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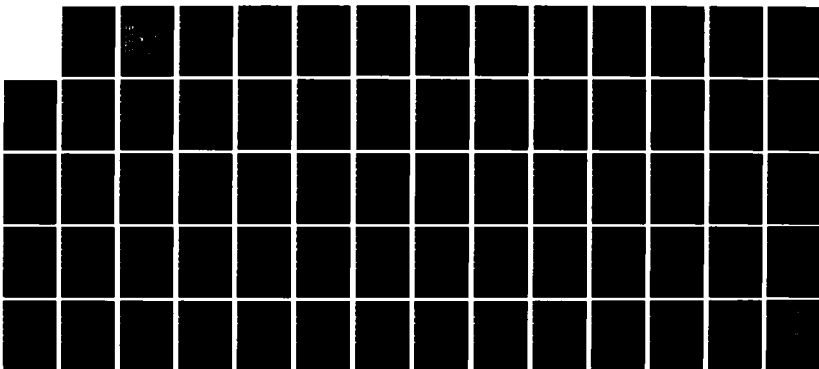
DEPARTMENT OF THE NAVY JUSTIFICATION OF ESTIMATES FOR
FISCAL YEAR 1986 SU. (U) DEPARTMENT OF THE NAVY
WASHINGTON DC FEB 85

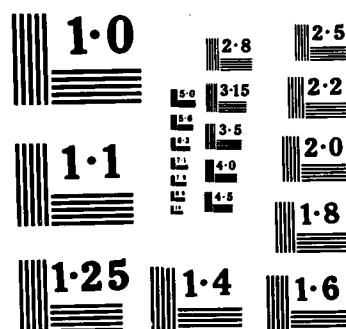
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NATIONAL BUREAU OF STANDARDS
MICROCOPY RESOLUTION TEST CHART

AD-A154 931

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**DEPARTMENT OF THE NAVY
JUSTIFICATION OF ESTIMATES
FOR FISCAL YEAR 1986**



SUBMITTED TO CONGRESS FEBRUARY 1985

PROCUREMENT

OTHER PROCUREMENT, NAVY

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Department of the Navy
Other Procurement, Navy

Justification of Estimates for Fiscal Year 1986

TABLE OF CONTENTS *

Page

Budget Appendix Extract, ... 1

Budget Activity Justification:

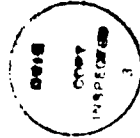
Budget Activity 1: Ship Support Equipment, ... 9
 Budget Activity 2: Communications and Electronics Equipment, ... 17
 Budget Activity 3: Aviation Support Equipment, ... 32
 Budget Activity 4: Ordnance Support Equipment, ... 40
 Budget Activity 5: Civil Engineering Support Equipment, ... 45
 Budget Activity 6: Supply Support Equipment, ... 49
 Budget Activity 7: Personnel and Command Support Equipment, ... 52
 Budget Activity 8: Spares and Repair Parts 56

Exhibit 32C: Comparison of Program Requirements 58

Other Procurement, Navy

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance and ammunition (except ordnance for new aircraft, new ships, and ships authorized for conversion); [the purchase of not to exceed one vehicle required for physical security of personnel notwithstanding price limitations applicable to passenger carrying vehicles but not to exceed \$100,000 per vehicle and] the purchase of not to exceed [four hundred and eighty-nine passenger motor vehicles which] nine hundred and twenty-four of which eight hundred and twenty-five shall be for replacement only; expansion of public and private plants, including the land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; [as follows: For ship support equipment, \$775,100,000; for communications and electronics equipment, \$1,758,800,000; for aviation support equipment, \$990,328,000; for ordnance support equipment, \$1,126,500,000; for civil engineering support equipment, \$238,000,000; for supply support equipment, \$112,000,000; for personnel/command support equipment, \$391,886,000; in all: \$5,341,614,000;] \$6,601,200,000, to remain available for obligation until September 30, [1987: Provided, That within the total amount appropriated, the subdivisions within this account shall be reduced by \$51,000,000, as follows: \$1,000,000 for contract support services; and \$50,000,000 for Trident facilities] 1988. (10 U.S.C. 5012, 5031; Department of Defense Appropriations Act 1985, as included in Public Law 98-473; additional authorizing legislation to be approved.)

Approved by	
Special Agent in Charge	
Field Office	
Date	
Initials	



A-1

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

04 Feb 85

Identification code	17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)				Obligations					
		1984 actual	1985 est.	1986 est.	1984 actual	1985 est.	1986 est.	1984 actual	1985 est.	1986 est.	
Program by activities:											
Direct program:											
00.0101	Ships support equipment	665,453	761,807	922,957	604,139	767,330	885,117				
00.0201	Communications and electronics equipment	1,526,633	1,710,167	2,153,996	1,464,507	1,812,833	2,047,403				
00.0301	Aviation support equipment	662,055	972,640	1,184,018	560,158	971,635	1,121,934				
00.0401	Ordnance support equipment	920,142	1,103,391	1,396,511	853,208	1,139,439	1,213,454				
00.0501	Civil engineering support equipment	192,190	232,509	221,558	144,201	296,725	240,843				
00.0601	Supply support equipment	79,424	89,725	62,495	58,235	137,756	66,594				
00.0701	Personnel and command support equipment	311,746	471,375	379,827	204,685	537,466	431,020				
00.0801	Spares and repair parts			279,838			214,012				
00.9101	Total direct program	4,357,643	5,341,614	6,601,200	3,889,133	5,663,184	6,220,377				
01.0101	Reimbursable program	32,313	40,000	50,000	27,575	101,449	47,120				
10.0001	Total	4,389,956	5,381,614	6,651,200	3,916,708	5,764,633	6,267,497				
Financing:											
Offsetting collections from:											
11.0001	Federal funds(-)	-15,232	-18,000	-22,500	-15,463	-18,000	-22,500				
13.0001	Trust funds(-)	-16,731	-21,500	-26,500	-7,647	-21,500	-26,500				
14.0001	Non-Federal sources(-)	-350	-500	-1,000	-30,339	-500	-1,000				
17.0001	Recovery of prior year obligations(-):										
21.4002	Unobligated balance available, start of year:				-1,593,489	-1,988,584	-1,639,665				
21.4007	For completion of prior year budget plans										
22.4001	Reprogramming from/to prior year budget plans	-99,437	34,100		-28,000	-34,100					
24.4002	Unobligated balance transferred, net	-28,000	-34,100								
25.0001	Unobligated balance available, end of year:				1,988,584	1,639,665	2,023,368				
	For completion of prior year budget plans	93,337			93,337						
	Unobligated balance lapsing										
39.0001	Budget authority	4,323,543	5,341,614	6,601,200	4,323,543	5,341,614	6,601,200				
Budget authority:											
40.0001	Appropriation	4,308,543	5,341,614	6,601,200	4,308,543	5,341,614	6,601,200				
42.0001	Transferred from other accounts	15,000			15,000						
43.0001	Appropriation (adjusted)	4,323,543	5,341,614	6,601,200	4,323,543	5,341,614	6,601,200				
Relation of obligations to outlays:											
71.0001	Obligations incurred, net				3,893,449	5,724,633	6,217,497				
72.4001	Obligated balance, start of year				4,874,750	5,533,459	7,492,692				
74.4001	Obligated balance, end of year				-5,533,459	-7,492,692	-9,250,689				
77.0001	Adjustments in expired accounts				-13,245						
78.0001	Adjustments in unexpired accounts				-30,339						
90.0001	Outlays				3,191,155	3,765,400	4,459,500				

Other Procurement, Navy
Program and Financing (in Thousands of dollars)
04 Feb 85
FISCAL YEAR 1982

Identification code		17-1810-0-1-051		Budget Plan (amounts for PROCUREMENT actions programmed)		Obligations	
		1984 actual	1985 est.	1986 est.	1984 actual	1985 est.	1986 est.
Program by activities:							
Direct program:							
00.0101	Ships support equipment				33,680		
00.0201	Communications and electronics equipment				117,140		
00.0301	Aviation support equipment				43,076		
00.0401	Ordnance support equipment				52,677		
00.0501	Civil engineering support equipment				13,881		
00.0601	Supply support equipment				3,959		
00.0701	Personnel and command support equipment				16,846		
00.9101	Total direct program				281,259		
01.0101	Reimbursable program				1,994		
10.0001	Total				283,253		
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)				-633		
13.0001	Trust funds(-)				-148		
14.0001	Non-Federal sources(-)				36		
17.0001	Recovery of prior year obligations(-):				-2	150	
21.4002	Unobligated balance available, start of year:						
21.4007	For completion of prior year budget plans					-355,696	
25.0001	Reprogramming from/to prior year budget plan						
	Unobligated balance lapsing					93,337	
39.0001	Budget authority						

Other Procurement, Navy
Program and Financing (in Thousands of dollars)
04 Feb 85
FISCAL YEAR 1983

Identification code	17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)		Obligations	
		1984 actual	1985 est.	1984 actual	1985 est.
Program by activities:					
Direct program:					
00 0101	Ships support equipment			87,068	41,223
00 0201	Communications and electronics equipment			343,225	144,206
00 0301	Aviation support equipment			72,577	55,575
00 0401	Ordnance support equipment			169,358	47,605
00 0501	Civil engineering support equipment			40,438	54,141
00 0601	Supply support equipment			24,741	25,614
00 0701	Personnel and command support equipment			65,420	27,975
00 9101	Total direct program			802,827	396,339
01 0101	Reimbursable program			25,581	41,436
10 0001	Total			828,408	437,775
Financing:					
Offsetting collections from:					
11 0001	Federal funds(-)			402	
13 0001	Trust funds(-)			9,232	
14 0001	Non-Federal sources(-)			165	
17 0001	Recovery of prior year obligations(-):			-10,189	
	Unobligated balance available, start of year:				
21 4002	For completion of prior year budget plans	28,000		-1,237,793	-437,775
21 4007	Reprogramming from/to prior year budget plans				
22 4001	Unobligated balance transferred, net	-28,000		-28,000	
	Unobligated balance available, end of year:				
24 4002	For completion of prior year budget plans			437,775	
39 0001	Budget authority				

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

04 Feb 85

FISCAL YEAR 1984

Identification code	17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
		1984 actual	1985 est.	1986 est.	1984 actual	1985 est.	1986 est.
Program by activities:							
Direct program:							
00.0101	Ships support equipment	665,453			483,391	131,060	51,002
00.0201	Communications and electronics equipment	1,526,633			1,004,142	448,280	74,211
00.0301	Aviation support equipment	662,055			444,505	168,878	48,672
00.0401	Ordnance support equipment	920,142			631,173	219,681	69,286
00.0501	Civil engineering support equipment	192,190			89,882	82,618	19,690
00.0601	Supply support equipment	79,424			29,535	44,858	5,031
00.0701	Personnel and command support equipment	311,746			122,419	165,259	24,068
00.9101	Total direct program	4,357,643			2,805,047	1,260,634	291,962
01.0101	Reimbursable program	32,313				30,013	2,300
10.0001	Total	4,389,956			2,805,047	1,290,647	294,262
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-15,232			-15,232		
13.0001	Trust funds(-)	-16,731			-16,731		
14.0001	Non-Federal sources(-)	-350			-350		
21.4002	Unobligated balance available, start of year:					-1,550,809	-294,262
21.4007	For completion of prior year budget plans						
22.4001	Reprogramming from/to prior year budget plan	-34,100	34,100			-34,100	
22.4001	Unobligated balance transferred, net		-34,100				
24.4002	Unobligated balance available, end of year:						
	For completion of prior year budget plans				1,550,809	294,262	
39.0001	Budget authority	4,323,543			4,323,543		
Budget authority:							
40.0001	Appropriation	4,308,543			4,308,543		
42.0001	Transferred from other accounts	15,000			15,000		
43.0001	Appropriation (adjusted)	4,323,543			4,323,543		

Other Procurement, Navy
Program and Financing (in Thousands of dollars)

04 Feb 85
FISCAL YEAR 1985

Identification code	17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1984 actual	1985 est.	1986 est.	1984 actual	1985 est.	1986 est.
Program by activities:							
Direct program:							
00.0101	Ships support equipment		761,807		595,047	137,496	
00.0201	Communications and electronics equipment		1,710,167		1,220,347	348,567	
00.0301	Aviation support equipment		972,640		747,182	173,074	
00.0401	Ordnance support equipment		1,103,391		872,153	163,151	
00.0501	Civil engineering support equipment		232,509		159,966	43,033	
00.0601	Supply support equipment		89,725		67,284	5,405	
00.0701	Personnel and command support equipment		471,375		344,232	106,789	
00.9101	Total direct program		5,341,614		4,006,211	977,515	
01.0101	Reimbursable program		40,000		30,000	7,320	
10.0001	Total		5,381,614		4,036,211	984,835	
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)		-18,000		-18,000		
13.0001	Trust funds(-)		-21,500		-21,500		
14.0001	Non-Federal sources(-)		-500		-500		
21.4002	Unobligated balance available, start of year: For completion of prior year budget plans					-1,345,403	
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans				1,345,403	360,568	
40.0001	Budget authority (Appropriation)		5,341,614		5,341,614		

Other Procurement, Navy
 Program and Financing (in Thousands of dollars)
 04 Feb 85
 FISCAL YEAR 1986

Identification code	17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)		Obligations	
		1984 actual	1985 est.	1984 actual	1985 est.
Program by activities:					
Direct program:					
00.0101	Ships support equipment		922,957		696,619
00.0201	Communications and electronics equipment		2,153,996		1,624,625
00.0301	Aviation support equipment		1,184,018		900,188
00.0401	Ordnance support equipment		1,396,511		981,015
00.0501	Civil engineering support equipment		221,558		178,120
00.0601	Supply support equipment		62,495		56,158
00.0701	Personnel and command support equipment		379,827		300,163
00.0801	Spare and repair parts		279,838		214,012
00.9101	Total direct program		6,601,200		4,950,900
01.0101	Reimbursable program		50,000		37,500
10.0001	Total		6,651,200		4,988,400
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)		-22,500		-22,500
13.0001	Trust funds(-)		-26,500		-26,500
14.0001	Non-Federal sources(-)		-1,000		-1,000
24.4002	Unobligated balance available, end of year:				
	For completion of prior year budget plans				1,662,800
40.0001	Budget authority (Appropriation)		6,601,200		6,601,200

04 Feb 85

Other Procurement, Navy
Object Classification (in Thousands of dollars)

Identification code	17-1810-0-1-051	1984 actual	1985 est.	1986 est.
Direct obligations:				
Other services:				
12.5002	Purchases from industrial funds	42,524	58,889	74,303
12.5003	Contracts	93,023	128,820	163,200
12.5004	Other	47,988	67,600	85,643
12.6001	Supplies and materials	684,272	963,932	1,221,293
13.1001	Equipment	3,021,326	4,443,943	4,675,938
19.9001	Total Direct obligations	3,889,133	5,663,184	6,220,377
Reimbursable obligations:				
Other services:				
22.5002	Purchases from industrial funds	309	560	665
22.5003	Contracts	640	1,160	1,378
22.5004	Other	331	600	713
22.6001	Supplies and materials	5,074	9,200	10,925
23.1001	Equipment	21,221	89,929	33,439
29.9001	Total Reimbursable obligations	27,575	101,449	47,120
99.9901	Total obligations	3,916,708	5,764,633	6,267,497

BUDGET ACTIVITY: 1 SHIP SUPPORT EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

	FY 1984 ACTUAL	FY 1985 ESTIMATE	FY 1986 ESTIMATE	FY 1987 ESTIMATE	JUSTIFICATION PAGE
SHIP PROPULSION EQUIPMENT	\$25,351	\$25,196	\$56,542	\$69,224	
GENERATORS AND PUMPS	13,494	11,367	27,570	19,720	
AIR COMPRESSORS	7,086	2,880	3,336	6,487	
PROPELLERS	6,467	7,583	14,510	15,091	
NAVIGATION EQUIPMENT	35,752	33,985	62,387	55,919	
UNDERWAY REPLENISHMENT EQUIPMENT	7,242	8,866	8,457	2,553	
PERISCOPES	8,651	20,625	21,742	20,555	
OTHER SHIPBOARD EQUIPMENT:					
SHIP SILENCING	9,609	20,400	21,411	39,428	
TRIDENT	15,848	43,710	56,455	110,284	
DEEP SUBMERGENCE	8,288	13,774	11,262	9,212	
SHIP SUPPORT IMPROVEMENT	17,668	13,476	15,393	11,313	
MINESWEEPING CABLES	4,111	5,579	5,669	14,597	
SAFETY EQUIPMENT	11,572	20,891	22,796	19,483	
MISCELLANEOUS	62,779	70,286	112,319	143,374	
REACTOR PLANT EQUIPMENT	353,692	386,155	391,122	546,874	
OCEAN ENGINEERING	24,010	26,961	39,915	41,576	
SMALL BOATS	22,198	14,146	14,777	15,636	
TRAINING EQUIPMENT	3,548	3,781	30,448	21,692	
PRODUCTION FACILITIES EQUIPMENT	27,513	29,392	6,846	1,082	
SPARES AND REPAIR PARTS	574	2,754			
TOTAL BUDGET PLAN	\$665,453	\$761,807	\$922,957	\$1,164,100	

Budget Activity 1 - Ships Support Equipment

(\$ In Thousands)
FY 1987 Estimate - \$1,164,100
FY 1986 Estimate - \$ 922,957
FY 1985 Estimate - \$ 761,807
FY 1984 Actual - \$ 665,453

Purpose and Scope of Work

Budget Activity 1 programs include Shipboard Components, Reactor Cores and Reactor Plant Components, support of the Deep Submergence, TRIDENT and Small Boat procurement programs, and procurement of Production Facilities and training equipment.

Shipboard components, as well as nuclear components and small boats, are procured for direct installation on Active Fleet ships as part of a planned maintenance replacement program or as part of an improvement program. These components are also procured to fill authorized stock requirements. Funding for the Deep Submergence Program is aimed at expanding the Navy's capability to live, work, explore and perform rescue missions in deep ocean areas.

Ship Propulsion Equipment (P-1 Line Items 1-5)

(\$ In Thousands)
FY 1986 \$56,542
FY 1987 \$69,224

These funds will provide for the procurement of equipment designed to improve the reliability, maintainability, fuel efficiency, power output, and durability of the LM 2500 Gas Turbine Engines introduced into the Fleet through the DD-963 and FFG-7 Class construction programs and the Allison 501K Gas Turbine engine introduced into the Fleet through the DD-963, DDG-993, and DD-997 Class ships. This will be accomplished through procurement of necessary modifications identified as a result of an on-going Component Improvement Program financed in the RDT&EN appropriation. Existing 1200 and 600 PSI Steam Plants require sufficient funds to modify and improve reliability through the procurement of fuel oil strainers, lube oil mods, boiler conductivity monitoring systems, stack gas analyzers, and lube oil strainers. Funds requested will also procure ME831-800 gas turbines, fin stabilizer mods, secondary propulsion motors, support for LCAC gas turbines, and support for marine diesel engines.

Generators and Pumps (P-1 Line Items 6-8)

(\$ In Thousands)
FY 1986 \$27,570
FY 1987 \$19,720

These funds will provide for continuation of programs to replace obsolescent, unsupportable, underpowered and unreliable generators and pumps of various capacities and sizes. These programs also procure equipment to support programmed SHIPALIS. Types of equipment procured include a 5KW static inverter for SSN, SSBN and AS class overhauls; arcing fault detector for SSN and SSBN overhauls; 15KW motor generator sets for LST overhauls; 60/400 HZ motor generator sets for CG, CGN and DDG class overhauls; diesel ship service power units for PHMs;

Command Centers (TFCC) (four in FY 1986 and three in FY 1987) which support the tactical commander by receiving and displaying information relative to the current tactical situation.

Training Equipment (P-1 Line Items 111 and 112)

(\$ in Thousands)	
FY 1986	FY 1987
\$4,771	\$14,147

The FY 1986 and FY 1987 requests are for procurement of equipment to satisfy initial training requirements developed through the Navy Training Plan process which will give the Navy the capability to train officer, operator and maintenance personnel on new or significantly modified equipment for which no Navy training is currently available. It also satisfies requirements to expand the Navy training capability on existing equipment to meet heavier needs for trained personnel in the Fleet (FY 1986 \$4.8 million; FY 1987 \$14.1 million).

Aviation Electronic Equipment (P-1 Line Items 113, 115-122)

(\$ in Thousands)	
FY 1986	FY 1987
\$116,747	\$90,010

The FY 1986 and FY 1987 requests for Aviation Electronic Equipment provide for procurement of electronic equipment to support Naval and Marine aviation shore activities, shipboard aircraft control equipment and secure identification systems. The Marine Air Traffic Control and Landing System (MATCALS) will provide a fully automatic air traffic control and landing system. \$16.3 million in FY 1986 and \$13.3 million in FY 1987 are for procurement of two Air Traffic Control (ATC) subsystems in each fiscal year, plus replacement equipment for the AN/TSQ-18 Landing Control Central (LCC). The Shipboard Air Traffic Control (SATC) program will improve air traffic control operations in the Fleet. SATC funding includes \$13.3 million in FY 1986 and \$18.7 million in FY 1987 for procurement of 28 AN/SPN-43 solid state radar field changes, nine moving target detection receiver modifications to improve the reliability and safety of operational AN/SPN-43A's, and 13 AN/UYK-44 computers to replace AN/UYK-20's in the Carrier Air Traffic Control Centers-Direct Altitude Identification Readout (CATCC-DAIR). \$9.2 million in FY 1986 and \$18.1 million in FY 1987 are for procurement of modification kits to correct deficiencies and enhance flight safety of Automatic Carrier Landing Systems (ACLS) AN/SPN-42's and for procurement of three AN/SPN-46 systems to replace the aging AN/SPN-42A Automatic Carrier Landing Systems. \$4.8 million in FY 1986 and \$3.1 million in FY 1987 are for procurement of 32 Tactical Air Navigation (TACAN) systems for Navy ships. \$2.7 million in FY 1986 and \$9.6 million in FY 1987 are for procurement of a variety of field changes required to correct deficiencies in the Air Traffic Control Radar Beacon, Identification Friend of Foe, MK XII System (AIMS), field changes, 100 AN/UPM test sets, 24 Mode IV evaluators, 29 hand held test sets and 13 wideband antennas. The Air Station Support Equipment Program addresses air traffic control requirements and enhances flight safety at Navy and

Submarine Surveillance Equipment (P-1 Line Items 95-98 and 100)

(\$ in Thousands)
 FY 1986 FY 1987
\$25,148 \$22,995

These resources provide special equipment in support of submarine surveillance operations. \$5.4 million in FY 1986 and \$3.5 million in FY 1987 are for procurement of automatic test equipment, repair test stations, and test program sets for the AN/WLQ-4(V) DEPOT Facility. \$12.8 million in FY 1986 and \$11.6 million in FY 1987 are for procurement of direction finding subsystems of the AN/BRD-() (four in FY 1986 and five in FY 1987) which will provide improved performance of SSN-688 Class submarines against long range targets. \$1.8 million in FY 1987 are for procurement of seven AN/BQH-5(V)4 Data Gathering Sets for installation on board SSN-637 Class submarines. \$2.5 million in FY 1986 and \$3.6 million in FY 1987 are for procurement of modifications to the existing AN/WLQ-4(V) installed on the SSN-637 Class submarines. \$4.5 million in FY 1986 and \$2.4 million in FY 1987 are for the procurement of unique equipments that are maintained in limited quantities at Submarine Surveillance Equipment Program Support Facilities for use on board nuclear attack submarines as well as for procurement of improved power supplies in each fiscal year for AN/WLR-8(V)2 systems.

Other Shipboard Electronic Equipment (P-1 Line Items 101-104 and 106-110)

(\$ in Thousands)
 FY 1986 FY 1987
\$386,132 \$361,253

\$130.9 million in FY 1986 and \$121.4 million in FY 1987 provide for procurement of improvements to the Navy Tactical Data System (NTDS) which permits major warships rapid integration of ship sensor information, analysis and display of tactical information and designation of weapon systems to force threats. \$193.8 million in FY 1986 and \$177.7 million in FY 1987 are for electronic equipment for the TRIDENT Training Facility (TRITRAFAC) and the TRIDENT Refit Facility (TRIREFAC). \$7.5 million in FY 1987 is for procurement of four AN/WQN-1(V) Channel Finder Systems and associated equipments. In addition, \$1.6 million in FY 1986 are for procurement of 44 state-of-the-art OMEGA receiving sets (LTN-211). This request also includes resources to support procurement of equipment for the Armed Forces Radio and Television Service (AFRTS) which operates radio and television outlets for the shipboard information, training and entertainment of United States servicemen and their dependents at sea or abroad (FY 1986 \$6.9 million; FY 1987 \$6.5 million). \$3.5 million in FY 1986 and \$7.9 million in FY 1987 are for procurement of mine hunting sonars for Minesweeping Boats (MSBs), route survey sonars for Ocean-going Minesweepers (MSOs), and precise navigation equipment. \$24.8 million in FY 1986 and \$17.2 million in FY 1987 are for procurement of shipboard and manpack receiver equipment for the NAVSTAR Global Positioning System (GPS) a joint service program which will provide a continuous, world-wide three-dimensional positioning/navigation capability to the operational forces. \$3.9 million in FY 1986 and \$6.2 million in FY 1987 are for procurement of the AN/USQ-74, a Link 11 Data Terminal Set. \$20.8 million in FY 1986 and \$16.8 million in FY 1987 are for procurement of seven Tactical Flag

upgrades, Engineering Change Proposals (ECP's), Depot Maintenance Equipment/Jigs/Fixtures/Training and one Passive AN/SLQ-17A(V)2 system to increase the ESM capability and prepare for Selected Restricted Availability (SRA) installation of AN/SLQ-32 based improved active subsystem. \$.5 million in FY 1987 provides for procurement of additional Engineering Change Proposals. The AN/WLR-1H is a tactical ESM receiver for use on-board SSN and CV/CVN class ships. \$3.5 million in FY 1986 and \$6.3 million in FY 1987 provides for the procurement of AN/WLR-1H, (AN/WLR-1() upgrade) field change kits for SSN class ships (five in FY 1986 and three in FY 1987), depot upgrades, production engineering, engineering change proposals, and five direction finding (DF) Antenna Subsystems for CV/CVN class ships (FY 1987). The AN/WLR-8 is a tactical ESM receiver featuring signal analysis capabilities for use on-board SSN-688 class submarines. \$3.0 million in FY 1986 will procure one trainer and \$12.7 million in FY 1987 will procure field change kits to upgrade four existing AN/WLR-8(V)2 equipments. Fleet Electronic Warfare Support Group (FEWSG) provides a realistic air, surface, and subsurface threat environment for Fleet Training and support of Operational Test and Evaluation of Electronic Systems. \$1.7 million in FY 1986 and \$1.4 million in FY 1987 provides for the procurement of signal density and power frequency enhancement for AN/ULQ-13(V) vans (four in FY 1986 and three in FY 1987). \$4.8 million in FY 1986 and \$22.2 million in FY 1987 are for procurement of AN/SKR-7 systems, AN/SPS-48 Simulators and AN/SLQ-33 systems. \$22.2 million in FY 1986 and \$65.8 million in FY 1987 are for procurement of Scenario Generators, High Frequency (HF) Communications Simulators, RADAR Jammer II Buoys, and E/F Band Simulators. \$21.5 million in FY 1986 and \$28.3 million in FY 1987 are for procurement of AN/ULQ-16 Video Processors, Reprogrammable Library terminals/processors/printers, Ships Signature Measurement Systems, upgrades to the Signals Warfare Support Center, Land Mobile systems, Land Fixed Systems, and the Data Link Vulnerability Assessment Project (DVAL). \$8.5 million in FY 1986 and \$61.8 million in FY 1987 are for procurement of Chaff Buoys, Imitative Electronic Countermeasure equipments, and Active Electronic Buoys (AEB).

Reconnaissance Equipment (P-1 Line Items 91-94)

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$81,088</u>	<u>\$79,576</u>

These resources will provide the tactical capability to detect, locate and identify hostile targets at long range and to input this information into the ships Tactical Data System. \$36.4 million in FY 1986 and \$26.5 million in FY 1987 are for continued procurement of OUTBOARD Phase I and OUTBOARD Phase II suites. \$25.1 million in FY 1986 and \$37.2 million in FY 1987 are for procurement of Combat Direction Finding Systems. \$4.0 million in FY 1986 and \$5.3 million in FY 1987 are for procurement of Combat Cryptologic Support Consoles (CCSC). \$15.6 million in FY 1986 and \$10.6 million in FY 1987 are for procurement of equipment for intelligence centers for the Aircraft Carriers (CV), Fleet Imagery Support Terminals (FIST), and Analyst Display Terminals (ADT).

Anti-Submarine Warfare Electronics (Aviation) (P-1 Line Items 80 and 81)

(\$ in Thousands)	
FY 1986	FY 1987
\$61,491	\$44,862

These funds will procure reliability and operability improvements to ADP equipment and will provide for continued production of UYQ-21 displays in FY 1986 and FY 1987 as well as continued procurement of improvements to the Acoustic Analysis subsystem and UYQ-21 displays. All of these are components of the Carrier ASW Module of the Carrier Combat Direction System (FY 1986 \$31.5 million; FY 1987 \$29.3 million). The request also includes resources to support procurement of various equipments which support the ASW Operations Center (ASWOC) (FY 1986 \$30.0 million; FY 1987 \$15.5 million).

Anti-Submarine Warfare Electronics (Surveillance) (P-1 Line Items 74 and 79)

(\$ in Thousands)	
FY 1986	FY 1987
\$105,241	\$113,251

These funds will support both the SOSUS and the SURTASS programs. Specific items to be procured in SOSUS include Ship Improvement Equipment, cable replacement and engineering, trainer hardware and configuration changes, searchlight processing, cable and shore electronics, (FY 1986 \$85.8 million; FY 1987 \$108.8 million). The funds requested in FY 1986 for SURTASS will procure two sonar data recorders, one backup array, one high ambient noise array and three shore electronic units. The FY 1987 procurement will support field changes and modifications, (\$19.4 million in FY 1986; \$4.4 million in FY 1987).

Electronic Warfare Equipment (P-1 Line Items 82-90)

(\$ in Thousands)	
FY 1986	FY 1987
\$181,811	\$295,131

The FY 1986 and FY 1987 Electronic Warfare procurement provides the Fleet with systems that have the capability of detecting overt electromagnetic emissions through passive means. Specific systems to be procured include the AN/SLQ-32, a family of modular shipborne electronic warfare equipments to be installed in most combatants and auxiliaries in the surface Navy. \$102.4 million in FY 1986 will procure six AN/SLQ-32(V)3 systems and Electronic Warfare Improvements as follows: Expanded SLQ-32 Computer Memory, (V)3 Isolation Improvements, Direction Finding (DF), Accuracy Improvement (Band 1), Electronic Support Measures (ESM) Sensitivity Improvements (Band 1 and 3), Band 3 ESM HAT, Antenna Enclosure Improvements, and Electromagnetic Interference (EMI) Improvements. \$96.1 million in FY 1987 will procure five AN/SLQ-32(V)3 systems, and EW Improvements. The AN/SLQ-17 system is for use on CV and CVN class ships to offer a variable and effective defense against simultaneous multi-threat, multi-axis Anti-Ship Missile (ASM) attack. \$14.2 million in FY 1986 provides for procurement of six AN/SLQ-17 Signal Processing/Low Power Amplifier (LPA)

TR-317 (formally TR-155) transducers for the AN/BQS-11/12/13 and AN/BQ-5 sonars for use on SSN-594, SSN-637 and SSN-688 class submarines; new TR-313 transducers (formerly TR-227() transducers) for the AN/SQS-26 Sonar; and Electronic Scanning Switches required to support replacement of unreliable mechanical switches with electronic switches on both surface ships and submarines (FY 1986 \$40.3 million; FY 1987 \$40.8 million).

Anti-Submarine Warfare Electronics (Surface Ships) (P-1 Line Items 71 and 75-78)

(\$ in Thousands)	
FY 1986	FY 1987
\$216,891	\$287,111

The FY 1986 and FY 1987 resources provide for the procurement and support of major ASW Electronics Systems for installation on surface ships. This request includes procurement of 44 AN/SLQ-25 (NIXIE) systems in FY 1986 and 27 systems in 1987 as well as 12 AN/SLQ-36 systems planned as replacements for the AN/SLQ-25 on selected ships (FY 1986 \$11.5 million; FY 1987 \$57.0 million); AN/SQR-17 performance improvements and AN/SKR-4 Data Link Modifications required to receive the new DIFAR/DICASS frequencies (FY 1986 \$15.2 million; FY 1987 \$16.8 million); improvements to increase the service life of the AN/SQR-15 Towed Array System (FY 1986 \$1.9 million; FY 1987 \$6.6 million); 16 complete AN/SQR-19 systems with 19 AN/UYQ-21 full displays in FY 1986 and 19 AN/SQR-19 systems with five full AN/UYQ-21 full displays and four AN/UYQ-21 partial displays in FY 1987 (\$146.5 in FY 1986; \$166.8 million in FY 1987); and conclude procurement of kits in FY 1986 to upgrade the AN/SQR-18A systems to the AN/SQR-18A(V)1 configuration and continue procurement in FY 1986 and FY 1987 of the AN/SQR-18(V)2 critical angle tow systems which employ the AN/SQR-19 hoist for installation on non-variable depth sonar ships (FY 1986 \$41.7 million; FY 1987 \$45.8 million).

Anti-Submarine Warfare Electronics (Submarine) (P-1 Line Items 70, 72 and 73)

(\$ in Thousands)	
FY 1986	FY 1987
\$13,694	\$86,115

The Navy request includes \$10.4 million in FY 1986 and \$26.8 million in FY 1987 for Submarine Acoustic Warfare Systems (SAWS) which provide an enhanced survival capability for submarines to use against enemy torpedoes and a means to reduce the effectiveness of enemy sensors. These resources provide for procurement of AN/BLR-14/BQR-15 Interface Engineering Changes, General Noise and Towed Systems and procurement of the Acoustic Device Countermeasure ADC MK-5 Mod in FY 1986 and FY 1987 and, commencing in FY 1987, Air Display Improvements, the Acoustic Countermeasure System MK-2 Mod 1 for SSN 637 class ships. \$2.8 million in FY 1986 and \$2.9 million in FY 1987 provide for procurement of Intermediate Maintenance Activity equipment for the Submarine Advanced Combat System (SUBACS); Also in FY 1987 one SUBACS maintenance trainer is requested at a cost of \$55.7 million. In addition, \$4.4 million in FY 1986 and \$7.7 million in FY 1987 is requested for the Acoustic Communications system, a multi-phase program which provides improved tactical acoustic communications systems for the three primary Anti-Submarine Warfare platforms (aircraft, surface ships, and submarines).

Improved Point Defense Surface Missile System (FY 1986 \$19.9 million; FY 1987 \$30.6 million). The FY 1986 and FY 1987 request also includes resources for procurement of various radar support items (FY 1986 \$25.0 million; FY 1987 \$20.7 million).

Ship Sonars (Surface Ships) (P-1 Line Items 59-61 and 65)

(\$ in Thousands)	
FY 1986	FY 1987
\$47,283	\$156,597

Funds requested for Surface Ship Sonars include \$7.9 million in FY 1986 and \$11.4 million in FY 1987 which will provide for procurement of AN/SQS-26 CX 153A sonar improvements. \$30.9 million in FY 1986 and \$64.4 million in FY 1987 provide for follow-on procurements of AN/SQS-53B Shipboard Kits (five in FY 1986 and ten in FY 1987). \$8.5 million in FY 1986 and \$9.8 million in FY 1987 provides for the procurement of emergency replacement windows and domes for the AN/SQS-26/53, AN/SQQ-23, AN/SQS-56 and AN/SQS-38 sonar systems. In addition, \$71.1 million in FY 1987 provides for the procurement of three AN/SQS-53C sonars for shorebased use.

Ship Sonars (Submarines) (P-1 Line Items 62, 63 and 68)

(\$ in Thousands)	
FY 1986	FY 1987
\$115,843	\$121,215

These funds provide for continued procurement of AN/BQQ-5 modification kits required to upgrade previously procured and installed AN/BQQ-5 systems onboard SSN-594, SSN-637 and SSN-688 class submarines (FY 1986 \$101.0 million; FY 1987 \$108.5 million); continued procurement of a total of 27 BQQ-5 TB-16 towed arrays in FY 1984 thru FY 1986 utilizing under a three year multi-year contract (FY 1986 \$1.5 million, FY 1987 \$3.8 million). Beginning in FY 1987 a new three year multi-year procurement of TB-16 arrays is planned for six units, with an additional 22 units planned for subsequent procurement; and procurement of AN/BQR-23 Improved Processors and Memory, AN/BQR-15 array modification shipalts, AN/BQQ-9 systems and various other alterations for installation on SSBN submarines (FY 1986 \$13.4 million; FY 1987 \$8.9 million).

Ship Sonars (General Support) (P-1 Line Items 66 and 67)

(\$ in Thousands)	
FY 1986	FY 1987
\$52,163	\$49,588

These funds procure upgrade equipment for the Transducer Repair Facilities including Towed Line Array (TLA) Plant Equipment for the TB-16, AN/SQR-18A(V)1, AN/SQR-18A(V)2, and AN/SQR-19; and engineering changes for the AN/BQS-14 including the upgrade of the Forward Look (FLU) portion of this sonar, and AN/BQS-15, (FY 1986 \$11.8 million; FY 1987 \$8.8 million). This request also includes resources to continue procurement of

Budget Activity 2: Communications and Electronic Equipment

	(\$ in Thousands)
FY 1987 Estimate	\$2,552,171
FY 1986 Estimate	\$2,153,996
FY 1985 Estimate	\$1,710,167
FY 1984 Actual	\$1,526,633

Purpose and Scope of Work

Budget Activity 2 programs include the procurement of shipboard and shore communications and electronic equipment for the Active Fleet and training activities. Improved shipboard surface and air search radars are designed to enhance the military capability of combatant ships. Anti-Submarine Warfare Electronics equipment will furnish surface ships, submarines and special shore activities with equipment used for detection, tracking localization and classification of submarines. Special sonars are procured for employment in Fleet Ballistic Missile submarines. Also procured in this activity is equipment which will provide the Fleet with the capability of deceiving, intercepting, and analyzing airborne, electro-magnetic and underwater radiation for the purpose of executing an effective surveillance and intelligence collection capability.

Justification of Funds:

Ship Radars (P-1 Line Items 52-58)

	(\$ in Thousands)
FY 1986	FY 1987
\$163,590	\$215,556

The FY 1986 and FY 1987 Ship Radar procurements provide the Active Fleet with detection, tracking and identification equipment to meet the challenge of high speed attack capabilities of low-flyers, anti-ship missiles and modern aircraft. Specific radars and radar equipment improvements to be procured in FY 1986 and FY 1987 include the AN/SPS-67(V) radar (the modernized version of the AN/SPS-10 radar), which is the primary surface search radar in the Fleet (FY 1986 \$9.2 million; FY 1987 \$12.8 million); the AN/SPS-40 radar whose long-range goal is to increase the detection capability in hostile, cluttered, or low-flyer threat environments through improved system availability and automation techniques (FY 1986 \$14.8 million; FY 1987 \$16.9 million); the AN/SPS-48 radar, a three-coordinate air search radar whose primary function is to provide target position data to a weapon system (FY 1986 \$67.5 million; FY 1987 \$79.6 million); the AN/SPS-49 radar, a narrow beamed, very long-range two dimensional, air search radar (FY 1986 \$14.1 million; FY 1987 \$29.6 million); the Integrated Automatic Detection and Tracking System (AN/SYS-()) which provides the capability to correlate contact data from up to three radars, determine target tracks, and provide a single target output to the ship's command and decision system automatically (FY 1986 \$13.1 million; FY 1987 \$25.4 million); and the MK-23 Target Acquisition System, a rapid reaction, fully automatic, electronic counter-counter-measure capable radar system developed as the target acquisition system for the

BUDGET ACTIVITY 2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

	1984	1985	1986	1987	Justification
	Actual	Estimate	Estimate	Estimate	Page
SHIP RADARS	132,640	170,298	163,590	215,556	
SHIP SONARS (SURFACE SHIPS)	87,793	71,974	47,283	156,597	
SHIP SONARS (SUBMARINES)	104,859	122,639	115,843	121,215	
SHIP SONARS (GENERAL SUPPORT)	36,443	50,295	52,163	49,588	
ANTI-SUBMARINE WARFARE ELECTRONICS (SURFACE SHIPS)	161,162	151,774	216,891	287,111	
ANTI-SUBMARINE WARFARE ELECTRONICS (SUBMARINE)	14,876	5,133	13,694	86,115	
ANTI-SUBMARINE WARFARE ELECTRONICS (AVIATION)	20,906	39,743	61,491	44,862	
ANTI-SUBMARINE WARFARE ELECTRONICS (SURVEILLANCE)	89,038	88,813	105,241	113,251	
ELECTRONIC WARFARE EQUIPMENT	51,631	109,411	181,811	295,131	
RECONNAISSANCE EQUIPMENT	42,073	63,817	81,088	79,576	
SUBMARINE SURVEILLANCE EQUIPMENT	10,861	7,054	25,148	22,995	
OTHER SHIPBOARD ELECTRONIC EQUIPMENT	151,329	183,687	386,132	361,253	
TRAINING EQUIPMENT	7,005	2,984	4,771	14,147	
AVIATION ELECTRONIC EQUIPMENT	107,742	67,282	116,747	90,010	
OTHER SHORE ELECTRONIC EQUIPMENT (COMM & CONTR)	15,183	18,817	40,736	50,752	
OTHER SHORE ELECTRONIC EQUIPMENT (MISCELLANEOUS)	70,100	48,907	66,181	64,435	
SHIPBOARD COMMUNICATIONS	67,122	60,945	59,273	54,846	
SUBMARINE COMMUNICATIONS	18,164	38,908	67,032	91,038	
SATELLITE COMMUNICATIONS	65,894	54,534	69,077	42,363	
SHORE COMMUNICATIONS	33,442	47,423	83,284	112,417	
CRYPTOGRAPHIC EQUIPMENT	104,684	150,431	168,157	168,537	
CRYPTOLOGIC EQUIPMENT	12,802	16,796	20,820	23,065	
OTHER ELECTRONIC SUPPORT	17,117	9,173	7,543	7,311	
SPARES AND REPAIR PARTS	103,767	129,329	-0-	-0-	
TOTAL BUDGET PLAN	\$1,526,633	\$1,710,167	\$2,153,996	\$2,552,171	

Training Equipment (P-1 Line Item 46 and 47).

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$30,448</u>	<u>\$21,692</u>

This program provides equipments for the support of initial training requirements developed through the Navy Training Plan process and sustaining training requirements developed by the Chief of Naval Education and Training. This funding will also procure equipment for the construction of a CG-47/DD 963 gas turbine operational facility.

Production Facilities Equipment (P-1 Line Items 48, 49 and 50).

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$6,846</u>	<u>\$1,082</u>

These programs provide for the procurement of replacement cranes for the floating dry dock at Norfolk Naval Shipyard and calibration equipment for the intermediate and organizational maintenance levels.

Spares and Repair Parts (P-1 Line Item 51).

This program provides for the procurement of initial spares and repair parts required to support components installed on-board ships of the Active Fleet. Funding for this program was transferred to Budget Activity 8 in FY 1986.

Reactor Plant Equipment (P-1 Line Items 39 and 40).

(\$ In Thousands)	
FY 1986	FY 1987
\$391,122	\$546,874

The FY 1986 and 1987 requests provide funds for the procurement of replacement reactor cores, power units and other reactor plant components and equipment. Replacement cores and power units are the assemblies of nuclear fuel and necessary associated structural and reactivity control equipment required for the periodic refueling of nuclear powered ships. The procurement of these units is accomplished by the Department of Energy (DOE). The DOE has developed production lines within the civilian nuclear industry to fabricate these units. The funds requested are required to meet the refueling needs of the Navy in a manner most efficient to the government as recommended by the DOE. The Reactor component line item includes the components, equipment, and material required to provide minimum support needed for the continued safe and reliable operations of naval nuclear propulsion plants. Funds are programmed for acquisition of replacement components for ship alterations, initial and replenishment stock spare components, and specialized equipment necessary for refueling of nuclear powered ships.

Ocean Engineering (P-1 Line Items 41-43).

(\$ In Thousands)	
FY 1986	FY 1987
\$39,915	\$41,576

These programs provide for the procurement of equipment to support safety requirements at the existing depth capabilities and mission duration restrictions imposed on the working diver; equipment to improve the Navy's diving capabilities and maintain sufficient levels of critical salvage items; and improved equipment developed as part of Swimmer Support Systems for Underwater Demolition Teams, SEAL Teams and Inshore Undersea Warfare Groups. FY 1986 and FY 1987 funds will procure the MK14 Push - Pull System and the Deep Tool System; hardware which will increase the U.S. Navy operational surface supported maximum diving depth from 300 to 450 feet and salvage equipment such as hydraulic pullers, stato anchors, puller beach gearlegs, and synthetic line; MK-VIII Swimmer delivery vehicle, gas transfer and storage systems, deck shelters, SEAL team outfitting, laser target designator, reserve equipment, and underwater breathing apparatus.

Small Boats (P-1 Line Items 44 and 45).

(\$ In Thousands)	
FY 1986	FY 1987
\$14,777	\$15,636

Standard boats procured with these funds will be used to fill new or revised allowances, to replace obsolescent wooden boats now in service, and to replace boats of fiberglass or steel construction which are beyond economical repair. Types of boats to be procured with these funds include the 26' Motor Whaleboat, 14' Punt, 35' and 50' Workboat, 24' EOD Craft, and 58' EOD Support Craft.

Other Shipboard Equipment (Minesweeping Cables) (P-1 Line Item 30).

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$5,669</u>	<u>\$14,597</u>

This program will provide for the procurement of minesweeping cables necessary to counter moored and influence mines. These funds will procure Q-3 and S-3 cables; mine neutralization system vehicles, cables and modification kits; and a complete mine neutralization system in FY 1987.

Other Shipboard Equipment (Safety Equipment) (P-1 Line Items 20, 33, and 35).

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$22,796</u>	<u>\$19,483</u>

These funds procure equipment which support shipboard fire fighting operations, fuel tank inspection, and other activities which can involve the exposure of lungs to noxious substances with the latest available safety equipment in order to perform assigned tasks without risking personal injury; provide for the protection of personnel from exposure to nuclear weapons radiation; and provide ships of the active fleet with the capability to detect chemical warfare agents before ship contamination occurs. FY 1986 and FY 1987 funding will provide Halon 1301 Fire Fighting systems to complement the existing Aqueous Film Forming Foam/ Purple K Dry Chemical Powder hose reel systems in machinery spaces as well as procurement of this system in a mobile/portable form and Oxygen Breathing Apparatus Voice Amplifiers to improve communications between fire fighting team members; shielding which will be affixed to bulkheads and to cradles containing the individual weapons on CVs, SSN-688 Class, Non-FBM ASs and at shore facilities; and chemical warfare directional detectors and chemical agent point detector systems.

Other Shipboard Equipment (Miscellaneous) (P-1 Line Items 21, 22, 25, 28, 29, 31, 34, 36, and 38).

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$112,319</u>	<u>\$143,374</u>

These funds provide for the procurement of Combat System Command and Control Switchboards; equipment which will enable the Navy to comply with Federal law and DOD and environmental pollution control regulations; replacement batteries for all active submersible craft/submarines; procurement and positioning of special equipment for merchant ships to provide them with the capability to perform Naval auxiliary roles; provision of specialized equipment to assure reliable repair of electronic modules at selected shore, surface and subsurface Fleet activities; acquisition of energy conservation systems, equipment and modifications developed through the Chief of Naval Operation's Energy Research and Development program for installation aboard ships in the Fleet; the Gas Management System for installation on board submarines which will enhance safety and reduce the submarine's vulnerability to detection; and modifications/replacements for all equipment that is not in a specific category and which cost less than \$900,000 by category.

Submarine Silencing program. FY 1986 and FY 1987 funding provides for the procurement of Masker Belts for CG's, PRAIRIE AIR for CVs AEs and AOs, Compound Air Maskers for large combatants, and flex hose and line filters for DD's and DDG's.

Other Shipboard Equipment (TRIDENT) (P-1 Line Item 26).

	(\$ In Thousands)
FY 1986	
\$56,455	
FY 1987	
\$110,284	

Funding in this program provides for hull mechanical and electrical equipment and tools required to perform measurements in support of maintenance tasks; equipment to develop stock levels for TRIDENT plant equipment and repair (TRIPER) equipments to achieve the required operational availability and to achieve a Depot Availability Period which does not exceed one year; alteration/modification packages for TRIPER equipment to maintain standardization and interchangeability of assets; long lead material/equipment for the advanced equipment replacement program; main shaft seal mating rings; alteration/modification packages for hull, mechanical and electrical equipment; and major equipment spares.

Other Shipboard Equipment (Deep Submergence) (P-1 Line Item 27).

	(\$ In Thousands)
FY 1986	
\$11,262	
FY 1987	
\$9,212	

The requested funds will provide for the procurement of hardware to improve/modify Deep Submergence Vehicles to provide the Navy with the capability to rescue personnel from craft disabled on the ocean floor. It also will improve the capability to perform manned underwater search, inspection and recovery missions.

Other Shipboard Equipment (Ship Support Improvement) (P-1 Line Items 32 and 37)

	(\$ In Thousands)
FY 1986	
\$15,393	
FY 1987	
\$11,313	

These programs will procure critical, long lead time equipments, assemblies and components to support the maintenance-limited LO-MIX classes of ships after delivery; provide for improvement in the material condition of Engineered Operating Cycle ships; achieve increased operational availability; and provide funds to upgrade facilities both ashore and afloat (Industrial plant and tenders) in order to improve and expand intermediate level maintenance by the surface forces. Shipboard maintenance will emphasize modular replacement with repairables being returned to Intermediate Maintenance Activities and Depot Overhaul Points for repair or rework and return to stock. Inherent in the Engineered Operating Cycle will be several intervening maintenance availabilities of extremely short duration for performing scheduled alterations and planned overhaul of installed equipment.

Underway Replenishment Equipment (P-1 Line Item 16)

	(\$ In Thousands)
FY 1986	FY 1987
<u>\$8,457</u>	<u>\$2,553</u>

The equipment procured under this program is required to provide the Active Fleet with new or improved underway replenishment-at-sea capability. This equipment is used to transfer fuel, cargo, ammunition, and missiles by both alongside and vertical replenishment techniques. The equipment being procured supports the following objectives: personnel/equipment safety; reduction in maintenance costs; and reduction in alongside time, to minimize ship vulnerability to enemy action. Major equipment includes ram tensioners, air flasks, gypsy winches, highline/ spanwire winches, saddle winches, and elevator controllers.

Periscopes (P-1 Line Items 17-19)

	(\$ In Thousands)
FY 1986	FY 1987
<u>\$21,742</u>	<u>\$20,555</u>

These funds will provide for the procurement of Type 18 periscope related material and other periscopes and accessories. The Type 18 periscope equipment includes eyepiece boxes and masts which are required to establish an inventory of these parts based on actual/predicted failure rates and turn around times, and automatic direction finding modifications. Funds are required to acquire a Submarine Satellite Information Exchange reception capability on Type 18 periscopes. Field change kits are being procured to implement approved changes on previously procured Type 18 periscopes. Equipment to provide additional shore/tender based components for other type periscopes also is required to ensure that an issuable periscope is always available as a replacement for damaged units on SSN-594 and 637 Class ships. This requirement is based on past demand experience and repair turn around time. The Type 8 periscope program will enable the modification of Type 8 periscopes to incorporate solid state amplifiers, twelve-channel rotary joints, improved slip ring assemblies, noise source and sapphire heated head window assemblies. Funding will also provide for support and improvement of the Type 2 and 15 series periscopes for all Active Fleet submarines.

Other Shipboard Equipment (Ship Silencing) (P-1 Line Items 23-24)

	(\$ In Thousands)
FY 1986	FY 1987
<u>\$21,411</u>	<u>\$39,428</u>

The requested funds will provide for the procurement of equipment such as Glass Reinforced Plastic (GRP) Domes, electrical system mods, air reducing manifolds, acoustically balanced diffuser pump casings, active torque cancellers, high pressure brine pump modification kits, main lube oil lined pipe acoustic filters, vent fan modifications, and noise/vibration monitor analyzers required to implement the militarily high priority Submarine Silencing program on existing nuclear submarines and for the acoustic quieting of radiated noise and sonar self-noise for surface ships. The submarine silencing equipment incorporates technology developed under RDT&EN programs for improving detection capability and reducing the detectability of the submarine. The surface ship silencing program will make use of the extensive silencing technology already developed under the

and 115 volt 150 amp 400HZ 1line voltage regulators for LHA and LPH Class overhauls. Also included are air conditioning chill water pumps; trim and drain pumps for SSN-688 class ships; pumps in support of the phased maintenance program for AFS's and AOR's; fire pumps/ends/motors for CVs/CVNs; and auxiliary freshwater pumps for SSBN's.

Air Compressors (P-1 Line Items 9-10)

	(\$ In Thousands)
FY 1986	
<u>\$3,336</u>	
	FY 1987
	<u>\$6,487</u>

These funds will provide for the procurement of greater capacity and more reliable high pressure air compressors than those currently installed in the Active Fleet. Oil free 20 Cubic feet/hour (CFH) air compressors are needed to support combat weapon systems on combatants. Also being procured are 30 Cubic feet/hour air compressors which are essential to the operation of Liquid Oxygen Generating Plants on aircraft carriers in direct support of aircraft, and oil-free 30 cubic feet/hour air compressors which provide required additional capability for submarine tenders.

Propellers (P-1 Line Items 11-12)

	(\$ In Thousands)
FY 1986	
<u>\$14,510</u>	
	FY 1987
	<u>\$15,091</u>

These funds will provide for the procurement of propellers to reduce the noise signature on FBM and attack submarines and as replacements for those propellers currently installed as casualties occur. Funds are also required for replacement of blades, shafts and hubs in support of active fleet ships as damage or failure occurs, as well as for support inventories for new classes of ships.

Navigation Equipment (P-1 Line Items 13-15)

	(\$ In Thousands)
FY 1986	
<u>\$62,387</u>	
	FY 1987
	<u>\$55,919</u>

These funds will procure Electrically Suspended Gyro Navigators (ESGN) which are programmed as replacements for the MK-3 Ships Inertial Navigation System (SINS) on SSN-637 Class and SSNs 671 and 685; and as replacements for the Dual Miniature Inertial Navigation System (DMINS) on SSN-688 Class ships. The improvement over the MK-3 SINS is in reliability, maintainability, availability and performance. The improvement over DMINS is in performance. Funds are required for the CV/CVN navigation system which will replace the MK-3 SINS system. This system will provide for improvements in reliability, maintainability, and availability. Funds are also required for maintenance items and newly developed improvements such as the AN/WSN-5 Inertial Navigation Sets for CG/CGN/DDG Class ships, the AN/SSQ-87(V) Hydrofoil Collision Avoidance and Tracking System, and the Doppler Sonar Velocity Log for SSN's and SSBN's.

Marine Corps Air Stations. The Air Station Support equipment budget request includes \$12.2 million in FY 1986 and \$14.7 million in FY 1987 for seven Alpha Numeric Display Systems (BRANDS), ten Fiber Optic Cable Systems, 15 Target Suppressor Transponders, and various communication system replacements. \$1.5 million in FY 1986 and \$1.5 million in FY 1987 are for procurement of 24 Open Planar Array Antennas for operational Radar Air Traffic Control Facilities (RATCF). \$7.4 million in FY 1986 and \$7.3 million in FY 1987 are for procurement of 28 Microwave Landing Systems (MLS). \$16.8 million in FY 1986 and \$3.8 million in FY 1987 are for procurement of Fleet Area Control and Surveillance Facilities (FACSFAC) for communication modernizations, FACSFAC Air Control Tracking System (FACTS) modifications, increased hardware/software maintenance capability, Joint Tactical Information Distribution System (JTIDS) terminals and air search radar capability. In addition, \$32.5 million in FY 1986 will provide for procurement of NTDS Links, communications upgrades, radar data processing, system interface and procurement of air search radar capability for Key West, Florida and Guantanamo Bay.

Other Shore Electronic Equipment (Command and Control) (P-1 Line Items 124-128)

(\$ in Thousands)	
FY 1986	FY 1987
\$40,736	\$50,752

These funds will procure electronic equipment for replacement of obsolete equipment of the Navy Space Surveillance System, and unalerted real-time detection of non-radiating satellites and other objects which pass through multistatic continuous wave radar beams (FY 1986 \$3.1 million; FY 1987 \$3.0 million). This request includes resources to support the Space System Processing System procurement of special computer hardware and software necessary to improve information processing and generation of highly classified reports for use by Operational Navy Commands (FY 1986 \$2.1 million; FY 1987 \$2.2 million). The Navy Command and Control System (NCCS) Ashore program (\$35.0 million in FY 1986 and \$43.3 million in FY 1987) provides for the coordination and integration of shore based command centers and their respective systems; resources will procure: three Intelligence Support Groups (two in FY 1986 and one in FY 1987); eight Operations Support Groups (four in FY 1986 and four in FY 1987); one Shore ASW Command Center Upgrade System and one ASW Operations Command Center Upgrade System (FY 1987); Baseline system, communications and command center upgrade, replacement equipments, and formatted message origination systems (FY 1986 and FY 1987). \$.6 million in FY 1986 also provides for procurement of Radar System Simulation Units for the Multiple Unit Link Eleven Test and Operational Training System (MULTOTS), a transportable system to validate Link II interoperability on Tactical Data Systems equipped ships and aircraft. In addition, \$2.3 million in FY 1987 are for procurement of seven Tactical Receiver Equipments (TRE).

Other Shore Electronic Equipment (Miscellaneous) (P-1 Line Items 129-136)

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$66,181</u>	<u>\$64,435</u>

\$8.6 million in FY 1986 and \$6.6 million in FY 1987 are for the Radiation Detection Indication and Computation Equipment Program (RADIAC) which procures instruments to detect and measure nuclear and ionizing radiation and convert these measurements into meaningful terms so that Navy personnel can adequately control personnel exposure to those radiations. \$1.6 million in FY 1986 are for the continuing procurement of advanced, state-of-the-art electronic Intrusion Detection Systems (IDS) as part of the Navy's continuing efforts to improve the physical security of storage sites for both nuclear weapons and Arms, Ammunition and Explosives (AA&E) weaponry. \$28.6 million in FY 1986 and \$23.4 million in FY 1987 are for the procurement of General Purpose Electronic Test Equipment (GPETE) for initial outfitting of new or modified Fleet and shore electronic equipments. \$5.3 million in FY 1986 and \$4.4 million in FY 1987 are for procurement of equipment required for the Integrated Combat System Test Facility (ICSTF) located at San Diego, California, the only permanent Navy test facility for integrated shipboard combat system certification and continuation engineering for modifications of combat systems in existing ships. \$7.0 million in FY 1986 and \$8.3 million in FY 1987 are for procurement of a new generation of signal generators and oscillator calibrators capable of calibrating up to 18 GHz to support test equipment for FFG-7 and DD-963 class ships and TRIDENT submarines and up to 40 GHz to support test equipment for SSN-637 and SSN-688 class submarines. \$10.0 million in FY 1986 and \$8.8 million in FY 1987 are for procurement of emergency field change kits and hardware devices to solve Electromagnetic Interference (EMI) problems in electronic systems and equipments throughout the operating forces. \$8.3 million in FY 1987 are for procurement of wide area surveillance systems to provide targeting information to tactical commanders afloat. The FY 1986 and FY 1987 requests also include resources to support procurement of replacements for deteriorating and obsolete management equipments (FY 1986 \$5.1 million; FY 1987 \$4.5 million).

Shipboard Communications (P-1 Line Items 137-143)

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$59,273</u>	<u>\$54,846</u>

\$13.6 million in FY 1986 and \$11.2 million in FY 1987 are for the High Frequency (HF) Shipboard Communications program to update the capabilities of the current HF Communications Systems. FY 1986 and FY 1987 funds will procure AN/URT-23 transmitters, AN/TRQ-35 HF Sounders, and commence procurement of the OA-9122/SRC antenna coupler group. \$7.3 million in FY 1986 and \$7.5 million in FY 1987 are for procurement of AN/WSC-3 (LOS) radios, an Ultra High Frequency (UHF) transceiver which provides secure tactical voice communications

aboard line-of-sight ships. \$6.2 million in FY 1986 is for procurement of AN/SRC-47 Flight Deck Systems which provide a secure voice communications system for key personnel involved in aircraft operational support functions. \$3.7 million in FY 1986 and \$4.2 million in FY 1987 are for procurement of portable specialized radios to support the unique air, sea and land environment of the Explosive Ordnance Disposal (EOD) and Navy Special Warfare (NSW) missions. \$16.0 million in FY 1986 and \$20.0 million in FY 1987 are for procurement of communication systems to automate message processing and distribution functions aboard ship. \$7.7 million in FY 1986 and \$7.2 million in FY 1987 are for procurement of multicoupler interface components, antennas and various other items for the integration and completion of communication suites aboard ship. \$4.8 million in FY 1986 and \$4.8 million in FY 1987 are for procurement of upgraded communication packages for flag configured logistic support ships and equipment for the Military Sealift Command/Ready Reserve Fleet (MSC/RRF).

Submarine Communications (P-1 Line Items 144-147 and 149-151)

(\$ in Thousands)	
FY 1986	FY 1987
\$67,032	\$91,038

These resources will procure communications equipment for Command and Control of the Fleet Ballistic Missile (FBM) Submarine Forces. \$13.2 million in FY 1986 and \$22.5 million in FY 1987 are for procurement of equipment in support of the Extremely Low Frequency Communication Program (Project ELF), a shore-to-ship communications system which will provide the capability to communicate with submarines at speed and depth. \$19.3 million in FY 1986 and \$29.9 million in FY 1987 are for procurement of Low Frequency/Very Low Frequency (LF/VLF) communications hardware, upgrades and high efficiency amplifiers. \$2.2 million in FY 1986 and \$3.6 million in FY 1987 are for procurement of new precise frequency time standards. \$7.7 million in FY 1986 and \$7.7 million in FY 1987 are for procurement of Enhanced VERDIN processors. In addition, \$6.2 million in FY 1986 and \$5.3 million in FY 1987 are for procurement of the 1600 Chips Per Second (CPS) Kits, Minimum Essential Emergency Communication Network (MEECN) modules and noise reduction circuits. These requirements are part of the VERDIN VLF communications system. \$1.7 million in FY 1986 is for procurement of equipment to enhance the capabilities of the existing SSN-688 class radio room. \$15.5 million in FY 1986 and \$21.2 million in FY 1987 are for procurement of Submarine Communications Equipment consisting of antennas, mast assemblies and buoyant cable antennas. \$3.3 million in FY 1986 are for procurement of on-line receivers for the Circuit Mayflower program. In addition, \$1.0 million in FY 1986 and \$1.0 million in FY 1987 are for procurement of modular data collection and recording equipment to measure FBM submarines communication performance.

Satellite Communications (P-1 Line Items 152 and 153)

(\$ in Thousands)	
FY 1986	FY 1987
\$69,077	\$42,363

FY 1986 and FY 1987 Satellite Communications procurements provide for adequate command, control and

communications with ships and aircraft through the Ultra High Frequency (UHF) and Super High Frequency (SHF) bands. \$69.1 million in FY 1986 and \$42.4 million in FY 1987 are for procurement of Demand Assignment Multiple Access (DAMA) systems, Officer in Tactical Command Information Exchange Subsystems (OTCIXS) equipment, Tactical Data Information Exchange Subsystems (TADIXS) equipment, Satellite Communications equipment for submarines operating in the arctic regions, Submarine Satellite Information Exchange Subsystems (SSIXS), Combat Direction Finding Communications equipment, Front End Processors for the Navy Modular Automated Communications Systems (NAVMACS) and modification kits for upgrading the Defense Satellite Communications terminals, AN/MS-64 Navy Terminals, AN/TSC-96 terminals and equipment operating with the new KG-84A cryptologic equipment.

Shore Communications (P-1 Line Items 154-156, 158 and 160-165)

(\$ in Thousands)	
FY 1986	FY 1987
\$83,284	\$112,417

\$1.4 million in FY 1986 and \$1.8 million in FY 1987 represent the Navy share of a Joint Service modernization of the Joint Chiefs of Staff (JCS) Communications equipment. \$.1 million in FY 1986 and \$1.5 million in FY 1987 are for procurement of emergency generators and uninterruptable power systems (UPS) for installation at various Naval Communication activities worldwide. \$30.0 million in FY 1986 and \$9.1 million in FY 1987 are for procurement of equipment and field change kits to replace obsolete High Frequency (HF) assets used to enable Naval Telecommunications to be viable in the absence of satellite communications. \$26.7 million in FY 1986 and \$30.4 million in FY 1987 are for procurement of Unit Level Circuit Switches (ULCS) and Advanced Narrowband Digital Voice Terminals (ANDVT). \$6.0 million in FY 1986 and \$6.1 million in FY 1987 are for procurement of Ashore Mobile Contingency Vans (AMCC), a transportable platform for deployment to provide contingency communications. \$2.1 million in FY 1986 and \$2.2 million in FY 1987 are for procurement of replacement and upgrade of microwave facilities in the worldwide Defense Communication System (DCS). \$2.8 million in FY 1986 and \$4.9 million in FY 1987 are for procurement of the Defense Data Network (DDN). \$9.9 million in FY 1986 and \$29.9 million in FY 1987 are for procurement of Local Digital Message Exchange (LDMX) terminals, Remote Information Exchange Terminals (RIXT) and Automatic Digital Network (AUTODIN) Standard Remote Terminals (SRT). \$1.1 million in FY 1986 and \$24.6 million in FY 1987 are for procurement of various communications equipment which supports the Worldwide Military Command and Control System (WWMCCS) and the initial deployment of the WWMCCS Information System (WIS) (FY 1987). \$3.1 million in FY 1986 and \$2.0 million in FY 1987 are for procurement of low dollar value items to support numerous Naval Shore Telecommunications programs.

Cryptographic Equipment (P-1 Line Items 166-185)

(\$ in Thousands)	
FY 1986	FY 1987
\$168,157	\$168,537

The FY 1986 and FY 1987 requests will procure sufficient secure voice equipment to provide secure voice protection to an additional share of Navy's identified critical narrowband/wideband secure voice requirements. \$18.2 million in FY 1986 and \$16.9 million in FY 1987 are for procurement of the Single Audio System (SAS), a system where all shipboard radio voice subscribers have access to either a plain or cryptographically covered circuit, on an as required and programmed basis. The SAS will provide manual voice switching suites for smaller ships and an automated switching suite for larger ships. Both switching systems utilize a switch which is modularly expandable to suit the needs of various platforms. \$15.8 million in FY 1986 and \$27.3 million in FY 1987 are for procurement of TSEC/KY-71/72 equipments which will provide subscriber expansion and improvement over the secure voice capability presently provided by AUTOSEVOCOM I. New features include digital transmission, end to end secure voice with conferencing, better voice quality, and lower bit rate. \$27.1 million in FY 1986 and \$26.8 million in FY 1987 are for procurement of the TSEC/KG-84, a general purpose key generator capable of satisfying a wide variety of requirements which is designed to serve as the future standard link encryption device for low to medium speed record and/or data systems. \$25.0 million in FY 1986 and \$22.3 million in FY 1987 are requested for TSEC/KY-57/58, a wideband, push-to-talk (half-duplex) tactical speech security equipment for use in VHF/UHF communications. \$4.6 million in FY 1986 and \$6.5 million in FY 1987 are for procurement of the TSEC/KYW-5, the Cryptographic module for the Advanced Narrowband Digital Voice Terminal (ANDVT) which satisfies requirements for secure narrowband communications which cannot be met by existing equipment. \$14.3 million in FY 1986 and \$9.0 million in FY 1987 are for procurement of the TSEC/KW-46 which will secure record and data communications for the Navy Fleet Broadcast System. \$1.4 million in FY 1986 are for procurement of the TSEC/KG-72/KGV-14, a communications security portion of the Flight Deck Communications Program. The TSEC/KG-72/KGV-14 will secure base station and personal (helmet radio) communications, respectively, on ships that support aircraft. \$5.3 million in FY 1986 and \$4.4 million in FY 1987 are for procurement of the TSEC/KG-81, a full-duplex, high speed digital data encryption system for bulk encryption of the most vital DCS links. \$7.9 million in FY 1986 are for procurement of the TSEC/KG-44 equipments for the Defense Meteorological Space Program. \$9.5 million in FY 1986 and \$4.3 million in FY 1987 are for procurement of the TSEC/KG-58/KGV-6, required to secure Marine Corps Ultra High Frequency Multi-Channel Communications in the Position Location and Reporting System (PLRS). \$13.5 million in FY 1986 and \$9.7 million in FY 1987 are for procurement of the TSEC/KY-67, a wideband push-to-talk (half-duplex) integrated secure Very High Frequency radio for the Marine Corps. The Marine Corps will employ the TSEC/KY-67 in tracked vehicles. \$4.5 million in FY 1986 and \$11.2 million in FY 1987 are for procurement of the TSEC/KGV-11, a general purpose communications security module designed for use with wide spectrum communications. \$5.5 million in FY 1986 and \$7.2 million in FY 1987 are for procurement of items of relatively low dollar value to meet special operational requirements. \$1.9 million in FY 1987 are for procurement of the KGR-96 which provides encryption/decryption for a satellite data link. \$11.9 million in FY 1986 and \$17.5 million in FY 1987 are for procurement of COMSEC devices for the TRI-TAC switches. \$0.7 million in FY 1987 are for the procurement of the KGV-8 which is the crypto module for the Joint Tactical Information Distribution System (JTIDS). \$1.9 million in FY 1986 and \$4.4 million in FY 1987 are for procurement of TEMPEST test equipment. \$2.0 million in FY 1986 and \$2.5 million in FY 1987 are for

procurement of the KYK-13 battery operated transfer devices, KYX-15 which performs the automatic remote keying control function and the KOI-18 which is a lightweight battery operated device for reading a light-level punched type.

Cryptologic Equipment (P-1 Line Items 186-191)

(\$ in Thousands)	
FY 1986	FY 1987
\$20,820	\$23,065

These resources provide equipment to support Tactical Cryptologic missions and functions. \$4.9 million in FY 1986 and \$5.0 million in FY 1987 continues procurement of the Carry-on Special Intelligence Communications Equipments, completes procurement of the Multi-User SI Communications (MUSIC) Systems, and continues procurement of the Special Intelligence Ship-Shore Teletype Replacement equipments. \$4.8 million in FY 1986 and \$4.8 million in FY 1987 initiates and/or continues procurement of Carry-on Tactical Cryptologic ancillaries, equipments and systems for the Ships Signals Exploitation Space (SSES) aboard U.S. Navy combatants. \$5.0 million in FY 1986 and \$6.8 million in FY 1987 continues procurement of various replacement and cryptologic training equipments for use at U.S. Navy shore sites, training command, and/or aboard U.S. Navy combatants. \$.8 million in FY 1986 and \$1.1 million in FY 1987 continues procurement of cryptologic systems for use at 81 U.S. Navy ashore reserve training sites. \$2.1 million in FY 1986 and \$2.2 million in FY 1987 continues procurement of cryptologic systems for use at U.S. Navy shore sites to ensure that cryptologic technicians maintain proficiency in various languages and manual Morse. \$2.3 million in FY 1986 and \$3.2 million in FY 1987 continues procurement of cryptologic support systems to be installed at various worldwide shore sites and are used in conjunction with afloat cryptologic systems to ensure that accurate tactical data bases are maintained.

Other Electronic Support (P-1 Line Items 192-194)

(\$ in Thousands)	
FY 1986	FY 1987
\$7,543	\$7,311

These resources will procure critical repairable equipments in support of planned maintenance schedules and corrective maintenance actions for the FFG (LO-MIX) and DD (Engineering Operation Cycle) Class ships; and dedicated test stations, industrial plant equipment, test jigs and fixtures for selected depot rework facilities in support of the new maintenance strategies for the FFG and DD (EOC) Class ships (FY 1986 \$7.4 million; FY 1987 \$7.2 million). In addition, \$.1 million in FY 1986 and \$.1 million in FY 1987 are for procurement of communications, Radiac and ancillary equipments for Advanced Base Functional Components (ABFC's).

Spares and Repair Parts (P-1 Line Item 195)

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$ -0-</u>	<u>\$ -0-</u>

FY 1986 and FY 1987 funds for spares and repair parts were transferred to Budget Activity 8.

Budget Activity 3: AVIATION SUPPORT EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

	1984 Actual	1985 Estimate	1986 Estimate	1987 Estimate	Justification Page
SONOBUOYS	\$183,359	\$332,684	\$273,051	\$230,868	
GENERAL PURPOSE BOMBS	144,832	208,241	321,277	352,123	
AIR LAUNCHED ROCKETS	23,269	45,412	48,666	58,372	
AIRCRAFT MACHINE GUN AMMUNITION	19,696	25,068	27,042	22,697	
BIGEYE CHEMICAL WEAPON	-	-	21,531	43,715	
GATOR	18,251	25,517	44,662	48,126	
MISCELLANEOUS ORDNANCE AND SUPPORT	103,828	96,339	157,442	100,023	
WEAPONS RANGE SUPPORT EQUIPMENT	30,671	67,617	85,858	82,181	
AIRCRAFT LAUNCHING AND RECOVERY EQUIPMENT	21,633	31,856	30,339	38,379	
AIRCRAFT REARMING EQUIPMENT	12,925	20,006	78,995	40,204	
AIRBORNE MINE COUNTER- MEASURES EQUIPMENT	11,101	14,425	22,967	31,384	
LAMPS MK III SHIPBOARD EQUIPMENT	65,001	72,060	42,683	43,062	
SPARES AND REPAIR PARTS	16,931	24,001	-	-	
OTHER AVIATION SUPPORT	10,558	9,414	29,505	47,206	
TOTAL BUDGET PLAN	662,055	972,640	1,184,018	1,138,340	

Budget Activity 3: AVIATION SUPPORT EQUIPMENT

(\$ in Thousands)
FY 1987 Estimate - \$1,138,340
FY 1986 Estimate - \$1,184,018
FY 1985 Estimate - \$ 972,640
FY 1984 Estimate - \$ 662,055

Purpose and Scope of Work:

Budget Activity 3 finances the procurement of all air-delivered ordnance required for the Navy forces and Marine Air Wings, except guided missiles funded under the Weapons Procurement, Navy (WPN) appropriation. It also includes air launched anti-submarine warfare (ASW) sensors, general support equipment associated with aircraft and other aviation support which includes ground electronics equipment, aircraft launching and retrieving equipment, photographic equipment, reconnaissance and electronic warfare processing and analysis equipment and miscellaneous other categories.

Justification of Funds:

Sonobuoys (Includes P-1 Line Item Nos. 196-207).

(\$ in Thousands)
FY 1986 FY 1987
\$273,051 \$230,868

The FY 1986 and FY 1987 Sonobuoy procurement has been computed considering the number of ASW carrier air groups and shore based ASW patrol squadrons to be supported, actual and planned peace-time usage for these forces and the necessary training allowance requirements. User aircraft include the S-3A, P-3, SH-2D, and SH-3 series. Specific sonobuoys to be procured in FY 1986 and FY 1987 include the AN/SSQ-36 Bathythermograph Sonobuoy, an air dropped bathythermograph transmitting set that provides a vertical water temperature profile (FY 1986 \$2.4 million; FY 1987 \$7.7 million); the AN/SSQ-53 (DIFAR), a passive directional sonobuoy used during the target localization phase of the Air ASW Mission (FY 1986 \$143.0 million; FY 1987 \$101.5 million), the AN/SSQ-57 (Special Purpose) Sonobuoy, a calibrated AN/SSQ-41 sonobuoy used to obtain acoustic and sound pressure level data and to measure ambient noise (FY 1986 \$3.1 million; FY 1987 \$3.1 million); the AN/SSQ-62 (DICASS) Sonobuoy, an active directional sonobuoy (FY 1986 \$27.0 million; FY 1987 \$18.3 million), the AN/SSQ-75 expendable reliable acoustic path sonobuoy (ERAPs), an air dropped, expendable, deep water active detection system and the AN/SSQ-77 (VLAD) Sonobuoy, a passive directional sonobuoy utilizing a line array of omni-directional hydrophones and a DIFAR element. The directional beam patterns are formed from the line array to discriminate against noise and the DIFAR enables determination of

the azimuthal bearing of detected sound (FY 1986 \$82.1 million; FY 1987 \$82.1 million). Funds are also required for procurement of the AN/SSQ-86 (DLC) Sonobouy, a one-way acoustic communications sonobouy (FY 1986, \$3.0 million, FY 1987 \$3.0 million) and the Low Cost Sonobouy program, an effort to streamline design specification while using high volume production techniques in order to arrive at a unit production cost goal of \$20 in quantities of 500,000 units per year (FY 1986 \$11.1 million). The FY 1986 and FY 1987 requests also include resources to support procurement of Signal Underwater Sound (SUS) devices which are expendable, high energy acoustic sources used for many applications including bottom mapping, long range signal transmission and position fixing (FY 1986 \$1.4 million; FY 1987 \$1.2 million).

General Purpose Bombs (P-1 Line Item Nos. 208-212, 217).

(\$ in Thousands)	
FY 1986	FY 1987
\$321,277	\$352,123

These funds will procure the MK 83 thermally protected bomb, the BSU-85 Air Inflatable Retarder Fin for the MK-83 G.P. Bomb, the FMU-139/B electric fuze used on MK-80 series G. P. bombs, the MK 15/BSU-86 retard fin and the BSU-33 high drag mode fin both for the MK-82 G. P. Bomb. \$11.4 million is requested in FY 1986 (\$31.9 million in FY 1987) for procurement of the MK-83 thermally protected G. P. Bomb. In FY 1986 \$34.3 million (\$13.9 million in FY 1987) will fund the procurement of the MK-15/BSU-86 Fins. \$18.1 million in FY 1986 (\$21.8 million in FY 1987) will procure the BSU-85 Air Inflatable Retarder Fin. \$73.0 million in FY 1986 (\$64.1 million in FY 1987) will procure the FMU-139/B electric fuze. The remaining \$11.8 million in FY 1986 (\$16.8 million in FY 1987) is requested to procure various types of fins for these G.P. Bombs as well as miscellaneous component parts and production support. \$27.6 million in FY 1986 (\$67.9 million in FY 1987) is for the procurement of SKIPPER, a Rocket Powered Standoff Laser Guided MK 83 Bomb. \$22.2 million in FY 1986 (\$40.3 million in FY 1987) is for PAVEWAY III Low Level Laser Guided Bomb Kits, which will be used to provide terminal guidance to the MK-82 general purpose bomb. \$37.6 million in FY 1986 (\$44.4 million in FY 1987) is for WALLEYE, an air-to-surface TV guided glide bomb. WALLEYE funds will procure extended range (ER) and data link (DL) hardware for the conversion of WALLEYE I weapons to the ER/DL configuration. \$8.8 million in FY 1986 (\$9.0 million in FY 1987) for procurement of FMU-140 proximity fuzes to retrofit the existing inventory of ROCKEYE II MK 20 500-lb free fall cluster bombs. The Practice Bombs procurement is \$21.3 million in FY 1986 (\$11.9 million in FY 1987) for the MK-76 and MK-106 Practice Bombs, \$36.0 million (\$19.5 million in FY 1987) for the MK-80 series inert bomb, \$2.3 million for the BDU-20 inert bombs for nuclear training, \$4.3 million (\$2.2 million in FY 1987) for Cartridge Simulant Units (CXU-3, CXU-4 and MK-4 smoke signals), \$9.6 million (\$5.3 million in FY 1987) for ROCKEYE Practice Bomb, and \$3.1 million (\$3.2 million in FY 1987) for production support services.

Air Launched Rockets (P-1 Line Item Nos. 213-214).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 48,666	\$ 58,372

\$20.7 million in FY 1986 and \$26.1 million in FY 1987 are for procurement of the air-to-ground Zuni 5.0" Wrap-around Fin Rocket system. \$28.0 million in FY 1986 and \$32.3 million in FY 1987 are for the 2.75" Folding Fin Rocket system.

Aircraft Machine Gun Ammunition (P-1 Line Item No. 216).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 27,042	\$ 22,697

This category includes procurement of 20MM, 25MM, 30MM and 30MM ammunition used with various aircraft (A-4, A-6, A-7, F-8, F-14 and AV-8) gun systems. \$11.3 million in FY 1986 and \$16.3 million in FY 1987 are requested for procurement of 20MM practice gun ammunition used with various aircraft (A-4, A-6, A-7, F-8, and F-14) gun systems for fleet training to maintain pilot proficiency. \$6.0 million in FY 1986 is requested for 30MM service ammunition fired by the AV-8 (HARRIER) aircraft gun system. \$7.2 million in FY 1986 and \$3.8 million in FY 1987 is to procure 25MM HEI and API service ammunition for war reserve requirements for the AV-8. \$4 in both FY 1986 and FY 1987 is provided for container procurement. Included in this program is \$.9 million in FY 1986 and \$1.0 in FY 1987 for production/engineering support of ammunition procurements. In addition \$1.2 million is provided in both FY 1986 and FY 1987 for a product improvement effort to increase the safety and reliability of the 25mm fuze in addition to reducing its cost.

BIGEYE Chemical Weapon (P-1 Line Item No. 223).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 21,531	\$ 43,715

The FY 1986 funds provide for low rate initial production of the full-up round BIGEYE weapon. The BIGEYE is an air launched binary spray chemical bomb. It generates and delivers a persistent nerve agent from two non-toxic chemicals. The FY 1987 request provides funds for the first year of the anticipated full rate production.

GATOR (P-1 Line Item No. 225).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 44,662	\$ 48,126

The \$44.7 million in FY 1986 and \$48.1 million in FY 1987 is to procure GATOR CBU-78 500 pound bombs. The GATOR weapon consists of a MK-7 dispenser that contains a mixture of air-scatterable anti-tank and anti-personnel land mines.

Miscellaneous Ordnance and Support (P-1 Line Item Nos. 215, 218-222, 224, 226).

(\$ in Thousands)	
FY 1986	FY 1987
\$157,442	\$100,023

This procurement will include chaff decoy heads for electronic countermeasures, impulse cartridges, and other miscellaneous ordnance and support. \$2.1 million in FY 1986 and \$1.9 million in FY 1987 are requested for the Parachute Flare Program to procure the LUU-2 B/B parachute flare. \$29.9 million in FY 1986 and \$29.3 million in FY 1987 are for the procurement of impulse cartridges used for ejecting air-launched weapons and other cartridge actuated devices. \$8.1 million in FY 1986 and \$7.6 million in FY 1987 are requested for rocket motors and catapults used for ejecting aircrmen from disabled aircraft. \$91.7 million in FY 1986 and \$34.3 million in FY 1987 are requested for procurement of airborne expendable countermeasures, including chaff, infrared flares and expendable jammers to meet training and war reserve (mobilization) requirements. \$15.6 million in FY 1986 and \$14.9 million in FY 1987 are requested for JATO (Jet-Assisted Take Off) rockets used to launched aircraft and targets and to propel sleds used in testing. The remaining \$10.2 million in FY 1986 and \$12.1 million in FY 1987 are requested for miscellaneous ordnance, including such items as Marine Location Markers, Smokey SAM Simulator, and Defense Nuclear Agency Material.

Weapons Range Support Equipment (P-1 Line Item Nos. 227-228).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 85,858	\$ 82,181

Procurements in FY 1986 include the following: (1) \$16.7 million for Aircrew Electronic Warfare Ranges at Fallon, NV and Cherry Point, NC. The Fallon Range procurement includes \$11.9 million for the Naval Strike Warfare Center (NSWC), which was commissioned to train strike warfare planners, leaders, and aircrews in

penetration tactics; (2) \$38.2 million for upgrading the East Coast and West Coast Tactical Aircrew Combat Training Systems (TACTS) at Oceana, VA and Yuma, AZ. This procurement includes \$11.5 million for NSWC; (3) \$21.0 million for Surveillance Radar at Boardman, OR including \$17.8 million for NSWC; and (4) \$2.3 million for System Replacement and Modernization. Other range equipment requirements in FY 1986 total \$7.7 million. Including \$2.9 million for NSWC. Procurements in FY 1987 include the following: (1) \$20.3 million for a Range Electronic Warfare Simulator (REWS) to be used for surface and air fleet Electronic Warfare (EW) training exercises; (2) \$24.4 million for Aircrew Electronic Warfare Ranges at Fallon, NV and Pinecastle, FL; (3) \$2.6 million for System Replacement and Modernization; (4) \$4.9 million for upgrading the East Coast Tactical Aircrew Combat Training System (TACTS) at Oceana, VA; (5) \$11.1 million for Range Operations Control System Replacement at PMRF; (6) \$1.7 million for Mobile Electronic Warfare Simulator at Marine Corps Air Station; Yuma, AZ; (7) \$2.8 million for Barking Sands Tactical Underwater Range Hydrophone Replacement; and (8) \$2.4 million for a Naval Tactical Data System at PMRF. Other range equipment requirements in FY 1987 total \$7.6 million. Drone Control Systems are also funded in this area. The FY 1987 funding of \$4.4 million will procure 7 units of a 14 unit requirement for Air Open Ocean Missile Target Control System which will replace the current Vega Tracking system.

Aircraft Launching and Recovery Equipment (P-1 Line Item Nos. 229, 231-232).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 30,339	\$ 38,379

Catapult, Arresting Gear, and Visual Landing Aids Support for the Navy's aircraft carriers, and the Marine Corps' Expeditionary Airfield (EAF) systems are funded under this program. \$2.9 million in FY 1986 and \$3.1 million in FY 1987 are for EAF support equipment to correct known deficiencies, to modernize the EAF equipment to enhance maintainability, reliability and safety of flight operations, and to keep pace with advanced aircraft requirements. \$27.5 million in FY 1986 and \$35.3 million in FY 1987 are for the procurement of major catapult, arresting gear and visual landing aids equipment for aircraft carriers and other aircraft capable ships.

Aircraft Rearming Equipment (P-1 Line Item No. 230).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 78,995	\$ 40,204

The Aircraft Rearming Equipment program provides armament support equipment (ASE) and weapons support equipment (WSE). ASE is equipment utilized ashore and afloat to load and/or download air launched weapons and to perform maintenance on aircraft installed armament systems. WSE equipment is used, ashore and afloat, to transport and perform maintenance on weapons and explosive ordnance components. ASE and WSE is utilized to accomplish the improved rearming rate (IRR) of A-6, EA-6, A-7, F-4, F-14, F-18, and AV-8 aircraft. The use of this equipment permits the rapid weapons loading and reloading of strike aircraft with a minimum number of flight deck personnel (\$79.0 million in FY 1986 and \$40.2 million in FY 1987). The large increase in FY 1986 over previous years reflects the Navy's need to build up levels of ASE/WSE in order to be able to fully outfit fifteen carriers by the end of FY 1989.

Airborne Mine Countermeasures Equipment (P-1 Line Item No. 236).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 22,967	\$ 31,384

This program funds various mine countermeasures equipments operated by RH/CH-53D/MH-53E helicopters. \$23.0 million requested in FY 1986 will procure airborne mine countermeasures (AMCM) tow provision kits which provide the necessary removable equipment that allow the helicopter to tow an AMCM system (\$10.6 million), and procure six (6) AN/ALQ-141 Sonar Countermeasure Sets (\$9.1 million). \$31.4 million requested in FY 1987 will procure AMCM tow provision kits (\$6.7 million); two (2) AN/ALQ-166 countermeasures Sets (\$18.3 million) and sixteen (16) AN/37U Mine Clearing Sets (\$4.0 million). Included in FY 1986 and FY 1987 (\$3.3 and \$2.4 million respectively) are modification funds in support of ECPs on AMCM production systems and magnetic minesweeping cable procurement.

LAMPS MK III Shipboard Equipment (P-1 Line Item No. 237).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 42,683	\$ 43,062

A multi-appropriation funded program, the LAMPS MK III shipboard equipment funded by OPN is that equipment which is to be installed in existing ships being backfitted with the LAMPS MK III weapon system. This equipment includes: (1) the AN/SSQ-28 (V), an electronic sonar signal processing system (5 in FY 1986 and 7 in FY 1987); (2) the AN/SRQ-4, a shipboard terminal data transmission device (6 in FY 1986 and 3 in FY 1987); and (3) HLS, the shipboard helicopter landing system for the LAMPS MK III helicopter (8 in FY 1986 and 3 in FY 1987).

BUDGET ACTIVITY 7: PERSONNEL AND COMMAND SUPPORT EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

Budget Plan					
Amounts for Procurement Actions Programmed					
	1984 Actual	1985 Estimate	1986 Estimate	1987 Estimate	Justification Page
Training Equipment	86,805	105,491	107,312	135,904	
Command Support Equipment	105,307	125,482	92,572	125,413	
Computer Acquisition Equip	111,039	227,412	176,523	121,596	
Productivity Programs	8,595	12,990	3,420	2,105	
Total Budget Plan	311,746	471,375	379,827	385,018	

The requested funds for the automated materials handling systems will provide for the installation of three Navy Integrated Storage Tracking and Retrieval Systems (NISTARS) in FY 1986 and FY 1987. NISTARS automates certain warehouse functions and places the entire warehouse operation under positive management control and automation. It improves the efficiency of labor and materials, as well as improves inventory accuracy. These systems should produce sizeable savings as well as improve supply support responsiveness.

Support Equipment (P-1 Line Items Nos. 315 - 316)

	(\$ in Thousands)
FY 1986	<u>2,288</u>
FY 1987	<u>817</u>

The request for pollution control equipment provides funds for three bulk fuel installations in FY 1986 and two in FY 1987. These projects provide Navy fuel farms with a comprehensive monitoring and control system and alarms which will respond to significant fuel level changes, permitting rapid response to problems such as oil spills. As most fuel terminals are located in environmentally sensitive areas (i.e. near large bodies of water), any oil spill would generate a costly clean-up effort and considerable adverse publicity.

	(\$ in Thousands)
FY 1986	<u>34,900</u>
FY 1987	<u>75,859</u>

Classified Programs (P-1 Line Items Nos. 317-322)

Details of these programs are of a higher classification. Justification is provided separately.

Budget Activity 6 - Supply Support Equipment

(\$ in Thousands)

FY 1987 Estimate	- 144,657
FY 1986 Estimate	- 62,495
FY 1985 Estimate	- 89,725
FY 1984 Actual	- 79,424

Purpose and Scope of Work

This budget activity finances the procurement of forklift trucks and other materials handling equipment used at Navy installations and aboard ships; automated materials handling systems; investment type support equipment; reprographics equipment; and pollution control equipment. In addition, financing for certain classified projects is included in this activity.

Justification of Funds

Materials Handling Equipment and Systems (P-1 Line Items Nos. 312-314)

(\$ in Thousands)	
FY 1986	25,307
FY 1987	67,981

These funds are requested to procure forklift trucks in FY 1986 and in FY 1987 which are needed for the cyclical replacement of equipments which have exceeded their economic life in use aboard ships and at shore activities. These overage equipments are more costly to maintain than to replace. As of the end of the FY 1986 funded delivery period, 26 percent of the ashore inventory of forklift trucks will be overage, based on a standard life expectancy of 11 years. The 1975 through FY 1985 budgets provided the first eleven increments of a phased plan for reducing the overage inventory to 20 percent ashore and zero percent afloat by the end of FY 1986. The original plan has been extended to FY 1988 due to funding limitations.

For other materials handling equipment the FY 1986 request represents the eleventh increment of a phased equipment replacement program to attempt to reduce the significant level of overage warehouse tractors, cranes and other equipment in the inventory. The requested FY 1986 program decreases the level of overage equipment in the inventory to 26 percent ashore and 20 percent afloat. Block obsolescence during the FY 1985 and FY 1986 periods prevents significant overage reduction. Subsequent fiscal year approved funding levels will allow for a phased reduction of overage equipment to 20 percent ashore and zero percent afloat by the end of FY 1989.

BUDGET ACTIVITY 6: SUPPLY SUPPORT EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

<u>Budget Plan</u>				
<u>(Amounts for Procurement Actions Programmed)</u>				
	1984 Actual	1985 Estimate	1986 Estimate	1987 Estimate
				Justification Page
Materials Handling				
Equipment and Systems	33,823	36,205	25,307	67,981
Support Equipment	9,255	9,320	2,288	817
Classified Programs	36,346	44,200	34,900	75,859
Total Budget Plan	79,424	89,725	62,495	144,657

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$27,654</u>	<u>\$109,256</u>

Fleet Hospital (P-1 Line Item 310)

Combat Zone and Communication Zone Hospitals consist of shelters, transportation equipment, medical equipment and other hospital support equipment, and will provide medical care for Navy and Marine Corps personnel during wartime. The FY 1986 program funds provide for one 500-bed Communications Zone Hospital in support of theater communications zone bed requirements for Naval component commanders. The FY 1987 program provides for two 500-bed Communications Zone Hospitals, one 1,000-bed Communications Zone Hospital and one 500-bed Combat Zone Hospital.

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$12,917</u>	<u>\$ 8,674</u>

Other Equipment - (P-1 Line Items 303-309 & 311)

Other programs in Budget Activity 5 include Mobile Utilities Support Equipment which provides electric power and high quality steam for support to the fleet while in port, and for emergency shore operations, serious utility system deficiencies and delayed military construction. Pollution control equipment is for compliance with Clean Air Act and Clean Water Act Amendments, various Environmental Protection Agency Regulations and State Implementation Plans. Also included are funds for Fleet Moorings which will be used to procure components for overhauling fleet moorings in the Pacific area, Indian Ocean, Western, and Eastern areas.

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$88,314</u>	<u>\$129,314</u>

Trucks, Trailers, Construction and Maintenance Equipment - (P-1 Line Items 291 - 299)

This category includes trucks, trailers, generators, crushing, drilling, earth moving, fire fighting and weight handling equipment and replacement of 78 ambulances for the protection and maintenance of Naval Shore Activities, Naval Construction Force, and various other Operational Forces worldwide. In addition, FY 1986 funds are required to continue the ongoing program for initial outfitting of the Advanced Base Functional Component (ABFC) OPLAN \$1.459 million, the Reserve Naval Construction Force (RNCF) \$6.489 million, and Maritime Prepositioned Ships (MPS) \$2.888 million. The majority of the increase in FY 1986 funding is not for augmentation of the program, but is an attempt to bring the quantity of equipment exceeding the economic replacement criteria (currently 46 percent) to an acceptable level by FY 1990. The funding level provided by Department of Defense Authorization Act, 1985, Report Number 98-691, Title I, page 92, does not allow an equipment replacement program which would provide an adequate readiness posture.

(\$ in Thousands)	
FY 1986	FY 1987
<u>\$82,519</u>	<u>\$108,238</u>

Amphibious Equipment (P-1 Line Item 300) and Combat Construction Support Equipment (P-1 Line Item 301)

These funds provide specialized amphibious equipment which significantly enhances the Navy's capability to support Marine Corps amphibious operations through the ship-to-shore transfer of both dry and liquid cargo and is a key part of the Strategic Sealift Program. This equipment will assist the Navy to provide essential logistic support in advanced areas having little or no port capability and will be used in the Assault Echelon and the Assault Follow-on Echelon phases of amphibious operations by the Amphibious Construction Battalions. The FY 1986 program includes amphibious dry cargo transfer equipment including powered and non-powered causeway sections, side loadable warping tugs, elevated causeways, roll on/roll off discharge facilities and other miscellaneous amphibious specialized equipment. The increase in FY 1986 funding is for the procurement of the second of five Off-Shore Petroleum Discharge Systems (first procured in FY 1984) which are required to support Defense Guidance for the Four Marine Air/Ground Task Force scenario (i.e., one Marine Amphibious Brigade, one Marine Amphibious Force, and two Maritime Prepositioned Ship sets). Combat Construction Support Equipment consists primarily of relocatable facilities such as storage magazines, fuel storage tanks, multipurpose shelters and containers, panel buildings in support of Naval Construction Force personnel. The FY 1986 program includes the outfitting of Naval Mobile Construction Battalions with equipment shelters and containers for prepacking Table of Allowance items and provides shelters for the protection of personnel against chemical agents at overseas Naval Bases.

(\$ in Thousands)
 FY 1987 Estimate - 366,488
 FY 1986 Estimate - 221,558
 FY 1985 Estimate - 232,509
 FY 1984 Actual - 192,190

Budget Activity 5: Civil Engineering Support Equipment

Purpose and Scope of Work

Funds provided under this budget activity are for the procurement of passenger carrying vehicles, trucks and trailers, construction, earthmoving, maintenance, fire fighting, weight handling, amphibious and specialized equipment, combat construction support equipment, mobile utilities support equipment, fleet moorings, pollution control equipment, and fleet hospitals. This equipment is procured for Navy-wide use by the Operating Forces and Shore Establishment including only passenger carrying vehicles for the Industrial Fund activities.

(\$ in Thousands)
 FY 1986 FY 1987
\$10,154 \$11,006

Passenger Carrying Vehicles - (P-1 Line Item 289 & 290)

This category provides for replacement and limited augment of buses, sedans, station wagons and armored sedans for all Navy activities. Included are replacement vehicles for Navy Industrial Fund (NIF) activities in compliance with the 97th Congress House of Representatives Conference Report No. 97-980. The increase in this line primarily supports NIF activities where the replacement of overage vehicles was not accommodated for three years. In addition, funding has been included to avoid uneconomical leasing which becomes necessary when inadequate procurement for replacement of overage vehicles or limited augmentation cannot be accommodated. It has been directed by Department of Defense Appropriation Bill, 1984, Report Number 98-427, Title III, that uneconomical leasing be avoided through increased procurement. The FY 1986 program provides for the replacement of 686 vehicles leaving an additional 1,838 which will still exceed economic replacement criteria. This category does not include ambulances, which are addressed below.

BUDGET ACTIVITY 5: CIVIL ENGINEERING SUPPORT EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

	Budget Plan				Justification Page
	(Amount for Procurement Actions Programmed)				
	1984 Actual	1985 Estimate	1986 Estimate	1987 Estimate	
Passenger Carrying Vehicles	4,081	4,365	10,154	11,006	
Trucks, Trailers, Construction and Maintenance Equipment	57,277	56,067	88,314	129,314	
Amphibious Equipment and Combat Construction Support Equipment	49,045	69,807	82,519	108,238	
Fleet Hospitals	58,200	69,233	27,654	109,256	
Other Equipment	23,587	33,037	12,917	8,674	
Total Budget Plan	192,190	232,509	221,558	366,488	

Other Expendable Ordnance (Includes P-1 Line Items 281-287)

	(\$ In Thousands)
FY 1986	FY 1987
<u>\$164,216</u>	<u>\$206,839</u>

The Small Arms and Landing Party Ammo request in FY 1986 and FY 1987 provides ammunition in support of active naval vessels, and for active and reserve special warfare forces including replacement of Non-Combat Expenditure Requirements (NCER), initial allowance for all approved active and reserve forces, and a Combat Reserve and/or Material Pipeline of ammunition quantities based on "Days of Support". The FY 1986 and FY 1987 request for Pyro and Demo Material provides pyrotechnics and demolition materials for all active naval vessels, amphibious and mobile construction battalions, harbor clearance units, cargo handling and port groups, naval security groups, and naval special warfare groups. The QUICKSTRIKE request in FY 1986 and FY 1987 provides for the procurement of the 2000 lb MK-65 service and non-service mines to include the MK-58 Target Detecting Devices (TDDs) and associated safety and arming devices. The request for Fleet Mine Support Equipment in FY 1986 and FY 1987 provides for the procurement of material and production support services for the assembly of mines in stockpile. The request also provides for support of fleet proficiency training, mine warfare and mine countermeasures training, and improved stockpile mine performance. The Shipboard Expendable Countermeasures program provides for Anti-Ship Missile Decoys deployed from the MK-36 Decoy Launching System. The FY 1986 and FY 1987 request provides for SEA GNAT RF Decoys and MK-186-IR Decoys. Also included under Other Expendable Ordnance is \$7.9 million in FY 1986 and \$7.6 million in FY 1987 for Defense Nuclear Agency (DNA) material for procurement of trainers and support equipment for the W-80 Series (TOMAHAWK) and other nuclear weapons systems in order to conduct nuclear safety studies, certification of ships/depos with respect to nuclear capability and for training and certification of Weapons Maintenance and Handling personnel.

Spares and Repair Parts (Includes P-1 Line Item 288)

The funds requested for initial spare parts support new end items and the funds requested for replenishment spare parts replace those consumed by the Fleet. Funding for this program was transferred to Budget Activity 8 in FY 1986.

Strategic Platform Support Equipment (Includes P-1 Line Items 264-265)

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$168,885</u>	<u>\$95,283</u>

The FY 1986 request of \$168.9 million and the FY 1987 request of \$95.3 million for Strategic Platform Support Equipment provides funding for MK-48 Handling equipment, class improvement program equipment, alterations/modifications to weapons systems and fire control systems, and acoustic data equipment.

ASW Support Equipment (Includes P-1 Line Items 266-270)

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$139,186</u>	<u>\$144,663</u>

The FY 1986 request of \$139.2 million and FY 1987 request of \$144.7 million funds is for Anti-Submarine Warfare (ASW) Support Equipment for procurement of All Digital Attack Center (ADAC) which includes FCS MK 117 Increased Display and Conversion for Over the Horizon targeting, Advanced Capability (ADCAP) Torpedo, and FCS MK 117/CCS MK-1 Improvements. In addition, FY 1986 and FY 1987 resources will support procurement of various up-grades to submarine and surface torpedo tube equipment, Anti-Submarine Rocket (ASROC) launchers, various test equipments, and procurement of equipment to support the MK-113 Mod 9 Improvement program. These funds will also support procurement of 8 MK-116 Mod 5/6 systems in FY 1986 and seven in FY 1987, as well as provide for the procurement of Anti-Submarine Warfare torpedo exercise and shore support equipment, range equipment for Fleet Operational Readiness Accuracy Check Sites (FORACS) and Sensor Accuracy Check Sites (SACS), and test equipment to support Weapon System Accuracy Trials (WSAT).

Other Ordnance Support Equipment (Includes P-1 Line Items 271-280)

(\$ In Thousands)	
FY 1986	FY 1987
<u>\$31,463</u>	<u>\$30,318</u>

The FY 1986 request of \$31.5 million and the FY 1987 request of \$30.3 million for Other Ordnance Support Equipment are for various ordnance programs not budgeted under other sub-budget activities within this budget activity. Some of the major programs are: Explosive Ordnance Disposal Equipment, Unmanned Seaborne Targets, and Stock Surveillance Equipment. The request in both FY 1986 and FY 1987 for Explosive Ordnance Disposal Equipment provides for procurement of necessary EOD tools and equipment, required for initial outfitting of EOD units. These equipments provide ordnance location and safe disposal of unexploded ordnance. The request for Unmanned Seaborne Targets provides Surface Seaborne Targets for Fleet training, with procurement of Septar Targets and Floating Automatic Scoring Target (FAST) hulls beginning in FY 1986 and continuing in FY 1987. The request in FY 1986 and FY 1987 for Stock Surveillance Equipment provides resources for determining safety, reliability, readiness, and service/shelf life of both stored and deployed Navy and Marine Corps tactical weapons and weapon systems and the causes for their degraded state. Other programs included in the FY 1986 and FY 1987 request are Swimmer Weapons Systems, Anti-Ship Missile Decoy System, Calibration Equipment, and Other Ordnance Training Equipment.

Ship Missile Systems Equipment (Includes P-1 Line Items 253-263)

	(\$ In Thousands)
FY 1986	FY 1987
\$574,384	\$443,241

The FY 1986 request of \$574.4 million and the FY 1987 request of \$443.2 million represent Ship Missile Systems (SMS) programs. The MK-92 Fire Control System request of \$2.9 million in FY 1986 and \$44.1 million in FY 1987 will provide for improved readiness of the MK-92 system. The FY 1986 and FY 1987 requests of \$13.0 million and \$13.9 million respectively for Harpoon Support Equipment will be used to procure Ordnance Alterations, primarily the Block 1C ORDALTS. The SMS ORDALTS: Area Defense, the TERRIER Support Equipment request of \$112.1 million in FY 1986 and \$51.0 million in FY 1987 will provide for modification to the TERRIER Missile Weapon Systems including Fire Control System MK 76, Weapons Direction System MK 14, Guided Missile Launching System MK 10, Communications Tracking Set AN/SYR-1 and Ancillary support equipment. These modifications provide for CG/SM-2 performance improvements (Standard Missile (Extended Range) Block I missile capability), New Threat Upgrade performance improvements (Standard Missile 2 (Extended Range) Block II missile capability) and associated Reliability/Maintainability/Availability improvements in CG-16/26/N9/N25/N35 Class ships. The requests in FY 1986 and FY 1987 of \$106.8 million and \$23.7 million respectively for the TARTAR Support Equipment Program represent improvements to the CGN/DCG/SM-2 Weapon System including Fire Control Radar Mods, Weapons Direction System (WDS MK-14), AN/SYR-1 Downlink Receiver and Ancillary Modifications to provide capability to fire the SM-2 (MR) missile; and improvements to the Guided Missile Launching System MK 13 Mod 4 on the FFG-7 Class ships. The SMS ORDALTS: Point Defense Support Equipment request of \$43.8 million in FY 1986 and \$48.5 million in FY 1987 will provide air defense of selected ships by upgrading the NATO SEASPARROW Surface Missile System including modification to fire the RIM-7M Monopulse Missile, procurement of associated special test equipment and upgrading to incorporate specific improvements to increase reliability. The request also includes first year (FY 86) procurement of the launch system to fire the 5" RAM Missile and follow-on FY 87 production. The \$1.0 million requested in FY 1986 and \$1.1 million requested in FY 1987 for Airborne ECM/ECCM will provide for equipment used to simulate projected enemy jamming tactics and techniques during Surface Warfare Systems ECCM/OCCM evaluations and Fleet exercises. The AEGIS Support Equipment request of \$61.8 million in FY 1986 and \$58.5 million in FY 1987 will provide shore based assets for the AEGIS Combat System/Educational Center to support the Battle readiness of AEGIS Cruisers including: AEGIS Combat System Center equipment; and AEGIS Educational Center equipment. The Surface TOMAHAWK Support Equipment request of \$86.6 million in FY 1986 and \$62.7 million in FY 1987 will procure the Surface Vertical Launching System (VLS), Common Weapons Control Systems (CWCS), and Armored Box Launchers for surface ships. The FY 1986 request of \$19.0 million and the FY 1987 request of \$16.4 million for the Submarine TOMAHAWK Support Equipment program will procure modifications to the MK-117 Fire Control System for SSN 637 and 688 Class submarines to provide the platform necessary to launch the TOMAHAWK Cruise Missile. The Vertical Launch Systems request of \$127.4 million in FY 1986 and \$123.4 million in FY 1987 will provide for installation on DD 963, CG 47, and DDG-41 class ships.

Budget Activity 4: Ordnance Support Equipment

(\$ In Thousands)
FY 1987 Estimate - \$1,358,301
FY 1986 Estimate - \$1,396,511
FY 1985 Estimate - \$1,103,391
FY 1984 Actual - \$ 920,142

Purpose and Scope of Work

Funds provided in this budget activity are for Ship Gun Ammunition, Ship Gun and Ship Missile Systems Equipment, Fleet Ballistic Missile and Anti-Submarine Warfare Support Equipment, Other Ordnance Support Equipment, and Other Expendable Ordnance.

Justification of Funds

Ship Gun Ammunition (Includes P-1 Line Items 242-249)

(\$ In Thousands)
FY 1986
\$254,777
FY 1987
\$352,351

The FY 1986 request of \$254.8 million and FY 1987 request of \$352.4 million for Ship Gun Ammunition is for procurement of Five-inch ammunition, 20MM ammunition for the Close-In Weapon System (CIWS), 76MM ammunition, Five-inch Guided Projectile, Sixteen-inch Ammunition, and Other Ship Gun Ammunition. The primary mission for the 76MM ammunition is for use against air targets but is also for use against surface and shore targets. The sixteen-inch ammunition is for use by battleships against surface and shore targets. The five-inch guided projectile will provide precisely accurate naval gunfire against targets ashore and at sea, and can be fired from MK-45 Mod 1 five-inch/54 caliber gun mounts.

Ship Gun Systems Equipment (Includes P-1 Line Items 250-252)

(\$ In Thousands)
FY 1986
\$63,600
FY 1987
\$85,606

The FY 1986 request of \$63.6 million represents \$34.8 million for Gun Fire Control Equipment and \$28.8 million for Coast Guard Gun Systems. In FY 1987 the request of \$85.6 million represents \$30.7 million for Gun Fire Control Equipment, \$21.3 million for Coast Guard Gun Systems and \$33.6 million for Electro-Optical Fire Control Subsystem (SEAFIRE). The funds requested for Gun Fire Control Equipment are for the procurement of equipment and ordnance alterations to improve reliability and maintainability of Surface Gun Fire Control Systems MK-86 and MK-68/56. The funds for Coast Guard Gun Systems procure three MK-92 Mod 1 Fire Control Systems in FY 1986 and two systems in FY 1987 to be installed on Modernized WHEC (Hamilton Class) Coast Guard vessels. The funds for SEAFIRE will procure systems for installation on DD 963 and DDG 993 class ships. SEAFIRE tracks surface and shore targets and provides precision target tracking data under all tactical environments.

BUDGET ACTIVITY: 4 ORDNANCE SUPPORT EQUIPMENT
SUMMARY OF BUDGET PLAN
(In Thousands)

BUDGET PLAN (Amounts for Procurement Actions Programmed)					JUSTIFICATION PAGE
	FY 1984 ACTUAL	FY 1985 ESTIMATE	FY 1986 ESTIMATE	FY 1987 ESTIMATE	
SHIP GUN AMMUNITION	\$167,285	\$195,969	\$254,777	\$352,351	
SHIP GUN SYSTEMS EQUIPMENT	34,206	42,366	63,600	85,606	
SHIP MISSILE SYSTEMS EQUIPMENT	329,681	428,588	574,384	443,241	
FBM SUPPORT EQUIPMENT	60,699	79,542	168,885	95,283	
ASW SUPPORT EQUIPMENT	118,477	92,048	139,186	144,663	
OTHER ORDNANCE SUPPORT EQUIPMENT	24,690	30,521	31,463	30,318	
OTHER EXPENDABLE ORDNANCE	111,623	136,245	164,216	206,839	
SPARES AND REPAIR PARTS	73,481	98,112	0	0	
TOTAL BUDGET PLAN	\$920,142	\$1,103,391	\$1,396,511	\$1,358,301	

Other Aviation Support (P-1 Line Item Nos. 233-235, 238-240).

(\$ in Thousands)	
FY 1986	FY 1987
\$ 29,505	\$ 47,206

This procurement will include Meteorological Equipment, Other Photographic Equipment, Survival Equipment, REWSON, Stock Surveillance Equipment, and Aviation Support Equipment - Miscellaneous. The Meteorological Equipment program finances the procurement of meteorological equipment required by the Navy to gather worldwide weather data, and to rapidly disseminate weather information to Navy and Marine Corps users. The information provided is required for weather forecasting, flight safety and planning fleet operations. The Navy, in addition to providing specialized weather service peculiar to its needs, coordinates services with the DOD and civilian weather agencies. Meteorological equipment to be procured in both FY 1986 and FY 1987 includes equipment for the high-speed dissemination of weather information and miscellaneous equipment to monitor and report weather conditions at sea and shorebased activities (\$2.4 million in FY 1986 and \$17.4 million in FY 1987). Other Photographic Equipment funds the procurement of photographic equipment for all Navy, shore and seaborne photographic laboratories plus various intelligence activities (\$1.7 million in FY 1986 and \$1.6 million in FY 1987). The Survival Equipment program will finance procurement of the PRC-103 Rescue Swimmer's Radio (\$2.2 million in FY 1986 and \$.3 million in FY 1987), the PRC-90-1 Aircrew Survival Radio (\$8.9 million in FY 1986 and \$4.7 million in FY 1987), the PRT-5/CRT-3 Replacement Survival Radio (\$4.4 million in FY 1987), and Chemical, Biological, Radiological personal protective equipment (\$4.6 million in FY 1986 and \$8.1 million in FY 1987) for use by aircrewmembers. The Survival Equipment program also includes funds for support equipment, ILS and Production Support (\$2.0 million in FY 1986 and \$1.1 million in FY 1987). \$2.4 million in FY 1986 and \$2.5 in FY 1987 is requested to buy equipment in support of the REWSON (Reconnaissance, Electronic Warfare, Special Operations and Naval Intelligence) Program. Procurement includes: (1) readout equipment for ship and shore reconnaissance squadrons, (2) surface and subsurface photo collection equipment, (3) analytical equipment to support these collectors and (4) equipment of a photographic and analytic nature for use by ship combatants. The Stock Surveillance Equipment line provides funds for procurement of equipment needed to monitor, measure, and assess the condition of current Navy stocks of air-launched missiles and air-launched ordnance and ammunition (\$2.3 million in FY 1986 and \$2.4 million in FY 1987). 80% of the funds support missile inventory quality evaluation (surveillance) efforts and 20% support air-launched ordnance evaluation, including bombs, rockets, and cartridge actuated devices. Material readiness factors such as reliability and serviceability are measured by this effort. In addition, OPN Budget Activity (B.A.) #3 funds procurement of fleet telemetry (TM) equipment which is used to receive, record and analyze missile telemetry performance data providing information to evaluate training/test exercises (\$3.1 million in FY 1986 and \$4.7 million in FY 1987) within the Other Aviation Support Equipment program. Beginning with FY 1986 Aviation Support Equipment Spares and Repair Parts will be consolidated with all other OPN funded spares and transferred to the new Budget Activity 8.

Budget Activity 7 - Personnel and Command Support Equipment

	(\$ in Thousands)
FY 1987	Estimate - 385,018
FY 1986	Estimate - 379,827
FY 1985	Estimate - 471,375
FY 1984	Actual - 311,746

Purpose and Scope of Work

This budget activity finances the procurement of Training Equipment, Command Support Equipment, Computer Equipment and Productivity Investment Programs.

Justification of Funds

Training Equipment (P-1 Line Items 323-343)

(\$ in Thousands)	
FY 1986	FY 1987
107,312	135,904

Surface training devices will provide maintenance, operator, team, and refresher training for new combat systems/capabilities being introduced into the fleet. Requested funding supports a variety of cost effective devices including Surface Sonar Trainers, Ship System Trainers and Surface Combat System Trainers.

The requested trainers in the sub-surface community will enhance capability to teach normal and emergency ship control procedures to improve skills and submerged ship handling proficiency; provide operator and team training on newly developed sonar systems; support land based training for submarine fire control/combat system attack center team training; provide simulated surfaced submarine piloting techniques; and provide a visual tactical targeting capability in submarine training attack centers to teach personnel to integrate information and make critical tactical decisions.

Funding is required to procure Training Support Equipment (TSE) consisting of minor training aids and devices to support the education and training programs to supply the fleet with effectively trained personnel.

Training Device Modifications provide cost-effective enhancements to update the existing inventory of training devices. The modifications help maintain the training value of devices and keep them compatible with equivalent changes made to the fleet operational equipments which these devices simulate.

Command Support Equipment (P-1 line Items 344-352)

(\$ in Thousands)	
FY 1986	FY 1987
92,572	125,413

This funding provides for the procurement of items which are centrally managed by activities not under the purview of the Naval Material Command, including Intelligence Support Equipment, Medical Support Equipment and Physical Security Equipment.

This request includes equipment needed for the Naval Intelligence Command and its field activities. It is a part of the General Defense Intelligence Program (GDIP) requirements. Further information on this program is classified. Additional details on this procurement request are contained in the Intelligence Justification Books being provided separately.

Funding is also requested to procure Medical Support Equipment. Funds are requested for acquisition of medical equipment in support of direct health care delivery. Funds are requested to replace existing worn-out, obsolete assets and to provide for the acquisition of new technological developments for a modern health care delivery system.

Funds are requested for acquisition of equipment to support the following Physical Security programs: Nuclear Weapons Security, Sensitive Ordnance Security, and Remote Sensors and other intrusion detection devices required for Physical Security at Naval bases.

Computer Acquisition Program (P-1 Lines Items 353-354)

(\$ in Thousands)	
FY 1986	FY 1987
176,523	121,596

The Computer Acquisition Program (CAP) was established to optimize the procurement of general purpose Automated Data Processing Equipment (ADPE) Navy-Wide. The procurement of ADPE through the CAP represents in most part the culmination of several planned and developed ADP systems that are ready for deployment and introduction throughout the fleet. The work load that is performed directly supports such day to day efforts as fleet supply and logistics, maintenance, financial, personnel management, and health management, all of which are currently either performed manually or in part by using old, obsolete, and unreliable data processing support. The automation and upgrade capability to be funded by the CAP would lighten the afloat and shore work loads and modernize ADP where such capabilities presently exist, hence directly improving overall fleet readiness.

Productivity Programs (P-1 Line Items 355-357)

(\$ in Thousands)	
FY 1986	FY 1987
<u>3,420</u>	<u>2,105</u>

Funds requested for the Productivity Investment Fund are used to purchase, install and demonstrate improved general purpose equipment, tools and procedures. The objective of productivity investments is to apply capital investment in exchange for labor intensive and costly operations in government by investments in modern equipment, methods and labor saving devices. It also realizes a continuing stream of benefits through the reduction of recurring operating costs. Projects involve the replacement of old and outmoded equipment and procedures to reduce inefficiency and maintenance costs. This frequently implants new technology as well, enabling growth in efficiency and the solution of emerging problems in operations and logistics. The technology factor has been credited with at least 40% of all productivity growth over the past 5 decades of domestic experience.

Over the past two decades, essential Navy capital investments in modern equipment, facilities and processes have not been made, and the ability of the Navy to internally support the full scope of its mission essential systems has eroded to an insufficient level. Productivity investments directly address the unfunded backlog of compelling investment opportunities existing in the Navy.

BUDGET ACTIVITY: 8 SPARES AND REPAIR PARTS
SUMMARY OF BUDGET PLAN
(In Thousands)

	FY 1984 ACTUAL	FY 1985 ESTIMATE	FY 1986 ESTIMATE	FY 1987 ESTIMATE	JUSTIFICATION PAGE
SPARES AND REPAIR PARTS					
INITIAL	0	0	253,282	234,050	
REPLENISHMENT	0	0	26,556	31,407	
TOTAL BUDGET PLAN	0	0	\$279,838	\$265,457	

Budget Activity 8 - Spares and Repair Parts (P-1 Line Item 358)

(\$ in Thousands)	
FY 1987 Estimate	\$265,457
FY 1986 Estimate	\$279,838
FY 1985 Estimate	\$0
FY 1984 Actual	\$0

Purpose and Scope of Work

Budget Activity 8 provides for all other Procurement, Navy (OPN) spares which were formally procured in the individual Budget Activities (FY 1985 - prior). The procurement of spares and repair parts for all equipments requiring support by the Systems Commands prior to transitioning into the Navy Supply System Material is divided between Initial spares (\$253.2 million in FY 1986 and \$234.1 million in FY 1987) and Replenishment spares (\$26.6 million in FY 1986 and \$31.4 million in FY 1987). \$279.8 million in FY 1986 includes the procurement of \$5.2 million of ships initial spares, \$135.8 million of communications and electronics initial spares, \$23.0 million of aviation initial spares, \$81.5 million of ordnance initial spares, \$3.7 million of civil engineering initial spares, \$4.1 million of personnel and command initial spares, \$6.4 million of aviation replenishment spares, and \$20.1 million of ordnance replenishment spares. \$265.5 million in FY 1987 includes the procurement of \$2.9 million of ships initial spares, \$125.3 million of communications and electronics initial spares, \$18.8 million of aviation initial spares, \$79.9 million of ordnance initial spares, \$3.6 million of civil engineering initial spares, \$3.6 million of personnel and command initial spares, \$5.4 million of aviation replenishment spares, and \$26.0 million of ordnance replenishment spares.

COMPARISON OF FY 1985 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1985 BUDGET WITH FY 1985 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1986 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per FY 1985 Budget	Program Requirements Per FY 1986 Budget	Increase (+) or Decrease (-)
1. Ships Support Equipment	857,100	761,807	-95,293
2. Communications & Electronics Equip	1,813,800	1,710,167	-103,633
3. Aviation Support Equipment	1,081,500	972,640	-108,860
4. Ordnance Support Equipment	1,229,600	1,103,391	-126,209
5. Civil Engineering Support Equip	313,300	232,509	-80,791
6. Supply Support Equipment	130,100	89,725	-40,375
7. Personnel & Command Support Equip	528,500	471,375	-57,125
Reimbursable Program	40,000	40,000	-
Total Fiscal Year Program	5,993,900	5,381,614	-612,286

EXPLANATION BY BUDGET ACTIVITY

1. Ships Support Equipment (\$-95.3 Million)

The decrease of \$95.3 million resulted from the following: Specific Congressional reductions to LM-2500 Gas Turbine (\$2.7 million), Other Generators (\$3.3 million), Other Pumps (\$3.1 million), Other Propulsion Equipment (\$1.7 million), ESGN (\$9.0 million), Type 18 Periscope (\$2.9 million), Surface Ship Silencing Equipment (\$1.5 million), Submarine Batteries (\$3.0 million), HM&E Items Less than \$900K (\$2.0 million), and Torpedo Retrievers (\$10.3 million), as well as an undistributed Congressional reduction of \$42.5 million. In addition to distributing these BA-1 reductions, further reductions in the amount of \$13.3 million were taken to partially offset a BA-7 increase.

2. Communications & Electronic Equip (\$-103.6 Million)

The decrease of \$103.6 million involved distribution of a \$55.0 million Congressional undistributed reduction, as well as additional reductions to various line items totalling \$48.6 million which were taken to offset in part a BA-7 increase.

EXPLANATION BY BUDGET ACTIVITY

3. Aviation Support Equipment (\$-108.9 Million)

The decrease of \$108.9 million resulted from the following: Specific Congressional reductions to AN/SSQ-77 Sonobouy (\$10.3 million), SKIPPER (\$3.6 million), GP Bombs (\$25.3 million), Laser Guided Bombs (\$8.2 million), WALLEYE (\$12.3 million), ZUNI (\$14.8 million), 2.75 Inch Rockets (\$4.3 million), Parachute Flares (\$5.0 million), Machine Gun Ammo (\$10.0 million), Practice Bombs (\$5.9 million), Airborne Expendable Countermeasures (\$0.5 million), Marine Location Markers (\$1.7 million), BIGEYE (\$19.7 million), JATOS (\$2.9 million), GATOR (\$6.1 million), Weapons Range Support Equipment (\$2.7 million), Expeditionary Airfields (\$4.8 million), Aircraft Rearming Equipment (\$1.4 million), and Airborne Mine Countermeasures (\$1.7 million), as well as a Congressional add of \$50.0 million to Sonobuoys. Further reductions totalling \$17.7 million were taken to various lines to offset OPN general reductions.

4. Ordnance Support Equipment (\$-126.2 Million)

The decrease of \$126.2 million resulted from the following: Specific Congressional reductions to 5 Inch/54 Gun Ammo (\$13.2 million) and 5 Inch Guided Projectile (\$12.9 million), as well as distribution of an undistributed Congressional reduction of \$77.0 million. Further reductions totalling \$23.1 million were taken to various lines to offset in part a BA-7 increase.

5. Civil Engineering Support Equip (\$-80.8 Million)

The decrease of \$80.8 million resulted from the following: Specific Congressional reductions to Passenger Carrying Vehicles (\$3.0 million), Trucks (\$1.6 million), Earth Moving Equipment (\$3.5 million), Weight Handling Equipment (\$3.2 million), and Amphibious Equipment (\$15.0 million), as well as an undistributed Congressional reduction of \$49.0 million. Further reductions totalling \$5.5 million were taken to various lines to offset OPN general reductions.

6. Supply Support Equipment (\$-40.4 Million)

The decrease of \$40.4 million resulted from specific Congressional reductions to Special Activities, Navy (\$1.6 million) and Special Purpose Supply Systems (\$16.5 million), and further reductions totalling \$22.3 million which were taken to various lines to offset OPN general reductions.

7. Personnel & Command Support Equip (\$-57.1 Million)

The decrease of \$57.1 million resulted from the following: Specific Congressional reductions to Intelligence Support Equipment (\$4.6 million), Computer Acquisition Program (\$34.1 million), Productivity Investment Fund (\$7.9 million), and an undistributed reduction of \$90.0 million which is being offset in part by transfers from other Budget Activities (\$79.5 million).

Comparison of FY 1985 Financing As Reflected
In FY 1985 Budget With FY 1985 Financing As
Shown In FY 1986 Budget

	Financing Per FY 1985 Budget	Financing Per FY 1986 Budget	Increase (+) or Decrease (-)
Program requirements (Total)	5,993,900	5,381,614	-612,286
Program Requirements (Service account)	5,953,900	5,341,614	-612,286
Program Requirements (Reimbursable)	40,000	40,000	
Less:			
Anticipated Reimbursements	40,000	40,000	
Reprogramming from prior year budget plans . .			
Unobligated balance available from prior year to finance new budget plans			
Transferred from other accounts			
Add:			
Reduction pursuant to P.L. 97-377			
Unobligated balance available to finance subsequent year budget plans			
Transferred to other accounts			
Appropriation	5,953,900	5,341,614	-612,286

Explanation of Changes in Financing

1. Program Requirements (TOTAL).

-612,286

The decrease reflects Congressional action to the FY 1985 President's Budget Request.

2. Program Requirements (Service Account).

-612,286

The decrease reflects Congressional action to the FY 1985 President's Budget Request.

3. Appropriation.

-612,286

The decrease reflects the difference between what was requested in January 1984 for the FY 1985 President's Budget, and the amount that was actually appropriated.

COMPARISON OF FY 1984 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1985 BUDGET WITH FY 1984 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1986 BUDGET

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

	Total Program Requirements Per FY 1985 Budget	Program Requirements Per FY 1986 Budget	Increase (+) or Decrease (-)
1. Ships Support Equipment	666,538	665,453	-1,085
2. Communications & Electronics Equip	1,513,422	1,526,633	+13,211
3. Aviation Support Equipment	660,692	662,055	+1,363
4. Ordnance Support Equipment	901,204	920,142	+18,938
5. Civil Engineering Support Equip	186,395	192,190	+5,795
6. Supply Support Equipment	106,365	79,424	-26,941
7. Personnel & Command Support Equip	279,927	311,746	+31,819
Reimbursable Program	40,000	32,313	-7,687
Total Fiscal Year Program	4,354,543	4,389,956	+35,413

EXPLANATION BY BUDGET ACTIVITY

1. Ships Support Equipment (\$-1.1 Million)

The \$1.1 million decrease is the net result of below threshold reprogramming actions.

2. Communications & Electronic Equip (\$+13.2 Million)

The \$13.2 million increase is the combined result of a \$20.5 million increase to Air Search Radar, offset in part by a \$3.5 million decrease to SATCOM Ship Terminals. The remaining \$4.8 million decrease is the net result of below threshold reprogramming actions.

3. Aviation Support Equipment (\$+1.4 Million)

The \$1.4 million increase is the net result of below threshold reprogramming actions.

4. Ordnance Support Equipment (\$+18.9 Million)

The \$18.9 million increase is the net result of below threshold reprogramming actions.

EXPLANATION BY BUDGET ACTIVITY

5. Civil Engineering Support Equip (\$+5.8 Million)

The \$5.8 million increase is the net result of below threshold reprogramming actions.

6. Supply Support Equipment (\$-26.9 Million)

The \$26.9 million decrease is the net result of below threshold reprogramming actions. In addition, there were two separate, but offsetting reprogrammings, a \$4.0 million increase to Special Activities, Navy and a \$4.0 million decrease to Automated Materials Handling Systems.

7. Personnel & Command Support (\$+31.8 Million)

The \$31.8 million increase is the combined result of a \$34.1 million increase to the Computer Acquisition Program, a \$8.0 million decrease to the Productivity Improvement Fund, and a \$5.7 million increase which is the net result of below threshold reprogramming actions.

Comparison of FY 1984 Financing As Reflected
in FY 1985 Budget With FY 1984 Financing As
Shown In FY 1986 Budget

	Financing Per FY 1985 Budget	Financing Per FY 1986 Budget	Increase (+) or Decrease (-)
Program requirements (Total)	4,354,543	4,389,956	+35,413
Program Requirements (Service account)	4,314,543	4,357,643	+43,100
Program Requirements (Reimbursable)	40,000	32,313	-7,687
Less:			
Anticipated Reimbursements	40,000	32,313	-7,687
Reprogramming from prior year budget plans . .			
Unobligated balance available from prior year to finance new budget plans		34,100	+34,100
Transferred from other accounts	6,000	15,000	+9,000
Add:			
Unobligated balance available to finance subsequent year budget plans			
Transferred to other accounts			
Appropriation	4,308,543	4,308,543	0

Explanation of Changes in Financing

1. Program Requirements (Total).

+35,413

This is the total change in the value of the FY 1984 program since submission of the FY 1985 budget in January 1984.

2. Program Requirements (Direct).

+43,100

The increase in program requirements represents the effect of inter-appropriations transfers of \$43.1 million.

3. Program Requirement (Reimbursable).

-7,687

The decrease in the reimbursable program reflects actual orders received in FY 1984.

4. Anticipated Reimbursements.

-7,687

The decrease is based on actual orders received in FY 1984.

5. Unobligated Balance Available from
Prior Year to Finance New Budget
Plans.

+34,100

The increase reflects a transfer from SCN to the Computer Acquisition Program in OPN.

6. Transferred from Other Accounts.

+9,000

The increase reflects a transfer from OPAF to OPN for Special Activities (\$4.0 million) and a transfer from APN to OPN for the Air Search Radar (\$5.0 million).

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