxiliaries and adds an interactive capability throughout the ships. SNAP II provides ADP capability for 450 smaller ships.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
TOTAL FUNDING	12,583		16,025		13,585	
1. Field Support	1,456		2,416		3,932	
2. SNAP I Contract	7,441		9,107		4,971	

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. SNAP II Contract	3,203	4,023	4,124
4. Other Contractor Spt	483	479	558
Number of Ships Maintained	200	328	450

9. PHM Logistic Support

Provides PHM Class support through the use of contractor logistic support. This program effort is a management effort to improve the readiness of these ships especially in the materials management area by having a ready stock of unique and necessary parts for the six ships. The contractor logistic support provides unique material support, engineering and technical support and planning yard design agent support. The Navy spent \$389 million to build five PHMs. So far, performance of these ships has suffered because of logistic support problems due to not having a complete stock of the unique materials necessary for maintaining readiness of these ships.

Number of Ships	6	6	6
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$5,057	\$4,744	\$10,657
1. Materials Management	1,952	1,850	2,883
2. Planning Yard	1,287	1,136	1,424
3. Eng and Tech Support	1,818	1,758	2,426
4. Materials	-0-	-0-	3,924

Inputs/Outputs

Repairables processed/per mo.	14	9	50
Turnaround time/days	235	235	70
Line item procurement/items	25	19	90
Leadtime/days	195	195	50
Line Item issues/per mo.	45	40	150
Tech Sup Reqs Placed in work/mo.	3	2	30
Manual Revisions/per mo.	1	.5	5

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

F. ACQUISITION AND LOGISTICS SUPPORT

1. Standardization

This program is designed to conserve resources by standardizing equipment, parts, material and related software and procedures. The program provides for the development of general approaches and detail procedures for achieving standardization in ship acquisition and maintenance actions. It also supports a continuing effort to minimize models and varieties of shipboard equipment.

	FY 1984		FY 1985		FY 1986	
	\$	WY	\$	WY	\$	WY
Total Funding	298	6.3	344	5.5	408	7.3
Proj Reducing Varieties of Equip	115	2.0	125	2.0	98	1.8
Maintain & Update Data Base	183	4.3	81	2.0	160	4.0
Standardize Overhaul Procedures			138	1.5	150	1.5

2. Acquisition Planning

Provides the following: the establishment and maintenance of a ship acquisition data base; studies and reports related to ship acquisition planning; and the continued study of ways to improve specifications and planning in major systems acquisition and ship construction projects, mobilization planning and support for the NAVMAT Data System.

Total Funding	\$1,389	\$2,273	\$2,405
a. <u>Acq Plng & Control Exec (WY)</u>	\$235 2.4	\$392 4.4	\$516 5.1

Provides support for preparing alternative 15-year shipbuilding programs, programmatic and industrial-base assessment, update of the Navy Ship-building Program Book, and a data base of acquisition schedules and industry/material planning data.

1. Systems Analysis and programming	225	284	343
2. Equipment Maintenance	-	42	84
3. Supplies	-	6	11
4. Other	10	60	78

b. Acquisition Appraisal/Assessment

\$17	1	-	-
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Provides a data system that displays timely and quality information on acquisition program appraisal of more than 200 programs.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	FY 1984		FY 1985		FY 1986	
	\$	WY	\$	WY	\$	WY
c. <u>Test and Evaluation Reviews</u>	\$199	2.4	\$224	2.5	\$258	2.9

Provides engineering support for reviews of each acquisition program's Test and Evaluation Master Plan, and for examining test results prior to certification of a system's readiness for operations evaluation and approval of start of production.

d. <u>Shipbuilding Programs</u>	\$ 42	.5	\$136	1.6	\$105	1.2
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Supports COMNAVSEA as Coordinator of Shipbuilding, Conversion, and Repair for DOD. Provides engineering support for the installation of equipment aboard merchant ships to augment naval forces, as required by law.

e. <u>Acquisition Policy/Guidance</u>	\$162	1.6	\$214	2.3	\$195	2.0
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Provides for development of acquisition policies and procedures, including those associated with Configuration Management, and extension of the 5 digit work breakdown structure (WBS) for application to construction, repair and maintenance.

1. Acquisition Policies	62		65		60	
2. Extended WBS	50		74		70	
3. Configuration Management	50		75		65	

f. <u>Mobilization Planning</u>	\$280		\$325		\$298	
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The mobilization process encompasses all activities necessary to move systematically and selectively from a normal state of peacetime preparedness to a warfighting posture. It includes phased incremental options both for deterring war and for enhancing force readiness, deployment, or sustainability should deterrence fail. The complexity and magnitude of the mobilization process makes sound planning essential for successful implementation. This program provides for the systematic execution of NAVSEA mobilization related programs and involves an analysis of major JCS/Navy Planning Documents and Fleet Operation Plan (OPLAN's), Logistic Support and Mobilization Plans. It also provides analysis of related industrial mobilization plans to determine adequate levels of logistic support and to evaluate the ability to meet these requirements.

1. Advance Base Functional Program	134		-		-	
2. Logistic Support and Mobilization Plan (wy)	146	3	325	6.4	298	5.5
g. <u>Naval Material Data Systems Group Support</u>	\$190		\$201		\$250	

Program provides support for a facility which includes the following functions: (1) a comprehensive communications capability; (2) approximately 2500 cubic feet of files and records; (3) office spaces and supplies to accommodate approximately 300 people; and (4) an emergency first-aid area.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
h. <u>Commanders Development Program (CDP)</u>	\$ 82*	\$531	\$533

The CDP was established to help fulfill NAVSEA's need to develop personnel to fill key positions. The CDP is based on selecting 10 participants each year for a three year program including planned rotational assignments coupled with special development courses.

1. <u>NAVSEA Institute (NI)</u>	\$182*	\$250	\$250
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The NAVSEA Institute was established to provide special development accredited courses, not usually available locally, that are directed toward meeting mission needs and given at a location and after hours time convenient to NAVSEA employees. Courses are primarily geared to Naval Architecture, Marine Engineering, Combat Systems, Computer Science, Operations Research, and Ship Acquisition/Logistics Support.

* For FY 1984 the following funds are shown in the Data Support Line
 CDP \$348K
 NI \$60K

Total funding responsibility is transferred to Acquisition Planning in FY 1985.

3. Ship Alteration Management Information Systems (SAMIS)

The Ship Alteration Management Information System (SAMIS) provides ADP support for the Fleet Modernization Program (FMP) planning and execution of alteration installations aboard ship. SAMIS includes a related effort to modernize ADP hardware and software to achieve significant management improvements in a major support effort of the Depot Overhaul Improvement Program (DOIP). These efforts are directly related to the operational/combat readiness of ships leaving the overhaul process. This program will provide a fully documented program plan which will include program responsibility, a carefully defined system specification, identified interfaces and a detailed implementation plan.

Number of Planned User Sites	123	123	123
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	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$	\$	\$
	Units	Units	Units
Total Funding	5,388	4,489	7,462

1. ADP Plan Contract	2,100	1,655	2,500
SAMIS Impl Spt Cont			
2. NARDAC Computer Spt	2,240	2,253	4,962
3. NARDAC Development	548	-0-	-0-
4. Prototype Lease Equip	500	581	-0-

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

4. Logistic Support Program (LSP)

The programs that comprise the LSP are Integrated Logistics Overhauls (ILO); Ship Equipment Configuration Accounting System (SECAS)/Configuration Status Accounting (CSA); Provisioning, Allowance and Fitting Out Support (PAFOS); Outfitting Support; and Spare Parts Breakout. The SECAS/CSA and ILO efforts collect, process, and distribute the configuration status data for each ship and activity, and identify the logistics support documentation and materials required to be loaded aboard ships after each overhaul, availability, or conversion. All of the above efforts are interrelated and must be performed in tandem to improve overall fleet material readiness. The three data systems provide the interface between the fleet and the logistics support systems, ensuring that proper outfitting materials are provided to the fleet. PAFOS and Outfitting Support determine the requirements for spare parts and spares necessary for maintenance throughout the ship's life cycle, and establish budget, management and control procedures to ensure that the requirements are valid, and that once budgeted, the funds are properly utilized. Spare Parts Breakout is in response to the DOD direction to increase competitive procurement for Navy spare parts.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY-1986</u>
	\$ units	\$ units	\$ units
Total Funding	17,764	19,523	40,447

Integrated Logistics Overhaul Program (ILO): Improves readiness by providing logistics support that accurately reflects the ship's true equipment configuration. It maintains procedure manuals, provides training, on-site technical assistance, ADP Support Systems, and monitors implementation at the ILO sites. When ships undergo overhaul, ILO verifies that logistics support (repair parts/Consolidated Shipboard Allowances List, Planned Maintenance System documentation and materials, technical manuals and test equipment) reflects the ships configuration (including the overhaul changes) and is loaded aboard ship at the end of overhaul. ILO also trains ships' force personnel in maintenance of logistics support during the operating cycle.

<u>Total ILO Funding</u>	\$3,346	\$708	\$1,673
Ships Assisted w/Tech Manuals	60	-	120
Manual/Guides generated/maintained	15	8	14
Mobile Assistance Team Visits	43	8	10
ADP Applications	67	-	50
Specifications/Documents			
Originated	680	-	150
Specifications/Documents			
Maintained	-	-	300
Bill of Materials for PMS Support	152	97	144

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Logistics Support Program (LSP) (cont'd)

Ship Equipment Configuration Accounting System (SECAS)/Configuration Status Accounting (CSA) Program: Maintains the Navy's central configuration status accounting system to satisfy all Navy managers' requirements for CSA data. SECAS uses change reporting system (shared with 3-M system), on-site validations and shipyard reporting of overhaul changes to obtain data. Data from this central system is required for 60 functions performed by Navy operations, maintenance and logistics support managers. Several initiatives are underway to improve accuracy of the CSA system and to be able to handle increased workload of a larger Navy.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
<u>Total SECAS Funding</u>	11,516		4,052		9,393	
<u>Preoverhaul Config. Validations of ships</u>		98		30		42
<u>Configuration Changes Processed</u>		60K		10K		66.7K
<u>Alteration Key Checkpoint Guides</u>		912		360		0
<u>SRA Config. changes</u>		400		180		700
<u>Ships AILSIN Maintained</u>		72		24		200
<u>Reports/Products</u>		37K		8.8K		50K
<u>ADP (Man Years)</u>		16		16		25
<u>Major Tech Dev. Program Enhancements/Tasks</u>		400		120		200
<u>Ships w/ ILO on-Site Assist.</u>		120		52		0

Provisioning, Allowance and Fitting Out Support (PAFOS) Program: Determines the Navy's requirements for spare parts and spares to maintain the ship system or equipment for its life-cycle. Provisioning is the bridge between the acquisition manager's support requirements and the supply system's ability to fill those needs. It provides the data to support an equipment or weapons system's corrective and preventive maintenance, repair and overhaul requirements. The Fitting-Out Program provides a complete equipment configuration baseline for new construction ships, monitors provisioning progress, and provides new-construction on-site program assistance and assessment. The Depot Level Provisioning (DLP) process adds to existing Allowance Parts Lists (APL's), for NAVSEA designated HM&E equipments, those items required by the depots to support class "B" overhauls and components repair. Class "B" overhauls are short and leave no time for the current slow ordering process.

	\$2,489		\$1,435		\$3,713	
<u>Total PAFOS Funding</u>						
<u>Provisioning/Allowance</u>						
Prog. and Acq. Log. (WY)	706	6	859	(9)	1,153	(12)
Supply Readiness (WY)	-	-	-	-	600	(10)
Ships Fitting Out (WY)	-	-	576	(11)	425	(9)
Depot Level Provisioning (WY)	1,783	37	-	-	1,535	(26)

Spare Parts Improvement Program (SPIP) Implements the SECDEF direction to improve spare parts acquisition through competition. Full implementation is

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

planned for FY 1989. Breakout reviews, engineering and economic evaluations of technical data, are performed to determine competition feasibility of sole source acquisition of system stock line items.

In addition, new line items are reviewed during the provisioning cycle using Contractor Technical Information Coding (CTIC), Provisioning Technical Documentation (PTD) and manufacturing plant surveys are conducted during Acquisition Method Code (AMC) Conferences. Once a new item is coded for competition, the technical data necessary to compete the procurement is purchased, and the competitive procurement specification is developed by the life cycle management engineers. NAVSEA engineering evaluation and central SPIP planning and control are essential to ensure quality and accuracy of spare parts acquisition.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
<u>TOTAL SPIP Funding</u>	413		13,328		25,668	
Full Screen Breakout Reviews (Units are breakout reviews)	413	112	10,249	2,876	19,750	5,130
PDT AMC Assignment (Units are # of AMC Assignments)			246	8,100	475	15,880
CTIC/AMC Conferences (workyears)			1,367		2,544	
(CTIC packages)			(1,188)	21	(2,194)	40
(AMC Conferences)			(179)	17	(350)	35
Technical Data Acquisition* (data packages)			1,266	14	2,499	24
Engineering Review of Restrictive Markings			200	2	400	4
SPIP Contractual Requirements Implementation				new equipment contracts		new equipment contracts

*Full production technical data is essential for competitive procurement. Technical data of competitive quality ranges in price from \$10,000 for a single drawing to over \$500,000 for complex components. Data costs for items developed at contractor expense are very high.

5. Integrated Logistic Support Technical Improvement Program (ILSTIP)

Program funds development of policies and procedures for maintenance support of ships and equipments. There are two major pieces to the program: 1) Integrated Logistic Support Technical Improvement Program (ILSTIP) and 2) Ship Maintenance Improvement Program/Maintenance Improvement Program/Detection Action Response Technique (SMPP/MIP/DART).

ILSTIP - provides for the development of improved policies and procedures for the maintenance support of ships, ships' systems, combat systems and other

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

equipments. The program also assesses and analyzes effectiveness in providing maintenance and other types of logistics support of the Fleet, specifies needed support improvements to equipment life-cycle managers and tracks their implementation. In a new FY 1986 effort, a successful ILS overhaul pilot program will be implemented. This program formalizes and automates the industrial activities by tracking ILS identification, acquisition, and delivery status through the SHIPALT development process, hardware acquisition, and final delivery aboard an overhauling ship.

SMPP/MIP/DART - Program's mission is to reduce maintenance costs and increase ship and equipment availability. Each year a select group of projects are pursued with each project taking from 3-5 years to complete. This activity will transfer to the Submarine Ship System Performance Monitoring/Support (SSMPS) Program in BA 2 in FY 1986.

	FY 1984		FY 1985		FY 1986	
	\$	WY	\$	WY	\$	WY
Total Funding	\$1,300		\$2,069		\$2,186	
ILSTIP	549	6.5	858	10.3	2,186	25.4
SMPP/MIP/DART	751		1,211		0	
<hr/>						
<u>ILSTIP Projects</u>						
Milestones Oriented ILS Plan	53	.6	-	-	50	.6
ILS Handbook	71	.8	-	-	200	2.4
Logistic Review Group	100	1.2	100	1.2	200	1.4
Audits & Findings						
Identify Systemic Logistic						
Support Problems	50	.6	100	1.2	150	1.8
Auditor Certification	-	-	25	.3	25	.3
INSURV ILS Audits	50	.6	75	.9	100	1.3
Criteria for CFE	-	-	125	1.5	200	2.4
LSA Execution Guidance	-	-	77	.9	100	1.3
Maintenance Planning	-	-			150	1.8
Shipboard ILS Audits	125	1.5	125	1.5	300	3.6
Automated ILS Plans	-	-	25	.3	200	2.2
ILS for Overhaul	100	1.2	206	2.5	511	6.3

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Integrated Logistic Support Technical Improvement Program (ILSTIP) (cont'd)

<u>SMPP/MIP/DART *</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
1. DART - CASREP and Maint Data Repts	38	35	0
2. Improved Availability Planning Program	431	240	0
3. Maintenance Support	52	100	0
4. Requirements for Intermediate Maint.	192	836	0
5. Technical Assistance Analysis	38	0	0

* This program is transferred to BA 2, Submarine Ship Systems Monitoring Performing Support (SSMPMS) in FY 86.

G. DIVING

1. Navy Diving Program

The efforts of the Navy Diving Program enable the Navy to conduct safe and efficient diving, salvage, and underwater swimming operations. Funding is utilized for:

A. Testing and Evaluation - of experimental diving equipment, and of human subjects with regard to diving physiology and decompression tables (testing is primarily conducted by the Experimental Diving Unit (EDU);

B. Fleet Support - includes life-cycle management of Navy diving equipment systems, certification of all Navy diving systems, and the provision of technical and logistics support for diving, salvage, underwater swimming and Explosive Ordnance Disposal (EOD) operations;

C. Development and Revision of Written Material - standards, procedures, instructions, manuals, and other diving publications.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$3,425	\$3,599	\$4,369
Workyears	14	20	25

<u>A. Testing and Eval</u>	<u>UNITS</u>	<u>UNITS</u>	<u>UNITS</u>
1. # of test dives	2,004	2,203	2,204
2. # of piece of equip tested	55	55	65
3. Surf Spt div tests	440	440	600
4. Diver air purity analyses	250	265	305

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. Fleet Support Actions

1. Div eqp systems certifs.	250	250	260
2. Field Op evals (# of items)	71	71	80
3. Field Changes	280	280	0
4. Unmanned dives in spt of Flt	450	550	550
5. Config mangmnt (systems dev)	30	30	35

C. Written Material

Developed or Revised

1. Div Manual Revs (by chapter)	1	1	1
2. Maint proc dev or rev	12	12	12
3. Faceplate Mag (# of issues)	4	4	4

H. INACTIVATION OF SHIPS

Inactivations - Surface

Reimburses Maritime Administration (MARAD) for shipyard maintenance and temporary lay-up of Navy ships. Funds costs to prepare surface vessels for storage by MARAD. Funds preparation of vessels retired from active fleet for long-term wet berth stowage in Navy facilities.

Inactivations - Submarines

Provides for advance planning and execution of pre-inactivation industrial availabilities of nuclear submarines and for actual inactivation in accordance with established schedules. Cost estimates are for minimum austere inactivations including hazardous material layup "as-is", defueling, blanking of sea connections, removing hazardous materials and fluids, removing equipment and repair parts of immediate value to operating forces and placing the ship in a safe condition until the ultimate disposal method is determined.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding Surface	1,428	31	1,553	33	543	29
Total Funding Submarine	18,765		3,079		61,641	
Total Funding	<u>\$20,193</u>		<u>\$4,632</u>		<u>\$62,184</u>	

Surface Inactivations:

	<u>1,428</u>		<u>1,553</u>		<u>543</u>	
LSD	900	2	900	2	-	-
FF	-	-	226	1	-	-
ARS	-	-	-	-	139	1
ATF	150	1	150	1	150	1
CL	129	2	-	-	-	-
Temporary Lay-ups (Number of vessels)	249	26	277	29	254	27

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Submarine Inactivations</u>			
<u>Inactivation of:</u>			
SSN 584	18,765		
SSN 578			22,949
SSN 583			20,606
SSN 592			18,086
 <u>Advance Planning for:</u>			
SSN 578		3,079	

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

I. SHIPYARD MODERNIZATION

1. Shipyards Modernization Program

This provides for a number of programs for enhancing and modernizing the production and industrial capacity of shipyards and ship facilities. Funding supports the Depot Operations Improvement Program (DOIP); computer support for long range workload forecasting and facility equipment requirements; propeller manufacturing and measurement; design, installation, and certification of magnetic silencing equipment at Naval Stations; drydock certification per Military Standard 1625A; productivity improvements; Test, Measurement, Diagnostic Equipment (TMDE) analysis; and capital equipment installation at non-NIF activities. This program also supports the maintenance of inactive nuclear hulls, shipyard physical security, asbestos litigation office, and Forces Afloat Maintenance Improvement (FAMI) engineered time values and intermediate maintenance activities combat support training. In addition, funds covering the procurement of industrial plant equipment at Non-Industrial Activities was transferred to this program starting in FY 1986.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	\$11,962		\$10,352		\$42,257	
DOIP	950		596		596	
(# WY)		(4)		(2)		(2)
Computer Support	816		590		633	
(timesharing hrs)		(200)		(275)		(300)
Propeller Profiler Support	0		0		100	
(tech improvements)						(1)
Magnetic Silencing	3,596		4,183		6,707	
(# systems)		(10)		(10)		(16)
Drydock Certification	1,401		1,400		1,500	
(# certified/recertified)		(77)		(77)		(100)
Industrial Operations Improvement	955		850		880	
(# WY)		(3)		(3)		(3)
TMDE	370		0		119	
(# WY)		(5)				(2)
Install non-NIF equip	100		0		0	
(# equip installed)		(4)				
Maintenance Nuclear Hull	930		985		1,500	
(# hulls)		(10)		(10)		(12)
Shipyards Security	2,500		0		1,050	
(# shipyards)		(8)				(8)
Asbestos Litigation	344		344		0	
(# cases)		(8)		(8)		
FAMI-Engineered Time Values	0		1,380		1,380	
(# OP Guides New/Validated)				(5,940)		(5,940)
FAMI-IMA Combat Systems	0		24		1,321	
(# Manweeks Training)				(11)		(590)
Industrial Plant Equipment	0		0		26,471	

Funds covering Industrial Plant Equipment transferred from OPN BA1 and BA4 effective FY 86.

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

J. VISIBILITY AND MANAGEMENT OF OPERATIONS AND SUPPORT COSTS (VAMOSC-SHIPS)

VAMOSC-SHIPS is a Department of the Navy management information system which provides for the collection and display of annual operating and support (O&S) cost and related data for active fleet ships. It is the Navy's single source which provides the full range of this data within an approved data element structure. VAMOSC-SHIPS data on actual (vice planned/budgeted) O&S costs are a valuable resource for a wide range of analytical and decision-making purposes. These include DSARC and DNSARC deliberations concerning new system acquisitions where support issues play a vital part and influence decisions affecting the composition or force structure of the fleet. Also included are studies and analyses aimed toward obtaining more value (e.g. readiness) per logistic dollar spent, better logistics support for deployed systems (sustainability), life cycle cost estimating, development of Integrated Logistic Support plans, and trade-off analyses of reliability improvements vs. life cycle costs. VAMOSC-SHIPS reporting capability is being expanded to include O&S cost and related data at the shipboard system level as required by OSD, ASSTSECNAV, CNO and users. VAMOSC-Ships collects data from many data sources, Navy-wide, and currently produces two standard annual reports of ship level O&S costs, one annual report on maintenance data for some 14,000 shipboard equipment items, and numerous special on-demand reports for users of the data.

	FY 1984		FY 1985		FY 1986	
	\$	WY	\$	WY	\$	WY
Total Funding	623	10.7	561	8.9	652	10.2
Management Support	305	5.5	290	5.0	334	5.5
Data Sources Support	70	.7	104	1.1	103	1.1
Systems Operation	54	1.0	54	.9	65	1.1
Total System Design Spt	.110	2.0	105	1.8	121	2.0
Product Improvement	84	1.5	8	.1	29	.5

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

K. DATA SUPPORT

Provides information and data systems designed to improve the life cycle management of ships and ship weapon systems. This is primarily accomplished through the NAVSEA Automated Data Systems Activity (SEAADSA). Incorporated with Data Support in FY 1985, SEAADSA is the NAVSEA central design agent for automation technology and ADP systems. SEAADSA also performs management reviews of proposed ADP systems, equipment, services, applications of ADP software and ADP installations in NAVSEA facilities thereby enhancing NAVSEA management capabilities.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$1,976	\$4,263*	\$4,885
Workyears	-	80	80

Activities Supported:			
Data Support (Management Support)	858	340	426
Data Support (Office Automation)	1,118	3,923	4,459

* SEAADSA direct funding is included in Data Support beginning FY 1985.

L. UNDERUTILIZED PLANT CAPACITY

This program provides a subsidy to Naval weapon stations, allowing them to maintain excess plant capacity which could be used in the event of war. The subsidy for a facility is the amount of funds needed to maintain 85 percent of maximum capacity, minus the amount of NIF funds budgeted for that year. Funding this program in an amount other than that required results in a gain or loss in the Accumulated Operating Results (AOR) of the ordnance activity fund.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$	\$	\$
Total Funding	90,095	110,129	100,199

WPNSTA			
Concord	13,398	17,366	17,362
WPNSTA			
Earle	11,449	13,165	12,048
WPNSTA			
Charlestown	1,252	825	995
NAVWPNSUPPCEN			
Crane	7,762	12,265	9,760
NAVORDSTA			
Indian Head	23,333	23,336	19,357

Activity Group: Logistics Support Activities (cont'd)

III. Performance Criteria and Evaluation (cont'd)

NAVUSEAWARENGSTA

Keyport	0	1,800	-
NAVORDSTA			
Louisville	9,735	12,873	13,181
WPNSTA			
Seal Beach	11,088	14,476	13,676
WPNSTA			
Yorktown	12,078	14,023	13,820

The funding for each facility is an accounting transfer which allows the facility to reduce the amount of NIF overhead funding charged as part of its stabilized rate. This allows the facilities to compete for work without being penalized by having to charge customers for maintaining capacity which bears no relation to the work the facility will perform for the customer. As such, no performance criteria units are appropriate for this program.

M. OTHER SUPPORT PROGRAM

The Other Support Program provides funding for four programs. These programs are:

1. NAVSEA Technical and Exhibition Ship Model Program and Navy Exhibit Chicago Museum of Science and Industry.
2. Leased bachelor quarters for the Combat System Test Center, Ronkonkoma, N.Y.
3. Beneficial Suggestion Awards Program.
4. Maintenance Interservicing Support Office (MISO) which provides a central point of contact for all NAVSEA depot level maintenance matters to ensure that adequate capability and capacity exist for depot level repairable workload projections for all designated overhaul points.

Effective in FY 1986, the Navy Leased Quarters, Beneficial Suggestion Awards and the Ship Model Programs are transferred to the Field Operations Activity Group, Operational Support Field Sub-Activity Group.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$/Units</u>	<u>\$/Units</u>	<u>\$/Units</u>
Total Funding (\$000)	\$686	\$612	\$563
1. Ship Model Program/#models	295/1,390	238/1,398	0 0
2. Navy leased quarters/#Apts	24/ 3	26/ 3	0 0
3. Beneficial Suggestion Awards	82/ 114	77/ 124	0
4. MISO/#Interservice Agreements	285/ 35	271/ 40	310/ 0
5. Designated Overhaul Point/ Management Information Systems*			253

* This activity was transferred from EOC Coordination in BA 2.

Activity Group: Logistics Support Activities (cont'd)

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>70</u>	<u>75</u>	<u>75</u>
Officer	12	13	13
Enlisted	58	62	62
B. <u>Civilian</u>	<u>13</u>	<u>106</u>	<u>106</u>
USDH	13	106	106

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Engineering & Support Services
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed

This activity group provides for technical and engineering services for continued improvement of equipments and repair actions of systems operating in the Fleet. Other specific activities include:

- inspection and refurbishment of high value reactor plant components and equipment
- technical updates of publications, manuals, and ship documentation
- development of programs and policies to assure quality, reliability and maintainability of ships and weapon systems
- performance of acoustic trials and engineering changes to reduce submarine signature levels.

Activity Group: Engineering Support Services (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Gun Weapons Sys Flt Spt	3,486	5,090	5,063	4,969	4,154	-715
Ordnance Handling Support	986	1,281	1,280	1,142	1,452	310
HARPOON	4,470	7,845	5,157	5,027	6,776	1,749
Combat Systems Eng Spt	4,992	7,553	7,365	5,413	4,575	-838
CIWS Close-in Wpn Spt	9,478	8,241	8,077	7,560	9,237	1,677
Gun F/C Systems Fleet Support	6,699	8,075	7,972	7,310	6,653	-657
SEMCIP/EMI Control	11,832	15,923	15,246	15,220	15,207	-13
24 Electronic Repair Prog	388	0	0	0	0	0
Electronic Test & Repair	127	861	776	595	2,138	1,543
NTDS	2,753	3,443	3,299	2,975	2,178	-797
Mine Logistics Support	2,898	4,427	3,195	2,526	4,225	1,699
Sonar Systems Support	3,551	9,077	8,231	6,096	6,205	109
BOD/Swimmer Weapons	3,285	6,283	5,959	5,834	3,432	-2,402
Weapons Control Switchboards	931	1,093	1,063	977	1,368	391
R&M Reliab/Maintainability	831	888	874	823	530	-293
GIDEP	795	419	382	722	339	-383
Total Ship Testing/Production	2,283	585	536	1,822	1,649	-173
Inservice Explosives	529	580	565	518	448	-70
Technical Publications	19,773	20,916	20,321	19,722	18,269	-1,453
Inspection & Testing	1,932	2,879	2,822	2,171	2,052	-119
Ship Design Tech Req Doc	1,835	2,225	2,109	1,952	1,868	-84
Steam Prop Plant Improvement	7,186	9,205	8,294	7,575	5,303	-2,272
Underway Replenishment	4,758	5,934	5,720	11,066	4,367	-7,499
Habitability	315	543	532	391	382	-9
Ships Trials & Tests	7,890	2,851	2,831	2,668	4,933	2,265
Ship Systems Engineering	19,027	17,569	16,959	17,368	16,757	-611
DSSP	12,135	14,969	14,364	13,857	16,969	3,112
Submarine Noise Reduction	10,055	15,628	14,609	14,747	10,957	-3,790
Quality and Reliab Assurance	2,609	1,713	1,606	1,498	2,137	639
Nuclear Propulsion Tech Log	47,490	77,022	76,295	75,047	81,749	6,702
TOTAL, ENGINEERING SPT SERVICES	195,159	253,118	241,492	238,291	236,309	-1,982

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate	\$238,291
2. Pricing Adjustments	3,748
A. Stock Fund	(-59)
1) Non-Fuel	-59
B. Industrial Fund Rates	(-1,882)
C. Other Pricing Adjustments	(5,689)
3. Program Increases	31,431
A. Other Program Growth in FY 1986	(31,431)
1) <u>Ordnance Handling Support</u>	858
Increase in this program provides for the repair of 9 additional LHA pallet transporters.	
2) <u>HARPOON</u>	1,698
Twenty-four additional active fleet ships and three new HARPOON variants require additional support. In particular, the new variants require technical manual, logistics documentation, and planned maintenance support updates for backfit of the AN/SWG-1A system onto the following ship classes: CG 47, PHM, FFG-7, FF 1052, and BB 61.	
3) <u>Close-In Weapon Support</u>	4,499
Due to the increase in the number of systems becoming operational (an additional 69 in FY 1986), increased field service support for in-service engineering and other engineering is required to maintain the level of support required for fleet introduction.	
4) <u>Gun Fire Control Systems Fleet Support</u>	457
Realignment within program provides additional support for the MK 68 and MK 56 Gun Fire Control Systems (392). Additional support also provided for night vision devices (65).	
5) <u>Electronic Test and Repair</u>	1,633
Realignment of the TMDE engineering portion from TMDE/METCAL Maintenance Support to this program (733). Additional increase of 5.5 WY's in 2M Electronic repair (466). Increase (434) to implement the Integrated Test Equipment Management Information System (TEMIS).	

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

6) Mine Logistics 1,721

In FY 1986, major tests and evaluations will be undertaken on improved mine flight gear components, and mine power sources, specifically, the increase will fund 5 additional readiness improvements, 3 additional operational tests, 2 more system evaluations, 3 more mine delivery tests, maintenance of 1 additional technical document and packaging, handling and storage of 3 additional tasks will provide support for mine systems to be introduced into the fleet in FY 1985 and FY 1986.

7) Sonar Systems Support 233

The number of LAMPS MK III supported increases from 21 in FY 1985 to 28 in FY 1986. As a result, additional engineering efforts are required to maintain a ready operational status.

8) EOD/Swimmer Weapons 625

Increase covers the costs of introducing new EOD equipment to the Fleet; realigned from Special Combat Support Forces Operations (CINCLANTFLT, 300K and CINCPACFLT 325K) to the in-service engineering portion of this program.

9) Weapons Control Switchboards 368

Increases in this program will provide support for ISEA fire and smoke detectors, Life Cycle Support facilities, Inter-Voice Communications System (IVCS), and Interior Communications (IC) test and evaluation agent. The expansion of Fleet IC assets, associated with the re-activation of BB-61 class and the introductions of DD-963 and FFG-7, dictates increased engineering support and maintenance assistance.

10) Technical Publications 2,709

Reprint an additional 1,924 technical manuals (fully funds this effort) (1,456). Convert an additional 300 Advance Change Notices (803). Reprint an additional 14 Ordnance Publications (209). Utilize an additional 3 technical manual Maintenance WYs (241).

11) Steam Propulsion Plant Improvement 529

Increase partially funds additional EOSS Maintenance since the number of ships with EOSS installation grows from 299 at the end of FY 1985 to 345 at the end of FY 1986 (266); increased training support is required to fund rising costs of overhaul and depot level repairs at the Propulsion Plant Training Facility at Great Lakes (263).

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- 12) Ships Trials and Tests 2,455
Ship Hardening - Increase provides for the development of engineering fixes to the highest priority shock deficiencies discovered during the shock test of the USS JOHN F. KENNEDY (CV 67). The increase also provides for the development of a shock awareness crew training program and the preliminary development of a shipboard power distribution system. These efforts will greatly enhance ship survivability by minimizing the equipment failure resulting from a combat induced shock.
- 13) Ship Systems Engineering 3,122
Propulsion: Increase provides for the initiation of the Submarine Shaft Seal maintenance downtime reduction Program. (728)
Damage Control: increase provides for in-service engineering and logistic support for damage control, chemical defense, personnel protective survival, rescue equipment and fire protection. (2,394)
- 14) Deep Sea Submergence Project 4,362
Funds the maintenance operation of the NR-1, the only nuclear powered deep-diving research and oceanographic submarine in service (2,824); and funds the Deep Sea Program, a new initiative to provide mission support to increase the operational tempo of deep ocean research, evaluation and recovery of assets (1,538).
- 15) Quality and Reliability Assurance 575
Program increase due to additional quality assurance (QA) requirements:
- 713 additional shipyard and SUPSHIP personnel to be trained for QA and ship overhaul process assessment.
- 2 additional on-site reviews of contractor plants.
- 30 additional equipment pieces analyzed using engineering data base.
- 1 additional Ship Repair Facilities (SRF) to be accredited and trained for QA.
- 3 additional ship models produced.
- 16) Nuclear Propulsion Technical Logistics 5,587
\$4.5 million of the growth is to support essential ongoing work at Naval Nuclear Propulsion Laboratories which was previously budgeted in R&D, but which has been transferred to the O&M,N budget for FY 1986 and later years. In addition, \$1.1 million is required to support:

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- a. Additional LOS ANGELES and TRIDENT Class submarines and NIMITZ Class aircraft that are entering the fleet.
- b. LOS ANGELES and NIMITZ Class ships undergoing their initial overhauls.
- c. Preparation for initial refuelings of CGN 38 Class nuclear powered cruisers.

The above work is in addition to continuing essential support of the Navy's existing SSN's and POSEIDON SSBN's whose increasing age necessitates a higher level of support work.

4. Program Decreases

-37,161

A. Other Program Decreases in FY 1986 (-37,161)

1) Gun Weapons Systems Fleet Support -838

Decrease will not allow accomplishment of: correction of safety hazards in the projectile hoist on the 16"/50 turrets; engineering improvements for MK 45 and MK 75 gun systems; in-service support for the MK 3 gun systems and the MK42/MK 88 machine gun; and correction of fleet RM&A and safety deficiencies.

2) Ordnance Handling Support -575

In FY 1986, no funding is planned for training of ships' crews in ordnance handling and stowage practices. In addition, the establishment of the depot capability for LHA pallet transporters will be completed in FY 85, so further funding is not required.

3) Combat Systems Engineering Support -1,008

Reflects a decrease in pre-installation engineering support of 9.2 workyears as well as a decrease in funding of program planning for the installation of combat system management information system alterations.

4) Close-In Weapons Support -3,072

In FY 1985, Block I System Testing will be completed, eliminating the requirement in FY 1986.

5) Gun Fire Control Systems Fleet Support -1,285

Reduced level of engineering support will be provided for the MK 86 Gun Fire Control Systems. In addition, support for gun fire accuracy and range tables will also be reduced.

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

- 6) SEMCIP/EMI Control -508
Decrease will provide less funding for electro-magnetic compatibility surveys: planned surveys will be less comprehensive than in FY 1985. Five fewer ships will be surveyed as part of the Surface Waterfront Corrective Action Program to correct operationally degrading electro-magnetic interference problems.
- 7) Electronic Test and Repair -104
Efforts to standardize automatic testing equipment will not be funded in FY 1986.
- 8) Navy Tactical Data Systems -918
In FY 1986, only 1 set of software maintenance and test results will be distributed; 90 fewer field change proposals will be reviewed and implemented. In addition, neither AN/UYQ-21 support nor RM&A equipment requires support in FY 1986.
- 9) Sonar Systems Support -387
Reflects a planned decrease in the number of Probe Alert installations (from 88 in FY 1985 to 50 in FY 1986). In addition, decreased support is provided for operational sonars on the 2 SSN-608's.
- 10) EOD/Swimmer Weapons -3,085
Decrease in maintenance effort of 70% and in-service engineering effort of 60% for (1) Army, Navy, Air Force and Marine Corps Explosive Ordnance disposal forces; (2) SEAL Weapons Systems; and (3) Advanced Marine Biological Systems assigned to EOD Mobile Units THREE and FOUR.
- 11) Reliability and Maintainability -313
The environmental stress screening program will be reduced. Three standard power supply design reviews will be cancelled. Distribution of Commanding Officer Narrative Reports is not planned for FY 1986.
- 12) GIDEP -400
998 fewer technical reports will be processed and 12 fewer microfilm reels will be processed.
- 13) Total Ship Test/Program -210
Decrease will provide support for one less ship class during industrial availability.
- 14) In-Service Explosives -65
Decreased funding for maintaining and updating explosive loading documentation.

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

15) <u>Technical Publications</u> Update 55 fewer technical manuals.	-3,344
16) <u>Inspection and Testing</u> Decrease will reduce Qualified Product List Testing	-212
17) <u>Ship Design Technical Requirements Document</u> Decrease primarily affects updating of standard type drawings. Approximately 19% fewer standard type drawings will be updated or developed.	-123
18) <u>Steam Propulsion Plant Improvement</u> Decrease (-3,049) in EOSS Development results as the program nears completion in FY 1986 (from 47 ships in FY 1985 to 18 in FY 1986). Decrease in Documentation Support (-78) results in the revision of the On-Line Verification implementation schedule.	-3,127
19) <u>Underway Replenishment</u> Program acceleration in FY 1985 has reduced backlogged requirements and engineering problems to be resolved (-5,321). Other program decreases will: (1) result in the termination of NAVSEA engineering support for the elevators at the end of 1st quarter 1986; (2) equipment safety and reliability improvements will not continue; (3) operational availability will decline to a maximum of 30% by end of FY 1986. (-2,660)	-7,981
20) <u>Ships Trials and Tests</u> <u>Inclining Experiments:</u> Two less inclining experiments.	-201
21) <u>Ship Systems Engineering</u> <u>Hull:</u> Decrease reduces engineering technical support of Stern Gate Improvement Program. (-28) <u>Auxiliary:</u> Decrease reduces technical support for the various DART programs. (-1,098) <u>Electrical:</u> Electrical Power Interface Program (EPIC) is being gradually phased out starting in FY 1986. In addition, funding is reduced for Electric Distribution of IC Sensor System. (-1,256) <u>DD-963:</u> FY 1986 will consist only of execution of plans to implement the Class fixes. Reduces HP Air Systems Support. (-1,033) <u>Material Engineering:</u> Delays preparation of Corrosion Control Manual and documents for 4 classes of ships to FY 1987. (-378) <u>Propulsion:</u> Reduces in-service engineering in support of boiler overhauls (-626).	-4,419

Activity Group: Engineering Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

22) Deep Sea Submergence Project -1,548

Decrease reflects reduced efforts in the Deep Submergence Rescue Vehicles (DSRV) Program (-226); Deep Submergence Vehicles Program (-715); Submarine Rescue Ship (ASR-21 Class) Program (-235) Unmanned Vehicle Systems (-210); and Engineering and Technical Support (-162).

23) Submarine Noise Reduction -3,412

Decrease will delay by one year engineering investigations and study tasks of known deficiencies which are preparatory to silencing SHIPALT development and hardware procurement. Program technical documentation and development of noise reduction training material for fleet and industry personnel will be deferred (-1,666). Decrease also reflects two fewer post overhaul acoustical trials and five fewer SSN EOC acoustical trials (-1,746).

23) Other Decrease -26
a) Habitability (-26)

5. FY 1986 President's Budget Request \$236,309

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation

A. SURFACE WARFARE SYSTEMS

1. Gun Weapons System Fleet Support

Provides engineering and logistics support to maintain the operational readiness and safety of inservice gun systems installed in combatant ships and training facilities. Funding is provided to correct design and safety defects, deficiencies in technical documentation, and maintenance procedures.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	<u>\$3,406</u>	<u>\$4,869</u>	<u>\$4,154</u>
	<u>\$/Units</u>	<u>\$/Units</u>	<u>\$/Units</u>
No. of Systems Supported (Minor caliber weapons not included)	570	581	599
Efforts Funded:			
1. 16"/50 and 5"/38 Gun Sys Spt	\$ 253/ 74	\$ 300/ 77	\$ 250/ 86
2. Minor Caliber Weapons	490/909	747/945	623/996
3. MK 75 Gun Sys Supt	535/ 52	797/ 62	680/ 69
4. MK 42 Gun Sys Supt	934/124	1,445/127	1,241/127
5. MK 45 Gun Sys Supt	612/104	995/106	870/110
6. 3"/50 Gun Sys Supt	382/216	585/209	490/207
7. Smoke Obscuration	200	---	---

2. Ordnance Handling

Provides technical support and engineering functions to ensure safe handling, shipping, and storage of explosive ordnance. Also provides for depot level overhaul for equipment on LHA-1 class ships.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	<u>\$986</u>	<u>\$1,142</u>	<u>\$1,452</u>
Efforts Funded (\$/Workyears)			
1. LHA Pallet Transporter (No. of Transporters)	-	93/1	950/10
2. Depot Overhaul Capability	300	407	-
3. In-Service Engineering	266/2.9	264/2.9	295/3.7
4. Training Support	200/2.2	171/2.2	-
5. Material Handling Equipment Engineering Support	75/ .8	70/ .9	70/ .9

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

6. Stowage	53/ .6	54/ .7	54/ .7
7. Railcar/Truck/Container Loading	54/ .6	44/ .6	44/ .6
8. Armament and Weapons Support Engineering	38/ .4	39/ .5	39/ .5

3. HARPOON

The program provides for introduction and follow-on support of the HARPOON Weapon System, a long-range anti-ship missile system, into submarines and surface combatants. It includes support of the command and launch system and the test set/simulator for all platforms.

O&M,N funds support the following number of active fleet ships and HARPOON variants:

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>Ships</u>	<u>Variants</u>	<u>Ships</u>	<u>Variants</u>	<u>Ships</u>	<u>Variants</u>
Surface Ships	178	14	196	16	205	19
Submarines	68	8	72	8	87	8
Total	246	22	268	24	292	27

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$</u>	<u>WY</u>	<u>\$</u>	<u>WY</u>	<u>\$</u>	<u>WY</u>
Total Funding	4,470	73	5,027	77	6,776	103
In-Service Engineering	1,148	19	1,307	20	1,762	27
Fleet Support	203	4	201	3	271	4
Integrated Logistics	1,345	23	1,608	25	2,168	33
Program Tech Support	1,603	24	1,659	25	2,304	35
Quality Assurance	114	2	101	2	135	2
Maintenance	57	1	75	1	68	1
Test Development	-	-	76	1	68	1

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

4. Combat System Engineering Support

Provides the planning, combat system level design, pre-installation engineering, ship overhaul, and post overhaul support for all elements of surface ship combat system conversion and modernization programs.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$4,992	\$5,413	\$4,575
Efforts Funded			
1. Pre-Installation Engineering Support (Workyears)	2,727/40	3,038/44.2	2,412/35.0
2. Ship Integrated Defense portions of Combat System Ship Qualification Trials (# trials)	664/10	766/11	880/11
3. Training and Documentation (Workyears)	508/7.7	535/8.0	459/7.0
4. Program Planning Combat System Management Information System (# of SHIPALT Installations)	1,093/640	1,074/1,047	824/1,051
(Planning costs vary depending on complexity of SHIPALT)			

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

5. Close-In Weapons Support

Provides analysis of operational and performance data of the Close-In Weapons System. In FY 1985, Block I System Testing will be completed. The program also provides for fleet support and technical assistance to SHIPALT installing activities and ships having maintenance problems beyond the ability of the organizational maintenance personnel.

	<u>FY 1984</u> \$ /Units	<u>FY 1985</u> \$ /Units	<u>FY 1986</u> \$ /Units
Total Funding	\$9,478	\$7,560	\$9,237
No. of CIWS supported	205	278	347
In-Service Engineering Agent Support (WY)	\$1,939/27.7	\$3,862/54	\$6,812/ 94
Fleet Operational Test & Evaluation (WY)	6,228/89	3,000/42.8	---
Other Engineering Suppt (WY)	1,311/18.9	698/ 9.0	2,425/30

6. Gun Fire Control System Fleet Support

Provides engineering and logistics support for maintaining the operational readiness and safety of in-service gun fire control systems installed on combatant ships and in training facilities. Funding is provided to correct design and safety defects, deficiencies in technical documentation, and improve maintenance procedures.

	<u>FY 1984</u> \$6,699	<u>FY 1985</u> \$7,310	<u>FY 1986</u> \$6,653
Total Funding			
Efforts Funded			
1. MK 86 Fire Control (no. of Systems supported)	4,987/57	5,038/57	3,975/59
2. MK 68 Fire Control (no. of Systems supported)	1,224/88	1,667/88	2,100/88
3. Gun Fire Accuracy	174	227	178
4. Range Table	103	152	100
5. Night Vision Devices	211	226	300

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. ELECTRONIC SYSTEMS

1. SEMCIP/EMI

Shipboard Electromagnetic Compatibility Improvement Program/Electromagnetic Interference provides corrective action to ships in the fleet to rectify onboard electro-magnetic compatibility (EMC) and interference (EMI) problems which degrade mission warfighting capability and are beyond the capabilities of a ship's force to diagnose and repair.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$11,832	\$15,220	\$15,207
Efforts Funded:			
EMC Improvement	\$5,535	\$4,763	\$4,725
Ship Surveys (EMC)	13	9	10
Problem Investigation	67	100	100
Radiation Hazard Surveys	25	25	25

EMC Improvement provides quick engineering maintenance response to EMI problems, full scale surveys, documentation of problem investigation and resolution management.

Surface Waterfront Corrective Action Program (WCAP) (including Carriers)	\$2,696	\$4,855	\$4,802
Ship Surveys	65	85	80
Tech Assists	160	165	160
Shipboard Training	380	200	250
Readiness Assessment	84	85	85

Submarine Waterfront Corrective Action Program (WCAP)	\$ 550	\$ 316	\$ 400
Ships Surveys	10	20	20
Tech Assists	20	20	22
Shipboard Training	20	20	22

Provides pre-deployment corrective action and quick response to ships and submarines with operationally degrading EMI problems.

Industrial EMC	\$1,176	\$2,900	\$2,900
Ships Events	30	60	60

Improves ship repair in industrial process through training, surveys, documentation, and repair practices.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

SEMCIP/EMI (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Combat System/Surface-Air Frequency Management Program (CSFMP/S-AFMP)	\$729	\$1,101	\$1,100
Updates	48	60	60

Provides frequency management EMC criteria for surface missile systems/ships deployed in task force/multi-ship EM environment to prevent missile loss and homing on friendly forces. Provides EMC criteria for frequency management of ship-to-air radar systems which degrade due to EMI.

Electromagnetic Readiness	\$1,046	\$1,200	\$1,200
Ship INSURV Support	140	145	145
Ship Discrepancy Documents	60	75	75

Provides EMI support to INSURV during acceptance trials and deficiency documentation.

Shipboard Electronic System Evaluation Facility	100	85	80
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2. 2M Electronics Repair Program

Provides tools, training, and technical data to the fleet to enable shipboard and intermediate maintenance activity 2M technicians to perform high reliability repairs on electronic parts.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$ / WY</u>		
Total Funding	\$388	-	-
Efforts Funded:			
Certification	\$180 2.9		
Engineering	130 2.0		
Curriculum	78 1.2		

Transferred to Electronic Test and Repair in FY 1985 and outyears.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. Electronic Test and Repair

The Electronic Test and Repair Program provides for Navy automatic testing requirements, miniature/microminiature emergency repair capability for printed circuit board (PCBs) and identification and life cycle management of all Test Measuring and Diagnostic Equipment (TMDE) at the organizational and intermediate maintenance levels.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$ / WY</u>		<u>\$ / WY</u>		<u>\$ / WY</u>	
Total Funding	\$127	1.7	\$595	7.5	\$2,138	25.4
a. 2M Electronic Repair	-	-	491	6.1	971	11.6
b. TMDE Engineering	-	-	-	-	733	8.7
c. Test Equipment Management Information System	-	-	-	-	434	5.1
d. Automatic Test Equipment	127	1.7	104	1.4	0	

4. Navy Tactical Data Systems

Provides the engineering support for existing and new tactical data systems being used by the fleets. This support includes distribution, updating, and validation of maintenance and test software; review and revision of manuals; and diagnostic program distribution.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$/Units</u>		<u>\$/Units</u>		<u>\$/Units</u>	
Total Funding	\$2,753		\$2,975		\$2,178	
Number of Ships Supported	136		143		151	
Maintenance & Test Software distributed or programs updated/maintained	\$737/3		\$790/4		\$540/1	
Field Change Proposals Reviewed & Implemented	983/197		1,058/210		700/120	
Fleet Readiness Visits	460/45		460/45		460/46	
Combat System Maint. Training Facility Management (Workyears)	95/1.5		95/1.5		95/1.5	
Document Review & Revision (Workyears)	478/8.0		422/7.0		383/5.5	
AN/UYQ-21 Support (Workyears)	-0-		75/1.0		-0-	
RM&A Improvement New Equipment Introduced	-0-		75/1		-0-	

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. UNDERSEA WARFARE SYSTEMS

1. Mine Logistic Support

Provides analyses of operational and design deficiency problems affecting in-service mines, destructors, and mine countermeasures systems, components, and equipment.

The Mine Warfare Engineering Program is the major source of funding for Engineering analysis and correction of operational and design deficiency problems affecting not only inservice mines and destructors but also inservice mines countermeasures systems, components and equipments.

	<u>FY 1984</u> \$ /Units	<u>FY 1985</u> \$ /Units	<u>FY 1986</u> \$ /Units
Total Funding	\$2,898	\$2,526	\$4,225
<hr/>			
Efforts Funded			
1. Readiness Improvements \$/# of Systems	\$1,180/12	\$541/10	\$1,053/15
2. Operational Data Collection and Analysis \$/# of Tests	150/2	320/4	553/7
3. System Evaluation and Test \$/# of Tests	121/2	411/4	750/6
4. Mine Delivery System Tests & Analysis \$/# of Tests	395/5	351/5	523/8
5. Documentation and Technical Support \$/# of documents Maintained	475/5	286/3	468/4
6. Mine Warfare Training \$/# of Training Tests	450/3	359/5	461/4
7. Packaging, Handling and Storage	127/4	258/3	417/6

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Sonar Systems

Provides funding for (1) Surface Sonar Systems, (2) Submarine Sonar Systems, and (3) Sonar System Command and Control.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	<u>\$3,551</u>	<u>\$6,096</u>	<u>\$6,205</u>

a. Surface Sonar Systems

The LAMPS MK III is an integrated aircraft and shipboard weapons system. This program provides the operation and maintenance support for sonars, data links and other data handling display and communication equipment.

Funding	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$1,536</u>	<u>\$4,260</u>	<u>\$4,677</u>
Number of LAMPS systems supported	6	21	28
Efforts Funded: (\$/WY)			
1. Interim Depot Spt.	215/2.1	160/ 1.6	389/ 3.9
2. In-Service Tech. Spt.	354/3.5	2,256/22.5	2,450/24.5
3. Contract Eng. Tech. Support	138/1.3	232/ 2.3	200/ 2.0
4. Soft & Configuration Spt.	630/6.3	200/ 2.0	188/ 1.9
5. Firmware Maint, Config. Mgmt.	46/ .5		
6. Follow-on Test & Evaluation		962/ 9.6	1,000/10.0
7. Prog. Mgmt. Spt.	153/1.5	450/4.5	450/ 4.5

b. Submarine Sonars

Provides life cycle support for the AN/BQR-15 and AN/BQR-19 Sonar Systems, including performance evaluation, on-call services, parts repair and repair management for these sonars installed on the two operational SSN-608 Submarines.

Funding	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$1,132</u>	<u>\$522</u>	<u>\$477</u>
Number of Operational Months Supported	36	24	24
Efforts Funded:			
1. Operational Support			
AN/BQR-15	\$555	\$337	\$300
AN/BQR-19		\$100	\$89
2. System Refurbishment			
AN/BQR-15	\$477/1	-	
3. Strategic Sys. Proj. Spt.	\$100	\$85	\$88

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. Sonar System Command and Control This program provides in-service engineering support for all underwater acoustics communications equipment in the Fleet, installation of Probe Alert equipment, and installation of technical improvements (engineering changes) to underwater acoustic communications equipment.

Funding	FY 1984	FY 1985	FY 1986
	\$/Units	\$/Units	\$/Units
	\$883	\$1,314	\$1,051
1. Probe Alert Fleet Support (WYS)	\$197/2	\$311/3	\$322/3
2. Probe Alert Installations (Number of installations)	320/36	707/88	403/50
3. Fleet Support for Other Acoustic Communications (Workyears)	366/5	296/4.5	306/4.5
4. AN/WQC-2A (Underwater Telephone) Change Installation (Number of installations)	-/-	-/-	20/8

3. Explosive Ordnance Disposal/Swimmer Weapons Support (EOD/SWS)

This program provides the forces of all military services with the documentation, in-service engineering support, and equipment maintenance required to accomplish their EOD missions. The swimmer weapons support program provides engineering and maintenance services for unique explosive weapons and ordnance equipment required by Navy Special Warfare units for missions in hydrographic reconnaissance, underwater attack, and direct action.

Total Funding	FY 1984	FY 1985	FY 1986
	\$3,285	\$5,834	\$3,432
1. Maintain Joint Service EOD Procedure Manuals (WY/manuals)	\$1,287 18.5/815	\$1,366 19/1,075	\$1,400 19/1,090
2. Perform In-Service Engineering Actions (WY/actions)	\$1,743 19.8/645	\$2,789 38/1,155	\$1,666 23/1,050
3. Maintenance of systems (WY/systems)	\$ 110 1.4/91	\$1,129 12/261	\$ 292 2.6/102
4. Safety modifications of SWS devices (WY/modifications)	\$ 30 0.6/1	\$ 40 0.6/1	\$ 0
5. Logistic Support for Systems (WY/tasks)	\$ 115 1.6/8	\$ 160 1.8/12	\$ 74 1/5
6. Provide EOD allowance list tools (sets of tools)	\$ 0	\$ 350 49	\$ 0

7 196

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

4. Weapons Control Switchboard

This program supports changes in weapons control switchboards which are the result of updating weapons systems. Increase in this program will be used to provide support for ISEA fire and smoke detectors, Life Cycle Support facilities Inter-Voice Communications System (IVCS) and Interior Communications (IC) test and evaluation agent. The expansion of Fleet IC assets, associated with the reactivation of battleship and the introductions of new ship classes such as DD-963 and FFG-7, dictates increased engineering support and maintenance assistance.

	<u>FY 1984</u> <u>\$ / WY</u>	<u>FY 1985</u> <u>\$ / WY</u>	<u>FY 1986</u> <u>\$ / WY</u>
Total Funding	\$931/16.1	\$977/16.8	\$1,368/21.0
Total Engineering Services for Wpn Ctrl Swbs	\$931	\$977	\$876
In-Service Engineering Support for Voice IC			\$492

D. OTHER COMBAT SYSTEMS SUPPORT

1. Reliability and Maintainability

Provides for the development and implementation of reliability, maintainability, and quality (RMQ) engineering programs which have common application for all ships and combat systems.

	<u>FY 1984</u> <u>\$831</u>	<u>FY 1985</u> <u>\$823</u>	<u>FY 1986</u> <u>\$530</u>
Total Funding	229	326	380
1. Acquisition/Design Support			
Reliab Eng Analyses Performed	14	18	23
Mission/Env Profiles Dev	2	3	0
Reliab Models Dev	2	2	0
2. Production Design Support	299	317	150
Electro Static Discharge Prop Solution/ Fail Mech Determination	5	5	5
Std Power Supply Specs Review Revised	2	1	1
Standard Power Supply-Design Review	5	5	2
Stress Screening Tech. Eval./Data Analyzed/Specs Dev	28	29	6
3. Reliab & Maint & Avail Fleet Support	303	180	0
Conar (# of extracts dist in 000's)	77	0	0
Deficiency Corrective Action Program Prop Analyses/Solutions	108	140	0

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Government/Industry Data Exchange Program (GIDEP)

Provides for acquiring, storing, retrieving, and disseminating test and usage information on parts and components. This information is maintained in specialized data banks which are available to both government and industry.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$795	\$722	\$339
	<u>Units</u>	<u>Units</u>	<u>Units</u>
Technical reports processed	2,274	1,885	887
Microfilm reels processed	25	23	11

3. Total Ship Testing Program

Provides ship construction test methodology necessary to ensure adequate testing of combat, command and control, and hull, mechanical, and electrical

TSTP systems. Also provides for review of ships undergoing conversions, modernization, or overhaul to determine the need for structural test firings.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	2,283		1,822		1,649	
Efforts Funded						
1. Documentation, training, development of test standards and methodology (Workyears)	465	6	402	6	392	5
2. Combat System Industrial Testing (# of Ships) (# of Ship Classes)	1,470	83	1,300	40	1,142	40
		11		6		5
3. Reviews for structural Test Firings	148	5	120	4	115	4
4. Combat System Readiness Reviews & Tests	200		-		-	

4. In-Service Explosives

This program performs two functions: 1) develops test and engineering procedures for explosives and 2) supports the National Authority for Explosives to the NATO Ammunition Group. This group develops standards and procedures for ammunition and other explosives. Funds support personnel at White Oak and Yorktown who develop required standards and procedures.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Workyears	\$	Workyears	\$	Workyears
Total Funding	\$529	9.3	\$518	9.6	\$448	7.6
Test & Eng	\$177	3.1	\$190	3.5	\$170	2.9
NATO	352	6.2	328	6.1	278	4.7

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

E. SHIP SYSTEMS

1. Technical Publications

This program provides the Fleet with timely, usable, adequate and accurate operations and maintenance documentation. Recent Inspector General audit reports have cited deficient technical manuals (TM) as a prime cause of equipment malfunction. The program consists of eight major functional areas:

Technical Manual Update - Makes required changes to deficient critical TMs. Efforts include the planning, development, update, certification, initial printing, stocking, and distribution of the updates. Removal of obsolete manuals and additions of new manuals results in a net 225 manuals per year being added to the list. At the beginning of FY 1985 the backlog was 1,309 manuals. Cost to eliminate backlog was \$82.1 million at the beginning of FY 1985. Backlog reduction in prior years was due to reclassification of selected manuals as valid for SCN funding. Manuals which are known to be candidates for SCN funding have been removed from the O&M,N backlog. Additionally, Advance Change Notices (ACNs) are converted into changes. Five hundred new ACNs are added yearly for conversion to changes.

Technical Manual Reprints - Stocking (over 150,000 TMs), reprinting, and redistribution of COG 01 TMs, except those used for GFI and outfitting. Over 4,000 reprint actions are required per year. Backlog in FY 1984 and FY 1985 was eliminated by reclassification of selected manuals as valid for SCN funding.

Technical Manual Quality Assurance - Funds production of Technical Manual Contract Requirements (TMCR) and participation in TM reviews, validations, verifications, QA audits and post distribution audits to assure that organizations which produce TMs adhere to NAVSEA quality requirements, thereby reducing the number of new deficient TMs entering the NAVSEA inventory.

Technical Manual Management Information System (TMMIS) - Funds two efforts: (1) A data base which a) allows the management and control of all facets of the life cycle management of NAVSEA TMs; b) provides a track of requirements for update of TMs to new equipment configurations; and c) records TM requirements for each ship; (2) The review and resolution of approximately 2,000 yearly Technical Manual Deficiency Evaluation Reports (TMDER) received from TM users. This process results in correction of existing errors in TMs.

Technical/Engineering Drawing Assistance for NAVSEA Publications and Engineering Drawing (ED) Program - Provides for the development and preparation of documentation for all areas of TM and ED management. Also, provides support for the Integrated Logistic Overhaul (ILO) on-site technical manual validation element of the Supply Overhaul Assistance Program (SOAP); and the Technical Manual Identification Numbering System (TMINS), Technical Manual Specification and Standards (TMSS) program, Technical Manual Quality Control (TMQC) program, TM contract requirements for Technical Repair Standards (TRSs) and software modifications to computer data base programs.

Technical Manual Inventory Management (TMIM) - Prepares distribution lists of TM requirements by ship, reviews requests for printing of new TMs; provides existing TMs; stores TM master copies; and stores, distributes and reprints NAVORD Pubs, assigns and manages TMIM requests.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Technical Publications (cont'd)

Maintenance Naval Ships Technical Manual (NSTM)/Electronic Information Bulletin (EIB)/Electronic Installation Maintenance Book (EIM)/Technical Manual Standards (TMS) - Provides for management, maintenance, updating, printing, distribution and inventory control of 100 NSTM chapters, 13 volumes of the EIMB, numerous EIB (a periodical of electronic equipment) articles and TMS.

Management and Control of NAVSEA EDs - Provides for the management and control of 3 NAVSEA Drawing Repositories, an effort which includes the following: storing, updating and distributing of EDs and indexes; maintaining microfilm indexes (microfiche, microfilm, etc); reviewing and submitting proposed revisions to MIL-SPECS, standards and microfilm techniques related to drawings; and processing all requests for drawings. Current inventory is approximately 28 million drawings. 35 million copies of drawings are provided annually in response to user requests.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ QTY	\$ QTY	\$ QTY
Total Funding	19,773	19,722	18,269

Key elements of the program are updates, reprints and quality assurance:

TM Update (# of Updates/Backlog)	6,304 97/1,721	5,070 78/1,309	1,518 23/1,456
TM Update - ACN Conversion (# of ACN Conversion/Backlog)	0	1,730 1K/1.8K	2,363 1.3K/1.3K
TM Reprint (# of Reprints/Backlog)	2,400 3,840/947	1,298 2,076/0	2,500 4,000/0
TM quality assurance (# of TM WYs)	1,945 45	2,100 42	2,163 42

Other elements are:

TM MIS - TMDER (WY)	1,050 27	1,500 30	1,545 30
- (# of TMDERS Recd/backlog)	581/1,417	2K/2,855	2K/2,855
ADP Support	820	800	855
Tech. Eng. Assist. for NAVSEA Pubs. & Eng. Drawings (WYs)	2,327 47	2,484 35	2,435 35
TM Invent. Mgmt. (WY) - Reprint Ord Pubs	1,287 700	1,200 700	1,360 700
Maint. NSTM/IB/ EIMB/TMS (WY) - Printing & Dist.	1,160 530	1,000 530	1,200 530
Management & Control of NAVSEA Eng. Drawing(WY)	1,250 43	1,310 25	1,100 22

Note that WYs for various efforts may vary in cost.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Inspection/Testing

Provides support to improve hull, mechanical, and electrical (HM&E) material readiness through a comprehensive testing program. Program goals include increasing the number of available sources for parts/equipments through an increased number of Qualified Products List (QPL) tests to create greater competition and cheaper prices, early identification of design problems through tests on failed material, verifying that material in stock has not degraded through appropriate tests, and tests on special interest items such as diesel engines and instrumentation.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$1,932	\$2,171	\$2,052
Output (Number of Tests)	1,694	1,796	1,666

Note that test costs may vary depending on complexity of test subject.

3. Ship Design Technical Requirements Documents

Program involves six major efforts:

General Specifications - Keep general specifications for ships current, Units are the number of sections of the General Specification Reviewed/Updated.

Standard & Type Drawings (S/T DWGs) - Prepare, maintain and update S/T DWGs needed for acquisition of equipment, systems and components used on ships. Units are the number of S/T DWGs prepared or updated.

Design Data Sheets (DDS) - Prepare and update DDS that cover standard design processes that are used by engineers and to control contractors' ship design effort. Units are the number of DDS's prepared or updated.

Specification Control Systems - Maintenance of computer data base for the 9,000 standard acquisition documents controlled by NAVSEA and the 5,000 prepared outside NAVSEA which require NAVSEA review. Data base contains revision of priorities for documents, cost of updating, and progress of documents being updated. Units are the numbers of major changes to the data base.

Technical Data Program - Upgrade, promulgate, consolidate, maintain Data Item Descriptions (DID's) for data required by NAVSEA specifications. Also, eliminate DID's no longer required. Units are the number of DID's upgraded or eliminated.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

13-Digit Documents Conversion - This effort is to convert technical requirements documents (welding, material identification, etc.) that are in the uncontrolled series, and non-standard format to a standard series. Units are the number of document conversions initiated each year. There are currently 62 documents still to be converted. The backlog is being reduced at a rate of 8 per year. The effort should be completed in FY 92.

TOTAL	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
	1,835		1,952		1,868	
Gen. Specs	100	15	100	5	100	5
Standard & Type Drawings	785	144	1,029	158	852	127
Design Data Sheets	50	7	50	3	100	3
Spec Control System	350	60	350	60	420	65
Tech Data Program	430	374	303	270	276	250
13-Digit Document Conversion	120	8	120	8	120	8

4. Steam Propulsion Plant Improvement Program

This program provides management and overall coordination required to eliminate deficiencies in training, personnel, engineering design, material, and logistic support of steam propulsion plants for surface ships. Functional areas that comprise this effort are: (A) Engineering Operational Sequencing System (EOSS) which provides procedures for operating propulsion plants in routine steaming and specific casualty modes. (B) EOSS Maintenance which is the operation of the EOSS library and a feedback/update system to maintain EOSS installations. (C) Training Support is the depot level repair of boiler hot plants, technical update of school curricula, and control system training of ship forces afloat. (D) Documentation Support which improves supply support, updates and enhances technical manuals and documentation for maintenance and training. (E) Technical Support which develops engineering improvements in steam propulsion systems, components, and procedures to enhance operability, reliability, safety, and maintenance resulting in a longer useful shipboard life.

	FY 1984	FY 1985	FY 1986
	\$	\$	\$
Total Funding	7,106	7,575	5,303
1. EOSS Development	4,062	4,339	1,483
2. EOSS Maintenance	1,110	1,547	1,880
3. Training Support	462	400	680
4. Documentation Support	429	420	360
5. Technical Support	1,043	869	900

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

5. Underway Replenishment (UNREP)

Provides for the improvement of reliability and maintainability of UNREP systems and equipment through standardization and simplification of reprovisioning actions, and training and technical documentation revisions. Develops safety and performance improvements for elevators, cranes, hoists, similar logistic/handling operations. Corrects Fleet's and Inspection and Survey identified deficiencies by improving integrated logistic support and data production.

	FY 1984		FY 1985		FY 1986	
	\$	QTY	\$	QTY	\$	QTY
Total Funding	4,758		11,866		4,367	
<hr/>						
<u>Aircraft Elevator</u>	<u>127</u>		<u>466</u>		<u>761</u>	
Reduction of CASREPTS per year	57	6	199	6	280	9
Reduction in Parts Delay (days)	7	4	10	7	100	30
Reduction in Maint. Time (days)	11	14	90	20	86	12
Reduction in Repair Time (days)	52	10	167	10	295	15
Current Ao = 0.875						
Goal Ao = 0.950						
<u>Cargo/Weapons Elevator</u>	<u>3,906</u>		<u>8,850</u>		<u>1,000</u>	
Reduction in Parts Delay (days)	72	1	1,000	5	50	-2
Reduction in Maint. Time (days)	203	4	500	10	0	
Reduction in Repair Time (days)	253	5	3,000	12	50	-2
Reduction in INSURV Inspection	1,061		2,000		200	
Reduction in MDCS Documents	434		500		0	
Reduction of CASREPT's per year	1,883	16	1,850	15	700	1
Program Initiation Ao (CV/CVN = .333)						
Current Combined Ao = .610						
Goal Ao (CV/CVN) = .800						
Goal Ao (Surface Ships) = .950						
<u>Standard Replenishment Along</u>						
<u>Side Method</u>	<u>725</u>		<u>1,450</u>		<u>1,100</u>	
Reduction in CASREPT per year	725	2	1,450	14	1,100	11
Increased Sys. Availability (Ao)						
Program Initiation Ao = 0.582;						
Current Ao = 0.852;						
Goal Ao = 0.892						
<u>Vertical Conveyor</u>						
Reduce Personnel Injuries	0		500	-2	606	-3
<u>AO/AR Crane Support</u>						
Crane Certification/# of tests	0		600	55	900	75

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

6. Habitability

Provides physical working conditions and personnel support facilities which support ship/fleet readiness and prevent excess expenditures in accomplishing fleet improvements. This effort increases personnel retention rates, ensures that expenditures result in functional vice cosmetic improvements, and ensures that materials/equipment/ furniture installations meet regulated standards and have adequate in-service engineering support.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	\$315		\$391		\$382	
Updates of Manuals/Catalogs <u>1/</u> Ships receiving assistance (Cumulative)	110	2	215	6	-	-
	-	-	-	100	-	-
Materials Safety: Materials Tested <u>2/</u>	55	24	23	9	-	-
Products Tested <u>3/</u>					200	15
Fleet Support Heat/Vent/Air Condition (HVAC) Surveys/Improvement Plans	50	8	103	24	95	22
Ship Equipment Assists <u>4/</u>	-	-	50	26	87	40
Maint. Equip Items Tested <u>5/</u>	100	15	-	-	-	-

1/ Includes In-Service Engineering Support

2/ For example, fabrics for berth curtains.

3/ Mainly furniture and office equipment.

4/ Testing and procurement/logistics support of laundry, dry cleaning, and food service equipment.

5/ Shipboard housekeeping and preservation equipment.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

7. Ships Trials & Tests

Funds inclining experiments and engineering solutions to ship hardening problems.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$7,890	\$2,668	\$4,933

a. Ship Hardening Program

Provides management guidance and technical support to apply lessons learned from ship shock tests by developing engineering fixes for proven highest priority shock hardening deficiencies for existing ships and equipment and modifying Specifications and Standards for improved future designs. Examples of actions taken include: (1) MK 45 Light Weight Gun SHIPALTs and ORDALTs have been prepared to shock harden this system on ship classes (CG 47 CGN 38, CGN 36, DD 963, DDG 993, LHA 1), for a total of 47 ships; (2) MK 86 Gun Fire Control System corrective actions on seven ship classes that potentially involve 71 ships. The probability of Battle Group Ships being rendered combat ineffective by shock damage can be significantly decreased when the developments of the Ship Hardening Program are installed. Thus, further delay of corrective action seriously affects Fleet survivability. The funding provides engineering fixes for the top 20 shock-related deficiencies identified in the "U.S. Navy Ship Hardening Plan-Shock." These requirements will increase as more ships (LSD 41, LHD 1, MCM 3, CG 53) are shock tested and shock hardening deficiencies are identified.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
1. Training Aids and Documentation	\$ 274	\$88	\$400
2. Electric Power Reliability	399	26	1,158
3. Interlocks & Protective Circuits	320	150	83
4. Missile System Hardening	50	0	300
5. Gun System Hardening	625	700	350
6. Communications System Hardening	163	253	550
7. NAVSEA Shock Coordinator Actions	345	260	370
8. CV 67 Shock Test & Follow-Up	4,597	0	727
TOTAL	<u>6,773</u>	<u>1,477</u>	<u>3,938</u>

b. Inclining Experiments

Program provides funds to perform inclining experiments on ships in the active fleet. These experiments determine displacement and center of gravity data necessary to ensure that ships do not exceed architectural limits. Historical data indicate unexpected and unaccounted for increases in displacement and rises in the center of gravity in spite of measures designed to control such growth. Exceeding the stability, buoyancy, or strength limits threatens survivability in high seas. Flooding caused by weapon damage, grounding, or collision will have a significant impact on the survivability.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Inclining Experiments	430	5	1,191	14	995	12
Weight Control Program						

c. Survivability Review Group (SRG)

SRG identifies changes in ship design practices, specifications and standards which will enhance the resistance of ships to damage by enemy weapons and provide directions to survivability-related R&D. The product of this program is a number of ship class reports beginning with FFG class.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
1. Combat Systems Rev	107	1 partial	-0-		-0-	
2. HM&E System Rev.	165		-0-		-0-	
3. Vulnerability Asses.	95		-0-		-0-	
4. Documentation	320		-0-		-0-	
TOTAL	687		0		0	

8. Ship Systems Engineering (SSE)

The program consists of seven discrete functional areas:

Materials Engineering consists primarily of the Shipboard Corrosion Control Program which reduces shipboard corrosion and related fleet maintenance. Level I SUBSAFE funding is incorporated into Materials Engineering beginning in FY 84.

Hull provides life cycle engineering support to critical shipboard hull systems including stern gates, synthetic rope, hull structure, and ship control systems. The main goal is the reduction in the number and duration of hull related CASREPTS and improvement in personnel safety/protection.

Auxiliary, by means of early detection and expedient resolution of auxiliary equipment problems, provides increased reliability and maintainability of mission essential systems/equipment with a tangible decrease in Fleet CASREPTS. Program efforts are targeted toward high priority (DART) equipment problems.

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Propulsion provides for engineering and technical support of propulsion related systems. Main effort is the Boiler Overhaul Improvement Program in which planning and quality assurance are improved by better definition and execution of repairs resulting in shorter, less expensive, higher quality overhauls.

Damage Control provides engineering and logistics support of A) chemical, biological and radiological defense; B) damage control; C) hazardous material control; and, D) personnel protective, survival and rescue equipment,

Electrical provides for engineering solutions to electrical problems identified by the Fleet, CNO, and by CASREPTs. Provides fixes to solve problems between electrical power and combat systems identified by the Electrical Power Interface Compatability (EPIC) program. Other equipment whose electrical problems are being solved are the 400 HZ MG Set, Circuit Breakers and Electrical Distribution and IC Sensor Systems. Electrical accomplishes its mission by revising technical manuals, developing repair standards, and providing modification kits.

DD 963 Class Senior Navy Steering Board (SNSB) - Identifies and oversees correction of technical problems arising on DD-963 Class ships. There are 5 main efforts: A. Independent Design Review Major technical areas analyzed per direction of SNSB. B. Waste Heat Boiler problem solutions. C. Bleed Air System deficiency correction and establishment of in-house repair capability. D. High Pressure Air Systems and E. Low Pressure Air Systems - Equipment and logistics improvements. (Low pressure effort is completed in FY 85).

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

8. Ship Systems Engineering (cont'd)

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	\$19,027		\$17,368		\$16,757	
<u>Materials Eng.</u>	<u>1,508</u>		<u>1,802</u>		<u>1,501</u>	
Corrosion Control	1,142		1,802		1,501	
Mandays saved		20,000		30,000		20,000
Other	366		0		0	
<u>Hull</u>	<u>867</u>		<u>1,711</u>		<u>1,730</u>	
Stern Gate Reduction	263		600		200	
CASREPT Red.		-1		-2		-1
Maint. days Red.		-3		-3		-3
Synth. Rope Safety	75		200		200	
Eng. Support	444		811		1,130	
Mean Downtime Reduction		-1%		-5%		-7%
Repair Time Red. (days)		-1%		-5%		-7%
Other	85		100		200	
<u>Auxiliary</u>	<u>7,116</u>		<u>5,877</u>		<u>5,032</u>	
DART Aux Equip Support	5,720		3,346		2,562	
CASREPT Reduction		-3%		-5%		-3%
Mean Downtime Reduction		-3%		-5%		-3%
Other Aux Equipment Support	1,396		2,531		2,470	
<u>Propulsion</u>	<u>3,083</u>		<u>3,183</u>		<u>3,422</u>	
Overhaul Red.	3,083		3,183		2,694	
Cost Avoidance (\$)		25,000		19,000		16,000
Rework Red.		25%		20%		10%
Red. OVHL delays		20%		30%		20%
Maintenance downtime reduction	0	0	0	0	728	60%
<u>Damage Control</u>	<u>184</u>		<u>0</u>		<u>2,394</u>	
Damage Control Equipment	40		0		724	
Cost Reduction						10%
Personnel Injury Reduction						4%
Personnel Protection/Chem Defense	144		0		1,541	
Cost Reduction		1%				10%
Personnel Injury Reduction						4%
Fire Protection	0		0		129	
<u>Electrical</u>	<u>3,479</u>		<u>2,943</u>		<u>1,784</u>	
EPIC	2,010		1,794		679	
Electrical Distr. & IC Sensor System	0		477		395	
Other	1,469		672		710	
<u>DD 963 SNSB</u>	<u>2,790</u>		<u>1,852</u>		<u>894</u>	
Ind. Des Review/completed/initiated	635	1/2	621	2/0	113	
Waste Heat Boiler	913		283		243	
Bleed Air System	450		300		250	
HP/LP Air System	392		494		288	
Other	400		154		0	

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

F. SUBMARINE SUPPORT

1. Deep Submergence Systems Project (DSSP)

Provides technical and engineering support in the areas of: design engineering, failure analysis, test planning and preparation, and integrated logistics support for deep submergence rescue systems, submarine rescue chambers, manned submersible vehicles, and unmanned towed search and work systems. This program enables the Navy to rescue people from disabled submarines; perform deep submergence oceanographic research; test and improve deep ocean sensor/equipment systems; perform manned and unmanned underwater search, inspection and recovery missions; and provide support for surface and submarine support ships for deep submergence systems/missions.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$12,135	\$13,857	\$16,969

a. The Deep Submergence Rescue Vehicles (DSRV) Program provides continuing technical and logistic services to maintain the readiness of the MYSTIC (DSRV-1) and AVALON (DSRV-2) to respond to submarine rescue mission requirements anywhere in the world. The DSRV's are equipped with a sophisticated command, control and display system using one-of-a-kind commercial equipment, most of which was designed in the late sixties. One of the two DSRV's must be in an alert ready status at all times.

	4,044	4,476	4,264
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b. The DSRV Modernization Program is a phased program consisting of the engineering design, testing, and vehicle integration efforts required to extend the service life of the DSRV's through the year 2000 and beyond. Rapidly increasing non-supportability of DSRV equipment/systems mandates modernization of these vehicles.

	-0-	2,578	2,694
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c. NR-1 is the only nuclear powered, deep-diving research and oceanographic submarine in service. Her submerged endurance, depth capability, and special ability for search and recovery far exceed the performance capabilities of other manned submersibles; while her nuclear power plant will provide many years of active service before refueling is required. Because NR-1 contains many unique, one-of-a-kind commercial equipments, it depends heavily on NAVSEA for continuing dedicated specialized technical and logistic support as well as routine operational/maintenance needs. NAVSEA has total budgeting responsibility for NR-1, including those items/services normally included in Fleet support.

	2,420	-	2,824
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Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Deep Submergence Systems Project (DSSP) (cont'd)

d. The Deep Submergence Vehicles Program TURTLE (DSV-3) and SEA CLIFF (DSV-4) provides a manned deep depth work and recovery capability and is supported by engineering, technical and logistics services.

2,227 2,505 1,809

e. The Submarine Rescue Ship (ASR-21 Class) Program supports two ships: the USS PIGEON and the USS ORTOLAN. Both are equipped with a complex Weight Handling System for handling the DSRV's and a Deep Diving System (DDS) for conducting open sea saturation diving operations.

1,083 1,280 1,100

f. Unmanned Vehicle Systems funds support the unmanned Surface Towed Search System (STSS) which provides a broad-area ocean bottom search capability. Increased funding in FY 1985 implements and maintains engineering/technical and logistic support services for new commercial type towed inspection and work vehicles being delivered in FY 1985 and FY 1986.

911 1,091 900

g. Dedicated Manned/Unmanned Vehicle Support provides specialized mission support services by Scripps Institute of Oceanography and Woods Hole Oceanographic Institute for TURTLE (DSV-3), SEA CLIFF (DSV-4), DSV ALVIN and unmanned vehicles/systems assigned to COMSUBPAC.

670 765 799

h. Submarine Personnel Rescue Systems modifies existing submarine rescue systems to provide a capability to rescue disabled submarine personnel exposed to pressurized conditions and to provide a submarine and surface ships-of-opportunity capability which augments the ASR-21 Class for support of Deep Submergence Rescue Vehicles.

- 246 257

i. Planning Yard and Engineering/Technical Services are provided for USS POINT LOMA (AGDS-2), a designated Navy DSV surface support ship. As modifications and improvements are accomplished, this ship will be capable of supporting manned DSV's, unmanned towed vehicle systems, and as a DSRV ship-of-opportunity for submarine rescue missions. A backlog of SHIPALT planning/engineering tasks is significantly reduced in FY 1985 and 1986.

195 445 465

j. Engineering and technical support is provided for the ELK RIVER (IX-501), which is the only platform for training Navy personnel in saturation diving. Support services provided by these funds are critical to the safe operation and readiness of the Deep Diving System (DDS) and heavy lift/handling systems installed on this vessel.

585 471 319

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

k. The Deep Sea Program is a new initiative beginning in FY 1986. These funds provide mission support as directed by the CNO to increase the operational tempo of deep ocean search, location, and recovery of assets. Various activities will use these funds in support of this new program effort to fund ship charters, special deep submergence systems/equipment charters, data reduction, systems transportation and increased maintenance and logistic support. Also included in this effort are funds to support professional and technical services at naval activities to establish and maintain a repository of certain recovered objects of significant military/national interest; data related to objects lost or disposed of at sea; and oceanographic, charted, and other vital data.

- - 1,538

2. Submarine Noise Reduction

The Submarine Noise Reduction Program has two objectives: (1) sponsor/fund an acoustical trials program, and (2) sponsor/fund state-of-the-art engineering investigations and technical support tasks.

	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
Total Funding Submarine Noise Reduction Program	<u>\$10,055</u>	<u>\$14,747</u>	<u>\$10,957</u>
Acoustical Trials	\$ 7,886	\$11,157	\$ 9,180
Engineering Investigations and Study Task	\$ 2,169	\$ 3,590	\$ 1,777

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

G. QUALITY RELIABILITY ASSURANCE

Establishes policies, performance criteria, and provides assistance in the QA discipline to implement OSD, OPNAV, NAVMAT, and NAVSEA guidance to assure product quality and reliability among ships and weapon systems during design, development, acquisition, operation, and maintenance.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding (\$000)	\$2,609	\$1,498	\$2,137
Efforts Funded:			
<u>Shipyards Quality Assurance</u>	\$246	\$239	\$545
1. Number of persons trained for QA and Ship OH Assessment	344	334	750
2. Number of persons trained for NDT certification	14	13	30
<u>Supship Quality Assurance</u>	\$129	\$ 81	\$206
1. Number of people trained for QA and Ship OH Process Assess	360	280	560
2. Number of training courses dev to certify QA personnel	9	6	15
3. Number of QA certification programs administered	7	6	16
<u>Level I/SUBSAFE</u>	\$53	\$56	\$ 75
1. Number of on-site reviews of contractor plants	7	8	10
<u>Fleet Quality Assurance Asst</u>	-	\$40	\$60
1. Number of SRF's accredited for QA	-	1	2
2. Number of SRF's trained for QA	-	1	2
<u>Management and Training</u>	\$642	\$332	\$269
1. Number of QA training exercises given	21	11	8
<u>Design and Production</u>	\$765	\$657	\$537
1. Number of design analyses conducted	135	90	100
<u>In-Service</u>	\$449	\$93	\$445
1. Number of ship models produced	4	1	4
2. Number of eqp pieces analyzed using engineering data base	40	40	70
<u>NAVMAT Initiatives</u>	\$325	-	-
1. Number of initiatives achieved	4	-	-

Activity Group: Engineering Support Services (cont'd)

III. Performance Criteria and Evaluation (cont'd)

H. NUCLEAR PROPULSION TECHNICAL LOGISTICS

This program contains two main efforts:

a. Shipyards Reactor Plant Component Maintenance

Six naval shipyards (Charleston, Mare Island, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound) provide the following types of support: (1) technical receipt inspection, refurbishment, and maintenance of Navy stock spare repairable components; (2) special handling and storage of irradiated components and equipment removed from ships; (3) inspection, modification, refurbishment and control of refueling equipment, special maintenance and support equipment and steam generator cleaning and repair equipment; and, (4) special evaluations of installed reactor plant components and systems as authorized by NAVSEA.

b. Reactor Plant Component and System Engineering

NAVSEA prime contractors (Westinghouse and General Electric), who operate the Department of Energy's Naval Nuclear Propulsion Program laboratories, provide engineering support directly related to the repair or maintenance of reactor plant components installed in nuclear-powered ships. Specifically, these contractors: (1) provide technical liaison with shipyards refueling, overhauling and testing reactor plants in commissioned nuclear-powered ships; (2) conduct evaluations of operating reactor plant cores, components and material; (3) conduct on-going safety analyses of naval reactor plant systems and material performance; (4) maintain technical manuals; (5) provide engineering support to shipyards repairing reactor plant components turned-in from operating ships; (6) design and develop field change modifications for reactor plant components and equipment as authorized by NAVSEA; (7) contract with vendors for refurbishment of reactor plant components; and (8) provide technical direction to the Navy Ship Parts Control Center regarding parts provisioning, procurement, quality assurance and on-board supply support.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$47,490	\$75,047	\$81,749
Shipyards Support	\$24,965	\$28,160	\$27,831
Other Support	22,525	46,887	53,918

IV. Personnel Summary (End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. Military	<u>24</u>	<u>46</u>	<u>99</u>
Officer	1	4	4
Enlisted	23	42	95

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Maintenance Support
Budget Activity: 7-Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed.

The Maintenance Support Activity Group supports functions which are not a part of depot, intermediate or organizational maintenance, but which facilitate and perpetuate any or all of those levels of maintenance. Maintenance support can be divided into: programming and planning support which includes long range workload scheduling and resource utilization, centralized planning for all maintenance, all logistics support efforts (except engineering) for the development of weapon system and weapon support activity maintenance requirements; maintenance technical and engineering support, which includes technical and engineering efforts in the development of maintainability concepts and the maintenance portion of logistics plans dealing with weapons and equipment; and technical and engineering data, which includes the preparation of technical and engineering data for all types of equipment, and provides for the preparation, editorial review and/or revision of equipment publications pertaining to the operation, repair and repair parts support of DOD materiel.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Coast Guard EMS	548	654	645	584	653	69
Gun Wpn Sys Maint Spt	1,762	2,241	2,184	1,888	2,159	271
Point Defense Maint Spt	2,849	1,414	1,487	1,386	1,374	68
Long Range Msl Sys Maint	9,495	18,986	18,838	18,432	11,547	1,115
Med Range Msl Sys Maint	14,582	16,216	16,869	15,192	17,416	2,224
Missile Maint Support	18,883	12,847	12,779	6,613	8,899	2,286
NATO Seasparrow	18,578	8,733	8,641	8,836	14,787	5,951
Search Radar	12,396	13,933	13,528	12,958	13,274	324
Vertical Launch Systems	998	1,218	1,156	923	2,081	1,078
2F Cog EMS	336	582	546	544	478	-66
INDE/METCAL	5,194	5,638	5,568	5,433	4,331	-1,102
Air Maintenance Spt	6,511	18,419	18,856	7,991	9,465	1,474
Ammunition	3,592	3,426	3,489	3,321	2,789	-532
INSPECMAR	2,179	2,292	2,171	2,129	3,356	1,227
Pollution Abatement EMS	863	1,686	1,679	1,392	1,188	-292
Pollution Abatement EMS	233	588	588	586	564	-22
Salvage EMS	662	944	944	937	584	-353
Inactive Ship	6,512	7,124	7,183	6,766	7,165	399
REGIS Systems	5,779	7,516	6,882	5,679	35,138	29,459
TOTAL, MAINTENANCE SUPPORT	94,344	188,449	185,289	93,582	137,888	43,578

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (Cont'd)

1. FY 1985 Current Estimate		\$93,502
2. Pricing Adjustments		1,872
A. Civilian Personnel Compensation (Direct)	(-73)	
1) US Direct Hire Pay Adjustment	-84	
2) Other Direct Pricing	11	
B. Stock Fund	(-42)	
1) Non-Fuel	-42	
C. Industrial Fund Rates	(575)	
D. Other Pricing Adjustments	(1,412)	
3. Program Increases		44,393
A. Other Program Growth in FY 1986	(44,393)	
1) <u>Coast Guard EMS</u>	53	
2) <u>Gun Weapons Systems MS</u>	222	
The increase will fund approximately 5,200 additional engineering and management support actions for the overhaul and repairs of the gun weapons systems.		
3) <u>Point Defense Maint Spt</u>	36	
4) <u>Long Range Missile Systems</u>	831	
The increase supports 10 TERRIER ships in overhaul in FY 1986 vice 6 in FY 1985.		
5) <u>Medium Range Missile Sys Maint</u>	1,719	
One additional ship will require Ship Installation/Test/Qualification Support and fourteen additional ships will require In-Service Engineering Agent/Fleet Support. This effort will, in part, support two new TARTAR weapon systems (MK 92 Fire Control System and MK 13 MOD 4 launcher) for FFG-7 class ships which require regular overhaul support and in-service engineering to maintain availability and prevent CASREPTS.		
6) <u>Missile Maint Support</u>	2,124	
New missiles entering the fleet require increased engineering support. In particular, a data base for flight testing must be established. Data analysis for these missiles requires 3 times the effort needed for SM-1 Blocks IV and V. Additionally, missiles destined for new vertical launch canisters and SM-2 missiles with new rocket motors require documentation and other engineering support.		

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (Cont'd)

- 7) NATO SEASPARROW 5,753
Increase supports overhaul of 25 NATO SEASPARROW equipments. Specific tasks include: Fleet Support - support from NAVSEACENLANT and NAVSEACENPAC in areas of supply, documentation, computer programming, Government Furnished Equipment (GFE), production support (ILS) efforts, and system engineering. Installation & Checkout/ Shipboard Qualification Test (I&C/SQT) provides installation preplanning integration, assistance to FMP installing yards, SQT and related logistics/technical/engineering support, and repair of part failures.
- 8) Search Radar MS 477
Increased funding will provide an additional 6 work years of effort for in-service engineering and Anti-Air Warfare Readiness Tasks in support of 2D and 3D search radars installed in carriers, destroyers, and cruisers. In addition, 3 search radar systems on 2 additional auxiliaries will be supported.
- 9) Vertical Launch System MS 1,038
Increased support is required as this system enters the fleet in FY 1986. ILS resources must be developed, in-service engineering agents must be trained, and computer programs must be written and tested for VLS's on DD-963 Class ships.
- 10) Mine Maintenance Spt 1,323
Increased maintenance requirements result from delivery of new weapons to mine stockpiles and in-service engineering duties for the MK-60 mine and the Quickstrike MK-62, MK-63, MK-64 and MK-65 mod 0.
- 11) Inshore Special Warfare MS 1,135
In FY 1986, funds are required for maintenance support of the 2 Dry Deck Shelters recently certified. In addition, technical support for Swimmer Delivery Vehicles increases due to 2 additional SDV's in FY 1986.
- 12) Inactive Ship MS 207
The increase provides greater contractor effort in operation of the Inactive Ship Maintenance Facilities.
- 13) AEGIS System Maintenance Support 29,475
Increase supports new units entering the fleets, planning requirements for SRAs, and

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

initial planning for CG-47 Regular Overhauls (ROH). Efforts include operation of a CG Planning Yard (9,292) which establishes expanded capabilities to support unique engineering, maintenance/modernization material integration, operating cycle integration, and quality control/mobile engineering teams. Other efforts include: 441 additional combat system or H&ME in-service engineering technical assists (7,120); follow-on test and evaluation for the Baseline II AEGIS cruiser (2,347); depot administration at Crane, IN (575); AEGIS Computer Center operation and maintenance and installation of Baseline II and III equipments (1,658); AEGIS Combat System Center activation and operations and maintenance (8,483).

4. Program Decreases

-2,687

A. Other Program Decreases in FY 1986 (-2,687)

1) 2F COG EMS

-59

The decrease results in 1 less workyear of maintenance support for the 2F COG ASW electronic restoration program.

2) TMDE/METCAL

-1,243

Realignment of the TMDE engineering portion of the program to Electronic Test and Repair (-897). Reduced METCAL engineering results in less development of new Calibration Standards (-346).

3) Ammunition

-612

Reduces the number of workyears by 6 impacting on such areas as ammunition malfunction investigations, technical publication updates, depot maintenance work requirement lists, and automated data lists.

4) Pollution Abatement EMS

-398

The proposed support for procurement of oil pollution abatement systems is deferred to FY 1987 and continuation of the Sewage Systems Certification Inspection Program will have one year backlog which will affect the following ships: CG-16, CG-34, CV-62, CV-67, CV-41, CV-60, CV-69, FF-1095, FF-1054, FF-1068, FF-1079, DD-46, and half the DD-963 Class.

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

5) Salvage EMS

-375

Decrement due to 17 fewer salvage equipment systems requiring modification, and 8 fewer procedures, instructions, or associated documentation receiving revisions.

5. FY 1986 President's Budget Request

\$137,080

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation

A. SURFACE WARFARE SYSTEMS

1. Coast Guard EMS

Provides maintenance engineering support of Navy-owned weapons and ASW systems installed in U.S. Coast Guard ships.

Funding supports the following ships:

	<u>FY 1984</u> Ships	<u>FY 1985</u> Ships	<u>FY 1986</u> Ships
1) Guns and Fire Control Systems			
WMEC	4	2	2
WHEC	4	5	6
2) Sonars			
WHEC	6	6	6

Guns and fire control systems and sonar equipment quantities vary by hull.

WHEC = High Endurance Cutter (378 ft.)

WMEC = Medium Endurance Cutter (270 ft.)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	540	7.1	584	7.0	653	8.7

Units = number of workyears

2. Gun Weapon System Maintenance Support

Provides engineering and management support for the gun weapon system maintenance and modernization programs, hydraulic fluid replacement, and test gun mount maintenance.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units*	\$	Units*	\$	Units*
Total Funding	1,762	33,885	1,888	43,907	2,159	49,068

* The vast majority of units are engineering and management actions. Units also include the number of guns whose hydraulic fluid was cleaned and one workyear for the test gun mount.

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. Point Defense Maintenance Support

Provides support for the 52 Basic Point Defense Surface Missile Systems installed on 34 ships of the fleet. Support includes:

Operational and maintenance efforts by the Naval Ship Weapon Systems Engineering Station (NSWSES), including development of reliability and maintainability ORDALTS engineering assistance for the correction of casualties, and planning support for ship qualification tests.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	WY	\$	WY	\$	WY
Total Funding	2,049	37.0	1,306	21.3	1,374	20.7
No. of Systems Supported	52		39		30	

4. Long Range Missile System Maintenance

Provides installation, test, qualification support and in-service engineering for TERRIER weapon systems on 31 AAW ships. These systems include 90 fire control systems, 45 launching systems, and 5 weapon direction systems.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$9,495	\$10,432	\$11,547
# of Reports, Ship Vists			
Documentation/Corrective Actions	12,231	12,320	12,270

Engineering teams monitor the configuration and installation of ORDALTS and planned improvements in the TERRIER Weapon Systems; test simulation and technical operation; and conduct detailed audits of the capability of weapon systems and the operators of those systems. In-service engineering includes ship assistance visits, remedying casualty reports, and writing technical feedback reports, technical document changes, and engineering change proposals.

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

5. Medium Range Missile System Maintenance

Maintenance support includes technical support and material services required for operation, maintenance installation support, Ship Installation/Test Qualification, In-Service Engineering Agent, and Fleet Support.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding/Systems Supported	\$14,582/465	\$15,192/518	\$17,416/569

A. Ship Installation/Test/Qualification Support

<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
\$	Units	\$	Units	\$	Units
2,454	166	2,100	136	2,350	145

Units include the number of teams and tasks associated with this support.

Support comprises FFG/DDG/CGN combat system ship qualification teams, combat system readiness reviews, provisioning support, regular overhaul support, follow on test and evaluation, ORDALT proofing and installation and checkout test support for the following classes:

<u>Ship Class</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
FFG-7	7	10	7
DDG-2	5	1	2
DDG-15	3	4	3
CGN-36	1	-	-
CGN-38	1	1	3
FFG-1	3	1	3
TOTALS	<u>20</u>	<u>17</u>	<u>18</u>

b. In-Service Engineering Agent/Fleet Support

<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
\$	Units	\$	Units	\$	Units
12,128	2,689	13,092	2,829	15,066	3,235

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Units include the number of casualty reports/tech assist actions, reliability/maintainability/availability support actions, technical feedback reports, and other fleet support tasks for the TARTAR missile program. Ship classes supported are:

<u>Ship Class</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
DDG-2	13	13	13
DDG-15	10	10	10
FFG-1	6	6	6
CGN-36	2	2	2
CGN-38	4	4	4
DDG-993	4	4	4
FFG-7	34	38	47
PHM-1	4	6	6
CG-47	0	1	2
WMEC	1	4	7
WHEC	0	1	2
TOTAL	<u>78</u>	<u>89</u>	<u>103</u>

6. Missile Maintenance Support

Maintenance support independent of the depot and intermediate level operations consists of telemetry and in-service engineering functions that support missile flight operations, missile logistics and technical support of design changes. This effort includes the maintenance and update of the flight testing data base for the analysis of flight firings.

Number of ships supported are as follows:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Extended Range Missile Combatants (CG, CGN, DDG)	31	31	31
Medium Range Missile Combatants (CG, CGN, DDG, FFG)	88	93	95
Mobile Logistics Force (AOE, AE, AOR, AO)	27	27	27

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>\$</u>	<u>WYR</u>	<u>\$</u>	<u>WYR</u>	<u>\$</u>	<u>WYR</u>
Total Funding	10,083	153	6,613	98	8,899	127
TERRIER	325	5	67	1	140	2
TARTAR	195	3	67	1	140	2
STD MSL-1	5,794	87	4,450	65	3,163	41
STD MSL-2	1,320	20	412	6	3,021	43
Special Weapons	195	3	135	2	270	5
Industrial Engineering	472	8	307	5	943	16
UHF Telemetry	1,782	27	1,175	18	1,222	18

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

7. NATO Seasparrow Maintenance Support

1. Description

The program provides installation, operation and maintenance support of the Improved Self-Defense Missile System Program (NATO SEASPARROW Surface Missile System (NSSMS) and MK-23 Target Acquisition System (TAS)) installed on CV/CVN's, AOE, AOR, DD-963 and LHD class ships.

Specific tasks include:

Quick reaction technical and engineering support to sustain a high level of system availability. Resolution of casualty reports; conducting configuration management, evaluating system reliability/maintainability/availability to improve system performance, reviewing and updating documentation and computer programs with respect to operational inputs, and performing necessary logistics support efforts essential to maintain systems in operation.

Perform efforts to improve system operational availability pursuant to Detection Action Response Technique (DART)

Conduct installation preplanning, assistance in actual installation and checkout of systems and ORDALTs, maintain installation documentation, coordinate installation spares and repairs, and perform Ship Qualification Trials (SQT).

2. Input/Outputs

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$10,578	\$ 8,836	\$14,787

Operational Systems Supported

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Sys/Ships</u>	<u>Sys/Ships</u>	<u>Sys/Ships</u>
NSSMS	65 50	67 51	67 51
NSSMS (7M ORDALTS)	6 4	11 8	24 19
TAS	19 19	25 25	30 30

8. Search Radar Maintenance Support

Provides maintenance support for all search radars installed in and used by the fleet. More specifically, this program provides technical engineering services required at shore stations, shipyards, and aboard ships in the operation and maintenance of nearly 1,000 search radars currently installed in the fleet, both in surface missile system (SMS) and non-SMS ships. These services provide in-service engineering and ship assistance teams for Ship Qualification Trials (SQT), ship certification efforts, pre-deployment/pre-overhaul inspections, and emergent problems as well as equipment repair and modifications. Included in this program is the Anti-Air Warfare Readiness Program, which provides rapid response to SMS ships for 2D/3D air search

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

radars, displays, ancillaries, and supporting systems. This effort provides high-value missile ships with urgently needed quick reaction engineering level assistance for training and problem resolution to provide improved equipment and system availability and reliability.

The program supports the following ship types:

	<u>FY 1984</u> <u>Units/Ships</u>	<u>FY 1985</u> <u>Units/Ships</u>	<u>FY 1986</u> <u>Units/Ships</u>
CARRIERS	15/8	15/7	16/8
MAJOR COMBATANTS	280/89	298/116	309/115
AUXILIARIES	30/28	28/23	31/25
TOTALS	<u>325/125</u>	<u>341/146</u>	<u>356/148</u>

Units = Number of Ship Assistance Team (SAT) visits, programmed AAW Readiness visits, Field Change installations, and other engineering efforts.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$12,396	\$12,950	\$13,274

9. Vertical Launch System (VLS) Maintenance Support

Program support is required for all levels of VLS maintenance as this new system enters the fleet in FY 1986. ILS resources must be developed, in-service engineering agents must be recruited and trained, and computer programs must be written and tested for the specific VLS variants installed in DD 963 class ships. Requirements will continue to increase in the outyears as new ship classes (CG 47 and DDG 51) and additional variants enter the fleet.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	WYS	\$	WYS	\$	WYS
Total Funding	998	12.2	923	10.2	2,001	21.2
Efforts Funded						
Integrated Logistic Support	\$257	3.1	\$223	2.5	\$466	5.0
In-Service Engineering Agent	376	4.6	368	4.0	800	8.5
Computer Programming	226	2.8	295	3.3	654	6.9
Reliability, Maintainability, Availability	139	1.7	37	.4	81	.8

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. ELECTRONICS SYSTEMS

1. 2F COG Electronics EMS

Provides programming and planning support (workload scheduling and resource utilization and maintenance, technical and engineering support), for repairable 2F Cog Undersea Warfare Equipment such as sonar systems, depth sounders, acoustic countermeasures, and undersea communication systems installed or to be installed in attack submarines, ballistic missile submarines, major surface combatants and support ships.

Program requirements are based on quantities of installed equipment, the age of equipment, the cycle time required to repair items, the position of the installed equipment on the ship, issue rates of equipment to the fleet and emergent fleet problems.

Transducers, hydrophones, and scanning switches are major components of a sonar system which receive support.

- a. Transducers receive and send signals and are used on active systems.
- b. Hydrophones, used on passive systems, only receive signals.
- c. Scanning switches are electro-mechanical switches made primarily of silver, which is necessary for a sonar system to process audio and visual signals.
- d. "Sonar equipment" designates various other components of sonar systems.

	FY 1984		FY 1985		FY 1986	
	\$	WY	\$	WY	\$	WY
Total Funding	336	3.9	544	6.2	478	5.2
Transducers and Hydrophones	212	2.5	391	4.4	338	3.8
Scanning Switches	38	.4	82	1.0	70	.8
Sonar Equipment	86	1.0	71	.8	70	.6

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. TMDE/METCAL Support

The TMDE/METCAL program identifies electronic test equipment requirements for monitoring and maintaining the performance level of systems/equipments and calibration support required for maintaining mechanical and ordnance TMDE. TMDE is any device which measures, calibrates, gages, tests, inspects, monitors, diagnoses or otherwise examines the operating or physical characteristics of a system/equipment or materials/supplies. This maintenance support program supports (1) technical support required for the NAVSEA Metrology Program; (2) determination of calibration requirements based upon system operating requirements; (3) development and distribution of standardized documentation required for the calibration program; (4) determination of electronic test equipment required for reliability operating and maintaining systems/equipments; and (5) data systems for analyzing TMDE requirements and for calibration scheduling.

	FY 1984		FY 1985		FY 1986	
	\$	W/Y	\$	W/Y	\$	W/Y
Total Funding	5,194	61	5,433	61	4,331	46
METCAL Engineering	3,769	43	3,998	45	3,692	40
TMDE Engineering	705	10	859	10	1/	
Measure	720	8	576	6	639	6

1/ The TMDE Engineering portion of this program transfers to Engineering and Support Services (Electronic Test and Repair) in FY 1986.

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. UNDERSEA WARFARE SYSTEMS

1. Mine Maintenance Support

Maintenance includes the following efforts:

Maintenance Support -- support for depot maintenance and intermediate maintenance of mines and related equipment includes material receipt, document issuance and processing, data and report compilation, and other program and technical items. Units are the number of work directives, procedure documents, Fleet test data reports, and other management documents produced or processed.

Mine Warfare Planning -- engineering and fleet support services for the development and maintenance of hardware and systems as well as software. Units include maintenance for 3 mine warfare simulators, 30 projects to update the simulator data base, and five field activities and support contracts.

The Craft of Opportunity/Route Survey Programs -- The COOP program and Route Survey program are recent initiatives to study the port breakout problem. Units are the number of major tests and tasks performed.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	6,511		7,991		9,465	
Programming & Planning Support	845	2,527	615	2,128	757	2,619
Maintenance Technical Engineering Support	1,059	4,173	895	4,086	1,231	5,621
Technical & Engineering Data	2,002	2,261	1,794	2,103	2,556	3,007
Mine Warfare Planning	610	29	815	38	852	40
Coop/Route Survey	1,995	26	2,806	38	2,839	38
Mine Hunting Systems Support Services (WY)*			295	3	418	5
Counter Measure Systems Support Services (WY)*			559	5	593	7
Mine Neutralization Systems Support Services (WY)*			212	2	219	2

* Transferred from Surface Mine Countermeasures in FY 85 and FY 86.

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

D. AMMUNITION MAINTENANCE SUPPORT

Maintenance Support Services - Provides engineering support both to investigate ammunition malfunctions and to prepare and update depot maintenance work requirements and automated data lists used by depot maintenance activities.

Joint Conventional Ammunition Program (JCAP) - Coordinates and takes action on all conventional ammunition logistic activities. Funding is provided for travel support of the Navy members (other than NAVSEA) designated as JCAP-CG and Single Manager points of contact.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	3,592		3,321		2,789	
Maintenance Support Services/ WY	3,528	35	3,257	30	2,725	24
JCAP/Number of Trips	64	71	64	71	64	71

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

E. OCEAN ENGINEERING SYSTEMS

1. Inshore Special Warfare Equipment Maintenance Support

Provides technical and engineering support for Swimmer delivery vehicles (SDV), dry deck shelters, production shelters, acoustic equipment, submersible training platforms and other special warfare equipment that support Sea-Air-Land (SEAL) teams in combat swimmer/SDV operations.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	2,179		2,129		3,356	
1. Engineering/Technical support for SDVs (Number of vehicles)	\$1,731	20	\$1,684	23	\$1,894	25
2. Dry Deck Shelters Supported (No. of DDS) (Operational Cycles) (Number of Submarines Configured)					995	2 6 3
3. Configuration Mgmt & Technical support for SEAL Delivery Vehicles SEA Life Support Sys -MK-15's (No. of Units) -DRAEGAR LAR V's (No. of Units)	273	20 94 320		32 140	65 220	
4. Rubber Raiding Craft Maintenance (# of craft)	16	43	38	61	65	70
5. Thermal Protection Units Procured	-		299	136	239	105

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Pollution Abatement EMS

Reduces pollution such as oil wastes, sewage, solid waste, hazardous waste, and air pollution by providing for engineering technical and logistic support, and guidance to the fleet on shipboard treatment/management systems. Supports the installation, implementation and upgrade of those systems which process on-board wastes. The benefits of pollution abatement efforts are access to foreign ports, freedom from litigation, and a data base to document environmental protection results. A description of some specific efforts follows:

Sewage - This program has developed technical documentation applicable to 372 surface ships plus additional boats and craft. Most surface ships now have active Marine Sanitation Devices (MSDs) that have been certified as being adequate.

Hazardous Waste - Development of the shipboard operational procedures for handling and storing hazardous waste and its disposal at sea and shore activities.

Solid Waste - Provides ship checks and shipalt proposals necessary for the procurement and installation of food waste pulpers and classified document destructors on all surface ships.

Open Sea Pollution Abatement - Provides funds for technical and engineering services required to develop planning, life-cycle engineering management, and integrated logistics support for open sea pollution abatement systems used to combat Navy spills at sea.

A description of output and the efforts involved follows:

No. of System Certification - units are the number of final reports on the certification inspections following the installation of CHT systems and oil and water separators on Navy ships. (Sewage and Oil Pollution)

No. of Ship Checks - units are the number of inspection visits to check-out pollution abatement systems following installations for both new construction and backfit on existing ships. (Sewage, Oil Pollution, and Solid Waste)

No. of Training Sessions - units are the number of sessions to train shipboard hazardous waste coordinators. (Hazardous Waste)

No. of Shipalt Proposals and Machalts - units are the number of installations of these equipments on existing ships and modifications to equipments that are already installed. (Sewage, Oil Pollution, and Solid Waste)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ Units	\$ Units	\$ Units
Total Funding (\$000)	\$1,096	\$1,978	\$1,664
Direct Tasks:			
Oil Pollution	240	350	277
Sewage	242	480	379
Hazardous Waste	221	300	237
Solid Waste	160	262	207
Open Sea Pollution Abatement	233	586	564
No. of System Certification	27	38	17
No. of Ship Checks	38	61	50
No. of Training Sessions	40	-	-
No. of Ship/Mach/Alts Proposals	46	57	43

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

3. Salvage Maintenance Support

Program provides maintenance support for all Navy salvage equipment and operations. This includes:

- A) Developing designs, drawings, and specifications required to modify and improve Navy salvage equipment.
- B) Modifying and revising maintenance procedures, instructions, and associated documentation for all Navy

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	\$662		\$937		\$584	
1) No. of Salvage equip. systems requiring design modification.	244	10	595	35	300	18
2) No. of procedures, instructions, associated documentation revised.	418	70	342	60	284	52

F. INACTIVE SHIP MAINTENANCE SUPPORT

Supports the operation of government-owned contractor-operated Inactive Ship Maintenance Activities at Bremerton, WA., Portsmouth VA., Pearl Harbor HI., and Philadelphia, PA., in accordance with the Commercial Activity (CA) program under OMB circular A-76. This program provides for planning and executing all-maintenance and pre-activation requirements for the fleet, provides funding required for the disposal of ships, and reimburses Maritime Administration (MARAD) for costs associated with disposal of vessels in MARAD custody.

The industrial effort required is performed by either private or naval shipyards with the Inactive Ship Activity performing custodial and non-industrial technical guidance in connection with maintenance, drydocking, and disposal functions.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding (\$000)	6,512		6,766		7,165	
Number of Ships/Craft	49/93		49/93		49/93	
1. Civilian Personnel (WY)	1,029/	36	1,050/	36	999/	36
2. Contract, Cost, GOCO(WY)	4,454/	285	4,692/	285	5,007/	285
3. Other Maintenance and Support (49 ships/93 craft)	966		930		1,059	
4. Inactive Fleet Maintenance	63		94		100	

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

G. AEGIS SYSTEM MAINTENANCE SUPPORT

Provides AEGIS system maintenance support in the following areas:

- CG 47 Planning Yard. Current CNO Top Level Requirements specify a sustained operational availability approaching 90% for the CG 47 Class. In order to achieve this availability goal, innovative maintenance planning and better execution are required to ensure that all maintenance/modernization requirements are accomplished during time-constrained availabilities. A primary goal of the CG 47 planning yard is to reduce the Regular Overhaul (ROH) period for CG 47 Class ships from seven months to five months. The net effect of such a reduction would be an additional twenty-two years of ship availability over the life of the entire class. Due to the higher than normal operational availability required of this class, the CG 47 Planning Yard responsibilities go well beyond those of a traditional Fleet Modernization Program (FMP) planning yard in the areas of configuration engineering, maintenance/modernization, material integration, operating cycle integration and quality control. The Design Services Allocation in support of pure FMP requirements is recognized and will be required in addition to the CG 47 maintenance and modernization planning agent, the planning yard consolidates all CG 47 maintenance and modernization planning responsibilities in one coordinated organization.

- Combat System In-Service Engineering. Because the AEGIS combat system is unique, organic fleet maintenance support capabilities and experience in maintaining a totally integrated combat system such as AEGIS do not exist. When coupled with the CG 47 Engineered Operating Cycle (EOC), increased In-Service Engineering (ISE) support will be necessary to maintain the AEGIS Combat System at required operational levels. CG 47 Class cruisers will undergo major system improvements in block upgrades. CG 47 - 51 are designated as Baseline I cruisers and are equipped essentially with the prototype production AEGIS Combat system. FY 86 marks the fleet introduction of the first Baseline II cruiser, CG 52, which incorporates significant combat system improvements, including a major ASW upgrade. This will further drive increased ISE support requirements. As time goes on, greater numbers of new and unique CG 47 combat system elements will be introduced.

- Hull, Mechanical and Electrical (HM&E) In-Service Engineering. Although CG 47 and DD 963 have many common HM&E equipments, In-Service Engineering requirements for the two classes are not the same. Unique CG 47 EOC requirements call for significant ISE support not required by the DD 963 Class. For example, NAVSSES Philadelphia, PA is tasked to determine equipment maintenance requirements to be conducted during short availabilities. CG 47 programmed operational availability approaches 90% compared to a DD 963 availability of 60%.

- Follow-on Test and Evaluation. Follow-on Test and Evaluation (FOT&E) is required on a cyclical basis with the introduction of each new Baseline to verify and validate the capabilities and performance of newly installed upgraded systems. CG 52, the first Baseline II cruiser, will undergo FOT&E in FY 1986 and 1987. Since no new Baselines were introduced in FY 85, no FOT&E requirements are identified for that year. FY 84 FOT&E support reflects final testing and evaluation of CG 47.

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

- Depot Administration. Provides for the administration, warehousing, receiving, packaging and shipping of failed AEGIS system tubes which are repaired at the designated AEGIS repair depot in NSWC Crane, Indiana and restored to a Ready For Issue status.

- AEGIS Computer Center (ACC) Administration and Maintenance. Provides required operation and maintenance support to the AEGIS Computer Center, Dahlgren, VA. This includes site upkeep, security, equipment repairs, utilities and general administration. This center directly supports in-service engineering, and computer program maintenance functions of the at-sea AEGIS Combat Systems.

AEGIS Combat Systems Center During FY 1984, \$42.9M in OPN funds were used to procure AEGIS Combat Systems Center (ACSC) equipment for installation during FY 1986. The establishment of the ACSC is in accordance with congressional direction to transition AEGIS training and Lifetime Support Engineering functions from RCA, Moorestown to NSWC Dahlgren and Wallops Island, VA, respectively. The \$4.1 in ACSC site activation funds are required to install and checkout FY 1984 equipment procurements prior to a scheduled ACSC operational date midway through FY 1986. New Baselines with their associated training and Lifetime Support Engineering requirements will continue to be satisfied initially by RCA Moorestown, and will transition to NSWC Dahlgren and ACSC Wallops Island on a cyclical basis.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$5,779	5,679	35,138
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ Units	\$ Units	\$ Units
1. CG 47 Planning Yard			
Functions:			
- Configuration Eng	318/-	293/-	3,036/-
- Maint/Mod Mat'l Integration	259/-	331/-	3,428/-
- Operating Cycle Integration	246/-	226/-	2,350/-
- Quality Control/Mobile Eng Team	154/-	143/-	1,469/-
Output measure:			
- Intermediate Maintenance			
Availabilities (IMA) Supported	-/1	-/1	-/3
- Selected Restricted			
Availabilities (SRA) Supported	-/0	-/1	-/2
- Regular Overhauls (ROH) Supported	-/0	-/0	-/1
2. Combat System In-Service Engineering/ Technical Assist or Ship Vists	621/40	1,284/79	7,042/415
3. Ship Systems (HM&E) In-Service Engineering/Technical Assists or Ship Visits	721/55	1,188/101	2,542/206

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ Units	\$ Units	\$ Units
4. Follow-On Test and Evaluation/ Ship Days of Test Support	1,454/6	0/0	2,347/9
5. AEGIS Depot Admin Crane, IN/ Tubes Repaired	1,146/71	1,191/185	1,763/300
6. AEGIS Computer Center (ACC) - Site Operations & Maintenance/ Computer Program Equivalents Supported	860/343	1,023/438	1,114/554
- Activation	0/-	0/-	1,564/-
7. AEGIS Combat Systems Center (ACSC) - Site Operations & Maintenance/ ACSC Lab Hours Supported (6 months)	0/0	0/0	4,498/1,200
- Activation	0/-	0/-	3,985/-

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Civilian</u>	54	55	55
USDH	54	55	55

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Contractor Technical and Maintenance Support
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed

This activity group provides both contract and in-house engineering and technical services supporting maintenance and repair of all operating naval ships. It meets Fleet and Type Commanders' requests to investigate and solve problems outside of industrial availabilities. Beginning in FY 1986, all funds for Ship Alteration Proposals and Ship Alteration Records have been transferred to the Fleet Modernization Program in BA 2.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
MOTU/CETS	10,389	10,681	10,671	10,157	10,913	756
DPS Direct Fleet Support	11,242	9,689	9,688	9,488	10,434	954
Navigation Sys Tech Sup	3,279	4,295	4,216	4,126	4,838	-88
Aircraft Carrier Technical Spt	1,525	1,550	1,478	1,470	1,891	-379
Surface Combat Tech Support	3,531	3,641	3,396	3,610	3,549	-61
CSS/ASC/Boats Tech Support	5,338	4,911	4,888	4,764	3,383	-1,461
Submarine Log & Eng Support	10,376	14,216	13,840	14,941	11,652	-3,289
TOTAL, CONTRACT TECH & MAINT SPT	45,600	48,903	48,009	48,548	44,980	-3,568

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$48,548
2. Pricing Adjustments		1,413
A. Industrial Fund Rates	(-265)	
B. Other Pricing Adjustments	(1,678)	
3. Functional Program Transfers		-6,818
A. Transfers Out	(-6,818)	
1) Intra-Appropriation	-6,818	
SAP/SAR -		
Transfer of overhaul-related Ship		
Alteration Proposals (SAP) and Ship		
Alteration Records (SAR) to the Fleet		
Modernization Program in BA 1 (P2PU;		
152K) and BA 2 (P2PU; 6,666K) from the		
following programs:		
Aircraft Carrier Technical Support (-204)		
Submarine Logistic & Engineering Support (-421)		
Surface Combatant Technical Support (-3,764)		
CSS/ASC/Boats Technical Support (-2,429)		
4. Program Increases		5,247
A. Other Program Growth in FY 1986	(5,247)	
1) <u>MOTU/CETS</u>	319	
Three additional manyears of annual MOTU/CETS		
support.		
2) <u>Direct Fleet Support</u>	546	
Funds an additional 160 functional checks		
(9.7 manyears of effort).		
3) <u>Surface Combatant Technical Support</u>	3,553	
a) <u>Surface Combatant Tech. Support</u>		
Prior to transfer to BA 2 this line was		
increased to fund additional Ship		
Alteration Records (1,409). Engineering		
Services increases to include shock		
hardening for CGN-38 class ships, and		
technical interface drawings and pre-		
sure fired boiler inspections for FF's		
(732). Engineering Services also includes		
funds for NAMS0, a NAVSUP activity which		
is reimbursably funded to design and		
operate the Logistic Data System for		
NAVSEA (1,357).		
b) <u>Surface Combat Systems Engineering</u>		
Increase provides additional funds for Ship		
Alteration Records development (55).		

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

4) <u>CSS/ASC/Boats Technical Support</u>	829
a) <u>CSS/ASC/Boats Tech Support</u> - Increase is to fund preparation of additional Ship Alteration Records which were subsequently transferred to BA 2 (153); fleet requirements to provide for critical design and on-site technical reviews (151); private sector overhaul management support and other tasks (136).	
b) <u>Combat Craft Support</u> - Increase is to fund development of the LCU/SLEP program, torpedo tube removal, and survival/reliability analysis (286).	
c) <u>Combat Craft Ship Systems Engineering</u> - Increase allows the accomplishment of 4 additional Ship Alteration Proposals which were subsequently transferred to BA2 (32), and increased Technical Repair Standards manual preparation (11).	
d) <u>Combatant Craft Combat Systems Engineering</u> - Increase provides additional funding for review of Ship Alteration Records which were subsequently transferred to BA2 (60).	
5. Program Decreases	-3,410
A. Other Program Decreases in FY 1986	(-3,410)
1) <u>Navigation Systems Technical Support</u>	-106
Decreases the number of corrective actions taken which in turn reduces the material readiness of shipboard (SSN, CV(N), BB, CG(N), DD and DDG) navigations systems.	
2) <u>Aircraft Carrier Technical Support</u>	-239
a) <u>CV Technical Support</u> - Decrease results in three fewer carrier visits by the Aircraft Carrier Climate Control Investigation Team and a reduction in overhaul management effort in FY 1986 (-93); reduced effort in logistic management and fleet requirements (-112).	
b) <u>CV Ship Systems Engineering</u> (-26)	
c) <u>CV Combat Systems Engineering</u> (-8)	
3) <u>Submarine Logistics & Engineering Support</u>	-3,059
a) <u>Submarine Technical Support</u> Reductions reflect decreases in material systems improvements such as ultrasonic testing, battery improvement and 400/HZ motor generation (-510); investigation and studies such as HY 80 Casting/MK 48	

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

impact (-2,189); reduced logistic and engineering support in maintenance repair efforts and SSN 688 Class Support (-270)

b) Submarine Periscope/Antenna (-49)

Reduced technical support for Operational Periscopes.

c) Submarine Ship Systems Engineering (-34)

d) Submarine Combat Systems Engineering (-7)

4) Surface Combatant Technical Support
Surface Combatant Ship Systems Engineering (-6)

-6

6. FY 1986 President's Budget Request

\$44,980

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation

A. FLEET TECHNICAL ASSISTANCE

1. CETS in Support of MOTU

Contractor Engineering and Technical Services (CETS) augment the in-house Mobile Technical Units (MOTU) efforts in trouble shooting, repair, maintenance and over-the-shoulder training in support of Fleet weapons, systems and equipments worldwide on immediate alert 24 hours a day 7 days a week. CETS are used when there is lack of Fleet or Direct Fleet Support capability or capacity. CETS requirements, by system or equipment, are determined annually by Fleet Commanders-in-chief, who regularly check each individual service being funded to assure that a need actually exists. If an individual service is found to be underutilized, then the service is reduced or discontinued. CETS is contracted in three ways:

Annual: Contractor personnel are located worldwide on an annual basis, to fill critical billet gaps and shortages of highly trained Navy senior enlisted personnel. Equipments supported by annual contracts include Close-In Weapon Systems (CIWS), Ships Inertial Navigation Systems (SINS), Type 18 periscopes, Navy Tactical Data Systems (NTDS), and MK 86 Gun Fire Control Systems (GFCS).

On-Call: Contractors provide technicians on an on-call basis as required. Equipments supported in this manner have a Mean Time Between Failure (MTBF) rate greater than that necessary to justify annual funding of a full time technician. Equipments supported by on-call contracts include evaporators, air and surface search radars, oxygen generators, Low Pressure and High Pressure air compressors and shipboard telephone systems.

Emergency: Repair contracts are let on an "as occurring" basis to support equipment which was not expected to fail beyond fleet capability to repair. Recent (FY 84 and FY 85) emergency contracts have included LP and HP air dehydrators, MK 14 gyros, doppler sonar and main reduction gears.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	10,309	10,157	10,913
Annual	8,453	8,329	8,949
On-Call	1,031	1,016	1,091
Emergency	701	662	708
General Support	124	150	165

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. Direct Fleet Support

Provides in-house Technical Assistance (TA) maintenance support directly to the fleet for all NAVSEA systems (except surface missile systems and radars). Support is provided on a 24 hour a day world-wide basis for shipboard systems/equipment which are out of the SCN funding period. This account also provides the fleet with scheduled systems/equipment Functional Checks (FC's) such as Combat Systems Readiness Trials/Reviews, Explosive Safety Reviews, etc. In conjunction with technical assistance and functional checks, on-the-job training is provided to ships' crews to make them technically self-sufficient. Response to CASREPTS, etc., and the periodic evaluation of correction of shipboard technical problems has a direct and immediate impact upon fleet readiness. This program reduces the possibility of serious equipment casualty and attendant cost, and reduces possibility of personnel injury.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	11,242	9,480	10,434
No. WY's	220	177	187
No. Events:			
Technical Assistance	6,675	7,500	7,500
Functional Checks	1,045	216	376

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

B. NAVIGATION SYSTEMS TECHNICAL SUPPORT

This program maintains the material readiness of shipboard (SSN, CV(N), BB, CG(N), DD and DDG) navigation systems. It provides timely corrective actions to achieve the required high reliability and availability of accurate navigational data for vessel navigation; torpedo and missile targeting; aircraft alignment; AEGIS, SM-2(ER) and TOMAHAWK weapon system stabilization and alignment.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	Units	\$	Units	\$	Units	\$
Total Funding		3,279		4,126		4,038

Effort Funded						
1. Ships Pt Cont Cntr Logistics Support (# of Installations)	100	635	100	700	100	665
2. Technical Support						
a. Dual Miniature Inertial	5	50	5	50	5	50
b. AN/WSN-2/5 Technical Support (No. of Manuals Maintained)	3	383	3	400	3	415
c. Inertial Navigation Sys/Shps Navigator & Aircraft Inertial Alignment Systems Certification (No. of Ships Supported)	38	595	50	818	40	677
d. Ships Inertial Navigation System (SINS) (Submarine Installations)	20	85	45	200	30	149
e. 608/598 SSBN to SSN Conversion (No. of Ships Supported)	2	405	2	300	2	150
f. ESGN (No. of Installations)	10	85	20	150	25	200
3. Conventional Navigation (No. of Equipments)	1,180	256	1,958	445	1,700	404
4. AN/WSN-2/5 Logistic Support (No. of Installations)	90	250	90	250	90	238
5. NARF TPS Maintenance (No. of TPS's Supported)	45	100	45	105	45	94
6. ESGN Firmware Support (No. of Installations Supported)	-	-	10	150	12	200
7. CVNS Navigation Facility	-	-	-	-	6	300
8. Reliability Analysis (No. of Ships Supported)	147	342	185	460	170	440
9. 608/598 SSBN to SSN Conversion Parts Support (No. of Ships Supported)	2	93	2	98	1	56

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. SURFACE SHIPS SUPPORT

1. Aircraft Carrier Technical Support

Responsible for identifying and effecting improvements in areas such as shipboard firefighting systems, health hazards, habitability, corrosion control and weapon aircraft elevators. Improvements are achieved through component/system redesign, revisions to operating techniques and procedures, control disciplines and improvements in logistics, training and documentation.

Three programs included are: 1) CV Technical Support which provides engineering technical support for investigating and applying equipment/systems to aircraft carriers and new equipment requirements for 8-10 overhauls a year; analyzes maintenance and performance data to discover ship problems, solve ship configuration inadequacies and investigates problems encountered outside of industrial availabilities, generally at the request of the Fleet; note that units below include reports, services and overhaul management such as MPR drawings, antenna system, reviews SARs, technical data collection, ShipAlt reviews, on-site inspections, ship configuration status reports and work package assessments; 2) CV Ship Systems Engineering which funds engineering development of Technical Repair Standards (TRS); and 3) CV Combat Systems Engineering which provides for the scheduling and development of all requisite combat systems upon aircraft carriers that require support and upgrade.

Number of Aircraft Carriers	16		16		16	
	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Total Funding	\$1,525		\$1,470		\$1,091	
A. CV Tech Support	1,129		1,103		896	
B. CV Ship Sys. Eng.	280		236		195	
C. CV Combat Sys. Eng.	116		131		0	

Efforts Funded:

A. CV Tech Support						
1. Logistic Mgmt.	435	44	425	40	350	38*
2. Fleet Reqmts.	435	27	425	24	386	21
3. Overhaul Mgmt.	259	32	253	32	160	11
B. CV Ship System Eng.						
1. TRS's						
- Revision(Maintenance)	215	150	211	165	27	20
- Development	40	3				
- Certification					119	100
- Review					27	20
- Verification					12	10
- Complete Development					10	8
2. SAP's	25	2	25	2	*	

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

C. CV Combat Systems Eng.

1. SAPs Developed	80	8	90	9	*
2. BACDs Reviewed	36	20	41	21	*
3. SARs Reviewed	-		-		*

* SAP/SAR funds are transferred to FMP BA2 account in FY 86.

2. Surface Combatant Technical Support

Maintains the readiness of all surface combatant ships by providing technical oversight in the diagnosis, planning and execution of repair work. In addition, management and technical expertise are provided to ensure that documentation, support, spare parts and personnel are available to support the operational fleet.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	\$ Units	\$ Units	\$ Units
A. Surf. Cmbt. Tech Spt.	\$2,373	\$2,389	3,153
B. Surf. Cmbt. Ship Sys. Eng.	658	724	396
C. Surf. Cmbt. Sys. Eng.	500	497	0
Total Funding	3,531	3,610	3,549
Number of Surface Combatant Hulls	196	221	226

A. Surface Combatant Technical Support

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding	\$2,373	\$2,389	\$3,153

1. Provide Engineering, Integrated Logistics Support (ILS) and Overhaul Management of 17 Classes of Surface Combatants and the Coast Guard 270 WMEC Class, which have steam propulsion plant systems. Additionally supports Gas Turbine Surface Combatant ships, including the DDG 963, DDG 993, PHM and FFG 7 classes. The number of FFG 7's increases from zero in FY 84 to 45 in FY 86.

a. <u>SAR Preparation</u>	\$1,409	\$1,370	1/
b. <u>Engineering Services + ILS</u>	\$695	\$854	\$2,979 2/
c. <u>Overhaul Management</u>	\$269	\$165	\$174

1/ Transferred to BA2-FMP in FY 1986

2/ Includes \$1,357 for NAMS0 which pays 37 civilian personnel on a reimbursable basis to design and operate the Logistic Data System (LDS), a key element in the FFG 7 Class life cycle maintenance and support.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Surface Combatant Technical Support (cont'd)

B. Surface Combatant Ship System Engineering

Prepares Technical Repair Standard (TRS) manuals to provide in a single document all procedures, technical specifications, drawings, and acceptance criteria necessary to restore surface combatant hull, maintenance, and electrical equipment to original performance specifications.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
TRS's						
- Revisions (Maintenance)	381	800	404	800	164	323
- Maintenance					22	40
- Complete Revisions					166	360
- Certification					26	50
- Review					9	12
- Verification					9	12
- Complete Development						
Total TRS	<u>381</u>		<u>404</u>		<u>396</u>	
SAPS	<u>277</u>	18	<u>320</u>	21	*	*
Total Surface Ship Sys Eng.	658		724		396	

C. Surface Combatant System Engineering

Provided for scheduling and development of Ship Alteration Proposals (SAPs) required to support and upgrade the combat system of surface combatants. Also provided review and technical approval of all planning yards development of Ship Alteration Records (SARs) and Basic Alteration Class Drawings (BACDs) for major or first time installations. This activity is transferred to the FMP, BA 2 beginning in FY 1986.

SAPs Developed	\$199	\$289	*
SARs Reviewed	128	134	*
BACDs Reviewed	173	74	*
TOTAL	<u>\$500</u>	<u>\$497</u>	*

3. Combat Support Ships/Amphibious Ships/Craft/Boats Technical Support

This program provides for developing and managing programs for the overhaul, repair, activation, maintenance, and logistic support of combat support ships, amphibious ships, craft, and boats. These constitute about half of all Navy surface ships. Among the ships covered by the funds are Mobile Logistic Support Force vessels which act as the life-support system of deployed fleet combatants and amphibious ships.

* Transferred to FMP BA 2 account in FY 86.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Combat Support Ships/Amphibious Ships/Craft/Boats Technical Support (cont'd)

The program objective is to assure high material readiness of operating forces. Recent efforts to increase the operational tempo of the fleets and to incorporate sophisticated equipment and self-defense weaponry (such as Close-In Weapon Systems) aboard Amphibious and Combat Support ships have placed additional demands on this program.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Total Funding</u>	<u>\$5,338</u>	<u>\$4,764</u>	<u>\$3,303</u>
A. CSS/ASC Boat Tech. Spt.	3,453	2,329	1,712
B. Combat Crft. Spt.	738	851	1,171
C. Combat Crft. Ship Sys. Eng.	408	678	420
D. Combat Crft. Combat Syst.	739	906	0
<u>Efforts Funded</u>			
A. <u>CSS/ASC Boat Tech Support</u>	<u>3,453</u>	<u>2,329</u>	<u>1,712</u>
1. SARs Prepared	882/ 88	960/ 96	*
2. Fleet Requirements	605/134	400/128	568/135
3. Eng. Mgmt/Log Plng Prog.	419/ 55	829/ 79	869/ 71
4. Private Sector Overhaul Management Support/FMP Support (Availabilities)	85/ 40	67/ 40	200/ 34
5. Other Requirement (Tasks)	78/ 20	73/ 15	75/ 11
6. NAMS0 Salaries**	1,384	--	--

* Transferred to BA2, FMP in FY 86.

** Transferred to BA7 in FY 1984. Included in FY 86 and outyears in the Surface Combatant Technical Support line.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
B. <u>Combat Craft Support</u>	<u>\$738</u>	<u>\$851</u>	<u>\$1,171</u>
1. Develop Technical Data	169	278	241
2. Survivability/Reliability Analysis	150	180	200
3. Engineering Improvements	169	263	200
4. Productivity Improvements	100	130	100
5. LCU/SLEP Program	-	-	230
6. Torpedo Tube Removal	150	-	200

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Combat Support Ships/Amphibious Ships/Craft/Boats Technical Support (cont'd)

C. Combat Craft Support Ship Systems Engineering

Prepares Technical Repair Standard (TRS) manuals to provide in a single document all overhaul procedures, technical specifications, drawings, and acceptance criteria necessary to restore combat craft and support hull, maintenance, and engineering equipment to satisfactory performance specifications.

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
Combat Craft SSE -TOTAL	408		678		420	
TRS's						
- Revisions (Maintenance)	127	113	394	120	47	12
- Development	13	1			60	17
- Certification					168	60
- Review					36	10
- Verification					36	10
- Complete Development					73	20
Total TRS	<u>140</u>		<u>394</u>		<u>420</u>	
SAPs Prepared	268	18	284	19	*	*

D. Combatant Craft Combat Systems Engineering

This program provides for scheduling and development of all combat system ship alteration proposals required to support and upgrade the combat systems of the Auxiliary and Amphibious Ships.

SAPs Developed	\$587	\$676	*
SARs Reviewed	46	118	*
BACDs Reviewed	106	112	*
Total	\$739	\$906	0

* Transferred to BA 2 FMP in FY 86.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

D. SUBMARINE SUPPORT

1. Submarine Logistic and Engineering Support

A. Submarine Technical Support

Provides engineering services for operating nuclear powered submarines in conjunction with NAVSEA efforts concerning maintenance and repair action from both private contractor and naval activities. The services include technical reviews, design investigations, and surveys. This involves the assignment of engineering personnel from lead design and planning activities to investigate and resolve fleet HM&E and combat weapons system technical interface problems and their integration into the ship platform. These services are provided in response to fleet casualty reports and technical requests. The program also supports the Naval Material Command's ability to respond and provide solutions to both hardware and software material problems which prevent submarines from maintaining their deployed/operational status. Additionally, the program develops new procedures, engineering standards, and specifications to ensure maximum fleet readiness conditions, and uses engineering and logistics personnel to help solve technical problems too complex for Forces Afloat personnel. The program provides logistics engineering support for all Nuclear Submarines currently deployed.

B. Submarine Ship System Engineering

This effort upgrades and maintains all Technical Repair Standards (TRS) as well as certifying the usability of existing TRS's, rewriting existing and developing new TRS's to provide consolidated overhaul specifications, and verifying all new and rewritten TRS's. TRS's provide in a single document all procedures, technical specifications, drawings, and acceptance criteria necessary to restore submarine HM&E equipment to original performance specifications. The upgrade of TRS's will improve the quality of submarine overhauls.

C. Submarine Periscope/Antenna

This program provides technical support for operation and problem resolution for various types of periscope systems such as Type 18, Type 15, Type 8 and Type 2. It supports the development of test procedures, standards, subsafe drawings, handbooks, and publications for fleet maintenance of these systems.

D. Submarine Combat System Engineering

Provides technical coordination of configuration management and control of the weapons, communication and ESM systems for operational submarines. This program encompasses about 128 submarines in the SSN 688 and SSBN 726 classes.

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Submarine Logistic and Engineering Support (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$ Units</u>	<u>\$ Units</u>	<u>\$ Units</u>
Total Program Funding	10,376	14,941	11,652
<hr/>			
A. <u>Submarine Technical Support</u>			
Total Sub. Technical Spt.	8,428	12,508	9,404
<hr/>			
Number of Submarines	129	134	137
1. Logistic & Engineering Spt	5,959	6,783	6,623
a. General Support (wy)	5,296	80 6,154	90 6,304 90
b. SSN 668 Class Support			
(# Change Reg/Notes)	274	1,088 285	1,131 214 850
c. Maintenance Repair (# tasks)	249	17 244	17 - -
d. Electronics Eng Spt	140	100	105
2. Investigation & Studies	1,030	3,649	1,460
a. HY80 Casting/MK 48 Impact	830	3,189	1,000
	0	0	0
b. Atmospheric Tests # Rpt	100	7 200	15 200 15
c. Hull Cathodic Protection	0	160	160
d. Hull Inspect Hist (# Ships)	100	25 100	25 100 25
e. Service Life Extension	0		
f. Chloride Reduction			
g. Excess Material Study			
3. Material Systems Improvement	902	1,399	880
a. 300KW MG Set	150	150	150
b. 400/HZ Motor Generation	150	120	100
c. Ultra Sonic Testing	95	396	200
d. Electrolytic Oxygen Gen	175	200	200
e. On-Board Material Eval	150	150	150
f. Electromagnetic Log Sys Spt	45	33	80
g. Arc Fault Detector Testing	25	-	-
h. Steering & Diving	37	-	-
i. Battery Improvement	-	350	-
j. Ship Information Booklet	75	-	-
k. Antenna			

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Submarine Logistic and Engineering Support (cont'd)

	FY 1984		FY 1985		FY 1986	
	\$	Units	\$	Units	\$	Units
4. <u>Pre-Sea Trial Certifications</u> <u>(SSBN/SSN)</u>	157	7/8	250	3/2	220	1/12
5. <u>Ship Alt Record Development</u> <u>(# SARs)</u>	260	12	287	13	0*	0
6. <u>Technical Data Center Support</u>	120		140		221	
Update Technical Manuals		120		175		180
Filing Records (Pages)		13,500		15,000		16,500
Microfiching (Cards)		500		600		700
Information Requests		225		250		275

* SARS Transferred to FMP BA 2 account in FY 86.

B. Submarine Ship System Engineering

Total Sub. SSE Funding	525		820		813	
TRS's						
- Revisions (Maintenance)	261	704	296	712		
- Maintenance					28	60
- Complete Revisions					262	644
- Development					3	8
	<u>261</u>		<u>296</u>		<u>293</u>	
Subs (\$/SAPs)	264/	18	524/	35	520/	35

Unit costs vary with ship type as a function of system complexity and scope of alterations.

Benefits of Effort

Better overhauls of mission critical equipment, resulting in increased ship availability and reduced Fleet life cycle maintenance cost.

Decrease in CASREPS and on-board corrective maintenance time. Increase operational availability,

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Submarine Logistic and Engineering Support (cont'd)

C. Submarine Periscope/Antenna

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding Sub. Per/Antenna	673		818		734	
Total Workyears	10.4		12.1		10.9	
Tech. Spt for Oper- ational Periscopes	308	4.7	448	6.7	390	6.0
Configuration Manage- ment Support	145	2.3	151	2.2	137	2.0
Subsafe Drawing Requirements	30	0.5	30	0.4	34	.5
Development of Test Procedure, Manuals, Publications	60	.9	59	0.9	58	.8
In-Service Engineering	85	1.3	83	1.2	73	1.0
Standards	45	.7	47	0.7	42	0.6

D. Submarine Combat System Engineering (CSE)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding Sub. CSE	750		795		701	
Total Workyears	13.6		13.6		11.9	
SARs Reviewed	42		42		38	
BACDs Reviewed	76		75		66	
Submarine Combat System Engineering	632		678		597	

IV. Personnel Summary (End Strength). N/A

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Activity Group: Intermediate Maintenance
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed.

The Intermediate Maintenance Activity Group funds that maintenance which supports Organizational Level Maintenance. Its phases usually consist of calibration, repair or level replacement of damaged or unserviceable parts, components or assemblies; the manufacture of critical nonavailable parts; and technical assistance to organizations using the equipment. Intermediate maintenance of equipment is normally accomplished in fixed or mobile shops, tenders, shore based repair facilities, or by mobile teams.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Point Defense	655	518	516	584	523	19
Missile Systems	7,502	6,555	6,494	9,964	9,188	-776
Mines	1,123	1,388	1,311	2,115	1,884	-231
IM 2P Cog ASW	2,033	1,464	1,442	2,740	3,247	507
TOTAL, INTERMEDIATE MAINTENANCE	11,313	9,925	9,763	15,323	14,842	-481

Activity Group: Intermediate Maintenance (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$15,323
2. Pricing Adjustments		243
A. Industrial Fund Rates	(215)	
B. Other Pricing Adjustments	(28)	
3. Program Increases		1,271
A. Other Program Growth in FY 1986	(1,271)	
1) <u>Point Defense</u>	7	
2) <u>Missile Systems</u>	735	
Increased intermediate level support is required for SM-2 missile maintenance due to continued introduction into the fleet.		
3) <u>2F Cog ASW</u>	529	
Maintenance of an additional 9 Type 15 periscopes for SSBNs (93) and an additional 5 complex and heavily used Type 18 periscopes for SSNs (436).		
4. Program Decreases		-1,995
A. Other Program Decreases in FY 1986	(-1,995)	
1) <u>Missile Systems</u>	-1,750	
Decreased test and assembly of 296 TERRIER missiles (-565); 114 SM-1 missiles (-426); and 248 special weapons (-759).		
2) <u>Mines</u>	-224	
Decrease in funding will result in a decrease in asset readiness from 68% in FY 1985 to 66% in FY 1986.		
3) <u>2F Cog ASW</u>	-21	
Intermediate maintenance for 2F Cog-ASW sonar equipment is decreased by .2 workyears.		
5. FY 1986 President's Budget Request		\$14,842

Activity Group: Intermediate Maintenance (cont'd)

III. Performance Criteria and Evaluation

A. SURFACE WARFARE SYSTEMS

1. Point Defense

Provides support for the 52 Basic Point Defense Surface Missile Systems installed on 34 ships of the fleet. Support includes:

Fleet Support Agent (Atlantic/Pacific) - provides intermediate maintenance and technical assistance to correct Casualty Reports (CASREPs) and remove, replace, or repair defective components. Each activity responds to a yearly average of 40 ship requests for technical assistance.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Total Funding, Fleet Support Agent	\$655	\$504	\$523

The above funds support the following ship classes:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Ships O/H</u>	<u>Ships O/H</u>	<u>Ships O/H</u>
FFs	19 -	12 -	9 -
CVNs	2 -	2 -	2 -
AMPHIBS	13 -	11 -	8 -

O/H = Overhauls

2. Missile Systems Intermediate Maintenance

Intermediate level maintenance consists of the test and assembly of missile rounds prior to load out of combatant and deployed logistics support force ships. Missile electronics require certification by test equipment at least every three years as explosive components are service life limited. The CNO Asset Readiness Objective (ARO) is 86 percent. The four Naval weapons stations perform this effort. In FY 1986 funding is also provided to package & handle obsolescent material for TERRIER/TARTAR missiles prior to movement to inland storage points.

Number of ships supported are as follows:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Extended Range Missile Combatants (CG, CGN, DDG)	31	31	31
Medium Range Missile Combatants (CF, CGN, DDG, FFG)	88	93	95
Mobile Logistics Force (AOE, AE, AOR, AO)	27	27	27

Activity Group: Intermediate Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	7,502	3,199	9,964	4,141	9,188	3,568
TERRIER	266	131	865	406	357	110
STD MSL-1	6,308	2,880	6,732	2,972	6,328	2,858
STD MSL-2	228	57	1,175	405	1,990	490
Special Weapons	700	131	1,192	358	513	110

Units are the number of missiles ready for issue.

B. UNDERSEA WARFARE SYSTEMS

1. Mine Maintenance

The program supports cyclic maintenance of assembled weapons at prepositioned locations. It includes screening, testing, adjustment and replacement of mine components and field calibration/repair of test equipment. New series of mines entering the Fleet and different maintenance cycles for various weapons account for year-to-year variances in requirements.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units	\$	Units	\$	Units
Total Funding	1,123		2,115		1,884	
Underwater Mines	918	5,516	1,607	5,834	1,413	4,602
Destructors	205	6,029	508	11,545	471	10,704

Units are the number of mines, destructors, and test equipment receiving maintenance.

Activity Group: Intermediate Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

2. 2F Cog Electronics ASW

The program provides pre-repair test and failure analysis; repair/replacement of damaged or unserviceable parts, components, modules, cables, or assemblies; manufacture of critical nonavailable parts; array and cable certification; post-repair test and calibration, and technical assistance to organizations using AN/WQM-6 and STASS 2F Cog USW equipment. Periscope maintenance is transferred from 2F Cog Electronics (P4XQ) in FY 1984.

Program requirements are based on quantities of installed equipment, the age of equipment, the cycle time required to repair items, the position of the installed equipment on the ship, issue rates of equipment to the fleet and emergent fleet problems. Costs include material, travel, shipping, and administrative support.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	\$	Units*	\$	Units*	\$	Units*
Total Funding	2,033		2,740		3,247	
<hr/>						
<u>SSBN</u>						
<u>Sonar</u>						
Equipment	303	2	338	1.9	329	1.8
Periscopes	103	12	203	23	296	32
<u>SSN/ASW Ships</u>						
<u>Sonar</u>						
Equipment	998	8	1,062	8.6	1,049	8.5
Periscopes	629	14	1,137	24	1,573	29

* Units are workyears for sonar equipment and number of components for periscopes.

IV. Personnel Summary (End Strength). N/A

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Program Package: Maintenance of Real Property
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed.

Maintenance of real property supports repair of and minor construction additions to naval facilities which are critical to preservation of fleet support activities. Funding in this activity group reflects Navy efforts to reduce the backlog of maintenance and repair at Naval facilities in accordance with Congressional direction to contain the backlog of repair projects by the end of FY 1988. The subactivities included under the Real Property Maintenance are described below:

A. Maintenance of Real Property - finances routinely scheduled maintenance and emergency repairs at Naval Shipyards, Ordnance Stations, Supervisors of Shipbuilding, and other NAVSEA field activities. Major Repair Funding finances more substantial maintenance projects over \$75 thousand which are required to bring existing facilities into adequate condition to permit activities under the cognizance of the Chief of Naval Material to fulfill their assigned mission.

B. Minor Construction - finances projects under \$200K for alterations to facilities, extensions of utility systems, additions to existing facilities, and replacement of damaged or deteriorated facilities.

II. Financial Summary (Dollars Thousands)

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986 BUDGET REQUEST	CHANGE
		BUDGET REQUEST	APPRO- PRIATION	CURRENT ESTIMATE		
Major Repair	11,363	12,339	12,323	12,321	8,007	-4,314
Minor Construction	1,448	2,047	1,924	1,922	4,290	2,368
TOTAL, Facilities Maintenance	12,811	14,386	14,247	14,243	12,297	-1,946

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$14,243
2. Pricing Adjustments		89
A. Industrial Fund Rates	(39)	
B. Other Pricing Adjustments	(50)	
3. Program Increases		2,278
A. Other Program Growth in FY 86	(2,278)	
1) <u>Minor Construction (MC)</u>	2,278	
<p>The realignment of 2,130 due to an increase in the MILCON threshold is included in the total increase of 2,278 and will be applied to support requirements for the upgrade of dry dock 4 at Supship San Francisco and planned welfare/recreation projects at six naval shipyards (992), the completion of Chapel Life Extension Program projects (60); and various minor construction projects previously deferred at 9 Ordnance Facilities (1,226).</p>		
4. Program Decreases		-4,313
A. Other Program Decreases in FY 86	(-4,313)	
1. <u>Maintenance of Real Property (MRP)</u>	-4,313	
<p>Realignment of funds to Minor Constuction due to an increase in the MILCON threshold (-2,130); Decrease in maintenance projects at ordnance facilities and shipyards and a limitation on repair work to emergency services only. No funding is directed towards the reduction of the maintenance and repair backlog (-2,183).</p>		
5. FY 1986 President's Budget		\$12,297

III. Performance Criteria and Evaluation

Maintenance and Repair of Real Property

	<u>FY 1984</u>	<u>FY 1985 Current Estimate</u>	<u>FY 1986 Budget Request</u>
Backlog, Maint/Repair (\$000)	37,704	39,610	41,517
Total Buildings (KSF)	11,814	12,977	11,216

IV. Personnel Summary (End Strength) N/A

DEPARTMENT OF THE NAVY
OPERATION & MAINTENANCE, NAVY
Exhibit OP-5

Program Package: Other Base Operations
Budget Activity: 7 Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Sea Systems Command)

I. Description of Operations Financed.

The Other Base Operations Program provides support services and material support to NAVSEA field activities, enabling assigned forces and tenants to perform their mission. Funds are utilized for common military and civilian support functions which are not directly related to the industrial effort. The subactivities included in Other Base Operations are described below:

A. Utility Operations - includes costs of purchased utilities and also utility systems generation/distribution costs where applicable.

B. Personnel Operations

1. Bachelor Housing - provides support for the operation of barracks, personnel housing, BOQs, BEQs, and the purchase and maintenance of personnel support equipment related to the housing of personnel.

2. Other Personnel Support - provides for food service facilities, sales activities, laundry and dry cleaning facilities, initial procurement, repair, and replacement of furniture and furnishings, operation of chapels, and family service centers.

3. Morale, Welfare and Recreation - provides authorized appropriated fund support for shore based recreational activities, special services, personnel support equipment, libraries, child care centers, clubs, and military and civilian general recreation facilities.

4. Medical/Dental Operations - provides funding for the Naval Regional Medical/Dental Clinic at NAVWPNSUPCEN Crane, Indiana.

5. Human Goals - provides support for Navy Drug and Alcohol programs through which personnel with alcohol or substance abuse problems are identified and counseled. Also provides funding for educational services for abuse prevention and operation of drug and alcohol rehabilitation facilities.

C. Base Operations - Mission

1. Retail Supply Operations - provides support for servicewide supply involving the receipt, inspection, packing of inert Navy material, the provision of technical information services, and the maintenance of stock records. Processes various Naval and DOD requisitions from Inventory Control Points (ICPs) and transaction reports to ICPs.

Activity Group: Other Base Operations (cont'd)

2. Other Base Services - provides support for base transportation and associated vehicle operation and routine maintenance, port services, service craft operation/maintenance, tool issues, and degaussing operations.

D. Base Operations - Ownership

1. Engineering Support - provides support for public works departments, firefighting services, refuse collection and disposal, custodial services, and entomological services. Also funds planning, design and engineering support for facility projects.

2. Administration - provides funding for off station activities and on-base tenants (as common support service) for the following functions: command and administration, civilian personnel services, legal assistance, accounting/auditing services, mail, travel administration, and other related common administrative support services.

3. Automated Data Processing - provides the management support costs for in-house computer programming as well as equipment rental and other contractual ADP purchases.

4. Hazardous Waste - provides support for the personnel, supplies, and training associated with the identification and disposal of hazardous waste material at NAVSEA facilities. Funding supports development of waste management plans, operations, maintenance, and repair of storage facilities, and treatment and disposal of toxic substances.

E. Base Communications - provides support for basic telephone equipment, installation, maintenance, removal, and service charges at NAVSEA headquarters and field activities. Provides for the costs of administrative communication systems, base telecommunication networks, and industrial security networks. Excludes industrial funded systems or those operational telecommunication activities directly supporting fleet operating forces.

11. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u> <u>Budget</u> <u>Request</u>	<u>Change</u>
		<u>Budget</u> <u>Request</u>	<u>Appro-</u> <u>priation</u>	<u>Current</u> <u>Estimate</u>		
Communications	5,563	5,270	4,709	5,728	5,284	-444
Utilities	9,682	10,534	10,280	10,250	9,632	-618
Personnel Operations	9,167	7,980	7,960	7,959	9,859	1,900
Base Operations Mission	20,024	18,657	18,629	18,628	17,829	-799
Base Operations Ownership	<u>14,131</u>	<u>15,220</u>	<u>14,691</u>	<u>14,295</u>	<u>13,532</u>	<u>-763</u>
Total Other Base Operations	58,567	57,661	57,269	56,860	56,136	-724

Activity Group: Other Base Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$56,860
2. Pricing Adjustments		61
A. Industrial Fund Rates	(-359)	
B. Other Pricing Adjustments	(420)	
3. Program Increases		3,716
A. Other Program Growth in FY 1986	(3,716)	
1) <u>Base Communications</u>	174	
Increase in communication requirements at shipyards and ordnance facilities due to increase in workload.		
2) <u>Personnel Operations</u>	1,908	
Increase to replace worn linen and material for bachelor quarters (161); increase to Other Personnel Support to maintain food service, laundry and dry cleaning operations, and chapel operations (677); increase in Morale Welfare and Recreation to support operation of clubs and messes, expand library operations, increase special services support and maintain military and civilian recreation operations (953); increase in Human Goals to support operations in Drug Education and Substance abuse counseling (117).		
3) <u>Base Operations Mission</u>	203	
Increase in Retail Supply Operations to accommodate an increase in receipts and issues of requisitions.		
4) <u>Base Operations Ownership</u>	1,431	
Increase in Administration to support additional industrial relations services at Naval Shipyards Portsmouth and Norfolk and to maintain civilian personnel services to tenants on a common support basis (536); increase in Hazardous Waste Operations to fund scheduled clean-up of hazardous waste dump on Mare Island and it continue compliance with various state and EPA regulations (895).		

Activity Group: Other Base Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

4. Program Decreases		-4,501
A. Other Growth Decreases in FY 1986	(-4,501)	
1) <u>Utilities</u>	-651	
Decrease in energy use at shipyards and ordnance stations as a result of increased energy conservation.		
2) <u>Base Communications</u>	-827	
Decrease in headquarters communications funding due to projected Defense telephone Service billing.		
3) <u>Base Operations - Mission</u>	-774	
Reduction in Other Base Services support for enhanced security, operations and maintenance of transportation, port services, and tool issues.		
4) <u>Base Operations - Ownership</u>	-2,249	
Other Engineering Services in reductions of public works administration and engineering services to tenants, (-847); reduced leasing of office spaces (-280); and significant reductions to custodial, trash collection and entomological control efforts (-1,122).		
6. FY 1986 President's Budget Request		\$56,136

Activity Group: Base Operations (cont'd)

III. Performance Criteria and Evaluation

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Base Operations (\$000)	58,567	56,860	56,136
Operation of Utilities (\$000)	9,682	10,250	9,632
Total Energy Consumed (MBTUs)	191,060	192,000	190,000
Total Non-energy consumed (K Gals)	423,575	440,000	430,000
Base Communications (\$000)	5,563	5,728	5,284
Number of Instruments	15,488	15,488	15,488
Number of Mainlines	6,206	6,206	6,206
Daily Average Message Traffic	325,000	375,000	350,200
Personnel Operations (\$000)	9,167	7,959	9,859
Bachelor Housing (\$000)	937	956	1,106
Number of Officer Quarters	230	230	230
Number of Enlisted Quarters	3,084	3,456	3,456
Other Personnel Support (\$000)	4,479	4,505	5,187
Population Served, Total	114,909	116,272	118,756
(Military, E/S)	66,405	67,249	69,376
(Civilian, E/S)	48,504	49,023	49,380
Morale Welfare & Recreation (\$000)	3,571	2,424	3,372
Population Served, Total	173,646	167,194	175,448
(Military, E/S)	87,893	81,301	89,140
(Civ/Dep, E/S)	85,753	85,893	86,308
Medical/Dental (\$000)	118	74	77
Human Goals (\$000)	62	0	117
Base Operations - Mission (\$000)	20,024	18,628	17,829
Retail Supply Operations (\$000)	3,681	2,830	3,101
Line Items Carried (000)	75	78	78
Receipts (000)	87	90	93
Issues (000)	86	89	91
Other Base Services (\$000)	16,343	15,798	14,728
Number of Motor Vehicles, Operated and Maintained	353	366	370
Base Operations - Ownership (\$000)	14,131	14,295	13,532
Other Engineering Support (\$000)	6,488	6,671	4,446
Administration (\$000)	4,361	4,569	5,116
Number of Bases, Total	19	19	19
(CONUS)	18	18	18
(O/S)	1	1	1
Hazardous Waste (\$000)	3,208	2,983	3,896
Automatic Data Processing (\$000)	74	72	74

Activity Group: Base Operations (cont'd)

III. Performance Criteria and Evaluation (cont'd)

IV. Personnel Summary (End Strength). N/A

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Electronic Systems Rework and Maintenance
Budget Activity: VII Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed.

Air Station Restoration - The Air Station Restoration program provides overhaul and repair of failed electronic equipments for communications, surveillance, air traffic control and navigational aid (TACAN). Equipments are sent to an overhaul activity and dismantled, rebuilt, bench-checked and operationally tested at an overhaul activity prior to return to operational use. Other larger, less mobile systems are overhauled at the air station, in place, by field teams on a scheduled basis to preclude loss of operational capability for extended periods. Resource requirements are based on availability of equipment through repair, overhaul schedules, failure rates and the quantity usage and age of equipments.

Marine Air Traffic Station Control Squadron (MATCS) - The MATCS Depot Maintenance program provides for the complete restoration of system/sub-system end items according to a predetermined duty cycle supporting Marine Corps aviation combat readiness postures. Through an intensive inspection process, field maintenance reporting system, components at tactical units are identified for induction into depot facilities for the restoration/overhaul process. Many of these equipments are of the Vietnam era and remain functional to the mission by virtue of depot capabilities. Depot rework increases system availability providing safety of flight margins that minimize the risk of aircraft and pilot loss.

22 Cog Electronic Restoration - This program finances restoration of failed communications, surveillance and countermeasures equipments, and aging navigation (TACAN) and tactical data systems (LINK 11). Equipments are sent to an overhaul activity and dismantled, rebuilt, bench-checked and operationally tested at a depot prior to return to operational use. Other larger systems are overhauled in place, afloat, by field teams on a scheduled basis to preclude loss of operational capability for extended periods. Also financed under this program is the removal and restoration of equipments from stricken ships, to provide an alternate source to new procurement for new ship construction. NAVEXLEX utilizes the support of NAVSEA shipyards to support a segment of its restoration program.

Standards, Calibration and Repair - This program funds calibration and repair of all electronic standards which are laboratory devices used to calibrate other test equipments of lesser accuracy.

Test Equipment Maintenance - Provides for the calibration and repair incidental to calibration, of all fleet-held electronic and electrical test, measurement and diagnostic equipment (TMDE). These equipments are used to install, align, adjust, operate and maintain all prime electronic and electrical systems in use aboard ships of the active fleet to ensure the material readiness of all radar, sonar, communications, countermeasure, surveillance, navigation, and propulsion systems.

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

I. Description of Operations Financed (cont'd)

Precise Time and Time Interval (PTTI) - This program provides depot level repair and maintenance of Verdin O-1695 Cesium Beam Frequency Standards (CBFS), which require an emergency replacement capability for inoperative units onboard nuclear submarines: the AN/URO-23 Frequency Time Standard; the SG-1157/V Digital Processing Clock; and Army owned frequency standards under the Defense Satellite Communications System program..

Cryptographic (Crypto) Repair - This program finances all depot costs for the maintenance, overhaul, repair and modification of fleet cryptographic devices/items and systems that are beyond the capability of the fleet maintenance personnel to perform and all COMSEC depot maintenance interservicing requirements. This includes all Naval/Marine Corps aircraft installed COMSEC equipment and COMSEC equipment used by the Coast Guard ships forces: all depot level repair/overhaul and modification of the new generation micro-miniature (MICROMIN) constructed COMSEC equipment/devices used in the Naval establishment (including MARCOR and COGARD); and overhaul of all Director, COMSEC Material System (DCMS) managed non-RFI COMSEC assets to meet validated fleet requirements.

Coast Guard Support - Pursuant to agreements between the Department of the Navy and the Department of Transportation, this program provides for reimbursement to the Coast Guard for the installation of new electronic equipment to replace obsolete Navy-owned equipment, and for the overhaul and maintenance of electronic equipment furnished by the Navy. The electronic material provided to the Coast Guard consists of shipboard electronic test equipment, components and subassemblies to maintain the Coast Guard in a state of readiness to function as a specialized service of the Navy in time of war.

RADIAC Depot Maintenance - This program calibrates and maintains radiation detection, indication and computation (RADIAC) equipment in a continuous state of operability and readiness within the Navy, Coast Guard, Military Sealift Command, and elements of the Marine Corps. Of the approximately 38,000 Radiac equipments in use, 23,000 are used to measure levels of radiation exposure in medical, nuclear power, weapons handling and radiography applications. Approximately 15,000 additional instruments are positioned on Navy ships and at shore facilities to be used for personnel safety and radiation level measurement in event of nuclear disasters or nuclear warfare. Radiac equipment must be kept operable in order that personnel, equipment and the environment can be adequately monitored and controlled within medical and legal safety limits of exposure, and maintain the Navy's ability to apply appropriate measures in the event of nuclear war or disaster.

Anti-Ship Missile (Electronic Warfare) System (ASM/EW) - Provides an EW capability to automatically detect, sort and classify, track and continuously display RF emitters, platform types and bearings in the relevant electromagnetic environment, plus automatic electronic countermeasures response on search, targeting and missile associated emitters. Depot Maintenance provides comprehensive overhaul and repair services to Fleet units and installation activities. Efforts range from piece part repair of the shipboard replaceable assemblies (SRA) up to Class B overhauls, and maintaining bonded storage of installation checkout (INCO) stock spares.

Activity Group: Electronic Systems Rework and Maintenance

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Air Station Restoration	7,234	8,476	8,098	8,134	10,233	2,099
MATCS	2,412	3,242	3,169	3,192	3,232	40
2Z Cog Restoration	12,016	14,076	13,684	13,760	14,129	369
Standards, Cal and Repair	4,776	6,730	6,471	6,468	7,881	1,413
Test Equip Maint	15,134	16,378	15,958	14,813	17,405	2,592
PTTI	269	294	288	293	303	10
Cryptographic Repair	6,853	9,302	9,098	9,061	10,874	1,813
Coast Guard Support	3,518	2,941	2,900	2,891	6,540	3,649
RADIAC Repair	4,190	5,430	5,350	5,333	6,710	1,377
Anti-Ship Missile (EW)	10,887	12,486	12,375	13,303	7,459	-5,844
Total O&M,N	67,289	79,355	77,391	77,248	84,766	7,518

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		77,248
2. Pricing Adjustments		-1,114
A. Stock Fund	(-63)	
1. Non-Fuel	-63	
B. Industrial Fund Rates	(-1,205)	
C. Other Pricing Adjustments	(154)	
3. Program Increases		15,014
A. Other Program Growth in FY 1986	(15,014)	
1. <u>Air Station Restoration</u> -	2,465	
Increase provides for overhaul and restoration of AN/SPN 41,42, 43 systems, (911); Aircraft Landing Systems (ACLS) (814); Antenna systems and various communication equipments (585); introduction of FACSFAC at 1 additional air station (155). Total overhauls and restorations are increased by 313 to maintain Air Station operations ensuring the safety of personnel and aircraft.		
2. <u>MATCS</u> - represents an increase in Depot Level Repairables (DLRs).	55	
3. <u>2Z Cog Restoration</u> - Increase provides funds to restore, overhaul and repair 80 additional units of electronic equipment (570), NTDS LINK 11 (74), ACLS (6), TACAN (12) to maintain Fleet Readiness.	662	
4. <u>Standard, Calibration & Repair</u> Provides 3,211 additional calibrations.	1,420	
5. <u>Test Equipment Maintenance</u> - Increase provides an additional 10,858 calibrations in support of additional GPETE delivered to the the Fleet. The depot maintenance backlog will be reduced to 59,873 with this effort.	3,066	

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

B. Reconciliation of Increases and Decrease (cont'd)

6. <u>PTTI</u> - Represents an increase of 20 calibrations/restorations of Cesium standards.	14	
7. <u>Cryptographic Repair</u> - Provides 4,212 additional cryptographic depot maintenance/overhaul repair actions and will reduce the backlog by 2,482 end items.	1,985	
8. <u>Coast Guard</u> - Provides for the overhaul and/or maintenance of an additional 2,363 units of electronic equipment, with a backlog of 1,345 units still remaining.	3,794	
9. <u>Radiac Repair</u> - Increase will permit the Radiac Repair Facilities to calibrate an additional 7,538 units.	1,553	
4. Program Decreases		-6,382
A. Other Program Decreases in FY 86	(-6,382)	
1) <u>Air Station Restoration</u> - Decrease of 4 Extensive Field Maintenance Restorations.	-413	
2) <u>ASM(EW)</u> - Funding decrease will reduce the number of class B AN/SLQ-32(V) overhauls by 18 in FY 1986 (-5492). Also the number of emergent AN/SLQ-32 (V) Systems Replaceable Units/Shipboard Replaceable Assemblies (SRU/SRA) repairs which can be inducted into the Designated Overhaul Point (DOP) will be reduced by 104 in FY 1986 (-477).	-5,969	
5. FY 1986 President's Budget Request		84,766

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Air Station Restoration

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Electronic Restorations Required	874/	1,070/	1,417/
Electronic Restorations	330/4,962	519/5,673	736/ 8,042
Extensive Field Maintenance Restorations	17/1,845	17/1,845	13/ 1,413
FACSFAC	<u>280/ 427</u>	<u>400/ 616</u>	<u>500/ 778</u>
TOTAL Restorations Financed	627/7,234	936/8,134	1,249/10,233

Air Station funds support a mix of repair programs including ground control, TACAN, ACLS and communication equipments. As these systems age, the amount of restoration required becomes more extensive. Increased restoration in turn drives repair cost growth beyond normal inflationary increases. This problem is amplified in systems such as the ACLS in which the average age of operational units is 20 years. Due to safety considerations and other factors, NAVELEX is tightening ACLS overhaul specifications and strengthening the ACLS QA process, thereby increasing costs beyond that experienced in the past.

Additional Fleet Area Control Surveillance Facilities (FACSFAC) will be introduced. Currently there are four air stations maintained by FACSFAC. These will expand to five in FY 1985 and to six in FY 1986. In FY 1984, NAVELEX inducted 280 repair actions in support of these systems and projects, an increase up to 400 repairs in FY 1985 and up to 500 in FY 1986.

MATCS

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Systems Restoration Required	50/	46/	45/
Instrument Landing System (ILS)		7/ 231	12/ 420
RADAR Surveillance Central	2/ 466*	3/ 704*	3/ 333*
RADAR Overhaul Kit	3/ 743	6/ 953	4/ 832
UHF Beacon	2/ 116	3/ 162	4/ 232
Mobile ATC Tower		4/ 120	5/ 165
Generators	10/ 350	10/ 390	12/ 516
Antennas & Mobilizers	11/ 198	11/ 242	5/ 165
DLR's	0/ 458	0/ 247	0/ 413
Test & Support Equipment	0/ 81	0/ 143	0/ 156
Other			
TOTAL Restorations Financed	28/2,412	44/3,192	45/3,232

*Various configurations

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

ZZ Cog Electronic Restoration

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Electronic Restorations Required	776/	1,114/	1,330/
Electronic Restorations	649/ 6,848	798/10,008	878/10,281
TACAN Reliability Improvement Prog	34/ 1,380	34/ 1,394	34/ 1,407
Tactical Data Systems (IINK 11)	5/ 2,855	3/ 1,730	3/ 1,807
Aircraft Carrier Landing Systems	3/ 933	2/ 628	2/ 634
TOTAL Electronics Restorations	691/12,016	837/13,760	917/14,129

Standards, Calibration and Repair

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Calibrations Required	43,134/	47,612/	54,146/
Calibrations Financed	28,945/4,776	37,763/6,468	40,974/7,881

Standards are calibrated every nine months at eight shipyards, thirty intermediate maintenance activities, two contractor facilities and three ship repair facilities. A substantial number of standards are being procured and delivered in the FY 1984-1986 timeframe, which increases the calibration requirements during these years. By the end of FY 1985, an additional 3,445 standards will be procured, which will entail 4,478 calibrations per year. By the end of FY 1986, 8,472 additional standards will have been procured, increasing the laboratory workload by 11,012 calibrations above the FY 1984 requirement.

Test Equipment Maintenance

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Calibrations Required	148,141/	157,784/	164,095/
Calibrations Financed	100,226/15,134	92,007/14,813	104,222/17,405

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Test Equipment Maintenance (cont'd)

Additional GPETE has been provided to the fleet: in FY 1983 4,931 units, FY 1984, 2,180 units, FY 1985 5,804 units and in FY 1986 8,688 units. By FY 1986 the calibrations required by NAVELEX will increase by 10,000 per year. NAVELEX will be required to calibrate approximately one half of the procurements, with the fleet calibrating the remainder. Calibrations financed in FY 1984 and out are only 65% of the total requirement. Additionally, the standards at Fleet activities are inadequate, causing more fleet test equipment overflow to NAVELEX funded laboratories.

Precise Time and Time Interval

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>MY/\$000</u>	<u>MY/\$000</u>	<u>MY/\$000</u>
PTTI Calibration/Restoration Requirement (Quantity)	481	504	534
Cesium Standards	441/243	423/268	443/279
Other Clocks	12/ 20	15/ 22	14/ 21
Time Frequency Equipment	16/ 6	8/ 3	9/ 3
TOTAL PTTI Units Calibrated/Restored	469/269	446/293	466/303

Cryptographic Repair

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of maintenance actions required	33,465/	33,500/	35,015/
Record and data crypto equipment	12,951/5,502	14,608/7,196	14,705/8,249
Secure Voice crypto equip	6,250/ 931	7,790/1,345	9,800/1,754
Codes changes permuters, key guns, card readers and common fill devices	5,280/ 391	5,650/ 486	7,300/ 715
Crypto special test equipment	30/ 2	30/ 3	120/ 13
Off line and misc. crypto equipment	120/ 27	120/ 31	485/ 143
TOTAL Number of maintenance actions financed	24,631/6,853	28,198/9,061	32,410/10,874

Activity Group: Electronic Systems Rework and Maintenance (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Coast Guard Support</u>	<u>Qty/\$000</u>	<u>Qty/\$000</u>	<u>Qty/\$000</u>
Number of vessels supported	177/	177/	177/
Overhaul and maintenance requirements	5,124/	5,759/	5,759/
Number of units overhauled and maintained	2,498/ <u>3,518</u>	2,051/ <u>2,891</u>	4,414/ <u>6,540</u>
TOTAL Cost of Units funded	\$3,518	\$2,891	\$6,540
<u>RADIAC Repair</u>			
Calibrations required	70,000	70,000	70,000
Number of units funded	36,002	42,822	50,360
Unit Cost	116.38	124.54	133.24
TOTAL Costs of units funded	\$4,190	\$5,333	\$6,710
<u>ASM(EW)</u>			
Planned Overhaul/Refurbish Systems	13/	33/	35/
Financed Overhaul/Refurbish Systems	13/5,642	32/9,838	14/4,438
Planned Depot Maint of Spares (SRU/SRA/INCO)	810/	300/	245/
Financed Depot Maint of Spares (SRU/SRA/INCO)	810/ <u>5,245</u>	300/ <u>3,465</u>	196/ <u>3,021</u>
TOTAL ASM(EW) Financed	\$10,887	\$13,303	\$7,459

Note 1: The average unit cost of refurbishments is dependent upon the workload (economic quantity) and the mix of SLQ-32 variants.

Note 2: The average unit cost of repair is dependent upon the mix of SRUs/SRAs and predicted failure rates per operational system.

IV. Personnel Summary - NONE

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Procurement Operations
 Budget Activity: Central Supply & Maintenance
 Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Project Management Offices - Program provides administrative staffs who support "cradle-to-grave" responsibility for special mission programs by maintaining effective centralized procurement engineering and technical services in support of acquisition and logistics support and other procurement related activities. They exercise systems integration and coordination to ensure a fully coordinated and timely effort for the following efforts: Navy Space Project Office, REWSON Systems Project Office, Joint Tactical Information Distribution System Project Office, Communications Systems Project Office, Command Systems Project Office, Undersea Surveillance Project Office and the Marine Corps Systems Project Office.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Project Management Offices	<u>36,095</u>	<u>36,461</u>	<u>36,453</u>	<u>36,069</u>	<u>36,292</u>	<u>223</u>
Total O&M,N	<u>36,095</u>	<u>36,461</u>	<u>36,453</u>	<u>36,069</u>	<u>36,292</u>	<u>223</u>

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		36,069
2. Pricing Adjustments		-924
A. Civilian Personnel Compensation (Direct) (-933)		
1. US Direct Hire Pay Adjustment	-1,245	
2. Other Direct Pricing Adjustments	312	
B. Stock Fund	(-4)	
2. Non-Fuel	-4	
C. Industrial Fund Rates	(-17)	
D. Other Pricing Adjustments	(30)	
3. Program Increases		1,147
A. Other Program Growth in FY 1986	(1,147)	
1) Increase will provide for equipment rental leases and maintenance costs due to buyout (79); for increased supplies, ADP Services and printing (63); growth will provide for 5 work years to balance FY 1985 and out civilian ceiling increases for the JTIDS Program (183)	325	
2) An additional 6 end strength to Surveillance Towed Array Sonar System (SURTASS) - these billets are required to support Operation and Maintenance LANT/PAC based TAGOS/SURTASS ships and shore facilities and to coordinate new training.		258
3) Growth will provide 14 additional end strength for the following efforts:	564	
REWSON Systems project Office - four end strength to provide engineering expertise in support of a new start C ³ CM (Countermeasures) program which is being phased into the REWSON Project Office in FY 1986.		
Five end strength (EW) - provide engineering expertise in support of a new start "Air Electronic Buoy (AEB) Chaff Buoy" being phased into the Electronic Warfare area in FY 1986.		
Navy Space Systems Project Office - Four end strength to provide for acquisition management integrated engineering for the NAVSTAR at Warner Robbins AFB.		
Communications Systems Project Office - One end strength in Strategic Communications growth to provide engineering expertise for new systems being installed and baseline mangement/standard plans relating to shipboard tactical communications systems.		
4. FY 1986 President's Budget Request		36,292

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria

SUMMARY
PERFORMANCE CRITERIA
PROCUREMENT OPERATIONS

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
NAVY SPACE PROJECT	3,461	4,074	4,296
REWSON SYSTEMS PROJECT	5,692	5,748	6,030
JOINT TACTICAL INFORMATION DIST. SYSTEM	1,140	2,082	2,516
COMMUNICATION SYSTEMS PROJECT	8,369	8,599	8,427
COMMAND SYSTEMS PROJECT	11,655	11,359	10,901
UNDERSEA SURVEILLANCE OFFICE	2,530	2,488	2,563
MARINE CORPS PROJECT	1,695	1,719	1,559
INTEGRATED TACTICAL SURVEILLANCE SYSTEM	1,553	TRANSFERRED	
	<hr/>	<hr/>	<hr/>
	36,095	36,069	36,292

NAVY SPACE PROJECT OFFICE

The Navy Space Project Office exercises program management, including design, development, procurement and operational use of all Navy Space Systems, This responsibility includes all activities within the purview of the Naval Material Command and related to the Military use of Space, including but not limited to broad areas of: Communications, Navigation, Surveillance, Environmental Observations, Space Defense and Geodesy.

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	3,461	4,074	4,296

REWSON SYSTEMS PROJECT OFFICE

REWSON Systems Project Office supports the system integration and coordination authority with respect to Reconnaissance, Electronic Warfare, Special Operations, and Naval Intelligence Systems. The project office manages the design and operational applications of all electronic equipments and systems to ensure compatibility between the various systems and subsystems, and that cost effective capabilities are developed and produced.

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	5,692	5,748	6,030

JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS) PROJECT OFFICE

The JTIDS Project Office manages (1) the full scale development to satisfy the requirements to the Joint Tactical Information Distribution System for Navy and Marine Corps applications; (2) the development of related support equipment; (3) integration of the systems in various tactical platforms; and (4) the associated technical and management data.

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd)

JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS) PROJECT OFFICE (cont'd)

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	1,140	2,082	2,516

COMMUNICATIONS SYSTEMS PROJECT OFFICE

The Communications Systems Project Office manages communication systems assigned by COMNAVELEX to satisfy the mission of assuring positive command and control of strategic and tactical forces ashore and afloat. Management authority and responsibility encompasses End-To-End Planning, Development, Test and Evaluation, Acquisition and integration of all Navy Advanced Communications Security Systems, Display Systems, Data Links and Strategic and Tactical Communication Systems.

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	8,369	8,599	8,427

COMMAND SYSTEMS PROJECT OFFICE

The Command Systems Project Office exercises systems management authority and project management execution for Command Systems Engineering, including Navy Command and Control Systems (NCCS) Ashore, Tactical Flag Command Center (TFCC), Ocean Surveillance Information System (OSIS), Anti Submarine Warfare Operations Centers (ASWOC), World Wide Military Command and Control System (WWMCCS), Remote Sensors Systems, FACSAC, Surveillance and Navigation Systems, Over The Horizon Targeting (OTH-T) Projects, ATC/Landing, Tactical Data Links, IFF Systems, Air to Ground Communications, and Battle Group Tactical Training System.

In addition, it provides support engineering and administration of the ASWOC Program at the engineering development and system prototype facility. Activities include support of both the Baseline ASWOC systems supervision of Hardware and Software maintenance and target USW Technologies and Threats..

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	11,655	11,359	10,901

UNDERSEA SURVEILLANCE OFFICE

The Undersea Surveillance Office was established in April 1972 as the successor to project Caesar and was tasked to develop an integrated undersea surveillance system, including responsibility for management and technical control of the Naval Electronic Systems Command Undersea Surveillance Program in advanced development, engineering development and operational development.

The program is comprised of fixed bottom mounted arrays, and towed arrays whose mission is to assist tactical forces in the detection of potential enemy submarines throughout wide ocean areas.

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	2,530	2,488	2,563

Activity Group: Procurement Operations (cont'd)

III. Performance Criteria (cont'd)

MARINE CORPS SYSTEMS PROJECT OFFICE

The Marine Corps Systems Project includes Marine Corps, Navy, and other customer (Air Force, Army and FMS) funded programs and provides material support to the Marine Corps. Projects include Facilities, Equipment, Procedures, Software, Personnel Training and the Integration of Subsystems for use of the Fleet Marine Forces as an integral part of the Naval Operating Fleets. It also involves those systems assigned to the Marine Corps for development in support of other U.S. Military Forces or Allied Forces. The project also provides the PPBS, Development, Testing, Production, and Life Cycle Management for Fleet Marine Forces Air Traffic Control and other USMC Aviation Support Systems.

FUNDING	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
PROFILE:	1,695	1,719	1,559

INTEGRATED TACTICAL SURVEILLANCE SYSTEM PROJECT OFFICE

FUNDING	<u>FY 1984</u>	FY 1985 and out transferred to Field Operations Activity Group.
PROFILE:	1,553	

IV. <u>Personnel Summary</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military E/S</u>	<u>36</u>	<u>38</u>	<u>37</u>
Officer	32	32	31
Enlisted	4	6	6
B. <u>Civilian E/S</u>	<u>825</u>	<u>841</u>	<u>861</u>
USDH	825	841	861

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Command & Administration
Budget Activity: Central Supply & Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

The Command and Administration program provides and organization which plans, develops, executes and manages the activities, processes and systems to meet the Command's mission. This organization administers the functions of the Counsel, Inspector General, Office of Small Business, Congressional and Public Affairs, Command Deputy Equal Employment Opportunity Office, International Programs Scientific and Technical Intelligence Liaison Office, Mobilization/Contingency Plans and Operations Office, Comptroller Directorate, Administrative Services Division and other administrative offices which provide support to the Commander.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Command and Administration	7,827	5,884	5,884	6,106	5,911	-195
TOTAL O&M,N	7,827	5,884	5,884	6,106	5,911	-195

Activity Group: Command & Administration (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		6,106
2. Pricing Adjustments		-139
A. Civilian Personnel Compensation (Direct)	(-127)	
1. US Direct Hire Pay Adjustment	-170	
2. Other Direct Pricing Adjustments	43	
B. Stock Fund	(-16)	
1. Non-Fuel	-16	
C. Industrial Fund Rates	(-21)	
D. Other Pricing Adjustments	(25)	
3. Program Increases		125
A. Other Program Growth in FY 1986	(125)	
1) Increase in equipment maintenance due to buyout (75) increased consumption of supplies, materials, printing (50).	125	
4. Program Decreases		-181
A. Other Program Decreases in FY 1986	(-181)	
1) Decrease in planned purchase of Systems Furniture (-93); decrease in other personnel compensation and lowered average salary (-17), decrease in equipment rental due to buyout (-71)		
5. FY 1986 President's Budget Request		5,911

III. Performance Criteria and Evaluation

The Command and Administration program provides the staff necessary to manage headquarters functions as defined by the Secretary of Defense, directs Command-wide policy and planning, and controls and allocates financial resource and manpower to provide efficient support of mission in conformance with legal and regulatory limitations and evaluations, Command-wide and in support of field activity management units.

IV. Personnel Summary

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military E/S</u>	<u>15</u>	<u>15</u>	<u>14</u>
Officer	11	13	12
Enlisted	4	2	2
B. <u>Civilian E/S</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
USDH	157	154	154

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Field Operations
Budget Activity: Central Supply & Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Field Operations - This program finances the day-to-day operations of the field activities management personnel (supervisory, financial, contractual and administrative) including costs for office supplies and equipment, mission travel, administrative training, data processing, printing and reproduction, transportation of things, costs associated with ADP(maintenance and leasing), general technical report production, and audiovisual. The Field Operations program provides electronic support to all Navy & Marine Corps installations.

Operational Support - Field - This program finances the salaries, administrative expenses and travel of personnel who are engaged in the design, development, acquisition, and logistics support of surveillance, space, intelligence, security, command and control, communications, electronic warfare, air traffic control, and navigational systems for the field activities. Additionally, the Operational Support - Field program develops and manages a technical program to ensure the security and integrity of Navy ADP systems, acts as the lead agency for the laser safety program and is the primary technical authority for electronic standards, standardization, techniques, practices and compatibility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Field Operations	26,483	30,144	29,068	28,935	29,913	978
Operational Support - Field	<u>22,391</u>	<u>17,432</u>	<u>17,390</u>	<u>18,853</u>	<u>20,946</u>	<u>2,093</u>
Total O&M,N	48,874	47,576	46,458	47,788	50,859	3,071

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		47,788
2. Pricing Adjustments		-722
A. Civilian Personnel Compensation (Direct)	(-979)	
1. US Direct Hire Pay Adjustment	-1,176	
2. Other Direct Pricing Adjustments	197	
B. Stock Fund	(-46)	
1. Non-Fuel	-46	
C. Industrial Fund Rates	(-4)	
D. Other Pricing Adjustments	307	
3. Functional Program Transfers		1,999
A. Transfers In	(1,999)	
1. Inter-Appropriation	1,999	
Expense/Investment Criteria Revision -		
Amounts transferred from Other		
Procurement, Navy (Shore Electronic		
Items under \$900K and the Computer		
Aquisition Program) pursuant to the		
proposed DOD initiative for elimination		
of \$3 thousand investment threshold and		
adoption of central management criteria		
as a governing factor [Field Operations		
(279), and OP Support-Field (1,720)].		
4. Program Increases		1,794
A. Other Program Growth in FY 1986	(1,794)	
1. Op Support-Field	885	
Increase of 9 work years to support an		
FY 1986 increase of civilian end		
strength (295); increase in NARDAC		
utilization costs (203); increase in		
printing costs (15); purchase of		
mission essential equipment and		
supplies (182); increase in training		
(102); increase in equipment		
maintanance due to buyout of leased		
equipment (64); lease of additioanal		
photocopier (24).		
2. Field Operations	909	
Increase in equipment maintenance due to buy		
out of leased equipment (321); change in		
mix of GS/GM (211); increase in printing		
(6); increase in systems analysis and		
programing (96); increase in training (150);		
increase in supplies and materials (99);		
rental of additional copier machine (26)		
6. FY 1986 President's Budget Request		50,859

III. Performance Criteria and Evaluation

Field Operations

The Naval Electronic Systems Command (NAVELEX) Field operations are comprised of 4 Naval Electronic Systems Engineering Centers at Charleston, San Diego, Portsmouth and Vallejo and 1 Systems Engineering Activity located at St. Inigoes, MD. Strategically located shore activities provide planning, implementation, coordination and management control of shore and shipboard electronic equipment under NAVELEX cognizance in support of direct Fleet Activities and Combat Forces. Resources provide for direct salaries and administrative support for 632 civilian personnel (FY 1986) and administrative support costs only for 55 military personnel and 1162 civilian personnel who provide design and engineering, inspection and testing of electronic installations, major equipment repair and engineering/technical assistance for electronic systems and equipments.

Operational Support - Field

The Operational Support - Field Program provides the Navy, Marine Corps and Coast Guard with electronic systems for processing and transfer of information between all military users and for special military application including ship and shore electronic warfare detection and weapons control, development, acquisition, and logistics support of surveillance, space, intelligence, security, contracts command and control, communications, electronic warfare, air traffic control, and navigational systems for field activities. Additionally, the operational support-field program provides development and management of technical programs to ensure the security and integrity of Navy ADP systems, acts as the lead agency for the laser safety program and is the primary technical authority for electronic standards standardization techniques, practices and compatibility. Operational Support Field is responsible for ensuring timely, cost effective and efficient life cycle support for all NAVELEX electronic equipment systems, including the execution and coordination of those equipment systems in afloat platforms. Advance planning, architectural/functional designs, and engineering for systems comprising the Navy's Command Central Communications and Intelligence (C3I) Systems is also provided.

IV. Personnel Summary

<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>	
A. <u>Military E/S</u>	<u>86</u>	<u>140</u>	<u>130</u>
Officer	62	105	95
Enlisted	24	35	35
B. <u>Civilian E/S</u>	<u>1,083</u>	<u>1,076</u>	<u>1,077</u>
USDH	1,083	1,076	1,077

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Logistics Support Services
Budget Activity: Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Standardization - Provides for the standardization of equipment, parts, material and related software, procedures and techniques in order to facilitate opportunities for interoperability and shared logistics support with friendly forces. These efforts are designed to increase fleet readiness and ensure adequate support of weapons systems through improved technical documentation, reduced dollar resources, manpower and skill requirements for their maintenance and operation.

Remote Sensors - Provides for engineering, technical support, installation and centralized management of the Intrusion Detection Systems (IDS) to allow security forces an early electronic warning of both the presence and approximate location of an intruder. The program also includes an on-going Special Ammunition Storage (SAS) site retrofit and an upgrade effort to ensure that installed IDS meet current security criteria. This includes installing new components such as tower maps, and replacing non-supportable equipment that is beyond economic repair. The Arms, Ammunition & Explosive (AA&E) sites that will receive the highest priority are those sites which contain Category I material (hand-held, portable, ready-to-fire rockets and launchers, etc.)

SSN Integrated Communications System (SSN-ICS) - Provides the attack submarine fleet with improved communication centers capable of responding to various mission requirements. The program supports the SSN 688 Class radio room by enhancing its capabilities through engineering changes and the addition of new improvements. This program provides repair and maintenance service for system hardware and software, engineering and technical services, configuration management and control, and technical support and management assistance for new equipments introduced into the Fleet. A high priority portion of the program is the Data Link Communications Systems (DLCS), a major subsystem of the Over-the-Horizon-Targeting (OTH-T)/TOMAHAWK capability, which will introduce to the SSN Class Submarine nine complex subsystems of electronic equipment. In addition, this program funds the Submarine Antenna function to ensure that current technical and operational documentation is available to support the submarine mission; that technically qualified personnel are stationed throughout the world to assist in inspection, investigation, maintenance, and fleet liaison for submarine antenna problems; that logistics and engineering services support are available; that support to the operation of an antenna range is provided; and provides inservice engineering agent support to the fleet. For support of the radio room and antenna systems, operations and maintenance funds are required to support approximately 4500 equipment items being procured, installed, or already installed on the attack submarine fleet.

Activity Group: Logistics Support Services (cont'd)

I. Description of Operations Financed (cont'd)

Safety - Is divided between Electronic Systems Safety and Laser Safety. The Electronic Systems Safety program supports an engineering laboratory with safety test and system safety analysis capabilities to provide safety assistance to Electronic Systems Program and Acquisition offices. This program also updates safety requirements in Navy electronic standards, specifications and publications. The Laser Safety Program maintains laser safety design standards and test and evaluation capability to assist in producing safe laser systems for the Fleet. Laser protective devices are evaluated for protection against friendly and enemy lasers; laser radiation hazard surveys are conducted afloat and ashore; laser safety training assistance is provided for all Navy; and laser safety publications are developed and promulgated to all Navy.

Navy Occupational Safety and Health (NAVOSH) - Is aimed at eliminating workplace hazards and training employees in safe work practices, thereby reducing work time injuries and equipment damage, increasing productivity and enhancing fleet readiness. This is accomplished by providing safety and occupational health training of safety personnel, supervisors and employees; safety inspections; salaries for safety officers and safety clerical assistance; protective equipment for personnel; safety signs, alarms and equipment; and safety modifications to machinery and buildings.

Integrated Logistic Support (ILS) Systems - The ILS (TRI-TAC) program is primarily concerned with design and acquisition of Fleet tactical communications systems. This includes all trunking, access and switching equipment for mobile and transportable tactical multi-channel systems, associated systems control and technical control facilities, local distribution equipment, voice, record, data and ancillary terminal devices and associated communications security equipment. This program provides funds for Integrated Logistic Support (ILS), implementation planning, project acquisition management support, software support and planning for depot and intermediate maintenance facilities. In FY 1986, the TRI-TAC program will be transferred to Primary Communication Security (COMSEC). However, a new ILS (Fleet Tactical) program will be established to encompass funds transferred from Other Procurement, Navy pursuant to the proposed DOD initiative for elimination of \$3K investment threshold and adoption of central management criteria as a governing factor.

Air Station Installation - The Air Station Installation program provides electronic equipment support to 122 Navy and Marine Corps air activities worldwide through the Naval Air Traffic Control (ATC) and Air Navigation Aids and Landing Systems (NAALS) programs. NAALS surveys are conducted to determine the operational readiness and condition of shore-based electronic systems as well as conditions and situations which directly affect the effective utilization of the equipment. The program finances the planning, installation design, installation and engineering support of Tactical Air Navigation Aid (TACAN), Tactical Communication, Air Traffic Control Systems, and Fleet Air Control and Surveillance Facilities (FACSFAC). FACSFAC provides control and scheduling services to aircraft, ships and submarines in offshore operating areas. Starting in FY 1985, funds are provided for installation of equipment in the Island Command Center (ICC) in Diego Garcia. Also included in this program is funding for support of fleet

Activity Group: Logistics Support Services (cont'd)

I. Description of Operations Financed (cont'd)

requirements for Shipboard Air Traffic Control (SATC), Automatic Carrier Landing Systems (ACLS), Navigation Systems and MK XII AIMS Identification-Friend-or-Foe (IFF) Systems. SATC Centers provide identification of aircraft carrier radar systems that provide precise automatic control for final approach and landing. Navigation systems supported in this line are the OMEGA radio receivers (SRN-17, BRN-7, LTN-211 etc). Satellite-based radio navigational systems are used worldwide and are installed on nearly all surface ships and submarines. AIMS IFF is a DOD-directed tri-service program providing universal air traffic control radar beacon systems compatible with the National Airspace System, and is a secure identification system for military use.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	FY 1984	FY 1985			FY 1986	
		Budget Request	Appropriation	Current Estimate	Budget Request	Change
Standardization	2,009	3,172	2,019	1,954	4,032	2,078
Remote Sensors	3,131	3,217	3,011	2,813	6,820	4,007
SSN-ICS	1,797	3,970	2,883	2,911	6,356	3,445
Safety	607	669	630	629	529	-100
NAVOSH	294	324	296	301	290	-11
ILS	289	2,058	1,450	1,449	774	-675
Air Station Installation	<u>18,129</u>	<u>26,786</u>	<u>22,725</u>	<u>22,645</u>	<u>27,475</u>	<u>4,830</u>
Total O&M,N	26,256	40,196	33,014	32,702	46,276	13,574

Activity Group: Logistics Support Services (cont'd)

C. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$32,702
2. Pricing Adjustments		475
A. Stock Fund	(-115)	
1) Non-Fuel	-115	
B. Industrial Fund Rates	(-132)	
C. Other Pricing Adjustments	(722)	
3. Functional Program Transfers		774
A. Transfers In	(774)	
1) Inter-Appropriation	774	
<u>Integrated Logistic Support (ILS)</u>		
<u>Systems (Fleet Tactical) -</u>		
Expense/Investment Criteria		
Revision - Amount transferred		
from Other Procurement, Navy		
pursuant to the proposed DOD		
initiative for elimination of \$3		
thousand investment threshold		
and adoption of central		
management criteria as a		
governing factor.		
4. Program Increases		19,096
A. Other Program Growth in FY 1986	(19,096)	
<u>Standardization - The increase is</u>	2,126	
to support the following growth:		
82 additional Engineering		
Support Actions to support		
microcircuit obsolescence and		
the new Standard Hardware		
Acquisition and Reliability		
Program (SHARP)(48).		
70 Qualification and Correlation		
Studies - Efforts will increase		
due to new standards program and		
in support of SHARP, and for		
second source qualification		
tests to support competitive		
procurement initiative (643).		

C. Reconciliation of Increases and Decreases (cont'd)

136 Standards and Specifications (reviews, updates and new documents), including:

- (1) Increase in metrication effort in updating established conversion goals.
- (2) Increase in fiber optic (RF Cable) specifications to alleviate shipboard flammability and toxicity issues.
- (3) Updating reliability, maintainability and quality assurance specifications, handbooks, and standards to conform to new guidelines.
- (4) Increase in the number of specifications/standards developed to support the newly introduced SHARP (845).

148 Design Approved Request Actions - As a result of an increase in the use of the Standard Electronic Modules Program (SEM) (590).

Remote Sensors- Program increase will fund: 4,052

- (1) The installation of a specially configured Intrusion Detection System (IDS) consisting of readout display equipment, exterior and interior sensors and CCTV at the Special Ammunition Storage (SAS) Site at SWFLANT, Submarine Base, Kings Bay, GA. Installation of the first phase must start in FY 1986 to meet the required IOC date of FY 1988 (434).
- (2) The accelerated installation of IDS, consisting of readout display equipment and interior sensors at 12 Risk Category I & II (that which can be carried off and used) Arms, Ammunition and Explosive (AA&E) sites in accordance with continued concern for increased physical security of such critical assets (3,458).

Activity Group: Logistics Support Services (cont'd)

C. Reconciliation of Increases and Decreases (cont'd)

(3) The SAS upgrade program providing the installation of two additional units of electrical equipment/tower maps for manned security guard towers. In addition to the tower equipment, this function provides the updating of electronic sensors to meet current security criteria and the replacement of equipment that has become uneconomical to repair (160).

SSN-ICS - Provides in-service engineering agent support to the fleet (928). Also, provides for new support requirements as follows: additional submarine antenna technical representatives to complete worldwide support organization (735); and reprovisioning support (383). Provides for growth in requirements being driven by an increase in both the numbers of equipments being managed and the number of new equipment systems being introduced to the operating fleet (1,420).

3,466

Air Station Installation - Program increase provides for: 1) Air Traffic Control Modernization - 24 Air Traffic Control (ATC) communications (206); 3 Radar Air Traffic Control Facility Direct Altitude Indicator Readout (RATCF DAIR) installations (412); 11 Flight Data Input/Output (FDIO) installations (307); 4 wind/clock/altimeter systems installations (234); 2 ATC Cable replacements (229); ATC Tower Improvement Installation (80); Radar Operational Facility (ROF) Assembly (263); and Brite Alpha Numeric Display System (BRANDS) Support (162);

9,452

Activity Group: Logistics Support Services (cont'd)

C. Reconciliation of Increases and Decreases (cont'd)

2) Air Navigation Aids Installation - 7 Tactical Air Navigation (TACAN) installations (1,141); and 20 UHF Homer/ATIS installations (468); 3) Landing System Installation - Precision Approach Radar (PAR) ECPs (903); and 2 PAR Assemblies (386); 4) Fleet Area Control and Surveillance Facility (FACSFAC) - 1 Fleet Area Control and Surveillance Facility (FACSFAC) installation (2,158); 5) ATC Management System - 1 equipment condition survey (39); and Software Support for NAALS System (1,061); 6) MK XII AIMS IFF (Shipboard) - Development, Test & Evaluation MK XII AIMS System ECPs (60); and Certifications of MK XII AIMS IFF (5); 7) Navigation - 6 WRN-5/SRN-19 Software/Hardware Mods (37); 2 BRN-7/SRN-17 FC Development/ Testing (27); 20 LTN-211 Software/Hardware mods (194); SRN-19 Recertifications (8); and SESEF Test Program (6); and 8) Automatic Carrier Landing System (ACLS) - 3 SPN-46 BESEPS (49); 1 Automatic Carrier Landing System (ACLS) Certification/Verification (106); and 3 CATTC/AATC Configuration/Hardware/Software ECPs (911).

5. Program Decreases

-6,771

A. Other Program Decreases in FY 1986 (-6,771)

Remote Sensors - Decrease will result in a delay in the start of 1 AA&E storage site installation. -97

Activity Group: Logistics Support Services (cont'd)

C. Reconciliation of Increases and Decreases (cont'd)

Safety - Decrease will result in -83
1 less Electronic Safety Document; 1 less Laser Safety Workshop; 1 less Laser Safety Publication; 1 less Laser Safety fleet assist and 1 less tech assist visit; 1 less Laser Safety Survey; 1 less Laser Safety Review Board Support Review; and loss of portions of a Laser protective device evaluation and Laser equipment safety evaluation.

NAVOSH - Decrease will result in -7
correction of 38 less Safety deficiencies.

Integrated Logistic Support (TRI-TAC) Systems - Decrease is due -1,448
to the termination of support for the Naval Telecommunication System Test Node and a reduction of technical support and depot activation planning for the TRI-TAC program Advanced Narrowband Digital Voice Terminal (ANDVT CV-3591); and realignment of the balance of \$816K to Communications Security (BA 3) when the ILS (TRI-TAC) program becomes a part of Primary Communications Security (COMSEC).

Air Station Installation - -5,136
Decrease will result in: 1) Air Traffic Control Modernization - 3 less Radar Air Traffic Control Facility (RATCF) installations (-1,573); 1 less Ground Control Approach (GCA) replacement (-411); 1 less Airport Surveillance Radar (ASR) replacement (-366); 6 less Radar Microwave Links (-72);

Activity Group: Logistics Support Services (cont'd)

C. Reconciliation of Increases and Decreases (cont'd)

2) Air Navigation Aids Installation - VORTAC (-431); 3) Landing System Installation - 1 less Instrument Landing System (ILS) installation (-202); and Microwave Landing System (MLS) (-31); 4) Diego Garcia Island Command Center Installation - Diego Garcia ICC Installation (-54); 5) ATC Management System - 5 less Configuration Status Accountings (CSAs) for Air Stations (-108); ATC Computer Aided Design (-295); Air Station Master Plans Prep (-12); and ILS Plans/Operational Logistics Support Summary Prep (-8); 6) Other ATC Improvements - 16 less Other ATC Improvements (-1,229); 7) MK XII AIMS IFF (Shipboard) - 1 less AS-3430 Integration ECPs (-43); 1 less UPA-59 Mod (-43); APX-100 Evaluation/Testing (-87); and 1 less UPX-25/28 Mod (-104); 8) Navigation - URN-25 Fleet Systems Mods (-34); and SRN-18/19 BRN-6 FC Test & Evaluation (-2); and 9) Automatic Carrier Landing System (ACLS) - 3 less USQ() Tests (-26); and ACLS Software/Hardware Mods (-5).

6. FY 1986 President's Budget Request

46,276

III. Performance Criteria .

	FY 1984		FY 1985		FY 1986	
	#Units	\$	#Units	\$	#Units	\$
<u>Standardization</u>						
Engineering Support Actions	404	164	433	195	515	242
Standards and Specifications	389	572	334	782*	470	1,411
Qualifications/Correlations	250	680	283	586	353	1,411
Design Approval Requests	274	593	175	391	323	968
TOTAL	1,317	2,009	1,225	1,954	1,661	4,032

(*Increase in unit cost is due to increased complexity of specifications to incorporate VHSIC/VLSI, the latest micro-electronic technology.)

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

	FY 1984		FY 1985		FY 1986	
	#Units	\$	#Units	\$	#Units	\$
<u>Remote Sensors</u>						
Special Ammunition Storage (SAS) sites	2	701	1	643	1	1,100
SAS Upgrade	3	405	1	88	3	450
Arms, Ammunition and Explosive (AA&E) Storage Sites					12	3,160

	FY 1984		FY 1985		FY 1986	
	#Units	\$	#Units	\$	#Units	\$
Engineering Support/Integrated Logistics Support (ILS) Intrusion Detection Systems (IDS) System Support		2,025		2,082		2,110
TOTAL	5	3,131	2	2,813	16	6,820

Workyears

	FY 1984		FY 1985		FY 1986	
	#Units	\$	#Units	\$	#Units	\$
<u>SSN-ICS</u> (FY 85 average cost per W/Y = \$100K for all items except ISEA)						
Curriculum Development for Training Support	1.0		1.2		1.5	
Field Maintenance Agency/Configuration Management (FY 85 Equip. Density = 808)	1.5		5.5		6.0	
Repair and Maintenance Service for:	1.5		1.4		0	
Signal Distribution Systems (SDS); Frequency Standard Transfer Switch (FSTS)/Low Level Teletype Switch (SB-3917); Teletype Switch (OK-261); Sensor Interface Unit (SIU); and Data Terminal Set (DTS). (FY 85 Equip. Density = 848).						
CCSIP Operations Support	3.0		1.7		2.5	
Technical Support and Management Assistance (FY 85 Equip. Density = 848)	3.3		5.7		7.4	

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>Workyears</u>		
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Software Life Cycle Support (SIU)	1.0	1.9	2.5
Antenna Technical Inspection Program	1.6	0	1.5
In-Service Engineering Agent (FY 85 Equip. Density = 3729 (FY 85 per M/Y Cost = \$86.8K)	0	4.2	14.4
Antenna Technical Representatives FY 85 Equip. Density = 3729)	7.0	8.0	15.0
Mod. Test Equipment Support	0	0	4.3
	<u>Workyears</u>		
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
EMI Installation Support	0	0	3.5
Com Spt (Video Tape; AN/WSC-3, AN/BRR-3; Electronic Drive; Spectrum Analyzer)	0	0	4.0
TOTAL W/Y	19.9	29.6	62.6
TOTAL FUNDING	\$1,797	\$2,911	\$6,356

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>
<u>Safety</u>						
Number of Electronic Safety Documents Produced or Revised	3	85	3	88	2	52
Number of Evaluations of Electronic Equipments	3	15	3	20	3	20
Number of Laser Safety Surveys	5	100	5	92	4	92
Number of Laser Safety Workshops	2	30	3	39	2	35
Laser Safety Review Board System Reviews	3	30	5	45	4	45
Laser Protective Device Evaluations	2	100	2	92	1	70
Laser Safety Publications	3	100	3	94	2	67
Laser Equipment Safety Evaluations	3	107	4	124	3	120
Laser Safety Fleet Assist Visits	2	20	3	28	2	22
Laser Safety Working Groups Technical Assist Visits	<u>8</u>	<u>20</u>	<u>3</u>	<u>7</u>	<u>2</u>	<u>6</u>
TOTAL	7	296	34	607	25	529

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>
<u>NAVOSH</u>						
Number of Safety and Health Inspections	8	157	8	150	8	150
Number of Supervisor and Employee Safety Courses	9	50	7	46	7	52
Number of Safety Officers Trained	6	18	7	21	7	22
Number of Safety Deficiencies Corrected	<u>100</u>	<u>69</u>	<u>128</u>	<u>84</u>	<u>90</u>	<u>66</u>
TOTAL	123	294	150	301	112	290

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>
<u>Integrated Logistic Support Systems</u>						
<u>TRI-TAC</u>						
Equipment (NTSTN) (Nos. of equipment supported)	169	51	169	53		
Project/Acquisition Management Support (M/Y)	2.5	238	2.5	301		
Depot Activation (No. of Sites)			1	1,080		
Software/Tech Maint Act/Fleet Maint Supt (M/Y)			1	15		
<u>Fleet Tactical Material Purchases</u>					56	774
TOTAL		289		1,449		774

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>	<u>#Units</u>	<u>\$</u>
<u>Air Station Installation</u>						
Air Traffic Control Modernization	27	9,343	89	8,630	119	7,777
Air Navigation Aids Installation	35	2,207	7	735	35	2,282
Landing System Installation	0	0	78	1,400	82	2,523
Fleet Area Control and Surveillance Facility	0	0	5	1,622	6	3,816
Diego Garcia Island Command Center Installation	0	0	1	100	1	50
ATC Management System	70	1,465	61	2,401	57	3,158
Other ATC Improvements, Equipment ECPs, Mods, etc	75	3,200	81	3,601	65	2,509
MK XII AIMS IFF (Shipboard)	610	190	629	1,461	626	1,303
Navigation	141	706	144	742	172	1,007
Automatic Carrier Landing System (ACLS)	25	1,018	39	1,953	34	3,050
TOTAL	983	18,129	1,134	22,645	1,197	27,475

IV. Personnel Summary (End Strength). None

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Engineering and Support Services
Budget Activity: Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed.

Technical Publications - Provides for adequate and accurate technical documentation for installation, training, operation, and maintenance of electronic systems for the Fleet and other users. The primary objective is to provide the best possible manuals with initial deliveries of every NAVEXLEX hardware item and to maintain adequate stocks in the supply system of the approximately 10,000 NAVEXLEX publications. The secondary objective is to correct any publications problems or deficiencies which may arise that reduce Fleet readiness.

Reliability and Maintainability - Provides technical surveillance of contracts to ensure that equipments are delivered without deficiencies. Selected systems, newly introduced into the Fleet, are evaluated to determine if design requirements are being met or to identify problems and develop corrective actions. Additionally, NAVEXLEX is the DOD designated preparing activity for yearly review and update of Military Standards for reliability testing, growth and thermal design. This program contains a requirement to maintain the integrity of Reliability Initiatives for NAVMAT and Workmanship Screening.

Electronic Test and Repair - This program provides: (1) requirement analysis of Navy test requirements to identify those parameters which need to be tested; (2) in-depth analysis of actual fleet and support activity requirements; (3) review of existing automatic test equipment test program sets and units under test documentation, their adequacy, and addresses the feasibility of enhancements if required; and (4) research in graphic forms and procedures to make the information more easily and rapidly comprehensible to the individual who needs to use it, tailored to his operational needs and educational and training level. DDEOC ships will have operating times extended from 36 months to approximately 60 months between overhauls. The change in maintenance strategy for the EOC ship classes is a shift from piece part repair to modular changeout. Changed out equipment and modules are shipped to expanded rework facilities for screening and refurbishment and subsequently returned to a pool for issue to support follow on availabilities of other SSEOC ship classes.

Tactical Electromagnetic Program (TEMP) - Ensures readiness by providing a valid operational Electromagnetic (EM) Environment and the capability to monitor and assess this environment. This is accomplished through the following efforts; (1) operation of two specially equipped NKC-135 aircraft to simulate hostile Electronic Countermeasures (ECM); (2) commencing FY 1986, operation of the Fleet Electronic Warfare Support Group (FEWSG) command, control, communications aircraft (FEWSG C³) which provides jamming services similar to the NKC-135 plus command, control, and communications for ORANGE FORCES during fleet training exercises; (3) operation, maintenance and overhaul of Fleet Electronic Warfare Support Group (FEWSG) simulators, vans

Activity Group: Engineering and Support Services

I. Description of Operations Financed (cont'd)

Tactical Electromagnetic Program (TEMP) (cont'd)

and ECM jammers; (4) provides technical advice and acquisition management support for the NATO Multi-Service Electronic Warfare Support Group (MEWSG); (5) provides repair and maintenance of fleet simulators and podded jammers used for training and tactical contingencies; (6) provides ECCM handbooks for specific ship classes based upon the ship's radar suite; and (7) maintenance of a master emitter data base at Electronic Intelligence (ELINT) Centers, generation of all electronic warfare libraries, and the coordination effort required with fleet intelligence centers.

Electromagnetic Compatibility/World Administrative Radio Conference (EMC/WARC) - Provides funding for: (1) Fleet EMC Support Program analysis and development of solutions for Fleet EMI (Interference) problems involving ELEX systems; (2) Acquisition E³ (Electromagnetic Environment Effects) technical review, analysis and recommendations in EMI control of ELEX systems acquisitions; (3) E³ Program support of CNO Executive Boards, Flag boards, and reports to OPNAV; Technical evaluation/review of reports and other support of E³ MAT EMI program; (4) WARC support involving technical evaluation of impact of special WARCs and development of technical alternatives for Navy requirements, plus VHF frequency realignment for regions of U.S. and possessions includes implementation support; (5) E³ Training Seminar to train acquisition, lab, and inspection personnel for better acquisitions -- E³ Newsletter to increase EMI awareness and provide guidance to Navy personnel--updating the EMI NTP--development of training modules--development of self-help films/tapes; (6) Shore Support in conducting EMI/RADHAZ survey by various ELEX field activities (under NESEC Charleston direction), and implementation of new RADHAZ criteria.

Submarine Surveillance Equipment Program (SSEP) - Provides funding for the required life-cycle support of many varied electronic support measures and data collection equipments assigned for nuclear attack submarines. This funding provides nuclear attack submarines with the capability to detect, track, identify, and analyze the activities of foreign and threat military systems, and to provide direct tactical support to deployed submarines for quick reaction to threat situations.

Shipboard Cover and Deception (SCD) - A configuration of specialized equipments, subsystems, and systems are within this line item and are of two types. They are (a) Offboard Deception Devices (ODDS) - expendable air or surface deployable specialized buoys to support ocean surveillance and C³; and (b) Integrated Cover and Deception (ICAD) - which collectively provides Fleet Commanders with the capability to deceive and/or disrupt adversary operations. The nature of these systems requires a high degree of accuracy and operational readiness and are in four categories: portable/modular carry-on/off relative to mission and deployment, installed at worldwide Navy shore activities, expendables, and permanently installed with designated shore support (e.g., hardware maintenance, software maintenance, repair, operational readiness testing, refurbishment between deployments, etc.). Therefore, extensive engineering/technical services, maintenance, repair, operational deployment testing, and refurbishment is required to maintain these equipments, devices, subsystems, and systems at specification level.

Activity Group: Engineering and Support Services (cont'd)

I. Descriptions of Operations Financed (cont'd)

Portable Electronic Warfare Support Measures (ESM) Equipment/Systems - The equipment, subsystems, and systems within this line item are of two types. They are (1) permanently installed at worldwide Navy ashore Sites and provide tactically significant technical cryptologic data support to installed/deployed cryptologic equipments/systems on Navy Combatants and Amphibious platforms and (2) portable systems centrally located at forward staging areas for deployment on Navy Combatants and Amphibious platforms, by direction of the Fleet CINC, on a mission-to-mission basis to provide tactical ESM support to the embarked Commander in a Quick Reaction Mode relative to mission area requirements.

Naval Information Processing System (NIPS) - This system includes intelligence equipment installed in the intelligence centers of the Aircraft Carriers (CV) the Amphibious Command Ships (LCC) the Amphibious Assault Ships (LHA) and four Navy shore commands. The purpose of NIPS is to process, analyze, display and disseminate intelligence data to the ship and the Battle Group to support Naval operations. The equipments comprising the NIPS are installed as 43 different suites of equipments made up of the AN/USQ-34(17); the AN/SSQ-64 (2); the AN/SYQ-9 (6); and the AN/SXQ-8 (18). Included with these systems is a National and Navy Intelligence Data Base and computer programs to operate the systems. The inventory of major equipments that comprise NIPS is very extensive, ranging from data processing equipment procured in the early 1970's to photographic equipment and a major close circuit television distribution system.

Surface Electronic Warfare (Excluding OUTBOARD)

(1) The equipment/systems within this line are radar and anti-ship missile (ASM) warning and defense systems (excluding the AN/SLQ-32) which provide the operational Commander with a real time passive capability to detect, locate, track and target surface and airborne radars and missiles, and to defend the task force by electronic means from electronic and/or IR guided ASM's. Systems within this category are (a) the AN/SLQ-17A(V)2 which provides both passive area surveillance and active electronic defense for CV/CVN against simultaneous multi-threat, multi-axis anti-ship missile attack. Funds are required for installation planning of LPA Signal Processors. Fleet Maintenance Agent software/hardware support and completion of Physical Configuration Audit (PCA) and ECP development and checkout; (b) the AN/WLR-1H, a passive radar surveillance receiver for CV/CVN which complements the AN/SLQ-17 in search and track for threat radars and missiles. Increased funding will provide software/hardware support by Fleet Maintenance Agent (FMA) required to meet needs of Fleet installed AN/WLR-1H, configuration management and Engineering Change Proposal (ECP) development; (c) the Anti-Ship Missile Decoy (ASDM) system, which is a family of ASM decoys and launching equipment to counter the ASM threat. Configuration Audit of installed systems will be performed on all platforms. The following smaller equipments did not receive support but they will be supported in FY 1985/1986; (d) MUTE (AN/SSQ-82), a shipboard emitter monitor and control system; (e) the AN/SLQ-20, a classified ECM deception

Activity Group: Engineering and Support Services (cont'd)

I. Description of Operations Financed (cont'd)

Surface Electronic Warfare (Excluding OUTBOARD) (cont'd)

equipment, (f) the AN/SLA-10, a blanker group used to disable selected countermeasure receivers to prevent reception of transmitted signals, (g) AN/WLR-1 including Band 10 Tuners and the AN/ULQ-6 and variants. Funds are required to provide for in-service support and NAVELEX field activity and contractor engineering and technical services, installation and deinstallation planning and support aboard USN surface ships; logistics support; system alignment/calibration during inport periods; hardware and software configuration control and maintenance; fleet failure analysis hardware and software ECP implementation and documentation updates and maintenance.

(2) Surface Cryptologic Warfare (SCW) - This line item supports Tactical Cryptologic equipment/systems deployed on Navy combatants. These equipment/systems provide the operational commander with a real time passive capability to detect, locate, track, and target hostile units at long range (over the horizon). Items within this category are of three types. They are (a) OUTBOARD, which consists of a direction finding system, countermeasures receivers system, Special Intelligence communications systems including TACINTEL, Local Monitor Station (LMS), System Supervisor Station, signal processing system and countermeasures receiver system; (b) COMBAT DF, which is an Electronic Warfare Signals Acquisition and Direction Finding System (AN/SRS-1) with the capability to detect, locate, and identify hostile targets at long range, and to input this information into the ships Tactical Data System; and (c) CCSC/CCSS. These items, Cryptologic Combat Support Console and Cryptologic Combat Support System (CCSC/CCSS), are installed on CV/CVN and non-OUTBOARD/COMBAT DF platforms which require combat support information and a method of tasking cryptologic resources. These items are the counterpart to the System Supervisor Station and its counterpart in COMBAT DF and receives information from all Battle Group OUTBOARD and COMBAT DF configured ships.

Automatic Data Processing (ADP) Security - Provides the capability to assure that Navy ADP systems, which process, store or use classified or sensitive business data and produce sensitive output, will, with reasonable dependability, prevent deliberate or inadvertent access to sensitive material by unauthorized persons and unauthorized manipulation of the computer and its associated devices. ADP security inspection teams design generalized test and evaluation procedures, modify them to provide a site specification plan, and conduct the analysis and evaluation of each ADP system. Team personnel provide training and guidance to operational personnel; a risk assessment of operational systems and the information necessary to correct deficiencies; and assistance to operational personnel and systems developers in obtaining system accreditation.

Inspection Testing - Test and evaluation of electronic systems and materials is performed at independent government test agencies to include: qualification tests on manufacturer's samples to determine compliance with the specification requirements and to establish the item on a Qualified Products List; special testing of failed material or intelligence items to determine serviceability of items in the supply system; pre-award surveys; and verification of production line items versus specifications. It further involves the analysis of master test plans to determine that planned testing will be necessary and sufficient.

Activity Group: Engineering and Support Services (cont'd)

I. Description of Operations Financed (cont'd)

General Purpose Electronic Test Equipment (GPETE) Technical Operations - Provides the engineering and technical support necessary to resolve technical and management problems associated with test, measurement and diagnostic equipments. This effort will enhance the standardization of GPETE equipment; reduce inventory; prevent redundancy; establish efficient repair cycles; maximize utilization through proper distribution; reduce excess GPETE items; eliminate obsolete and uneconomical repair to items; and validate requirements for initial outfitting and for replacement items.

Test and Monitoring Systems (TAMS) - In executing the lead SYSCOM functions for TAMS, the following test and monitoring system effort is provided: (1) Establishing policies, procedures and techniques for the acquisition and application of automatic testing. (2) Conducting weapon system acquisition reviews to assure proper application testing and METCAL screen acquisitions of Automatic Test Equipment (ATE), revising the ATE acquisition guide for project offices and providing consulting services to various acquisition and project offices and their contractors. In addition, the TAMS program represents Naval Material Command on the Joint Logistics Commanders Panel on Automatic Testing, which is a Joint Services Panel, and the NSIA Automatic Testing Committee. (3) Represents Naval Material Command on the JLC Joint Technical Coordinating Group for Metrology and Calibration (JTCC/METCAL), and provides direction to the Calibration Coordinating Group (CCG) and NBS engineering and technical projects. (4) Advanced Testing Technology (ATT) includes planning, monitoring and coordinating the Navy's advanced testing technology programs. (5) Training and education includes developing and conducting a number of automatic testing and related educational programs.

Maintenance Engineering - This program has major responsibilities for a portion of the Detection, Action and Response Technique (DART) Program which is a coordinated priority effort within the Naval Material Command for identification and expeditious correction of the most serious shipboard equipment problems affecting fleet material readiness. This program also finances the implementation and management of the following efforts: (1) ashore electronic Planned Maintenance System (PMS) program and the Nomenclature Assignment Effort; (2) maintenance concepts to include level of repair, supply support, provisioning guidance, allowance list development, production liaison for major equipments and systems, and development of corrections for equipment deficiencies; (3) repair management of electronic material and quality control of the repaired product; (4) depot maintenance interservice support agreements; and (5) intensive in-service engineering support.

Other Engineering Services - Provides specialized engineering/technical support to enhance the operational readiness of fleet and shore based systems and equipments by providing improved reliability. This effort corrects system and equipment deficiencies including technical documentation; improves configuration and management control; extends both the useful military life and mean time between failures within the equipment's current performance envelope, develops and implements systems level tests, maintenance procedures and maintains Total Ship Test Program equipment; and provides pre-and

Activity Group: Engineering and Support Services (cont'd)

I. Description of Operations Financed (cont'd)

Other Engineering Services (cont'd)

post-installation system testing for new construction and active fleet ships. The Navy has requirements to provide major technological upgrades to its aging shipboard EXCOMM systems in the next decade; and to improve its EXCOMM systems support to the Fleet.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986	Change
		Budget Request	Appropriation	Current Estimate	Budget Request	
Technical Publications	2,054	2,349	2,169	2,128	2,589	461
Reliability & Maintain	615	643	595	573	1,056	483
Electronic Test & Repair	236	6,581	6,235	4,125	4,630	505
TEMP	13,939	19,471	17,048	14,169	16,912	2,743
EMC (WARC)	4,225	3,979	4,311	3,475	6,433	2,958
SSEP	7,984	9,579	9,189	9,161	11,802	2,641
Cover & Deception	1,746	3,238	3,043	2,782	2,551	-231
Portable ESM	1,718	4,086	3,713	3,528	2,814	-714
NIPS	2,680	3,098	3,016	2,820	2,825	5
Electronic Warfare	5,548	10,451	9,397	9,038	12,170	3,132
ADP Security	1,189	1,427	1,356	1,274	1,358	84
Inspection Testing	530	809	727	650	628	-22
GPETE Tech Operations	605	2,003	1,791	1,390	1,748	358
TAMS	1,105	2,485	2,328	1,909	1,926	17
Maintenance Engineering	8,353	11,429	11,081	10,148	11,556	1,408
Other Engr Services	2,286	3,710	3,422	3,064	3,448	384
Total, O&M,N	54,813	85,338	79,421	70,234	84,446	14,212

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		70,234
2. Pricing Adjustments		722
A. Stock Fund	(-533)	
1. Fuel	-316	
2. Non-Fuel	-217	
B. Industrial Fund Rates	-73	
C. Other Pricing Adjustments	1,328	
3. Program Increases		16,486
A. Other Program Growth in FY 1986	(16,486)	

Technical Publications

484

This increase in program value is to support processing 210 Engineering Data packages. These packages are used to support competitive procurement of future repair part requirements (302). The increase also supports the automation, digitalization of engineering drawings (87). This will reduce the present, costly, manual effort and enable drawings to be updated by work-processing equipment instead of cutting and pasting paper copies. Additionally, increases in desk top manuscript reviews (95).

Reliability and Maintainability

458

Growth will permit the monitoring of contractor performance by the Regional Support Program at NESEC, San Diego, CA and NWSC, Crane, IN. An increase from zero to 12 hardware contracts will be monitored to ensure that reliability and maintainability requirements are adequately addressed during design to minimize the risk during development and production that the availability will not be met. The Fleet Reliability Assessment Program will be reinstated at NWSC Crane, IN to evaluate new equipments, detect latent defect early in production and assure that Operational Availability (A⁰) is being met.

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Reliability and Maintainability (cont'd)

Workmanship screening which includes temperature cycling and random vibration of repaired electronic modules from the restoration depot at NESEC Portsmouth, will be reinstated at NESEA, St. Inigoes, MD. The purpose of workmanship screening is to minimize workmanship errors in production and restoration of electronic modules. Workmanship screening will preclude the shipment of repaired modules to the Fleet that have workmanship defects. It is currently estimated that 20% of the repaired modules have workmanship errors. Approximately 1200 modules will be screened during FY 1986 with an ultimate screening of 8700 modules per year.

Electronic Test and Repair

The increase in funds for FY 1986 will enable translation and/or programming of Test Program Sets (TPS) for the following NAVEX COMBAT Systems AN/SLQ-32, AN/SLQ-17A(V)2, ON-143 (V-4, 6, 7), AN/SRN-19, and AN/URN-25. A total of 250 TPSs can be created and required copies of each distributed to the Fleet by the end of FY 1986. TPS average cost is \$15,000.

459

TEMP

FEWSG C³ Aircraft - This aircraft is similar to the NKC-135 jamming aircraft with increased command control and communication capabilities, and enters service in FY 1986 following procurement in FY 1984. The aircraft will be fully contractor operated and maintained since the Air Force cannot maintain this DC-8 type aircraft. The increase of (1,919) will allow this aircraft to fly 100 hours (not in service for a full year) (200) and partially fund the operations and maintenance contractor (1,719).

3,880

FEWSG Repair/Maintenance - The increase of (552) will provide for maintenance/repair of the expanded inventory of jammers and simulators.

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases

TEMP (cont'd)

MEWSG - Increase of (23) will provide increase in engineering/technical support for the NATO Maritime Electronic Warfare Support Group Program.

Fleet Simulators/Pods - Increase will provide for maintenance/repair of additional assets for fleet support and tactical contingency (451).

Advanced ECCM - Provides ECCM operator handbooks by class for surface ships. 10 class specific handbooks are programmed for FY 1986 (170).

EW Library - Increase provides for preplanned additional levels of support for fleet units and deployed equipments from the ELINT centers and NSGA Naples. This addition provides for the phased transition from manpower intensive library generation and data manipulation methods to a more capable library generation through a data base management system (765).

EMC/WARC

2,873

The increase will provide E³ control for 75 additional acquisitions, implementations of plans for complying with new RADHAZ criteria which affects 600 stations, conduct EMI/RADHAZ surveys and corrective action at an additional 50 shore stations. Other areas of increased emphasis will be EMI Training of additional naval personnel at headquarters, field activities, laboratories and centers and enhanced planning and appraisal of the overall program at the NAVMAT level.

Submarine Surveillance Equipment Program (SSEP)

2,531

The Submarine Surveillance Equipment Program (SSEP) provides funding for the required life-cycle support of many varied electronic support measures (ESM) and data collection equipments assigned to nuclear attack submarines. This funding provides nuclear attack

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases

SSEP (cont'd)

submarines with the capability to detect, track, identify, and analyze the activities of foreign and threat military systems and to provide direct tactical support to deployed submarines for quick reaction to threat situations (899).

The growth in the SSEP Pooled Equipment line for FY 1986 is for support of the SSEP Support Facilities located in Groton, CT and Pearl Harbor, HI. These facilities directly support submarines deploying on special operations by grooming and certification of ESM, Sonar, and certain optical equipment. (1,632)

ELECTRONIC WARFARE (Excluding Outboard)
(Surface Electronic Warfare)

3,051

AN/SLQ-17A(V)2- Increased funding is needed for Fleet Maintenance Agent software/hardware support, completion of Physical Configuration Audit (PCA) and Engineering Change Proposal development and checkout, and planning for installation of LPA Signal Processor Modification Kits (1,737).

AN/WLR-1H - Increase will provide software/hardware support by SSA/FMA required to meet needs of Fleet installed AN/WLR-1H, configuration management and ECP development (165). (Surface Cryptologic Warfare-including Outboard) Increase provides for 7.5 manyears of maintenance support for OUTBOARD (Phase II) (267). 13 manyears of COMBAT DF IMA/FMA in-house support at NESSEC Char. S.C. (456), and 4 manyears of increased CCSC/SSCC IMA/FMA in-house support at NESSEC San Diego, CA. (188).

DECOYS - FY 1986 will commence installation of additional launchers and associated components and an automated Decoy Control System. Each existing system is being increased by 2 launches. Also, the 4 additional systems shown in FY 1986 will

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases

be installed on the CV/CVN's. This is a new configuration which requires 8 launchers per system launchers per system (238).

ADP Security

108

Increase will support one additional manyear of effort in support of the Navy Computer Security program. Increase will fund computer security technical support in software engineering, hardware maintenance, identification of new computer security tools and techniques applicable to NAVEXLEX C³I projects, the evaluation of specific Navy computer systems security posture, the development of new improved methods of testing computer systems reliability, and increased Security Tests and Evaluations and technical assistance.

GPETE Technical Operations

351

Provide an additional 18 test equipment allowances for the fleet, revise 27 test equipment specifications, determine 12 test equipment suitability evaluations and review 18 test equipment measurement capabilities.

Maintenance Engineering

1,877

The unit cost increase in FY 1986 for the AN/SPN-42 is the result of performing more complex and extensive tests on field changes. Specifically, the Dual Band Antenna (50), Antenna Drive Motor (25), UPM-119 test set (40), Moving Target Detection (70). The unit cost increase in FY 1986 for the AN/SPN-43 is the result of fabrication and installation of the Moving Target Detection (MTD) field change (866), and installation and test of a radome to prevent halyard entanglement (451). Also, more extensive testing of the Pedestal (110), Transmitter (65), Receiver (95), Power Supply (70) and Azimuth Drive (35).

B. Reconciliation of Increases and Decreases

Other Engineering Services 414
Review of Basic Alteration Configuration
Reviewed Drawings (BACDs) completed by NAVSEA, coordination and oversight of shipalt design providing technical information, material management and test certification during the shipalt process for NAVELEX systems and equipments will increase by 3 manyears in order to respond to increased requirements (61). Engineering evaluations to resolve and implement correction of electromagnetic performance deficiencies attributable to topside located systems will increase by 44%. (94)

RADHAZ surveys, which involve investigations of radiation hazards at Navy shore activities, and are required to ensure the safety of Navy personnel and civilians located in close proximity to Navy transmitter installations, will increase by 22. Approximately 600 Navy shore facilities worldwide require survey for review, evaluation and recommendations (61).

TSTP acceptance testing, which involves the development of test procedures for Exterior Communication (EXCOMM) equipment by hull for overhaul and by hull or ship class for PMS by service personnel during operation will increase by 9. (63)

Increase will fund sample and quality assurance testing and initial calibration prior to operational deployment of 5 additional Exterior Communication (EXCOMM) Total Ship Test Program (TSTP) test suites delivered from the vendor. (58)

Advance Base Functional Component (ABFC) reviews will increase by 5. These reviews include documentation of ABFCs assigned to NAVELEX and consist of evaluating the design and composition of ABFCs to ensure that mission statements reflect the requirements of the

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases

Other Engineering Services (cont'd)

Fleet CINCs; reviewing listed equipment to ensure that it is the most technically advanced available; maintaining liaison with other Commands to ensure that their contributions are the best available for the purpose of then recommending to CNO the inclusion of new components, the deletion of old components and the revision of mission statements of existing components. (20)

Additional funds will provide for follow-on calibration of 34 TSTP equipment suites of which 4 will also include repair of the equipment. These items are currently backlogged in repair/calibration cycle. (9)

FY 1986 funding will provide additional computer time and a 33% increase in data retrievals, RACC inquiries and updates, MILSTRIPS processed, compilation and review of asset availability data, and technical documentation assessment of 22 cog requirements for management of NAVEXLEX cog material within the scope of the Uniform Inventory Control Point (UICP) Requirements Accumulator (RACC) on-line data system. (48)

4. Program Decreases -2,996

A. Other Program Decreases in FY 1986 (-2,996)

TEMP -1,210
Program decrease will impact support of the NKC 135 by reducing Planned Depot Maintenance (PDM) scheduled (-550), reducing fuel usage (-293), reduce Aircraft Material (-59), and reduced contractor engineering and technical support. (-308).

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Shipboard Cover and Deception -304
Decrease provides for refurbishment of 2 fewer AN/SLQ-34(VI)'s (-146) and refurbishment of 2 less AN/SLQ-34 (V2)'s (-158).

Portable Electronic Warfare -769
Support Measures (PESM) - Decrease provide for installation of Multi-User Special Intelligence Communications Systems at 3 Navy shore activities (211), 4 fewer AN/SSQ-80(V1/2) carry-on shipboard installations (38), refurbishment of 2 AN/SSQ-80(V1/2) (-375), initiation of Intermediate Maintenance Activity (IMA) support for the AN/SSQ-80(V4) (58), and less of IMA support for the Tactical Augment to Command and Control Systems (87).

NIPS- Decrease the Fleet Imagery Support Terminal (FIST) being delivered to fleet units in FY 1986. -27

TAMS - Decrease of one work year (W/Y) in managing the Navy Automatic Testing Program and two work years (W/Y) in operating the Testing Technology Office and Information Center. These funds support NAVELEX's responsibilities as Lead SYSCOM for TAMS. -65

Maintenance Engineering -485
The decrease will cause a reduction in Fleet Secure Voice Systems engineering actions by 5; decrease revisions of Allowance Parts List (APL) by 6 and decrease new APLs generated by 62. Decrease 2 in tech review/validation of acquisition packages; decrease of 20 in reprourement data packages reviewed/certified and decrease of 2 in acquisition method codes recommended will occur in BOSS.

Inspection Testing -31
Reduction will reduce number of qualification test.

Activity Group: Engineering and Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

Other Engineering Services -105

Decrease support of integrated shipboard test program and development of system level testing for overall EXCOMM Operations. There will be fewer reviewers of engineering documentation for communication systems configuration.

5. FY 1986 President's Budget Request

84,446

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria.

<u>MAINTENANCE OF TECHNICAL PUBLICATIONS</u>	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
Quality Assurance			
In Process Reviews	20	22	20
Verifications	12	17	14
Manuscript (desk-top) Reviews	174	102	295
Updates			
Manuscripts updated	39	48	38
User Comment Sheets Processed	350	375	390
Printing and Replenishment			
Manuscript reprint actions	528	388	395
Engineering Data Maintenance			
Technical data package			210
TOTAL FUNDING	\$2,054/	\$2,128/	\$2,589/
	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
<u>RELIABILITY & MAINTAINABILITY</u>			
Hardware Contracts monitored	0	0	12
Contract Data			
Requirements List deliverables evaluated	300	285	223
Equipment Supported by Fleet Reliability			
Assessment Program	0	0	3
Workmanship Screening Modules	0	0	1,200
Reliability Initiatives Workyears	3.0	3.0	3.0
Military Initiatives Update Workyears	0	0	2.0
TOTAL FUNDING	\$615/	\$573/	\$1,056/
	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
<u>ELECTRONIC TEST AND REPAIR (ATE)</u>			
Test Program Sets (TPS) developed	27	17	17
Requirements Analysis/Standardization	1	4	4
Translate TPS	0	17	17
Duplicate TPS	0	39	39
DDEOC			
Restoration of Equipment Change-out	0	180	180
Technical Repair Standards (TRSs) developed	0	12	24
Validate and Install TPS/TRSs	0	5	5

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$/Units</u>	<u>\$/Units</u>	<u>\$/Units</u>
<u>ELECTRONIC TEST & REPAIR (cont'd)</u>			
System Maintenance Analyses (SMA)			
Reviews	0	780	780
Class Maintenance Plan (CMP) Reviews	0	2	2
Allowance Part List (APL) Rewrites	0	7	7
Weapon System File (WSF) Retrievals	0	57	57
Reprocurement Data Packages	0	12	12
Fleet Support Planned Maintenance System (PMS) packages	0	9	9
Provisioning Data Packages	0	30	30
TOTAL FUNDING	<u>\$236/</u>	<u>\$4,125/</u>	<u>\$4,630/</u>
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>TEMP</u>			
<u>NKC-135</u>			
Flight hours (Programmed)	1,000	1,070	1,070
Fixed Costs (\$000)			
Contract Operation & Maint	5,945	6,798	6,490
Engine Overhauls	404	404	404
Planned Depot Maint	0	550	0
Operating Costs (\$000)			
*Fuel	2,343	2,293	2,000
AF Material Support	515	559	500
Total Cost (\$000)	(9,207)	(10,604)	(9,394)
FEWSG C ³ Aircraft	0	0	100
Flight Hours			
Fixed Costs (\$000)			
**Contract Op & Maint	0	0	1,719
Operating Costs (\$000)			
*Fuel	0	0	200
Total Cost (\$000)	0	0	(1,919)
<u>EMPASS</u>			
Flight Hours	423	0	0
Operating costs (\$000)	318	0	0
Fixed costs (\$000)	817	0	0
Total Cost (\$000)	(1,135)	0	0
<u>FEWSG Repair & Maintenance</u>			
Simulation vans (Units)	8	8	8
Electronic countermeasure jammers (Units)	27	92	118
Simulator Pods (ALQ-167/AST-4)	14	14	14
Instrumented simulators (Units)	6	15	31
Chaff Dispensers (Units)	29	29	31
DLQ-3 (Units)	8	16	16
Total Cost (\$000)	(1,526)	(1,409)	(1,931)

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
MEWSG			
Eng/Tech Services (\$000)	100	120	143
Fleet Simulators/Pods Repair and Maintenance			
ALQ-167 (Units)	43	51	62
AST-4 (Units)	17	22	25
Total Cost (\$000)	(996)	(949)	(1,400)
Advanced EECM			
ECCM Manuals	0	0	10
Total Cost (\$000)	0	0	(170)
EW Library (\$000)			
Pacific Support (Personnel support)	310	100	175
Atlantic Support (Personnel support)	310	104	175
Mediterranean Support (Personnel support)	75	60	175
Data Base (System Support)	77	366	580
Software Support (System support)	203	457	850
Total Cost (\$000)	(975)	(1,087)	(1,955)
TOTAL TEMP FUNDING	(\$13,939)	(\$14,169)	(\$16,912)

* - NKC-135 Aircraft consume 2,200 gal/hr based upon FY 1984 data
FEWSG C³ aircraft estimate consume 2,380 gal/hr due to additional
drag on airframe.

** - Contractor maintenance for partial year. Cost include aircraft
material support not available in USAF supply.

	<u>FY 1984</u> \$/Units	<u>FY 1985</u> \$/Units	<u>FY 1986</u> \$/Units
<u>EMC/WARC</u>			
Fleet EMC Support Program:	1,263 (83 probs)	1,287 (86 probs)	2,189 (146 probs)
Acquisition E ³	454 (75 acqs)	460 (75 acqs)	782 (150 acqs)
E ³ Program Support	275 (3 CEB)	200 (2 CEB)	200 (2 CEB)
Technical Evaluation Review	378 (23M prog)	357 (36M prog)	606 (52M prog)

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
On site assessment of MAT EMI program	39 (4 Eng)	32 (6 Eng)	60 (15 Eng)
WARC Support	255 (2spec WARC)	180 (2spec WARC)	200 (2spec WARC)
VHF Frequency Realignment	125 (1 area)	125 (1 area)	357 (2 area)
E ³ Training Seminars/self-help films	358 (36 Sessions)	297 (30 Sessions)	761 (38 Sessions/ 3 FILMS)
E ³ Newsletter	39 (4 issues)	30 (3 issues)	48 (4 issues)
Update EMI NTP	35K 100 (1 module)	50K	50K
Shore Support (# of surveys)	658 (68 surveys)	457 (49 surveys)	1,180 (120 surveys)
TOTAL FUNDING	\$4,225	\$3,475	\$6,433
	<u>FY 1984</u> <u>QTY/\$</u>	<u>FY 1985</u> <u>QTY/\$</u>	<u>FY 1986</u> <u>QTY/\$</u>
<u>SSEP</u>			
Digital Receiver (AN/BRD-7)	114/0	114/0	114/0
FMA Support (Hardware)	114/175	114/200	114/200
Maintenance Software Support	10/60	0/0	0/0
Management Support	114/40	114/50	114/50
Sub-surface Tactical ESM (WLR-8)	39/0	40/0	41/0
FMA Support (Hardware)	39/250	40/300	41/325
LCM Hardware Maintenance	39/50	40/50	41/75
Management Support	39/95	40/100	41/100
Navy Early Supply Support	39/5	40/5	41/5

(Sub-surface tactical ESM (WLR-8 - The inventory increase specified for the AN/WLR-8(V)2 system is the result of normal procurement of these systems for installation aboard the SSN-688 Class nuclear attack submarines.)

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>QTY/\$</u>	<u>QTY/\$</u>	<u>QTY/\$</u>
<u>SSEP (cont'd)</u>			
Interferometer DF (BLD-1)	2/0	2/0	5/0
FMA Support (Hardware)	2/100	2/150	5/300
FMA Technical Support	2/100	2/100	5/100
Maintenance (Hardware)	2/50	2/50	0/0
Management Support	2/50	2/50	5/50
Navy Early Support	2/5	2/5	5/5

(Interferometer DG (DF (BLD-1) - The inventory increase specific for the AN/BLD-1 system is the result of normal procurement of these systems for installation aboard the SSN-688 Class nuclear attack submarines.)

Sub-surface ESM Receiver (WLR-6)	16/0	10/0	6/0
FMA Support (Hardware)	16/630	10/500	6/300
Management Support	16/95	10/90	6/90
Navy Early Support	16/5	10/5	0/0

(Sub-surface ESM Receiver (WLR-6) - The decrease in system inventory is due to the replacement of old AN/WLR-6 systems aboard the SSN-637 Class nuclear submarines by the newer and more capable AN/WLQ-4(V) ESM system.)

Sub-surface ESM Receiver (SNAPPER)	15/0	15/0	15/0
FMA Support (Hardware)	15/540	15/600	15/600
EHF/IPM Hardware Support	15/150	15/150	15/150

(Sub-surface ESM Receiver (WLR-6 SNAPPER). Same rationale as for the AN/WLR-6 system.)

Band-10 Tuner	38/0	38/0	38/0
FMA Support (Hardware)	38/50	38/50	38/50
Surveillance Receiver	0/0	0/0	0/0
(SSN-594 Upgrade (WLR-1H)	4/0	9/0	9/0
FMA Support (Hardware)	4/150	9/250	9/250
Navy Early Supply Support	4/5	9/5	9/5

(Surveillance Receiver (SSN-594 Upgrade) (WLR-1H) - The system inventory increase reflects the second of three procurements of these systems for installation aboard the older SSN-594 Class nuclear submarines.)

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>QTY/\$</u>	<u>QTY/\$</u>	<u>QTY/\$</u>
<u>SSEP (cont'd)</u>			
Digital Surveillance Receiver (WLQ-4)	28/0	34/0	40/0
FMA Support (Hardware)	28/1941	34/2300	40/3820
Software Maintenance	28/1317	43/1458	40/2654
Support	28/182	34/300	40/325
Navy Early Supply Support	28/8	34/8	40/8
Radar Cross Section Reduction	480/0	490/0	500/0
FMA Support (Hardware)	480/300	490/390	500/400
Headwindown Cleaner/Applicator	5/0	10/0	10/0
FMA Support (Hardware)	5/50	10/100	10/100
Emitter Classification Units	20/0	20/0	20/0
FMA Support (Hardware)	20/15	20/15	20/15

(Digital Surveillance System (WLQ-4) - The system inventory increases in each of FY 1985 and FY 1986 reflect the delivery of the final group of systems procured for installation aboard the SSN-637 Class nuclear submarines.)

SSEP Pooled Equipment	149/0	152/0	375/0
Facilities Management and Support	149/500	152/550	375/100
Maintenance (Hardware)	149/300	152/300	375/575

(SSEP Pooled Equipment - This reflects the normal increase of special purpose test equipment procured under program subhead 52LS for use by the Submarine Surveillance Equipment Program Support Facilities in direct support of high priority special missions of national significance.)

Sub-surface ESM Receivers (WLR-1G)	67/0	64/0	64/0
FMA Support (Hardware)	67/150	64/150	64/150
Electromagnetic Readiness Tester (EMSORT Vans)	3/0	4/0	5/0
FMA Support (Hardware)	3/180	4/200	5/200

(Electromagnetic Readiness Tester (EMSORT) - The system increase represents the delivery of systems procured to assist the SSEP Support Facilities in their mission of supporting the deployment of SSN submarine on special operations.)

Activity Group: Engineering And Support Services (cont'd)

III. Performance Criteria (cont'd)

SSEP (cont'd)

Aural Analysis Booths	0/0	4/0	4/0
Refurbishment (Hardware)	2/56	4/130	4/200

(Aural Analysis Reproduce Stations - This procurement represents upgrading a vitally needed resource at each of the two SSEP Support Facilities in support of the ACINT collection of data by submarines on special operations. This facility currently does not have the capability to screen and analyze data coming from the AN/BQH-5(V)4 Data Gathering Sets.)

	<u>FY 1985</u>	<u>FY 1986</u>	<u>FY 1986</u>
	<u>QTY/\$</u>	<u>QTY/\$</u>	<u>QTY/\$</u>
Radio Detection finder (BRD-8)	5/0	14/0	14/0
FMA Support (Hardware)	5/170	14/300	14/300
BLA-4 Antenna Systems	46/0	46/0	46/0
FMA Support	46/150	46/175	46/200
Test Facility Operation	46/60	46/75	46/100
SSEP TOTAL FUNDING	<u>\$7,984</u>	<u>\$9,161</u>	<u>\$11,802</u>

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Quantity</u>	<u>of Items</u>	<u>Supported</u>

SHIPBOARD COVER AND DECEPTION

1) Title/Nomenclature			
a) AN/SLQ-34(V1)	6	6	6
b) AN/SLQ-34(V2)	35	37	37
c) AN/SLR-22	30	30	30
d) AN/SLQ-33	2	5	7
e) C&D Scenario Generator	3	5	5
f) AN/SSQ-74 Vans	6	6	6
g) PTD ODDS	0	0	6
h) AN/SKR-7	0	10	19
i) AN/SLQ-20	15	15	15
j) HF Communications Simulator	0	0	50
k) Radar Jammer II	0	0	65
l) E/F Band Simulator	0	0	50

Activity Group: Engineering And Support Services (cont'd)

III. Performance Criteria (cont'd)

SHIPBOARD COVER AND DECEPTION (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Quantity</u>	<u>of Items</u>	<u>Supported</u>
2) Elements of Expense			
a) Maintenance			
1) Hardware	572	762	621
* 2) Software	554	957	630
** b) Refurbishment	620	883	910
c) IMA/FMA	0	180	210
***d) Installation/Deinstallation			180
Total	<u>\$1,746</u>	<u>\$2,782</u>	<u>\$2,551</u>

* = Includes all within envelope changes to keep pace with threat environment.

** = Dynamic relative to usage.

*** = Includes all portable/carry-on installations/deinstallations and permanent shore site installations.

PORTABLE ESM

1) Title/Nomenclature			
a) Carry-on SI Communications	12	16	56
b) Teletype Replacement	18	70	70
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Quantity</u>	<u>of Items</u>	<u>Supported</u>
c) MUSIC	0	3	6
d) AN/SSQ-80(V1)	34	37	37
e) AN/SSQ-80(V2)	34	37	37
f) AN/SSQ-80(V4)	0	0	1
g) SSES Ancillaries	42	54	66
h) TACC Systems	0	0	5
i) HF Receivers	0	0	24
j) VANS			
1) Quick	12	12	12
2) OICS	4	4	4
3) PESM	4	5	7
k) FES Systems	0	0	17
l) Field Training Systems	4	6	11
m) MSTDF	2	4	6
n) Cryptologic Items Under 900K	14	26	39

Activity Group: Engineering And Support Services (cont'd).

III. Performance Criteria (cont'd)

PORTABLE ESM (cont'd)

2) Elements of Expense (\$000)

a) Maintenance			
1) Hardware	108	762	762
2) Software	270	599	599
b) Refurbishment	118	271	298
c) IMA/FMA	974	724	219
***d) Installation/Deinstallation	248	1,172	936
TOTAL PORTALBE ESM	\$1,718	\$3,528	\$2,814

- * = Includes all within envelop changes to keep pace with threat environment.
- ** = Dynamic relative to usage.
- *** = Includes all portable/carry-on installations/deinstallations and permanent shore site installations.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Number of Equipments Supported</u>		
<u>NIPS</u>			
OA-4547A/USQ-34 Plotter	2	2	2
AS-27A Analysis System	18	18	20
TD-1194 Display System	39	39	40
IP-1243 Keyboard Terminal	117	119	121
TT-624 Teleprinter	84	95	98
RD-358 Tape Units	25	28	29
MU-602 Extended Memory	20	20	20
AN/USH-26 Cartridge Magnetic Tape Unit	19	19	19
AN/UYH-2 Disk Memory Set	44	50	51
AN/UYK-20 Computer	40	43	44
CP-642B Computer	38	38	38
AR-155A Reader/Printer	33	33	33
AN/UYK-48 Analytic System	21	22	24
AN/UYK-7 Computer	4	7	8
SB-3495 Switch	4	7	8
OA-7984 Punch Paper Tape Unit	26	28	28
SA-1722/UYK Switch	4	7	8
AN/UYQ-23 Display Console			

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

NIPS (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Numbers of Equipments Supported</u>		
AN/UYK-43 Computer	0	0	1
RD-397 Printer/Punch	0	1	2
SA-1816/UYK Switch	4	9	10
PT-533 Graphic Plotter	2	2	2
RD-294 Magnetic Tape Unit	19	19	19
RO-280 Line Printer	22	22	22
AN/SXQ-8 CCTV	22	22	22
EH-38 Film Processor	54	54	54
EN-52 Printer	14	14	14
EN-90 Contact Printer	14	14	14
EN-109 Printer	14	14	14
Fleet Imaging Support Terminal (FIST)	7	12	17

Naval Information Processing System (NIPS) - The funds support the efforts of people located at three Naval facilities in their role of fleet support to the NIPS. The operations financed are: (1) computer program maintenance with documentation, (2) intelligence data base maintenance, (3) contractor and government engineering and technical services, (4) installation and de-installation of equipment on LCC's, CV's, LHGA's and shore commands, (5) repair of equipment, (6) hardware software and documentation configuration control, (7) facility operation and maintenance of the three engineering activity computer systems. The FY 86 funds will be used as set forth below:

(1) Computer Program Maintenance with documentation	1,177	1,137	972
(2 program/year) AN/USQ-34 (CV)			
(2 program/year) AN/SSQ-64 (LCC)	400	400	400
(1 program/year) AN/SYQ-9 (LHA)	300	380	300
(2) Repair Support			
AN/USQ-34	200	200	200
AN/SXQ-8	200	200	200
(3) Tech Services to Fleet Units (43 systems/4200 man hours)	200	300	300
AN/USQ-34 (17)			
AN/SXQ-8 (18)			
AN/SSQ-64 (2)			
AN/SYQ-9 (6)			
(4) Installation Support			
2 New Systems AN/SXQ-8	0	0	75
2 New Systems AN/SYQ-9	0	0	125
5 New (FIST)	0	0	50

Activity Group: Engineering and Support Services (Cont'd)

III. Performance Criteria (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Numbers of Equipment</u>		
(5) 4 Graphic Change Kits AN/USQ-34	53	53	53
(5) Data Base Support			
(6) Facility Maintenance and Operations (3 Field Activities)			
AN/SYQ-8			
AN/USQ-34			
AN/SYQ-9			
AN/SSQ-64	150	150	150
TOTAL NIPS FUNDING	\$2,680	\$2,820	\$2,825
<u>ELECTRONIC WARFARE (Excluding OUTBOARD)</u>			
TOTAL FUNDING	\$5,548	\$9,038	\$12,170
<u>Element of Expense</u>			
J Band Receiver and Deception Repeater AN/SLQ-17A(V)2	7/2,572	11/3,017	12/4,624
Tactical Surface ESM Receiver AN/WLR-1H	0/260	0/644	5/800
(Surface Cryptologic Warfare including OUTBOARD)			
1) Title/Nomenclature			
a) OUTBOARD Phase I (includes 1 each OK-324/SUQ, OB Ancillaries, AN/SLR-16A, AN/SRD-19A, OE-236/SRD)	29	31	33
b) OUTBOARD Phase II (includes 1 each AN/SLR-23 and AN/SYQ-8)	16	22	27
c) CCSC/CCSS (AN/SSQ-93)	2	6	16
d) COMBAT DF (AN/SRS-1)	0	2	7
2) Elements of Expense (\$000)			
a) Maintenance			
1) Hardware	566	588	788
2) Software	595	794	1,148
b) Refurbishment	0	698	698
c) IMA/FMA	740	2,304	3,056
***d) Installation/Deinstalaltion	316	389	389
SUBTOTAL FUNDING	(2,217)	(4,773)	(6,079)
* = Includes all within envelope changes to keep pace with threat environment.			
*** = Dynamic relative to usage.			
*** = Includes all portable/carry-on instllations/deinstallations and permanent shore site instalaltions.			
DECOY - ASMD (Incudes MK36, MK-34, and MK-33)	265/378	282/560	286/800

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

Surface Cryptologic Warfare including OUTBOARD (cont'd)

Configuration Audit of installed systems will be performed on all platforms in FY 1986. Due to funding shortfalls in prior years configuration audit was delayed until FY 1986.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Number of</u>	<u>Equipment</u>	
Carry-on Countermeasures Devices	31/0	31/150	31/150
AN/SLQ-20A	44/0	44/150	44/150
AN/ULQ-6 & Variants			
Multitex Unit for Transmission			
Elimination AN/SSQ-82	14/0	15/250	16/250
AN/WLR-1 (Includes Band 10 Tuners)	107/0	97/250	94/250
AN/SLA-10	397/0	397/150	397/150
Equipment Nomenclature (Inventory):			
*FMA	1,359	1,927	2,180
Maintenance	380	650	1,050
ETS (i.e. ECP engineering & validation integration & analysis)	855	1,317	1,460
*Configuration Management	451	785	1,784
*Material Support	165	492	700
SUBTOTAL FUNDING	<u>\$3,210</u>	<u>\$5,171</u>	<u>\$7,174</u>

*Included in inventory

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$/Units</u>	<u>\$/Units</u>	<u>\$/Units</u>
<u>ADP SECURITY</u>			
ADP Test and Evaluations (T&E) per year	390/13	420/14	420/14
Technical Assistance	250/20	312/25	412/33
Technical Support	374	367	351
IG Support	175/20	175/20	175/20
TOTAL FUNDING	<u>\$1,189</u>	<u>\$1,274</u>	<u>\$1,358</u>

INSPECTION TESTING

Qualification Tests	3	25	15
Special Tests	1	4	7
T&E Master Plans Prepared	27	30	30
TOTAL FUNDING	<u>\$530</u>	<u>\$650</u>	<u>\$628</u>

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$/Units</u>	<u>\$/Units</u>	<u>\$/Units</u>
<u>GPETE TECHNICAL OPERATIONS</u>			
Test Equipment Suitability Evaluations Completed	0	70	86
Test Equipment Allowances	0	87	107

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd).

	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
Updated (Shore Activities)	0	87	107
Test Equipment Specifications Prepared	5	130	160
Test Equipment Measurement Capability Groups Revised and Updated	0	87	107
TOTAL FUNDING	\$605	\$1,390	\$1,748

	<u>FY 1984</u> <u>Units/\$</u>	<u>FY 1985</u> <u>Units/\$</u>	<u>FY 1986</u> <u>Units/\$</u>
<u>TEST and MONITORING SYSTEMS</u>			
Navy Automatic Testing Program (W/Y)	1/50	2/180	2/184
JLC Program on Automatic Testing (W/Y)	1/50	1/90	1/92
Testing Technology Office & Information Center	9/670	10/830	8/672
ATE Inventory and Data Banks Developed/Maintained	2/30	2/80	2/281
Automatic testing guides and guidance documents (W/Y)	1/50	2/180	2/184
ATLAS Test Programming Language (W/Y)	1/50	1/90	1/46
Automatic Testing Standardization (W/Y)	1/50	1/90	1/46
Automatic courses maintained/offered	8/80	10/100	11/135
Manual Testing/METCAL Program (W/Y)	1/60	3/245	3/256
Perform Calibration Consolidation Studies	1/15	2/24	2/30
TOTAL FUNDING	\$1,105	\$1,909	\$1,926

NOTE: Some of the TAMS performance criteria is not related to work years.

MAINTENANCE ENGINEERING

<u>Nomenclature and Configuration Management</u>			
Nomenclature requests processed	2,068	2,114	2,120
Tracked in-process engineering change proposals	1,293	1,321	1,400

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

Maintenance Engineering (cont'd)

	<u>FY 1984</u> \$/Units	<u>FY 1985</u> \$/Units	<u>FY 1986</u> \$/Units
Provisioning			
New Allowance Parts Lists generated	809	837	775
Revision to Allowance Parts Lists	65	66	60
Provisioning actions completed	612	626	650
Technical referrals	560	572	580
PSD Sheets Processed	619	675	710
Field Maintenance Agent Engineering Support			
Casualty Report/3M reviewed and analyzed	800	780	820
Technical problems investigated/beneficial suggestions evaluated	207	195	200
User Comment sheets responses	52	53	55
Engineering change proposals (ECPs) prepared/reviewed	52	53	55
Planned Maintenance System (PMS)			
Document development backfit and new equipment problems corrected	35	46	50
Subsystems developments and redevelopment	90	105	110
Subsystems feedback reports processed	265	289	295
Failure Analysis Reports	336	343	350
Installation Control Drawings (ICDs)	246	252	255
Technical Data Packages	39	40	43
Fleet Secure Voice Systems	131	134	129
DOD Interservicing Specification Generated			
	561	573	580
Depot Maintenance Interservice Support Agreements (DMISA)			
DMISA negotiated	2	2	2
DMISA reviewed/updated	6	6	5
Technical Repair Agent			
Depot assignments made/planned	216	220	230
Technical repair standards developed	130	133	135
Test jigs/fixtures developed	22	22	22
Depot certified	9	9	10

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

Maintenance Engineering (cont'd)

	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
BREAKOUT (BOSS)			
Technical review/validation of acquisition packages	52	54	52
Reprocurement data packages reviewed/certified	440	460	440
Procurement Method Codes recommended	52	54	52
Automatic Carrier Landing System (ACLS - DART)			
Pre-Positioning Technicians	635/14	680/14	708/14
Pre-Positioning Grooming/OJT	600/14	464/14	520/14
Logistics Support/Mgmt	709/14	700/14	732/14
AN/SPN-41 Improvement Mods	100/1	0/0	0/0
AN/SPN-42 Improvement Mods (1)	1,010/3	237/4	445/6
AN/SPN-43 Improvement Mods (1)		158/7	1,747/7
SUBTOTAL ACLS-DART FUNDING	(\$3,054)	(\$2,239)	(\$4,152)
TOTAL FUNDING	\$8,353	\$10,148	\$11,556

(1) The unit cost increase from FY 1985 to FY 1986 for the AN/SPN-42 is the result of performing more complex and extensive tests on field change modifications. The AN/SPN-43 unit cost increase is the result of fabrication and test of the Moving Target Detection (MTD) field change and more complex and extensive testing of other SPN-43 field change modifications.

	<u>FY 1984</u> <u>\$/Units</u>	<u>FY 1985</u> <u>\$/Units</u>	<u>FY 1986</u> <u>\$/Units</u>
<u>OTHER ENGINEERING SERVICES</u>			
Cost Estimating			
Man years of support effort	3	3	0
RACC/ATS Updates & Inquiries	70,000	70,000	71,539
Uniform Inventory Control (UICP)			
MILSTRIPS documents processed	20,000	20,000	21,467
Data updates/retrievals	125,000	125,000	131,950
Weapons systems data retrievals	55,000	55,000	58,026
Technical documentation validations	9	11	14
Total Ship Test Packages			
Implementations	11	24	29
TSTP Equipment Maintenance	75	125	159
TSTP Acceptance Testing	38	63	72
NAVMACS Systems Operational Tests	10	11	11
Number of RADHAZ Surveys	15	16	38
Basic Alteration Configuration Reviewed			
Drawings (BACDs) of Systems/Subsystems	4	4	6
Fleet Tactical Communications Program:			
Ship alteration proposals and records for external communications shipboard projects	8	8	11

Activity Group: Engineering and Support Services (cont'd)

III. Performance Criteria (cont'd)

OTHER ENGINEERING SERVICES (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>\$/Units</u>	<u>\$/Units</u>	<u>\$/Units</u>
Standard installation drawings	8	7	14
Planning detailed specifications and drawings for Combat Systems Life Extension Program	8	7	14
Studies of operational systems to determine the impact of new systems scheduled for intro- duction into the Fleet	4	3	4
Formulate test outlines for post installation integrated system test	4	3	5
Full scale mock-ups of external communication shipboard spaces in support of the Fleet Improvement Program	16	15	14
ABFC's reviewed	7	6	7
Topside FMP Design Engineering Evaluations	0	7	12
TOTAL FUNDING	<u>10</u>	<u>31</u>	<u>36</u>
	<u>\$2,286</u>	<u>\$3,064</u>	<u>\$3,448</u>

IV. Personnel Summary - NONE

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Contractor Technical and Maintenance Support
Budget Activity: VII Central Supply & Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Fleet Engineering/Technical Support - Program improves and maintains electronic readiness by providing emergency technical assistance, improving shipboard maintenance capabilities and providing assistance to support the President, Board of Inspections and Survey. This technical assistance is beyond ships force capability. Support is provided by Mobile Technical Unit (MOTU) contractor effort and Navy in-house services. Requirements for technical services are determined annually in conferences with Fleet representatives, through review of past year utilization data, new equipment and field change delivery schedules, Navy manning levels, ship movements, and political climate in strategic areas.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	FY 1984	FY 1985			FY 1986	
		Budget Request	Appropriation	Current Estimate	Budget Request	Change
Fleet Engineering/ Technical Support	7,045	4,362	4,317	5,428	6,552	1,124
Total O&M,N	7,045	4,362	4,317	5,428	6,552	1,124

Activity Group: Contractor Technical and Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$5,428
2. Pricing Adjustments		185
A. Other Pricing Adjustments	(185)	
3. Program Increases		939
A. Other Program Growth in FY 1986	(939)	
1. <u>Fleet Engr/Tech Support</u> -		
Represents an increase of an		
additional 236 ship visits.		
4. FY 1986 President's Budget Request		6,552

Activity Group: Contractor Technical and Maintenance Support (cont'd)

III. Performance Criteria.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Fleet Engineering/Technical Support</u>	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Mobile Technical Unit WYs (contractor)	46/3864	36/2720	36/2880
Inspection and Survey (INSURV)	205/ 534	205/ 564	205/ 615
Emergency technical assists (in-house)	680/1063	680/1122	680/1224
Scheduled ship visits (in-house)	765/ <u>1584</u>	340/ <u>1022</u>	576/ <u>1833</u>
Total	\$7,045	\$5,428	\$6,552

IV. Personnel Summary - NONE

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Maintenance Support
Budget Activity: VII Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Marine Air Traffic Control Squadron (MATCS) - The MATCS Maintenance Support Program provides the external engineering support necessary to maintain the combat readiness posture of transportable tactical air traffic control and landing systems supporting the four Marine Aircraft Wings to launch and recover aircraft under all weather conditions during tactical operations and when directed assist geographical areas during catastrophic situations. The program finances installation; centralized standardization of systems, subsystems and equipments; planned product improvements, tests, measurement and diagnostic support; centralized software support; training (formal and OJT); organizational level maintenance support.

Standards, Calibration and Repair - This program funds calibration and repair of all electronic standards which are laboratory devices used to calibrate other test equipments of lesser accuracy. This program includes engineering efforts at the Metrology Engineering Center to improve measuring techniques, upgrade Navy calibration standards and equipments, assign and modify calibration intervals for test equipments, and conduct audits of calibration laboratories.

Test Equipment Maintenance - This program provides for the calibration and repair incidental to calibration, of all fleet-held electronic and electrical test, measurement and diagnostic equipment (TMDE). These equipments are used to install, align, adjust, operate and maintain all prime electronic and electrical systems in use aboard ships of the active fleet to ensure the material readiness of all radar, sonar, communications, countermeasure, surveillance, navigation, and propulsion systems. This program also provides for the continuation of the Measurement Equipment Automated System for Uniform Reporting and Evaluation (MEASURE) program to manage the maintenance of the test equipment inventory and the GPETE Assets Screening Program (GASP).

Precise Time and Time Interval (PTTI) - This program provides engineering support and quality assurance for the Verdin 0-1695 Cesium Beam Frequency Standards (CBFS), which require an emergency replacement capability for inoperative units onboard nuclear submarines; the AN/URO-23 Frequency Time Standard; the SG-1157/V Digital Processing Clock; and Army owned frequency standards under the Defense Satellite Communications System program. The PTTI program also provides for time calibration via portable clock trips and operational and maintenance training for PTTI users. There are annually scheduled clock trips to approximately 40 Navy and 14 Army activities and approximately one unscheduled clock trip per month.

Activity Group: Maintenance Support (cont'd)

I. Description of Operations Financed (cont'd)

Cryptographic (Crypto) Repair - Commencing in FY 1984, the Crypto Repair program provides for the maintenance of communications security (COMSEC) documentation and for system operation and verification tests on automatic and manual Secure Audio System (SAS) shipyard installations to ensure that no technical problems exist prior to ship deployment. Installation of the second generation COMSEC devices significantly increases the support for major influxes of new equipment. This effort is essential to ensure reliability and maintainability of the communications systems.

RADIAC Maintenance Support - Provides for (1) RADIAC coordination by NAVELEX RADIAC Field Managers and RADIAC Coordinators at selected locations throughout the country and aboard who act as liaisons between NAVELEX and the fleet or other customers in order to provide quick response to any problem with RADIAC equipment maintenance and radioactivity control; assist the fleet in obtaining emergency replacements of equipment required for inoperable or lost RADIAC equipment; ensure that shore RADIAC allowances and inventories are current; coordinate funding requirements for and monitor workload scheduling and performance of the sixteen (16) RADIAC Repair Facilities which calibrate RADIAC equipment; assure compliance with NAVELEX, NRC and local regulations governing radioactive material and sources used in connection with the RADIAC program; (2) maintenance of the Measurement Equipment Automated System for Uniform Reporting and Evaluation (MEASURE) data flow and accuracy for RADIAC equipment; (3) lead activity/engineering support for implementation and tracking of field changes, formulation of standard maintenance and calibration procedures, maintenance of applicable approved parts lists, and review of the Planned Maintenance Sub-systems (PMS) documentation for RADIAC equipments; (4) technical and engineering support services directly related to engineering, technical and logistics projects supporting the RADIAC Program for such specific programs as the Thermoluminescent Dosimetry (TLD) and Air Particle Detector quality assurance programs; maintenance of standards pools, fleet support, maintenance and support TRITIUM equipment, QPL testing of quartz fiber dosimeter, and management of a RADIAC test and evaluation facility; (5) provides for standardization of fleet and shore RADIAC calibrators and performance of acquisition engineering services by NAVELEXCEN Charleston.

Anti-Ship Missile (Electronic Warfare) System - ASM(EW) - Provides an EW capability to automatically detect, sort and classify, track and continuously display RF emitters, platform types and bearings in the relevant electromagnetic targeting and missile associated emitters.

Support is provided in 4 major categories: Life-cycle Software support including threat libraries, Fleet Maintenance Activity (FMA), engineering technical services and Intermediate Maintenance Activity (IMA) support.

Specifically, the threat library effort includes coding threat parameter data, revising and testing detection/display/response algorithms; validation testing utilizing the Tactical EW Environmental Simulator (TEWES) at Dahlgren; computer tape production and distribution; and Fleet software status accounting.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
MATCS	3,497	4,618	4,227	4,154	5,331	1,177
Standards, Cal and Repair	2,457	2,283	2,029	2,023	2,434	411
Test Equip Maint	2,294	3,347	2,832	2,745	3,207	462
PTTI	577	1,193	1,091	1,066	994	-72
Cryptographic Repair	980	1,048	965	934	1,804	870
RADIAC Repair	2,804	2,651	2,328	2,263	2,738	475
Anti-Ship Missile (EW)	<u>10,353</u>	<u>23,968</u>	<u>20,176</u>	<u>20,144</u>	<u>22,757</u>	<u>2,613</u>
TOTAL O&M,N	22,962	39,108	33,648	33,329	39,265	5,936

Activity Group: Maintenance Support (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		33,329
2. Pricing Adjustments		93
A. Stock Fund	(-117)	
1. Fuel	-117	
B. Industrial Fund Rates	(-355)	
C. Other Pricing Adjustments	(565)	
3. Program Increases		5,905
A. Other Program Growth in FY 1986	(5,905)	
1) <u>MATCS</u> - Increase will result in	1,141	
5 additional installations being		
accomplished (150); increased testing		
in FY 1986 at Patuxent River Test Site to		
support increased scope (200); increase		
in funds to complete MATCS Maintenance Support		
on 4 Squadrons as FY 1985 funds only accomplished		
partial completion (791).		
2) <u>Standards, Calibration & Repair</u> -	392	
Increase will provide 25 more calibration		
laboratory allowances (51); 16 more		
maintenance update documentations (10);		
70 more Calibration Processing Evaluations		
(45); 43 more field inventory reports (13)		
and 113 more TMDE Interval Analysis		
performed for General Purpose Electronic Test		
Equipment (GPETE) (45); increase of 2 M/Y to		
support Metrology Engineering Center technical		
functions (228).		
3) <u>Test Equipment Maintenance</u> -	401	
Provides for 14,224 additional Measure		
Recalls (80); provides the Measure Program		
4 M/Y of ADP capability for determining workload		
at Naval laboratories, distribution of Measure		
reports approximately 5 times a month to 150		
activities (261); provides for increased		
complexity of Field Calibrations Activity Management		
Audits which will be performed at shipyards and		
laboratories (39); increase in .5 M/Y for		
Management Informations System (MIS) support (21).		

Activity Group: Maintenance Support (cont'd)

3. Program Increases (cont'd)

A. Other Program Growth in FY 86 (cont'd)

4) Cryptographic Repair - Represents 831
an increase of 37 operational verification/
acceptance tests on Secure Audio System (SAS)
installations with associated technical support
and planning documentation (2M/Y).

5) RADIAC Maintenance Support - Increase 516
if for 2 manyears of effort in the RADIAC
Coordination and Field Manager Program
(117); one manyear of effort required
for engineering support at shipyards required
for developing calibration procedures and field
changes for RADIAC equipment used by the fleet
(104); 2 manyears of effort required for
technical services support (237); one-half
manyear of effort to be expended in MEASURE
Program Management (58).

6) Anti-Ship Missile (EW) - Increase 2,624
will provide for 7 additional validated
geographically tailored threat libraries;
perform repairs to 20 additional fleet units
(2,431); increase manpower to support hardware
configuration management, equipment acquisition
support, ECP engineering design installations,
maintenance engineering, EMI/EMC analysis and
support the AN/SLQ-32(V) improvement program (193).

4. Program Decreases

-62

A. Other Program Decreases in FY 1986 (-62)

1) PTTI - Decrease reduces engineering -62
support for Cesium Beam Frequency
Standards (CBFS) resulting in 13 less
cesium beam replacements.

5. FY 1986 President's Budget Request

39,265

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation

<u>MATCS</u>		<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
		<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Installations	Required	8/	28/	33/
	Financed	8/190	28/995	33/1,150
Inspections	Required	4/	4/	4/
	Financed	2/ 50	2/ 50	4/ 100
Test	Required	1/	1/	1/
	Financed	1/300	1/300	1/ 500
MATCS Maintenance Support (Squadron)	Required	4/	4/	4/
	Financed	4/834	4/716	4/1,800
SSA Maintenance Facility	Required	14/	12/	12/
	Financed	14/885	12/720	12/ 726
Engineering Support (Vallejo) OJT/PMS	Required	10/	10/	7/
	Financed	10/194	10/345	7/ 255
Support Contractor	Required	8/	9/	8/
	Financed	8/552	9/603	8/ 500
TERPES	Required	7/	7/	4/
	Financed	7/492	7/425	4/ 300
Total Funding:		3,497	4,154	5,331

Standards, Calibrations & Repair

	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
Calibration Laboratory Allowance	206/144	215/145	238/198
Maintenance Update Documentation	140/131	133/126	149/137
Calibration Processing Evaluation	620/277	587/267	657/314
Field Inventory Reports	362/183	356/173	399/186
TMDE Intervals Analysis	1316/246	939/166	1,052/193
Metrology Engr. Center Technical functions (M/Y)	19/1,476	15/1,146	17/1,406
Total Funding:	\$2,457	\$2,023	\$2,434

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

Test Equipment Maintenance

<u>Test Equipment Maintenance</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>Units/\$000</u>	<u>Units/\$000</u>	<u>Units/\$000</u>
MEASURE Recalls	260,418/1,359	218,846/1,238	233,070/1,313
GASP transactions	3,610/ 416	3,060/ 391	3,060/408
Documentation prepared	244/ 124	216/ 127	230/117
Field Calibration Activity (FCA) management audits	55/ 83	45/76	45/102
Engineering evaluations	269/ 312	220/310	220/323
Shore Allowances	0	0	0
	<u>MY/\$000</u>	<u>MY/\$000</u>	<u>MY/\$000</u>
Naval Training Plan	0	3/113	3/120
Calibration Requirement Sys.	0	3/155	3/180
Field Calibration Tech. Rep.	0	6/259	6/292
Requirements Management Info System (MIS)	0	1/ 76	5/112
MEASURE ADP Maintenance	0	0	4/240
Total Funding:	\$2,294	\$2,745	\$3,207

Precise Time and Time Interval

Portable Clock and Emergency Clock Visits Required	3	3	3
Financed		3/300	3/312
3/324			
Cesium Beam Replacement Required	44	133	
107			
Financed	<u>44/277</u>		<u>120/754</u>
107/670			
Total Funding:	\$577	\$1,066	\$994

Cryptographic Repair

Operational verification/acceptance tests on SAS installations (#)	37/530	27/439	64/1,219
Technical Support & Planning Documentation (M/Y)	<u>10/450</u>	<u>11/495</u>	<u>13/585</u>
Total Funding:	\$980	\$934	\$1,804

Activity Group: Maintenance Support (cont'd)

III. Performance Criteria and Evaluation (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>RADIAC Repair</u>			
	<u>MY/\$000</u>	<u>MY/\$000</u>	<u>MY/\$000</u>
RADIAC Coordinators	8/400	8/400	10/513
Engineering Support	16/826	12/600	13/700
Technical Services Support	17/1,228	13/1,018	15/1,250
Measure Program Management	6/350	4/245	4/275
Total Funding:	\$2,804	\$2,263	\$2,738
<u>ASM(EW)</u>			
	<u>Units/\$000</u>	<u>Units/000</u>	<u>Units/000</u>
Life Cycle Software (# ships)	206/4,431	245/6,747	265/6,929
Threat Libraries	4/ 649	3/ 831	10/2,856
FMA (# ships)	206/3,034	245/6,216	265/6,384
Eng Tech Svcs (# ships)	206/1,496	245/2,815	265/2,891
IMA Support (# ships)	206/ 743	245/3,535	265/3,697
Total Funding	\$10,353	\$20,144	\$22,757

IV. Personnel Summary - NONE

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Maintenance of Real Property
 Budget Activity: VII - Central Supply & Maintenance
 Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Facilities Maintenance - Provides for both scheduled and day-to-day recurring facilities maintenance and repair actions, as well as emergency service work needed to preserve facilities at the Naval Electronic Systems Command's field activities in an operational status and within Navy standards. The facilities include the following types: electronic shops, electronic laboratories, administrative spaces, roads and grounds, electronic maintenance facilities and storage buildings including maintenance of utilities.

Minor Construction (MC) - Minor Construction provides for interior alternations and upgrading of spaces within the Commanding Officer's authority to accommodate new electronics tasking and to provide for shop, laboratory and administrative spaces within Naval Electronic Systems Command's field activities.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Facilities Maintenance	1,407	821	821	821	853	32
Minor Construction	801	371	371	372	247	-125
Total O&M,N	2,208	1,192	1,192	1,193	1,100	-93

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate			1,193
2. Pricing Adjustments			39
A. Industrial Fund Rates	(32)		
B. Other Pricing Adjustments	(7)		
3. Program Decreases			-132
A. Other Program Decreases in FY 1986	(-132)		
1) Reduction of 5 minor construction projects	-132		
4. FY 1986 President's Budget Request			1,100

III. <u>Performance Criteria</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Backlog, Maint & Repair (\$000)	1,118	1,175	1,232
Buildings (KSF)	1,337	1,337	1,337

IV. Personnel Summary - NONE

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Base Operations
 Budget Activity: VII - Central Supply & Maintenance
 Claimant: Chief of Naval Material (Naval Electronic Systems Command)

I. Description of Operations Financed

Operation of Utilities (OOU) - Utilities provide for electricity, heat, steam, water and sewage purchased from a Naval activity or commercial source, depending on the location of the activity. The field activities of the Naval Electronic Systems Command do not operate power generation or central steam plant facilities.

Other Engineering Support (OES) - Provides for custodian services, refuse disposal, emergency service work (other than real property), fire protection, leases, guard services, pest control, general services for shops, laboratories and administrative spaces in field activities of the Naval Electronic Systems Command.

Base Communications - Base Communications provides for such costs as services, local, autovon and long distance calls, switchboard support, message center support and telegraphic message capability, purchased communications costs, initial installation and monthly recurring charges.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Change</u>
Utilities	1,404	2,130	2,130	2,130	2,184	54
Other Engineering Support	2,125	1,655	1,545	1,545	1,600	55
Base Communications	<u>2,419</u>	<u>2,496</u>	<u>2,496</u>	<u>2,736</u>	<u>2,683</u>	<u>-53</u>
Total O&M,N	5,948	6,281	6,171	6,411	6,467	56

Activity Group: Base Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		6,411
2. Pricing Adjustments		182
A. Industrial Fund Rates	(-8)	
B. Other Pricing Adjustments	(190)	
3. Program Decreases		-126
A. Other Program Decreases in FY 1986	(-126)	
1) Reduction of 60 main lines and 180 instruments for communications	-126	
4. FY 1986 President's Budget Request		6,467

III. Performance Criteria and Evaluation.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Base Operations (\$000)</u>	<u>5,948</u>	<u>6,411</u>	<u>6,467</u>
<u>Operation of Utilities (\$000)</u>	<u>1,404</u>	<u>2,130</u>	<u>2,184</u>
Total Energy Consumed (MBTU's)	19,000	18,000	18,000
Total Non-Energy Consumed (K-Gals.)	3,000	3,000	3,000
<u>Base Communications (\$000)</u>	<u>2,419</u>	<u>2,736</u>	<u>2,683</u>
Number of Instruments	3,872	4,002	3,822
Number of Mainlines	1,321	1,331	1,271
Daily Average Message Traffic	621	649	705
<u>Ownership Operations (\$000)</u>	<u>2,125</u>	<u>1,545</u>	<u>1,600</u>
Other Engineering Support (\$000)	2,125	1,545	1,600

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Supply Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

Supply Operations under the Naval Supply Systems Command provide: (1) effective response to requisitions for worldwide operations and maintenance requirements of Navy fleet and shore units; (2) timely freight terminal services for the shipment or receipt of material carried by the stock point activities and for the transshipment of material designated for fleet units and other activities throughout the world; and (3) effective supply services to all Navy units other than to filling requisitions for material or the processing of transshipments. Funding under this activity group finances the operations of eight stock point activities located in the United States, engaged in the receipt, storage and distribution of military supply items and the provision of other services such as fueling and procurement support. This activity group also finances military support operation of the supply departments at three Naval Shipyards.

This submission incorporates the efficiencies gained as a result of the installation of productivity enhancing projects. As allowed by Department of Defense policy, investment of these productivity savings has been incorporated at the activity level.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986 Budget Request</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appro- piation</u>	<u>Current Estimate</u>		
Supply Depot Operations	215,356	276,242	264,624	239,015	258,028	+19,013
Supply Departments at Naval Shipyards	<u>7,108</u>	<u>8,131</u>	<u>8,131</u>	<u>7,820</u>	<u>7,633</u>	<u>-187</u>
Total, Supply Operations	222,464	284,373	272,755	246,835	265,661	+18,826

Activity Group: Supply Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$246,835
2. Pricing Adjustments		-4,,195
A. Civilian Personnel Compensation (Direct)	(-4,693)	
1) US Direct Hire Pay Adjustment	-7,112	
2) Other Direct Pricing Adjustment	2,419	
B. Stock Fund	(-402)	
1) Fuel	-402	
C. Industrial Fund Rates	(-267)	
D. Other Pricing Adjustments	(1,167)	
3. Functional Program Transfers		4,149
A. Transfers In	(6,312)	
1) Inter-Appropriation - Expense/ Investment Criteria Revision - Amounts transferred from Other Procurement, Navy pursuant to the proposed DOD initiative for elimination of \$3 thousand investment threshold and adoption of central management criteria as a governing factor.	6,312	
B. Transfers Out	(-2,163)	
1) Inter-Appropriation - Transfer of the subsistence operation at Alameda (NSC Oakland) to the Defense Logistics Agency.	-2,163	
4. Program Increases		20,841
A. Annualization of FY 1985 Increases	(7,224)	
1) President's Private Sector Survey on Cost Control (PPSSCC) - Annualization of funding for high grade personnel at Supply Centers to provide civilian oversight, improve management continuity and ensure senior civilian accountability. 744		
2) Supply Center Workload - Annualization of funding for additional civilian personnel who perform receipt and issue of material to fleet and industrial customers in order to sustain supply depot processing times at an acceptable level of 90% on-time, in the face of increasing workload caused by the 600 ship Navy program and more sophisticated weapons systems.	3,528	

Activity Group: Supply Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

- 3) Inventory Accuracy - Annualization of funding for additional civilian personnel for improved inventory accuracy at supply depots. Personnel were added by Congressional direction to improve inventory integrity, and concurrently improve fleet material readiness. 2,928
- 4) Contact Management Review - Annualization of end strength added in FY 1985 to perform contract management review and allow for improved oversight of Navy contracts. 24

B. Other Program Growth in FY 1986 (13,617)

- 1) Stock Points Logistics Integrated Communications Environment (SPLICE)- Funds are required to download ADP applications onto the SPLICE hardware. These funds will be used for additional disk packs and controllers, memory, etc., and items require for the high speed data channel which will be delivered during the FY 1985/FY 1986 timeframe. 1,039
- 2) Navy Integrated Storage Tracking and Retrieval System (NISTARS) Maintenance - Funding is required for maintenance of the NISTARS hardware at Naval Supply Centers Oakland, Norfolk, and San Diego, as well as loading costs and maintenance costs for government-furnished equipment at other Naval Supply Centers for which NISTARS hardware will be procured in subsequent years. 3,822
- 3) President's Private Sector Survey on Cost Control - The PPSSCC recommended the strengthening of automated support and the improvement of work standards at Naval Supply Centers. The funds requested will enable the Navy to install terminals and upgraded computer peripheral devices in several logistics functions-- customer service, inventory control, physical inventory, and receipt and material locations control. Improved inventory and financial record accuracy will result from the upgraded system. Funding will also provide for moving toward a "paperless environment" and re-engineering the work place. 5,160

Activity Group: Supply Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

4) Contract Management Review - Additional end strength and funding are required to perform contract management reviews to allow for improved oversight of Navy contracts, thus ensuring that the Government is utilizing resources in the most effective manner.	24
5) Physical Security Upgrade - Funds are required for supplies and equipment (e.g., fencing and alarms) to upgrade physical security at the Naval Supply Centers. These security measures will prevent loss and pilferage of items stocked at the Centers, thereby reducing losses to the government. These improvements directly support the Inventory Accuracy Improvement Program and are in consonance with DOD Directive 5200.8.	3,211
6) Supply Depot Workload - Additional end strength and funding required to ensure that supply centers are able to maintain acceptable issue and receipt processing times concurrent with workload growth.	361
5. Program Decreases	-1,969
A. Annualization of FY 1985 Decreases	(-130)
1) Logistics Application for Automated Marking and Reading Symbols (LOGMARS) - Annualization of savings to be realized in FY 1986 as a result of implementing LOGMARS at Navy Stock Points.	-130
B. Other Program Decreases in FY 1986	(-1,839)
1) Automated Material Handling Systems (AMHS) Savings - Savings resulting from the installation and operation of AMHS at Naval Supply Centers.	-707
2) Project BOSS (Buy Our Spares Smart) - Reduced support costs for the non-labor portion of the Project BOSS effort at Supply Depots.	-158
3) President's Private Sector Survey on Cost Control (PPSSCC) Savings - Savings attributable to the implementation of certain initiatives recommended by the PPSSCC.	-588

Activity Group: Supply Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

4) Efficiency Review Savings - Savings as the result of completion of efficiency reviews similar to those conducted under the Commercial Activities (CA) program.	-147	
5) President's Private Sector Survey on Cost Control (PPSSCC) - Reduced funding required in FY 1986 to implement a computer security program at stock points.	-239	
6. FY 1986 President's Budget Request		\$265,661

III. Performance Criteria.

The following table summarizes potential program output based on available end-strength:

<u>Program Output</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Line items issued and received (000)	13,245	13,619	13,831
Measurement tons of cargo handled (000)	8,058	8,308	8,437
Barrels of fuel throughput (000)	77,500	77,900	78,300
Line Items screened for credit (000)	1,002	1,030	1,038
Purchase requests completed (000)	394	449	478
Warehouse Refusal Rate	0.7%	0.7%	0.7%
Number of Locations Survey (million)	2.3	2.3	2.3
Location Survey Accuracy Rate	96%	97%	97%
Gross Monetary Adjustment Rate	5%	3%	3%
% of contracts awarded competitively	80.7%	82.3%	84.0%

Activity Group: Supply Operations (cont'd)

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>291</u>	<u>281</u>	<u>281</u>
Officer	188	182	183
Enlisted	103	99	98
B. <u>Civilian</u>	<u>7,743</u>	<u>8,439</u>	<u>8,022</u>
USDH	7,743	8,439	8,022

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Inventory Control Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

The mission of the Naval Supply Systems Command's Inventory Control Points is to maximize Navy and Marine Corps weapon system, aircraft, and ship readiness by establishing and maintaining total secondary (repairable and consumable) item supply support necessary for their operation and maintenance, and to provide supply support for certain items to other services.

This activity group finances the operation of inventory control point activities engaged in the management of secondary item supply support for operation and maintenance requirements of the fleet and shore establishment, and for the design, implementation, and maintenance of standardized logistics and related financial management systems. The objective of these systems is to improve fleet readiness, support weapon systems, and provide for economies in supply operations and inventory investment. This submission includes resources to improve spare parts acquisition through breakout and increased competition in the procurement process.

This submission incorporates the efficiencies gained as a result of the installation of productivity enhancing projects. As allowed by Department of Defense policy, reinvestment of these productivity savings has been incorporated at the activity level.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Inventory Control Operations	<u>221,176</u>	<u>232,056</u>	<u>222,863</u>	<u>224,287</u>	<u>245,873</u>	<u>+21,586</u>
Total, Inventory Control Operations	221,176	232,056	222,863	224,287	245,873	+21,586

Activity Group: Inventory Control Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$224,287
2. Pricing Adjustments		-2,979
A. Civilian Personnel Compensation (Direct)	(-4,933)	
1) US Direct Hire Pay Adjustment	-6,147	
2) Other Direct Pricing Adjustment	1,214	
B. Stock Fund	(-53)	
1) Non-Fuel	-53	
C. Industrial Fund Rates	(-216)	
D. Other Pricing Adjustments	(2,223)	
3. Functional Program Transfers		1,562
A. Transfers In	(2,562)	
1) Inter-Appropriation - Expense/ Investment Criteria Revision - Amounts transferred from Other Procurement, Navy pursuant to the proposed DoD initiative for elim- ination of \$3 thousand investment threshold and adoption of central management criteria as governing factor.	2,562	
B. Transfers Out	(-1,000)	
1) Inter-Appropriation - Transfer of responsibility for inventory management of consumable items to the Defense Logistics Agency.	-1,000	
4. Program Increases		24,851
A. Annualization of FY 1985 Increases	(1,243)	
1) Logistics Application of Automated Marking and Reading Symbols (LOGMARS) Staffing - Annualization of funding for programmers required at the Fleet Material Support Office in support of the LOGMARS program. This program will provide bar-coding of materials and consequently enhance other inventory accuracy improvement efforts.	129	
2) Project BOSS (Buy Our Spares Smart)- Additional resources are required in FY 1986 to provide full year funding for Price Fighters at the Fleet Material Support Office who will monitor spare parts purchases and will perform value analysis where cost or price exceeds the intrinsic value.	850	

Activity Group: Inventory Control Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

- 3) Project BOSS (Buy Our Spares Smart) - Annualization of resources required to ensure that contracting for spare parts is performed competitively by identifying parts which can be broken out to the original equipment manufacturer, thus bought from sources other than prime contractors. 34
- 4) Conventional Ammunition Integrated Management System (CAIMS) - Annualization of funding for personnel who provide in-house maintenance of procurement, production and renovation data, and monitoring of contractor deliverables. 230
- B. Other Program Growth in FY 1986 (23,608)
 - 1) TRIDENT - End strength and funding to support increased Consolidated Shipboard Allowance List (COSAL) and Consolidated Shore Base Allowance List (COSBAL) maintenance/update requirements for increased TRIDENT ship population. 155
 - 2) Industrial Preparedness Planning - NAVSUP has the tri-service lead for the Rapid Acquisition of Manufactured Parts (RAMP) program. The RAMP program is dedicated to the development of manufacturing technology for use at the parts supplier level. Funding is required to prepare an implementation plan for technology transition of RAMP to the industrial base. 326
 - 3) Expanded Navy - Additional end strength and funding are required to perform inventory control functions in support of the 600-ship Navy. This increase is required in the technical review and provisioning areas. 401
 - 4) President's Private Sector Survey on Cost Control (PPSSCC) - Travel costs associated with the implementation of an Integrated Logistics Career Development Program for Supply Corps Officers. 10
 - 5) Presidents Private Sector Survey on Cost Control (PPSSCC) - Computer Backup - The PPSSCC recommended that the ADP facilities at the ICPs establish a tested process for computer backup in the event of a site catastrophe. Funds will enable the development of an ICP

Activity Group: Inventory Control Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

- catastrophe plan including risk analysis of threats and procedures to be followed in response to specific threats and the establishment of an off-site contractor ADP facility to provide ADP processing support during a catastrophe. 1,150
- 6) Stock Point ADP Replacement (SPAR) - The Stock Point ADP Replacement Project has two primary objectives: to replace the computer systems supporting the Uniform Automated Data Processing System (UADPS-SP) for Stock Points and to redesign the UADPS-SP applications programs. The increase in FY 1986 represents funding for benchmark performance contracts to encourage vendor participation in the competitive process (with awards scheduled for September, 1986), funding for site modification to prepare for installation of the test bed and funding for conversion work package preparation. In addition, there is an increase in funding for contractor maintenance of the current UADPS-SP applications programs. 4,244
- 7) Military Standard Contract Administration Procedures (MILSCAP) - In accordance with OSD direction, NAVSUP has been assigned Project Manager responsibility for MILSCAP. MILSCAP provides uniform procedures for the interchange of contract, logistics and financial data via AUTODIN between the Military Services and contract administration offices. All files will be updated from a common data source to ensure integrity and compatibility. Funding will correct current differences in Navy contractual, logistics and financial systems. 3,000
- 8) Defense Data Network (DDN) - DDN is an OSD-directed telecommunications network to provide long distance (greater than 50 miles) communication requirements for the DOD community. DDN replaces existing public utility and military telecommunications networks, dedicated lines, and manual methods for massive data transfer. This funding provides the software necessary to link 31 other stock points and the 4 Navy Regional Contracting Centers. 1,109

Activity Group: Inventory Control Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

- | | |
|--|-------|
| 9) Navy Integrated Storage Tracking and Retrieval System (NISTARS) Support - This funding is required to provide software support for NISTARS to properly maintain the Navy's investment in this system and keep it fully operational at all times. | 1,974 |
| 10) UICP Resolicitation Portability - Portability allows software to be compatible with various brands of hardware, thereby not restricting its use and allowing subsequent hardware upgrades and replacements. The FY 1986 requirement is for acquisition of the necessary portability tools and training at the inventory control points. | 2,821 |
| 11) Aviation Depot Level Repairables (AVDLR) Training - Beginning in FY 1985, AVULRs will be Stock Funded. This change in funding requires that personnel involved in managing DLRs be trained in such areas as carcass tracking, retrograde transshipment tracking, requisitioning, and report generation. Personnel in the command structure must be skilled in managing AVDLRs to ensure the full benefits of this management initiative. | 1,696 |
| 12) UICP Resolicitation - Resources required to fund the installation of the SPCU production system and to properly size the ASO production system, prior to moving converted programs onto the new Resolicitation hardware. These funds will also provide funding for currently installed equipment, to ensure that the Resolicitation program will continue on schedule. | 4,939 |
| 13) Project BOSS (Buy Our Spares Smart) - Additional funding is required to increase competition in the procurement of spare parts and meet the FY 1986 competition target of 30%. | 468 |
| 14) Security Upgrade - Funding to provide improvements in security such as ADP security, intrusion alarms, and security fencing. Installation of these improvements will prevent disruptions by terrorists and other unauthorized groups. | 1,315 |

Activity Group: Inventory Control Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

5. Program Decreases		-1,848
A. Other Program Decreases in FY 1986	(-1,848)	
1) President's Private Sector Survey on Cost Control (PPSSCC) - Decreased funding requirements for upgraded computers and computer security below the level of the FY 1985 effort.	-183	
2) Military Sealift Command (MSC) Support - Decreased requirements because of completion of provisioning documentation for new MSC Snips in FY 1985.	-120	
3) Buy Our Spares Smart (BOSS) - Decreased requirements in the areas of value engineering, and automated systems as a result of completion of these efforts and reduced training requirements for personnel hired in FY 1985.	-1,430	
4) Efficiency Review Savings - Savings from completion of a program to perform efficiency studies such as those done for functions under the Commercial Activity (CA) Program.	-115	
6. FY 1986 President's Budget Request		\$245,873

Activity Group: Inventory Control Operations (Cont'd)

III. Performance Criteria. FY 1984 FY 1985 FY 1986

The following table summarizes potential program output based on available end strength:

Line Items Managed (000)	619	633	640
Items Selected for Provisioning (000)	761	771	785
Percent of Contracts to be Awarded Competitively	28.7%	28.8%	30%
Purchase Requests (000)	219	222	230
Technical Reviews (000)	521	558	564

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>260</u>	<u>258</u>	<u>288</u>
Officer	190	185	215
Enlisted	70	73	73
B. <u>Civilian</u>	<u>5,878</u>	<u>5,891</u>	<u>5,881</u>
USDH	5,878	5,891	5,881

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Procurement Operations
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

The mission of Procurement Operations is to provide for effective procurement services, and centralized administration of specialized supply programs. The mission of the Fleet Hospital program is to provide for the acquisition and life cycle support of self-contained, air-transportable/relocatable fleet hospital units.

Funding under this Activity Group finances the operations of four Regional Contracting Centers (NKOCs) and special supply programs which are administered at the Headquarters, Naval Supply Systems Command. In addition, under the Fleet Hospital Program, funds are provided for the world-wide prepositioning of selected, modular units which comprise the hospitals, setting up and maintaining medical supply and other logistics support systems for their continued operation under war-time conditions, and all operations associated with the acquisition process. Beginning in FY 1985, this Activity Group also includes finances for the operation of the Project Management Office, transferred from Command and Administration in accordance with DOD Instruction 5100.73.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Supply System Services	31,503	46,526	46,171	43,209	59,505	+16,296
Project Management Office	0	0	0	1,027	1,010	-17
Regional Procurement Offices	14,724	15,935	15,702	16,133	17,905	+1,772
Fleet Hospital Project	<u>5,824</u>	<u>13,214</u>	<u>12,036</u>	<u>12,057</u>	<u>11,192</u>	<u>-865</u>
Total, Procurement Operations	52,051	75,675	73,909	72,426	89,612	+17,186

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$72,426
2. Pricing Adjustments		1,150
A. Civilian Personnel Compensation (Direct)	(-316)	
1) US Direct Hire Pay Adjustment	-507	
2) Foreign National Direct Hire Pay Adjustment	31	
3) Other Direct Pricing Adjustment	160	
B. Stock Fund	(-18)	
1) Non-Fuel	-18	
C. Industrial Fund Rates	(-468)	
D. Other Pricing Adjustments	(1,952)	
3. Functional Program Transfers		15,765
A. Transfers In	(15,765)	
1) Inter-Appropriation - Expense/Investment Criteria Revision - Amounts transferred from Other Procurement, Navy pursuant to the proposed DoD initiative for elimination of \$3 thousand investment threshold and adoption of central management as a governing factor.	15,765	
4. Program Increases		5,049
A. Other Program Growth in FY 1986	(5,049)	
1) Stock Point Logistics Integrated Communications Environment (SPLICE)- Funds required to download ADP applications onto the SPLICE hardware. These funds will be used for additional disk packs and controllers, memory, etc. along with items needed for the high speed data channel which will be available during the FY 1985/1986 time frame. This contractual effort will be centrally managed.	3,610	
2) Expanded Navy Workload - Additional end strength and funding are required to perform the contractual workload expansion as we build to a 600-ship Navy.	81	
3) Contract Management Reviews - Additional end strength and funding are required to perform contract management reviews to allow for improved oversight of Navy contracts.	27	

Activity Group: Procurement Operations (cont'd)

B. Reconciliation of Increase and Decrease (cont'd).

4) Navy Regional Data Automation Center (NARDAC) Support - Additional resources required to fund services performed by NARDAC, Washington (a NIF activity) in support of ADP programs such as Integrated Disbursing and Accounting - Financial Management System, Integrated Disbursing and Accounting - Resource Management System, System IV and civilian payroll.	148	
5) Logistics Application for Automated Marking and Reading Symbols (LOGMARS) - Resources required for the installation of bar code reading equipment in the receiving and issuing areas at Navy Stock Points.	1,183	
5. Program Decreases		-4,778
A. Other Program Decreases in FY 1986	(-4,778)	
1) Buy Our Spares Smart (Project BOSS) - Reduction in the training required by procurement analysts in the techniques of breaking out contracts to ensure maximum competition.	-2,837	
2) Conventional Ammunition Integrated management System (CAIMS) - Reduction of contractual support as a result of completion of the CAIMS resystemization effort.	-646	
4) Fleet Hospital - Reduction in the level of assembly & integration (A&I) contract effort in FY 1986.	-1,295	
o. FY 1986 President's Budget Request		\$89,612

Activity Group: Procurement Operations (Cont'd)

III. Performance Criteria.

The following table summarizes potential program output based on available end-strength:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of Local Procurement Offices Provided Technical Direction	833	833	833
Number of Purchase Requests (In Thousands)	83	90	95
Percent of Contracts to be Awarded Competitively	45.8%	56.4%	59.2%

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>military</u>	<u>105</u>	<u>113</u>	<u>114</u>
Officer	69	78	79
Enlisted	36	35	35
B. <u>Civilian</u>	<u>546</u>	<u>571</u>	<u>578</u>
USDH	508	545	552
FNDH	38	26	26

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Command and Administration
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

The mission of the Naval Supply Systems Command Headquarters is to manage and provide technical direction to major logistics subsystems which directly support ships, aircraft, weapon systems, and personnel of the operating forces ashore and afloat. Funds under the Command and Administration activity group finance the operation of the Naval Supply Systems Command Headquarters which manages and provides technical direction to the following logistics subsystems:

- An integrated Navy supply system which is responsible for providing secondary item support Navy-wide to fleet units and shore installations
- A purchasing system which provides Navy-wide support in procuring products and services from commercial suppliers
- A transportation system which is responsible Navy-wide for first and second destination movement of material
- A financial system with Navy-wide responsibility for payroll; operating expense, inventory, and plant property accounting; and disbursing
- A resale system involving the management of the Navy's Commissary and Exchange systems, including the operation of ships' stores, barber shops, laundry facilities afloat, and retail clothing stores
- A publications and printing service which has Navy-wide responsibility for printing requirements
- A food service system with technical responsibility for the food service operations of the Navy.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Command	<u>29,766</u>	<u>28,181</u>	<u>28,112</u>	<u>31,756</u>	<u>33,321</u>	<u>+1,565</u>
Total, Command and Administration	<u>29,766</u>	<u>28,181</u>	<u>28,112</u>	<u>31,756</u>	<u>33,321</u>	<u>+1,565</u>

Activity Group: Command and Administration (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$31,756
2. Pricing Adjustments		397
A. Civilian Personnel Compensation (Direct)	(-407)	
1) US Direct Hire Pay Adjustment	-526	
2) Other Direct Pricing Adjustment	119	
B. Industrial Fund Rates	(-6)	
C. Other Pricing Adjustments	(810)	
3. Functional Program Transfers		-
4. Program Increases		1,642
A. Annualization of FY 1985 Increases	(37)	
1) Logistics Application for Automated Marking and Reading Symbols (LOGMARS) Staffing - Annualization of resources required for the overall management of the LOGMARS program to ensure the improvement of inventory data collection.	37	
B. Other Program Growth in FY 1986	(1,605)	
1) Funding for a classified project.	1,605	
5. Program Decreases		-474
A. Other Program Decreases in FY 1986	(-474)	
1) Project BUSS (Buy Our Spares Smart) - Reduced requirements for Project BUSS at the Headquarters level.	-36	
2) Reduction in contractual services	-438	
6. FY 1986 President's Budget Request		\$33,321

Activity Group: Command and Administration (Cont'd)

III. Performance Criteria.

<u>Program Output</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of Field Activities Managed	165	169	170
Number of Civilian Personnel Managed	24,813	25,627	25,438

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>79</u>	<u>80</u>	<u>80</u>
Officer	70	71	71
Enlisted	9	9	9
B. <u>Civilian</u>	<u>383</u>	<u>355</u>	<u>355</u>
USDH	383	355	355

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Field Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

Field Operations under the Naval Supply Systems Command provide for the management of Navy material transportation, for the centralized management of the Navy's food service program, and for the overall management of Navy fuel operations worldwide.

Funds under this activity group finance the operation of the following activities: the Naval Material Transportation Office, the Navy Food Service Systems Office, and the Navy Petroleum Office. Beginning in FY 1985, this activity group also includes finances for the operation of Operational Support-Field transferred from Command and Administration in accordance with DOD Instruction 5100.73.

This program finances the salaries, administrative expenses and travel of personnel who are engaged in certain transportation, physical distribution, and security management functions for the field activities.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Miscellaneous Field Operations	6,532	6,316	6,269	6,411	6,516	+105
Operational Support-Field	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,027</u>	<u>1,002</u>	<u>-25</u>
Total, Field Operations	6,532	6,316	6,269	7,438	7,518	+80

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$7,438
2. Pricing Adjustments		-58
A. Civilian Personnel Compensation (Direct)	(-120)	
1) US Direct Hire Pay Adjustment	-170	
2) Other Direct Pricing Adjustment	50	
B. Industrial Fund Rates	(-8)	
C. Other Pricing Adjustments	(70)	
3. Functional Program Transfers		-
4. Program Increases		216
A. Other Program Growth in FY 1986	(216)	
1) Transportation Operational Personal Property Standard System (TOPS) - Funds will provide for the development of an operational, multi-service system which will automate and standardize the DOD personal property movement and storage program.	200	
2) Physical Security - Staffing to manage the implementation of programs to increase the level of security at shore activities of the Naval Supply Systems Command.	16	
5. Program Decreases		-78
A. Other Program Decreases in FY 1986	(-78)	
1) Reduction in various non-labor expenses such as supplies, equipment, and printing/reproduction costs.	-78	
6. FY 1986 President's Budget Request		\$7,518

Activity Group: Field Operations (cont'd)

III. Performance Criteria.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of food service locations managed	670	680	680
Number of fuel facilities for which technical guidance is provided	115	115	115

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. Military	<u>35</u>	<u>11</u>	<u>11</u>
Officer	35	8	8
Enlisted	0	3	3
B. Civilian	<u>226</u>	<u>211</u>	<u>212</u>
USDH	226	211	212

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Servicewide Transportation
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

The Servicewide Transportation (SWT) program provides funding for the majority of the Navy's worldwide cargo movements. This includes first destination transportation (FDT), second destination transportation (SDT), and continental United States terminal services in conjunction with first and second destination transportation. First destination transportation costs are associated with the movement of material, after purchase by procurement and other appropriations on a Free-On-Board origin basis, from the contractors' facilities to the first point of use or storage. The program also provides financing for the worldwide second destination movement of regular and emergency readiness material including ammunitions, chemicals, medicine, subsistence, mail, repair parts, and high value repairable items.

The SWT program finances the purchase of transportation services predominantly from DOD industrially-funded transportation activities, the Military Airlift Command (MAC), the Military Sealift Command (MSC), and the Military Traffic Management Command (MTMC). In addition, SWT purchases transportation services from private sector firms. These include aircraft, truck, rail, bus, barge and freight forwarding services.

It should be emphasized that this is a navy-wide program. The volume of the program is driven by a variety of factors, most significantly the operating tempo and readiness requirements of the fleet and the level of deliverables from programmed procurements.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Servicewide Transportation	442,321	410,385	407,385	406,233	394,760	-11,473
Total, Servicewide Transportation	442,321	410,385	407,385	406,233	394,760	-11,473

Activity Group: Servicewide Transportation (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$406,233
2. Pricing Adjustments		-6,341
A. Industrial Fund Rates	(-12,862)	
B. Other Pricing Adjustments	(6,521)	
3. Functional Program Transfers		-405
A. Transfers Out	(-405)	
1) Inter-Appropriation - Transfer of First Destination funds to RDT&E,N.		-405
4. Program Increases		7,923
A. Other Program Growth in FY 1986	(7,923)	
1) Increased transportation requirements in support of scheduled replacement and outfitting of Civil Engineering Support Equipment (CESE) and Civil Engineering End Items (CEEI) as reflected in the OPN B.A. 5 Budget Request as well as some subsequent second destination movements. Modal distribution: MSC 7,409 measurement tons; MTMC 6,449 measurement tons; Inland 18,674 short tons.		4,127
2) Increased second destination requirements supporting increases in ships (+2.8% over FY85), aircraft (+.7% over FY85), military personnel (+2.6 % over FY85), and flying hours (+5.6% over FY85). Modal distribu- tion is: MAC 709 short tons; MSC 7,360 measurement tons; MTMC 4,691 measurement tons; and Inland 4,046 short tons.		2,880
3) Increased transportation require- ments associated with the delivery of Harrier engines. Procurement sources include overseas contractors. Modal distribution: MAC 110 short tons; Inland 934 short tons; MSC 282 measurement tons; MTMC 282 measurement tons; QUICKTRANS 222 short tons.		587

Activity Group: Servicewide Transportation (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

4) Increased transportation requirements in support of planned increases for overseas commissary stores and Navy Exchanges. Modal distribution: MSC 2,400 measurement tons; MTMC 2,400 measurement tons.	329	
5. Program Decreases		-12,650
A. One-Time FY 1985 Costs	(-821)	
1) Transportation requirements to support the TA-7C re-engine program completed in FY 1985. Modal distribution: Inland -1,341 short tons.	-360	
2) Transportation requirements to move conventional ammunition within the United Kingdom completed during FY85. Modal distribution: Inland -1,011 short tons.	-261	
3) Transportation requirements to move VTX engines within the CONUS completed in FY85. Modal distribution: Inland -1,534 short tons.	-200	
B. Other Program Decreases in FY 1986	(-11,829)	
1) Reduced transportation requirements for premium airlift movements of aircraft engines for resupply. Modal distribution: MAC -2,195 short tons; QUICKTRANS -289 short tons.	-6,066	
2) Servicewide Transportation is responsible for the movement of repair items for the F/A-18 program with FY 1986 representing the second year's operations. Planned transportation economies result in repricing. Modal distribution: MAC -277 short tons; Inland -2,723 short tons; QUICKTRANS -625 short tons.	-1,444	
3) Reduced transportation requirements for the movement or miscellaneous equipment and material procured by the Naval Facilities Engineering Command with OPN funds. Modal distribution: Inland -5,300 short tons.	-1,023	

Activity Group: Servicewide Transportation (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

- | | |
|---|--------|
| 4) Reduced transportation requirements to support deliveries of Aircraft Procurement, Navy; Shipbuilding and Conversion, Navy; Weapons Procurement, Navy; and Other Procurement, Navy materials. Modal distribution: MAC -28 short tons; MSC -2,322 measurement tons; Inland -5,608 short tons; MTMC -794 measurement tons. | -1,372 |
| 5) Reduced transportation requirements for the movement of materials to upgrade Underwater Range in St. Croix. Modal distribution: MSC -4,354 measurement tons; MTMC -4,354 measurement tons. | -710 |
| 6) Reduced Transportation requirements for Project Tent Camp PACKUP. Tent camps are used as temporary berthing facilities for an entire Construction Battalion (approximately 750 persons) when deployed for a military construction project (Costs continue into outyears). Modal distribution: MSC -2,610 measurement tons; MTMC -2,610 measurement tons. | -514 |
| 7) Reduced transportation requirements for movement of ASW Operational equipment. Modal distribution: MAC -100 short tons; Inland -75 short tons. | -277 |
| 8) Reduced transportation requirements to move TOMAHAWK All-Up-Rounds plus component parts and empty containers. Modal distribution: MAC -5 short tons; Inland -166 short tons; QUICKTRANS -284 short tons. | -247 |
| 9) Reduced transportation requirements for the movement of Fleet Ballistic Missiles and Strategic Weapons Systems materials. Modal distribution: Inland -839 short tons. | -127 |
| 10) Reduced transportation requirements for movement of Sound Surveillance System (SOSUS). Modal distribution: MAC -8 short tons; Inland -8 short tons. | -26 |

Activity Group: Servicewide Transportation (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

- 11) Reduced transportation requirements for the movement of electronic equipment vans. Modal distribution: MSC -115 measurement tons; Inland -90 short tons; MTMC -115 measurement tons. -23

6. FY 1986 President's Budget Request

\$394,760

III. Performance Criteria.

See Attachment A.

IV. Personnel Summary.

There are no military or civilian personnel associated with this activity group.

PROGRAM DATA	FY 1984		FY 1985		FY 1986	
	UNITS	\$000	UNITS	\$000	UNITS	\$000
<u>First Destination Transportation</u> <u>by Mode of Shipment:</u>						
<u>Military Airlift Command</u>						
Regular						
Channel (ST)	4,105	8,777	4,320	8,870	4,318	7,298
SAAM (Flying Hours)	426	1,656	426	1,540	422	1,277
LOGAIR (ST)						
<u>Military Sealift Command</u>						
Regular						
Routes (MT)	66,218	12,393	88,665	6,352	85,300	9,708
Per Diem (SD)						
<u>Military Traffic</u>						
<u>Management Command</u>						
<u>Port</u>						
Handling (MT)	40,919	2,296	55,277	3,508	52,480	2,689
<u>Commercial</u>						
Air (ST)	4,243	2,677	4,387	2,808	4,462	3,000
Surface (ST)	206,217	26,788	225,890	29,432	229,721	31,197
TOTAL		54,587		54,510		55,169

7 373

PROGRAM DATA	FY 1984		FY 1985		FY 1986	
	UNITS	\$000	UNITS	\$000	UNITS	\$000
<u>Second Destination Transportation</u>						
<u>by Selected Commodity:</u>						
Cargo (ST)	569,866	194,956	595,914	196,679	590,166	173,453
(MT)	735,788	65,520	815,075	49,105	826,248	52,882
(SD)	665	7,715	665	8,356	665	8,694
(Flying Hours)	1,952	7,456	2,085	7,372	2,085	6,156
Commissaries (MT)	227,609	21,637	249,480	13,498	254,156	16,350
Base Exchanges (MT)	228,877	28,866	254,273	16,817	257,113	21,183
Subsistence (ST)	894	1,902	966	1,906	936	1,479
(MT)	97,652	11,660	109,250	7,645	110,546	9,064
Overseas Mail:						
Surface (MT)	14,092	1,784	15,569	1,081	15,705	1,320
Air (ST)	6,119	46,236	6,498	49,284	6,568	49,016
TOTAL		387,734		351,723		339,591

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Retail Sales Operations
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

The Retail Sales Operations Activity Group contains two subactivity groups - Commissary Operations and Retail Clothing Stores/Ships' Stores Afloat. The mission of the Navy's Commissary Operations is to provide authorized resale items for sale to authorized commissary store patrons at the lowest practicable price in a facility designed and operated similar to the standards used in commercial food stores. Retail Clothing Stores provide a convenient and reliable source from which authorized personnel may obtain government-procured articles of uniform clothing and related items. Ships' Stores Afloat provide a convenient and reliable source from which personnel aboard ships may obtain articles and services for their health and comfort. Retail Operations provides funding for the operation of commissary stores world wide, regional distribution centers, and management organizations. The budget provides for the opening of three new commissary stores in FY 1985 and one store in FY 1986 to further support member families.

Savings realized by member families purchasing goods from commissaries are a vital incentive for the retention of service members and could even be considered part of the enlistment contract. The commissary privilege is very important to enlisted personnel, especially to the E-4 through E-6 ranks, and junior officers.

Retail Clothing Stores/Ships' Stores Afloat provides for reimbursement to Navy exchanges and the Navy Resale and Services Support Office (NAVRESSO) for staff services expended in support of government-procured articles of uniforms at Navy exchanges. In addition, funding within this program provides reimbursement to NAVRESSO which exercises technical control over this program and provides staff services in support of the operations of the program.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	Budget Request	FY 1985 Appropriation	Current Estimate	FY 1986 Budget Request	Change
Commissary Operations	72,720	74,750	74,229	77,034	82,011	+4,977
Retail Clothing Stores/ Ships' Stores	6,511	7,726	6,900	5,200	5,651	+ 451
Total, Retail Sale Operations	79,231	82,476	81,129	82,234	87,662	+5,428

Activity Group: Retail Sales Operations (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$82,234
2. Pricing Adjustments		-37
A. Civilian Personnel Compensation (Direct)	(-829)	
1) US Direct Hire Pay Adjustment	-2,034	
2) Foreign National Direct Hire Pay Adjustment	115	
3) Other Direct Pricing Adjustment	1,090	
B. Stock Fund	(-10)	
1) Non-Fuel	-10	
C. Other Pricing Adjustments	(802)	
3. Functional Program Transfers		-
4. Program Increases		5,526
A. Annualization of FY 1985 Increases	(3,317)	
1) Funding is required for full year operations of commissary stores at Imperial Beach, CA, King's Bay, GA, and Nea Makri, Greece opening during FY 1985.	3,317	
B. Other Program Growth in FY 1986	(2,209)	
1) Civilian Substitution at Commissary Stores (CIVSUB) - Civilian end strength and funding are required to provide executive management in commissary stores and regional offices to offset reductions in officer allowances.	1,551	
2) L-1 Store Renovation - Funding required to provide for the major renovation of uniform stores at Navy Exchanges. Appropriated fund authority is required to cover the costs of facilities improvement of the government issue portion of Naval Uniform Centers.	389	
3) New Commissary Store - Resources are required to open a new commissary store at Murhy Canyon CA. Funds for construction are being provided by the Commissary Store Revolving Trust Fund.	269	

Activity Group: Retail Sales Operations (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

5. Program Decreases		-61
A. Other Program Decrease in FY 1986	(-61)	
1) Efficiency Review Savings - Savings as the result of completion of efficiency reviews similar to those conducted under the Commercial Activities (CA) program.	-40	
2) Commercial Activities - Adjustments for commissary store functions designated for contracting out under the CA program.	-21	
6. FY 1986 President's Budget Request		\$87,662

III. <u>Performance Criteria.</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Average System-wide Commissary Store Operating Hours Per Week	41.9	41.9	42.7

See Attachment A for additional performance criteria

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>1,528</u>	<u>1,318</u>	<u>1,275</u>
Officer	89	83	37
Enlisted	1,439	1,235	1,238
B. <u>Civilian</u>	<u>2,519</u>	<u>2,816</u>	<u>3,057</u>
USDH	2,216	2,479	2,720
FNDH	209	222	222
FNIH	94	115	115

Department of Navy
 FY 1986 President's Budget
 Commissary Operations (Retail)
 (Dollars in Thousands)

	FY 1984			FY 1985			FY 1986		
	CONUS	Over- Seas	Total	CONUS	Over- Seas	Total	CONUS	Over- Seas	Total
<u>Number of Stores</u>									
Domestic Stores	57	3	60	58	3	61	60	3	63
Foreign Stores	-0-	19	19	-0-	19	19	-0-	20	20
Total	57	22	79	58	22	80	60	23	83
<u>Gross Yearly Sales (000's)</u>									
Domestic Stores	666,146	60,531	726,677	664,261	60,132	724,393	731,601	64,095	795,696
Foreign Stores	-0-	86,018	86,018	-0-	89,445	89,445	-0-	95,341	95,341
Total	666,146	146,549	812,695	664,261	149,577	813,838	731,601	159,436	891,037
<u>Appropriated Fund Support Operation and Maintenance (000's):</u>									
Civilian Pay - USDH	43,893	4,579	48,472	47,321	4,958	52,279	50,170	5,461	55,631
Civilian Pay - FNDH	-	1,573	1,573	-	1,673	1,673	-0-	1,909	1,909
Civilian Pay - FNIH	-	1,345	1,345	-	1,509	1,509	-	1,637	1,637
Non-Personnel Costs (excl. cost of transportation to overseas stores)	17	55	72	44	131	175	42	123	165
Travel	419	41	460	275	27	302	274	28	302
Other Purchased Services	12,916	7,882	20,798	13,079	8,017	21,096	13,867	8,500	22,367
Total - Commissary Operations	57,245	15,475	72,720	60,719	16,315	77,034	64,353	17,658	82,011
Military Personnel	21,411	5,455	26,866	29,183	7,182	36,365	26,733	6,767	33,500
<u>Subtotal Operating Costs (excluding overseas transportation costs)</u>	78,656	20,930	99,586	89,902	23,497	113,399	91,086	24,425	115,511
<u>Costs of Transportation to Overseas Stores</u>	-	21,637	21,637	-	13,498	13,498	-	16,350	16,350
<u>Total Appropriated Fund Support</u>	78,656	42,567	121,223	89,902	36,995	126,897	91,086	40,775	131,861

<u>End Strength</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>MIL</u>	<u>MIL</u>	<u>MIL</u>
	<u>CIV</u>	<u>CIV</u>	<u>CIV</u>
Military	-	-	-
Civilian	2,216	2,479	2,720
USDH	209	222	222
FNDH	-	115	115
FNIH	94	-	-
Total End Strength	1,528	2,816	3,057
<u>Work Years</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
	<u>MIL</u>	<u>MIL</u>	<u>MIL</u>
	<u>CIV</u>	<u>CIV</u>	<u>CIV</u>
Military	-	-	-
Civilian	2,410	2,475	2,694
USDH	186	218	218
FNDH	-	113	113
FNIH	94	-	-
Total Workyears	1,476	2,806	3,025

7 380

Department of the Navy
 Operation & Maintenance, Navy
 Exhibit OP-5

Activity Group: Maintenance of Real Property
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

This program provides for the maintenance, repair, and minor construction of all public works, buildings, structures, grounds, and utility systems required at the Naval Supply Systems Command's field activities. The two major elements of this program are:

- * Maintenance and Repair of Real Property - finances scheduled, day-to-day recurring maintenance, and emergency service work needed to preserve facilities.
- * Minor construction - finances the erection, installation or assembly of real property facilities; the addition, extension, alteration, conversion or replacement of existing real property facilities; the relocation of real property facilities; and the installation of equipment which is made part of a facility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985 Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986 Budget Request</u>	<u>Change</u>
Maintenance & Repair of Real Property	19,969	25,909	25,756	23,094	22,323	-771
Minor Construction	<u>2,583</u>	<u>429</u>	<u>428</u>	<u>2,435</u>	<u>1,914</u>	<u>-521</u>
Total, Maintenance of Real Property	22,552	26,338	26,184	25,529	24,237	-1,292

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$25,529
2. Pricing Adjustments		624
A. Civilian Personnel Compensation (Direct)	(-98)	
1) US Direct Hire Pay Adjustment	-220	
2) Other Direct Pricing Adjustment	122	
B. Stock Fund	(-53)	
1) Non-Fuel	-53	
C. Industrial Fund Rates	(341)	
D. Other Pricing Adjustments	(434)	
3. Functional Program Transfers		-94
A. Transfers Out	(-94)	
1) Transfer of subsistence storage activity at Alameda (NSC Oakland) to the Defense Logistics Agency	-94	
4. Program Increases		-
5. Program Decreases		-1,822
A. Other Program Decreases in FY 1986	(-1,822)	
1) Decreased level of facilities maintenance and repair	-1,822	
6. FY 1986 President's Budget Request		\$24,237

Activity Group: Maintenance of Real Property (cont'd)

III. Performance Criteria.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Maintenance of Real Property</u>			
Backlog, Maint/Repair	91,455	96,080	100,703
Total Buildings (KSF)	41,069	41,084	41,169

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
B. <u>Civilian</u>	<u>250</u>	<u>250</u>	<u>250</u>
USDH	250	250	250

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Base Operations, Other
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (NAVSUP)

I. Description of Operations Financed.

This program provides the base support services and material required at field activities under the command of the Naval Supply Systems Command to allow assigned forces and tenants to perform their mission.

The major elements of this program are:

Base Communications - provides for administrative telephones, telecommunications centers, industrial security networks, and paging networks.

Utility Operations - Includes operating expenses for purchased electricity, electricity generating plants, purchased steam and hot water, heat plants, utility distribution systems, waste systems, air conditioning and refrigeration plants.

Personnel Operations - Support required for personnel-related functions to include expenses for:

-Other Personnel Support - provides for mess halls, sales activities, laundry and dry cleaning facilities.

-Morale, Welfare and Recreation - provides authorized appropriated fund support for shore-based recreation activities.

Base Operations - Mission - Support for those Base Operations functions which are required in direct support of the mission of the base. Expenses are included for the following functions:

-Retail Supply Operations - This item funds the management associated with the movement of personal property and assistance rendered to service members in their permanent change of station moves.

-Maintenance of Installation Equipment - provides for maintenance of major shore-based equipment including: service and miscellaneous craft, construction equipment (non-deployable), weapons, electronics, electronic engineering, and fleet moorings.

-Other Base Services - Includes expenses for miscellaneous base support functions (other than Public Works functions) not otherwise included in other functional categories. Typical of such expenses are those incurred by the administrative transportation activities (including motorpools) and security.

Activity Group: Base Operations, Other (cont'd)

Base Operations - Ownership - Support required at shore bases regardless of type of mission being performed which must be sustained to have a functioning base. Expenses are included for the following functions:

-Other Engineering Support - Public Works Department administration, engineering services, custodial services, refuse/garbage collection and disposal, snow removal, rental and leasing of real property, and fire protection and firefighting for Naval Supply Systems Command activities and their tenants.

-Administration - provides support related financial/resource management, civilian manpower management, and maintaining military personnel records.

-Automated Data Processing - provides analysis programming, equipment rental, operations and maintenance, contractual services and supplies.

-Hazardous Waste Material Handling - includes personnel, supplies and training associated with the identification and disposal of hazardous wastes.

-Audiovisual - provides supplies and services required for audiovisual support.

Activity Group: Base Operations, Other (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	
Base Communications	10,926	7,036	6,527	10,826	11,585	+759
Utility Operations	20,884	21,908	21,593	21,764	20,898	-866
Personnel Operations	549	552	536	392	464	+72
Other Personnel Services	(313)	(552)	(536)	(200)	(269)	(+69)
Morale, Welfare & Recreation	(236)	(-)	(-)	(192)	(195)	(+3)
Base Operations - Mission	23,023	19,501	18,911	23,908	23,017	-891
Retail Supply Operations	(5,761)	(4,100)	(3,947)	(6,521)	(6,240)	(-281)
Maintenance of Installation Equipment	(762)	(2,500)	(2,364)	(2,383)	(2,410)	(+27)
Other Base Services	(16,500)	(12,901)	(12,600)	(15,004)	(14,367)	(-637)
Base Operations - Ownership	79,940	61,062	59,462	83,251	79,245	-4,006
Other Engineering Support	(15,179)	(13,660)	(13,357)	(15,827)	(15,483)	(-344)
Administration	(63,677)	(47,244)	(45,951)	(65,966)	(62,206)	(-3,760)
Automated Data Processing	(279)	(158)	(154)	(294)	(295)	(+1)
Hazardous Waste	(328)	(-)	(-)	(371)	(367)	(-4)
Audiovisual	(477)	(-)	(-)	(793)	(894)	(+101)
Total, Base Operating Support	135,322	110,059	107,029	140,141	135,209	-4,932

Activity Group: Base Operations, Other (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$140,141
2. Pricing Adjustments		966
A. Civilian Personnel Compensation (Direct) (-1,603)		
1) US Direct Hire Pay Adjustment	-2,341	
2) Other Direct Pricing Adjustment	738	
B. Stock Fund (-282)		
1) Fuel	-240	
2) Non-Fuel	-42	
C. Industrial Fund Rates	(266)	
D. Other Pricing Adjustments	(2,585)	
3. Functional Program Transfers		-460
A. Transfers In (122)		
1) Intra-Appropriation - Unaccompanied enlisted personnel functional transfer.	77	
2) Inter-Appropriation - Consolidation of booking office from Travis AFB to Naval Supply Center, Oakland.	45	
B. Transfers Out (-582)		
1) Intra-Appropriation - Transfer of Authorized Accounting Activity (AAA) function for Commissary Store, Nea Makri, Greece from Naval Supply Center, Norfolk to Naval Station, Rota, Spain.	-11	
2) Intra-Appropriation - Transfer of the subsistence storage activity at Alameda (NSC Oakland) to DLA.	-443	
3) Intra-Appropriation - Transfer of on-site examination from Naval Supply Center, Oakland to the Fleet Accounting and Disbursing Center, Pacific.	-128	
4. Program Increases		215
A. Other Program Growth in FY 1986 (215)		
1) Increased utilities as a result of automated warehouse operations under the Navy Integrated Storage Tracking and Retrieval System.	215	

Activity Group: Base Operations, Other (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

5. Program Decreases		-5,653
A. Other Program Decreases in FY 1986	(-5,653)	
1) Decreased utilities costs due to lower energy costs and energy conservation measures.	-450	
2) Decreased use of temporaries in accounting and bill paying functions.	-5,203	
6. FY 1986 President's Budget Request		\$135,209

III. Performance Criteria.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Base Operations (\$000)</u>	135,322	140,141	135,209
<u>Operation of Utilities (\$000)</u>	20,884	21,764	20,898
Total Energy Consumed (MBTUs)	3,414,344	3,513,899	3,572,386
Total Non-Energy Consumed (K Gals)	910,974	910,974	910,974
<u>Base Communications (\$000)</u>	10,926	10,826	11,585
Number of Instruments	21,228	21,228	21,228
Number of Mainlines	14,453	14,453	14,453
Daily Average Message Traffic	6,857	6,857	6,857
<u>Personal Operations (\$000)</u>	549	392	464
Other Personnel Support (\$000)	313	200	269
Population Served, Total	4,900	4,900	4,900
(Military, E/S)	1,300	1,300	1,300
(Civilian, E/S)	3,600	3,600	3,600
Morale, Welfare & Red (\$000)	236	192	195
<u>Base Operations--Mission (\$000)</u>	23,023	23,908	23,017
Retail Supply Oper (\$000)	5,761	6,521	6,240
Line Items Carried (000)	2,328	2,328	2,328
Receipts (000)	4,249	4,249	4,249
Issues (000)	5,467	5,467	5,467
Maint of Instal Equip (\$000)	762	2,383	2,410
Other Base Services (\$000)	16,500	15,004	14,367
No. of Motor Vehicles, Total	1,556	1,556	1,556
(Owed)	1,108	1,108	1,108
(Leased)	448	448	448

Activity Group: Base Operations, Other (cont'd)

B. Reconciliation of Increases and Decreases (cont'd).

III. Performance Criteria (cont'd).

<u>Ownership Operations (\$000)</u>	78,856	81,793	77,689
Other Engineering Sup (\$000)	15,179	15,827	15,483
Administration (\$000)	63,677	65,966	62,206
Number of Bases, Total	63	63	63
(CONUS)	62	62	62
(O/S)	1	1	1

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>4</u>	<u>4</u>	<u>4</u>
Officer	4	4	4
B. <u>Civilian</u>	<u>2,728</u>	<u>2,752</u>	<u>2,754</u>
USDH	2,728	2,752	2,754

Department of the Navy
 Operation & Maintenance, Navy
 Exhibit OP-5

Activity Group: Command and Administration
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Facilities Engineering Command)

I. Description of Operations Financed

These funds provide for salaries and related support costs of the engineers, technicians and administrative personnel in the Headquarters of the Naval Facilities Engineering Command (except for the execution of Military Construction), whose mission includes facilities and base planning; administration of Navy real estate; engineering and management support for acquisition of facilities (i.e., MILCON, including design, construction and inspection), utilities systems, and civil engineering support equipment; management of Navy family housing; administration of the Navy Environmental Protection Program; support of ocean engineering; technical support of the Naval Construction Force and other fleet units; public works support for major naval complexes executed by the Public Works Centers; and research and development related to all of the above. The personnel provide for the command and control of the field activities of the Command, as well as the programming, budgeting and financial management support for those appropriations for which the Command is responsible.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	
Command/ Administration	17,512	16,765	16,645	17,869	17,663	-206

Activity Group: Command and Administration (cont'd)

B. Reconciliation of Increase and Decreases.

1. FY 1985 Current Estimate		\$17,869
2. Pricing Adjustments		-373
A. Civilian Personnel Compensation (Direct)	(-439)	
1) U.S. Direct Hire Pay Adjustment	-571	
2) Other Direct Pricing Adjustments	132	
B. Industrial Fund	(-5)	
C. Other Pricing Adjustments	(71)	
3. Functional Program Transfers		
4. Program Increases		167
A. Other Program Growth in FY 1986	(167)	
1) Increased support for technical engineering services provided to Navy activities world-wide.	167	
5. Program Decreases		
6. FY 1986 President's Budget Request		\$17,663

III. Performance Criteria.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of field activities provided management support	21	21	21
Total civilians supported	21,627	21,393	21,145
Total military supported	1,079	1,163	1,204
Total funds (from all sources- \$ in billions)	5.2	5.5	6.2

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military End Strength</u>	<u>52</u>	<u>52</u>	<u>52</u>
Officer	45	44	44
Enlisted	7	8	8
B. <u>Civilian End Strength</u>	<u>344</u>	<u>369</u>	<u>369</u>
USDH	344	369	369

Department of the Navy
Operation & Maintenance
Exhibit OP-5

Activity Group: Field Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Facilities Engineering Command)

I. Description of Operations Financed

Field Operations include the personnel and related support costs for the Engineering Field Divisions (except for the execution of Military Construction) and the Naval Energy and Environmental Support Activity of the Naval Facilities Engineering Command. The Engineering Field Divisions are responsible for providing support to the operating forces of the Navy, the Marine Corps, and components of the Naval Material Command, in regard to shore facilities and related material and equipment, including the planning, design and construction of public works, public utilities, and special facilities for the Navy (e. g., communication facilities, runways, piers, hospitals, personnel support facilities); acquiring and disposing of Navy real estate; providing technical advice and assistance on the maintenance of facilities and operation of utilities; directing and administering family housing at assigned field installations and providing technical and engineering advice and assistance; administering the assignment, replacement, maintenance and disposal of transportation equipment (passenger vehicles, trucks, trailers, construction, firefighting and weight handling equipment); assisting and advising activities in the application of the technical programs assigned to the Naval Facilities Engineering Command; and providing facilities engineering assistance to those naval commands for which Engineering Field Divisions have been designated the principal staff advisor.

The Naval Energy and Environmental Support Activity is responsible for providing environmental protection and energy conservation support to Naval Commands. Its mission is to support: (1) the Naval Environmental Protection Support Service (NEPSS), which provides: Navy-wide environmental data management with an ADP capability, specialized air emission test teams, wastewater and potable water experts, a hazardous material/waste management and investigation team; and ship sewage and oily waste disposal experts; (2) energy conservation management; energy data management; and specialized engineering field assistance on industrial energy conservation surveys, heating and power plant optimization, and energy training; and (3) technical assistance and engineering management of procurement, overhaul and utilization of Mobile Utility Support Equipment (MUSE).

The Environmental Restoration Program represents an ongoing but newly reorganized environmental rehabilitation effort, designed to enhance the priority status and visibility of the program. FY 1984 and FY 1985 funding is provided through a separate DOD appropriation. Subsequent funding will be incorporated in the O&M,N appropriation. Funding supports:

Activity Group: Field Operations (cont'd)

I. Description of Operations Financed (cont'd)

1. Installation Restoration Program. This is a comprehensive, multi-phase program to identify, investigate, confirm, and clean up contamination from hazardous substances and wastes on active installations. Specific projects include Initial Assessment Studies (IAS), Confirmation Studies (CS), groundwater monitoring projects and remedial measures.

2. Building Demolition and Debris Removal Program. The purpose is to plan and execute a comprehensive program to demolish and remove unsafe, unsightly, and hazardous buildings and structures on active Navy and Marine Corps installations.

3. Other Hazardous Waste Disposal Operations. These include studies and the purchase of hardware to reduce hazardous waste generation, as well as one-time waste permit costs required under the Resource Conservation and Recovery Act.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout

	FY 1984	FY 1985			FY 1986	Change
		Budget Request	Appropriation	Current Estimate	Budget Request	
Engineering Field Divisions	51,092	56,106	55,036	54,777	51,183	-3,594
Navy Energy/ Environ Spt Act	3,558	3,396	3,366	3,417	3,397	-20
Environmental Restoration	-0-	40,200	-0-	-0-	42,906	42,906
Total Field Operations	54,650	99,702	58,402	58,194	97,486	39,292
(Environmental Restoration Defense)	(15,529)	-	(31,300)	(37,725)	-	(-37,725)

* FY 1984 and FY 1985 execution under the separate Environmental Restoration, Defense Appropriation (ERDA). Figures shown for information only.

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases.(cont'd)

1. FY 1985 Current Estimate		\$ 58,194
2. Pricing Adjustments		-554
A. Civilian Personnel Compensation (Direct)	(-1,158)	
1) U. S Direct Hire Pay Adjustments	-1,575	
2) Other Hiring Adjustments	417	
B. Industrial Fund Rates	(17)	
C. Other Pricing Adjustments	(587)	
3. Functional Program Transfers		42,101
A. Transfers In	(42,906)	
1) Inter-Appropriation: Transfer of Environmental Restoration Program from Environmental Restoration, Defense Appropriation (ERDA).	42,906	
B. Transfers Out	(-805)	
1) Intra-Appropriation: Transfer of Administrative Telephone functions from NAVFAC to NAVTELCOM.	-805	
4. Program Decrease		-2,255
A. Other Program Decreases in FY 1986	(-2,255)	
1) Decrease in contracted technical support for all Naval activities especially for energy and utilities system studies.	-2,255	
5. FY 1986 President's Budget Request		\$ 97,486

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria. (\$000)</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. Facilities and Base planning: Master planning and special studies related to facilities base requirements and utilization.	9,638	10,577	10,128
B. Administration of Navy Real Estate effort related to acquisisiton, disposal and leasing of real estate.	3,321	3,706	3,627
C. Utilities, Transportation and Other Facilities: Engineering and managment support to major claimants in relation to all Naval Shore Facilities. Review audits and validate requirements for Civil Engineering Support and Weight Handling Equipment.	23,689	25,987	23,924
D. Management of Family Housing: Oversees the complete planning, construction and management of Navy Family Housing.	1,739	1,993	1,912
E. Administration of Navy Environmental Protection Program: Validate, develop and implement projects to correct pollution problems.	1,409	1,464	1,411
F. Energy Engineering: This program provides the resources required to improve the energy efficiency of the shore establishment leading to a 20 percent reduction in energy use by 1985. Execution of the program is primarily through contractual effort.	11,816	11,663	10,714
G. Pollution Abatement: Performance of air emission testing and hazardous waste investigations. Central managment of the environmental data system and dissemination of technical and managerial guidance.	2,405	2,295	2,340

Activity Group: Field Operations(cont'd)

III. Performance Criteria. (\$000) (cont'd)

H.	Mobile Utility Support Equipment: Provides for the assignment, inspection, procurement and other technical management of MUSE.	633	509	524
I.	Environmental Restoration Program: Facilitates centralized execution of Navy efforts in the area of environmental protection.	-	-	42,906
	TOTAL	54,650	58,194	97,486

IV. Persomnel Summary (End Strength.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. Military	<u>469</u>	<u>587</u>	<u>617</u>
Officer	430	528	529
Enlisted	39	59	88
B. Civilian	<u>1248</u>	<u>1257</u>	<u>1253</u>
UDSH	1248	1257	1253

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Logistics Support Services
Program Budget Activity: 7 Central Supply and Maintenance
Claimant: Chief of Naval Material (Naval Facilities Engineering Command)

I. Description of Operations Financed

Funding supports shore facilities and fleet support programs which are the responsibility of the Naval Facilities Engineering Command and include:

a) Collateral Equipment Program which provides centralized funding for collateral equipment required to initially outfit new military construction at naval activities throughout the shore establishment; b) Engineering Investigations Program which provides engineering investigations, feasibility studies and surveys for more than 700 naval activities; c) Inspection of Radio Towers Program provides direct support to the fleet through structural inspection of radio towers; d) Soil Conservation and Natural Resources Program provides technical assistance to improve erosion control and conservation; e) Planning Studies Program provides architectural and engineering services and studies, computer support, mapping support and specialized industrial support studies; f) Pollution Abatement Program identifies pollution abatement deficiencies, develops technical solutions and provides technical assistance to all Navy field activities to comply with various public laws; g) Federal Military Standards and Specifications Program provides for development, review, conversion, consultation and publication of federal and military specifications; h) Fleet Moorings Program provides for the installation, relocation, inspection, maintenance and repair of moorings; i) the Ocean Facilities Program provides for the maintenance, repair and overhaul of specialized ocean construction equipment; and j) Materials technology, which consists of (1) Base Engineering Support Technical (BEST) Program which provides software development and training for a management information system for all larger Naval Public Works Departments to improve workload scheduling, personnel utilization, and cost estimating; (2) Chemical, Biological, and Radiological (CBR) Warfare Protection Program which provides protective masks, suits, and meters to counter the effects of CBR warfare; (3) non-2C cog equipment used by the Naval Construction Force; (4) base operating technical support and analysis for all Navy claimants; and (5) administrative, public works shop, and specialized inspection equipment for the Naval Facilities Engineering Command and its field activities.

Activity Group: Logistics Support Services (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	
Collateral Equipment	24,794	36,018	35,301	35,108	47,240	12,132
Engr Investigations	3,086	6,446	4,216	4,216	6,156	1,940
Radio Towers	156	320	220	220	324	104
Soil Conservation and Natural Resources	362	461	434	434	469	35
Planning Studies	2,372	3,655	3,471	3,471	4,013	542
Pollution Abatement	3,974	9,185	8,796	8,796	13,634	4,838
Federal Standards & Specifications	1,267	1,867	1,267	1,300	2,066	766
Fleet Moorings	3,040	892	855	900	4,716	3,816
Ocean Facilities	768	1,319	1,290	1,290	2,091	801
Materials Technology	<u>4,208</u>	<u>7,449</u>	<u>7,078</u>	<u>7,078</u>	<u>19,586</u>	<u>12,508</u>
Total, Logistics Support Services	44,027	67,612	62,928	62,813	100,295	37,482

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimates		\$ 62,813
2. Pricing Adjustments		2,546
A. Stock Fund	(1,218)	
1) Non-Fuel	1,218	
B. Industrial Fund Rates	(-35)	
C. Other Pricing Adjustments	(1,363)	
3. Functional Program Transfers		34,925
A. Transfers In	(34,925)	
1) Inter Appropriation Expense/Investment Criteria Revision - collateral equipment, ocean construction equipment, administration, Public Works shop, and specialized inspection equipment funding transferred from Other Procurement, Navy (OPN), pursuant to the proposed DOD initiative to eliminate the current \$3,000 per item investment threshold in favor of centralized management feasibility as the governing factor.	34,925	

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

4. Program Increases	20,070
A. Other Program Growth in FY 1986	(20,070)
1) Provides for protective measures at overseas locations to counter the effects of Chemical/Biological/Radiological (CBR) warfare.	8,705
2) Increased effort for the development of facility mobilization readiness plans.	393
3) Increased effort for overhaul, upgrade, and cyclical inspection of fleet moorings.	3,776
4) Provides for a reduction of the current average update cycle of federal/military standards and specifications down to the five-year DOD standard. Many of these documents are out of date with energy and environmental goals, changing technology, and new weapons system requirements.	710
5) Increased effort for the update of 14 engineering and design manuals, which will lower the current seven-year average cycle toward the five-year DOD update standard.	1,848
6) Increased effort for corrective Pollution Abatement projects to eliminate ground water contamination, and provide for industrial waste pretreatment and spill prevention.	4,527
7) Increased effort in radio tower inspections and soil conservation.	111
5. Program Decreases	-20,059
A. One-time FY85 Costs	(-704)
1) Decrease due to completion of Washington Navy Yard facilities studies.	-186
2) Decrease due to completion of periodic replacement of hull plates on the Ocean Construction Platform, SEACON (Ocean Facilities Program).	-518

Activity Group: Logistics Support Services (cont'd)

B. Reconciliation of Increases and Decreases (cont'd)

B. Other Program Decreases in FY 1986 (-19,355)

1) Decreased procurement of collateral equipment associated with initial outfitting of military construction projects. -18,021

2) Decreased effort for software development and training of public works department employees related to the Base Engineering Support Technical (BEST) management information system. -806

3) Decreased effort for base operations technical support and analysis provided to Navy claimants. -168

4) Reduced procurement of odd-cog combat support items required for the Naval Construction Force. -360

6. FY 1986 OSD/OMB Budget Request \$100,295

III. Performance Criteria.

Collateral Equipment

The FY 1986 budget includes resources for initial outfitting of Congressionally authorized Military Construction, Navy (MCON) projects and the Government of Japan (GOJ) Relocation and Facilities Improvement Programs, with construction usable completion dates (UCD's) as follows:

Overseas: June 1986
CONUS: June 1986

In addition, the budget includes resources for the replacement and augmentation of furniture, furnishings, and equipment required for unaccompanied personnel facilities at activities under the command of the Chief of Naval Material (CNM).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Initial Outfitting-MCON	\$18,943	\$32,028	\$44,299
Initial Outfitting-GOJ	3,663	3,050	2,911
CNM Augmentation Program	2,188	30	30
TOTAL Dollars (\$000)	\$24,794	\$35,108	\$47,240

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd).

Engineering Investigations

The Engineering Investigations (E.I.) Program provides immediate access to the private sector and laboratories via contract and is a key element in the Naval Facilities Engineering Command's ability to quickly mobilize the skills, talents, and knowledge required to resolve facilities problems in four important areas: seismic, engineering design criteria, long-term ongoing projects, and unpredictable critical requirements from more than 700 Naval activities.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Dollars (\$000)	\$ 3,086	\$ 4,216	\$ 6,156
No.	56	55	69

Inspection of Radio Towers

Radio tower inspections are performed by professional contractual personnel and provide early detection of potential problem areas, prevent possible structural tower failures, identify maintenance deficiencies and save extensive rehabilitation costs.

The present scope includes examination of individual elements, rate of deterioration, effect of damage, necessity for repair, tower verticality and rod alignment. Additionally, the following requirements are included in all contracts:

- a. Inspect all counterweight subsystems
- b. Inspect all top hat subsystems
- c. Inspect all feed line subsystems
- d. Inspect all cables in running rigging subsystems
- e. Inspect a random sampling of bolts for corrosion

The frequency of radio tower inspections vary due to several reasons. Namely, certain activities inspect their towers on a two year frequency and others on a four year frequency. Therefore, in FY 85 there is a preponderance of 1200-1500 foot towers which are fewer in number while in FY 86 there is a preponderance of 100-300 foot towers spread throughout the Pacific.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Dollars (\$000)	\$156	\$220	\$324
Towers Inspected	79	59	123

Soil Conservation and Natural Resources

This program consists of projects and studies for soil conservation, grounds maintenance, and natural resources management that vary in scope from individual installations surveys of \$4K to Navy-wide project of \$50K.

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Dollars (\$000)	\$ 362	\$ 434	\$ 469
Numbers of Projects	30	25	34

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd).

Planning Studies

This program provides for the support of computerized planning systems; Architectural and Engineering (A&E) contractual mapping and planning studies; and facility planning requirements at Naval Base complexes. The chart below indicates funding levels required for each aspect of the program.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>No.</u>	<u>\$</u>	<u>No.</u>	<u>\$</u>	<u>No.</u>	<u>\$</u>
A&E Planning Studies	14	1,694	22	2,827	20	2,913
A&E Encroachment Studies	2	47	4	415	3	400
A&E Facility Planning Studies	N/A	631	1	29		
A&E Mobilization Planning Studies			4	200	14	700
TOTAL Dollars (\$000)	<u>16</u>	<u>\$2,372</u>	<u>31</u>	<u>\$3,471</u>	<u>37</u>	<u>\$4,013</u>

Funds are used to provide intermediate products as well as final products. For instance, A&E Planning Studies buy activity and complex master plans. Noise studies which are used in writing Air Installation Compatible Use Zone Chapters (AICUS) for master plans are paid for from these funds. Studies vary significantly in scope and the length of time required for accomplishment. For instance, the POL Study for DOD activities in Japan has taken over 4 years to complete and has been accomplished using funds from 3 fiscal years with a total cost of \$646,453. Traffic studies cost only \$2,000 to \$3,000 each.

Pollution Abatement

Projects are developed based upon the need to correct deficiencies to meet standards established under various public laws. The following schedule shows the funding plan by type of operation:

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Air	\$ 722	\$1,709	\$2,722
Water	1,402	3,679	5,554
Noise	353	303	430
Solid Waste	1,214	2,755	4,355
Pesticides	283	350	573
TOTAL Dollars (\$000)	<u>\$3,974</u>	<u>\$8,796</u>	<u>\$13,634</u>

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd).

Federal Military Standards and Specifications

This workload is developed from procurement contract requirements, and from various specifications and standards that require review and/or revision. The number of documents to be developed or revised in FY 1985 as compared to FY 1983 or FY 1984 includes a complex specification for pumping assemblies, which involves a time consuming review process. Also, a specification for Acetylene Generators is scheduled in FY 1985 which again is more complex in scope than routine revisions and/or developments for such things as Motorized Rollers or Rotor Sweepers.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>No.</u>	<u>\$(000)</u>	<u>No.</u>	<u>\$(000)</u>	<u>No.</u>	<u>\$(000)</u>
Develop/Revise standardization documents (Number of Documents)	253	630	230	498	385	775
Technical review of standardization documents prepared by others (Number of Documents)	1,523	588	1,523	723	2,000	1,160
Data Management for acquisition contracts (Number of Activities Served)	4	30	23	48	23	80
Number of centrally managed federal supply classes	16	19	16	31	16	51
Total Dollars (\$000)		\$1,267		\$1,300		\$2,066

Fleet Moorings

The installation, relocation, removal, maintenance and repair of all fleet moorings for the Navy is financed by this line item. Funds are needed for existing mooring upgrade where detailed inspections show inadequate holding capacity for required ship loadings, as well as, annual maintenance, repair and inspection.

	<u>FY 1984</u>		<u>FY 1985</u>		<u>FY 1986</u>	
	<u>No.</u>	<u>\$(000)</u>	<u>No.</u>	<u>\$(000)</u>	<u>No.</u>	<u>\$(000)</u>
Overhauls	61	\$2,523	6	\$ 514	24	\$2,575
Upgrades (new chain, cathodic protection, fiberglass)	-	-	-	-	17	1,925
Cyclical Inspection	300	340	100	136	114	216
Installation of Moorings	1	177	4	250	-	-
TOTAL dollars (\$000)		\$3,040		\$ 900		\$4,716

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd).

Ocean Facilities

This program provides for overhaul, maintenance, and repair of the ocean construction equipment which provides the Naval Construction Force with the capability to respond to and fulfill both exigent and planned fleet needs for construction, inspection, maintenance and repair of high value ocean and underwater facilities.

	<u>FY 1984</u> <u>(\$000)</u>	<u>FY 1985</u> <u>(\$000)</u>	<u>FY 1986</u> <u>(\$000)</u>
Maintenance and overhaul of the Ocean Construction Equipment Inventory	\$ 551	\$1,169	\$ 587
Replacement of facilities components	73	35	74
Facilities support and maintenance	118	68	124
New equipment	26	18	1306
TOTAL dollars (\$000)	\$ 768	\$1,290	\$2,091

Materials Technology

Includes: Base Engineering Support, Technical (BEST) which provides for contract costs of software maintenance, installation, and training of public works department employees to improve workload scheduling, personnel utilization and cost estimating for all Navy facilities; Chemical, Biological, Radiological (CBR) warfare program which is part of the initiative by the Navy to equip Naval Construction Force (NCF) personnel with protective clothing, detectors, decontamination equipment and protective structures to counter the effects of chemical warfare; Non-2c cog equipment for the Naval Construction Force; Defense relocation at the Washington Navy Yard; Base operating technical support and analysis for all Navy claimants; administrative equipment, Public works shops equipment and specialized inspection equipment for the Naval Facilities Engineering Command and its field activities.

	<u>FY 1984</u> <u>(\$000)</u>	<u>FY 1985</u> <u>(\$000)</u>	<u>FY 1986</u> <u>(\$000)</u>
BEST			
Software Development	\$ 644	\$ -	\$ -
Software Maintenance & Installation	-	629	165
Training	536	805	525
(Subtotal BEST)	(1,180)	(1,434)	(690)

Activity Group: Logistics Support Services (cont'd)

III. Performance Criteria (cont'd).

Materials Technology (cont'd)

	<u>FY 1984</u> <u>(\$000)</u>	<u>FY 1985</u> <u>(\$000)</u>	<u>FY 1986</u> <u>(\$000)</u>
CBR			
Protective masks	-	2,770	2,048
Protective clothing (overgarments, gloves, hoods, etc.)	1,571	1,160	469
Decontamination materials and equipment	-	200	300
Detectors, alarms, training aids, etc.	-	44	1,000
Protective structures	-	-	9,241
(Subtotal CBR)	(1,571)	(4,174)	(13,058)
Naval Construction Force Equipment	-	779	452
BOS Tech Support and Analysis	287	513	367
Defense Relocation	-	178	-
Energy Conservation Awards	1,170	-	-
Administrative Equipment	-	-	4,750
Public Works Shop Equipment	-	-	181
Specialized inspection equipment	-	-	88
TOTAL dollars (\$000)	\$4,208	\$7,078	\$19,586

IV. Personnel Summary

No personnel associated with this activity group.

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Maintenance of Real Property
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Naval Facilities Engineering Command)

I. Description of Operations Financed.

Maintenance of Real Property supports repair of and minor construction additions to naval facilities which are critical to preservation of fleet support activities. Funding in this activity group reflects Navy efforts to reduce the backlog of maintenance and repair at naval facilities in accordance with the Congressional direction to contain the backlog at \$536M by the end of FY 1988. The subactivities included under the Real Property Maintenance group are described below:

A. Maintenance/Repair

1. Facilities Maintenance finances routinely scheduled maintenance and emergency repairs for NAVFAC field activities.

2. Major Repair - finances more substantial maintenance projects over \$75K which are required to bring existing facilities into adequate condition to permit activities under the cognizance of the Chief of Naval Material to fulfill their assigned mission. Also included is the cost of the administration and contract execution of the entire Navy/Marine Corps Operations and Maintenance Repair Projects program by the Engineering Field Divisions; and the cost of projects specifically designed to correct facility deficiencies relating to the Navy's Occupational Safety and Health Program.

B. Minor Construction - finances projects under \$200K for alterations to facilities, extensions of utility systems, additions to existing facilities, replacement of damaged or deteriorated facilities. In addition, the installation of equipment which is made part of a facility to permit activities under the cognizance of the Chief of Naval Material to accomplish their assigned mission is also financed in this sub-activity group. Also funds minor construction relating to the Navy's Occupational Safety and Health Program and routine minor construction projects for NAVFAC field activities.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986	
		Budget Request	Appropriation	Current Estimate	Budget Request	Change
Facilities Maintenance	17,888	23,816	23,150	21,990	22,160	170
Major Repair	68,134	94,114	92,949	92,458	77,033	-15,425
Minor Construction	7,776	13,531	13,263	13,263	10,791	-2,472
Total, Maintenance of Real Property	93,798	131,461	129,362	127,711	109,984	-17,727

Activity Group: Maintenance of Real Property (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$127,711
2. Pricing Adjustments		2,953
A. Civilian Personnel Compensation (Direct)	(-899)	
1) U.S Direct Hire Pay Adjustment	-1,369	
2) Other Direct Pricing Adjustments	470	
B. Stock Fund	(-41)	
1) Non-Fuel	-41	
C. Industrial Fund Rates	(716)	
D. FN Indirect	(117)	
E. Other Pricing Adjustments	(3,060)	
3. Program Decreases		-20,680
A. One-Time FY 1985 Costs	(-15,000)	
1) Major FY 1985 BEQ/BOQ maintenance upgrade program at activities under Chief of Naval Material (CNM) cognizance	-15,000	
B. Other Program Decreases in FY 1986	(-5,680)	
1) Reduction in contract major repair projects at activities under CNM cognizance only. (Projects at other naval activities are funded in other Navy claimant budgets).	-1,725	
2) Reduction in CNM minor construction program.	-1,951	
3) Reduction in Navy OSHA program effort in both maintenance and minor construction areas.	-2,004	
4. FY 1986 President's Budget Request		\$109,984

III. <u>Performance Criteria and Evaluation</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Maintenance of Real Property</u>			
Backlog, Maint/Repair (\$000)	29,435	30,923	32,411
Total Buildings (KSF)	11,404	11,404	11,404

Activity Group: Maintenance of Real Property (cont'd)

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>66</u>	<u>61</u>	<u>61</u>
Officer	13	10	10
Enlisted	53	51	51
B. <u>Civilian</u>	<u>1,471</u>	<u>1,446</u>	<u>1,522</u>
USDH	1,328	1,309	1,385
FNIH	143	137	137

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Other Base Operations
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material/(Naval Facilities Engineering Command)

I. Description of Operations Financed

The Other Base Operations Program involves support of fourteen functions (subactivities) related to operation of various field activities which are under Naval Facilities Engineering Command (NAVFAC) direction. There are also included a number of Navy-wide programs around the world. The subactivities included under the Other Base Operations program are described below:

A. Utility Operations. Included are costs of purchased utilities and also utility system generation/distribution costs where applicable at all field activities under NAVFAC direction. The Mobile Utility Support Equipment (MUSE) Overhaul Program finances the repair of portable steam plants and the Electrical Water Analysis Program supports quality testing of coal burned at naval facilities and also chemical analysis of industrial waste water produced as a result of daily operations.

B. Personnel Operations.

1. Bachelor Housing. Provides support for the operation of barracks, personnel housing, BOQs, BEQs and the purchase and maintenance of personnel support equipment related to the housing of personnel.

2. Other Personnel Support. Provides for food service facilities (mess halls, galleys), sales activities, laundry and dry cleaning facilities and initial procurement, repair, and replacement of furniture and furnishings.

3. Morale, Welfare and Recreation. Provides authorized appropriated fund support for shore based recreation activities, special services, personnel support equipment, libraries, clubs and military and civilian general recreation and other membership associations.

C. Base Operations - Mission.

1. Retail Supply Operations. This function involves storage of critical Seabee support material inventories prior to issuance worldwide, as well as procurement and other activities common to organic supply department.

2. Maintenance of Installation Equipment. Included in this subactivity group is maintenance of major plant equipment at Construction Battalion Centers. Overhaul of NAVFAC-owned service craft such as working tugs employed at coastal facilities is also funded here.

3. Other Base Services. The costs budgeted here are for base transportation and associated vehicle/craft operation and routine maintenance. Also included is the centrally managed program for Civil Engineering Equipment Overhaul which covers periodic rehabilitation of heavy engineering equipment used worldwide. Operation of Family Service Centers at major NAVFAC field activities is also covered here.

Activity Group: Other Base Operations (cont'd)

D. Base Operations - Ownership.

1. Engineering Support. This area includes public works administration, custodial services, garbage collection, facility inspection, and firefighting services performed at NAVFAC activities.

2. Administration. Funding covers costs of financial management operations, as well as personnel and training offices, at Construction Battalion Centers and the Naval Support Facility.

3. Automated Data Processing. This subactivity group is composed of the management support costs of in-house computer programming, as well as equipment rental and other contractual ADP purchases.

4. Audiovisual Services. Provides supplies and services required for audiovisual support.

E. Base Communications. This represents the cost incurred by Headquarters, Naval Facilities Engineering Command, the six Engineering Field Divisions, and the three Construction Battalion Centers for telecommunications requirements. Specifically, these requirements include equipment rental; rental of leased communication lines to operate rapid communication and administrative telephones; and telephone services including toll charges.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1984	FY 1985			FY 1986	Change
		Budget Request	Appropriation	Current Estimate	Budget Request	
Utility Operations	7,907	11,191	10,766	9,592	8,593	-999
Personnel Operations	3,123	3,112	2,996	3,014	3,000	-14
Base Ops - Mission	29,680	35,441	32,048	32,610	39,789	7,179
Base Ops - Ownership	29,195	29,568	29,024	30,698	35,115	4,417
Base Communications	2,623	1,248	1,248	1,990	1,885	-105
Total, Other Base Operations	72,528	80,560	76,092	77,904	88,382	10,478

Activity Group: Other Base Operations (cont'd)

B. Reconciliation of Increase and Decreases.

1. FY 1985 Current Estimate		\$77,904
2. Pricing Adjustments		633
A. Civilian Personnel Compensation (Direct)	(-741)	
1) U.S. Direct Hire Pay Adjustment	-1,131	
2) Other Direct Pricing Adjustments	390	
B. Stock Fund	(-323)	
1) Fuel	-108	
2) Non-Fuel	-215	
C. Industrial Fund Rates	(439)	
D. FN Indirect	(90)	
E. Other Pricing Adjustments	(1,168)	
3. Functional Program Transfers		3,474
A. Transfers In	(3,552)	
1) Inter-Appropriation		
a. Expense/Investment Criteria		
Revision: ADP equipment funding		
transferred from Other		
Procurement Navy (OPN), pursuant		
to the proposed DOD initiative to		
eliminate current \$3,000 per		
item investment threshold in		
favor of centralized management		
feasibility as the governing		
factor.	3,552	
B. Transfers Out	(-78)	
1) Intra-Appropriation		
a. Civilian personnel administration		
from CBC Davisville to		
CCPO Newport (NETC).	-78	
4. Program Increases		9,597
A. Other Program Growth in FY 1986	(9,597)	
1) Increase for contract maintenance		
on the second of thirteen Mari-		
time Prepositioning Ships (MPS)		
under the Sealift Support		
Facilities Program. The increased		
funding also provides for spare		
parts and equipment maintenance		
to preserve the readiness of		
existing ship inventories. A major		
goal of the Sealift Program is to		
provide logistics support for the		
4th Marine Air-Ground Task Force		
(4-MAGTF), whose purpose is to		
respond rapidly in emergency		
warfare contingencies.	3,065	

Activity Group: Other Base Operations (cont'd)

B. Reconciliation of Increase and Decreases (cont'd).

2) Increased effort in Civil Engineering Equipment Overhaul program. This does not represent a major new initiative, but rather a restoration of the program to its 1984 level to reduce major backlog.	6,100
3) Increased ADP efforts related to automation projects under development.	237
4) Increased administrative workload associated primarily with heavy investment for a major upgrade of Reserve Naval Construction Force (RNCF) equipment investment funded under O&M, NR and Guard and Reserve Equipment Defense appropriations.	167
5) Increased effort at CBCs for base physical security to help thwart potential terrorist activity.	28
5. Program Decreases	-3,226
A. Other Program Decreases in FY 1986	(-3,226)
1) Reduction in Mobile Utilities Support Equipment (MUSE) overhaul effort.	-1,288
2) Reduced effort in supply operations area based on anticipated elimination of logistics support backlog by end of FY 1985.	-1,706
3) Reduction due to planned efficiencies and economies in use of long distance communications.	-191
4) Decreased effort in personnel support areas due to lessened requirements after significant increases in FY 1984 and 1985.	-41
6. FY 1986 President's Budget Request	88,382

I. Performance Criteria and Evaluation

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>Base Operations (\$000)</u>	72,528	77,904	88,382
<u>Operation of Utilities (\$000)</u>	7,907	9,592	8,593
Total Energy Consumed (MBTUs)	755,728	742,379	712,189
Total Non-energy Consumed (K Gals)	289,685	289,685	289,685
<u>Base Communications (\$000)</u>	2,623	1,990	1,885
Number of Instruments	11,663	11,663	11,663
Number of Mainlines	7,939	7,939	7,939
Daily Average Message Traffic	1,031	1,056	1,056
<u>Personnel Operations (\$000)</u>	3,123	3,014	3,000
Bachelor Housing (\$000)	259	282	384
No. of Officer Quarters	86	86	86
No. of Enlisted Quarters	4,359	4,359	4,359
Other Personnel Support (\$000)	1,826	1,946	1,725
Population Served, Total	56,072	56,072	56,072
(Military, E/S)	9,362	9,362	9,362
(Civilian, E/S)	46,710	46,710	46,710
Morale, Welfare & Rec. (\$000)	1,038	786	891
Population Served, Total	56,072	56,072	56,072
(Military, E/S)	9,362	9,362	9,362
(Civilian, E/S)	46,710	46,710	46,710
<u>Base Operations - Mission (\$000)</u>	29,680	32,610	39,761
Retail Supply Operations (\$000)	13,594	13,421	11,390
Line Items Carried (000)	93	93	93
Receipts (000)	85	85	85
Issues (000)	363	365	365
Maint. of Installed Equipment (\$000)	6,877	12,447	15,668
Other Base Services (\$000)	9,209	6,742	12,703
No. of Motor Vehicles, Total	982	982	982
(Owned)	975	975	975
(Leased)	7	7	7
<u>Ownership Operations (\$000)</u>	29,195	30,698	35,143
Other Engineering Support (\$000)	17,700	19,070	19,628
Administration (\$000)	11,495	11,628	15,487
Number of Bases, Total	4	4	4
(CONUS)	4	4	4
(Overseas)	-	-	-

Activity Group: Other Base Operations (cont'd)

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>490</u>	<u>461</u>	<u>472</u>
Officer	65	72	68
Enlisted	425	389	404
B. <u>Civilian</u>	<u>1,367</u>	<u>1,355</u>	<u>1,384</u>
USDH	1,274	1,210	1,239
FNIH	93	145	145

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Command and Administration
 Budget Activity: 7-Central Supply and Maintenance
 Claimant: Chief of Naval Material (Headquarters, Naval Material Command)

I. Description of Operations Financed.

The Chief of Naval Material (CNM) directs the development and acquisition of equipment and weapons systems for the Fleet. Also, CNM directs the logistics and maintenance support of weapon systems and equipment currently in the Fleet. Funds within this activity group include personnel compensation and training, printing and reproduction, travel, supplies, office equipment and furniture, word processing, renovation and relocation and other expenses to support the Chief of Naval Material and his staff.

II. Financial Summary (Dollars in Thousands).

A. Sub-activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>		<u>FY 1986</u>		<u>Change</u>
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	
Command and Administration	<u>19,217</u>	<u>19,518</u>	<u>19,490</u>	<u>20,017</u>	<u>20,040</u>	+23
Total, (Command and Administration)	19,217	19,518	19,490	20,017	20,040	+23

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate	\$20,017
2. Pricing Adjustments	-516
A. Civilian Personnel Compensation (-576)	
(1) U.S. Direct Hire	-673
(2) Other Direct Pricing Adjustment	97
B. Industrial Fund Rates (-3)	
(1) Navy Regional Data Command Rate Adjustment	-3
C. Other Pricing Adjustments (63)	

Activity Group: Command and Administration (cont'd)

3. Functional Program Transfers

4. Program Increases 539

- A. Other Program Growth in FY 1986 (539)
- (1) Two Physical Security Specialists with oversight and coordination responsibilities for the Physical Security Program in the Naval Material Command. 63
 - (2) Maintenance contracts for equipment bought instead of leased. 176
 - (3) Furniture - replacement furniture required. 84
 - (4) Supplies and Materials and Printing and Reproduction increase to match basic personnel support requirements. 216

5. Program Decreases

6. FY 1986 President's Budget Request \$20,040

III. <u>Performance Criteria.</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Subordinate Commands	5	6	6
Designated Project Mangers	5	4	4
Acquisition Funding	\$30.8B	\$36.9B	\$37.2B
Operating & Maintenance Funding	\$ 9.5B	\$10.8B	\$11.5B

IV. Personnel Summary (End Strength).

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>113</u>	<u>116</u>	<u>113</u>
Officer	93	96	93
Enlisted	20	20	20
B. <u>Civilian</u>	<u>416</u>	<u>432</u>	<u>434</u>
USDH	416	432	434

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Field Operations
Budget Activity: 7-Central Supply and Maintenance
Claimant: Chief of Naval Material (Headquarters, Naval
Material Command)

I. Description of Operations Financed.

Resources within this Activity Group finance field activities which provide specialized services throughout the Naval Material Command and in the Fleet.

Navy Management Systems Support Office:

The mission of the Navy Management Systems Support Office (NAVMASSO) is to design, develop, implement, and provide life-cycle support for standard Fleet Nontactical Automated Information Systems afloat and ashore, and perform such other functions as directed by the Chief of Naval Material. NAVMASSO trains and assists fleet users in the operation of these information systems, and performs other tasks in the software analysis and functional areas as directed by higher authority. NAVMASSO functions as the single Central Design Agency (CDA) for fleet nontactical information systems.

Consolidated Civilian Personnel Office - Crystal City:

The mission of the Consolidated Civilian Personnel Office - Crystal City (CCPO-CC) is to provide the full range of civilian personnel services for Naval Material Command components in the National Capital Region including position classification, position management, staffing, performance appraisal systems, employee relations and services, employee assistance programs and employee development and training programs. The CCPO-CC maintains liaison with the Systems Command, Project Managers, Chief of Naval Operations, Office of Personnel Management and other offices on civilian personnel operating policies and procedures. Recruiting efforts include nationwide campaigns to locate and hire qualified personnel with skills currently in short supply in the National Capital Region.

Automated Data Processing Selection Office (ADPSO):

ADPSO is responsible for evaluating and selecting for approval by the senior ADP Policy Official, ADP Resources (equipment, software, and contractual services) which are above specified thresholds; acting, when delegated, as the Department of the Navy Contracting Office for the procurement of the foregoing ADP resources; and performing such other functions as directed.

Activity Group: Field Operations (cont'd)

Miscellaneous Field Activities:

The mission of the Naval Material Command Industrial Resources Detachment (NMCIRD) is to serve as the Navy focal point for implementation of the Industrial Plant Equipment Program. It supports the Chief of Naval Material with regard to the commercial or industrial activities and the manufacturing technology programs.

The mission of the Office of Naval Technology (ONT) is to manage, direct, and coordinate the Department of the Navy Exploratory Development ("6.2") efforts in the "6.2" program to ensure the maintenance of an appropriate balance of focused and generic technology projects consistent with current and future Navy and Marine Corps requirements. ONT develops and implements the necessary measures to ensure effective transition of technology program outputs to higher development categories to improve Naval and Marine Corps capabilities. ONT coordinates with the Chief of Naval Reserve (CNR) to develop and implement measures to employ suitable outputs of the Naval Research Program in appropriate exploratory development projects. The Office of Naval Technology is functionally transferred to the Chief of Naval Research in FY 1986.

II. Financial Summary (Dollars in Thousands).

A. Sub-activity Group Breakout.

	<u>FY1984</u>	<u>FY 1985</u>			<u>FY1986</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appro- priation</u>	<u>Current Est</u>	<u>Budget Request</u>	
NAVMASSO	24,881	25,921	23,369	24,677	32,803	+8,126
CCPO-CC	9,626	8,843	8,643	8,739	8,945	+206
ADPSO	0	2,136	2,136	2,209	2,071	-138
Misc Field Ops	<u>1,430</u>	<u>2,456</u>	<u>2,456</u>	<u>2,456</u>	<u>3,668</u>	<u>+1,212</u>
Total (Field Activities)	35,937	39,356	36,604	38,081	47,487	+9,406

Activity Group: Field Operations (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$38,081
2. Pricing Adjustments		156
A. Civilian Personnel	(-615)	
Compensation		
(1) US Direct Hire Pay	-615	
Adjustment		
B. Industrial Fund Rates	(-22)	
(1) Navy Regional Data	-22	
Center (NARDAC) Rate		
Adjustment		
C. Other Pricing Adjustment	(793)	
3. Functional Program Transfers		1,095
A. Transfers Out	(-1,852)	
(1) Inter-Appropriation:	-1,852	
Office of Naval		
Technology trans-		
ferred to Chief of		
Naval Research		
B. Transfers In	(2,947)	
(1) Inter-Appropriation:	2,947	
Expense/Investment		
Criteria Revision -		
Amounts transferred		
from Other Procurement		
Navy pursuant to the		
proposed DOD initiative		
for elimination of		
\$3 thousand investment		
threshold and adoption		
of central management		
criteria as governing		
factor.		
4. Program Increases		8,155
A. Purchased utilities	(16)	
Increased facilities at		
NAVMASSO will increase		
utility costs.		
B. Purchased communications	(26)	
Estimate for increased costs		
for telephone service.		
C. Rents	(3)	
Increased rent of temporary		
facilities used to support		
SNAP installations aboard		
ship.		

Activity Group: Field Operations (cont'd)

- D. Supplies and Materials (106)
In support of increased level of activity in the installation of non-tactical computers aboard ship.
 - E. Printing and Reproduction (56)
To support the printing of technical guidance for shipboard personnel in the use and logistical support of the shipboard nontactical computers.
 - F. Supports installation of (7232)
shipboard nontactical computers and associated software. The support includes equipment and software installation, the initial loading of data into the computer (e.g. repair parts inventory), initial crew training in operation and maintenance of the system and trouble call response at the request of the Fleet user.
 - G. Personnel costs reflecting (454)
23 additional end strengths to support increasing work load as nontactical computer central design activity.
 - H. Provides for the shipment of tools, manuals, and other equipment to ships to install non-tactical computer systems. (3)
 - I. Industrial Fund Purchases (259)
Navy Regional Data Automation Center, Washington's increasing range of ADP services require additional resources.
5. Program Decreases
6. FY 1986 President's Budget Request \$47,487

Activity Group: Field Operations (cont'd)

III. <u>Performance Criteria.</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
NAVMASSO:			
SNAP I Hardware Replacements	58	4	0
SNAP I Real-Time Installations	21	52	12
SNAP II Installations	52	94	123
NALCOMIS Installations	3	16	0
TOTAL INSTALLATIONS:	<u>134</u>	<u>166</u>	<u>135</u>
FLEET Customers supported	232	333	454
FLEET Requested Assist Visits	500	1100	1600
SNAP Software Implementations	375	750	1250
NALCOMIS Software Implementations	0	36	113
Software programs under development	32	30	29
Software programs in life cycle support	25	40	58
CCPO-CC			
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Population served	12,000	12,000	12,000
Systems Commands served	5	5	5
Activities served	17	17	17
Students trained	5,000	5,000	5,000
Personnel actions	60,000	60,000	60,000
Recruitment actions	3,400	3,900	4,000
Number of classifications	9,700	9,900	10,000
ADPSO			
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Number of contracts	8	10	10
Value of contracts (\$000,000)	1,080	1,300	1,300
IV. <u>Personnel Summary (End Strength)</u>			
	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	<u>251</u>	<u>296</u>	<u>324</u>
Officer	31	47	41
Enlisted	220	249	283
B. <u>Civilian</u>	<u>525</u>	<u>564</u>	<u>585</u>
USDH	525	564	585

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Industrial Preparedness
 Budget Activity: 7-Central Supply and Maintenance
 Claimant: Chief of Naval Material (Headquarters, Naval Material Command)

- I. The programs financed under this activity group include:
- (1) Government-Owned Contractor-Operated (GOCO) Facilities.
 - (2) Industrial Readiness.

Government-Owned, Contractor-Operated Facilities (GOCO). Provides for lease administration of GOCO facilities and drydocks. Also provides for maintenance, protection and storage of government-owned special tooling/test equipment required for Navy programs in contractor facilities.

Industrial Readiness. Provides for development of formal plans with industry for emergency production of weapons systems. It involves planning with individual producers of critical items for a specific level of production sufficient to meet surge and mobilization requirements. It provides for the development of industrial preparedness measures to ensure utilization of improved techniques to shorten production lead time and reduce requirements for industrial manpower and critical materials. Also, the program funding provides for standby and maintenance of production lines as well as the packing, crating and handling of special tooling and special test equipment being moved to mobilization storage facilities.

II. Financial Summary (Dollars in Thousands).

A. Sub-activity Group Breakout.

	<u>FY 1984</u>	<u>FY 1985</u>			<u>FY 1986</u>	
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget Request</u>	<u>Changes</u>
Industrial Readiness	2,157	2,444	2,444	2,444	2,283	-161
Govt Owned- Contractor Operated	<u>104</u>	<u>119</u>	<u>119</u>	<u>119</u>	<u>94</u>	<u>-25</u>
Total, Industrial Preparedness	2,261	2,563	2,563	2,563	2,377	-186

Activity Group: Industrial Preparedness (cont'd)

B. Reconciliation of Increases and Decreases.

1. FY 1985 Current Estimate		\$2,563
2. Pricing Adjustments		98
A. Industrial Fund Rates	(14)	
B. Other Pricing Adjustments	(84)	
3. Functional Program Transfers		
4. Program Increases		96
A. Other Program Increases	(96)	
(1) Support equipment on which Industrial Base assessment information will be organized into a data base.	96	
5. Program Decreases		-380
A. Other Program Decreases	(-380)	
(1) Reduced level of effort required in determination of mobilization requirements necessary in employment of civilian shipyards.	-39	
(2) Elimination of cost associated with specialized equipment in support of A-4 Aircraft Mobilization. There is no longer a mobilization requirement for A-4 Aircraft.	-341	
6. FY 1986 President's Budget Request		\$2,377

III. <u>Performance Criteria</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
GOCO Facilities:			
Special tooling maintenance operations	2,755	2,078	1,875
Facility/drydock leases	14	14	14
Autoclave maintenance	0	1	1
Nuclear drydock activation	0	0	0
FMC security projects	7	0	0

Activity Group: Industrial Preparedness (cont'd)

Industrial Readiness:			
Industrial Preparedness			
Agreements	65	500	550
Surge Planning Projects	0	7	8
Industrial Preparedness			
Measures Developed	0	3	4
Stand-by lines for production			
lines for mobilization	3	4	3

IV. Personnel Summary.

None for this activity.

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Naval Industrial Fund and Stock Fund Support
 Budget Activity: 7 - Central Supply and Maintenance
 Claimant: Chief of Naval Material (Headquarters, Naval Material Command)

I. Description of Operations Financed.

This activity group includes: (1) funding to reimburse DOD Industrial Fund and Stock Fund costs not recovered through customer rates, (2) refunds from Industrial Fund and Stock Fund where applicable.

DOD Industrial Funds and Stock Funds operate under a rate stabilization policy established by the Secretary of Defense. Financial resources requested in various appropriated fund customer programs reflect the impact of approved stabilized rates. Changes to established rates are disruptive to both customer program and Industrial Fund and Stock Fund operations. The Department executes its programs at established stabilized rates with additional reimbursement to or refunds from Industrial Fund and Stock Fund, as appropriate.

The Committees on Appropriations are familiar with the Department's price stabilization policy. The Committees are cognizant of the fact that the Department will continue to execute programs at published prices and provide refunds to customer accounts.

II. Financial Summary (Dollars in Thousands)

A. Sub-activity Group Breakout

	<u>FY 1984</u>	<u>FY 1985</u>		<u>FY 1986</u>	<u>Change</u>
		<u>Budget Request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	
Stock Fund Reimb (Nonfuel)				-150,000	150,000
Stock Fund Reimb (Fuel)	-459,000		-352,700	-352,700	352,700
Navy Industrial Fund Rebates	-200,000			-84,000	-280,300
Navy Industrial Fund Support	<u>114,000</u>	<u>-102,931</u>	<u>-102,931</u>	<u>37,500</u>	<u>-37,500</u>
Total, Stock Fund/Industrial Fund	-545,000	-102,931	-455,631	-549,200	268,900

Activity Group: Navy Industrial Fund and Navy Stock Fund Support (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		- \$549,200
2. Pricing Adjustments		268,900
A. Stock Fund (Nonfuel)	(150,000)	
B. Stock Fund (Fuel)	(352,700)	
C. Industrial Fund	(-233,800)	
1. Military Sealift Profits	25,000	
2. Audit Related Items	59,000	
3. FY 1985 Payraise	-9,800	
4. Annualization of .5% difference in FY 1984 Payraise	-27,700	
5. Retained Earnings	-280,300	
3. Functional Program Transfers		
4. Program Increases		
5. Program Decreases		
6. FY 1986 President's Budget Request		- \$280,300

III. Performance Criteria

None for this activity.

IV. Personnel Summary

None for this activity.

Department of the Navy
Operations and Maintenance, Navy
Exhibit OP-5

Activity Group: Base Operations
 Budget Activity: 7-Central Supply and Maintenance
 Claimant: Chief of Naval Material (Headquarters, Naval Material Command)

I. Description Of Operations Financed.

Funds under this activity group finance Physical Security and Base Communications in support of the the Chief of Naval Material programs.

Physical Security commencing in FY 1986 provides funding for physical security measures, and for guard services. The initial effort within Headquarters, Chief of Naval Material is the creation of the data base from which physical security can be managed. There exists data compiled for communications security program which can be efficiently and relatively inexpensively adapted to physical security requirements. Funding under this activity group is to accomplish that adaptation.

Base Communications includes telecommunications functions which support the entire scope of operations. Base Communications provides services including leased lines, toll charges, WATS, common equipment, station equipment, local calls, interdepartmental dial service (IDS), telephone directories, and other related telephonic expenses at Headquarters, Chief of Naval Material.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1985</u>			<u>FY 1986</u>		
	<u>FY 1984</u>	<u>Budget request</u>	<u>Appropriation</u>	<u>Current Estimate</u>	<u>Budget request</u>	<u>Change</u>
Physical Security					154	+154
Base Communications	<u>433</u>	<u>386</u>	<u>386</u>	<u>442</u>	<u>448</u>	<u>+6</u>
Total, (Base Operations)	433	386	386	442	602	+160

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate \$442
2. Pricing Adjustments 20
 - A. Other Pricing Adjustments (20)
3. Functional Program Transfers

Activity Group: Base Operations (cont'd)

- 4. Program Increases 154
 - A. Other Program Growth in FY 1986 (154)
 - 1. Establishment of data base to enable coordination of physical security program for the Naval Material Command.
- 5. Program Decreases -14
 - A. Other Program Decreases (-14)
- 6. FY 1986 President's Budget Request \$602

III. <u>Performance Criteria.</u>	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Management system established			1
Number of telephone instruments	803	803	803
Number of main lines	428	428	428
Daily average message traffic	1600	1600	1600

IV. Personnel Summary.

There are no personnel in this activity group.

Department of the Navy
Operations & Maintenance, Navy
Exhibit OP-05

Activity Group: ASW Maintenance
Budget Activity: VII Central Supply & Maintenance
Claimant: Chief of Naval Material (PM-4)

I. Description of Operations Financed

The purpose of the ASW Maintenance program is to provide for the rework and maintenance of surface ship and submarine ASW weapon systems. Systems include ASW targets, underwater fire control systems, torpedoes, torpedo tubes, the surface ship Anti-Submarine Launched Rockets (ASROC) and launchers, Submarine Launched Rockets (SUBROC), and the enCAPsulated TORpedo (CAPTOR) mines. Also included are rework for components of the above equipments together with certain related items such as ASROC motor rework and container refurbishment. In order to fulfill the requirements and perform the mission, the program is subdivided into the following areas:

A. Submarine ASW Maintenance

Provides for the rework and maintenance of submarine ASW weapon systems. Systems include torpedoes, torpedo tubes, Submarine Launched Rockets (SUBROC), sensors and underwater fire control systems. Also included are rework for components of the above equipments and maintenance of software supporting the equipment.

B. Surface ASW Maintenance

Provides for the rework and maintenance of surface ship ASW underwater fire control systems, sensors, torpedoes, torpedo tubes, the enCAPsulated TORpedo (CAPTOR), Anti-Submarine Launched Rockets (ASROC) and launchers. Also included are rework for components of the above equipments and maintenance of software supporting the equipment.

C. Aviation ASW Maintenance

The Aviation Maintenance Program provides targets and pingers required for training exercise capability for all torpedoes, fired actively or passively, including Torpedo MK48, sonars, sonobuoys, and Magnetic Anomaly Detection (MAD) equipped aircraft. The program provides depot level repair for the overhaul and maintenance of target end items/sub-assemblies beyond the capability of the IMAs. Also provides services for fleet torpedo firings required for ASW fleet exercises, including maintenance and turnaround of range pinger systems. Includes depot maintenance of CV-ASW Module.

D. ASP Maintenance

The ASP Maintenance program provides depot and software maintenance for advanced signal processors. Enhanced Modular Signal Processor (EMSP) provides a Software Support Activity (SSA) capability for the AN/UYS-2, which encompasses a maintenance capability for programming methodologies, computer programming environments, computer programs, and associated documentation.

Activity Group: ASW Maintenance (Cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	FY 1984	FY 1985			FY 1986	
		Budget Request	Appro priation	Current Estimate	Budget Request	Change
Submarine ASW Maintenance	90,680	72,285	71,386	72,241	70,620	-1,621
Surface ASW Maintenance	51,146	57,526	56,100	58,111	60,964	+2,853
Aviation ASW Maintenance	17,115	16,409	16,661	18,860	24,513	+5,653
ASP Maintenance	-0-	1,538	1,560	1,560	4,145	+2,585
Total O&MN	158,941	147,758	145,707	150,772	160,242	+9,470

B. Reconciliation of Increases and Decreases

- 1. FY 1985 Current Estimate \$150,772
- 2. Pricing Adjustments 3,749
- B. Other Pricing Adjustments (1,467)
- 3. Program Increases 15,596
 - A. Other Program Growth in FY 1986

Increase provides for an operational IMA at SOCAL for MK 27 and MK 30 targets and for associated Pinger support (\$2,608); provides for funding a backlog of 400 MK 46 Mod 4 and Mod 5 torpedoes awaiting six year cyclic Class B overhaul at NUWES, Keyport (\$3,136); supports an increase of 200 fleet exercise MK 46 torpedo firings; provides for support of additional CAPTOR units coming due for maintenance in FY 1986 (\$1,178); provides for increase in the number of Bearing Transmitter MK 17/Cable Reels MK 1 and Indicator Panels (IP) MK 21 refurbishment for the Underwater F/C Submarine program. The increase in IP refurbishment reflects the projected increase in Submarine Launched Mobile Mine (SLMM) installations for SSNs (\$1,663). Also reflects program growth of \$2,594 for 2 CV ASW modules due for cyclic overhaul and refurbishment in FY 1986 (\$2,591); reflects a new start of Enhanced Modular Signal Processor (EMSP) maintenance in FY 1986 and increased software maintenance for EMSP (\$2,517). Provides for an increase in MK 37 warshot loadouts. Reflects increased software maintenance for surface sensor programs, i.e. SQQ-15 and SQS 26/53A (1,903).

Activity Group: ASW Maintenance (Cont'd)

4. Program Decreases

-9,875

- A. Other Program Decreases in FY 1986
 Reflects no depot level refurbishment in FY 1986 of Surface Underwater Fire Control Systems MK 111/114 (-\$4,295). Reflects a decrease of 17 SUBROC components to be reworked during FY 1986 (-\$1,624); decrease in software support for AN/BQQ-5 and other ASW sensor programs (not including EMSF) (-1,549); and reduction of one ASROC launcher overhaul and associated ASROC maintenance, repair and test (-\$910). Reflects a decrease in MK 48 depot turnarounds of 108 torpedoes (\$-1,497).

5. FY 1986 Presidents' Budget Request

\$160,242

III. Performance Criteria

FY 1984 FY 1985 FY 1986

Where performance criteria is reflected as various, units may be comprised of items and workyears and/or items of varying mix which may not lend themselves to average pricing from one year to the next due to changes in the mix of the workload. Additional backup data can be provided upon request. In addition, numbers in parentheses denote workyears vice units.

A. Submarine ASW Maintenance

1. Torpedoes	390	408	495
a. MK37 Maintenance	Var	Var	Var
b. MK48/Depot Maint	65,600	47,568	47,135
	Var	Var	Var
2. U/W Fire Control Maint			
a. U/W FC Component Rework	3,978	5,224	7,012
	Var	Var	Var
3. Subroc Maintenance	7,412	7,753	6,462
	Var	Var	Var
4. Sensors Maintenance	13,300	11,288	9,516
	Var	Var	Var
Total Submarine Maint	90,680	72,241	70,620

B. Surface ASW Maintenance

1. Torpedoes	23,969	27,210	31,290
a. MK46 Depot Maint	Var	Var	Var
b. Torpedo Tube Rework and Test	835	492	476
	20	10	11

Activity Group: ASW Maintenance (Cont'd)

III. Performance Criteria (Cont'd)	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
2. U/W FCS	3,487	4,156	-0-
	Var	Var	Var
3. ASROC launcher overhauls	15,102	16,757	16,249
	18	19	18
4. Sensors	4,084	5,667	7,814
	Var	Var	Var
5. Captor	3,669	3,829	5,135
	(60.1)	(59.7)	(76.6)
Total Surface Maint	51,146	58,111	60,964
C. <u>Aviation Maintenance</u>			
1. Target Support	12,569	15,064	17,148
	(180.3)	(231.8)	(251.1)
2. Pinger Support	2,446	3,691	4,666
	(32.6)	(46.9)	(56.4)
3. CV/ASW Module	2,100	105	2,699
	Var	Var	Var
Total Aviation Maintenance	17,115	18,860	24,513
D. <u>ASP Maintenance</u>			
EMSP	-0-	1,560	4,145
		Var	var
IV. <u>Personnel Summary</u> None			

Department of the Navy
Operations & Maintenance, Navy
Exhibit OP-05

Activity Group: ASW Maintenance Support
Budget Activity: 7 Central Supply and Maintenance
Claimant: Chief of Naval Material (PM-4)

I. Description of Operations Financed

The purpose of the ASW Maintenance Support program is to provide for the direct maintenance support of surface ship and submarine ASW weapon systems. Systems include ASW targets, underwater fire control systems, torpedoes, torpedo tubes, the surface ship Anti-Submarine Launched Rockets (ASROC) and launchers, Submarine Launched Rockets (SUBROC), and the enCAPsulated TORpedo (CAPTOR) mines. Also included are rework and maintenance support for components of the above equipments together with certain related items such as ASROC motor rework and container refurbishment. In addition, this program provides in-service engineering support for each ASW weapon system for the purpose of ensuring combat system readiness. In order to fulfill the requirements and perform the mission, the program is subdivided into the following areas:

A. Submarine ASW Maintenance Support

Provides for direct maintenance support of submarine ASW weapon systems. Systems include torpedoes, torpedo tubes, Submarine Launched Rockets (SUBROC), Sensors and underwater fire control systems. In addition, this program provides in-service engineering support for each system for the purpose of ensuring combat system readiness.

B. Surface ASW Maintenance Support

Provides for direct maintenance support of surface ship ASW weapon systems. Systems include ASW underwater fire control systems, sensors, torpedoes, torpedo tubes, the enCAPsulated TORpedo (CAPTOR), Anti-Submarine Launched Rockets (ASROC) and launchers. In addition, this program provides in-service engineering support for each system for the purpose of ensuring combat system readiness.

C. Aviation ASW Maintenance Support

The mobile ASW Target Program provides training exercise capability for all torpedoes, fired actively or passively, including Torpedo MK48, sonars, sonobuoys, and Magnetic Anomaly Detection (MAD) equipped aircraft. The aviation maintenance program provides for direct maintenance support for fleet torpedo firings required for ASW fleet exercises. In addition it provides for maintenance support for CV-ASW Module.

D. ASP Maintenance Support

The ASP Maintenance Support Program provides maintenance support for advanced signal processors. Enhanced Modular Signal Processor (EMSP) maintenance support provides In-Service Engineering Agent (ISEA) capability for the AN/UYS-2 hardware. This support is comprised of centralized planning and programming of maintenance efforts at all levels for the life cycle of all AN/UYS-2 products.

Activity Group: ASW Maintenance Support (Cont'd)

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Breakout

	FY 1984	FY 1985			FY 1986	
		Budget Request	Appropriation	Current Estimate	Budget Request	Change
Submarine ASW Maintenance Support	29,360	38,079	36,672	33,086	33,873	+787
Surface ASW Maintenance Support	12,533	14,021	13,796	14,491	9,149	-5,342
Aviation Maintenance Support	4,506	4,286	5,775	4,285	4,994	+709
ASP Maintenance Support	-0-	500	500	500	5,198	+4,698
Total O&MN	46,399	56,886	56,743	52,362	53,214	+852

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$52,362
2. Pricing Adjustments		-50
A. Industrial Fund Rates	(-787)	
B. Other Pricing Adjustments	(737)	
3. Program Increases		8,665
A. Other Program Growth in FY 1986		
Reflects increased effort in the Underwater Fire Control - Submarine program to correct long existing FCS MK 113 MOD 9 Reliability and Maintainability problems (\$2,045); increased funding in support of depot maintenance for AN/BQQ-5 B/C to support additional operational systems (\$1,143); increased maintenance support for 2 CV-ASW Modules requiring overhaul and refurbishment in FY 1986 (\$801); supports six Enhanced Modular Signal processors (EMSP) UYS-2s becoming operational in FY 1986. (\$4,676) Provides for additional ASROC engineering efforts.		
4. Program Decreases		
A. Other Program Decreases in FY 1986		-7,763
Reflects no in-service engineering support in FY 1986 for Surface Underwater Fire Control Systems (-\$3,394); decreased efforts for the SUBROC program incident to inventory control, and in-service engineering (-\$708);		

Activity Group: ASW Maintenance Support (Cont'd)

and reduced engineering effort
for ASW Sensors programs (-\$3661)

5. FY 1986 President's Budget Request \$53,214

III. Performance Criteria FY 1984 FY 1985 FY 1986

Where performance criteria is reflected as various, units may be comprised of items and workyears and/or items of varying mix which may not lend themselves to average pricing from one year to the next due to changes in the mix of the workload. Additional backup data can be provided upon request. In addition, numbers in parentheses denote workyears vice units.

A. ASW Submarine Maintenance Support

1. Torpedo Maint Support			
a. MK37 Maint Spt	251	250	201
	Var	Var	Var
b. Torpedo Tube Rework and Test Spt	445 (6.5)	460 (7.0)	380 (5.5)
c. Torpedo MK48 Engineering	15,208 (175.2)	16,239 (150.8)	14,843 (132.8)
2. U/W FCS Maintenance Support			
a. U/W FCS MK117 Rework Spt	56 (.6)	253 (2.9)	244 (2.7)
b. F/C Engineering	4,286 (60.6)	5,470 (56.7)	7787 (77.1)
3. Subroc Maintenance and Engineering Support	2,019 Var	2,266 Var	1,655 Var
4. Sensor Maintenance Support	7,095 Var	8,148 Var	8,763 Var
Total Submarine Maint Spt	29,360	33,086	33,873

B. ASW Surface Maintenance Support

1. Torpedo Maintenance Support			
a. MK46 Maintenance Support	2,720 (25.6)	4,053 (40.0)	3,688 (34.8)
b. Torpedo Tube Rework and Test Support	174 (22)	217 (12)	218 (16)
2. U/W FCS Maintenance Support			
a. U/W FCS Component Rework Spt	137 Var	143 Var	-0-
b. Surface F/C Engineering	2,146	3,121 (28.5)	-0- (38.6)
3. ASROC Maintenance Support			
a. ASROC Maintenance Spt	485 Var	1,361 Var	1,350 Var
b. ASROC Engineering	166 (2.0)	170 (1.5)	286 (2.6)

Activity Group: ASW Maintenance Support (Cont'd)

III. Performance Criteria	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
4. Captor Maintenance Support			
a. Refurb/Repair Maint Support	135 (2.3)	198 (3.2)	410 (6.5)
5. Sensors Maintenance Support	6,570 var	5,228 var	3,197 var
Total ASW Surface Maintenance Support	12,533	14,491	9,149
C. <u>Aviation Maintenance Support</u>			
1. Target Support	2,361 (33.8)	2,423 (36.7)	2,391 (34.1)
2. CV/ASW Module Support	2,145 var	1,862 var	2,603 var
Total Aviation Maintenance Support	4,506	4,285	4,994
D. <u>ASP Maintenance Support</u>	-	500 var	5,198 var
IV. <u>Personnel Summary</u> None			

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: ASW Support
Budget Activity: 7 - Central Supply and Maintenance
Claimant: Chief of Naval Material (PM4)

I. Description of Operations Financed

The purpose of the program is to provide technical support, periodic testing and correctional improvements throughout the life of ASW sensors and weapon systems in order to maintain ASW Surface and Submarine forces at a high level of effectiveness and readiness. This program also provides logistics support for the collection and processing of undersea acoustic data. In order to perform the stated mission, this program finances five sub-programs which are:

A. ASW Submarine Technical Support - This program provides the basic source of technical support for various complex sonar and ordnance systems on submarines. Principal types of effort included are: statistical analysis, investigations, testing, and engineering design of corrective fixes of items in the operational inventory for the purpose of extending the useful military life of such items within the current performance envelope; Installation and Checkout (I&C); Integrated Logistics Support (ILS) Management; Configuration Management (CM); Operation of House Models; Data review and update; a Training and Certification Program (TCP) and Follow on Test and Evaluation (FOT&E) programs for the Torpedo MK-48; various other maintenance engineering tasks for operational fleet systems; and the operation of test sites, development of test procedures and performance of standard tests within the shipyard and at sea after major events such as overhauls and major modifications or prior to ship deployment.

The program is comprised of four elements: (1) AN/BQQ-5 Technical Support; (2) MK-48 Torpedo Technical Support; (3) Other Submarine Technical Support. and (4) ASW Test Program.

B. ASW Surface Ship Technical Support - This program provides the basic source of technical support for various complex sonar and ordnance systems on surface ships. Principal types of effort included are: statistical analysis, investigations, testing, and engineering design of corrective fixes of items in the operational inventory for the purpose of extending the useful military life of such items within the current performance envelope; Installation and Checkout (I&C); Integrated Logistics Support (ILS) Management; Configuration Management (CM); Operation of House Models; Data review and update; Fleet introduction analysis and planning for CAPTOR; and various other maintenance engineering tasks for operational fleet systems.

The program is comprised of three elements: (1) CAPTOR Technical Support; (2) MK-46 Torpedo Technical Support and (3) Other Surface Technical Support.

Activity Group: ASW Support (cont'd)

C. ASW Avionics Technical support - This program provides for reliability improvement for the CV-ASW Modules and life-cycle engineering and logistic support for the Integrated Carrier Acoustic Processor System(ICAPS). Principal types of effort included are: developing system configuration drawings; identifying training requirements; initiating installation planning, integration and testing; safety assessments; developing engineering change orders; and developing documentation.

D. Airborne ASW Support - This program is a comprehensive and integrated ASW program that consolidates under a single budget line item four distinct ASW programs: (1) Air ASW Readiness and Performance Assessment Program (AIREM), which assesses and improves the effectiveness of Air ASW systems by collecting and analyzing scientific and operational data to support quantitative analyses of the Air ASW platforms, systems and sensors; (2) Air ASW Fleet Support, which increases the reliability and maintainability of the Fleet in-service ASW Avionics Systems installed in the P-3, S-3, SH-2, and SH-3 aircraft; (3) Sonobuoy Support, which provides the operational Navy with sonobuoys that conform to specified performance and reliability levels and provides on-going operational/logistic support as required; and (4) Advanced Signal Processor Support, which provides software maintenance and configuration control to the users of the AN/UYS-1.

C. Undersea Surveillance - This program provides support for SOSUS and SURTASS.

SOSUS provides for the collection and processing of undersea acoustic data. SOSUS consists of cable connected to shore sites and shore processing equipment. This program maintains existing SOSUS against cable breaks and equipment breakdowns; improves existing SOSUS system through backfits to shore electronics; and installs new shore facilities.

Maintenance of the existing systems is accomplished by three ships. These ships try to provide one ship continuously in each the Atlantic and the Pacific for cable guard and repair services. In addition, a cable transporter and a survey ship support the program. Also included is expendable cable repair material.

U.S. Navy maintenance of SOSUS shore electronic systems hardware is augmented by Western Electric Company Resident Engineer Support (one or two engineers per site) and configuration control support and Naval Electronic Systems Engineering Center maintenance of selected site hardware. Also included is the maintenance of shipboard machinery and electronics, overall ship maintenance during shipyard periods, shore and cable inspection/repair and refurbishment of shore electronic hardware.

New deployments are achieved by an extensive oceanographic hydrographic and acoustic survey program followed by cable implantment and burial and array implantment.

SURTASS provides for collection and processing of undersea acoustic data. It employs a passive hydrophone array towed by a dedicated surface ship, designated T-AGOS, for data collection. A satellite relay is used to transmit acoustic data to a shore facility for processing and display.

Activity Group: ASW Support (cont'd)

Funds are required for operation and support of SURTASS production units. The production unit operations and support includes:

(1) SURTASS contractor technicians to operate and maintain the SURTASS electronics aboard the T-AGOS ships;

(2) Establishment and operation of on-shore logistics support. This includes contractor operated intermediate maintenance facilities and spare parts depots for unique SURTASS equipment in the Norfolk, VA and Pearl Harbor, HI areas;

(3) Computer Software Maintenance.

During the phased introduction of the first 12 T-AGOS/SURTASS units (i.e., one unit every 2.5 months) significant non-recurring start up costs are required in advance of production unit operations. These non-recurring costs are: (1) contractor technicians training required to begin 12 months prior to each unit becoming operational; (2) establishment of shore logistics support depots.

Activity Group: ASW Support (cont'd)

II. FINANCIAL SUMMARY (Dollars in Thousands)

A. Sub-Activity Group Breakout.

	<u>FY 1984</u>	<u>Budget Request</u>	<u>FY 1985</u> <u>Appropriation</u>	<u>Current Estimate</u>	<u>FY 1986</u> <u>Budget Request</u>	<u>Change</u>
ASW Submarine Technical Support	78,325	81,106	79,857	78,774	81,684	+2,910
ASW Surface Ship Tech- nical Support	36,264	42,181	41,733	39,143	46,120	+6,977
ASW Avionics Technical Support	698	538	528	784	1,445	+661
Airborne ASW Support	9,138	10,249	9,922	9,949	5,206	-4,743
Undersea Surveillance	130,637	139,189	135,010	146,664	164,385	+17,721
TOTAL ASW SUPPORT	255,062	273,263	267,050	275,314	298,840	+23,526

Activity Group: ASW Support (cont'd)

B. Reconciliation of Increases and Decreases

1. FY 1985 Current Estimate		\$275,314
2. Pricing Adjustments		-2,653
A. Stock Fund	(-269)	
1) Non-Fuel	-269	
B. Industrial Fund Rates	(-7,925)	
C. Other Pricing Adjustments	(5,541)	
3. Functional Program Transfers		23,945
A. Transfers In	(24,045)	
1) Intra-Appropriation	1,800	
Sonar Training Assessment and Grooms transferred from LANTFLT BA1(900) and BA2(900).		
2) Inter-Appropriation	22,245	
Tasks in support of the SOSUS annual sea/shore installation contract with American Telephone and Telegraph Technologies, Inc. (AT&T) which were previously funded in OPN(19,784). Amounts transferred from Other Procurement, Navy pursuant to the proposed DoD initiative for elimination of \$3 thousand investment threshold and adoption of central management criteria as a governing factor(2,461)		
B. Transfers Out	(-100)	
1) Intra-Appropriation	-100	
PATAO support transferred to Naval Sea Systems Command.		
4. Program Increases		10,127
A. Other Program Growth in FY 1986	(10,127)	
ASW Submarine Technical Support	4,432	
Provides for product improvements to the submarine towed array; and support for the the new SUBmarine Advanced Combat System (SUBACS).		

Activity Group: ASW Support (cont'd)

ASW Surface Ship Technical Support	1,431	
Increasing levels of support for the new surface combat system, including the AN/SQS-53B, AN/SQR-19, ASWCS and for CAPTOR.		
Undersea Surveillance	4,264	
Initial surveys for SOSUS 6300 expansion(a special project) scheduled to start in FY 1986(2,000).		
Increased system engineering support to maintain major SOSUS subsystems scheduled to transfer to operational status in FY 1986(700).		
Increase in the number of SURTASS ship operating months to 75 as new ships become operational(1,564).		
5. Program Decreases		-7,893
A. One-Time FY 1985 Costs	(-1,598)	
Undersea Surveillance	-1,598	
CVB site preparation/power upgrade and USNS NEPTUNE fleetling drum installation.		
B. Other Program Decreases in FY 1986	(-6,295)	
Airborne ASW Support	-4,995	
Reduced exercise support for the Air Effectiveness Measurement Program (AIREM); reduced support for Air ASW Sensors Systems; reduced quality assurance and reliability testing for production sonobuoys; and reduced life cycle support for ASP common software.		
Undersea Surveillance	-1,300	
Reduced effort for SOSUS hardware maintenance and configuration control support, cable refurbishment and Sonar Data Recorder refurbishment.		
6. FY 1986 President's Budget Request		\$298,840

Activity Group: ASW Support (cont'd)

III. Performance Criteria () denotes units	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. ASW Submarine Technical Support			
1. AN/BQ5 Sonar (Work Years)	11,226 (135)	10,918 (136)	14,757 (180)
2. MK-48 Torpedo Support (TCPs) (Work Years)	17,930 (7) (157)	19,558 (9) (159)	20,421 (12) (164)
3. Other Submarine Supp (Work Years)	29,439 (368)	26,122 (312)	28,860 (335)
4. ASW Test Program			
Weapon System Ship Trials (WSST)	9,990	11,381	9,850
Standardized Test Program (work years)	(3)	(6)	(6)
Sub Consolidated Operability Test (COT)(Hulls)	(8)	(7)	(10)
Weapon Systems Accuracy Trials	(32)	(38)	(38)
SHAREM (Exercises)	(6)	(6)	*
Post-Op Analysis Critique & Exer Review (work years)	(9)	(6)	*
STAGS (exercises)	(60)	(63)	(123)
FORACS (# of Test Ops)	6,660 (91)	7,724 (83)	7,796 (91)
(Work Years)	(62)	(72)	(74)
Acoustic trials (# of Trials)	3,080 (66)	3,071 (87)	* *
TOTAL ASW Submarine Technical Support	78,325	78,774	81,684

* Moved to ASW Surface Ship Technical Support beginning in FY 1986

Activity Group: ASW Support (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
B. ASW Surface Ship Technical Support			
1. CAPTOR Support (Work Years)	7,057 (108)	5,668 (83)	8,070 (113)
2. MK-46 Torpedo (Work Years)	7,091 (69)	4,778 (45)	5,391 (51)
3. Other Surface Support (Work Years)	22,116 (272)	28,697 (339)	28,484 (339)
4. ASW Test Program			
SHAREM (Exercises)	*	*	1,449 (6)
Post-op Analysis Critique & Exer Review (Work Years)	*	*	364 (5)
Acoustic Trials (# of Trials)	*	*	2,362 (76)
TOTAL ASW Surface Ship Technical Support	36,264	39,143	46,120
* Moved from ASW Submarine Technical Support beginning in FY 1986.			
C. ASW Avionics Support	698	784	1,445
(Work Years)	(8)	(9)	(17)
D. Airborne ASW Support			
1. Air ASW Readiness & Performance Assess. (Work Years)	1,137 (10)	1,589 (15)	582 (6)
2. Air ASW Fleet Support (Work Years)	1,959 (29)	2,341 (35)	1,359 (21)
3. Sonobuoy Support (Work Years)	2,806 (14)	2,311 (14)	1,198 (4)
4. Advanced Signal Processor (Work Years)	3,236 (27)	3,708 (33)	2,067 (20)
TOTAL Airborne ASW Support	9,138	9,949	5,206

Activity Group: ASW Support (cont'd)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
E. Undersea Surveillance			
1. SOSUS			
Cable & Survey			
Ship Support	61,821	49,039	37,498
(Ship Days)	(1980)	(1917)	(1825)
Maintenance/Install/ Restor/Material/ Fleet Support/ Travel & Training	53,485	69,028	96,589
2. SURTASS	15,331	28,597	30,298
(Operating Months)	(10)	(43)	(75)
Total Undersea Surveillance	130,637	146,664	164,385

IV. Personnel Summary(End Strength)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
A. <u>Military</u>	22	21	23
Officer	19	18	20
Enlisted	3	3	3