DEPARTMENT OF THE NAVY
FY 1998/1999 BUDGET ESTIMATES

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JUSTIFICATION OF ESTIMATES

NAVY WORKING CAPITAL FUND

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DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
OVERVIEW OF FY 1998/FY 1999 BUDGET ESTIMATES

Discussion: Department of the Navy (DoN) revolving fund organic industrial and supply facilities became financial components of the Defense Business Operations Fund (DBOF) in FY 1991. In December, 1996, the Under Secretary of Defense (Comptroller) (USD(C)) approved the formation of separate working capital funds for each of the Military Departments and for the Department of Defense (DoD). This budget incorporates the transformation of DoN DBOF facilities to Navy Working Capital Fund (NWCF) entities during FY 1997 execution.

The NWCF is projected to be the largest of the Military Departments' working capital funds and employs approximately half of the DoN's civilian personnel. There are nine NWCF activity groups which can be separated into seventeen sub-activity groups.

In the FY 1997 DoD Appropriations Act, Congress directed the Secretary of the Navy, in conjunction with the Under Secretary of Defense (Comptroller) (USD(C)), to develop a plan to increase revenue by at least $500 million through a surcharge or revised rates. Transfer authority was provided to fund the increase in Navy DBOF revenue by making two percent reductions in various DoN procurement appropriations and Research, Development, Testing and Evaluation, Navy. The actual amount of additional revenue will be $512 million and it is being collected in conjunction with selected workload at the Naval Shipyards, Naval Aviation Depots and Naval Weapons Stations. However, the DoN, in consultation with USD(C), has determined that additional action is required to build-up a cash corpus sufficient to support NWCF operations. Therefore, NWCF rates will reflect cash surcharges in FY 1998 and FY 1999 of $500 million and $150 million, respectively. The cash surcharges will be applied across most of the NWCF's activity groups. Customers have been resourced appropriately for these rate increases. These proposed actions represent a tremendous commitment of DoN resources to ensure the NWCF's long term solvency and are expected to result in the elimination of all advance billing balances by the end of FY 1999.

DoN NWCF activity and sub-activity group managers are making significant strides in the management of funded carryover (workload which is funded in one fiscal year but which is not completed until a subsequent fiscal year). Management now closely monitors carryover and limits the amount of funding held by their activities at any given time through careful workload scheduling and , where practical, the employment of direct customer funding of the costs of related contractor efforts (direct cite funding). In addition, the methodology for counting carryover has been improved and standardized following the completion of a joint

OSD/Military Department study of carryover and the implementation of the study recommendations by USD(C). The DoN is committed to limiting carryover at all of its NWCF activity and sub-activity groups to a maximum of three months of funding at the composite level. In accordance with guidance, carryover funding from a particular appropriation (e.g. Aircraft Procurement, Navy) may be allowed to exceed the three month standard so long as the composite carryover figure (incorporating carryover from all appropriations) remains at the three month level. This practice enables NWCF managers to cope with factors such the DoD full funding policy for procurement efforts, long lead times for certain types of equipment or components and the extended duration of some types of depot maintenance and modernization workload. Specific data on funded carryover is contained in the individual industrial activity group narratives

Following a recent period of chronic operating losses at the Naval Weapons Stations (NWS), the DoN has developed a plan to restructure the organization to ensure that it is not only capable of fulfilling all its customers' peacetime and contingency requirements, but also achieves long-term financial equilibrium. Maintenance of those NWS facilities which will not be utilized during normal peacetime operation will be funded by a Unutilized Plant Capacity subsidy beginning in FY 1998. The NWS group has also been transferred out of the Depot Maintenance activity group to a separate group entitled Ordnance to better recognize the nature of its mission.

Base Realignment and Closure (BRAC) actions to achieve mission cessation at a number of activities during FY 1996 and FY 1997 are reflected in the budget estimates of the Shipyard, Naval Aviation Depot and Public Works Centers sub-activity groups. In addition, privatization of the Naval Air Warfare Center's facilities at Indianapolis, IN, in January 1997, and the Naval Surface Warfare Center's facilities at Louisville, KY, in August, 1996, results in reduced scope of NWCF funding and operations within these communities.

Consistent with direction found in the Conference Report on the FY 1997 Appropriations Act , the Naval Computer and Telecommunications Station, New Orleans, was transferred to the management of the Commander, Naval Reserve Force, and became part of the Naval Reserve Information Systems Office. Another organizational action that has been taken was to move the Naval Facilities Engineering Service Center (NFESC) from the Research & Development activity group to the Base Support activity group. NFESC's current functions are better classified within the latter area.

Financial Profile:

Costs of Goods and Services Sold (Obls for Supply)	(Dollars in Millions) FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	2,918.6	2,247.7	2,076.1	2,175.0
Naval Aviation Depots	1,988.0	1,399.2	1,396.7	1,377.0
Marine Corps Depots	192.3	154.7	150.2	139.2
Naval Weapons Stations	600.1	540.2	456.1	451.9
Naval Air Warfare Center	2,601.8	1,923.2	1,778.3	1,727.8
Naval Surface Warfare Center	2,470.5	2,120.2	2,068.8	2,068.5
Naval Undersea Warfare Center	1,000.0	773.4	646.1	613.4
Naval Command, Control and Ocean Surveillance Center	1,280.5	968.9	936.2	910.0
Naval Research Laboratory	494.9	529.6	537.5	549.2
Military Sealift Command	1,127.9	1,150.3	1,150.1	1,196.6
Naval Computer and Telecommunications Stations	311.2	145.8	120.7	118.4
Fleet Material Support Office	101.8	78.1	71.1	73.0
Naval Reserve Information Systems Office	0.0	24.1	16.7	16.0
Public Works Centers	2,063.9	1,916.9	1,765.4	1,785.9
Naval Facilities Engineering Service Center	74.1	56.0	54.2	54.2
Navy Supply Management	6,013.1	5,794.7	6,007.9	5,738.9
Marine Corps Supply Management	233.7	155.2	144.3	150.1
Total	23,472.4	19,978.0	19,376.5	19,145.1

Note: The changes in Costs of Goods and Services Sold of $4.3 billion from FY 1996 to FY 1999 are caused by numerous factors. These include continued privatization efforts in R&D (Indianapolis and Louisville), planned downsizing and BRAC actions primarily in Shipyards and NADEPs, and an increase in direct cite work load (versus in-house workload) primarily in R&D. The DON R&D program remains stable through the FYDP, however, the mix of direct cite and in-house work fluctuates. The decrease in R&D reimbursable orders and an increase in direct cite orders will result in increased efficiency and ensure conformance with Department carry-over policies. Direct contract work load dollars are not reflected in the Working Capital Fund budgets.

Net Operating Results	(Dollars in Millions) FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	442.7	(1.1)	83.1	0.0
Naval Aviation Depots	135.8	6.7	(21.8)	0.0
Marine Corps Depots	(0.5)	9.7	(1.3)	0.0
Naval Weapons Stations	(36.7)	(66.1)	224.3	0.0
Naval Air Warfare Center	(10.8)	(2.9)	18.9	0.0
Naval Surface Warfare Center	62.0	(41.6)	34.7	0.0
Naval Undersea Warfare Center	16.4	(5.2)	1.2	0.0
Naval Command, Control and Ocean Surveillance Center	24.7	0.7	(14.6)	0.0
Naval Research Laboratory	(2.6)	(10.3)	(20.4)	0.0
Military Sealift Command	14.0	(64.1)	52.1	0.0
Naval Computer and Telecommunications Stations	(6.5)	(10.6)	7.0	0.0
Fleet Material Support Office	(10.0)	(4.2)	(2.9)	0.0
Naval Reserve Information Systems Office	0.0	(3.9)	0.0	0.0
Public Works Centers	0.5	(9.6)	(16.8)	0.0
Naval Facilities Engineering Service Center	(0.4)	(0.6)	(0.6)	0.0
Navy Supply Management	(306.3)	(200.4)	87.5	0.0
Marine Corps Supply Management	46.0	18.5	15.9	0.0
Total	368.3	(385.0)	446.3	0.0

Accumulated Operating Results	(Dollars in Millions) FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	(60.9)	(83.1)	0.0	0.0
Naval Aviation Depots	14.9	21.8	0.0	0.0
Marine Corps Depots	(8.5)	1.3	0.0	0.0
Naval Weapons Stations	(158.2)	(224.3)	0.0	0.0
Naval Air Warfare Center	(15.9)	(18.9)	0.0	0.0
Naval Surface Warfare Center	6.9	(34.7)	0.0	0.0
Naval Undersea Warfare Center	4.0	(1.1)	0.0	0.0
Naval Command, Control and Ocean Surveillance Center	15.0	14.6	0.0	0.0
Naval Research Laboratory	30.7	20.4	0.0	0.0
Military Sealift Command	12.0	(52.1)	0.0	0.0
Naval Computer and Telecommunications Stations	7.5	(7.0)	0.0	0.0

Fleet Material Support Office	7.1	2.9	0.0	0.0
Naval Reserve Information Systems Office	0.0	0.0	0.0	0.0
Public Works Centers	26.4	16.8	0.0	0.0
Naval Facilities Engineering Service Center	1.2	0.6	0.0	0.0
Navy Supply Management	112.9	(87.5)	0.0	0.0
Marine Corps Supply Management	31.1	49.6	0.0	0.0
Total	26.2	(380.7)	0.0	0.0

(In Thousands)

Civilian End Strength	FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	24.2	20.8	20.7	21.0
Naval Aviation Depots	12.2	11.8	11.8	11.8
Marine Corps Depots	2.0	1.8	1.7	1.6
Naval Weapons Stations	4.3	3.5	3.5	3.5
Naval Air Warfare Center	16.3	12.9	12.1	11.6
Naval Surface Warfare Center	16.4	15.7	15.2	14.8
Naval Undersea Warfare Center	5.5	4.9	4.7	4.5
Naval Command, Control and Ocean Surveillance Center	5.2	5.2	5.1	5.0
Naval Research Laboratory	3.3	3.4	3.3	3.2
Military Sealift Command	4.5	4.3	4.6	4.5
Naval Computer and Telecommunications Stations	1.2	1.1	1.1	1.1
Fleet Material Support Office	0.9	0.9	0.9	0.9
Naval Reserve Information Systems Office	0.0	0.1	0.1	0.1
Public Works Centers	13.8	12.5	12.3	12.1
Naval Facilities Engineering Service Center	0.3	0.3	0.4	0.4
Navy Supply Management	7.1	7.0	6.7	6.4
Marine Corps Supply Management	0.1	0.1	0.1	0.1
Total	117.2	106.4	104.3	102.6

Civilian Full-Time Equivalents	(In Thousands) FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	28.3	22.8	20.8	21.2
Naval Aviation Depots	13.8	11.7	11.6	11.5
Marine Corps Depots	2.0	1.8	1.7	1.6
Naval Weapons Stations	4.6	4.1	3.5	3.5
Naval Air Warfare Center	16.6	13.9	12.4	11.7
Naval Surface Warfare Center	17.6	16.3	15.4	14.9
Naval Undersea Warfare Center	5.7	5.2	4.8	4.6
Naval Command, Control and Ocean Surveillance Center	5.2	5.2	5.1	5.0
Naval Research Laboratory	3.2	3.3	3.3	3.2
Military Sealift Command	5.7	5.6	5.6	5.9
Naval Computer and Telecommunications Stations	1.2	1.1	1.1	1.1
Fleet Material Support Office	0.9	0.9	0.9	0.9
Naval Reserve Information Systems Office	0.0	0.1	0.1	0.1
Public Works Centers	14.0	13.4	12.1	12.0
Naval Facilities Engineering Service Center	0.3	0.3	0.4	0.4
Navy Supply Management	7.1	7.1	6.8	6.5
Marine Corps Supply Management	0.1	0.1	0.1	0.1
Total	126.2	112.9	105.6	104.2

Military End-Strength	(In Thousands) FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	0.3	0.2	0.2	0.2
Naval Aviation Depots	0.1	0.1	0.1	0.1
Marine Corps Depots	0.0	0.0	0.0	0.0
Naval Weapons Stations	0.8	0.8	0.7	0.7
Naval Air Warfare Center	0.3	0.4	0.4	0.4
Naval Surface Warfare Center	0.3	0.4	0.3	0.3
Naval Undersea Warfare Center	0.1	0.1	0.1	0.1
Naval Command, Control and Ocean Surveillance Center	0.1	0.1	0.1	0.1
Naval Research Laboratory	0.1	0.1	0.1	0.1
Military Sealift Command	1.1	1.2	1.0	1.0
Naval Computer and				

Telecommunications Stations	0.0	0.0	0.0	0.0
Fleet Material Support Office	0.0	0.0	0.0	0.0
Naval Reserve Information Systems Office	0.0	0.0	0.0	0.0
Public Works Centers	0.1	0.1	0.1	0.1
Naval Facilities Engineering Service Center	0.0	0.0	0.0	0.0
Navy Supply Management	0.6	0.5	0.5	0.5
Marine Corps Supply Management	0.0	0.0	0.0	0.0
Total	4.0	4.0	3.5	3.5

Military Workyears	(In Thousands) FY 1996	FY 1997	FY 1998	FY 1999
Naval Shipyards	0.3	0.2	0.2	0.2
Naval Aviation Depots	0.1	0.1	0.1	0.1
Marine Corps Depots	0.0	0.0	0.0	0.0
Naval Weapons Stations	0.8	0.8	0.7	0.7
Naval Air Warfare Center	0.3	0.4	0.4	0.4
Naval Surface Warfare Center	0.3	0.4	0.3	0.3
Naval Undersea Warfare Center	0.1	0.1	0.1	0.1
Naval Command, Control and Ocean Surveillance Center	0.1	0.1	0.1	0.1
Naval Research Laboratory	0.1	0.1	0.1	0.1
Military Sealift Command	1.1	1.2	1.0	1.0
Naval Computer and Telecommunications Stations	0.0	0.0	0.0	0.0
Fleet Material Support Office	0.0	0.0	0.0	0.0
Naval Reserve Information Systems Office	0.0	0.0	0.0	0.0
Public Works Centers	0.1	0.1	0.1	0.1
Naval Facilities Engineering Service Center	0.0	0.0	0.0	0.0
Navy Supply Management	0.6	0.5	0.5	0.5
Marine Corps Supply Management	0.0	0.0	0.0	0.0
Total	4.0	4.0	3.5	3.5

Capital Budget Program Authority	(Dollars in Millions) FY 1996*	FY 1997	FY 1998	FY 1999
Naval Shipyards	32.3	47.6	40.0	32.3
Naval Aviation Depots	33.4	53.4	30.0	20.3
Marine Corps Depots	6.0	9.2	3.6	3.5
Naval Weapons Stations	11.0	11.3	6.6	6.3
Naval Air Warfare Center	27.7	37.4	38.3	36.3
Naval Surface Warfare Center	23.6	32.2	36.1	27.9
Naval Undersea Warfare Center	21.5	25.1	21.0	19.0
Naval Command, Control and Ocean Surveillance Center	3.7	10.3	7.7	6.6
Naval Research Laboratory	14.0	10.9	15.0	15.8
Military Sealift Command	4.6	1.3	1.2	0.5
Naval Computer and Telecommunications Stations	0.0	0.1	1.0	0.0
Fleet Material Support Office	0.5	0.5	0.5	0.5
Naval Reserve Information Systems Office	0.0	0.4	0.0	0.0
Public Works Centers	13.9	18.0	19.5	17.7
Naval Facilities Engineering Service Center	0.5	0.3	1.2	0.5
Navy Supply Management	32.1	28.0	31.0	27.3
Marine Corps Supply Management	0.0	0.0	0.0	0.0
Total	224.8	286.0	252.7	214.5

* FY 1996 figures represent obligations.

FY 1998/1999 PRESIDENT'S BUDGET
NAVY WORKING CAPITAL FUND
DEPOT MAINTENANCE - NAVAL SHIPYARDS

ACTIVITY GROUP FUNCTION:

Naval Shipyards provide logistic support for assigned ships and service craft; perform authorized work in connection with construction, overhaul, repair, alteration, dry-docking and outfitting of ships and craft as assigned; perform design, manufacturing, refit and restoration, research, development and test work, and provide services and material to other activities and units as directed by competent authority.

ACTIVITY GROUP COMPOSITION:

This budget includes eight naval shipyards, of which four are closed by the end of this budget period. Of the four closing shipyards (identified below with an *), only Long Beach Naval Shipyard performed customer funded work in FY 1996. The other three closing yards completed their customer work during FY 1995 and reported only Base Realignment and Closure (BRAC) cost and residual NWCF charges during FY 1996. Prior to the start of FY 1997, Long Beach completed their final ship overhaul. All four closing yards are now beyond their mission cease date. The Naval Shipyards and their locations are:

Portsmouth Naval Shipyard	Kittery, ME
Norfolk Naval Shipyard	Portsmouth, VA
Puget Sound Naval Shipyard	Bremerton, WA
Pearl Harbor Naval Shipyard	Pearl Harbor, HI
*Ex-Mare Island Naval Shipyard	Vallejo, CA
*Ex-Charleston Naval Shipyard	Charleston, SC
*Ex-Philadelphia Naval Shipyard	Philadelphia, PA
*Long Beach Naval Shipyard	Long Beach, CA

* closing/closed shipyards

OVERVIEW FOR NAVAL SHIPYARDS:

This budget is designed to segregate the costs of the continuing and closing yards so as to prevent the distortion of the ongoing efforts of the yards remaining open. The issues facing these yards are very different. Long Beach Naval Shipyard has completed work on ships, but now must phase down toward closure. The continuing yards face the challenge of reducing the workforce while at the same time continuing a strong commitment to productivity improvement and cost efficiency in response to the continuing need to further stretch the limited financial resources in the Navy maintenance program.

The mission cease and operational closure dates for the four closing yards are as follows:

	Mission Cease	Operational Closure
Mare Island	Apr 95	Apr 96
Charleston	Aug 95	Apr 96
Philadelphia	Sep 95	Sep 96
Long Beach	July 96	Sep 97

Mare Island and Charleston missions ceased in FY 1995 and closure operations occurred in April 1996. Philadelphia closed in September 1996 and Long Beach closure is set for September 1997. Only BRAC and residual NWCF costs are reflected in the budget for FY 1997 and out for the closing shipyards. These costs were not included in the Shipyard budget in the FY 1997 President's Budget estimates, as we anticipated that these costs would be recorded and reported as direct appropriation charges. However, implementation of the accounting and reporting system changes necessary to accomplish this proved to be impractical.

(Dollars in Millions

Financial Profile:	FY 1996	FY 1997	FY 1998	FY 1999
Continuing Yards				
Cost of Goods Sold	$2,157.5	$2,046.0	$2,044.0	$2,171.9
Operating Results	82.3	380.4	238.0	67.8
Accumulated Operating Results	(92.8)	(104.7)	0.0	0.0

Closing Yards	FY 1996	FY 1997	FY 1998	FY 1999
Cost of Goods Sold	$761.1	$201.7	$32.1	$3.2
Operating Results	6.6	(3.0)	0.0	0.0
Accumulated Operating Results	31.9	21.6	0.0	0.0

Total Yards				
Financial Profile:	FY 1996	FY 1997	FY 1998	FY 1999
Cost of Goods Sold	$2,918.6	$2,247.7	$2,076.1	$2,175.0
Operating Results *	88.9	377.4	238.0	67.8
Accumulated Operating Results	(60.9)	(83.1)	0.0	0.0

* Includes JLSC surcharges of $28.1 million in FY 1996, $30.4 million in FY 1997, $36.8 million in FY 1998 and 30.7 million in FY 1999 plus cash surcharges of $348.1 million in FY 1997, $117.9 million in FY 1998, and $37.1 million in FY 1999.

The changes for the continuing yards in costs of goods sold each year is in line with the changes in workload and also reflects efforts to improve work processes to accomplish planned levels of performance and productivity. Payments totaling $7.2M and $13.7M for the International Federation of Professional and Technical Engineers (IFPTE) FLSA Global Memorandum of Understanding have been incorporated into the FY 1996 and FY 1997 budgets respectively as prior year

adjustments. Another $5.9M prior year adjustment occurred in FY 1996 to properly reflect prior year depreciation expense.

FY 1997 budgeted Operating Result gain of $380.3M varies from the FY 1997 President's Budget by $319.2 million for the following reasons:

	($Millions)
113,873 Manday Reduction in Workload (3.2% decrease)	$(50.0)
Reduction in Direct Labor Cost	35.3
Labor Pricing Changes	(13.1)
Increased SIP/RIF Cost	(13.3)
Increased Depreciation Cost	(2.1)
Additional Revenue Resulting from Stabilized Mat'l Modification	20.0
Cash Surcharge	348.1
Other Changes	(5.7)
Total FY 1997 Variance	$319.2

FY 1998 budgeted Operating Result of $238M is the result of the following surcharge factors built into the stabilized rates:

	($Millions)
JLSC	$36.9
Cash	$117.9
AOR recoupment	$83.2
	$238.0

For the closing yards the reductions from FY 1996 to FY 1997 and FY 1997 to FY 1998 in Cost of Goods Sold and Net Operating Results reflect operational closure at Mare Island, Charleston and Philadelphia in FY 1996 and Long Beach in FY 1997 respectively. FY 1996 NOR is the result of positive performance at Long Beach Naval Shipyard, while FY 1997 reflects the close out of prior year accounting records.

Workload: (Direct Labor Hours)	FY 1996	FY 1997	FY 1998	FY 1999
Total Yards	34,038.5	27,657.0	25,270.8	26,395.9
Continuing Yards	27,376.6	25,932.1	25,270.8	26,395.9
Closing Yards	6,661.9	1,724.9		

For the continuing yards workload changes are consistent with fleet requirements and also reflect shipyard process improvements. The current estimate for FY 1997 workload reflects a 4.2 percent decrease from FY 1997 in the President's Budget and is a 5.3 percent reduction from the actual FY 1996 workload. The FY 1998 and FY 1999 workload estimates reflect a stable workload. We have developed a cost efficient approach to accomplish this workload through the increased use of temps and seasonal employees. FY 1999 end strength estimates anticipate that 11.2 percent of our employees will be temporaries compared to only 4.0 percent in FY 1996. This increase in temporary employees

will give the shipyards more flexibility to adjust to constantly changing workload and will ultimately result in lower costs to our customers.

For the closing yards the change from year to year reflects mission cease and operational closure of the four closing yards.

Workload Indicators:	FY 1996	FY 1997	FY 1998	FY 1999
Continuing Yards				
Regular Overhaul/Complex Overhaul/Refueling Overhaul/ERO	3	3	3	3
Depot Modernization Period	0	1	2	1
Other Starts: (Selected Restricted Availability) Extended Refit Period, Inactivation, Phased Maintenance Availability, Post Shakedown Availability)	44	54	43	39
Sub-Total	47	58	48	43
Closing Yards				
Regular Overhaul/Complex Overhaul/Refueling Overhaul	1	No-Starts		
Depot Modernization Period				
Other Starts: (Selected Restricted Availability) Extended Refit Period, Inactivation, Phased Maintenance Availability, Post Shakedown Availability)	2			
Sub-Total	3			
Total Yards				
Regular Overhaul/Complex Overhaul/Refueling Overhaul/ERO	1 3	3	3	3
Depot Modernization Period	0	1	2	1
Other Starts: (Selected Restricted Availability) Extended Refit Period, Inactivation, Phased Maintenance Availability, Post Shakedown Availability)	46	54	43	39
Total	50	58	48	43

Performance Indicators	FY 1997	FY 1998	FY 1999
Operating Results ($ millions)			
Continuing Yards	380.4	238.0	67.8
Closing Yards	(3.0)	0.0	0.0
Total Yards	377.4	238.0	67.8

Customer Rate Changes:	FY 1997	FY 1998	FY 1999
NSY Composite Rate per hour	$77.24	$92.36	$82.40
Percent Change from prior year		19.6%	(10.8%)

The FY 1998 rate change largely represents the application of a cash surcharge. A lesser surcharge in FY 1999 and the absence of an AOR recovery factor are the major factors contributing to a composite rate reduction in FY 1999.

Unit Costs:	FY 1996	FY 1997	FY 1998	FY 1999
Continuing Yards	$80.22	$79.20	$79.83	$80.07
Closing Yards	$92.31	$93.11		
Total Yards	$82.59	$80.07	$81.05	$80.19

The unit cost represents total costs per direct labor hour incurred by Naval Shipyards in the applicable fiscal year. The total yards decrease from FY 1996 to FY 1999 reflects the reduced costs at the closing shipyards.

Staffing:	FY 1996	FY 1997	FY 1998	FY 1999
Continuing Yards				
Civilian End Strength	22,883	20,753	20,731	21,027
Civilian Work Years-ST	24,067	21,902	20,779	21,199
Military End Strength-Total	300	231	213	213
Officer End Strength	154	163	157	157
Enlisted End Strength	146	68	56	56
Military Work Years	245	255	209	209
Closing Yards				
Civilian End Strength	1,354	35	0	0
Civilian Work Years-ST	4,225	933	5	0

Military End Strength	13	0	0	0
Officer End Strength	9			
Enlisted End Strength	4			
Military Work Years	49	0	0	0

Total Yards

Civilian End Strength	24,237	20,788	20,731	21,027
Civilian Work Years-ST	28,292	22,835	20,784	21,199
Military End Strength	313	231	213	213
Officer End Strength	163	163	157	157
Enlisted End Strength	150	68	56	56
Military Work Years	293	255	209	209

For the continuing yards civilian end strength and workyear estimates are matched to workload and reflect continued streamlining of shipyard processes and increased productivity along with overall Department of Defense downsizing and regionalization efforts.

For the closing yards the change from year to year reflects mission cease and operational closure.

Headquarters Cost

(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
Cost of Management Headquarters	8.180	7.514	7.514	7.514

Carry-over

Naval Shipyards have begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($millions)	450.3	169.1	301.9	349.3
Months of Carryover	2.1	.8	1.6	1.9

Capital Budget Authority	(Dollars in Millions) FY 1996	FY 1997	FY 1998	FY 1999
Equipment-Non-ADPE/TELECOM	$20.094	$26.112	$27.802	$24.107
ADPE/Telecommunications Equip	9.343	18.805	6.500	6.500
Minor Construction	2.833	2.706	2.662	1.682
TOTAL	$32.270	$46.623	$36.964	$32.289

The Capital Budget Authority reflects the financing of essential fleet support equipment and other capital improvements critical to sustaining shipyard operations, improving productivity, meeting health, safety and environmental requirements and lowering production costs.

Economies and Efficiencies:

Continuous efforts are underway to improve and streamline work processes in order to accomplish the planned levels of performance and productivity. This is shown by the shipyards increasing direct labor indicator which reflects an increase of 8.1% from FY 1996 to FY 1999. (59.0 to 63.8) This increase is even more impressive when reviewed in the context of a 3.6% workload decrease. Plans to achieve this level of improved efficiency is challenging as notices for a Reductions-in-Force (RIFs) are planned and issued at every shipyard during FY 1999. Despite the disruption of continuous downsizing, shipyards are focused on improving performance and reducing cost. Advanced Industrial Management (AIM) is a major productivity effort affecting most functional areas of the shipyard. It is an engineering process for industrial operations at naval shipyards and will improve performance by:

- Providing disciplined work planning, estimating and scheduling functions.
- Delivering simplified and complete work documents to the mechanic
- Applying group and zone technology.
- Promoting data management and integration.
- Reshaping and downsizing the organizational structure to take advantage of the improved process.

To achieve these performance improvements, the AIM Program focuses on three major components:

- Process. The process standardizes planning and work procedures and the products produced by these procedures so they can be accessed and reused by all shipyards. The process also allows flexible packaging of work (by zone, trade skill, resource, system, etc.) to promote efficient resource management.

- Organization. The shipyard organizational and management structure has been changed to reflect the project orientation of the improved process.

- Information Technology. New automated tools are developed to support the portions of the process that cannot be satisfied with existing systems. All automated systems (new and old) are integrated to provide a single point of entry for each user, a common man-machine interface, and standard software that can be easily maintained.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
SHIPYARD / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	2,930.2	2,188.7	2,096.8	2,111.4
Surcharges	28.1	378.4	154.9	67.8
Depreciation excluding Major Constructio	49.2	57.9	62.3	63.7
Other Income				
Total Income	3,007.5	2,625.1	2,314.1	2,242.8
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	13.5	14.3	14.5	14.8
Civilian Personnel	1,356.3	1,335.1	1,279.5	1,316.7
Travel and Transportation of Personnel	62.0	38.7	39.3	40.4
Material & Supplies (Internal Operations	227.9	216.5	208.8	232.1
Equipment	11.0	14.5	20.0	19.5
Other Purchases from NWCF	47.1	46.6	44.3	44.2
Transportation of Things	6.2	5.1	4.5	4.6
Depreciation - Capital	49.2	57.9	62.3	63.7
Printing and Reproduction	5.4	3.6	3.6	3.5
Advisory and Assistance Services	.3	.3	.3	.3
Rent, Communication & Utilities	67.9	66.7	69.0	68.9
Other Purchased Sevices	973.3	415.1	302.1	308.0
Total Expenses	2,820.2	2,214.4	2,048.3	2,116.7
Work in Process Adjustment	107.5	33.3	27.8	58.4
Comp Work for Activity Reten Adjustment	-9.1	.0	.0	.0
Cost of Goods Sold	2,918.6	2,247.7	2,076.1	2,175.0
Operating Result	88.9	377.4	238.0	67.8
Less Surcharges	-28.1	-378.4	-154.9	-67.8
Plus Appropriations Affecting NOR/AOR	383.8	.0	.0	.0
Other Changes Affecting NOR/AOR	-1.8	.0	.0	.0
Net Operating Result	442.7	-1.1	83.1	.0
Other Changes Affecting AOR	128.6	-21.1	.0	.0
Accumulated Operating Result	-60.9	-83.1	.0	.0

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BUSINESS AREA ANALYSIS
DEPARTMENT OF THE NAVY
NAVAL SHIPYARDS
SOURCE OF REVENUE
(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
1. New Orders	2,846.4	2,356.0	2,443.6	2,267.2
a. Orders from DoD Components	2,669.8	2,324.7	2,405.2	2,185.1
Department of the Navy	2,256.1	2,161.6	2,366.9	2,175.4
Operations and Maintenance, Navy	2,076.8	1,822.0	1,969.1	1,800.4
Operations and Maintenance, Marine Corps	0.1	0.0	0.0	0.0
O&M, Navy Reserve	5.7	4.4	4.0	6.7
O&M, Marine Corps Reserve	0.1	0.0	0.0	0.0
Aircraft Procurement, Navy	0.7	0.0	0.0	0.0
Weapons Procurement, Navy	5.3	5.1	5.2	5.0
Procurement of Ammunition, Navy/Marine Corps	0.0	0.0	0.0	0.0
Shipbuilding & Conversion, Navy	18.4	6.8	15.3	8.9
Other Procurement, Navy	115.0	248.4	288.0	283.7
Procurement, Marine Corps	(0.0)	0.0	0.0	0.0
Family Housing, Navy and Marine Corps	11.9	7.0	9.1	9.3
Research, Development, Test & Eval, Navy	12.6	65.5	73.1	58.2
Military Construction, Navy	2.2	2.2	2.8	2.9
Other Navy Appropriations	7.4	0.2	0.3	0.3
Other Marine Corps Appropriations	0.0	0.0	0.0	0.0
Department of the Army	1.2	0.3	0.4	0.3
Army Operation & Maintenance Accounts	1.2	0.2	0.2	0.2
Army Res, Dev, Test & Eval Accounts	0.0	0.0	0.0	0.0
Army Procurement Accounts	0.1	0.1	0.0	0.0
Army Other	(0.1)	0.1	0.1	0.1
Department of the Air Force	0.4	0.1	0.2	0.2
Air Force Operation & Maintenance Accounts	0.4	0.1	0.2	0.2
Air Force Res, Dev, Test & Eval Accounts	0.0	0.0	0.0	0.0
Air Force Procurement Accounts	0.0	0.0	0.0	0.0
Air Force Other	0.0	0.0	0.0	0.0
DoD Appropriated Accounts	412.0	162.6	37.7	9.1
Base Closure and Realignment	405.9	158.7	32.4	3.9
Operation & Maintenance Accounts	2.9	2.3	3.0	3.0
Res, Dev, Test & Eval Accounts	0.8	0.0	0.1	0.1
Procurement Accounts	0.2	0.1	0.1	0.1
DoD Other	2.3	1.5	2.1	2.0
b. Orders from DBOF Business Areas	165.8	24.6	27.0	72.4
c. Total DoD	2,835.6	2,349.3	2,432.2	2,257.5
d. Other Orders	10.8	6.8	11.4	9.8
Other Federal Agencies	9.5	0.1	0.2	0.1
Foreign Military Sales	(4.5)	4.6	8.4	7.0
Non Federal Agencies	5.8	2.0	2.8	2.7
2. Carry-In Orders	1,809.8	1,265.1	996.1	1,125.5
3. Total Gross Orders (available funding)	4,656.2	3,621.2	3,439.7	3,392.8
4. Funded Carry-Over*	1,265.1	996.1	1,125.5	1,150.0
5. Less Passthrough	383.8	0.0	0.0	0.0
6. Total Gross Sales	3,007.3	2,625.1	2,314.1	2,242.8
Adjusted Carry-over is:	450.3	169.1	301.9	349.3

NAVY WORKING CAPITAL FUND
DEPOT MAINTENANCE - NAVAL SHIPYARDS

SUMMARY OF CHANGES IN OPERATIONS

	EXPENSE
1. FY 1996 ACTUAL COST	**$2,820,164**
2. FY 1997 PRESIDENT'S BUDGET	**$2,017,204**
3. PRODUCTIVITY INITIATIVES	
a. Management Efficiencies	
1. Labor	($1,646)
4. Program Changes	
a. Workload Changes	
1. Direct Workyears	($21,972)
2. Direct Nonlabor	$25,253
3. Overhead Workyears	($16,001)
5. Other Changes	
a. Change in Average Salary	$13,118
b. Change in Separation Costs	$12,139
c. Depreciation	$2,079
d. Closing Yards	$160,599
e. All other	$23,591
6. FY 1997 CURRENT ESTIMATE	**$2,214,364**
7. PRICING ADJUSTMENTS	
a. Civilian Pay Raise	
1. FY98 Raise	$22,652
2. Annualization	$12,774
b. Stock Fund-fuel	$792
c. Stock Fund non-fuel	$11,259
d. Working Capital Fund	($938)
e. General Inflation	$9,180
f. Military pay raise	$440
g. Other	$298
8. PRODUCTIVITY INITIATIVES	
a. Management Efficiencies	
1. Labor	($21,804)
2. Nonlabor	($3,050)
9. PROGRAM CHANGES	
a. Workload Changes	($61,045)
b. Nonlabor Changes	$304
c. Military Labor	($979)

NAVY WORKING CAPITAL FUND
DEPOT MAINTENANCE - NAVAL SHIPYARDS

SUMMARY OF CHANGES IN OPERATIONS

	EXPENSE
10. OTHER CHANGES	
a. Change in Separation Costs	($16,526)
b. HRO Savings/Regionalization	($7,390)
c. Facility Maintenance (MRP)	$14,943
d. Closing Yards	($129,791)
d. Depreciation	$4,465
e. All Other	($1,636)
11. FY 1998 CURRENT ESTIMATE	**$2,048,312**
12. Pricing Adjustments	
a. Civilian Pay Raise	
1. FY 1998 Pay Raise	$15,510
2. Annualization	$11,979
b. Stock Fund Fuel	($180)
c. Stock Fund Non-fuel	($1,335)
d. Working Capital Fund	$475
e. General Inflation	$9,604
f. Military pay	$448
g. Other	$286
13. PRODUCTIVITY SAVINGS	
a. Management Efficiencies	
1. Labor	($10,227)
2. Nonlabor	($2,334)
3. Planning/Engineering	($15,364)
14. Program Changes	
a. Workload Changes	$56,209
b. Nonlabor Changes	$22,975
15. Other Changes	
a. Change in Separation Costs	($1,339)
b. HRO Savings/Regionalization	($4,464)
c. Facility Maintenance (MRP)	$12,402
d. Depreciation	$1,344
e. Closing Yards	($27,649)
16. FY 1999 CURRENT ESTIMATE	**$2,116,652**

NAVY WORKING CAPITAL FUND
DEPARTMENT OF THE NAVY
DEPOT MAINTENANCE - SHIPYARDS
MATERIAL INVENTORY DATA
(Dollars in Millions))

	Total	Mobilization	Peacetime Operating	Peacetime Other
Materiel Inventory Beginning FY 1996	172.6	0.0	172.6	0.0
Purchases				
A. Purchases to Support Customer Orders (+)	223.1		223.1	
B. Purchases of long lead items in advance (+	0.0			
C. Other Purchases (+)	0.0			
D. Total Purchases	223.1	0.0	223.1	0.0
Material Inventory Adjustments				
A.. Material used in Maintenance (and billed/charged to customer orders) (-)	239.0		239.0	
B. Disposals, Theft, Losses due to Damage (-)	0.0			
C. Other Reductions (-)	0.0			
D. Total Inventory Adjustments	239.0	0.0	239.0	0.0
Materiel Inventory End FY 1996	156.7	0.0	156.7	0.0
Materiel Inventory Beginning FY 1997	156.7	0.0	156.7	0.0
Purchases				
A. Purchases to Support Customer Orders (+)	195.2		195.2	
B. Purchases of long lead items in advance (+	0.0			
C. Other Purchases (+)	0.0			
D. Total Purchases	195.2	0.0	195.2	0.0
Material Inventory Adjustments				
A.. Material used in Maintenance (and billed/charged to customer orders) (-)	231.1		231.1	
B. Disposals, Theft, Losses due to Damage (-)	0.0			
C. Other Reductions (-)	0.0			
D. Total Inventory Adjustments	231.1	0.0	231.1	0.0
Materiel Inventory End FY 1997	120.8	0.0	120.8	0.0

NAVY WORKING CAPITAL FUND
DEPARTMENT OF THE NAVY
DEPOT MAINTENANCE - SHIPYARDS
MATERIAL INVENTORY DATA
(Dollars in Millions))

	Total	Mobilization	-------- Peacetime -------- Operating	Other
Materiel Inventory Beginning FY 1998	120.8	0.0	120.8	0.0
Purchases				
A. Purchases to Support Customer Orders (+)	211.1		211.1	
B. Purchases of long lead items in advance (+	0.0			
C. Other Purchases (+)	0.0			
D. Total Purchases	211.1	0.0	211.1	0.0
Material Inventory Adjustments				
A.. Material used in Maintenance (and billed/charged to customer orders) (-)	228.7		228.7	
B. Disposals, Theft, Losses due to Damage (-)	0.0			
C. Other Reductions (-)	0.0			
D. Total Inventory Adjustments	228.7	0.0	228.7	0.0
Materiel Inventory End FY 1998	103.1	0.0	103.1	0.0
Materiel Inventory Beginning FY 1999	103.1	0.0	103.1	0.0
Purchases				
A. Purchases to Support Customer Orders (+)	249.3		249.3	
B. Purchases of long lead items in advance (+	0.0			
C. Other Purchases (+)	0.0			
D. Total Purchases	249.3	0.0	249.3	0.0
Material Inventory Adjustments				
A.. Material used in Maintenance (and billed/charged to customer orders) (-)	251.6		251.6	
B. Disposals, Theft, Losses due to Damage (-)	0.0			
C. Other Reductions (-)	0.0			
D. Total Inventory Adjustments	251.6	0.0	251.6	0.0
Materiel Inventory End FY 1999	100.8	0.0	100.8	0.0

Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	Non-ADPE, >$500K (Replacement)								
1	BRIDGE CRANE - STRUCTURAL SHOP	1	0.829						
2	FY 97 EQUIPMENT DESIGN COSTS	1	0.500						
3	CRANE, 60 TON PORTAL			1	7.000				
4	CRANE, 50 TON MOBILE HYDRAULIC			2	1.500				
5	CRANE, LOCOMOTIVE			1	0.800				
6	WEIDEMANN PUNCH PRESS			1	0.650				
7	RETROFIT HORIZ. BORING MILL			1	0.600				
8	CRANE, BRIDGE, 10 TON, CAB, B-76			1	0.500				
9	18 TON ROUGH TERRAIN CRANE					6	1.800		
10	10 TON BRIDGE CRANES, 2 EA.			2	0.060	2	1.260		
11	PROCUREMENT OF TWO 40 TON MOBILE TRUCK CRANES			2	0.106	2	1.000		
12	CRANE, MOBILE, 150 TON LATTICE BOOM			1	0.075	1	0.980		
13	CNC OXYFUEL/PLASMA FUEL CUTTER			1	0.015	1	0.900		
14	WALL CRANES FOR BLDG 155, 3 EA.			3	0.150	3	0.750		
15	800 TON PRESS BRAKE			1	0.060	1	0.750		
16	PLASMA CUTTING/PUNCHING MACHINE			1	0.055	1	0.700		

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Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
17	TRUCK, STRADDLE-CARRY, WIDE			2	0.035	2	0.680		
18	BRIDGE CRANE - BLDG 215			1	0.070	1	0.657		
19	CNC PUNCH/PLASMA FABRICATING CENTER			1	0.060	1	0.539		
20	FIRE TRUCK, LADDER			1	0.020	1	0.525		
21	MANLIFT, 90 FT			4	0.055	4	0.505	4	0.500
22	CNC BEAM PROFILER			1	0.045	1	0.478		
23	PORTAL CRANES 60 TON, 2 EA					2	3.750	2	11.250
24	2000 TON PRESS BRAKE					1	0.150	1	2.160
25	80 TON BRIDGE CRANE FOR B-261					1	0.033	1	1.300
26	M-130 ENCLOSURE PUMPDOWN SYSTEM					2	0.026	2	1.032
27	CRUISER CRANE, 70 TON					1	0.060	1	0.600
28	MIZ 30 TUBE INSPECTION EQUIPMENT					1	0.056	3	0.555
29	EQUIPMENT DESIGN AND ENGINEERING COSTS FOR FY-2000 NON-ADPE PROJECTS							VAR	1.291
30	MISCELLANEOUS NON-ADPE, REPLACEMENT	VAR	2.406	VAR	4.457	VAR	5.553	VAR	2.658
	Sub-Total Non-ADPE, Replacement	VAR	3.735	VAR	16.313	VAR	21.152	VAR	21.346

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Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996 Quantity	FY 1996 Total Cost	FY 1997 Quantity	FY 1997 Total Cost	FY 1998 Quantity	FY 1998 Total Cost	FY 1999 Quantity	FY 1999 Total Cost
	Non-ADPE, >$500K (Productivity)								
31	CONVERSION OF BLAST BOOTH #1	1	0.518						
32	60 TON PORTAL CRANE	1	5.000						
33	REBUILD FLOOR TYPE HORIZ BORING MILL			1	3.000				
34	CLOSED LOOP UHP WATER JET BLASTER			1	0.100	1	1.610	1	1.600
35	PLASMA PUNCH PRESS			1	0.015	1	0.850		
36	CNC LASER CUTTER			1	0.015	1	0.600		
37	MISCELLANEOUS NON-ADPE, PRODUCTIVITY	VAR	1.785	VAR	0.569	VAR	2.174	VAR	0.761
	Sub-Total Non-ADPE, Productivity	VAR	7.303	VAR	3.699	VAR	5.234	VAR	2.361
	Non-ADPE, >$500K (New Mission)								
38	RADIOACTIVE LIQUID WASTE (P622)	1	1.900						
39	RELOCATION, LONGBED, SHAFT LATHE	1	0.937						
40	60 TON BRIDGE CRANE FOR BLDG 129			1	1.050				

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Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
41	ONBOARD DISCHARGE TANKS (ODT'S) BLASTING EQUIPMENT			1	0.750				
42	PIPE BENDER, SEMI-AUTOMATIC, 6" NPS			1	0.700				
43	EMERGENCY RADIO COMMUNICATIONS SYSTEM			1	0.540				
44	MISCELLANEOUS NON-ADPE, NEW MISSION	VAR	1.876	VAR	1.162	VAR	1.416	VAR	0.400
	Sub-Total Non-ADPE, New Mission	VAR	4.713	VAR	4.202	VAR	1.416	VAR	0.400
	Non-ADPE, >$500K (Environmental/Safety)								
45	CLOSED LOOP HP WATER JET	2	2.756						
46	OILY WATER WASTE TREATMENT SYSTEM	1	0.600						
47	BLAST BOOTH FOR BLDG 285			2	1.500				
48	MISCELLANEOUS NON-ADPE, ENVIRONMENTAL	VAR	0.987	VAR	0.398	VAR	0.000	VAR	0.000
	Sub-Total Non-ADPE Environmental	VAR	4.343	VAR	1.898	VAR	0.000	VAR	0.000
	Total NON-ADPE	**VAR**	**20.094**	**VAR**	**26.112**	**VAR**	**27.802**	**VAR**	**24.107**

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Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996 Quantity	FY 1996 Total Cost	FY 1997 Quantity	FY 1997 Total Cost	FY 1998 Quantity	FY 1998 Total Cost	FY 1999 Quantity	FY 1999 Total Cost
	ADPE & Telecommunications Equipment>$500K								
49	TELESWITCHING EQUIPMENT, NORFOLK NSY	1	2.904						
50	DEPOT MAINTENANCE STANDARD SYSTEM (JLSC)	VAR	1.477	VAR	12.570				
51	AIM SYSTEM	1	4.962	1	3.000				
52	TELEPHONE SWITCHING EQUIPMENT, PUGET SOUND NSY				2.000				
53	UPS SYSTEM FOR MAIN COMPUTER ROOM				0.500				
54	REPLACE BANYAN VINES						6.500		6.500
55	MISC. ADPE & TELECOMMUNICATIONS EQUIPMENT<$500K			VAR	0.735				
	Total ADPE & Telecommunications Equipment	**VAR**	**9.343**	**VAR**	**18.805**	**VAR**	**6.500**	**VAR**	**6.500**
	Minor Construction >$200K								
56	CONSTRUCT SCREENING WALL, BLDG 172		0.300						
57	CONSTRUCT WALL, BLDG 592		0.200						

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Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
58	MINOR CONSTRUCTION DESIGN COST		0.092		0.328				0.250
59	CONSTRUCT OFFICE FOR CRANE ENGINEERING BLDG 236		0.300						
60	MATERIAL CONTROL STATION DRY DOCK 5		0.220						
61	MATERIAL CONTROL STATION PIER 6		0.220						
62	CONSTRUCT ADDITION FOR RLT DEWATERING BLDG. 1475				0.300				
63	INSTALL HAZARDOUS WASTE LINES TO B-871				0.289				
64	RELOCATE TRAIN TRACK CONNECTION DD-1				0.242				
65	MODIFY BUILDING 311 FOR PURE WATER PRODUCTION				0.240				
66	PROVIDE VEHICLE WASHDOWN AREA				0.222				
67	CONSTRUCT EMPLOYEE PARKING		0.300				0.300		
68	CONSTRUCT POST OFFICE						0.300		
69	LOCOMOTIVE/MOBILE CRANE SERVICE PITS						0.300		
70	HAZARD/FLAM REPACKAGING AND DISPENSING AREA, B377						0.250		
71	STEAM DISTRIBUTION SYSTEM EAST-WEST CROSS CONNECT						0.250		
72	PROVIDE ADDED FIRE TRUCK SPACE						0.245		
73	RELOCATE WELDING SCHOOL TO B-460						0.242		

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Capital Investment Summary
Navy Working Capital Fund
DEPOT MAINTENANCE - SHIPYARDS
FY 1998/1999 President's Budget
February 1997
($ In Millions)

Line Num	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
74	DIRECT CURRENT MOTOR GEN. SET FOR BERTHS 11&13								0.250
75	PIPED NITROGEN SYS FOR DD #1/#3 AND BERTH 11/13								0.250
76	CONSOLIDATE DD6 PRODUCTION SUPPORT (B-426)								0.242
77	MOVE PLANNING YARD TO SHIPYARD (PHASE 2)								0.242
78	MISC. MINOR CONSTRUCTION <$200K	VAR	1.201	VAR	1.085	VAR	0.775	VAR	0.448
	Total Minor Construction	**VAR**	**2.833**	**VAR**	**2.706**	**VAR**	**2.662**	**VAR**	**1.682**
	GRAND TOTAL	**VAR**	**32.270**	**VAR**	**47.623**	**VAR**	**36.964**	**VAR**	**32.289**

000029

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)							A. Budget Submission FY 1998-1999 President's Budget					
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 9/CRANES, 18 TON, ROUGH TERRAIN (Replacement)			D. Activity Identification Naval Shipyard, Norfolk					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							6	.300	1.800			

Narrative Justification

Six mobile cranes with a lift capacity of 18 Tons each will be purchased at a total project cost of $1.8M. Procurement to be phase funded over two years, FY 98 (3), FY 99 (3).

Six new cranes to replace six 12 yr. old cranes which will be excessed. Existing cranes will exceed life expectancy by 2 yrs (per NAVFAC P-300, & Mfr.,). Cranes currently fully depreciated. Overhaul costs for cranes is presently 80% of new crane costs. Workload is annually increasing. Rough terrain cranes provide a higher lift per hour ratio than dock cranes (2.4 lifts/hour vs. 1.2) at a reduced cost. Unscheduled downtime increasing to 3 times normal expectancy, impacting shipyard production services and denying crane availability to support ship work. Rental is a more costly alternative. Payback 3.64 years, IRR 32.12%, Projected annual savings $616,232.

Accomplish Mission with difficulty. Cranes are lifted onto ships to provide service on flight/hangar decks of aircraft and helicopter carriers, and within access cuts to other ships. The work supports ship upgrades and system installation. Increased scheduled and unscheduled down-times impact mission.

000030

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 10/10 TON BRIDGE CRANES, 2 EA. (Replacement)			D. Activity Identification Naval Shipyard, Pearl Harbor					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							2	.620	1.240			
ENG. & DESIGN				2	.030	.060						
INSTALLATION COST									.020			
TOTAL COST						.060			1.260			

Narrative Justification

To replace two 10 ton bridge cranes in the Inside Machine and Electrical shops with modern cranes of similar capacity and features. The new cranes will enhance the safety and reliability of operation. The cranes are projected to be installed in Bldg. 67 (Inside Machine) and 214 (Electrical). Originally submitted in FY 97 program; decreased quantity from 3 to 2.

The existing cranes are well beyond economic repair. Due to age, frequent breakdowns are experienced. Repair parts are not readily available and must be custom made. Modernization overhaul is not cost effective, projected costs are expected to exceed procuring a new crane. Alternate lifting services are not feasible for certain operations, floor space constraints can preclude use of a truck crane in these buildings. Operation and maintenance on existing cranes require safety controls for workers involving exposed electrical conductors, asbestos and lead painted parts, and grease/oil leaks. Payback period 10 years based on an average annual savings of 75% in labor/maintenance/ material costs vs. the status quo.

If the cranes are not replaced the shop will continue to experience production slowdowns due to the lack of crane service, which will impact production schedules.

000031

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 11/PROCUREMENT OF TWO 40 TON MOBILE TRUCK CRANES (Replacement)			D. Activity Identification Naval Shipyard, Norfolk					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							2	.500	1.000			
ENG. & DESIGN				2	.053	.106						
TOTAL						.106			1.000			

Narrative Justification

Two mobile truck cranes with a lift capacity of 40 Tons each will be purchased at a total project cost of $1.0M.

Two new cranes are required to replace three 12 yr. old cranes for FY 98 excessing. One crane already deactivated. Existing cranes will exceed lift expectancy by two years (per NAVFAC P-300, & Mfr.,). Cranes fully depreciated. Overhaul costs are 80% of new crane cost. Workload is increasing to moderately increasing workload. Truck cranes provide a higher lift per hour ratio than dock cranes (2.8 lifts/hour versus 1.2) at less cost. Unscheduled downtime increasing to 3 times normal expectancy, impacting shipyard production services. Crane rental is a more costly alternative. Payback 4.75 yrs, IRR 24.39%, Projected annual savings $274,858.

Accomplish Mission with difficulty. Cranes provide multi-site lift service in all shipyard and satellite areas. Provide essential crane service to ships during dock crane maintenance period. Increased unscheduled down-time impacts shipyards mission.

000022

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 12/CRANE, MOBILE, 150 TON LATTICE BOOM (Replacement)			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.950	.950			
ENG. &DESIGN				1	.075	.075						
INSTALLATION COST									.030			
TOTAL COST						.075			.980			

Narrative Justification

This project provides a permanent replacement for a crane which was surveyed as beyond repair. Currently the IRR program (Inactivation, Reactor Compartment Disposal, and Recycling) workload is being supported by long term rental of a crane at excessive costs.

During support of the ship IRR program (Inactivation, Reactor Compartment Disposal, and Recycling) , mobile cranes are in great demand for handling of heavy hull sections and machinery at remote demil/cut-up sites. The Shipyard is currently renting a 150 ton crane as a temporary replacement for the 100 ton mobile crane which was surveyed as beyond repair. The added capacity is required to handle the inherently heavier loads associated with the ship IRR process. (The larger the hull section, the less lineal feet of on-hull cutting required to dismantle and remove the ship from the dry dock - which decreases the dry dock availability required for each ship.)

The rental crane, although in typical condition for rental cranes of this size, had 38% down time for maintenance and repair in 1995. This excessive down time results in work delays, at a cost which is conservatively estimated at $1,000 to $2,000 per day. (For the purpose of economic analysis, $1,000/day is used.) Typically, a new crane of this type and size would have 12-15% down time for maintenance.

Procurement of the new crane will result in an estimated savings of $280K per year. The payback period will be 3.8 years. In addition, crane familiarization based upon training and operating experience is a key element in preventing accidents. The potential for accidents is reduced by lowering the Shipyard's dependence on a changing inventory of rental cranes.

Delay in funding this project will necessitate continued rental of a crane to support ship recycling operations. The present rental crane has approximately 38% downtime, which results in costly work delays and high maintenance costs.

0060033

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 13/CNC OXYFUEL/PLASMA FUEL CUTTER (Replacement)			D. Activity Identification Naval Shipyard, Pearl Harbor					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.800	.800			
ENG. & DESIGN				1	.015	.015						
INSTALLATION COST									.100			
TOTAL COST						.015			.900			

Narrative Justification

The oxyfuel/plasma cutter shall include a 14'X 44' water table, 6 oxypropane torches and a plasma arc torch. CNC capabilities will consist of a high density floppy drive, parts library, teach/trace option, color graphics monitor, and parts programming software. The cutter should have individual torch station control and cutting speeds of 350 inches per minute.

The oxyfuel/plasma cutter will be used to cut plate material into a variety of shapes prior to assembling structural components. The existing 15 year old cutter is used daily and can not keep up with the shops workload. Production schedule delays are common due to high workloads. Payback period 3.94 years.

This equipment is considered essential to shop operations. If this project is not executed, the shop will continue to incur high production costs because the shop will forced to rely on time consuming manual methods to complete its work.

000054

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 14/WALL CRANES FOR BLDG 155, 3 EA. (Replacement)				D. Activity Identification Naval Shipyard, Pearl Harbor				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP ENG. & DESIGN				3	.050	.150	3	.250	.750			

Narrative Justification

To replace 3 ea. 5 ton wall cranes in the Structural Shop to improve safety and reliability for Ship fitting inside-shop work. The cranes will operate on the existing crane rail system and use the existing electrical power source. This project was originally submitted in the FY 97 program.

The existing World War II-era wall cranes are beyond economic repair. Frequent breakdowns occur due to age. Unavailability of repair parts require they be custom made, which extends crane downtime periods. Modernization overhaul is not cost effective; projected costs are expected to exceed purchasing new cranes. Drive shaft failure and limit switch malfunction have resulted in dropped loads and personal injuries. Overhaul would also expose workers to asbestos materials in the cranes. The crane replacement program in the Structural Shop is a key element in the consolidation of the Sheet metal and Shipfitting Shops in Bldg. 155. Bldg. 155 will be the sole sheet metal and structural steel fabrication facility in the shipyard. Payback period 6.3 years based on an average annual savings of approximately 40% in labor/ maintenance/material costs with new cranes. The present method's cost projection assumes a major upgrade of the existing wall cranes in FY 3 through 7 to maintain service of these cranes.

Loss of wall crane service severely impacts structural steel fabrication work which can delay ship repair work. Recent downtime periods for wall crane repairs have exceeded 3 months. When wall cranes are inoperable, the shop must rely on unreliable bridge crane service or costly truck crane service.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 15/800 TON PRESS BRAKE (Replacement)			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.700	.700			
ENG. & DESIGN				1	.060	.060						
INSTALLATION COST									.050			
TOTAL COST						.060			.750			

Narrative Justification

This project provides one new press break to replace two which are severely worn and have excessive down time and repair costs. This will restore essential capability while reducing the equipment infrastructure.

Shop 11 has two press breaks which are severely worn, and have excessive down time and repair costs. One is a 650 ton built in 1944, the other is 350 ton built in 1967. This project will replace both machines and provide additional capacity needed for the tougher steels (HY 80/HY100) used in current structural designs. Press breaks are essential that are needed for forming metal plate into the structural shapes. In some cases, there is no practical or acceptable alternate method of achieving the required shapes without changing the design of the component.

Based on the current work load, procurement of the new press brake will result in an estimated savings of $142K per year. The payback period will be 5.7 years.

This project is required to restore/maintain a vital core capability. Delay of funding beyond the requested year will jeopardize the Shipyard's ability to accomplish its mission.

000039

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)							A. Budget Submission FY 1998-1999 President's Budget					
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 16/PLASMA CUTTING/PUNCHING MACHINE (Replacement)			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.625	.625			
ENG. & DESIGN				1	.055	.055						
INSTALLATION COST									.075			
TOTAL COST						.055			.700			

Narrative Justification

This project provides a replacement for an existing plasma cutting/punching machine which is severely worn. Frequent breakdowns result in work delays and increased labor costs.

Shop 11 uses an existing Plasma Cutting/Punching Machine to punch out and cut out holes up to 3/8" thick plate material. The machine has been used 3 shifts per day for 10 years, and breakdowns due to component wear and fatigue are becoming more frequent and serious. During the last 3 years the machine has been down 168 days. During these outages plate is cut and punched by alternate methods where quality and speed are diminished and labor (especially hand finishing) is intensive.

Procurement of the new cutting/punching machine will result in an estimated savings of $152K per year. The payback period will be 5.0 years.

This machine is considered a core capability for accomplishment of Shop 11's workload. If procurement is delayed until the machine fails and cannot be returned to service, the mission will be impacted by schedule delays and increase labor costs.

270000

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 17/TRUCKS, STRADDLE CARRY, WIDE (Replacement)			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							2	.340	.680			
ENG. & DESIGN						.035						
TOTAL COST						.035			.680			

Narrative Justification

This project will provide two wide straddle-carry trucks which will be dedicated to support of the ship recycle program.

The Shipyard currently has 2 wide straddle-carry trucks. Both are certified for special purpose service (SPS) or nuclear work, which restricts their allowable load to 80% of manufacturer's rated capacity. The recycle program utilizes straddle trucks to move containers of scrap metal, and sometimes the weight restrictions are accidentally exceeded. The unit must then be taken out of service and tested to recertify in for nuclear work. In addition to being costly in terms of labor to test and recertify, waterfront work is delayed. Additional delays are caused by having an insufficient number of straddle trucks.

The new straddle trucks will be reserved for non-nuclear work at their full rated capacity. This will reduce the number of trips required and eliminate the delays now being experienced.

Delay in the funding of this project will result in the continued use of the SPS straddle trucks, with their associated costs and work delays.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 18/BRIDGE CRANE - BLDG 215 (Replacement)			D. Activity Identification Naval Shipyard, Pearl Harbor					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.657	.657			
ENG. & DESIGN				1	.070	.070						
TOTAL COST						.070			.657			

Narrative Justification

Replaces the 1940's- manufactured 30 ton/5 ton two hoist bridge crane with a modern crane of similar capacity. It will be equipped with features to satisfy the nuclear material storage area established. The replacement will operate on the existing rail system and use the existing building power source. This project was originally submitted FY 96 program.

This crane is required to meet Special Purpose Service (SPS) requirements to support building 215's use as a reactor servicing equipment storage facility. Alternate lifting service, such as truck crane service, is not feasible for certain nuclear lifting operations due to floor space constraints. The existing crane is aged, unreliable, and prone to frequent breakdowns. Repair parts are scarce or need to be custom made, adding to the cost and downtime. Maintenance of this crane requires safety controls for workers involving exposed electrical conductors, asbestos and lead painted parts, and grease/oil leaks. Payback period is 8.25 years based on an average annual savings of 75% in labor/ maintenance/material costs vs. the status quo.

Mission essential, this project impacts the shipyard's ability to achieve full SSN 688 class reactor servicing capability. This project will provide Bldg. 215 with a modern reliable bridge crane to service the refueling equipment storage facility.

000039

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 19/CNC PUNCH/PLASMA FABRICATING CENTER (Replacement)				D. Activity Identification Naval Shipyard, Norfolk				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.504	.504			
ENG. & DESIGN				1	.060	.060						
INSTALLATION COST									.035			
TOTAL COST						.060			.539			

Narrative Justification

CNC Turret Punch/Plasma Metal Plate Fabricating Center consisting of Whitney punch, Plasma arc cutter, Heavy duty dust collector, tooling.

The present equipment takes ferrous and non ferrous plate and automatically cuts and punches it producing finished piece parts. Current machine annual down time averages six weeks and machine capacity is limited to 3/8" metal thickness, 3/8" hole size punching. The proposed project replaces this equipment with a machine capable of cutting and punching 3/4" thick material. To meet ship's schedules, alternate methods require three to ten highly skilled mechanics using manual machines vs. one highly skilled operator required by this project. Alternate methods increase the fabricated part costs by a minimum of 300% and require the use of overtime. Annual cost of $30,000 are incurred by the present machine due to hand work and compresses gas usage. The ability to work 3/4" materials will decrease individual job cost by approximately 20% and enhance the Navy's ability to meet production schedules. The cost of new equipment is $538,800 with annual savings of $139,459 and a payback of 4.14 yrs.

This equipment will give the Navy the ability to cheaply and quickly cut out and punch certain classes of high volume metal plate parts. This equipment is an integral part of the Navy's Intergraph CAD/CAM initiative to implement direct computer control into the manufacturing processes. The proposed equipment uses technology which eliminates the most significant source of waste material generated by the process. The proposed equipment reduces the number of compressed gases from three to two and quantity of compressed gases by 20%.

0000240

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 20/FIRE TRUCK, LADDER (Replacement)				D. Activity Identification Naval Shipyard, Puget Sound				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.525	.525			
ENG. & DESIGN				1	.020	.020						
TOTAL COST						.020			.525			

Narrative Justification

This project will provide a replacement for an existing 16 year old ladder truck which is unreliable and costly to maintain. Project F0993E000039 is a companion project to provide enclosed storage space for the truck.

OPNAV 11320.23F and NAVFAC P1021 requires the Shipyard to maintain an aerial ladder truck to provide fire fighting and rescue capability to high rise structures (4 stories or higher), such as the shipyard Bachelor Enlisted Quarters, and ships. The existing truck is one of only two ladder trucks in Kitsap County, and also supports the Shipyard's agreement with the community for reciprocal fire protection. The ladder truck is one of ten manufactured for the Navy in 1980 by Pierreville company, which later went out of business to escape the liability associated with poor reliability of the units. It is the last of the ten trucks still in service, and is now beyond the ten year service established by NAVFAC. In recent years unit downtime has increased markedly from 6% in 1992 to 30% in 1995, due to serious deficiencies with the engine and hydraulic system. Major rebuild is not considered a viable option due to the poor design of the unit.

Replacement is of the ladder truck is considered mandatory to comply with OPNAV and NAVFAC criteria for fire fighting equipment. The principal economic benefit would be reduced fire loss, which is indeterminate. Lesser benefit would be reduction of maintenance cost, estimated at an average of $20,000 per year. Based upon reduced maintenance cost alone, payback would be 27 years.

Delay of funding for this project will necessitate the continued use of the existing ladder truck, with high maintenance cost and increased potential for fire losses.

000021

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 21/MANLIFT, 90 FT (Replacement)				D. Activity Identification Naval Shipyard, Puget Sound				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							4	.120	.480	4	.125	.500
ENG. & DESIGN				4	.014	.055	4	.014	.055			
TOTAL COST						.055			.505			.500

Narrative Justification

This project will support the ship IRR program (Inactivation, Reactor Compartment Disposal, and Recycling) by providing replacements for 4 existing manlifts which are past their service life and worn beyond economical repair. This project complies with NAVFAC Instruction, P-300 dated September 1992.

Currently, the Shipyard uses manlifts to avoid erection of staging for short term requirements to provide working areas for personnel. The 4 manlifts to be replaced by this project are have frequent break downs which necessitate erection of staging to avoid protracted work delays. It is estimated that 2,500 man-hours per year are expended for this purpose. Replacement of the manlifts will eliminate this cost, in addition to reducing maintenance costs.

Procurement of the new manlifts will result in an estimated savings of $107K per year. The pay back period will be 4.7 year.

Delay in funding this project will necessitate the continued use of staging. For the ship program, where staging is used for short periods, this is not cost efficient.

000042

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 22/BEAM PROFILER (Replacement)			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.478	.478			
ENG. & DESIGN				1	.045	.045						
TOTAL COST						.045			.478			

Narrative Justification

This project will provide a CNC Beam Profiler which will replace manual methods of cutting steel beams to structural shape requirements.

The Shipfitter/Boiler Shop uses a variety of structural steel shapes in their manufacturing applications. The current methods for supporting this work are manual and labor intensive. Cutting, coping, mitering, and beveling are often required and are usually performed by hand. Large shapes require riggers and crane services to rotate them for processing both sides. The accomplishment of this project will automate or eliminate most of these operations. It is estimated that an annual labor savings of 74% will be realized with the completion of this project.

Delay of this project will result in the Shipyard continuing to incur high labor costs during this application.

000043

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 23/PORTAL CRANES 60 TON, 2 EA (Replacement)			D. Activity Identification Naval Shipyard, Pearl Harbor					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										2	5.625	11.250
ENG. & DESIGN							2	1.875	3.750			
TOTAL COST									3.750			11.250

Narrative Justification

Procure two (2) each 60 short ton portal cranes. Modern Navy crane design, steeples controls, main and whip hoist (2 hoists). This would replace two over aged existing cranes as part of the strategic long range portal crane replacement plan.

Existing WWII-manufactured portal cranes have exceeded their original design life. Replacement parts are no longer available, and must be custom made. Required maintenance periods are extensive and crane modernization is cost prohibitive. Existing cranes have extensive off-line time due to maintenance and in-service breakdown. $3.5 million in annual repair costs have been expended on one of our existing cranes. The shipyard strategic plan is to replace existing cranes on a scheduled basis over several years. Operation and maintenance on existing cranes require safety controls for workers potentially exposed to unguarded rotating machinery (couplings and gears), exposed electrical panels/contractors, asbestos parts, lead painted surfaces, and oil/grease leaks. Payback period 2.03 yrs based on an average annual savings of 82% in labor/maintenance/material costs and includes a major upgrade of two existing cranes in FY 3 through FY6 to extend service life.

Existing cranes will incur major structural, electrical or mechanical malfunction or wear out which results in unreliable or loss of service. Necessary crane service will be assigned to remaining cranes which will increase wear and tear on remaining units. Without sufficient modern cranes available, the shipyard could not support assigned work.

0000544

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 24/2000 TON PRESS BRAKE (Replacement)					D. Activity Identification Naval Shipyard, Puget Sound			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										1	2.100	2.100
ENG. & DESIGN							1	.150	.150			
INSTALLATION COST												.060
TOTAL COST									.150			2.160

Narrative Justification

This project will provide a replacement for a worn out 53 year old press break, for which repair parts are no longer available. Replacement of this press is considered a mandatory requirement to restore/maintain a basic core capability.

The existing press break was manufactured in 1943, and has an 1800 ton capacity. When operational, it is used on a three shift basis for forming structural shapes from large/heavy aluminum and steel plate. Due to its age and advanced state of wear, serious breakdowns have become more frequent. Repair parts are extremely scarce, and in most cases require special manufacture in-house, which results in protracted outages.

The reduced reliability and extended downtimes jeopardize, and often actually delay, production schedules. In many cases there is no approved alternate method for fabrication of the structural component. Alternate methods which are approved are labor intensive, almost to the point of being impractical, and drive costs over budget allowance. It is conservatively estimated that the unscheduled press brake outages cost the Shipyard 6,000 man-hours per year in production delays and work-arounds.

Procurement of the new 2000 ton press brake will restore full reliability of a core capability, and provide an additional 200 tons of capacity needed to facilitate forming the high strength steel used in the repair and modification of modern naval vessels. Replacement of the press brake will result in an annual savings estimated at $292K through minimizing unscheduled downtime and rework/scrap, while drastically reducing maintenance costs. The payback period will be 7.9 years.

Delay of this project will result in the Shipyard's loss of a vital core capability in the event that the existing press brake suffers catastrophic breakdown and cannot be restored to service. This would result in serious adverse impact on the Shipyard's ability to accomplish its mission.

000045

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 25/80 TON BRIDGE CRANE FOR B-261 (Replacement)			D. Activity Identification Naval Shipyard, Norfolk					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										1	.960	.960
ENG. & DESIGN							1	.033	.033			
INSTALLATION COST												.340
TOTAL COST									.033			1.300

Narrative Justification

80 Ton cab controlled bridge crane approximately 95 feet bridge span.

Replacement of four bridge cranes (3-15T, 1-30T) age 50 yrs. Last overhauls 15 yrs ago; next at 2000. The age and maintenance of these cranes is a primary concern. Replacement parts cannot be obtained without special fabrication contracts. Maintenance downtime is 1.5 months/crane/year. Three cranes are currently down due to parts procurement problems. Lift capacity in B-261 is inadequate. A spreader beam is required between cranes to make lifts up to 65T. During this period no crane service is available to Bldg. 261. When lifts exceed this 65T capacity, a time consuming process of "jacking and rolling" is required. Use of a mobile crane either through the roof or inside is not feasible due to many components requiring movement through the length of Bldg. Rather than invest $1M to ovhl a min. of two cranes, it is preferred to replace four cranes with an 80T crane and eliminate the costly and more risky lifting schemes.

Without installation of subject 80T bridge crane, lifts will require dual/complex lifting schemes and "jacking and rolling" procedures to manipulate loads within Bldg. 261. This significantly increases labor costs and increases risk of loss of control. The 80T would reduce scheduling restrictions; reduces annual maintenance down time; reduces KW/HR power consumption (operation of 1 crane vs. operation of 2 cranes). Annual savings of $170K will be realized in reduced annual operating costs.

000046

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 26/M-130 ENCLOSURE PUMPDOWN SYSTEM (Replacement)				D. Activity Identification Naval Shipyard, Norfolk				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										2	.516	1.032
ENG. & DESIGN							2	.013	.026			
TOTAL COST									.026			1.032

Narrative Justification

This project will remove two highly radioactive contaminated M-130/M-140 Container Pumpdown Systems and replace them with simplified systems. Provide an enclosed operating space for these systems. Improve M-130/M-140 railcar movements.

Replaces an existing Portable Railcar Enclosure with a Fixed Railcar Enclosure used to provide valuable equipment operating and foundation space. Reduces manning for such operations as M-130/M-140 container pumpdown, routine M-130 Lower Level Enclosure maintenance, installation/removal of demineralizers, and eliminates personnel altogether for the removal/installation of the portable railcar enclosure every time heavy equipment and railcars need to be brought into the M-130 lower level. Eliminates two difficult/manpower intensive rigging operations: 1) positioning two heavily shielded demineralizers behind a M-130/M-140, 2) rigging off/on the Portable Railcar Enclosure. Will dispose of existing contaminated fluid systems and replace them with a more efficient system, easier to operate, maintain, and radiologically manage. This eliminates performing high volume flushes and equipment replacement due to contamination levels.

Navy standards minimize radiation areas in the performance of Naval Nuclear Work. This project will provide the ability and improve the efficiency of performing refueling/defueling pumpdown operations. Annual savings resulting from the implementation of this project are $233,500 with an expected payback period of 3.87 years and an IRR of 14.29%.

000042

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 27/CRUISER CRANE, 70 TON (Replacement)					D. Activity Identification Naval Shipyard, Portsmouth			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										1	.600	.600
ENG. & DESIGN							1	.060	.060			
TOTAL COST									.060			.600

Narrative Justification

This project will procure a 70 ton general purpose cruiser-type mobile crane to provide weight handling service throughout the shipyard. This crane will replace an existing 60 ton cruiser crane purchased in 1989 (USN 82-05325) and is intended to provide improved capability, reliability and maintainability over the existing crane from 1999 onwards.

This project is essential to the submarine repair mission in order to move materials throughout the shipyard which are unable to be reached with a bridge or portal cranes. It also gives us the versatility of using a mobile crane to cover for another crane during an outage period due to scheduled maintenance or breakdown. The increased capacity and reach will more closely mimic the capabilities of our new portal cranes. The increased capabilities will also aid in supporting regional maintenance work where increasingly bulky loads arrive by truck and need to be unloaded or transferred, often in areas not capable of being serviced by other equipment. NAVSEA 07/08 have supported purchasing mobile cranes in place of renting them to reduce the possibility of accidents caused by operators who are unfamiliar with the equipment being operated. This is an initiative started by Puget Sound Naval Shipyard where several accidents (one fatal) have occurred. Per minutes of crane quality management board 13-14 Dec 95 meeting.

Delay of this project can have direct effect on maintaining ship schedules. This crane will be used in part to supplement other cranes which are out of service for annual maintenance or due to unexpected breakdowns.

000048

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 28/MIZ 30 TUBE INSPECTION EQUIPMENT (Replacement)				D. Activity Identification Naval Shipyard, Portsmouth				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										3	.185	.555
ENG. & DESIGN							1	.056	.056			
TOTAL COST									.056			.555

Narrative Justification

The Eddy current inspection system shall be complete and consist of the following: MIZ-30 Data Acquisition system, analysis system, and support equipment. The components listed shall function as an independent Eddy current phase analysis acquisition and analysis system. The system shall perform inspection in accordance with NAVSEA 0905-475-3010 Rev A and DOD-STD-XX79 (SH). All components, including encoders, shall be interchangeable with existing equipment.

Naval Shipyard Portsmouth currently uses Zetec MIZ-18 equipment for the inspection of main condenser tubes. MIS-18 equipment is now obsolete by the manufacturer and will no longer be available as a result of Hewlett Packard's decision to end support for the 200/300 series computer (an integral part of the MIZ-18 system). Recent correspondence and meeting minutes suggest that all shipyards will seek to procure the next generation of tube inspection equipment (MIZ 30),when approved by ECTIP.

This project will posture Naval Shipyard Portsmouth to support all work in house and handle revenue generating off-yard work. Eddy current inspection systems are required to support Portsmouth's current and future workload. Continued emphasis on off-yard work puts a real strain on supporting all Portsmouth assigned Eddy current work with just three systems. This project represents a phased replacement to the next generation equipment.

63000

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. Budget Submission FY 1998-1999 President's Budget		
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 29/EQUIP. DESIGN & ENGINEERING FOR FY 2000 (Replacement)						D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth and Puget Sound		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP										VAR		1.291

Narrative Justification

Due to the constraint of this exhibit, it is not possible to budget engineering and design costs as part of projected FY-2000 Non-ADPE projects.

The foundation for displaying the equipment design cost as a separate item is twofold. First, it has been our experience that we must design the prior year of execution in order to insure program execution. In some cases where there is long lead time for design, design must be executed well in advance of the actual acquisition. Design and execution of a specific project in the same year lends itself to low execution throughout the year. The purpose of funding of engineering costs prior to project execution is to improve shipyard program execution performance. Second, prior year funding for engineering and design promotes better business planning, acquisition planning, and site engineering that would take into consideration all project contingencies and minimize project cost overruns. By funding engineering costs as part of the capital asset project in the same year as project execution, shipyards are forced to plan and execute within the time constraints of the fiscal year often resulting in a lack of project execution and/or excessive cost overruns that cause failure.

Prudent program management dictates that we should design one year and execute the next year. In intent of the display is to reflect this change in management philosophy.

0000 53

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97							C. Line. No & Description 30/MISCELLANEOUS NON ADP PROJECTS < $500K (Replacement)						D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Non ADP	VAR		2.406	VAR		4.457	VAR		5.553	VAR		2.658	
Narrative Justification													

000054

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 34/CLOSED LOOP UHP WATER JET BLASTER (Productivity)				D. Activity Identification Naval Shipyard, Puget Sound				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	1.500	1.500	1	1.600	1.600
ENG.& DESIGN				1	.100	.100	1	.110	.110			
TOTAL						.100			1.610			1.600

Narrative Justification

This project will provide a closed loop ultra-high pressure water jet system which will replace the current dry abrasive blasting method for removal of coatings from ships' hulls, for a environmentally safer system.

The closed loop ultra-high pressure water jet blaster is a portable unit which supports the hull blasting of ships to remove coatings. It is unique in that it is environmentally compatible with dry dock regulations for containing spills and keeping contaminated water from entering the open sea. It serves to provide a safer working environment while blasting ships hulls, saves labor in clean up after job completion and the closed loop process provides for reuse of water. This unit is designed to replace the dry abrasive blasting method which required containment, blast protection, and abrasive clean up.

Procurement of the proposed system will eliminate the risk of violations of the National Pollutant Discharge Elimination System (NPDES) Permit and Puget Sound Air Pollution Control Agency regulations. The Shipyard has no current citations, but is in jeopardy during dry blasting operations. Additionally, it will facilitate meeting mandatory milestones for reducing the volume of both solid and hazardous waste, and reduce the risk of an environmental incident.

Annual savings are estimated at $774,000 per year. The projected payback is 2.1 years.

The Shipyard expects to dock one carrier and one submarine per year for the foreseeable future. This unit will provide a safe, environmentally sound method for blasting ships' hulls without sacrificing hull cleaning time while reducing labor costs for clean up afterward.

000023

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 35/PLASMA PUNCH PRESS (Productivity)				D. Activity Identification Naval Shipyard, Pearl Harbor				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.750	.750			
ENG. & DESIGN				1	.015	.015						
INSTALLATION COST									.100			
TOTAL COST						.015			.850			

Narrative Justification

The proposed plasma/punch press shall have a cutting table (5' X 8') and a minimum load capacity of 1500 lbs. The plasma arc should be capable of cutting 3/4 inch steel plate and punching a 1 inch hole in 5/8 inch thick HY-80 steel plate. Other equipment features include a 12 tool magazine, 45 degree beveling, a filtered exhaust system for extracting fumes, automatic height adjustment, and 1/4 inch to 1 inch topping in UNC and UNF threads. CNC options include color graphics monitor, 3.5 inch floppy drive, and parts programming software.

Purchasing a plasma/punch press will enable the shop to consolidate several operations that are currently performed on separate machines. This equipment will produce high quality finished parts material wastage will be greatly reduced because CNC controls will monitor each share of the part's production. Payback period 4.1 years.

If this equipment is not purchased, the shop will be forced to continue using labor intensive manual methods to produce parts, material handling costs and delays will keep production costs high because material will have to be manually moved from work station to work station until the part is completed.

000053

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 36/CNC LASER CUTTER (Productivity)			D. Activity Identification Naval Shipyard, Pearl Harbor					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP							1	.550	.550			
ENG. & DESIGN				1	.015	.015						
INSTALLATION COST									.050			
TOTAL COST						.015			.600			

Narrative Justification

This project provides the Shipfitting Shop with a new CNC laser cutting center for cutting plate material in support of ship availability's. The new machine will increase the cutting capacity and decrease setup, run time and provide direct support in cutting a wide range of materials. Originally submitted FY 96 program.

The laser cutter will improve productivity in sheet metal cutting 50% or more. Current method involves lengthy manual layout, shearing, punching, drilling, and finish grinding operations. The proposed laser cutter can quickly produce complex precision parts with clean edges that require little or no finish grinding. The CNC features of the laser permit it to be fully integrated with the shop's existing CAD section. The installation of the laser will enable part plans to be sent directly from the CAD workstations to the laser for cutting. This project will allow the shop to eliminate a punch press and two shears from the shop floor. The laser cutter will also support the shipfitter's work with its ability to cut up to 5/8 in. thick mild steel. The planned consolidation of the Sheet metal Shop into the Shipfitter shop will provide easy access for both shops. Payback period 3.1 years.

If this project is not executed, we will continue to use manual processes which are very labor intensive, time consuming, and subject to significant rework.

000274

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 37/MISCELLANEOUS NON ADP PROJECTS < $500K (Productivity)				D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP	VAR		1.785	VAR		.569	VAR		2.174	VAR		.761

Narrative Justification

000035

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 44/MISCELLANEOUS NON ADP PROJECTS < $500K (New Mission)				D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Non ADP	VAR		1.090	VAR		1.162	VAR		1.416	VAR		.400
Narrative Justification												

0600056

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97							C. Line. No & Description 48/MISCELLANEOUS NON ADP PROJECTS < $500K (Environmental)						D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Non ADP	VAR		0.987	VAR		.398							
Narrative Justification													

250009

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)							A. Budget Submission FY 1998-1999 President's Budget					
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 54/REPLACE BANYAN VINES (Hardware)			D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
ADP/Telecom							VAR		6.500	VAR		6.500

Narrative Justification

The purpose of this project is to acquire the software and operating hardware platforms to replace the existing BANYAN VINES operational infrastructure in the Naval Shipyards. This entails the acquisition of a new corporate Windows NT based network operating system, server platform and clients in addition to client operating and applications software to create a seamless, uniform, and flexible base level infrastructure supporting high end voice, video, and data transmission that provides flexible growth, centralized management, and inter-operability within DOD.

Requirement: OSD/C31 ltr of 9 March 1995, Subj: Electronic Messaging Policy states that "There will be one seamless, end to end global electronic messaging service within the Department of Defense. This service, provided by the Defense Messaging System (DMS), will meet department requirements outlined by the Joint Staff and is consistent with the natural objectives for inter-opperable electronic messaging. All electronic messaging within the DOD must migrate to DMS-compliant messaging as rapidly as possible. This includes messaging capabilities integrate into larger systems or applications.

Justification: The Naval Shipyards are currently connected via a standard FDDI-based communication network, utilizing Banyan Vines network operating system. The Naval Sea systems Command is connected via a mix of fiber and broadband network utilizing the Novell network operating system. There are frequent communications lapses due to the incompatible between the two operating systems. There are also difficulties between the Shipyards and Fleet support activities with whom the Shipyards must communicate in implementing regional maintenance concepts and initiative. NavyLogistics Maintenance Systems. This requirement is re-enforced by the Office of Secretary of Defense for Command, Control, Communications and information (C31) ltr of Mar 95. In order to meet this requirement, the Naval Shipyards intend to migrate to a Windows NT based environment provided by the DMS initiative. This is necessary since the current naval Shipyard Office Automation Client-Server environment is approaching obsolescence. Windows 3.1 will not be supported beyond FY98. The SCO/UNIX, the baseline AIM (BAIM) client-server environment, is extremely complex and expensive to maintain. In addition the current BANYAN vines environment will not meet either mandatory DOD/DON mandated C2 security requirements, nor is it compatible with the DMS mandated environment. The Fleet and Marine Corps are already converting form Vines to Windows NT for similar reasons. The Shipyards must acquire DOD standard replacement tools and to institute a comprehensive technology refreshment project to upgrade the Base Level infrastructure to support this new mandated operating environment supporting the Navy Fleet and DOD wide inter-operability objectives.

000058

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 58/MINOR CONSTRUCTION DESIGN COST						D. Activity Identification Naval Shipyards, Headquarters,			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const			.092			.328						.250	

Narrative Justification

Provides for design costs associated with subsequent FY CPP Minor Construction projects.

000053

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 67/CONSTRUCT EMPLOYEE PARKING						D. Activity Identification Naval Shipyard, Norfolk			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const			.300						.300				

Narrative Justification
Construct parking lot.

This project will construct additional parking throughout Norfolk Naval Shipyard for shipyard personnel. Construction cost is estimated to be $300,000. This project will improve the quality of work life for shipyard employees and is not based on economic savings.

Additional parking is required because of City of Portsmouth actions banning on-street parking, and the sale of properties adjacent to the shipyard that were formerly used as parking lots. These actions will eliminate approx. 2,000 parking spaces used by shipyard workers. If this project is not accomplished many employees will not be able to park their cars in or near the shipyard.

000169

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 68/CONSTRUCT POST OFFICE						D. Activity Identification Naval Shipyard, Norfolk			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const									.300				

Narrative Justification

This project will provide for the construction of a post office.

This project will provide for the construction of a post office. Construction cost is estimated to be $300,000. Postal service is required in the shipyard and the service demand will increase with the convenience berthing of Desron Squadrons. The present facility neither conforms with the Shipyard Strategic Plan in its present location nor does it efficiently use space currently allocated. The new postal facility will consolidate postal and guard mail functions, reducing the overall space required by the two separate functions. Construction of a post office will result in an equivalent uniform annual savings of $6,470 with a payback period of 10.7 years. The savings are generated from a reduction in maintenance; operations and personnel cost.

If this project is not accomplished, we will continue increased postal operations from an inefficient facility with duplication of certain functions. The duplication results from shipboard personnel having to pickup mail at the post office and guard mail at another location in the shipyard.

000021

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 69/LOCOMOTIVE/MOBILE CRANE SERVICE PITS						D. Activity Identification Naval Shipyard, Norfolk			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const									.300				

Narrative Justification

Construction of two locomotive/mobile crane service pits.

Existing service pits are in unsatisfactory condition from a production/environmental standpoint. Primary concern is environmental. A breach exists in the pit to groundwater seal allowing liquids to penetrate freely in either direction. Existing working conditions effected by water in pits. Existing ventilation system is defective and inaccessible. Portable fans are used for temporary ventilation. These pits service 3 locomotives and 21 mobile cranes. Outsourcing of locomotive maintenance is not available locally. If pits are shutdown, mobile cranes will be required to be jacked up to perform maintenance which will incur a minimum of 10% increase in maintenance labor hours/cost per crane per annual PM. Jacking up of locomotives to perform maintenance is not feasible and complete loss of locomotive support for production could result. The two existing pits must be replaced with two of equivalent size with the capability of meeting EPA requirements.

Unless action is taken to replace the existing service pits, impending shutdown, due to environmental violations, will result in costly, hazardous and time consuming work around to accomplish required maintenance and repairs. The production support provided by these locomotives and cranes will be significantly impaired. The annual savings is $98,644. The payback period is 3.17 yrs. The IRR is 32.77%.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 70/HAZARD/FLAM REPACKAGING AND DISPENSING AREA, B377				D. Activity Identification Naval Shipyard, Portsmouth				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Const									.250			

Narrative Justification

This project will construct a single area at Portsmouth Naval Shipyard meeting all applicable OSHA/NFPA regulations and codes within which consolidated repackaging and dispensing of hazardous/flammable materials can be performed.

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Constructed in 1989 building 377 is the shipyard's hazardous /flammable storage facility which is currently only used to support storage of unopened material. The shipyard is presently consolidating repackaging, dispensing, and issue points for hazardous materials from many sites to a total of only five strategically located areas as part of its CHRIMP implementation plan. As the number of issue points decreases, the quantity of hazardous material stored/handled in those remaining sites has increased to the point that none of these areas presently meets code requirements for the operation. Building 377 is currently under utilized and it was specifically designed to meet code requirements for the storage of hazardous/flammable material. Modifying this facility to consolidate all hazardous/flammable functions is the most cost effective solution to support the implementation of CHRIMP.

This project will allow the consolidate all hazardous/flammable material storage, repackaging, and dispensing functions into one facility that meets all OSH/NFPA code requirements. Failure to accomplish this project would require all five areas currently designated as issue points as part of CHRIMP to be upgraded to meet code requirements at an estimated cost of $1.5M. Due to the number of sites and the extensive amount of work required to bring all of these sites into compliance full implementation of the CHRIMP plan would be delayed.

000053

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 71/STEAM DISTRIBUTION SYSTEM EAST-WEST CROSS CONNECT			D. Activity Identification Naval Shipyard, Portsmouth					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Const									.250			

Narrative Justification

This project will construct a new duct and steam lines to connect the east and west sides of the shipyard steam distribution system.

The existing steam distribution system is divided into east and west systems with no common link outside the central power plant. This presents a problem when the east or west export valves or piping must be secured for maintenance or due to failure. This project will provide an external link outside the power plant so that both sides can be fed from either export valve. This will require a new underground duct and steam lines.

This project will eliminate the potential for serious disruption of steam and heating services. Disruption of steam service would directly impact production efforts, and an outage during winter months would result in significant damage to facilities and utility distribution systems throughout the shipyard. Failure to accomplish this project risks a potential major interruption in service which as a minimum would have a one time cost due to production downtime, temporary heating of facility/utility systems, and emergent repairs estimated to cost $75,000.

000674

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 72/PROVIDE ADDED FIRE TRUCK SPACE			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Const									.245			

Narrative Justification

This project will construct additional fire truck space at the shipyard's West Fire Station, Building 503, to house the new aerial platform truck procured by project E1124E000003.

The current shipyard ladder truck is located in the shipyard's Main Fire Station, Building 435. The building was constructed in 1935 to house fire apparatus of the size and type available at the time. The largest equipment bay is 11 feet high, 10 feet 7 inches wide, and 38 feet 11 inches long. The space barely accommodates the shipyard's 15 year old 100 foot ladder truck. Shipyard research has not identified any currently manufactured 100 foot ladder trucks which will fit in the existing space. The lowest height unit found requires 11 foot 6 inches. The shipyard has determined that the existing building can not be economically modified to increase door ceiling height without compromising the structural integrity of the building. The West Fire Station, Building 503, is also inadequate to store the new unit, but has adjoining space available to construct an addition large enough to accommodate the unit. The enclosed space would protect the ladder truck from inclement weather conditions and vandalism, and reduce maintenance costs. It would also keep the unit ready to move at a moments notice, to respond to a fire call.

This project has not been analyzed for economic benefit. Economic benefits would be reduced maintenance and repair cost for the ladder truck, and improved fire response (i.e., reduced fire losses), both of which are indeterminate.

Delay of funding for this project will result in need to house the new ladder truck off-station, which will increase maintenance and manning costs for the truck, and reduce response time for shipyard calls.

000025

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 73/RELOCATE WELDING SCHOOL TO B-460			D. Activity Identification Naval Shipyard, Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Const									.242			

Narrative Justification

This project will provide power and ventilation modifications in the south end of Building 460 as a prerequisite for relocating the Welding School from Building 289. Building 289 has been selected for demolition as part of the Shipyard infrastructure reduction initiative.

Building 289 has inadequate ventilation for removal of smoke and fumes from the Welding School, and currently has a RAC 3 OSH deficiency on file. Additionally, insufficient building insulation results in high heating costs in Winter and very uncomfortable working environment during the Summer months.

Relocation of the Welding School to the second floor of Building 460 will consolidate all related functions in one location. Additionally, it will completely vacate Building 289 and allow its demolition. This will eliminate a maintenance/deficiency correction backlog estimated at $350K, and result in an estimated annual savings of $11K in maintenance and utility costs. The payback period will be less than 1 year.

Delay in providing the funding for this project will delay correction of a RAC 3 OSH deficiency, and the savings to be realized through Shipyard infrastructure reduction.

000096

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 74/DIRECT CURRENT MOTOR GEN. SET FOR BERTHS 11&13						D. Activity Identification Naval Shipyard, Portsmouth			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const												.250	

Narrative Justification

This project will install a new permanent DC/MG set to serve Berths 11 and 13.

Direct current (DC) power to ships is presently being provided to submarines for shipboard testing of MG sets using transportable solid state rectifiers. These rectifiers produce some ripple in the output voltage. These ripples in output voltage cause sparking on the MG set commutator which mimics commutation problems on shipboard MG sets. This project will construct an enclosure with slab on grade foundation and relocate an existing MG set which is not currently being utilized to Berth #11/#13. Installing this MG set at berth #11/#13 will insure reliable and cleaner DC power, and greatly reduce the time required to test shipboard MG sets.

This project has a direct benefit on production schedules due to the improved quality and reliability of DC power to support shipboard testing. This project will also eliminate the need for long runs of temporary cable to support shipboard testing which in the past has resulted in significant problems associated with grounding. Delays in testing typically cost the shipyard approx. $40,000 per day. Failure to accomplish this project will result in an estimated average annual revenue loss of $80,000. This project has an estimated 3.1 year payback.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 75/PIPED NITROGEN SYS FOR DD #1/#3 AND BERTH 11/13						D. Activity Identification Naval Shipyard, Portsmouth			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const												.250	

Narrative Justification

This project installs a central nitrogen supply co-located with the pure water storage facility and provides permanent piping to distribute the nitrogen gas for use for nitrogen blankets and purges of nuclear systems on ships undergoing overhaul.

This project upgrades dock and pier services similar to improvements previously made to drydock #2 by installing a piped nitrogen system for nuclear use. This system eliminates transport, installation, setup, and removal of temporary nitrogen tanks or bottle racks which clutter pier space and increase availability project costs.

A reliable nitrogen source to ships undergoing availability's to maintain system chemistry is required.

This project is critical to submarine overhauls and will have a direct impact through improved efficiencies. Accomplishing this project will result in an annual savings of $32,000 and will provide a 7.8 year payback.

000063

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 76/CONSOLIDATE DD6 PRODUCTION SUPPORT (B-426)						D. Activity Identification Naval Shipyard, Puget Sound			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const												.242	

Narrative Justification

This project is one of several projects to reduce infrastructure within the shipyard. This project will consolidate and relocate work operations housed in temporary structures near Drydock 6 into permanent space within Building 426.

Functions presently located in Building 426 will be relocated in late 1996 to a new Flammable Materials Warehouse being constructed be MILCON P-233. This project will upgrade heating and lighting in the space being vacated to convert it from warehouse to production support space. Availability of the new production support space will eliminate the costs associated with setting up, maintaining, heating, periodically relocating a variety of temporary structures used to support work operations in Drydock 6. Cost savings depend upon the particular structures needed for the type of work being performed at any given time, but are conservatively estimated at $45K per year.

Based upon the minimum expected annual savings, this project will pay pack in 6.4 years.

Delay in funding this project will impair the shipyard's ability to reduce infrastructure and will result in continuation of the costs associated with using temporary structures to support work operations at Drydock 6.

000069

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)													A. Budget Submission FY 1998-1999 President's Budget
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 77/MOVE PLANNING YARD TO SHIPYARD (PHASE 2)						D. Activity Identification Naval Shipyard, Puget Sound			
	FY 1996			FY 1997			FY 1998			FY 1999			
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Minor Const												.242	

Narrative Justification

This project is one of several projects to reduce infrastructure within the shipyard. It is the second phase of a project to relocate Planning Yard personnel from space leased in downtown Bremerton to within the boundaries of the Shipyard.

This project provides 30,000 SF of additional office space within Building 290 suitable for relocating those Planning Yard personnel (approximately 200) not relocated in Phase 1 of the project. It will avoid an annual overhead cost of $798K to lease 69,610 square feet of office space in downtown Bremerton.

This project will amortize in less than 1 year.

Delay in funding this project will impair the shipyard's ability to reduce infrastructure and will require continued leasing of space for a significant number of Planning Yard personnel.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (Dollars in Millions)				A. Budget Submission FY 1998-1999 President's Budget								
B. Component/Activity Group/Date DON/DEPOT MAINT/NSY/ 17 Jan 97				C. Line. No & Description 78/MISCELLANEOUS MINOR CONST PROJECTS < $200K			D. Activity Identification Naval Shipyards, Norfolk, Pearl Harbor, Portsmouth, and Puget Sound					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Const	VAR		1.201	VAR		1.085	VAR		.775	VAR		.448

Narrative Justification

000074

Capital Budget Execution
Navy Working Capital Fund
Naval Shipyards
FY 1998/1999 President's Budget

FY	PROJECT TITLE	97 PRESIDENTS BUDGET	CHANGE	REVISED *	EXPLANATION
Non-ADP Equipment					
97	CRANE, 60 TON PORTAL	7.000	0.000	7.000	No change
97	BLAST BOOTH FOR BLDG 285	1.500	0.000	1.500	No change
97	CRANE, 50 TON MOBILE HYDRAULIC	1.500	0.000	1.500	No change
97	CRANE, LOCOMOTIVE	0.800	0.000	0.800	No change
97	WEIDEMANN PUNCH PRESS	0.650	0.000	0.650	No change
97	RETROFIT HORIZ. BORING MILL	0.600	0.000	0.600	No change
97	CRANE, BRIDGE, 10 TON, CAB, B-76	0.500	0.000	0.500	Repair vs. New
97	REBUILD FLOOR TYPE HORIZ BORING MILL	3.000	0.000	3.000	No change
97	VORTEX FREEZE SEAL ENCLOSURE	0.400	(0.400)	0.000	Moved to Miscellaneous
97	60 TON BRIDGE CRANE FOR BLDG 129	1.050	0.000	1.050	No change
97	ONBOARD DISCHARGE TANKS (ODT'S) BLASTING EQUIPMENT	0.750	0.000	0.750	No change
97	PIPE BENDER, SEMI-AUTOMATIC, 6" NPS	0.700	0.000	0.700	No change
97	EMERGENCY RADIO COMMUNICATIONS SYSTEM	0.527	0.013	0.540	Cost increase
97	100 TON BRIDGE CRANE, BLDG 171	0.000	2.000	2.000	Reprogramming
97	RELOCATE 60 TON PORTAL CRANE FROM PHILLY TO PUGET	0.000	1.500	1.500	Reprogramming
97	50 TON OVERHEAD BRIDGE CRANE, BLDG 369	0.000	0.975	0.975	Reprogramming
97	RELOCATE SHAFT LATHE FROM PHILLY TO NORFOLK	0.000	0.656	0.656	Reprogramming
97	HP AIR COMPRESSOR	0.000	0.500	0.500	Reprogramming
97	MISCELLANEOUS NON-ADP EQUIP	5.142	(1.002)	4.140	Project changes <$500K
97	FY98 EQUIPMENT DESIGN COSTS	1.993	(1.057)	0.936	Design costs for >$500K
	Total Non-ADP Equipment	**26.112**	**3.185**	**29.297**	

240002

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Under Secretary of Defense (Comptroller) for approval.

Capital Budget Execution
Navy Working Capital Fund
Naval Shipyards
FY 1998/1999 President's Budget

FY	PROJECT TITLE	97 PRESIDENTS BUDGET	CHANGE	REVISED *	EXPLANATION
ADP & Telecommunications Equipment					
97	AIM SYSTEM	3.000	0.000	3.000	No change
97	DEPOT MAINTENANCE STANDARD SYSTEM (JLSC)	12.570	0.000	12.570	No change
97	UPS SYSTEM FOR MAIN COMPUTER ROOM	0.500	(0.500)	0.000	Cancelled
97	SUN 2000 COMPUTER SYSTEM	0.290	0.000	0.290	No change
97	SUN SERVER	0.245	(0.245)	0.000	Cancelled
97	REPLACE SHIPYARD LAN SERVERS	0.200	(0.200)	0.000	Cancelled
97	TELEPHONE SWITCHING EQUIPMENT, PUGET SOUND NSY	2.000	(2.000)	0.000	Cancelled
Total ADP & Telecommunications Equipment		**18.805**	**(2.945)**	**15.860**	
ADP Software Development					
97	ADPE Software Development	0.000		0.000	No change
Total ADPE Software Development		**0.000**		**0.000**	

000023

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Under Secretary of Defense (Comptroller) for approval.

Capital Budget Execution
Navy Working Capital Fund
Naval Shipyards
FY 1998/1999 President's Budget

FY	PROJECT TITLE	97 PRESIDENTS BUDGET	CHANGE	REVISED *	EXPLANATION
Minor Construction					
97	MINOR COSNTRUCTION DESIGN COST	0.328	0.383	0.711	Associated w/project changes
97	CONSTRUCT ADDITION FOR RLT DEWATERING BLDG. 1475	0.300	(0.300)	0.000	cancelled
97	INSTALL HAZARDOUS WASTE LINES TO B-871	0.289	(0.289)	0.000	cancelled
97	RELOCATE TRAIN TRACK CONNECTION DD-1	0.242	(0.242)	0.000	cancelled
97	MODIFY BUILDING 311 FOR PURE WATER PRODUCTION	0.200	0.040	0.240	Cost increase
97	PROVIDE VEHICLE WASHDOWN AREA	0.222	0.000	0.222	No change
97	INSTALL TEMPORARY SERVICE TROUGHS, DD#3	0.000	0.208	0.208	Reprogramming
97	MISC. MINOR CONSTRUCTION <$200K	1.125	(0.040)	1.085	Decrease in scope
Total Minor Construction		**2.706**	(0.240)	**2.466**	

420000

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Under Secretary of Defense (Comptroller) for approval.

Capital Budget Execution
Navy Working Capital Fund
Naval Shipyards
FY 1998/1999 President's Budget

FY	PROJECT TITLE	97 PRESIDENTS BUDGET	CHANGE	REVISED *	EXPLANATION
R.M. & S. PROJECTS					
97	INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)	17.647	(17.647)	0.000	cancelled
97	ENGINEERING FOR REDUCED MAINTENENACE	11.515	(11.515)	0.000	cancelled
Total R.M. & S. Projects		**29.162**	**(29.162)**	**0.000**	
GRAND TOTAL		**76.785**	**(29.162)**	**47.623**	

000075

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Under Secretary of Defense (Comptroller) for approval.

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
NAVAL AVIATION DEPOTS

ACTIVITY GROUP FUNCTION

To provide responsive worldwide maintenance, engineering, and logistics support to the Fleet and ensure a core industrial resource base essential for mobilization; repair aircraft, engines and components, and manufacture parts and assemblies; provide engineering services in the development of hardware design changes, and furnish technical and other professional services on maintenance and logistics problems.

ACTIVITY GROUP COMPOSITION

Activities	Location
NAVAVNDEPOT, Alameda*	Alameda, CA
NAVAVNDEPOT, Cherry Point	Cherry Point, NC
NAVAVNDEPOT, Jacksonville	Jacksonville, FL
NAVAVNDEPOT, North Island Detachment	Pensacola, FL
NAVAVNDEPOT, North Island	San Diego, CA
NAVAVNDEPOT, Norfolk**	Norfolk, VA

*Closed on 13 September 1996.
**Operational closure 30 September 1996.

Budget Highlights.

General.

As a result of Base Realignment and Closure (BRAC) legislation enacted in 1993, the Naval Aviation Depots(NADEPs) Community is in the final stages of an unprecedented transition of Depot Maintenance Repair Capability for critical Component, Engine and Airframe requirements. The remaining NADEP activities constitute less than 50% of the original capacity of the combined NADEP activities prior to the enactment of this 1993 BRAC legislation. Similarly, the size of the fleet (and therefore the need for depot maintenance services) has also been reduced. Accordingly, the requirement was analyzed and rightsized to reflect reduced demand. At the same time, detailed transition plans were established to enable the eventual standing down of the closing activity and the corresponding standing up of capability at the new location **WITHOUT COMPROMISING FLEET READINESS**. The outcome has created a NADEP organization that is a leaner(approximately 50%) and meaner (more competitive) institution, geared to the total fleet requirement. The enormous complexity of this process

cannot be understated, particularly the transition of the repair capability for thousands of different critical aeronautical components.

BRAC Decisions. This budget reflects the Cease Primary Mission Operations (CPMO) of NADEPs Alameda and Norfolk in September 1996 and the NADEP North Island Detachment at Pensacola in September 1997. The Closure Implementation (CI) date for NADEP Alameda was accelerated to 13 September 1996 vice March 1997. The CI dates for NADEPs Norfolk and North Island Detachment at Pensacola remain at 31 March 1997 and 30 September 1997 respectively. The closing depots will become Mission Funded after their CPMO dates and will receive additional BRAC funding of $13.5M in FY 1996, $38.0M in FY 1997, and $4.3M in FY 1998. The following table summarizes FY 1996, FY 1997, FY 1998, and FY 1999 BRAC orders reflected in this budget (Dollars in Millions):

	FY 1996	FY 1997	FY 1998	FY 1999
BRAC III	$180.4	$4.3	$0.0	$0.0
BRAC IV	$7.7	$11.1	$0.0	$0.0
TOTAL BRAC	$188.1	$15.4	$ 0.0	$0.0

FY 1998/1999 STABILIZED RATES. The FY 1998 composite stabilized rate is $119.73, a decrease of 2.56% when compared with the FY 1997 composite rate. The FY 1998 composite rates include a negative recoupment of $21.4M to offset prior years gains and positive DON cash ($69.0M) and JLSC surcharges ($31.7M). The proposed FY 1999 composite stabilized rate is $113.04, a decrease of 5.6% when compared with the FY 1998 composite rate. The FY 1999 rates were developed to recover all FY 1999 operating costs and collect positive DON cash ($20.7M) and JLSC surcharges (26.5M).

Unit Cost Goals. The budget reflects the following FY 1996-1999 unit cost goals (including BRAC funding)(Dollars and Direct Labor Hours (DLHs)in Millions):

	FY 1996	FY 1997	FY 1998	FY 1999
Total Costs	$1,755.1	$1,483.5	$1,438.8	$1,421,2
DLH	15.788	12.683	12.234	12.438
Unit Cost	111.17	116.97	117.55	114.25
% Change Unit Cost	--	5.2%	0.5%	-2.8%

OTHER SIGNIFICANT BUDGET HIGHLIGHTS

Orders Received. Reimbursable orders required to finance NADEPs operations were $1,411.4M for FY 1996, and are projected to be $1,479.8M, $1,475.1M, and $1,441.6M for FYs 1997, 1998, and 1999 respectively. Orders Received is equal to funding received during the year less funding from previous years returned to the sponsor.

The increase from FY 1996 actual orders to FY 1997 projected orders reflects the return of orders during FY 1996 from closing depots that have ceased operations and the return of orders from remaining depots to meet carryover goals. Orders are projected to be stable through FY 1998 with some decreases in component funding for FY 1999.

Airframe Backlog Reduction. This budget reflects increased orders received in FY 1998 and FY 1999 to reduce Airframe backlog. This additional workload will be accomodated within the total constant endstrength of 11,789 through realignment of end strength from non-Airframe workload, overtime of six to ten percent and in-house contractor support as warranted.

Carryover. The NADEPs have begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Unfilled Orders, beginning of year	$1,788.7	$1,051.7	$985.5	$984.0
New Orders	1,411.4	1.479.8	1.475.1	1.441.6
Gross Orders	3,200.1	2.531.5	2,460.6	2,425.7
Less Revenue	1,937.0	1,546.1	1,396.7	1,377.0
Gross Carryover	1,051.7	985.5	984.0	1,001.5
Less Work in Process	515.3	583.4	609.1	636.4
Less FMS, BRAC, non-DOD, DCWF	110.2	65.7	57.5	54.1
Less contract liab.	113.1	100.4	98.7	100.1
Net Carryover	313.1	236.0	218.7	210.9
Carryover in Months	1.7	1.8	1.8	1.8

Revenue. Revenue was $1,937.0M for FY 1996 and projected revenues are $1,546.1M for FY 1997, $1,476.6M for FY 1998, and $1,424.2M for FY 1999. Revenue relates to workload performed (allocated) and recognized. The sources of the large decrease

from FY 1996 to FY 1997 are the reduction in BRAC funding ($154M), decreased learning curve costs for workload transitioned from closing to remaining activities, and reduced workload, primarily that completed at the activities closed in FY 1996. The decrease from FY 1997 to FY 1998 reflects reduced allocated hours in the Other Support Program, reduced BRAC funding, and a negative recoupment of $21.4M offset by a cash surcharge of $101.7M and increased allocated hours in the Aircraft Component and APN MOD Programs. The decrease from FY 1998 to FY 1999 is the combination of reduced cash surcharge ($20.7M vice $70.1M) and APN MOD workload offset by increased Aircraft workload. The $87.2M decrease in FY 1997 Revenue from the FY 1997 Congressional Budget is due to reduced allocated hours in the Product Support Directorate and Aircraft Programs offset by increased allocated hours in the Component Program. (The DON has in total increased the FY 1997 Aircraft program workload from the FY 1997 President's Budget by increasing funding at inter-service and commercial sources.)

Costs. Costs relate to workload performed. The large decrease in costs from FY 1996 to FY 1997 reflects the closure of NADEPs Alameda and Norfolk in FY 1996 and the reduction of BRAC funding. The decrease from FY 1997 to FY 1998 reflects the closure of the NADEP North Island Detachment in FY 1997, the reduction of BRAC funding, and the workload adjustments discussed above. The decrease from FY 1998 to FY 1999 is due to the workload adjustments discussed above and management efforts to reduce overhead costs. The decrease in FY 1997 cost from the FY 1997 Congressional Budget shows the effects of the reduced allocated hours in the Product Support Directorate and Aircraft Programs offset by increased allocated hours in the Component Program. (The DON has in total increased the FY 1997 Aircraft Program workload from the FY 1997 President's Budget by increasing funding at inter-service and commercial sources.)

Environment. The NADEPs continue to make significant strides toward protection of human health and environment in this budget. All Class I and Class II requirements have been fully funded to ensure full compliance with statutory, regulatory, or other legal standards. The following amounts are included in this budget for environmental cost: $29.0M in FY 1996, $25.6M in FY 1997, $21.1M in FY 1998, and $19.8M in FY 1999.

SUMMARY OF OPERATIONS:
(In Millions of Dollars)

	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	$1,937.0	$1,546.1	$1,476.6	$1,424.2
Costs of Goods	1,988.0	1,399.2	1,396.7	1,377.0
Revenue Less Costs	-50.9	146.9	79.9	47.2
Inventory Adjustments	0.0	0.0	0.0	0.0
Reservation of Surcharge	-24.6	-140.2	-101.7	-47.2
Passthroughs/Redistribute	211.3	0.2	0.0	0.0
Transfers	0.0	0.0	0.0	0.0
Net Operating Results	135.8	6.7	-21.8	0.0
Prior Year and Other Adjs	245.0	0.0	0.0	0.0
AOR	14.9	21.8	0.0	0.0

SUMMARY OF NEW CUSTOMER ORDERS:
(In Millions of Dollars)

	FY 1996	FY 1997	FY 1998	FY 1999
Navy Appropriations and Funds:				
O&M	$589.9	$643.2	$555.6	$540.1
R&D	19.9	21.8	24.5	18.9
Procurement	.1	96.4	146.5	181.8
Other Navy Customers	1.2	8.4	10.8	10.5
Other DoD Customers	795.2	699.5	731.3	682.7
Non-DoD Customers	5.0	10.5	6.4	7.6
Total All Customers	$1,411.3	$1,479.8	$1,475.1	$1,441.6

SUMMARY OF PERSONNEL RESOURCES:

	FY 1996	FY 1997	FY 1998	FY 1999
Civilian Personnel:				
End Strength	12,218	11,789	11,789	11,789
Workyears w/o OT	13,796	11,681	11,585	11,526
Military Personnel:				
End Strength	109	109	104	104
Workyears	135	104	104	104

SUMMARY OF CAPITAL PURCHASES:

The NADEP CPP budget reflects the following requirements (Dollars in Thousands):

FY 1997 CON BUDGET	FY 1996	FY 1997
Non-ADP	$17,900	$40,647
Equipment	14,915	33,854
Minor Construction	2,985	3,126
RMS MODs	0	3,667
ADP	$16,351	$10,562
Total CPP	$34,251	$51,209

Current CON BUDGET	FY 1996 OBLIGNS	FY 1997	FY 1998	FY 1999
Non-ADP	$17,031	$36,962	$25,226	$18,197
Equipment	14,638	33,836	21,071	13,972
Minor Construction	2,393	3,126	4,155	4,225
ADP	$16,333	$16,362	$4,820	$2,150
Total CPP	$33,364	$53,324	$30,046	$20,347

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NADEP / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	1,868.9	1,374.6	1,338.6	1,340.4
Surcharges	24.6	140.2	101.7	47.2
Depreciation excluding Major Constructio	43.6	31.3	36.3	36.6
Other Income				
Total Income	1,937.0	1,546.1	1,476.6	1,424.2
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	6.6	5.7	5.6	5.7
Civilian Personnel	744.0	633.7	628.7	664.9
Travel and Transportation of Personnel	59.4	22.7	20.7	21.1
Material & Supplies (Internal Operations	565.4	536.3	531.5	489.8
Equipment	15.7	23.6	25.8	24.4
Other Purchases from NWCF	47.4	47.9	48.5	48.5
Transportation of Things	2.0	.7	.7	.7
Depreciation - Capital	43.6	31.3	36.3	36.6
Printing and Reproduction	3.5	2.7	2.5	2.5
Advisory and Assistance Services	8.0	4.8	3.9	4.1
Rent, Communication & Utilities	41.8	32.5	26.5	27.1
Other Purchased Sevices	217.7	141.8	108.3	95.8
Total Expenses	1,755.1	1,483.5	1,438.8	1,421.2
Work in Process Adjustment	234.5	-68.2	-25.6	-27.3
Comp Work for Activity Reten Adjustment	-1.7	-16.2	-16.5	-16.9
Cost of Goods Sold	1,988.0	1,399.2	1,396.7	1,377.0
Operating Result	-50.9	146.9	79.9	47.2
Less Surcharges	-24.6	-140.2	-101.7	-47.2
Plus Appropriations Affecting NOR/AOR	211.3	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	135.8	6.7	-21.8	.0
Other Changes Affecting AOR	245.3	.2	.0	.0
Accumulated Operating Result	14.9	21.8	.0	.0

0000282

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NADEP / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	1,411.4	1,479.8	1,475.1	1,441.6
a. Orders from DoD Components	795.6	766.7	742.2	753.1
Department of the Navy	611.1	769.9	737.4	751.4
O & M, Navy	570.8	618.8	535.1	521.7
O & M, Marine Corps	.1	.0	.0	.0
O & M, Navy Reserve	19.0	24.4	20.6	18.4
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	-.9	93.6	145.0	180.5
Weapons Procurement, Navy	-.4	.0	.1	.0
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	.5	.2	.1	.2
Other Procurement, Navy	.9	2.6	1.2	1.2
Procurement, Marine Corps	.0	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	19.9	21.8	24.5	19.0
Military Construction, Navy	.0	.0	.0	.0
Other Navy Appropriations	1.3	8.5	10.9	10.5
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	.1	.0	.1	.0
Army Operation & Maintenence	.1	.0	.0	.0
Army Res, Dev, Test, Eval	.0	.0	.0	.0
Army Procurement	.0	.0	.1	.0
Army Other	.0	.0	.0	.0
Department of the Air Force	3.6	.8	1.0	.8
Air Force Operation & Maintenence	4.3	.5	.5	.5
Air Force Res, Dev, Test, Eval	.1	.2	.3	.3
Air Force Procurement	.6	.1	.2	.1
Air Force Other	-1.4	.0	.0	.0
DOD Appropriation Accounts	180.8	-4.0	3.7	.9
Base Closure & Realignment	147.5	-6.5	.0	.0
Operation & Maintence Accounts	.1	.0	.0	.0
Res, Dev, Test & Eval Accounts	.3	.6	1.5	.8
Procurement Accounts	1.6	-.1	.0	.0
DOD Other	31.3	2.0	2.2	.1
b. Orders from NWCF Business Area	607.2	676.6	695.5	650.9
c. Total DoD	1,402.9	1,443.3	1,437.7	1,404.0
d. Other Orders	8.5	36.5	37.4	37.7
Other Federal Agencies	4.3	10.5	6.3	7.5
Foreign Military Sales	3.5	26.1	31.0	30.1
Non Federal Agencies	.7	.0	.1	.1

000083

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NADEP / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	1,788.7	1,051.7	985.5	984.0
3. Total Gross Orders	3,200.1	2,531.5	2,460.6	2,425.7
4. Funded Carry-Over **	1,051.7	985.5	984.0	1,001.5
5. Less Passthrough	211.3	.0	.0	.0
6. Total Gross Sales	1,937.0	1,546.1	1,476.6	1,424.2
Adjusted Carryover	313.1	236.0	218.7	210.9

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

000684

CHANGES IN COST OF OPERATIONS
DEPARTMENT OF THE NAVY
BUSINESS AREA:
Naval Aviation Depots
(DOLLARS IN MILLIONS)

1.		FY 1996 Actual	1,755.1
2.		FY 1997 President's Budget	1,466.2
3.		Pricing Adjustments	(0.5)
	a.	FY 1997 Pay Raise/Annualization	0.0
	b.	Stock Fund - Fuel	0.0
	c.	Stock Fund - Nonfuel	(0.5)
	d.	Working Capital Fund Purchases	0.0
	e.	General Purchases Inflation	0.0
4.		Productivity Initiatives & Other Efficiencies	0.0
	a.		0.0
5.		Program Changes (Workload Changes)	17.0
	a.	Airframes	9.8
	b.	Engines	(7.3)
	c.	Components	48.0
	d.	Support Equipment	(7.5)
	e.	PSD	(17.4)
	f.	Modification Installation	0.2
	g.	Other Support	(8.8)
6.		Other Changes in:	0.8
	a.	Depreciation	0.8
7.		FY 1997 Current Estimate	1,483.5

CHANGES IN COST OF OPERATIONS
DEPARTMENT OF THE NAVY
BUSINESS AREA:
Naval Aviation Depots
(DOLLARS IN MILLIONS)

1.	FY 1997 Current Estimate	1,483.5
2.	Pricing Adjustments	114.1
a.	FY 1997 Pay Raise/Annualization	17.8
b.	Stock Fund - Fuel	0.3
c.	Stock Fund - Nonfuel	88.1
d.	Working Capital Fund Purchases	2.9
e.	General Purchases Inflation	5.0
3.	Productivity Initiatives & Other Efficiencies	(1.8)
a.	CPP	(1.8)
4.	Program Changes (Workload Changes)	(138.3)
a.	Airframes	63.2
b.	Engines	(38.4)
c.	Components	89.5
d.	Support Equipment	5.9
e.	PSD	(117.0)
f.	Modification Installation	12.7
g.	Other Support	(154.2)
5.	Other Changes in:	(18.7)
a.	BRAC	(15.4)
b.	Headquarters	(1.6)
c.	Depreciation	5.0
d.	Purchased Utilities	(4.0)
e.	ADP Services/Support	(2.7)
6.	FY 1998 Current Estimate	1,438.8

CHANGES IN COST OF OPERATIONS
DEPARTMENT OF THE NAVY
BUSINESS AREA:
Naval Aviation Depots
(DOLLARS IN MILLIONS)

6.	FY 1998 Current Estimate	1,438.8
7.	Pricing Adjustments	6.9
a.	FY 1998 Pay Raise/Annualization	14.0
b.	Stock Fund - Fuel	0.4
c.	Stock Fund - Nonfuel	(10.1)
d.	Working Capital Fund Purchases	(0.6)
e.	General Purchases Inflation	3.2
8.	Productivity Initiatives & Other Efficiencies	(6.8)
a.	CPP	(6.8)
9.	Program Changes (Workload Changes)	(18.4)
a.	Airframes	51.8
b.	Engines	25.7
c.	Components	(55.5)
d.	Support Equipment	(7.8)
e.	PSD	10.5
f.	Modification Installation	(29.0)
g.	Other Support	(14.1)
10.	Other Changes in:	0.7
a.	Headquarters	0.4
b.	Depreciation	0.3
11.	FY 1999 Current Estimate	1,421.2

NAVY WORKING CAPITAL FUND
NAVAL AVIATION DEPOTS
MATERIAL INVENTORY DATA
(DOLLARS IN MILLIONS)
FY 1996

	Total	Mobilization	Peacetime Operating	Other
Material Inventory BOP	$ 84.0	$ -	$ 84.0	$ -
Purchases				
A. Purchases to Support Customer Orders	$ 649.8	$ -	$ 649.8	$ -
B. Purchases of Long Lead Items in Advance of Customer Orders	$ -	$ -	$ -	$ -
C. Other Purchases	$ -	$ -	$ -	$ -
D. Total Purchases	$ 649.8	$ -	$ 649.8	$ -
Material Inventory Adjustments				
A. Material Used in Maintenance	$ 581.1	$ -	$ 581.1	$ -
B. Disposals, Theft, Losses Due to Damages	$ -	$ -	$ -	$ -
C. Other Reduction	$ -	$ -	$ -	$ -
D. Total Inventory Adjustments	$ 581.1	$ -	$ 581.1	$ -
Material Inventory EOP	$ 152.7	$ -	$ 152.7	$ -

NAVY WORKING CAPITAL FUND
NAVAL AVIATION DEPOTS
MATERIAL INVENTORY DATA
(DOLLARS IN MILLIONS)
FY 1997

	Total	Mobilization	Peacetime Operating	Other
Material Inventory BOP	$ 152.7	$ -	$ 152.7	$ -
Purchases				
A. Purchases to Support Customer Orders	$ 525.9	$ -	$ 525.9	$ -
B. Purchases of Long Lead Items in Advance of Customer Orders	$ -	$ -	$ -	$ -
C. Other Purchases	$ -	$ -	$ -	$ -
D. Total Purchases	$ 525.9	$ -	$ 525.9	$ -
Material Inventory Adjustments				
A. Material Used in Maintenance	$ 559.9	$ -	$ 559.9	$ -
B. Disposals, Theft, Losses Due to Damages	$ -	$ -	$ -	$ -
C. Other Reduction	$ -	$ -	$ -	$ -
D. Total Inventory Adjustments	$ 559.9	$ -	$ 559.9	$ -
Material Inventory EOP	$ 118.7	$ -	$ 118.7	$ -

NAVY WORKING CAPITAL FUND
NAVAL AVIATION DEPOTS
MATERIAL INVENTORY DATA
(DOLLARS IN MILLIONS)
FY 1998

	Total	Mobilization	Peacetime Operating	Other
Material Inventory BOP	$ 118.7	$ -	$ 118.7	$ -
Purchases				
A. Purchases to Support Customer Orders	$ 559.3	$ -	$ 559.3	$ -
B. Purchases of Long Lead Items in Advance of Customer Orders	$ -	$ -	$ -	$ -
C. Other Purchases	$ -	$ -	$ -	$ -
D. Total Purchases	$ 559.3	$ -	$ 559.3	$ -
Material Inventory Adjustments				
A. Material Used in Maintenance	$ 557.3	$ -	$ 557.3	$ -
B. Disposals, Theft, Losses Due to Damages	$ -	$ -	$ -	$ -
C. Other Reduction	$ -	$ -	$ -	$ -
D. Total Inventory Adjustments	$ 557.3	$ -	$ 557.3	$ -
Material Inventory EOP	$ 120.7	$ -	$ 120.7	$ -

NAVY WORKING CAPITAL FUND
NAVAL AVIATION DEPOTS
MATERIAL INVENTORY DATA
(DOLLARS IN MILLIONS)
FY 1999

	Total	Mobilization	Peacetime Operating	Other
Material Inventory BOP	$ 120.7	$ -	$ 120.7	$ -
Purchases				
A. Purchases to Support Customer Orders	$ 515.3	$ -	$ 515.3	$ -
B. Purchases of Long Lead Items in Advance of Customer Orders	$ -	$ -	$ -	$ -
C. Other Purchases	$ -	$ -	$ -	$ -
D. Total Purchases	$ 515.3	$ -	$ 515.3	$ -
Material Inventory Adjustments				
A. Material Used in Maintenance	$ 514.1	$ -	$ 514.1	$ -
B. Disposals, Theft, Losses Due to Damages	$ -	$ -	$ -	$ -
C. Other Reduction	$ -	$ -	$ -	$ -
D. Total Inventory Adjustments	$ 514.1	$ -	$ 514.1	$ -
Material Inventory EOP	$ 121.9	$ -	$ 121.9	$ -

CAPITAL INVESTMENT SUMMARY
DEPARTMENT OF THE NAVY
DEPOT MAINTENANCE - AVIATION DEPOTS
($ In Millions)

ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
	Qty	Actual Obligns	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
GRAND TOTAL NON-ADP CAPITAL PURCHASES PROGRAM		17.031		36.962		25.226		18.197
GRAND TOTAL ADP CAPITAL PURCHASES PROGRAM		16.333		16.362		4.820		2.150
GRAND TOTAL CAPITAL PURCHASES PROGRAM		33.364		53.324		30.046		20.347

000092

CAPITAL INVESTMENT SUMMARY
NON-ADP PROGRAM-SUBMIT
DEPARTMENT OF THE NAVY
DEPOT MAINTENANCE - AVIATION DEPOTS
($ In Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Actual Obligns	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	1a. EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)								
	Replacement								
N EL 00000A R	CORPORATE ASKARS UPGRADE	2	2.774						
E EL 00024A R	TEST COMPUTER AND INSTRUMENTATION	1	1.200						
E EL 00016A R	5-AXIS MACHINING CENTER	1	0.933	1	0.825				
C EL 00289A R	VERTICAL MACHINE CENTER VMC 200	1	0.500						
F EL 00001A R	FUEL METERING UNIT TEST STAND			1	1.000				
C EL 00304A R	LARGE VERTICAL GRINDER			1	0.637				
E EL 00240A R	CNC LATHES					4	1.390		
E EL 00241A R	AUTO EDDY CURRENT SYS					2	1.015		
F EL 00022A R	MONARCH VMC200 MACHINE CENTER REPLACEMENT					1	0.525		
F EL 00021A R	K & T MODULINE 5 AXIS MACHINE CENTER REBUILD					1	0.500		
C EL 00387A R	DAATS TPS OFFLOAD					27	2.160	27	2.160
C EL 00382A R	HORIZONTAL JIG MILL							1	1.550
	Productivity								
C EL 00360B P	C-SCAN ULTRASONIC INSPECTION EQUIPMENT					1	0.850		
E EL 00251B P	CNC LASER PUNCH					1	0.758		
F EL 00004B P	AUTOMATED WATER JET COATING REMOVAL SYSTEM					1	0.750		
F EL 00009B P	AUTOMATED PLASMA SPRAY SYSTEM UPGRADE					1	0.500		
	New Mission								
N EL 00000X N	CASS STATION EQUIPMENT	4	4.701	14	27.773	3	4.825	1	1.807
F EL 00002B P	COLD ROLLING PROCESS FOR PROPELLER BLADES					1	0.500		

000093

CAPITAL INVESTMENT SUMMARY
NON-ADP PROGRAM-SUBMIT
DEPARTMENT OF THE NAVY
DEPOT MAINTENANCE - AVIATION DEPOTS
($ In Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Actual Obligns	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	Environmental Compliance								
F EL 00004C E	HVOF METAL COATING SYSTEM							1	1.500
F EL 00008C E	AUTOMATED PAINT COATING SYSTEM							1	0.600
E EL 00246C E	FLASHJET PAINT STRIP							1	2.500
	SUBTOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)		10.108		30.235		13.773		10.117
N ES 000000	1b. EQUIPMENT, OTHER THAN ADPE & TELECOM (<$500K)		4.530		3.601		7.298		3.855
	2. GRAND TOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM		14.638		33.836		21.071		13.972
N MC 000000	3. MINOR CONSTRUCTION		2.393		3.126		4.155		4.225
	GRAND TOTAL NON-ADP CAPITAL PURCHASES PROGRAM		17.031		36.962		25.226		18.197

600094

CAPITAL INVESTMENT SUMMARY
ADP PROGRAM-SUBMIT
DEPARTMENT OF THE NAVY
DEPOT MAINTENANCE - AVIATION DEPOTS
($ In Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 1996 Qty	FY 1996 Actual Obligns	FY 1997 Qty	FY 1997 Total Cost	FY 1998 Qty	FY 1998 Total Cost	FY 1999 Qty	FY 1999 Total Cost
	1a. ADPE & TELECOMMUNICATIONS (>$500K)								
	Computer Hardware (Production)								
N KL 00000J P	DEPOT MAINTENANCE SYSTEM (DMS)	3	12.976	3	6.657				
E KL 05001C N	EDMICS	1	1.453						
E KL 04001B P	ENGINEERING CAD/CAM SYSTEM PHASE II	1	0.499	1	0.440				
F KL 00006A R	NALCCOIS REPLACEMENTS			1	1.000	1	1.000	1	1.000
E KL 00001J P	CONFIGURATION MANAGEMENT INFORMATION SYSTEM (CMIS)			1	5.800				
F KL 00001B P	LAN UPGRADE AND ENHANCEMENT			1	0.800			1	0.600
F KL 00012A R	E-MAIL SERVER SYSTEM REPLACEMENT			1	0.500				
F KL 00000A R	JEDMICS					1	1.500		
	SUBTOTAL ADPE & TELECOMMUNICATIONS (>$500K)		14.928		15.197		2.500		1.600
N KS 000000	**1b. ADPE & TELECOMMUNICATIONS (<$500K)**		1.405		1.165		2.320		0.550
	2. GRAND TOTAL ADPE & TELECOMMUNICATIONS		16.333		16.362		4.820		2.150
	GRAND TOTAL ADP CAPITAL PURCHASES PROGRAM		16.333		16.362		4.820		2.150

000095

CAPITAL PURCHASES JUSTIFICATION												A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot					C. EEL00240AR CNC LATHES							D. Jacksonville
Element of Cost	FY 1996			FY 1997			FY 1998			FY 1999		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
							4	347.5	1,390			
TOTAL							4	347.5	1,390			

Narrative Justification:

The four lathes (65886-012346,012347, 65889-410540,409866) are experiencing maintenance problems due to their age. Three were procured in 1986 and the other in 1987. Current problems are mostly electronic in nature (drive boards, bubble memory board) and replacement parts are becoming increasingly harder to obtain. Other problems include excessive wear on the tool turret and the main spindle which equate to positioning problems and difficulty in holding critical dimensions.

Workload for the CNC lathes is defined by the Penn State Report of May 94 and states the following : 10 CNC Lathes are required to perform 34,000 hours of projected CNC type lathe work in manufacturing, of which these 4 lathes make up part of the required 10 lathes.

The cost benefit analysis performed is based on the comparison of operating cost associated with the proposed project and the present operation. The anticipated operational cost associated with the present operation assume the following :

1. At least two of the existing lathes cannot produce parts due to machine failure and are not repairable.
2. the workload will have to be produced on conventional "manual" lathes. It is assumed that a CNC Lathe will out produce a manual lathe by a 4 to 1 ratio.
3. Cannibalize one or two of the lathes in order to keep the other two lathes in production.

New lathes will have state of the art electronics and be factory supported for approximately ten years. Also, new tool turrets and machine ways will guaranty the accuracies required for aircraft "Flight Critical" components. The new lathes should provide years of trouble free production. Maintenance will be of a routine, preventative nature, and parts should be readily available for 5 years.

With the requirement to cannibalize one or two of the lathes in order to keep the remaining two lathes in production, then the production shop would have to work three shifts plus overtime (weekends) on the remaining lathes in order to maintain the production schedule. This leaves no surge factor nor time to perform preventive or corrective maintenance.

The Cost Benefit Analysis:
Average Annual Savings : $ 484,169 starting MAR 99 Pay Back Period : 2.0 years Rate of Return : 34.8 %

960096

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. EEL00241AR AUTO EDDY CURRENT SYS							D. Jacksonville
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
							2	1,015	1,015				
TOTAL							2	1,015	1,015				

Narrative Justification:

The existing Automated Eddy Current Systems are outdated and not capable of performing specialized eddy current inspections for TF34, F404 and F1D2 Engine parts. The new Automated Eddy Current Systems will be state-of-the-art inspection systems capable of performing any of the required engine inspections related to TF34, F404 and F1D2 Engine programs. The systems will also be capable of eddy current inspecting other related engine and aircraft program parts currently at this command.

If not procured, eddy current inspection requirements for the TF34 and F404 engine programs will be significantly impacted by equipment downtime and for some parts, no capability to meet the inspection requirement.

The Cost Benefit Analysis:
Average Annual Savings: $153,746 starting OCT 98 Pay Back Period: 4.3 Years Rate of Return: 15.1%.

000057

CAPITAL PURCHASES JUSTIFICATION		A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot	C. FEL00022AR MONARCH VMC200 MACHINE CENTER REPLACEMENT	D. Cherry Point

Element of Cost	FY 1996			FY 1997			FY 1998			FY 1999		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
							1	525	525			
TOTAL							1	525	525			

Narrative Justification:

A Monarch milling machine, model VMC-200, is currently in operation in the NC Machine Manufacturing Shop, shop 93666. This machine was installed in this facility in FY77. The existing controller has begun to give maintenance problems and will become increasingly difficult to maintain due to the age of its components and the fact that the manufacturer will eventually no longer support the present control configuration. Electrical problems have begun to be a routine occurrence with mechanical problems also beginning to arise. Due to the fact that the unit has surpassed its already by 5 years, rebuilding of this unit did not seem feasible due to the electrical and mechanical condition of all systems. A rebuild would cost more than 60% of the cost of a new unit without realizing the benefits of new milling technologies.

This project proposes to procure a new Monarch VMC-200 or equivalent to replace the existing unit. By the time the replacement unit is installed and operational, the present will be 23 years old and will have passed its useful life expectancy by 7 years. The VMC-200 is the only milling machine at the depot that is capable of milling components in the x axis over 100" long. Thus, some of the existing workload can only be machined on the subject equipment.

A number of alternatives were considered including status quo, rebuild the existing machine tool, relocate a machine tool from a closing depot, and procure a new machine tool to replace the existing unit. Alternative 1 was not chosen because we had experienced the outcome of this choice on existing tube benders rendering them inoperative for a 2 year period when spare parts could not be obtained for a controller. Alternative 2 was not chosen because the cost of a rebuild is estimated to exceed 60 -65% of the cost of a new unit. Alternative 3 was attempted but was unsuccessful. An eight year old Monarch VMC-200 was located at the depot at Alameda CA. We requested the unit but it was transitioned to the depot in Jacksonville FL. No other units were available with the x-axis travel that the existing unit possesses. Alternative 4 was chosen because it is the most tactical alternative as the depot begins to manufacture larger components in support of the H-53 aircraft program.

The Cost Benefit Analysis has been performed with an: Average annual savings: $77,203 starting SEP 98 Payback period: 4.5 years Rate of Return: 14.7%

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. FEL00021AR K & T MODULINE 5 AXIS MACHINE CENTER REBUILD							D. Cherry Point
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
							1	500	500				
TOTAL							1	500	500				

Narrative Justification:

One K& T Moduline 5 Axis machining centers is currently in operation in the NC Machine Manufacturing Shop, shop 93666. This machine was installed in this facility in 1981. The existing controllers have begun to give maintenance problems and will become increasingly difficult to maintain due to the age of its components and the fact that the manufacturer will eventually no longer support the present control configuration. Electrical problems have begun to be a routine occurrence with mechanical problems also beginning to arise. Due to the fact that the units have almost reached their expected service lives, it seems to not be cost effective to replace the entire machines because the control systems are the unit's main problem.

The K & T Moduline is the only 5 Axis machine at the depot that is capable of multi-axis machining with an envelope of 72" of x axis travel, 60" of y axis travel, 30" of z axis travel and 24" of z' axis travel. Some of the existing workload can only be machined on this unit. Presently, there are approximately 50 jobs that have to be programmed on this machine tool.

This project proposes to rebuild the K & T Moduline in FY 1998. By the time the unit is rebuilt and reinstalled at this facility, it will be approximately 17-18 years old, past its expected service life. Rebuilding of this unit will save approximately 40 -50% of the cost of a new unit.

A number of alternatives were considered including status quo, rebuild the existing machine tool, relocate a machine tool from closing depots, and procure a new machine tool to replace the existing units. Alternative 1 was not chosen because we had experienced the outcome of this choice on existing tube benders rendering them inoperative for a 2 year period when spare parts could not be obtained for a controller. Alternative 2 was chosen because suitable replacements were not available at the closing facilities and it was a more cost effective alternative than alternative 4. It is expected that rebuilding will result in a cost avoidance of approximately $600 -700K over buying a new machine while the depot will realize like new operationability with the rebuilt units.

The Cost Benefit Analysis has been performed with an: Average annual savings: $95,173 starting in SEP 98 Payback period: 4.18 years Rate of Return: 19.0%

C00003

CAPITAL PURCHASES JUSTIFICATION												A. FY 1998/1999 BIENNIAL BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot					C. CEL00387AR DAATS TPS OFFLOAD							D. North Island		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
DAATS TPS OFFLOAD PHASE I							27	80	2,160			
DAATS TPS OFFLOAD PHASE II										27	80	2,160
TOTAL							27	80	2,160	27	80	2,160

Narrative Justification:

Description and purpose of item:
Test Program Sets (TPS) will be developed in-house to test depot unique workload components on the CASS test stations. TPSs are support equipment used with Automatic Test Equipment (ATE) to test various avionics and electronic components. The TPSs will be unique to the workload component and the CASS test station. TPSs developed for a particular piece of ATE will not function on a different type of ATE. The Offload of TPSs will provide the necessary capability to test and repair components now supported by NADEP North Island. The Digital Analog Automatic Test System (DAATS) is used for testing and repairing numerous avionics and electronics components. To continue this workload either the DAATS equipment or the Offload of Test Program Sets to another Automatic Test Equipment would be required. By Offloading the TPSs the existing workload requirements can be accomplished for an additional 15 years. This project will be accomplished over two years utilizing in-house labor.

What is the deficiency?
The Digital Analog Automatic Test System (DAATS) was installed in 1980 and is difficult to maintain. Due to the age and parts obsolesce issues, this equipment has caused delays in production of components for several weapons systems. The Depot peculiar Test Program Set used to test depot unique workload on the DAATS cannot be used on the CASS test stations, or any other piece of ATE. The TPS is unique to the workload component and the tester being utilized. New TPSs have to be developed for use on the CASS test stations. Current and planned TPSs being developed to offload components onto CASS do not include depot peculiar workload components.

What Alternatives have been considered?
- Do nothing - Eventual loss of capability within three to four years.
- Replace of the DAATS - Estimated cost would be $3,000,000 but existing TPSs could be used on the new equipment.
- Offload the existing TPSs to Consolidated Automated Support Systems (CASS) - This equipment is now available at North Island and has the capacity to accept the additional workload. This is the most cost effective option.

What are the benefits?
NADEP North Island will have 10 to 12 CASS stations available to support this workload. Overall operational and maintenance cost will be reduced to accomplish the transferred workload. CASS is supported by NAVAIR for fleet and depot requirements.

Impact if not acquired?
If the replacement of DAATS or Offload of TPSs is not accomplished workload delays will continue to increase. There is also the risk that the DAATS may fail and not be repaired due to obsolete parts. NADEP North Island is the only site for this workload tested on the DAATS.

Cost Benefit Analysis:
Average Annual Savings: $2,316,521 Payback Period: 1.5 Years Rate of Return: 53.6% Estimated Operational Date: SEPT 1998

001100

CAPITAL PURCHASES JUSTIFICATION										A. FY 1998/1999 BIENNIAL BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot				C. CEL00382AR HORIZONTAL JIG MILL						D. North Island		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
										1	1,550	1,550
TOTAL										1	1,550	1,550

Narrative Justification:

Description and purpose of item:
Horizontal Jig Mill with generic PC based CNC Controller. Direct replacement for the existing asset. No added capability - No added capacity - No extra bells or whistles.

What is the deficiency?
Current asset was received over 26 years ago with an original estimated life of 15 years. Maintenance costs are still minor but the asset is not expected to last over 30 years. Asset still used the original spool tape drive type CNC controller. Only asset with a long work bed to process aircraft surfaces. This is a direct replacement project based on capability. Productivity type Rate of Return (ROR), Savings, and Payback can not be calculated.

What alternatives have been considered?
Do nothing - We will not be able to perform the unique workload requiring the longer work bed.
Contract out - This would add turn-around-time to the aircraft and incur added expensed for transporting and tracking parts to the contractor.
Acquire new equipment - The most cost and time effective alternate.

What are the benefits?
Maintain capability for aircraft surfaces, generic PC based CNC Controller, and tighter tolerances can be maintained.

Impact if not acquired:
Current asset will go down hard in the future. Loose our capability to do aircraft surfaces. New workload requiring the longer work bet will have to be refused.

Cost Benefit Analysis:
Average Annual Savings: $328,560 Payback Period: 4.1 Years Rate of Return: 21.2% Estimated Operational Date: May 2000.

000107

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot							C. CEL00360BP C-SCAN ULTRASONIC INSPECTION EQUIPMENT						D. North Island
Element of Cost	FY 1996			FY 1997			FY 1998			FY 1999			
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
							1	850	850				
TOTAL							1	850	850				

Narrative Justification:

Description and purpose of item:
The c-scan system uses automated manipulation of ultrasonic transducers housed in water nozzles that transmit ultrasound pulses through the component being inspected. There are two transducers and nozzles, one on each side of the part. One transmits the ultrasound pulses and the other receives them. The amount attenuation of the sound pulse as it travels through the component reveals delaminations, disbonds and other internal damage. Motion is controlled in a rastor pattern to produce an attenuation map of the part called a "C-scan". The c-scan information is stored in computer memory and is displayed on a monitor with varying colors representing different amounts of attenuation.

What is the deficiency?
The C-Scan system used for the Non Destructive Inspection (NDI) examination of F-18 , F-14 and other A/C surfaces is technologically obsolete and maintenance is increasing at a geometric rate. Maintenance parts and services are becoming increasing difficult to locate. New parts are non existent.

What alternatives have been considered?
- Do Nothing - If the current systems are not replaced the NADEP will be unable to continue in the business of composite component repair and manufacture. Loss of this capability would leave us unable to provide adequate depot support for the either F/A-18C/D or the new F/A-18E/F.
- Contract Out - Too costly. The closest alternate source for this type of inspection is Northrop-Grumman Corp. in Hawthorn, CA.
- Refurbishment - New motion control and ultrasonic and data acquisition subsystems was considered but found not desirable for two reasons. (1) There is no company with the capability to create this type of system that is interested in taking a 15 year old frame and bridge, and building an effectively new system around them. (2) The existing frame and bridge are also too small to inspect the horizontal stabilizers from the new F/A-18E/F.
- Acquire New Item - Acquiring new systems is the only viable alternative.

What are the benefits?
Maintain capability, Improved Quality, Reduced turn-around-time, and Reduced maintenance actions.

Impact if not acquired:
If the current systems are not replaced the NADEP will be unable to continue in the business of composite component repair and manufacture. Loss of this capability would leave us unable to provide adequate depot support for the either F/A-18C/D or the new F/A-18E/F.

Cost Benefit Analysis:
Average Annual Savings: $170,582 starting OCT 99 Payback Period: 4.4 Years Rate of Return: 20.1%

000102

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot					C. EEL00251BP CNC LASER PUNCH								D. Jacksonville
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
							1	758	758				
							1	758	758				

Narrative Justification:

Many parts being manufactured in shop 93321 require metal to be cut to approximate size using a shear and a pattern cut from the metal using a template as a guide. This process is currently carried out using the scribe and saw method and then sanding the excess metal to the scribe line. This method of manufacturing parts is slow and tedious and does not produce the quality that a programable CNC Laser could provide. The current method also contributes to poor quality downstream in the production process

A Cost-Benefit Analysis:
Average Annual Savings : $ 131,271 starting AUG 98 Pay Back Period : 4.6 years Rate of Return : 17.3%

003603

CAPITAL PURCHASES JUSTIFICATION												A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. FEL00004BP AUTOMATED WATER JET COATING REMOVAL SYSTEM						D. Cherry Point
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
							1	750	750			
TOTAL							1	750	750			

Narrative Justification:

Currently, various parts and engine components require that coatings be removed before additional coatings can be applied. Coating removal is a key step in the process of refurbishing many turbine engine parts. When an aircraft engine is disassembled for inspection and overhaul, these coatings must be stripped to the parent metal and re-applied before the parts are reinstalled. Traditional methods of removal tend to be slow, can also be expensive, and damage to the parts a possibility. Until recently, coating removals normally utilized chemical processes, blasting processes, and machining processes. With the current trend to reduce chromium exposure levels in the plating shop, it was evident that an alternative method to coating removal needed to be investigated.

This project proposes to install an automated water jet coating removal cell to greatly reduce the labor, turnaround time, and scrap rates presently associated with coating removals. This process will reduce the requirements for chromium plating, blasting of components, and the machining of components to perform coating removals. These systems are presently being operated in the private sector with tremendous time savings to supplement the environmental and safety issues associated with this process.

Status Quo operation utilizing existing processes is not cost effective and could result in loss of capability if chromium exposure levels are drastically reduced and our facility is not ready for the impending changes. Our facility chose the option that private industry has chosen as an alternative method for these processes while generating cost savings.

The Cost Benefit Analysis has been performed with an: Average annual savings: $393,101 starting in OCT 98 Payback period: 1.38 years Rate of Return: 52.4%

C03204

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot							C. FEL00009BP AUTOMATED PLASMA SPRAY SYSTEM UPGRADE						D. Cherry Point
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
							1	500	500				
TOTAL							1	500	500				

Narrative Justification:

Currently, the Naval Engine Airfoil Center contracts out the application of thermal barrier coating of the F402 second stage high pressure turbine vanes. The contracting out turn around time, intermittent coating quality problems and contract costs are causing lengthened internal turn around time and increased production costs that are then passed on the fleet

This project proposes to upgrade the robotic plasma spray system that will be relocated from the NADEP , Norfolk, VA to the Naval Engine Airfoil Center, Cherry Point, NC. Upon completion, the robotic system will be functionally capable of applying thermal barrier coating on the F402 second stage high pressure turbine vanes.

The upgrade of the plasma spray system will incorporate the following major renovations to the system; Robot repairs/upgrades, refurbish and possible inclusion of additional plasma spray equipment, refurbishment and upgrade of auxiliary equipment such as dust collector, turntables, CNC controls, blowers, etc., and replacement of the control system with state of the art controls and software. This upgrade will place this system at the forefront of coating technology as the depot mores towards metal spray coatings as a way to reduce chromium exposure limits throughout the depot.

Status Quo operations will include the non cost effective method of contracting the service out. Alternative 2 would be to procure a new robotic plasma spray system while alternative 3 would be to upgrade the system being transitioned from NADEP NORVA. As identified in the PIA, the most sensible alternative is to upgrade the existing system. This will realize a $1M cost avoidance over the procurement of a new system and will save dollars with respect to contracting out the coating requirements.

The Cost Benefit Analysis has been performed with an: Average annual savings: $204,273 starting in APR 98 Payback period: 1.50 years Rate of Return: 48%

0003C5

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. NEL00000XN CASS STATION EQUIPMENT							D.		
	FY 1996			FY 1997			FY 1998			FY 1999					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
FEL00000XN CHERRY POINT	1	1,049	1,049	4	VAR	8,518									
EEL00000XN JACKSONVILLE				2	VAR	5,602									
CEL00000XN NORTH ISLAND	3	VAR	3,652	8	VAR	13,653	3	VAR	4,825	1	VAR	1,807			
TOTAL	4	VAR	4,701	14	VAR	27,773	3	VAR	4,825	1	VAR	1,807			

Narrative Justification:

This request results from the design and development of modularly constructed Automated Test Equipment (ATE). The development program was executed in response to fleet concerns regarding serious deficiencies in existing ATE and recommendations of an extensive 1976 SECNAV study on test equipment. The CASS program is part of the Navy's long range plan to replace existing aging testers. Depot Level support for the F/A-18, F-14, S-3B, and P-3, as well as core avionics, is planned for NADEPs utilizing CASS. Many of the avionics systems scheduled for CASS are new development programs sets developed only for CASS. There are no alternative means of support. Without CASS stations at the NADEPs avionics component workload and aircraft SDLM concurrent repair will not be executable significantly impacting readiness and pipeline assets. The Consolidated Automated Support System (CASS) design incorporate easily reconfigurable modules which can address varying test requirements (e.g. electro-optical, radio frequency, laser, infrared, inertial guidance, etc.) and will also allow modification to meet the demands of future technologies.

CASS is the Navy's latest state-of-the-art avionics automated test equipment to be used to test present and future complex weapons system. CASS will eventually replace the existing testers which includes both common and peculiar ATE. Common ATE has the capability to test electronic assemblies from many different weapon systems, while peculiar ATE tests only one weapon system. CASS represents an approach to testing which consolidates the numbers and types of testers used to implement electronics support. CASS has a standard, yet open-ended system architecture that uses a set of standard test modules from which different configurations are composed to meet specific user test requirements. Only the number of test modules and their collective packaging change to adapt to different user needs. Utilizing the CASS architecture, low-level modules, and a distributed computing systems, it is possible to produce CASS configurations optimized to the particular application. These can range from multiple rack-mounted configurations. All share common assets and software and allow Test Program Set transportability. The four rack-mount configurations include a hybrid tester, RF configuration, Electro Optic configuration and communication/navigation/identification (CNI) configuration.

The CASS program will increase weapon system material readiness, reduce life cycle costs through standardization, improve tester sustainability at depot and intermediate maintenance levels, and provide Navy-wide test capability for existing and future avionics systems. CASS will increase repair facility throughput capability, reduce spare parts and personnel training requirements, and significantly reduce the space required for avionics testing aboard space critical aircraft carriers.

000306

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot					C. FEL00002BP COLD ROLLING PROCESS FOR PROPELLER BLADES								D. Cherry Point
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
							1	500	500				
TOTAL							1	500	500				

Narrative Justification:

The Propeller Shop, Shop 93316, was established as a result of Base Realignment and Closure (BRAC) 93 desires to close the Depots at Alameda and Norfolk VA. All Navy and ASO propeller work that was completed, was performed at these two facilities. As a result of BRAC 93, the two propeller repair facilities were to be closed and all workload was to be transitioned to NADEP Cherry Point NC. Our propeller shop established full rework capability in 1st quarter of FY96.

Upon induction into our shop, each propeller is inspected by our Quality Evaluator team to determine required processing for the propeller. We have found that a small percentage of propeller (14%) require a cold rolling process that this facility doe not have capability on. Labor hours are expended to determine that the propeller must be returned to supply to be sent to Hamilton Standard for the cold rolling process. When the blade is sent for this process, another propeller has to be purchased from supply to replace the one requiring cold rolling.

Due to the number of propellers requiring cold rolling per quarter and the cost to the customer to replace the units, the current deficiency is that the government is dependent upon contractors to perform this process and the cost to the government is inflated.

The cold rolling process consists of a machine that is capable of stress relieving the propeller. the machine simply applies a twisting motion to the propeller and measures the position of the propeller through mechanical or laser means. The machine applies the required amount of twist within tolerances as set forth by NAVAIR instructions.

The proposed solution is to establish cold rolling capabilities in the propeller shop at this facility. The cost savings to the customer and facility justify this requirement. The establishment of cold rolling at this facility will eliminate the requirement to reroute the propellers to private contractors, increase propeller turnaround time, and reduce overall cost and rework rate to the customer.

Status Quo alternative was not considered feasible due to the Navy and other NADEP customer propeller users remaining at the mercy of contractors to perform the cold rolling process. While it is noted that neither of the two Depots that were reworking propellers possessed cold rolling capabilities; status quo continues the expensive practice of expending hours on propellers needlessly when they are required to be routed to the contractor's facilities and the needless material expenditures passed on to the customer to purchase replacement propellers while the units requiring cold rolling are routed to the contractors for rework.

A Cost Benefit Analysis has been performed with an: Average annual savings: $506,461 starting DEC 98 Payback period: .55 years Rate of return: 101%

000107

CAPITAL PURCHASES JUSTIFICATION		A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot	C. FEL00004CE HVOF METAL COATING SYSTEM	D. Cherry Point

Element of Cost	FY 1996			FY 1997			FY 1998			FY 1999		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
										1	1,500	1,500
TOTAL										1	1,500	1,500

Narrative Justification:

Currently, the Naval Aviation Depot contracts out the application of hard face metal sprayed (HVOF) coatings of various F402/406 engine components and an assortment of additional components. The contracting out turn-around-time, intermittent coating quality problems and contract costs are causing lengthened internal turnaround time and increased production costs.

Another problem/deficiency is that there are environmental and safety concerns being expressed with respect to chrome plating exposure limits. Presently, all chrome plating is done basically manually in our plating shop. Occupational Safety Health Administration (OSHA) has published reports leaning towards drastic reductions in the chromium exposures levels allowed in plating shop employee's blood streams. The proposed maximum exposure level is 0.5 micrograms per cubic meter. These findings and reports have sent up the red flag in industry and government circles as a 0.5 microgram per cubic meter exposure level will be extremely difficult to comply with. Automated chrome plating lines may be required or very extensive protective gear as a minimum would be required. This red flag has been investigated thoroughly by this facilities materials engineering branch in the Product Support Directorate (PSD) with inputs from the safety and environmental offices. PSD personnel are taking part in industry/government panels and committees that are researching alternative methods for chrome application. The use of HVOF metal spray has emerged as the most promising technology in the transition away from chrome plating.

The proposed project will provide a robotic HVOF metal spray system that will be equipped with a HVOF gun system including all gas, power, air, and powder controls and a gantry style robotic gun positioning system that will be controlled from the same control panel as the gun system. The spray operation will be housed in a noise attenuating enclosure as will all the auxiliar units. The enclosure will include the dry filter system for the spray operation, turntable for part holding, and a dust collector system. The system will allow the depot to enhance its metal spray capabilities while bringing contracted work back into the depot. The proposed system will also provide a method of tremendously reducing the amount of chrome plating required in the facility and to be in compliance with forthcoming OSHA and EPA regulations.

The purpose of this project is to reduce labor costs and turn-around-time associated with the repair of F402 fan blades and to comply with forthcoming EPA and OSHA requirements. The proposed project intends to do this by gaining better control, making it a more efficient process, and by drastically reducing operator exposure to chromium. It is our recommendation to do this by procuring HVOF metal spray technology.

A Cost Benefit Analysis has been performed with an: Average annual savings of $323,041 starting AUG 99; a Payback Period: 3.6 years; and a Rate of Return of 21%.

003108

CAPITAL PURCHASES JUSTIFICATION												A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot					C. FEL00008CE AUTOMATED PAINT COATING SYSTEM							D. Cherry Point
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
										1	600	600
TOTAL										1	600	600

Narrative Justification:

Currently, the Naval Aviation Depot utilizes painting processes at numerous locations throughout the facility. Some of the major painting operations are the aircraft paint hangar, the small components part paint walls, the engine can paint facility, and the engine line paint facility. The facility utilizes a large number of paint processes and different types of paint to accomplish its mission. Batch work that is done at the facility is normally not conducive to automation of the processes with painting being no exception to the rule. Each of the painting process areas are required to prime components and paint various colors on components. Automating the painting process would require tremendously large holding tanks for the various colors of paints are require considerable cleanup of spray chambers and reprocessing equipment. Therefore, automating the painting process at this facility would probably not be feasible. However, all parts require priming before painting. A system could be developed to automatically apply primer to components. Approximately 50% of all work done in the small components paint area is primer work.

Another problem/deficiency is that there are environmental and pollution prevention concerns being expressed with respect to our painting processes. Our present paint operation is presently in compliance with respect to emissions of volatile organic compounds (VOC) and solid particulate matter. However, future VOC maximum allowable levels may be reduced in the future. OPNAVINST 5090.1B on Pollution Prevention has mandates reductions of pollution throughout the depot. The present paint walls in the small components paint facility are the water fall type. Each unit holds approximately 250 gallons of water for a total of 500 gallons of water being utilized in the operation. On average, these tanks have to be pumped out 6 times a year and the liquid disposed of as hazardous waste. Any method of paint application that could reduce this effort would assist the facility's goal in reducing pollution while potentially reducing VOC emissions. Our plant engineering, product support directorate engineering, environmental engineering and production shop personnel are working together to improve the overall painting process by extensively researching alternative methods for primer applications. The use of powder coating or electrodeposiiton paint processes have emerged as the most promising technologies in the transition away from conventional air spraying of all components.

This proposed project will provide an automated paint application system for the purpose of applying primer on small components presently being sprayed by hand in the small components paint shop. The proposed system will be capable of handling approximately 50% of the shop's present workload. The other 50% of the workload will consists of prime jobs that can't be sent through the automated line and the different colors paint application. The proposed automated paint application system will be equipped with the required preplanning station, paint application station, and drying station. The cell will be capable of handling 2 foot cubed components as a minimum and will be equipped with necessary waste treatment and to reduce overall waste and emissions.

A Cost Benefit Analysis has been performed with an: Average annual savings of $144,696 starting JUL 99; a Payback Period: 3.22 years; and a Rate of Return of 24.1%.

000369

CAPITAL PURCHASES JUSTIFICATION												A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot					C. EEL00246CE FLASHJET PAINT STRIP							D. Jacksonville
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
										1	2,500	2,500
TOTAL										1	2,500	2,500

Narrative Justification:

Current chemical stripping process is in violation of OSHA and environmental regulations due to inadequate ventilation of Hangar 101S. The feasibility to upgrade Hangar 101S is currently under investigation. Aircraft stripping paint produces hazardous waste from the waste water generation. Hangar 122 was considered as an alternate stripping site. However, Hangar 122 is not currently available due to priority workload constraints. The proposed Flashjet process utilizes a xerox flashlamp and a carbon dioxide removal system. This process will safely and economically remove aircraft paint coatings without the use of hazardous chemicals or potentially damaging dry media. The volume of hazardous waste will continue to increase the operational costs of the closed loop Treatment Plant #2 (TP-2) if this process is not supported. Cost for the usage of landfills and approved disposal sites will be at a premium in the near future.

Cost Benefit Analysis:

Average Annual Savings: $878,287 starting SEP 99 Payback: 2.0 yrs. Rate of Return: 35.1%

0363

CAPITAL PURCHASES JUSTIFICATION										A. FY 1998/1999 BIENNIAL BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot				C. FKL00006AR NALCCOIS REPLACEMENTS						D. Cherry Point		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
				1	VAR	1,000	1	VAR	1,000	1	VAR	1,000
TOTAL				1	VAR	1,000	1	VAR	1,000	1	VAR	1,000

Narrative Justification:

These funds are to support replacement of 80286 based processor personal computers (PCs) purchased and capitalized under the Naval Aviation Logistics Center Communication and Office Information System (NALCCOIS). The subject PCs were installed in 1987 and since that time technology and the business needs of the depot have changed.

Of all the existing PCs at the depot, approximately 1,300 are basic 80286 based microprocessor based PCs provided under the NALCCOIS project. Most of these assets have long since exceeded their useful life expectancy of five (5) years, and all have been superseded by technology. Current technology requires greater processing power and memory not capable by an 80286 based microprocessor. Most of the available software packages currently used by the NAVAIR Team cannot be loaded or run on the old obsolete machines.

In addition to technical obsolescence, many of the assets are in poor physical condition due to exposure to an industrial (i.e. depot) environment. Monitors, keyboards, internal circuit boards, hard drives, floppy drives, etc. are in need of repair or replacement. To add to this problem is the difficulty in obtaining replacement parts for machines that are almost ten (10) years beyond their date of manufacture.

The intended solution is to purchase direct replacements for the existing 80286 based microprocessor PCs, to include replacement of the LAN card where required. Due to the large number of PCs which need replacement, and the limitations on funding and execution resources, implementation of the replacements will be phased. This project will focus on replacing one third of the existing PCs each fiscal year for three consecutive years. 430 PCs will be replaced in this year, the first of three years.

A Cost Benefit Analysis has been performed with an: Average annual savings of $276,163 starting DEC 98; a Payback Period: 3.27 years; and a Rate of Return of 27.6%.

CAPITAL PURCHASES JUSTIFICATION													A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. EKL00001JP CONFIGURATION MANAGEMENT INFORMATION SYSTEM (CMIS)						D. Jacksonville
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
				1		5,800						
TOTAL						5,800						

Narrative Justification:

Material Management (MM) hardware funds budgeted by the Joint Logistics Systems Center (JLSC) are to support the deployment of Material Management applications at various Navy sites. These sites, encompass various business areas including Research and Development (R&D), Depot Maintenance/Aviation (DM/AV), Supply Management (SM), Depot Maintenance/Ordnance (DM/ORD), and Information Systems (IS/NCTC). The Material Management Standards Systems (MMSS) applications to be implemented include Configuration Management Information System (CMIS), Commercial Asset Visibility II (CAV II), and Math Models. CMIS application deployment scheduled for FY97 will occur on time only if new hardware is procured and installed at the planned CMIS sites. Both Math Models and CAV II are scheduled for deployment in the early part of FY 1998, and as such require hardware to be procured in FY 1997, and installed, configured, and tested for CMIS implementation by early FY 1998. MSS hardware is separate from hardware deployed to support the Depot Maintenance Systems (DMS). For example, NADEP Cherry Point and NADEP North Island are scheduled to receive hardware in support of both MMSS and DMS. In each case, the hardware is physically separated between MM and DM functional areas, and is used by different personnel. There is no overlap of MM or DM hardware requirements.

The type and amount of equipment needed is dependent upon projects fielded, the size of each site, and the availability and applicability of equipment currently at that site. This requirement is based upon FY 1996 site surveys. As project deployment to a specific site nears, a final survey will be conducted to confirm requirements. Representative configurations vary in size from those including servers at approximately $314K - $650K per site, to personal computer workstations with 17 or 15 inch displays at $2.7K - $3.1K per workstation per site, and X-terminal workstations at a cost of $2K. Cost also include MMS connectivity to Local Area Networks (LANs).

The MMS applications will provide a radically improved capability to the Military Services and DLA, reduce DoD costs for information services and establish an information system infrastructure on which DoD can improve the way it does business. Specific improvements include:- Reduced inventories through better management information on purchase decisions; -Reduced labor requirements for material management processes;-Reduced rework caused by inaccurate or incomplete configuration data;- Reduced information technology costs; - Improved visibility and control of assets.

Actual cost savings cannot be accurately calculated until the full suite of MMSS applications are in place and fully operational, and the full spectrum of improved business processes enabled by MMSS deployments is realized. The largest cost savings are anticipated from the CMIS described below. Additionally, once implementation of MMSS systems is complete, legacy applications will be reduced or eliminated, significantly decreasing ADP costs.

The CMIS application is managed within the Supply Management business area but used at various business area sites. It manages weapon system configuration data both within and between program offices and System Commands. The most significant function affected by CMIS is inventory spares management. The method of computing inventory spares is dependent upon accurate configuration data for each weapon system platform (aircraft/ship/submarine, etc.). Of all the System Commands, NAVSUP is projected to benefit the most from CMIS. More specifically, CMIS deployments to NAVAIR/NAVSEA sites will enhance the ability of NAVSUP to achieve several of its long range strategic goals. Greater accuracy in configuration data delivered through the CMIS application will facilitate the implementation of advanced readiness based sparing models, which will result in less investment for inventory spares while maintaining and possibly improving fleet readiness. A more streamlined, accurate flow of configuration data through the CMIS application will facilitate NAVSUP in achieving its goal of reducing/attacking the logistics infrastructure and downsizing its workforce. Without the requisite hardware, the CMIS application cannot be deployed on schedule and to the requisite NAVAIR, NAVSEA, NAVSUP, NCTC, and Ordnance sites, and the anticipated savings and logistics business process improvements cannot be realized.

000212

CAPITAL PURCHASES JUSTIFICATION												A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot				C. FKL00001BP LOCAL AREA NETWORK UPGRADE AND ENHANCEMENT								D. Cherry Point
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
				1	800	800				1	600	600
TOTAL				1	800	800				1	600	600

Narrative Justification:

These funds are to support upgrade of existing Broadband Local Area Network (LAN) engineered and installed in 1987. The upgrade will provide a network backbone architecture based on Asynchronous Transfer Mode (ATM) technology, along with ATM connections for existing servers, and provides baseband connectivity via a Smart Hub (for small groups in isolated areas), or a 5-slot enclosure system (for a larger group). This solution will provide the increased bandwidth necessary to transport graphical images, as well as data, rapidly within and outside the depot. The Upgrade will reduce existing non-productive time currently resulting from limited LAN accessibility. The existing ten year old technology LAN affords a throughput of 5 Mbit, while ATM affords a throughput of 155 Mbits. This Upgrade will also reduce maintenance costs for areas using Network Interface Units (NIUs), will provide LAN accessibility for areas not currently connected, and reduce network traffic by allowing segmentation of resource groups. Implementation of ATM as the backbone of the depot LAN will position the depot to leverage this investment for future convergence of voice, data, and full motion video needs into a single network.

A Cost Benefit Analysis has been performed with an: Average annual savings of $453,894 starting JAN 99; a Payback Period: 1.25 years; and a Rate of Return of 75.6%.

000213

CAPITAL PURCHASES JUSTIFICATION			A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot	C. FKL0000AR JEDMICS		D. Cherry Point

Element of Cost	FY 1996			FY 1997			FY 1998			FY 1999		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
							1	1,500	1,500			
TOTAL							1	1,500	1,500			

Narrative Justification:

The Joint Engineering Data Management Information and Control System (JEDMICS) is an automated, state-of-the-art engineering drawing repository utilizing digital imaging techniques, optical/digital mass storage, conventional (ADPE/MIS) computer resources and Local Area Network (LAN) technologies. JEDMICS is a Computer Aided Logistics Support (CALS) initiative.

The purpose of this project is to provide the NADEPs with the ability of storing large amounts of technical data in the CALS compliant digital format and to implement the JEDMICS compatible automated Engineering Drawing Support Activity.

JEDMICS will improve repository management by reducing or eliminating labor intensive functions associated with the receipt, storage, retrieval and distribution of drawing images. The system will permit authorized users the ability to add, delete, or change data as required. There will be increased efficiency in the processing of drawing requests and improved accuracy by providing the user with the latest drawing revision.

000214

DEPARTMENT OF THE NAVY - DEFENSE BUSINESS OPERATIONS FUND
DEPOT MAINTENANCE - AVIATION DEPOTS
CAPITAL BUDGET EXECUTION
(DOLLARS IN MILLIONS)
FY 1997

ITEM LINE #			ITEM DESCRIPTION	Original Request	Change	Revised Request	Explanation/Reason for Change
			1a. EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)				
			Replacement				
E EL	00016A	R	5-AXIS MACHINING CENTER	0.825	0.022	0.847	Contracting procedure changed, causing an additional contracting fee.
F EL	00001A	R	FUEL METERING UNIT TEST STAND	1.000	0.000	1.000	
C EL	00304A	R	LARGE VERTICAL GRINDER	0.637	0.063	0.700	Price Increase of the base unit due to required options and administrative costs.
			New Mission				
N EL	00000X	N	CASS STATION EQUIPMENT	27.773	(7.820)	19.953	Decreased Test Program Set (TPS) Engineering requirements due to delays in TPS deliveries to the fleet. FY 98 & 99 budget requirements will meet known current and future TPS Engineering requirements. Decrease transferred to DMS & projects under 500k.
			SUBTOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)	30.235	(7.735)	22.500	
N ES	000000		**1b. EQUIPMENT, OTHER THAN ADPE & TELECOM (<$500K)**	3.619	(0.507)	3.112	
			2. GRAND TOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM	33.854	(8.242)	25.612	
N MC	000000				0.760		Construction of a clean room ($.460) and a pressure wash pad ($.150), and re-installation of a glass booth on a new foundation ($.150).
			3. MINOR CONSTRUCTION	3.126		3.886	
			4a. RMS MODs (>$500k)				
N RL	000000		H-46 ROTOR BLADE MODERNIZATION	3.500	(3.500)	0.000	Transfer of RMS Projects to procurement appropriations.
			SUBTOTAL RMS MODs (>$500K)	3.500	(3.500)	0.000	
N RS	000000		**4b. RMS MODs (<$500K)**	0.167	(0.167)	0.000	Transfer of RMS Projects to procurement appropriations.
			5. GRAND TOTAL RMS MODs	3.667	(3.667)	0.000	
			GRAND TOTAL NON-ADP CAPITAL PURCHASES PROGRAM	40.647	(11.149)	29.498	

000215

DEPARTMENT OF THE NAVY - DEFENSE BUSINESS OPERATIONS FUND
DEPOT MAINTENANCE - AVIATION DEPOTS
CAPITAL BUDGET EXECUTION
(DOLLARS IN MILLIONS)
FY 1997

ITEM LINE #			ITEM DESCRIPTION	Original Request	Change	Revised Request	Explanation/Reason for Change
			1a. ADPE & TELECOMMUNICATIONS Computer Hardware (Production)				
N KL	00000J	P	DEPOT MAINTENANCE SYSTEM (DMS)	6.657	7.000	13.657	Increase due to Site Surveys which indicates full acquisition in 1997 due to DoD accelerating schedule. Increase was transferred from CASS Station Equipment.
E KL	04001B	P	ENGINEERING CAD/CAM SYSTEM PHASE II	0.440	0.000	0.440	
F KL	00006A	R	NALCCOIS REPLACEMENTS	1.000	(0.300)	0.700	Moved .300K to FY 98 to correct defiency for the CAD System under 500K category.
F KL	00001B	P	LAN UPGRADE AND ENHANCEMENT	0.800	0.000	0.800	
F KL	00012A	R	E-MAIL SERVER SYSTEM REPLACEMENT	0.500	0.000	0.500	
E KL	00001J	P	CONFIGURATION MANAGEMENT INFO SYSTEM (CMIS)	0.000	5.800	5.800	Redistribution of JLSC Hardware from Navy Supply Mgmt to the NADEPs.
C KL	00228B	P	CAD II	0.475	0.000	0.475	
C KL	00352B	P	OPEN SYSTEM TRANSITION	0.490	0.000	0.490	
E KL	00013C	N	COMPUTER SYSTEM UPGRADE	0.200	0.000	0.200	
			INFORMATION SUBSCRIBER SERVER	0.000	0.283	0.283	Preapproved project moved from FY 1995 to FY 1997
			CARD ACCESS SECURITY MONITORING SYSTEM	0.000	0.207	0.207	Coincides with security requirements for H60 labs resulting from BRACON for PSD facility scheduled for completion in FY 1997.
			CAD SYSTEM REPLACEMENT PROJECT	0.000	0.300	0.300	Needed to meet urgent production requirements.
			2. GRAND TOTAL ADPE & TELECOMMUNICATIONS	10.562	13.290	23.852	
			GRAND TOTAL CAPITAL PURCHASES PROGRAM	51.209	2.141	53.350	

000219

NAVY WORKING CAPITAL FUND
MARINE CORPS DEPOT MAINTENANCE

Activity Group Function:

The mission of the Marine Corps Depot Maintenance Activity Group (DMBA) of the Navy Working Capital Fund is to provide quality and responsive maintenance and maintenance support services and to maintain a core industrial base to support mobilization and surge requirements. The maintenance functions performed by the DMBA include repair, rebuild, modification, and Inspect and Repair Only as Necessary (IROAN) for all types of ground combat and combat support equipment used by the Marine Corps and other Department of Defense (DoD) military services under interservice support agreements. Other functions include performance of related services such as preservation, testing, technical evaluation, calibration, and fabrication of automated test equipment.

Activity Group Composition:

The DMBA is comprised of two Maintenance Centers, one located at Albany, Georgia, and the other at Barstow, California. The Marine Corps Maintenance Centers maintain virtually identical capabilities in order to provide support for Marine Corps operational units, depending on unit location.

Budget Highlights

Several years ago, the depot maintenance community began the most comprehensive review of business practices ever undertaken in the history of Marine Corps depot maintenance. This review led to the development of the Marine Corps Depot Maintenance Business Plan. In pursuit of the financial objectives of this plan, a Financial Management (FM) Quality Leadership Board (QLB) was chartered to implement the financial management aspects of the plan. Early in the process, two issues emerged as crucial to the success of the Maintenance Centers: competition and cost control. In order to improve in both areas, the FM QLB developed a Cost Allocation Methodology for the Maintenance Centers that will improve their posture for competition and increase their cost visibility which will facilitate cost control.

This budget submission reflects the initial results of the Cost Allocation Methodology used by the Maintenance Centers in the establishment of stable labor rates for FY97, FY98, and FY99. One of the objectives of cost allocations is to reduce overhead through cost control. In order to achieve this, the responsibility for overhead cost must be assigned to the lowest possible level. This will increase visibility of costs while encouraging cost control at the business center level. This by itself does not reduce cost, but it does take the cost closer to the product. The impact of this allocation process can be seen in the unit cost decreases shown below.

Unit Costs:

FY 1996	FY 1997	FY 1998	FY 1999
$73.62	$70.10	$69.80	$71.53

Unit costs decline between FY96 and FY97, and again between FY97 and FY98 due to total costs declining slightly more than workload (direct labor hours) over those years. The unit cost increase between FY 1998 and FY 1999 is due to inflation.

Financial Profile

($ in millions)	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	192.9	165.6	158.5	142.5
Cost of Goods Sold	192.3	154.7	150.2	139.2
Net Operating Result	-.5	9.7	-1.3	0.0
Accum Operating Results	(8.5)	1.3	0.0	0.0

The FY 1996 operating results are slightly lower than expected while FY 1997 results are anticipated to be more favorable than forecast last year. Costs decline in FY 1998 and FY 1999 commensurate with workload decreases.

Workload:

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hrs (DLH)	2,611,996	2,206,509	2,152,021	1,945,598

The DLH profile reflects a decline in customer funding levels from FY 1997 to FY 1999. This decline includes a decrease in Full-time Equivalents (FTEs) and overtime.

Carryover:

The Marine Corps Depots have begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($M)	$44.1	$33.5	$32.9	$34.2
Months of Carryover	2.7	2.4	2.5	2.9

Performance Indicators:

	FY 1996	FY 1997	FY 1998	FY 1999
Schedule Conformance	97.5%	98.5%	99.0%	99.0%
Quality Deficiency Reports	0.2%	0.2%	0.2%	0.2%
Inventory Turnover Ratio	12.2:1	11.8:1	12.9:1	11.9:1

Our performance indicators illustrate our efforts to provide continued quality service to our customers.

Customer Rates:

	FY 1997	FY 1998	FY 1999
	$77.31	$73.09	$73.62
Change	+11.1%	-5.46%	+0.73%

The FY 1997 rate increase recovers prior year losses. The FY 1998 rate decrease reflects recovery of current year costs plus a cash surcharge. The FY 1999 rate increases slightly with the continuation of the cash surcharge plus inflation.

Staffing:

	FY 1996	FY 1997	FY 1998	FY 1999
Civilian End Strength	2,003	1,792	1,675	1,596
Civilian Work Years	2,010	1,790	1,665	1,590
Military End Strength	20	19	19	19

End strength and work years decline in all budget years due to decreased workload and associated funding.

Capital Budget Authority:

($ in millions)	FY 1996	FY 1997	FY 1998	FY 1999
Equip Non-ADPE/TELCOM	2.4	4.9	1.5	1.4
ADPE/Telecommunications Equip	2.4	1.1	0	0
Software Development	0	1.6	0	0
Minor Construction	1.2	1.6	2.1	2.1
TOTAL	6.0	9.2	3.6	3.5

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
MCIF / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	187.8	160.6	145.1	135.2
Surcharges	1.1	1.2	9.6	3.3
Depreciation excluding Major Constructio	4.0	3.9	3.9	4.0
Other Income				
Total Income	192.9	165.6	158.5	142.5
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	.9	1.1	1.1	1.1
Civilian Personnel	97.7	87.4	84.0	80.1
Travel and Transportation of Personnel	.6	.3	.3	.3
Material & Supplies (Internal Operations	56.5	35.7	35.2	31.3
Equipment	2.6	1.7	1.7	1.7
Other Purchases from NWCF	.0	3.2	3.6	3.7
Transportation of Things	.0	.0	.0	.0
Depreciation - Capital	4.0	3.9	3.9	4.0
Printing and Reproduction	.1	.1	.1	.1
Advisory and Assistance Services	.0	1.3	.0	.0
Rent, Communication & Utilities	4.8	4.2	4.1	3.7
Other Purchased Sevices	25.1	15.8	16.3	13.2
Total Expenses	192.3	154.7	150.2	139.2
Work in Process Adjustment	.0	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	192.3	154.7	150.2	139.2
Operating Result	.6	10.9	8.3	3.3
Less Surcharges	-1.1	-1.2	-9.6	-3.3
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-.5	9.7	-1.3	.0
Other Changes Affecting AOR	-1.1	.0	.0	.0
Accumulated Operating Result	-8.5	1.3	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
MCIF / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	172.3	153.0	157.2	144.6
a. Orders from DoD Components	160.1	137.6	142.1	124.5
Department of the Navy	153.6	136.3	140.5	123.3
O & M, Navy	.2	.0	.0	.0
O & M, Marine Corps	145.9	125.4	124.4	113.4
O & M, Navy Reserve	.0	.0	.0	.0
O & M, Marine Corp Reserve	2.6	2.7	2.5	2.6
Aircraft Porcurement, Navy	.0	.0	.0	.0
Weapons Procurement, Navy	.0	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	.0	.0	.0	.0
Other Procurement, Navy	.0	.0	.0	.0
Procurement, Marine Corps	4.2	5.2	10.6	4.2
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	.7	2.9	2.9	3.1
Military Construction, Navy	.0	.0	.0	.0
Other Navy Appropriations	.0	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	2.7	.0	.0	.0
Army Operation & Maintenence	.0	.0	.0	.0
Army Res, Dev, Test, Eval	.0	.0	.0	.0
Army Procurement	.0	.0	.0	.0
Army Other	2.7	.0	.0	.0
Department of the Air Force	.7	.3	.3	.2
Air Force Operation & Maintenence	.0	.3	.3	.2
Air Force Res, Dev, Test, Eval	.0	.0	.0	.0
Air Force Procurement	.0	.0	.0	.0
Air Force Other	.7	.0	.0	.0
DOD Appropriation Accounts	3.0	1.0	1.3	1.0
Base Closure & Realignment	.0	.0	.0	.0
Operation & Maintence Accounts	.0	.0	.0	.0
Res, Dev, Test & Eval Accounts	.0	.0	.0	.0
Procurement Accounts	.0	.0	.0	.0
DOD Other	3.0	1.0	1.3	1.0
b. Orders from NWCF Business Area	11.0	13.9	14.3	18.4
c. Total DoD	171.1	151.5	156.4	142.9
d. Other Orders	1.2	1.5	.8	1.7
Other Federal Agencies	1.2	1.5	.8	1.7
Foreign Military Sales	.0	.0	.0	.0
Non Federal Agencies	.0	.0	.0	.0

0001274

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
MCIF / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	68.0	47.4	34.8	33.5
3. Total Gross Orders	240.3	200.5	192.0	178.1
4. Funded Carry-Over **	47.4	34.8	33.5	35.6
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	192.9	165.6	158.5	142.5
Adjusted Carryover	**44.1**	**33.5**	**32.9**	**34.2**

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

000252

Exhibit Fund-11

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
CHANGES IN THE COSTS OF OPERATION

	EXPENSES
FY 1996 Actuals	192.3
FY 1997 Estimate in President's Budget	160.8
Estimated Impact in FY 1997 of Actual FY 1996 Experience	
Pricing Adjustments	
A. Civilian Personnel Compensation and Benefits	0.6
B. Material & Supplies	-0.4
Program Changes:	
A. Civilian Personnel Compensation and Benefits	2.5
B. Travel and Transportation of Personnel	-0.6
C. Material & Supplies	-3.1
D. Depreciation	-0.2
E. Other Purchases	-4.9
FY 1997 Current Estimate	154.7
Pricing Adjustments:	
A Personnel Compensation and Benefits	2.1
B. Material & Supplies	4.2
C.. Other Purchases from Revolving Funds	-0.4
D. Rent, Communications & Utilities	0.1
E. Other Purchases	0.4
Program Changes:	
A. Personnel Compensation and Benefits	-5.6
B. Material & Supplies	-4.8
C. Intra-fund Purchases	0.8
D. Rent, Communications & Utilities	-0.2
E. Other Purchases	-1.1
FY 1998 Current Estimate	150.2
Pricing Adjustments:	
A. Personnel Compensation and Benefits	1.8
B. Other Purchases	0.4
Program Changes:	
A. Personnel Compensation and Benefits	-5.6
B. Material & Supplies	-3.9
C. Intra-fund Purchases	0.1
D. Depreciation	0.1
E. Rent, Communications & Utilities	-0.5
F. Other Purchases	-3.4
FY 1999 Current Estimate	139.2

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
CHANGES IN THE COSTS OF OPERATION

Narrative:

FY 1997 - FY 1997: Decrease in cost estimate for material and supplies, facility and equipment maintenance and various contracts.

FY 1997 - FY 1998: Overall costs decrease 2.9% commensurate with a decrease in workload.

FY 1998 - FY 1999: Total costs decrease 7.4% as a result of declining workload and the continuous effort to reduce overhead.

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
MATERIAL INVENTORY DATA
(Dollars in Millions)
Fiscal Year 1996

	Total	Mobilization	----------Peacetime---------- Operating	Other
Material Inventory BOP	15.2	0.0	15.2	0.0
Purchases				
A. Purchases to Support Customer Orders	59.2	0.0	59.2	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (+)				
Materials & Supplies	0	0.0	0.0	0.0
D. Total Purchases	59.2	0.0	59.2	0.0
Material Inventory Adjustment				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	61.2	0.0	61.2	0.0
B. Disposals, theft, losses due to damage (-)	0.0	0.0	0.0	0.0
C. Other reductions (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	61.2	0.0	61.2	0.0
Material Inventory EOP	13.2	0.0	13.2	0.0

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
MATERIAL INVENTORY DATA
(Dollars in Millions)
Fiscal Year 1997

	Total	Mobilization	----------Peacetime---------- Operating	Other
Material Inventory BOP	13.2	0.0	13.2	0.0
Purchases				
A. Purchases to Support Customer Orders	37.4	0.0	37.4	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (+)				
Materials & Supplies	0	0.0	0.0	0.0
D. Total Purchases	37.4	0.0	37.4	0.0
Material Inventory Adjustment				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	37.9	0.0	37.9	0.0
B. Disposals, theft, losses due to damage (-)	0.0	0.0	0.0	0.0
C. Other reductions (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	37.9	0.0	37.9	0.0
Material Inventory EOP	12.7	0.0	12.7	0.0

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
MATERIAL INVENTORY DATA
(Dollars in Millions)
Fiscal Year 1998

	Total	Mobilization	Peacetime	
			Operating	Other
Material Inventory BOP	12.7	0.0	12.7	0.0
Purchases				
A. Purchases to Support Customer Orders	36.8	0.0	36.8	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (+)				
Materials & Supplies	0	0.0	0.0	0.0
D. Total Purchases	36.8	0.0	36.8	0.0
Material Inventory Adjustment				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	37.3	0.0	37.3	0.0
B. Disposals, theft, losses due to damage (-)	0.0	0.0	0.0	0.0
C. Other reductions (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	37.3	0.0	37.3	0.0
Material Inventory EOP	12.2	0.0	12.2	0.0

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
MATERIAL INVENTORY DATA
(Dollars in Millions)
Fiscal Year 1999

	Total	Mobilization	----------Peacetime---------- Operating	Other
Material Inventory BOP	12.2	0.0	12.2	0.0
Purchases				
A. Purchases to Support Customer Orders	33.0	0.0	33.0	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (+)				
Materials & Supplies	0.0	0.0		0.0
D. Total Purchases	33.0	0.0	33.0	0.0
Material Inventory Adjustment				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	33.5	0.0	33.5	0.0
B. Disposals, theft, losses due to damage (-)	0.0	0.0	0.0	0.0
C. Other reductions (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	33.5	0.0	33.5	0.0
Material Inventory EOP	11.7	0.0	11.7	0.0

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
Summary of Capital Purchases

Dollars in Millions

Line Number	Item Description	FY 1996 Estimate		FY 1997 Estimate		FY 1998 Estimate		FY 1999 Estimate	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	Equipment >500K								
1	Replacement	1	0.580	0	0.000	0	0.000	0	0.000
2	Productivity	0	0.000	0	0.000	0	0.000	0	0.000
3	New Mission	1	0.592	0	0.000	0	0.000	0	0.000
4	Environmental Compliance	0	0.000	2	3.248	0	0.000	0	0.000
	Subtotal	2	1.172	2	3.248	0	0.000	0	0.000
	Equipment >100K<500K								
5	Replacement	6	1.106	5	1.242	3	0.330	5	0.774
6	Productivity	0	0.000	0	0.000	4	0.475	2	0.500
7	New Mission	2	0.150	2	0.400	2	0.677	1	0.110
8	Environmental Compliance	0	0.000	0	0.000	0	0.000	0	0.000
	Subtotal	8	1.256	7	1.642	9	1.482	8	1.384
	Total Equipment	10	2.428	9	4.890	9	1.482	8	1.384
	ADPE & Telecom >500K								
9	Computer Hardware (Production)	1	2.200	1	1.120	0	0.000	0	0.000
11	Telecommunications	0	0.000	0	0.000	0	0.000	0	0.000
12	Other Communications	0	0.000	0	0.000	0	0.000	0	0.000
	Subtotal	1	2.200	1	1.120	0	0.000	0	0.000
	ADPE & Telecom >100K<500K								
13	Computer Hardware (Production)	1	0.177	0	0.000	0	0.000	0	0.000
14	Computer Software (Operating Sys)	0	0.000	0	0.000	0	0.000	0	0.000
15	Telecommunications	0	0.000	0	0.000	0	0.000	0	0.000
	Subtotal	1	0.177	0	0.000	0	0.000	0	0.000
	Total ADPE & Telcom	2	2.377	1	1.120	0	0.000	0	0.000
17	Minor Construction >500K	0	0.000	0	0.000	0	0.000	0	0.000
18	Minor construction >100K<500K	7	1.153	7	1.610	10	2.103	10	2.103
19	Software >500K	0	0.000	0	1.585	0	0.000	0	0.000
20	Software >100K <500K	0	0.000	0	0.000	0	0.000	0	0.000
	TOTAL	19	5.958	17	9.205	19	3.585	18	3.487

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance

MARINE CORPS CAPITAL INVESTMENT JUSTIFICATION ($ in Millions)										A. FY98 President's Budget Submission		
B. Navy Working Capital Fund Marine Corps Depot Maintenance				C. Line No. 1,2,3,4					D. Equipment > $500K			
	FY1996 Estimate			FY1997 Estimate			FY1998 Estimate			FY1999 Estimate		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FY96-Air Compressor,Milling Machine	2		1.172									
FY97-Terr Aqua, Plastic Media				2		3.248						

Narrative Justification:
MARCORLOGBASES strategic plan calls for improved industrial and performance processes to achieve maximum reduction of hazardous materials and exploit all opportunities for pollution prevention. The Terr-Aqua system must be procured in FY 97 to meet this goal. This system requires from 12 to 18 months to install and must be operational in FY 99 to comply with maximum available control technology required by Air Control Act Amendments.

The blast room will provide a plastic media blasting facility which is currently not available. Plastic Media Blast (PMB) technology will provide for rapid and cost effective removal of coating from almost any substrate without the use of toxic chemical strippers, or damage to the substrate. This technique would reduce the need for laborious hand sanding, machine sanding, and scraping. The process does not create volatile organic compounds (VOC) and generates only a small amount of dry residue. The blast room is designed to be constructed inside a building, much like the paint booths which are now in place.

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance

MARINE CORPS CAPITAL INVESTMENT JUSTIFICATION ($ in Millions)										A. FY98 President's Budget Submission		
B. Navy Working Capital Fund Marine Corps Depot Maintenance				C. Line No. 5, 6, 7					D. Equipment Purchases >100K <500K			
	FY1996 Estimate			FY1997 Estimate			FY1998 Estimate			FY1999 Estimate		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FY96--Anodizer Installation, Ther Imaging Test Station, 230 Ton Brake, VMC-6030HT, Off-Axis Proj, CNC Punch Press, Terr Aqua, PMB Booth; FY-97-Rotoblast Machine, Lathe, Flow Tester, Fall Prev Equip, Electro Optics, Auto Test Sys, 15CW Crankshaft; FY98--Towed Chassis Dynamometer, CNC Punch Press, HP7000 Signal, Baseband Signal Analyzer, Auto Power Sensor, 8FT Shear,AN/VVS, Vacuum System, Auto Sensor; FY99-Vapor Degreasor, Lathe, Radiometer, Flowtester Rotoblast, Calibration Sys, Analyzer, VMC-6030HT	8		1.256	7		1.642	9		1.482	8		1.384

Narrative Justification:

FY98/99 equipment purchases play a vital role in the MC3's ability to harness technology and procure labor saving devices which more efficiently and effectively utilize personnel resources and will enhance capabilities to sustain our mission, meet workload requirements. The CNC Punch Press will improve sheetmetal capacity and allow for metal fabrication. Some of the items which can be fabricated utilizing the punch press include floor boards, triangle washers, mud flap plates, floor panels, brake shoe plates, oil filter brackets for AAVs vent covers, etc. The Towed Chassis Dynamometers to test and evaluate wheeled vehicles (i.e., M-998s, 1038s, 1035s, 1043s). The Calibration System and CNC Shear are being procured to replace outdated equipment, enhance capabilities to sustain our mission, and reduce machine process time in order to provide our customer reliable services. Purchases such as the Rotoblast Machine and Lathes are necessary to meet safety and environmental requirements.

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance

MARINE CORPS CAPITAL INVESTMENT JUSTIFICATION ($ in Millions)										A. FY98 President's Budget Submission		
B. Navy Working Capital Fund Marine Corps Depot Maintenance				C. Lines 9, 10, 11					D. ADPE & Telecom>500K			
Element of Cost	FY1996 Estimate			FY1997 Estimate			FY1998 Estimate			FY1999 Estimate		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
JLSC Systems Hardware	1		0.177	1		1.120						

NARRATIVE JUSTIFICATION:

These funds are to support the fielding of the DMS suite of migration applications being developed by the Joint Logistics Systems Center (JLSC) to Marine Corps Maintenance Depots. During the recent budget review, the responsibility for acquisition of hardware was transferred from JLSC to the military services.

The Depot Maintenance Systems (DMS) program is using an evolutionary program strategy to deliver the enterprise functionality to support improved business process required for effective Depot Maintenance operations across the Department of Defense. This Functionality will be provided through the development of a suite of applications with critical interfaces to legacy and other major systems. These applications address major end item management, commodities repair, and specialized support (tool management, hazardous material management, enterprise information management, and interservice workload tracking). The objective is to provide to the user a suite of service specific migration applications with basic interfaces to the legacy environment. DMS will provide the services a revolutionary step forward in functional capability and automation, including a systems infrastructure upon which to make significant strides in business process improvement. Benefits will be realized in two primary areas: business performance and information systems cost. Business performance will be enhanced through the process improvements delivered by DMS applications to support the Depot Maintenance improved functional baseline (IFB). These improvements include:

- Reducing cycle times to make more assets available to support the war fighter
- Providing accurate delivery schedules to support missions planning
- Improving readiness, sustainment and interoperability of the war fighter
- Reducing labor through better resource and work planning
- Reducing overhead through elimination of non value added activity
- Improving schedule performance through more complete asset visibility

Once implementation is complete and legacy applications are reduced, ADP costs will come down markedly. Without this investment, needed improvements to the depot/shipyard business process and infrastructure will not be achieved. implementing enhanced repair and overhaul capabilities is a critical contribution toward improving mission readiness in a downsizing environment. As the DOD weapon systems continue to age, reduction to the workforce continues, and the number of depots/shipyards are reduced, efficient and effective organic capability is of increasingly growing importance to DOD in maintaining weapons system's combat readiness. In order to meet the demand, the depot/shipyard community needs to dramatically strengthen its business processes and the associated information infrastructure.

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance

MARINE CORPS CAPITAL INVESTMENT JUSTIFICATION ($ in Millions)										A. FY98 President's Budget Submission		
B. Navy Working Capital Fund Marine Corps Depot Maintenance				C. Line No. 18						D. Minor Construction>100K<500K		
	FY1996 Estimate			FY1997 Estimate			FY1998 Estimate			FY1999 Estimate		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FY96--Construct Storage Bldg, Close Wing 732/733, Renovate Undercoat Rack, Constr Paxman Facility, Provide Power TPS-59/SIOH, Replace Air Compressors, Construct Optic Shop; FY97-Renovate Chain Conveyor, New Paint Booths, AE Costs, Construct Maint Fac, Construct Admin Fac, Relocate LAV Stand, PMB Bldg; FY98-Laser/Punch Fac, QLB Fac, Concrete Pad, Construct Radiac, Fire Bottle Station, Fiber Glass Fac, VOC Facility, New POL Bldg, Paint Conveyor, Storage Bldg 740; FY99-Laser/Punch Fac, QLB Facility, Pad, Radiac, Fire Bottle Station, Fiber Glass, VOC Fac, POL Bldg, Paint Conveyor, Bldg 740	7		1.153	7		1.610	10		2.103	10		2.103

Narrative Justification:
The following projects are vital to our continuing effort to provide a more efficient and safe workplace:
- --Construct Dining Facility to replace substandard dining accommodations
- --Construct addition to Radiac Area to accommodate increased workload
- --Construct Admin Facility to replace like facilities that have been converted to productive shop areas
- --Construct additional concrete Hard Stands to prevent leaks and drifts from stored vehicle
- --Install Paint Chain Conveyor
- --Construct storage buildings at radar shops for workload and testing of radar systems required to protect personnel and government property

000133

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance

MARINE CORPS CAPITAL INVESTMENT JUSTIFICATION ($ in Millions)										A. FY98 President's Budget Submission		
B. Navy Working Capital Fund Marine Corps Depot Maintenance				C. Line 19						D. Software>500K		
Element of Cost	FY1996 Estimate			FY1997 Estimate			FY1998 Estimate			FY1999 Estimate		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Naval Industrial Financial Management System				1		1.585						

NARRATIVE JUSTIFICATION:
In support of software development associated with NIFMS implementation at Marine Corps' Industrial Activities. This additional cost is in keeping with the average costs experienced by 11 Naval activities during their systems implementation.

0003634

NAVY WORKING CAPITAL FUND
Marine Corps Depot Maintenance
CAPITAL BUDGET EXECUTION
(Dollars in Millions)
FY 1997

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
Equipment (non-ADPE/Tel)				
TERR-AQUA/PLASTIC MEDIA BLASTER	2.500	0.000	2.500	
EQUIPMENT < $.5 MILLION	2.390	0.000	2.390	
Subtotal Equipment	4.890	0.000	4.890	
ADPE and Telecom Equip				
JLSC HARDWARE ITEMS	1.120	0.000	1.120	
Subtotal ADPE/Tel Equip	1.120	0.000	1.120	
Software				
NAVAL INDUSTRIAL FIN. MNGT SYSTEM	0.000	1.585	1.585	Additional funds provided based on average cost of implementation at other Navy installations
Minor Construction				
PROJECTS < $.5 MILLION	1.610	0.000	1.610	
RM&S Mods				
RM&S	1.863	-1.863	0.000	Realigned to other appropriations
TOTAL CAPITAL INVESTMENT	9.483	-0.278	9.205	

NAVY WORKING CAPITAL FUND
NAVAL ORDNANCE CENTER
NAVAL WEAPONS STATIONS

Activity Group Function:

The Naval Ordnance Center (NAVORDCEN) and the Naval Weapons Stations (NWS) provide all services for explosive outloading of combat logistic force ships, amphibious ships, combatants, submarines and commercial vessels. The stations also provide retail ammunition management services including receipt, segregation, storage, issue and maintenance of ammunition. Other functions include intermediate and depot level maintenance assignments for air, surface and subsurface weapons, prototype and pilot production services, quality evaluation services, acquisition engineering-agent functions, support of non-tactical fleet data systems, and ordnance packaging, handling, storage and transportation. All five stations are host activities with significant military/tenant support responsibilities. Four of the stations provide complete homeporting services for naval combat logistic force ships. The activity group also includes the Naval Warfare Assessment Division which is responsible for the assessment of weapons performance by all Fleet units. This responsibility involves gauging the war fighting capacity of ships and aircraft, from unit to battlegroup level, by assessing the suitability of design, the performance of equipment and weapons, and the adequacy of training. The Inventory Management and Systems Division is also included in the activity group and is responsible for performing inventory management and program support for all Navy tactical expendible ordnance.

Activity Group Composition:

Activities	Location
NAVORDCEN Headquarters	Indian Head, Maryland
NAVORDCEN Atlantic Division *	Yorktown, Virginia
Naval Weapons Station	Charleston, South Carolina
Naval Weapons Station	Earle, Colts Neck, New Jersey
Naval Weapons Station	Yorktown, Virginia
NAVORDCEN Pacific Division *	Seal Beach, California
Naval Weapons Station	Concord, California
Naval Weapons Station	Seal Beach, California
NAVORDCEN PACDIV Detachment	Fallbrook, California
NAVORDCEN PACDIV Detachment	Port Hadlock, Washington
Naval Warfare Assessment Division	Corona, California
Inventory Management and Systems Division	Mechanicsburg, Pennsylvania

* Disestablished 1 Jul 97

Budget Assumptions:
The FY 1998/99 NAVORDCEN Navy Working Capital Fund (NWCF) budget for the Naval Weapons Stations (NWS) was developed under the following assumptions:

A. Implementation of NAVORDCEN restructuring initiatives.

B. 1 Jul 97 approval for personnel reductions.

C. $51.2 million cash surcharge in FY 1997.

D. FY 1998 Accumulated Operating Result (AOR) recoupment of $224 million applied to Receipt, Segregation, Storage and Issue (RSS&I) program to achieve a zero AOR.

Budget Highlights:

Summary of Budget Data.

$/DLHs in Mil.	FY 1996 Actual	FY 1997	FY 1998	FY 1999
New Orders	496.2	513.8	660.2	439.1
Revenue	563.4	525.3	680.4	451.9
Cost	602.7	539.7	455.7	451.5
DLHs	5.088	4.704	4.509	4.509
Civilian E/S	4,310	3,546	3,546	3,546
Civilian FTE WYs	4,567	4,122	3,546	3,546
Military E/S	728	715	672	672

Trends for new reimbursable orders, revenue, cost, civilian and military personnel are consistent with the assumptions and projections for direct workload, inflation and stabilized rates.

General. The NAVORDCEN is undergoing major restructuring as a result of Defense force structure reductions, consolidation and downsizing initiatives, and efforts to effectively reorganize and realign to best provide ordnance logistics and technical services to the U.S. operating forces in support of the National Military Strategy. Central to the restructuring efforts are that creation of an organization with long-term financial as well as operational viability. These efforts will result in a projected 18 percent reduction in civilian end strength, 22 percent reduction in civilian full time equivalent workyears, 11 percent reduction in direct labor hours, 23 percent reduction in military end strength and 25 percent reduction in cost from

FY 1996 to FY 1999. Highlights of the major variables impacting our current estimates are explained in the following sections.

Restructuring. The NAVORDCEN will make some fundamental changes in the way it is organized and in how it will do business. We will reengineer the organization to focus on our core business areas of ordnance management and technical assessment. Within ordnance management, we will enhance our role in explosives safety, improve ordnance inventory management and improve our processes for ordnance distribution. Within technical assessment, we will evaluate and consolidate the management and execution of our engineering and information resources management processes. In addition, to support the Navy's aggressive emphasis on reducing infrastructure costs, we will take the initiative to determine what functions we can and should perform, what can be outsourced to the private sector, and what work must be shed. The following NAVORDCEN restructuring actions are included in the budget submission:

a. **Reorganize NAVORDCEN Headquarters and the Inventory Management and Systems Division (IMSD).** This reorganization will result in the reduction of headquarters positions as ordnance inventory and maintenance management functions are further consolidated and realigned from NAVORDCEN Headquarters to IMSD. This reorganization will eliminate the organizational layering of these functions as well as create a multi-skilled workforce and facilitate process improvements at IMSD.

b. **Consolidate Engineering and Information Resources Management (IRM) Functions under the Naval Warfare Assessment Division (NWAD).** This effort will consolidate the management of NAVORDCEN support engineering and information resource systems development under the leadership of NWAD. This consolidation will facilitate achievement and integration of efficiencies, process improvements and best business practices.

c. **Establish One Lead Weapons Station on Each Coast, Disestablish NAVORDCEN Atlantic and Pacific Division Headquarters, and Significantly Reduce Operations at Non-Lead Weapons Stations.** This effort will establish the most economical ordnance delivery schedule for each coast, further merge and consolidate essential support and maintenance functions into a lead facility on each coast, and significantly reduce the level of operations at non-lead weapons station facilities. One weapons station on each coast will be placed in a reduced operating status, providing necessary security and maintenance to prevent significant property or capability deterioration. The reduced operating status of these weapons stations is considered unutilized plant capacity and the cost will be financed with a direct O&M,N mobilization appropriation effective FY 1998.

d. Single Site Air-Launched and Surface Launched Missile Maintenance. This effort will eliminate duplicative maintenance functions by consolidation to a single site.

Indirect/Overhead Costs. The NAVORDCEN's ability to control and reduce total indirect or overhead costs is critical to achievement of its restructuring, consolidation and downsizing goals. This budget reflects the NAVORDCEN's commitment to these goals. The following table reflects projected estimates and trends for indirect or overhead costs, indirect labor hours (INDLHs) and direct labor hours (DLHs):

Current Estimate	FY 1996 Actual	FY 1997	FY 1998	FY 1999
Indirect Costs ($Mil)	283.9	275.1	206.7	196.7
-Indirect Cost	283.9	235.0	206.7	196.7
-FY 1997 Excess Labor	0.0	40.1*	0.0	0.0
INDLHs (Mil)	4.271	4.390	3.307	3.284
DLHs (Mil)	5.088	4.704	4.509	4.509
% Change Costs	-	-3.1%	-24.9%	-4.8%
% Change INDLHs	-	+2.8%	-24.7%	-0.7%
% Change DLHs	-	-7.5%	-4.1%	0.0%

*FY 1997 indirect costs include $29.3 million associated with 584 excess civilian FTE workyears plus $10.8 million in additional SIP/VERA/RIF costs not included in the FY 1997 President's budget.

As the above table illustrates, NAVORDCEN indirect costs are projected to decrease by 31 percent from FY 1996 to FY 1999. Direct labor hours (direct workload) are expected to decrease by 11 percent over this same period. After normalizing for 478 thousand direct labor hours associated with the transfer of 273 workyears from indirect to direct effective FY 1997, direct labor hours decrease by 21 percent from FY 1996 to FY 1999. Civilian personnel reductions over this period will be accomplished through attrition, voluntary separation incentives (separation incentive pay/early retirement) and involuntary separations (reductions in force).

Civilian Manpower. The budget reflects the following NAVORDCEN civilian manpower profile:

	FY 1996 Actual	FY 1997	FY 1998	FY 1999
End Strength	4,310	3,546	3,546	3,546
FTP	3,968	3,021	2,952	2,884
Temps/Other	342	525	594	662

Workyears	4,856	4,357	3,762	3,758
ST Direct	2,672	2,346	2,346	2,346
ST Indirect	1,895	1,776	1,200	1,200
OT Equivalent	289	235	216	212
DLHs (Mil.)	5.088	4.704	4.509	4.509

FY 1996 to FY 1999 reductions in civilian end strength and workyears are consistent with direct workload trends. From FY 1996 to FY 19997, civilian end strength will decrease by 764 or 18 percent. Given current estimate direct workload projections for FY 1997, the budget assumes 1,206 excess civilian personnel will be carried on overhead until implementation of a 1 Jul 1997 involuntary separation. This equates to 584 excess civilian indirect FTE workyears or $29.3 million. The NAVORDCEN will manage the downward trend from FY 1996 to FY 1997 through attrition and implementation of voluntary and involuntary separations.

Significant reductions in indirect will result from restructuring, consolidation and flattening of the NAVORDCEN infrastructure via reduction and elimination of unneccessary and redundant functions.

Temporary fluctuations in direct workload will be absorbed and executed through the use of a flexibile workforce (temporary, term and intermittant employees) and overtime. Building a flexible workforce for the future (short term temporaries, long term non-permanent personnel, multi-skilled wage grade) should alleviate the need for future RIFs.

Military Manpower.

A. Military Labor. The following military labor estimates have been incorporated in the budget:

	FY 1996 Actual	FY 1997	FY 1998	FY 1999
Active ($ in Mil)	23.1	19.0	22.6	23.0
End Strength	728	715	672	672
Workyears	519	708	672	672
Reserves ($ in Mil)	3.2	4.4	0.0	0.0
Workyears	49	133	0	0

FY 1996 and FY 1997 military estimates for cost, end strength and workyears reflect the President's budget. FY 1998 and FY 1999 reflect our best estimates.

B. Naval Reserve Contributory Support. Effective FY 1998, reservists performing annual duty for training at Naval Weapons Stations are considered to be in a training status and their costs will be fully funded in the Reserve Personnel, Navy appropriation.

FY 1996-99 NAVORDCEN/NWS Composite Stabilized Rates. The following reflects the trends in customer composite stabilized unit rates (Composite unit rates include all direct non-labor costs in addition to direct labor, production and G&A expenses):

	FY 1997	FY 1998	FY 1999
Navy RSS&I Rates $/DLH	103.45	450.15*	122.51
Percent Rate Change		335.1%	-72.8%
All other customer rates $/DLH	88.75	90.45	93.18
Percent Rate Chanage		1.9%	3.0%

* FY 1998 rate reflects AOR recoupment of $224.3 million.

Unit Cost Goals/Rates. The budget reflects the following unit cost goals based on current cost estimates:

$/DLHs in Mil.	FY 1996	FY 1997	FY 1998	FY 1999
Total Costs	602.7	539.7	455.7	451.5
DLHs	5.088	4.704	4.509	4.509
Unit Cost	$118.46	$114.73	$101.06	$100.13
% Chg. Unit Cost	-	-3.1%	-11.9%	- .9%
% Chg. DLHs	-	-7.5%	-4.1%	0.0%

The NAVORDCEN's ability to reduce costs through restructuring, consolidation and downsizing of its infrastructure and process improvements is critical in keeping its year-to-year changes in unit cost rates below inflation and fluctuations in direct workload.

Productive Ratios. This budget reflects the following straight time workyear productive ratios:

	FY 1996	FY 1997	FY 1998	FY 1999
Productive Ratio	59%	57%	66%	66%

The NAVORDCEN's ability to restructure, consolidate and eliminate unnecessary and redundant overhead functions, and also effectively project and execute planned direct workload from FY 1996-99 is critical to achievement of the budget goals.

Net Operating Results (NOR)/Accumulated Operating Results (AOR). The following table reflects the NOR (revenue less expense) and AOR levels included in the budget:

$ in Millions	FY 1996 Actual	FY 1997	FY 1998	FY 1999
Beginning AOR	-217.1	-158.2	-224.3	0.0
- NOR	-36.7	-66.1	224.3	0.0
- Adjustments	95.6	-	-	-
Ending AOR	-158.2	-224.3	0.0	0.0

FY 1996 ending AOR reflects a posting of the approved FY 1994 passthrough of $78.6 million, the $24.3 million redistribution from Navy Supply approved in PBD 426 of Feb 96, and a $-7.3M adjustment for a prior year correction to revenue recognition. NOR is exclusive of FY 1997 cash surcharges of $66.1 million.

Carry-over

The Naval Ordnance Center has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($millions)	38.0	44.0	42.8	35.0
Months of Carryover	.8	1.0	.8	.9

Capital Purchases Program (CPP). The CPP allows for improvement in readiness, sustainability and mobilization for mission support through replacement of existing overaged facilities and equipment and investment in new productivity enhancing projects. In addition, these capital investments contribute to resolving environmental and safety compliance related requirements. The following displays the CPP requirements/authority reflected in the budget and consistent with NAVORDCEN restructuring goals:

$ in Millions	FY 1996 Actual	FY 1997	FY 1998	FY 1999
Non ADP Equipment	2.8	3.1	1.6	4.5
ADP/Telcom	4.3	3.4	1.8	0.8
Minor Construction	1.7	3.4	2.6	1.0
Software Development	2.2	1.4	0.6	0.0
Total CPP	11.0	11.3	6.6	6.3

FY 1996 to FY 1999 CPP requirements reflect the NAVORDCEN's commitment to reduce its infrastructure costs and associated investments. Capital investment decreases by 43 percent from FY 1996 to FY 1999.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NWS / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	551.3	461.4	668.0	440.1
Surcharges	.0	51.2	.0	.0
Depreciation excluding Major Constructio	12.1	12.7	12.4	11.7
Other Income				
Total Income	563.4	525.3	680.4	451.9
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	26.3	23.4	22.6	23.0
Civilian Personnel	253.4	263.3	217.9	221.7
Travel and Transportation of Personnel	8.7	12.9	12.2	11.7
Material & Supplies (Internal Operations	54.9	36.7	29.8	33.2
Equipment	5.1	4.0	3.3	3.2
Other Purchases from NWCF	39.0	17.6	15.0	14.6
Transportation of Things	.1	.0	.1	.0
Depreciation - Capital	12.1	12.7	12.4	11.7
Printing and Reproduction	1.6	1.7	1.8	1.6
Advisory and Assistance Services	.0	.0	.0	.0
Rent, Communication & Utilities	20.8	18.1	14.1	13.6
Other Purchased Sevices	180.7	149.1	126.6	117.2
Total Expenses	602.7	539.7	455.7	451.5
Work in Process Adjustment	-2.5	.5	.4	.3
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	600.1	540.2	456.1	451.9
Operating Result	-36.7	-14.9	224.3	.0
Less Surcharges	.0	-51.2	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-36.7	-66.1	224.3	.0
Other Changes Affecting AOR	95.6	.0	.0	.0
Accumulated Operating Result	-158.2	-224.3	.0	.0

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INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NWS / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	496.1	513.8	660.2	439.1
a. Orders from DoD Components	423.8	443.8	585.6	367.7
Department of the Navy	388.6	408.7	560.9	343.5
O & M, Navy	271.7	315.0	462.5	248.6
O & M, Marine Corps	6.0	5.6	5.2	4.9
O & M, Navy Reserve	1.0	.4	.2	.2
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	3.6	3.7	3.3	3.2
Weapons Procurement, Navy	32.2	20.6	24.8	22.9
Ammunition Procurement, Navy/MC	.2	.7	.6	.6
Shipbuilding & Conversion, Navy	18.4	16.2	17.8	15.3
Other Procurement, Navy	19.0	10.1	9.0	8.6
Procurement, Marine Corps	.8	9.4	10.6	10.1
Family Housing, Navy/MC	20.1	22.2	20.9	23.4
Research, Dev., Test, & Eval., Navy	12.1	3.9	5.2	4.7
Military Construction, Navy	.0	.0	.0	.0
Other Navy Appropriations	3.6	.8	.9	.8
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	18.3	19.7	20.2	19.5
Army Operation & Maintenence	11.0	.0	.0	.0
Army Res, Dev, Test, Eval	.0	.0	.0	.0
Army Procurement	.3	.0	.0	.0
Army Other	6.9	19.7	20.2	19.5
Department of the Air Force	12.2	11.5	1.6	1.6
Air Force Operation & Maintenence	8.4	.0	.0	.0
Air Force Res, Dev, Test, Eval	1.0	.0	.0	.0
Air Force Procurement	.0	.0	.0	.0
Air Force Other	2.8	11.5	1.6	1.6
DOD Appropriation Accounts	4.8	3.9	3.0	3.2
Base Closure & Realignment	.0	.0	.0	.0
Operation & Maintence Accounts	.0	.0	.0	.0
Res, Dev, Test & Eval Accounts	.0	.7	.6	.6
Procurement Accounts	1.6	.0	.0	.0
DOD Other	3.1	3.3	2.4	2.6
b. Orders from NWCF Business Area	52.7	51.2	57.8	54.2
c. Total DoD	476.5	495.0	643.4	421.9
d. Other Orders	19.6	18.7	16.8	17.2
Other Federal Agencies	4.9	4.4	3.9	4.1
Foreign Military Sales	12.2	13.1	11.8	12.0
Non Federal Agencies	2.6	1.2	1.2	1.1

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NWS / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	204.0	141.1	125.3	105.1
3. Total Gross Orders	700.2	654.9	785.5	544.2
4. Funded Carry-Over **	141.1	125.3	105.1	92.3
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	559.1	529.6	680.4	451.9

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

Adjusted Carry-over is:	38.0	44.0	42.8	35.0

00345

Exhibit Fund-11

FY 1998/1999 PRESIDENT'S BUDGET
NAVY WORKING CAPITAL FUND (NWCF)
NAVAL ORDNANCE CENTER

SUMMARY OF CHANGES IN OPERATIONS
Dollars in Millions

		COSTS
1.	**FY 1996 Actual**	602.7
2.	**FY 1997 Presidents Budget**	575.7
3.	Estimated Impact in FY 1997 of Actual FY 1996 Experience	
4.	Pricing Adjustments	
5.	Productivity Initiatives	
6.	**Program Changes:**	
	a. Workload:	
	a1. Direct Full-Time Equivalent (FTE)/Workyear changes:	
	Direct civilian labor cost changes associated with -1,045 direct FTE workyear change:	
	-152 FTE BRAC 93 Tenant Support at NWS Charleston	(6.4)
	-135 FTE Receipt, Segregation, Storage & Issue (RSS&I) at all NWSs	(5.7)
	-122 FTE Unfunded Performance Assessment, Quality Assurance, Measurement Science, and Scientific Engineering programs at NWAD	(5.7)
	-109 FTE Restructure initiatives for the NAVORDCEN	(4.0)
	-106 FTE Tenant Spt at NWSs Charleston (-72); Earle (-18); Yorktown (-16)	(4.0)
	-106 FTE Direct workload reductions at all NWSs	(4.0)
	- 98 FTE Port Terminal Operations (includes Army/Air Force ship prepositioning and Military Traffic Mgmt Command (MTMC) at NWS Concord	(3.9)
	- 64 FTE BRAC 95 Tenant Support at NWS Seal Beach	(2.7)
	- 42 FTE Family Housing transfer from NWSs Charleston, Earle, and Yorktown to NAV	(2.0)
	- 36 FTE 2.75 " Rocket Motor program at NWSs Seal Beach and Concord	(1.5)
	- 19 FTE BRAC 93 Tenant Support at NWS Concord	(0.8)
	- 19 FTE Information Technology program at NWS Concord	(0.8)
	- 17 FTE Standard Missile program at NWS Yorktown	(0.7)
	- 20 FTE Miscellaneous direct workload	(0.9)
	a2. Other Direct Cost Changes	
	Direct Material cost changes associated with decreased direct workload	(4.6)
	Direct Other, Travel, and Transfer cost changes are in support of : NWAD Engineering efforts and tenant support at NWS Charleston	4.9
	Direct Contract cost changes associated with decreased direct workload	(1.4)
	a3. Indirect/Overhead Full-Time Equivalent (FTE) /Workyear Changes	
	Indirect civilian labor cost changes associated with +16 indirect FTE workyear change:	
	- 151 G&A FTE Public Works transfer from NWS Yorktown to PWC Norfolk	(7.6)
	- 133 G&A FTE Supply transfer from all NWSs to FISC	(3.8)
	- 284 PE and G&A FTE associated with decreased direct workload	(14.2)
	+ 584 PE and G&A FTE Unfunded excess direct workload personnel	29.3
	Separation Incentive Awards/Reduction in Force expense	10.8
	G&A civilian overtime labor cost changes associated with -30 overtime workyears	(1.6)

FY 1998/1999 PRESIDENT'S BUDGET
NAVY WORKING CAPITAL FUND (NWCF)
NAVAL ORDNANCE CENTER

SUMMARY OF CHANGES IN OPERATIONS
Dollars in Millions

		COSTS
	a4. Other Indirect/Overhead Cost Changes	
	Military labor repricing iaw MILPERS adjustment	(0.4)
	Material cost changes associated with decreased workload	(8.3)
	Contract cost changes associated with decreased workload	(4.2)
	G&A Contract cost changes:	16.4
	Supply Support from FISC $ +3.8	
	PW Support from PWC Norfolk $ +7.6	
	ADP services $ +5.0	
	Travel/Depreciation/Other cost changes associated with reduced workload,	(8.2)
7.	**FY 1997 Current Estimate**	**539.7**
8.	Pricing Adjustments:	
	a. FY 1998 Payraise	
	1. Civilian Personnel	4.6
	2. Military Personnel	0.5
	b. Annualization of prior year payraise	2.4
	c. Travel/Transportation/Other	0.1
	d. Materials and Supplies	2.4
	e. Other Intrafund Purchases	0.5
	f. Other Purchases	3.4
9.	Productivity initiatives and Other Efficiencies (CPP savings in maintenance costs)	(1.0)
10	**Program Changes:**	
	a. Workload:	
	a1. Direct Full-Time Equivalent (FTE)/Workyear changes:	
	Direct civilian labor cost changes due to workload mix	0.8
	Direct civilian overtime labor cost changes associated with -6 overtime workyear change	(0.3)
	a2. Other Direct Cost Changes:	
	Direct Military labor cost changes due primarily to the removal of Reserve contributory support from DBOF financing	(4.6)
	Direct Material cost changes associated with workload and Restructure Initiatives for the NAVORDCEN	(6.5) (0.6)
	Direct Contract cost changes associated with the Restructure Initiatives for the NAVORD	(14.9)
	Direct Contract cost increase for mobilization	3.3
	Direct Travel cost changes associated with the Restructure Initiatives for the NAVORDCEN	(0.7)
	a3. Indirect/Overhead Full-Time Equivalent (FTE)/Workyear changes:	
	Indirect civilian labor cost changes associated with -576 indirect workyear change:	
	FTE Restructure Initiative at the NAVORDCEN and reduced workload	(29.4)
	Separation Incentive Awards/Reduction in Force labor cost change	(16.0)
	Indirect civilian overtime labor cost changes associated with -10 overtime workyears	(0.7)

FY 1998/1999 PRESIDENT'S BUDGET
NAVY WORKING CAPITAL FUND (NWCF)
NAVAL ORDNANCE CENTER

SUMMARY OF CHANGES IN OPERATIONS
Dollars in Millions

		COSTS
a4.	**Other Indirect/Overhead Cost Changes**	
	Military Labor cost changes associated with -41 less Indirect mililtary workyears and repricing iaw MILPERS pricing	3.0
	Material cost changes associated with reduced workload	(3.1)
	Intrafund Purchase Contract costs associated with reduced workload	(3.9)
	Other Purchase Contact costs associated with reduced workload	(22.8)
	Travel costs associated with reduced workload	(0.2)
	Reduced depreciation costs	(0.3)
11.	**FY 1998 Budget**	**455.7**
12.	**Pricing Adjustments:**	
a.	FY 1998 Payraise	
1.	Civilian Personnel	3.0
2.	Military Personnel	0.5
b.	Annualization of prior year payraise	1.7
c.	Travel/Transportation/Other	0.1
d.	Materials and Supplies	(0.1)
e.	Other Intrafund Purchases	0.0
f.	Other Purchases	3.0
13.	Productivity initiatives and Other Efficiencies	
14.	**Program Changes:**	
15.	**a. Workload:**	
a1.	**Direct Full-Time Equivalent (FTE)/Workyear changes:**	
	Direct civilian overtime labor cost changes associated with -3 overtime workyear change	(0.2)
a2.	**Other Direct Cost Changes:**	
	Direct Material cost changes associated with Ships Outfitting at NWS Seal Beach	1.9
	Direct Travel cost changes associated with workload	(0.5)
a3.	**Indirect/Overhead Full-Time Equivalent (FTE)/Workyear changes:**	
	Separation Incentive Awards/Reduction in Force labor cost change	(0.3)
	Indirect civilian overtime labor cost changes associated with -1 overtime workyear change	(0.1)
a4.	**Other Indirect/Overhead Cost Changes**	
	Intrafund Purchase Contract costs associated with reduced workload	(0.2)
	Other Purchase Contact costs associated with reduced workload and the Restructure Initiative for the NAVORDCEN	(12.3)
	Travel costs associated with reduced workload	(0.1)
	Reduced depreciation costs	(0.6)
16	**FY 1999 Budget**	**451.5**

Business Area: Capital Investment Summary

Component: DEPARTMENT OF THE NAVY (NAVAL ORDNANCE CENTER)

Activity Group: ORDNANCE

FY98/99 PRESIDENT'S BUDGET SUBMISSION

($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	Non ADP								
1	CRANE TRUCK MOUNTED 200 TON CAPACITY E/C 8249-00 (Replacement)							1	2.000
2	EXTERNAL DATA COMMS AND DISPLAY/DEBRIEF (Replacement)			1	.325	1	.400		
3	ASYNCHRONOUS TRANSFER MODE HIGH SPEED DATA COMM (New Mission)							1	.500
4	Miscellaneous (Non ADP < $500K; > $100K)		2.773		2.803		1.238		1.995
	Non ADP Total:		**2.773**		**3.128**		**1.638**		**4.495**
	ADP								
5	DMRD 924 MIGRATION TO OSE-C	1	2.615						
6	JLSC HARDWARE (Hardware)			1	1.500				
7	OPEN SYSTEMS ENVIRONMENT					1	.780	1	.350
8	DATA COMMUNICATIONS			1	.448	1	.350		
9	FIBER OPTICS COMM SYS 96/97/98 C	1	.314	1	.359				
10	WAL ADP EQUIP							1	.500
11	MIDTIER PROCESSING					1	.500		
12	Miscellaneous (ADP < $500K; > $100K)		1.345		1.128		.200		
	ADP Total:		**4.274**		**3.435**		**1.830**		**.850**

Business Area: Capital Investment Summary
Component: DEPARTMENT OF THE NAVY (NAVAL ORDNANCE CENTER)
Activity Group: ORDNANCE
FY98/99 PRESIDENT'S BUDGET SUBMISSION
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	Software								
13	NAVORDCEN EXECUTIVE INFORMATION SYSTEM (EIS)	1	1.500	1	.900				
14	STOCKPILE ANALYSIS SOFTWARE	1	.719	1	.373				
15	ALFA/APMM					1	.600		
16	Miscellaneous (Software < $500K; > $100K)				.156				
	Software Total:		**2.219**		**1.429**		**.600**		
	Minor Construction								
17	CONSTRUCT HOLDING YARD F					1	.600		
18	LIGHTNING PROTECTION - B BARRICADES							1	.290
19	ENVIRONMENTAL CONTROLS - T&E LAB PHS&T					1	.290		
20	DEMOLISH/RECONSTRUCT PORTION OF BLDG 4A							1	.290
21	LIGHTNING PROTECTION - A BARRICADES					1	.285		
22	REPAIR ORDNANCE DEPT CARPENTRY SHOP			1	.280				

000450

Business Area: Capital Investment Summary

Component: DEPARTMENT OF THE NAVY (NAVAL ORDNANCE CENTER)

Activity Group: ORDNANCE

FY98/99 PRESIDENT'S BUDGET SUBMISSION

($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
23	PRIMARY GROUNDING - PIER 3			1	.280				
24	REMODEL BLDG 848 L			1	.275				
25	EOD FACILITY ADDITION BLDG C-7					1	.275		
26	EXPAND C-1 FOR SECURITY DEPARTMENT			1	.250				
27	EMER GEN/PORT SERVICES SEWERAGE LIFT STATION	1	.250						
28	ALTS TO BLDG 26 S					1	.250		
29	GENERATOR FOR BLDG C-50			1	.220				
30	INSTALL PAVED ROADS IN MAGAZINE AREAS			1	.200				
31	Construct Utility Building B-311	1	.200						
32	Miscellaneous (Minor Construction < $200K; > $100K)		1.282		1.818		.850		.420
	Minor Construction Total:		**1.732**		**3.323**		**2.550**		**1.000**
	Grand Total:		**10.998**		**11.315**		**6.618**		**6.345**

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 1/CRANE TRUCK MOUNTED 200 TON CAPACITY E/C 8249-00 (Replacement)			D. Activity Identification Weapon Station Earle, NJ					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP										1	2,000	2,000

Narrative Justification:

Description

Project Number: E990901 Category: Replacement
Crane truck mounted hydraulic 200 ton capacity.

Justification

To replace older equipment in this series that meets the criteria for replacement. This project will replace two 150 Ton lattice boom cranes, EINs 82-04781 built in 1985 and 82-04942 built in 1987. Cost to repair/overhaul the old units will exceed 50% of cost of new replacements. Cost to replace the old units will be approximately $993K each. Other savings will be realized in the following areas: 1) a hydraulic crane is less expensive to maintain than a lattice boom; 2) a hydraulic crane is easier to transport from the shop to the work site; 3) there will be one less crane to maintain, test & certify.

Impact

Cranes are utilized in direct support of ordnance department, in the loading of ships at our pier operations and also supports other activities involved at pier.

000452

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 2/EXTERNAL DATA COMMS AND DISPLAY/DEBRIEF (Replacement)				D. Activity Identification NWA Division Corona, CA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP				1	325	325	1	400	400			

Narrative Justification:

Description

This is a phased project to continuously develop NWAD's capability of providing digital combat systems data acquisition directly from the Fleet using telecommunications to link critical tactical, simulation and training nodes. Secure audio tele-conferencing, connectivity to strategic commands and ranges, increase of data rate exchange with high-end graphic equipment will continue to support assessment of Fleet exercises in a real and constructive threats in a virtual, synethic environment. These nodes will be critical for the receipt of instantaneous exercise data to provide rapid debrief and interactive assessment of that data via the secure audio connectivity.

Justification

Recently, the DoD community has expanded the use of modeling and simulation to achieve training objectives. Comprehensive advance technology training can be conducted pier-side with land based networks. At-sea training utilizes satellite connections and Wide Area Network technology. This project provides direct real-time acquisition and transmission of system performance data to and from the test sites with secure network technology.

Impact

Fleet training continues to rely more on modeling and simulation than live testing for support. Without this equipment, NWAD will not be able to service the needs of the Fleet for instrumented live or constructive firings using land-based or at-sea modeling and simulation networks. No interactive secure audio will be available to provide rapid feedback of results and debriefs to the Fleet and weapons systems community.

0053

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 3/ASYNCHRONOUS TRANSFER MODE HIGH SPEED DATA COMM				D. Activity Identification NWA Division Corona, CA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP										1	500	500

Narrative Justification:

Description

Procurement of standards based Asynchronous Transfer Mode (ATM) technology that will enable the NWAD data communications infrastructure to support user applications which integrate voice, data, and video ATM technology consists of both hardware and software. ATM technology offers guaranteed quality of service and the bandwidth needed for high-quality voice and video.

Justification

Required to continue to provide the command with the data communications infrastructure necessary to fulfill fleet mission requirements. As more of the end-user applications such as E-Mail with attached multi-media files, video teleconferencing, graphical analytical tools, and emerging modeling and simulation programs are incorporated into NWAD's day-to-day business practices, the data communications infrastructure must be modified and enhanced to cope with the added requirements on bandwidth, speed, reliability, and interoperability. ATM technology has the capacity for video to the individual desktop as well as the capacity to significantly increase aggregate backbone speeds. Additionally, NWAD supports military projects which often use ATM based technology to transfer mission exercise data near real-time via satellites to various exercise locations. NWAD's capability to continue the seamless transfer of this data all the way to the individual analyst's workstations attached to data communications infrastructure enables rapid feedback to the exercise participants.

Impact

If standards based ATM technology is applied to the NWAD data communications infrastructure, NWAD will not have the capability to support end-user applications which intergrate voice, data, and video. As such, the command will not be in a position to support military applications in the areas of modeling and simulation, desktop video teleconferencing, multi-media E-Mail, etc. This will severely impact NWAD's abilities to support the fleet as well as our ability to be leaders in the area of fleet analysis.

BA: CAPITAL PURCHASES JUSTIFICATION. (Dollars in Thousands)		A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION		
B. Component/Activity Group/Date DON/ORDNANCE	C. Line# and Description 4/Miscellaneous (Non ADP < $500K; > $100K)		D. Activity Identification NA	
	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	2,773	2,803	1,238	1,995

000155

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 6/JLSC HARDWARE (Hardware)			D. Activity Identification NOC Indian Head, MD(all sites)					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	1,500	1,500						

Narrative Justification:

Description

The Depot Maintenance standard automated information systems are managed by JLSC, the DoD designated Corporate Information Management (CIM) agent for depot level logistics systems. The depot standard systems include Depot Maintenance Management Information system - Repairables (DMMIS-R), Baseline Advanced Industrial Management - Project Management (BAIM-PM), Laboratory Information Management System (LIMS), Hazardous Substance Management System (HSMS-formerly Hazardous Material Management System (HMMS), Facilities and Equipment Management (FEM), Tool Inventory Management Application (TIMA), Interservice Material Accounting and Control Systems (IMACS), Executive Information System (EIS), and the full, integrated Depot Maintenance Standard System (DMSS),

Justification

Impact

000156

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 7/OPEN SYSTEMS ENVIRONMENT			D. Activity Identification NWA Division Corona, CA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	780	780	1	350	350

Narrative Justification:

Description

NWAD Command Office Automation System will be a phased upgrade to include Groupware (allowing easier on-line sharing of information within work groups doing data analysis), and standardized Office Software Suite on servers (everyone will have the same office software available to them on their servers). Compatibility with the Defense Message System (DMS) will be implemented as well as compatibility with NAVSEAX.500 Standard which is an international standard format which NAVSEA has adopted for sharing directory information. The Command remote network hookup capability will be expanded to 31 lines (allowing 31 people on travel to connect to the servers they normally use at NWAD) including 23 ISDN 64kb lines as well. Desktop Video will be implemented for the TD, CO, and Directorate Heads. A remote Help Desk capability will also be implemented which will allow people on travel or on flexi-place work schedule to call the Help Desk and connect to the user's PC to help resolve the problem.

Justification

Upgrades are needed which build on the infrastructure already in place to progress to the next generation of computing capability. These upgrades will facilitate the sharing of data and the implementing of some of the technologies (e.g. multimedia) required to provide more timely and informative reports to NWAD sponsors. It will also allow people on travel to communicate more effectively with information systems at NWAD and with officials at other locations to update information/reports on a timely basis.

Impact

1. Inability to accommodate increasing/emerging requirements.

Office Automation response time expected to degrade to unacceptable levels due to CPU, and memory saturation.

In-place equipment will reach the end of it's useful life cycle.

0537

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 8/DATA COMMUNICATIONS				D. Activity Identification NWA Division Corona, CA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	448	448	1	350	350			

Narrative Justification:

Description

Data communications upgrades and continuous expansion of NWAD Data Communication network to twenty (20) buildings throughout the NWAD Corona installation. Unshielded Twisted Pair (UTP) category five cables to each building in conjunction with twenty enterprise network hubs are required. The central hub will be centrally located in Building 509 and act as the switching hub for both unclassified and secure networks.

Justification

Upgrade and expand the NWAD Data Communications network. Required to standardize interior wiring infrastructure and networking equipment in 20 NWAD bldgs. As more of the data transmission requirements on the network require higher bandwidth, the need to upgrade the network to handle higher transmission data rates becomes imperative. It also supports the transfer of information received from Fleet and test sites within NWAD to support the real-time communication effort.

Impact

1. If infrastructure not upgraded, the cabling in 20 NWAD bldgs will become a bottleneck to data throughput.

Current cabling in these bldgs. non-standardized, resulting in additional troubleshooting effort.

Current network equipment in 20 bldgs unable to support applications that demand higher bandwidth such as client-server applications. This will create a network bottleneck resulting in longer wait times to run applications and lost productivity.

If the second phase isn't done, third phase can't proceed.

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 10/WAL ADP EQUIP					D. Activity Identification NWA Division Corona, CA			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP										1	500	500

Narrative Justification:

Description

This is the upgrade modernization of NWAD's Warfare Assessment Laboratory (WAL). The modernization requirements are additional real-time computer systems to provide multiple type and simultaneous missile firing analysis; a database computer for performance history/analysis; and additional graphics/ engineering workstations/network system for reconstruction/analysis.

Justification

In the last two decades, the Navy's focus on engineering development, training and operations has shifted from individual weapon/weapon system to the entire battle group. Enormous increases in complexity and capability of individual weapons and systems have also occurred. Integration of hundreds of weapons systems and people in the battle group for successful operation depends on timely assessment/feedback to Fleet Command, OPNAV, Systems Commands, and supporting engineering activities. This must include: reconstruction of battle group interaction, with a synthesized threat of realistic proportion; quantification of force and individual systems performances; and identification of force-limiting problems. This feedback will assist users to: assess Fleet readiness/capability; validate tactics; correct current, systems deficiencies; allocate resources for new/improved systems; and identify additional battlegroup training needs. This requires computer resources for: automatic decision support; interactive graphics display to interpret/manipulate data; distributed databases to accumulate performance results; & high-speed information transfer.

Impact

The CNO has recognized the need to improve training effectiveness in the coming decades, despite decreasing budgets in order for the Navy to perform its world-wide mission. Improvement in the depth and timeliness of exercise feedback is a key element in enhancing training proficiency/Fleet readiness. Without this equipment, NWAD will not be able to service the needs of the Fleet for training/readiness assessment and provide rapid feedback of results during Fleet exercises.

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 11/MIDTIER PROCESSING					D. Activity Identification NOC Yorktown, VA			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	500	500			

Narrative Justification:

Description

The Naval Ordnance Center's mission is to provide for the planning and management of world-wide inventory and in-service ordnance assets to support Fleet operational requirements. A more technological architecture is being developed to focus on providing total asset visibility and enhance inventory accuracy and integrity.

Justification

Data from various sources is required to facilitate the management process and develop the best business approach. The information needs to be provided to personnel and/or systems, both on and off site. The system requires a friendly user interface that effectively utilizes point and click techniques. Customers require ease of access and organization. Personnel must have access to integrated programs and applications residing on the mainframe computer, mini's and file servers to perform logistical "what if's" and ad hoc queries and reports and management related functions. The customers need to formulate and analyze various types of information utilizing several data types and formats. Benefits to be derived are increased visibility of explosive ordnance, optimal distribution of inventories, transportation cost avoidance and enhanced accuracy of data.

Impact

Without this process, managers will be required to perform time consuming manual data manipulation and analysis. To continue to develop projects on the mainframe would require large one-time investment in software development and continuous annual investment in maintenance of these programs. There are few off-the-shelf tools currently available and connectivity to other systems is not well supported. Timeliness and quality of response to Fleet Commanders on mission critical analysis would be negatively impacted.

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION		
B. Component/Activity Group/Date DON/ORDNANCE	C. Line# and Description 12/Miscellaneous (ADP < $500K; > $100K)		D. Activity Identification NA	
	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	1,345	1,128	200	0

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 15/ALFA/APMM					D. Activity Identification NOC Indian Head, MD(all sites)			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software							1	600	600			

Narrative Justification:

Description

The Activity Land and Facilities Assets (ALFA)/Activity Planning and Management Model (APMM) is a facilities management tool. It is used currently at three activities and has provided management with the information required to integrate relational and graphical data into the decision making process as well as adding modules such as explosive safety.

Justification

This project was implemented at three pilot sites, NWS Yorktown, NWS Seal Beach and PACDIV Fallbrook Det, and has shown cost avoidance. The tool enables the station planning personnel to operate effectively with a downsized work force.

Impact

If ALFA/APMM is not implemented, planning data will continue to age and the opportunity will be missed. Future implementation will cost significantly more due to the aging data. BRAC/MILCON type data calls will continue to be a manual effort.

000182

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION					
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 17/CONSTRUCT HOLDING YARD F			D. Activity Identification NOC Div Fallbrook Det. CA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	600	600			

Narrative Justification:

Description

This project constructs an asphalt holding pad for explosive laden vehicles. The purpose of this project is waiver elimination and it supports the NAVORDCEN Strategic Plan under Guiding Principles relating to safety.

Justification

Since the NAVORDCEN, Fallbrook Detachment does not have a holding yard, a waiver request (CNO Waiver No. NAVORDCEN Pacific Division, Fallbrook Detachment, 01-94) has been submitted that will allow parking of an explosive laden conveyance at the classification yard and/or transfer depot. A holding hard is the only alternative available to eliminate this waiver. The process requires trucks to proceed to the classification yard for inspection, classification, and disposition upon arrival at the Detachment. If a prolonged delay is encountered, or the carrier arrives on station after normal working hours, a safe and secure area is required for the carrier to park until it can be processed and unloaded. Since no explosive holding yard exists at the Detachment, explosive laden trucks are currently parked near magazines. Per NAVSEA ltr Ser 06G/023 of 29 Jan 93, if an ordnance laden conveyance cannot be off-loaded or moved off-base within one working day, it must be parked in a properly sited holding yard. If such does not exist at the site, a waiver is required to park the material in a location that does not meet explosive safety quantity distance (ESQD) requirements. An economic analysis was not performed since it is not required for environmental projects. Estimated operational date is 4/2002.

Impact

If this project is not funded, continuation of the existing waiver will be required.

000163

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION					
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 18/LIGHTNING PROTECTION - B BARRICADES			D. Activity Identification Weapon Station Earle, NJ					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction										1	290	290

Narrative Justification:

Description

Project Number: C8-96 Category: Safety

The project provides for a Class III Open Air Storage Lightning Protection System for ten (10) Barricade Railroad Sidings. The proposed work will include installation of two (2) lightning protection masts per barricade with a catenary and a secondary ground girdle.

Justification

There is no lighting protection system for the (B) Railroad Barricades. Each barricade is considered a Class III, open area, ordnance storage facility which requires a lightning protection system. The project requirement is based on an Explosives Safety effort to ensure that all NAVSEA installations have grounding test plans for each explosive storage facility. Completion of this project will allow WPNSTA Earle to comply with both the NAVSEA Grounding and Lightning Protection Handbook and NAVSEA OP-5, Volume 1, Chapters 5 & 6. The expected year that this project will be operational is 2000.

Impact

This project will assure continued explosives storage safety by implementation of a grounding test plan and compliance with governing NAVSEA guidelines.

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION					
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 19/ENVIRONMENTAL CONTROLS - T&E LAB PHS&T			D. Activity Identification Weapon Station Earle, NJ					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	290	290			

Narrative Justification:

Description

Project Number: C20-91 Category: Productivity

This project will provide environmental controls to approximately 1600 sf of the T&E Branch of the PHS&T Center. The project will include insulating the test area, lowering the sprinkler system and providing a one ton environmental control system.

Justification

The humidity of the summer months disturbs the calibration of the computerized testing equipment. This disturbance requires either retesting of previously completed efforts or suspension of work until a change of weather. Completion of the project will improve productivity of the department by allowing testing to be performed as required.

Impact

Completion of the project will improve productivity. Without this improvement testing is delayed or repeated, resulting in slippage of projects schedules and increased costs.

000165

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 20/DEMOLISH/RECONSTRUCT PORTION OF BLDG 4A				D. Activity Identification Weapon Station Earle, NJ				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction										1	290	290

Narrative Justification:

Description

Project Number: R2-92 Category: Environmental/Safety

The proposed project will demolish a 3,410 sf condemned structure, and replace it with a smaller new structure. The new structure will utilize existing potable water and sanitary lines which have been cored through the pier's concrete deck. The new structure will serve the same function as the old facility, which was a Ordnance Field Office, Change/Relief House and Telephone Bank for personnel on the ships.

Justification

Building 4A is the only structure located on Pier 3. It was constructed in 1944 and has deteriorated beyond repair. The structural defects include failing floor supports for the second deck, loose or missing exterior bricks, and a partially caved-in roof. As a result, Bldg. 4A has been closed. There is a need to keep an ordnance field office on pier 3 because of the remoteness of its location. An ordnance field office is located on Piers 2 and 4. However, due to the distance and the slow speed limit posted for the pier complex, it is not productive to have personnel drive from Pier 3 to a field office located on the other piers. The expected year that this project will be operational is 2000.

Impact

This project is part of the Station effort to carry out the Station mission with modern, efficient facilities and to improve the quality of life for sailors aboard the ships berthed at Pier 3.

000365

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 21/LIGHTNING PROTECTION - A BARRICADES					D. Activity Identification Weapon Station Earle, NJ			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	285	285			

Narrative Justification:

Description

Project Number: E980902 Category: Safety The project provides for a Class III Open Air Storage Lightning Protection System for ten (10) Barricade Railroad Sidings. The proposed work will include installation of two (2) lightning protection masts per barricade with a catenary and a secondary ground girdle.

Justification

There is no lighting protection system for the (A) Railroad Barricades. Each barricade is considered a Class III, open area, ordnance storage facility which requires a lightning protection system. The project requirement is based on an Explosives Safety effort to ensure that all NAVSEA installations have grounding test plans for each explosive storage facility. Completion of is project will allow WPNSTA Earle to comply with both the NAVSEA Grounding and Lightning Protection Handbook and NAVSEA OP-5, Volume 1, Chapters 5 & 6. The expected year that this project will be operational is 2000.

Impact

This project will assure continued explosives storage safety by implementation of a grounding test plan and compliance with governing NAVSEA guidelines.

000367

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 25/EOD FACILITY ADDITION BLDG C-7					D. Activity Identification Weapon Station Earle, NJ			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	275	275			

Narrative Justification:

Description

Project Number: C6-96 Category: Environmental/Safety

The project will provide an additional 1960 sf to the Explosive ordnance Disposal (EOD) Team building. The addition will be used for inside storage of the emergency boat and an administrative work area. The project will also replace the existing asbestos roof.

Justification

According to NAVFAC P-80, the basic facility requirement for a Navy EOD detachment is 5,100 sf. The current EOD building is 3,134 sf. Currently the EOD boat is stored outside. EOD must maintain their boat in working order for emergency situations. Outside storage in the winter months makes this task expensive and time consuming. In addition there are six EOD team members and only three work areas. The additional space would drastically increase productivity.

Impact

Completion of the project will allow the EOD team to react quickly to emergencies as well as provide them with the administrative area they need.

000168

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION								
B. Component/Activity Group/Date DON/ORDNANCE				C. Line# and Description 28/ALTS TO BLDG 26 S					D. Activity Identification NOC Seal Beach, CA			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	250	250			

Narrative Justification:

Description

Construct an armory and command post/communication area as well as install air conditioning throughout Bldg 26. Includes removal of asbestos and lead based paint. Purpose is pollution prevention. This is combined with a repair project for rehab of the entire 25,850 SF facility. This project supports the infrastructure reduction goal of the NAVORDCEN Strategic Plan, Key Results Area.

Justification

This project completes the station plan to consolidate all Weapon Station adminstrative personnel in the "campus" admin area close to the station command. Safety, environmental, and security personnel were located in various facilities around the station and this project is required to consolidate them in bldg. 26 and close bldg 6. The environmental section has to be relocated from the Public Works building in preparation for the move of the OICC/ROICC office from the closing Naval Shipyard Long Beach. Bldg. 26 requires this upgrade to make it suitable for this consolidation. This project is combined with a repair project which is required to repair the roof and replace the interior electrical system which is undersized and not to code. An economic analysis is not required for environmental projects. Estimated operational date is 4/1998. There is no required compliance date.

Impact

If this project is not provided, Safety, Environmental, and Security personnel will be moved into an inadequate building. There would not be proper storage of the Security Department's weapons and the function of monitoring IDS security systems in critical buildings and dispatching security vehicles would be intermingled in another department in a delapidated area remote from the rest of Security.

BA: CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 98/99 PRESIDENT'S BUDGET SUBMISSION		
B. Component/Activity Group/Date DON/ORDNANCE	C. Line# and Description 32/Miscellaneous (Minor Construction < $200K; > $100K)		D. Activity Identification NA	
	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	1,282	1,818	850	420

NAVAL ORDNANCE CENTER
FY 1998/1999 PRESIDENT'S BUDGET
FY 1997 CAPITAL INVESTMENT

Title/Description	FY 1997 Presidents	+/-	FY 1997 Revised *	Explanation of Changes
Equipment (Non-ADPE/TEL)				
External Data Comms & Display/Debrief	0.325	0	0.325	No change
Crane, Mobil 50 Ton		0.775	0.775	Correct Safety Deficiencies
Miscellaneous NON ADPE Equipment	2.803	-0.775	2.028	
SUBTOTAL (NON-ADPE EQUIP)	**3.128**	**0**	**3.128**	
ADPE and TELECOMM Equip				
B&L Open Sys Network 96/97	0.106	0	0.106	No change
High Speed OnLine Doc Retrv System	0.181	0	0.181	No change
OnLine Mass Stor & Central Processor	0.14	0	0.14	No change
SPARC File Server	0.14	0	0.14	No change
Data Communications	0.448	0	0.448	No change
Distro Info Sys-Open	0.062	0	0.062	No change
Fiber Optics Comm Sys	0.359	0	0.359	No change
Video Telecon Sys SB/PAC	0.289	0	0.289	No change
Upgrade Comm Network	0.21	0	0.21	No change
JLSC Hardware		1.5	1.5	Transfer from Supply
SUBTOTAL (ADPE/TELECOM EQUIP)	**1.935**	**1.5**	**3.435**	

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Undersecretary of Defense (Comptroller) for approval.

NAVAL ORDNANCE CENTER
FY 1998/1999 PRESIDENT'S BUDGET
FY 1997 CAPITAL INVESTMENT

Title/Description	FY 97 Presidents	+/-	FY 1997 Revised	Explanation
Software Development				
NAVORDCEN Exec Info Sys	0.9	0	0.9	No change
Stockpile Analysis Software	0.373	0	0.373	No change
B&L Open System	0.156	0	0.156	No change
SUBTOTAL SOFTWARE DEVELOP	**1.429**	**0**	**1.429**	
Minor Construction				
Install Paved Rds in Mag Area	0.2	0	0.2	No change
Expand C-1 for Security Dept	0.25	0	0.25	No change
Repair Ord Dept Carpentry Shop	0.28	0	0.28	No change
Primary Grnding - Pier 3	0.28	0	0.28	No change
Generator for Bldg C-50	0.22	0	0.22	No change
Remodel Bldg 848	0.275	0	0.275	No change
Miscellaneous Minor Construction	1.818	0	1.818	No change
SUBTOTAL MINOR CONSTRUCTION	**3.323**	**0**	**3.323**	
GRAND TOTAL	**9.815**	**1.5**	**11.315**	

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Undersecretary of Defense (Comptroller) for approval.

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
NAVAL AIR WARFARE CENTER
SUMMARY OF OPERATIONS

ACTIVITY GROUP MISSION

The mission of the Naval Air Warfare Center (NAWC) is to be the Navy's full spectrum research, development, test, evaluation, and in-service engineering center for, aircraft weapons integration, assigned airborne electronic warfare systems, naval aircraft engines, avionics, aircraft support systems, weapons systems associated with air warfare (except antisubmarine warfare systems), missiles and missile subsystems and to maintain and operate the air, land, and sea test ranges complex. The Training Systems Division, Orlando reports to the Commander of the Aircraft Division. However, it is funded by an expense operating budget and therefore is not part of this submission.

ACTIVITY GROUP COMPOSITION

Activity Name	Location
Naval Air Warfare Center, Aircraft Division	Indianapolis, IN*
Naval Air Warfare Center, Aircraft Division	Lakehurst, NJ
Naval Air Warfare Center, Aircraft Division	Patuxent River, MD
Naval Air Warfare Center, Aircraft Division	Trenton, NJ
Naval Air Warfare Center, Aircraft Division	Warminster, PA
Naval Air Warfare Center, Aircraft Division	St. Inigoes, MD
Naval Air Warfare Center, Weapons Division	China Lake, CA
Naval Air Warfare Center, Weapons Division	Pt Mugu, CA.
Naval Air Warfare Center, Training Systems Division	Orlando, FL

NAWCAD Indianapolis was privatized in accordance with the Base Closure statute effective January 1997. This will be discussed in more detail under the BRAC portion of this narrative.

CUSTOMER BASE

At the direction of the Secretary of the Navy, the NAWC was established and assigned primary responsibility for aircraft, engines, avionics, and aircraft support. While designated as a Research, Development, Test, and Evaluation (RDT&E) activity, NAWC supports a broad range of Navy and Department of Defense (DOD) programs in various phases of life cycle acquisition management. Additionally, the activity supports a broad base of tenant, foreign military sales, and private party customers. Consequently, the activity has a diverse sponsor and appropriation customer base. Specific leadership areas were assigned as follows:

Aircraft launch and recovery systems
Aviation support equipment
Propulsion systems testing
Electronics manufacturing and production support
Electronic systems transition to production
Pilot/emergency production
Aircraft testing
Aircraft test and evaluation (T&E) ranges
Aircraft modeling analysis
Air vehicles, manned and unmanned
Aircrew equipment and life support
Airborne surveillance systems
Avionics
Range Instrumentation System
Air antisubmarine warfare systems and sensors
Aircraft electronic warfare T&E
Air platform systems integration
Aircraft active and passive signatures
Air vehicle propulsion
Missile /Missile Subsystems R&D and ISE
Freefall/Unguided Weapons R&D and ISE
Weapons Modeling and Analysis
Weapons System Integration
Aircraft/Missile Survivability/Vulnerability Testing
Parachute Systems Components
Air/Land RCS,EW Ranges
Aircraft Electronic Warfare R&D and ISE
Missile Signature Active and Passive
Combat and Combat Control Systems R&D
Airborne Weapons T&E
Air/Sea Range
Aircraft Armament System /Equipment
Targets and Simulators for Air Launched Systems
Aerial target/Threat Simulator Development

Programs under those leadership areas include the following:

Navy QF-4S Target System
Plume Measurement Capability
Two-Stage Light-Gas Gun
Gas Generator Fire Extinguishing System tested
Testing of MARS Pathfinder for JPL
Support Test Operation in the Persian Gulf
ARIES System - Radar and communication detection
BQS-15 Engineering Change Sonar System
V-22 Osprey multi-purpose aircraft
TOMAHAWK Missile Skynet Program
CCWG Threat simulation program
Demonstrations of fiber optic data bases on the Hornet F/A-18A
Version 4 of Flight Optimization Routines for Energy Management
Trivalent Chromium Conversion Coating
F/A-18 A/B/C/D - Development Test and Evaluation programs
F/A-18E/F planning and support for EMD flight test program
Joint Advance Strike Technology
Tactical Air Combat Training system - Block 5.0 upgrade
Light Detection and Range Systems

BUDGET HIGHLIGHTS

NWCF Reimbursable Workload - The key NAWC workload measures are orders received, revenue, and unbilled carryover.

	FY 96	FY97	FY98	FY99
New Orders Received	$1,905	$1,547	$1,743	$1,723
Revenue	2,250	1,920	1,797	1,728
Unbilled Carryover less WIP	391	162	141	153
Months Of Carryover	1.1	1.0	.9	1.1

Orders Received - The orders are influenced by the significant amount of BRAC activity being performed at the Aircraft Division. New orders for FY 1996 and 1997 are lower than the amounts in last year's Congressional Budget by $92.7 million and $500.2 million, respectively. This reflects shifts in work to direct cite, workload changes, and privatization of Indianapolis. All new incoming orders are accepted based on the stringent guidelines of 80% in-house performance. New orders in all years are consistent with changes in customer workload.

Unbilled Carryover - The NAWC has established a goal of maintaining carryover at the equivalent level of three months of operations or less, in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. This has been accomplished by tight administrative control of funds acceptance, transition of contractual work from reimbursable to direct cite and reversion of unused/unusable funds for use by programs as required.

AOR and NOR - This budget achieves total AOR recoupment by the end of FY 1998. Significant effort was made in FY 1996 and will continue in FY97-99 to achieve the budgeted NOR results. The importance of orderly hiring of direct workforce balanced by the reduction of indirect workforce to achieve these results cannot be overemphasized.

Base Realignment and Closure (BRAC) - NAWCAD Indianapolis is implementing a Privatization Plan as a cost effective alternative to the BRAC 95 decision to close the activity. Privatization occurred in January 1997. Indianapolis' mission cease date is 15 March 1997. The only remaining personnel DON personnel at Indianapolis after mission cease will be program liaison and BRAC closeout personnel in a NAWC, Aircraft Division detachment. Two other Aircraft Division activities are also affected by BRAC. Warminster's mission cease date was 30 Sep 1996 and final closure is 31 Mar 1997. Trenton's mission cease date is 15 May 1998 and final closure is 15 Dec 1998.

Funding Policy

The NAWC is chartered as a Navy Working Capital Fund (NWCF) sub-activity and all reimbursable workload is funded and reported through NWCF. However, due to NAWC complex mission a significant portion of the activity's overhead is funded from appropriated sources. Specifically:

a) **MRTFB.** Major Range Test Facility Base (MRTFB) portion of the NAWC funds its general and administrative (G&A) contribution to command overhead and indirect (production) expenses from the Test and Evaluation Support program element of the Navy RDT&EN appropriation.

b) **Base Operating Support (BOS).** NAWC receives BOS O&M,N funding to pay for Military Support and Common Support to Tenants. The Common Support to Tenants funding is a contributing revenue source to command G&A. Funding requirements have increased due to the BRAC move of NAVAIR to Patuxent River, contracting for Bachelor housing front desk support, clerical support and child care.

Stabilized Rates - Stabilized Rates have been set to achieve AOR recoupment in FY 1997.

	FY96	FY97	FY98	FY99
Stabilized Rate *	$73.66	$70.55	$75.59	$73.40
Stabilized Percent Change	--	-.4.2%	7.14%	-2.9%
Composite Rate Change		.1%	4.16%	-.05%

* Actual FY 1997 rate charged to customers is $73.24

Civilian Manpower

Manpower budget estimates reflect base realignment and subsequent realignment/ closure of Warminster, privatization of Indianapolis, and closure of Trenton.

The following table summarizes civilian manpower estimates contained in the current A-11 budget submission:

FTE Work Years	**FY96 Estimate**	**FY97 Budget**	**FY98 Budget**	**FY99 Budget**
FY96 Congressional Budget	16,854	15,882		
New Submit A-11	16,636	13,872	12,412	11,681
Delta	-218	-2,010		

Civilian End Strength				
FY 1997	16,528	15,808		
Congressional Budget				
A-11	16,272	12,898	12,141	11,600
Delta	-256	-1,936		

To achieve AOR targets and limit NWCF rate increases, NAWC has established an operating goal in this budget to reduce applied direct labor hours by only 2% per year. Average civilian FTE and end strength decline by over 7% per year from FY96-99. This results in a productivity improvement as measured by the productivity ratio (civilian direct FTE , total civilian FTE). The productivity improvement will be accomplished by generating higher separations from civilian overhead positions vice direct positions.

MILITARY MANPOWER

	FY96	FY97	FY98	FY99
NWCF MISSION BILLETS				
Officer	111	143	133	132
Enlisted	158	239	224	219
Total	269	382	357	351

KEY FINANCIAL OPERATING ASSUMPTIONS

NAWC with Indianapolis				
Financial Profile:	FY96	FY97	FY98	FY99
Revenue	2,591,025	1,920,209	1,797,313	1,727,840
Cost of Goods Sold	2,601,783	1,923,155	1,778,302	1,727,840
Net Operating Result	(10,758)	(2,946)	18,871	0
Total Change FY AOR	(10,758)	(2,946)	18,871	0
AOR Beginning of FY	(5,167)	(15,925)	(18,871)	0
AOR End Of FY	(15,925)	(18,871)	0	0
Unit Cost	77.20	77.02	77.52	77.93
Workload Profile:	FY96	FY97	FY98	FY99
Orders Received ($000)	$2,229,888	$1,546,562	$1,743,169	1,723,080
DLHs	17,931,904	15,100,660	13,299,849	12,938,109

FY96 to FY97 reduction due to impact of privatizing
FY97 to FY99 reduction commensurate with end strength drawdown.

DIRECT CITE FUNDING PROFILE

The NAWC budget reflects a decrease in reimbursable orders and an increase in direct cite orders in the budget years. This change will result in increased efficiency and ensure conformance with Department carryover policies. The DON R&D program remains stable through the FYDP; however, the mix of direct cite and in-house work fluctuates. The direct cite contract workload dollars shown below are not reflected in this Activity Group budget. The Activity Group only provides management support and contract management services for these efforts. Further, from FY 1996 to FY 1997 the privatization of Indianapolis is reflected, and from FY 1997 through FY 1999 an increase in Activity Group managed direct cite workload can be seen.

	($000)			
	FY96	FY97	FY98	FY99
RDT&E,N	$192,200	$196,900	$216,600	$243,900
O&M,N	68,300	66,000	63,300	62,500
APN	517,600	506,100	477,200	539,700
WPN	20,800	18,600	18,500	18,400
SCN	58,500	58,500	59,500	60,500
OPN	101,800	64,500	65,200	63,900
Other Navy	25,800	21,400	22,300	21,500
Army	7,400	17,100	16,600	16,800
Air Force	18,000	14,400	14,800	14,600
NWCF	34,600	23,100	22,200	22,400
FMS	127,000	69,200	69,300	68,600
Other DoD	59,500	58,500	58,200	58,200
Other Govt	7,500	2,200	2,200	2,300
Other	1,200	-	-	-
Total Direct Cite	$1,240,000	1,116,500	1,106,900	1,193,200

BRAC FUNDING PROFILE

NAWC BRAC orders, revenue, and expenses included in the A-11 are as follows:

	($000)			
	FY96	FY97	FY98	FY99
Orders	$75,596	78,562	21,197	355
Revenue	74,746	90,459	28,178	7,941
Cost	74,746	90,459	28,178	7,941

NAWC AD Indianapolis BRAC orders, revenue, and expenses included above are $43,526 and $6,327 in FY 1997 and 1998, respectively.

CAPITAL PURCHASE PROGRAM

As NAVAIR continues to downsize, the successful utilization of capital resources is critical. The NAWCAD and NAWCWD managers proactively review the future strategic plans, resource requirements and assets to avoid duplication among competencies/sites as consolidation efforts are implemented. Our CPP plan reflects a changing environment with a direction toward streamlined processes through automation and procurement of the resources necessary to function as coordinated business units.

	FY 96 Actual Obligns	($000) FY97	FY98	FY99
Non-ADP Equipment	$16,252	$13,781	$17,137	$14,309
Minor Construction	2,884	2,924	835	1,430
ADP Equipment	8,496	18,535	20,066	20,128
Software Development	100	2,140	300	450
Total CPP Budget	$27,732	$37,380	$38,338	$36,317

FY 1996 reflects the actual obligations for the CPP program. FY 1997 reflects the Congressional submission plus costs to implement the NIFMS financial management system, as approved by DFAS. FY 1998 and FY 1999 requirements are addressed separately in the Capital Purchases section of the budget.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NAWCDIV / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	2,570.5	1,891.1	1,767.4	1,697.2
Surcharges	.0	.0	.0	.0
Depreciation excluding Major Constructio	20.5	29.1	29.8	30.6
Other Income				
Total Income	2,591.0	1,920.2	1,797.2	1,727.8
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	14.1	17.5	16.0	16.0
Civilian Personnel	1,076.1	946.0	833.6	809.1
Travel and Transportation of Personnel	61.0	40.7	37.7	36.6
Material & Supplies (Internal Operations	277.1	196.3	186.5	182.7
Equipment	45.7	31.7	28.8	27.7
Other Purchases from NWCF	48.7	31.1	27.3	25.8
Transportation of Things	24.0	1.7	1.7	1.6
Depreciation - Capital	20.5	29.1	29.8	30.6
Printing and Reproduction	4.6	4.5	4.6	4.7
Advisory and Assistance Services	3.5	11.1	10.9	10.9
Rent, Communication & Utilities	61.1	65.9	59.8	60.2
Other Purchased Sevices	1,002.3	545.0	543.7	524.0
Total Expenses	2,638.7	1,920.5	1,780.3	1,729.8
Work in Process Adjustment	-35.3	4.7	.0	.0
Comp Work for Activity Reten Adjustment	-1.6	-2.0	-2.0	-2.0
Cost of Goods Sold	2,601.8	1,923.2	1,778.3	1,727.8
Operating Result	-10.8	-2.9	18.9	.0
Less Surcharges	.0	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-10.8	-2.9	18.9	.0
Other Changes Affecting AOR	.0	.0	.0	.0
Accumulated Operating Result	-15.9	-18.9	.0	.0

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NAWCDIV / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	2,229.9	1,546.6	1,743.2	1,723.1
a. Orders from DoD Components	2,007.4	1,442.4	1,583.5	1,563.5
Department of the Navy	1,739.4	1,206.2	1,385.4	1,393.0
O & M, Navy	387.3	308.4	338.0	367.7
O & M, Marine Corps	1.7	1.4	1.6	1.6
O & M, Navy Reserve	2.4	.9	.9	.9
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	345.3	126.9	257.1	203.6
Weapons Procurement, Navy	90.1	56.8	63.8	66.2
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	37.4	42.4	22.6	20.7
Other Procurement, Navy	56.7	24.8	17.9	28.2
Procurement, Marine Corps	-1.5	-4.7	.0	.0
Family Housing, Navy/MC	23.1	26.0	26.1	26.5
Research, Dev., Test, & Eval., Navy	761.1	613.0	642.2	662.1
Military Construction, Navy	.2	.1	.1	.1
Other Navy Appropriations	35.7	10.1	15.0	15.3
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	12.3	14.1	14.5	14.4
Army Operation & Maintenence	3.6	1.4	1.9	2.0
Army Res, Dev, Test, Eval	3.6	9.3	9.2	9.3
Army Procurement	2.0	.7	.8	.9
Army Other	3.1	2.7	2.6	2.2
Department of the Air Force	53.0	39.8	45.8	45.6
Air Force Operation & Maintenence	2.3	3.6	4.2	3.8
Air Force Res, Dev, Test, Eval	35.5	33.1	34.2	35.0
Air Force Procurement	12.5	-.2	4.0	3.4
Air Force Other	2.8	3.3	3.5	3.4
DOD Appropriation Accounts	202.6	182.3	137.8	110.6
Base Closure & Realignment	75.5	78.6	21.2	.4
Operation & Maintence Accounts	10.6	3.6	4.3	3.7
Res, Dev, Test & Eval Accounts	56.1	56.6	61.1	56.4
Procurement Accounts	51.1	5.9	13.3	17.1
DOD Other	9.2	37.7	38.0	32.9
b. Orders from NWCF Business Area	126.6	27.3	68.5	68.8
c. Total DoD	2,134.0	1,469.7	1,652.0	1,632.3
d. Other Orders	95.9	76.9	91.2	90.8
Other Federal Agencies	15.4	11.3	13.9	15.0
Foreign Military Sales	70.9	58.9	69.6	67.8
Non Federal Agencies	9.6	6.7	7.7	8.0

000102

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NAWCDIV / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	1,199.1	838.0	464.3	410.3
3. Total Gross Orders	3,429.0	2,384.5	2,207.5	2,133.4
4. Funded Carry-Over **	838.0	464.3	410.3	405.6
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	2,591.0	1,920.2	1,797.2	1,727.8
Adjusted Carryover	391.4	161.5	140.8	152.7

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

000182

CHANGES IN COST OF OPERATIONS
DEPARTMENT OF THE NAVY
BUSINESS AREA:
NAVAL AIR WARFARE CENTER
(DOLLARS IN MILLIONS)

1.	FY 1996 Actual	2,638.7
2.	FY 1997 President's Budget	2,371.8
3.	Pricing Adjustments	0.0
4.	Productivity Initiatives & Other Efficiencies	(4.4)
a.	Overhead workyear reductions	(1.7)
b.	Implementation of productivity initiatives in manufacturing - acceleration of programs	(2.7)
5.	Program Changes (Workload Changes)	(201.9)
a.	BRAC - Privatization Plan Implemented	(193.7)
b.	Trenton BRAC reduction	(1.2)
c.	MRTFB	4.9
d.	Weapons Maint - O&M,N	(6.1)
e.	Equip Maint - O&M,N	(5.8)
6.	Other Changes in:	(245.0)
a.	Civilian Personnel Costs	(68.1)
b.	SIP/Severance/Retirement Offset (9%)	36.8
c.	Real Property Maintenance	(4.2)
d.	Other OH-Equip maint, rents/leases	(13.7)
e.	Depreciation	(14.0)
f.	Lease A/C & Vessels to incl. SNI shuttle & barge	2.5
g.	ADP Services	(4.0)
h.	Printing & Reproduction	(2.8)
i.	Purchased Utilities	(1.4)
j.	Warminster Base Closure Team increase	3.5
k.	System 2000	6.0
l.	Reduction in contracts	(185.7)
7.	FY 1997 Current Estimate	1,920.5

CHANGES IN COST OF OPERATIONS
DEPARTMENT OF THE NAVY
BUSINESS AREA:
NAVAL AIR WARFARE CENTER
(DOLLARS IN MILLIONS)

1.		FY 1997 Current Estimate	1,920.5
2.	a.	Pricing Adjustments	58.2
	b.	Annualization of Prior Year Pay Raises	8.6
		FY 1997 Pay Raise	18.9
		(1) Civilian Personnel	18.5
		(2) Military Personnel	0.4
	c.	Stock Fund - Fuel	0.3
	d.	Stock Fund - Nonfuel	16.9
	e.	Industrial Fund Purchases	(0.1)
	f.	General Purchases Inflation	13.6
3.		Productivity Initiatives & Other Efficiencies	(22.0)
	a.	Overhead workyear reductions	(12.6)
	b.	CPP Productivity Initiatives	(5.6)
	c.	HRM Regional Savings/Transfer	(3.8)
4.		Program Changes (Workload Changes)	(105.0)
	a.	R&D Workload increases	17.2
	b.	GPS (Global Positioning Sys RDT&E)	(10.8)
	c.	F-14 Aircraft (APN)	(3.1)
	d.	TACAIR EW (APN)	(1.4)
	e.	GP Bomb Systems (RDT&E)	(3.8)
	f.	Guided Weapons (RDT&E)	(3.1)
	g.	AH-1 Helicopter (O&M,N)	(4.1)
	h.	HARM (MPAF)	(5.8)
	i.	AV-8B Aircraft (RDT&E)	(6.6)
	j.	Aircrew Electronic Warfare Tng (OPN)	(4.0)
	k.	TRIDENT/POLARIS/POSIEDON (O&MN)	(3.8)
	l.	BRAC - Privatization Plan	(87.0)
	m.	Trenton BRAC reduction	(3.7)
	n.	Carrier Systems Development	10.4
	o.	RDT&E Ship/Aircraft Support	4.6
5.		Other Changes in:	(71.4)
	a.	Reduction of Manpower	(14.2)
	b.	Overhead Travel, Training/tuition	(2.1)
	c.	ADP services	(4.0)
	d.	Depreciation	1.4
	e.	Real Property Maintenance	(16.3)
	f.	Reduction in In-house contracts	(36.2)
6.		FY 1998 Current Estimate	1,780.3

CHANGES IN COST OF OPERATIONS
DEPARTMENT OF THE NAVY
BUSINESS AREA:
NAVAL AIR WARFARE CENTER
(DOLLARS IN MILLIONS)

6.	FY 1998 Current Estimate	1,780.3
7. a.	Pricing Adjustments	37.7
b.	Annualization of Prior Year Pay Raises	6.0
	FY 1998 Pay Raise	12.6
	(1) Civilian Personnel	12.2
	(2) Military Personnel	0.4
c.	Stock Fund - Fuel	4.1
d.	Stock Fund - Nonfuel	1.4
e.	Industrial Fund Purchases	0.5
f.	General Purchases Inflation	13.1
8.	Productivity Initiatives & Other Efficiencies	(25.3)
a.	Overhead workyear reductions	(8.2)
b.	CPP Productivity Initiatives	(13.1)
c.	HRM Regional Savings/Transfer	(4.0)
9.	Program Changes (Workload Changes)	(61.3)
a.	Threat Targets (RDT&E)	(10.9)
b.	F-14 Aircraft (APN)	(2.3)
c.	TACAIR EW (APN)	(2.3)
d.	Sidewinder (MPAF)	(2.5)
e.	Guided Weapons (RDT&E)	(1.3)
f.	OPTICS incl. Lasers	(2.0)
g.	Phoenix (MPAF)	(1.7)
h.	REWS (OPN & O&MN)	(0.9)
i.	AEWTR (OPN)	(1.9)
j.	TRIDENT/POLARIS/POSIEDON (O&MN)	(1.9)
k.	Aircraft Survivability (O&MN & RDT&E)	(2.6)
l.	F/A 18 (RDT&E & APN)	(13.2)
m.	Tomahawk (RDT&E)	(8.8)
n.	AH-1 Helicopter (APN)	(3.1)
o.	Trenton BRAC reduction	(5.9)
10.	Other Changes in:	(1.6)
a.	SIP/Severance	6.6
b.	Real Property Maintenance	7.2
c.	Travel requirements	(0.3)
d.	DFAS Support	(0.4)
e.	Depreciation	1.0
f.	POM-98 Child Dev Center/MWR increase	1.1
g.	Reduction in In-house contracts	(5.1)
h.	Other Overhead Reductions	(11.7)
11.	FY 1999 Current Estimate	1,729.8

Capital Budget Summary
Non-ADP Program - Submit
Department of the Navy
Research and Development - Naval Air Warfare Center
($ in Million)

ITEM LINE #	ITEM DESCRIPTION	FY 1996 QTY	FY 1996 ACTUAL OBLIGNS	FY 1997 QTY	FY 1997 TOTAL COST	FY 1998 QTY	FY 1998 TOTAL COST	FY 1999 QTY	FY 1999 TOTAL COST
	1a. EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)								
	Replacement								
W C 3 EL 0006 R	WEPTAC PHASE II	1	1.766	1	2.123				
W C 4 EL 0007 R	MISSION PLANNING/DIGITAL IMAGING W/S	1	1.000	1	1.000	1	1.000	1	1.000
A B 6 EL 0001 R	EYE-SAFE LASER TRACKER	1	.714						
W C 3 EL 0005 R	P-369 MILCON COLLATERAL EQUIPMENT	1	.525	1	.300				
W C 5 EL 0500 R	HIGH OFF BORE SIGHT ANGLE TABLE	1	.711						
W P 3 EL 4002 R	AMES II THREAT SIMULATOR			1	1.235				
W C 7 EL 0502 R	INSTRUMENTATION UPGRADE (WSL)			1	.565	1	.590		
W C 8 EL 6027 R	IMAGING SEEKER SIMULATION SYSTEM					1	1.000		
A B 8 EL 6608 R	CNC VERTICAL MACHINE CTR (LARGE)					1	.755		
W P 8 EL 8001 R	ELECTRONIC SECURITY SYSTEM (ESS)					1	.710	1	1.253
W C 8 EL 7000 R	UPGRADE MICROCIRCUIT MACHINES					1	.575		
A B 9 EL 4812 R	CATAPULT HYDRAULIC SYSTEM FLEET STANDARDIZATION							1	1.900
A A 9 EL 4440 R	ELECTRICAL POWER SYS ENV. TEST REPLACE							1	1.100
W C 9 EL 8002 R	SURFACE ANALYSIS INITIATIVE							1	.885
A A 9 EL 4450 R	F & L LABORATORY							1	.540
A A 9 EL 4623 R	RECONFIGURABLE COCKPIT UPGRADE							1	.525
	Productivity								
W C 3 EL 0010 P	CONCURRENT ENGINEERING WORKGROUP	1	1.198			1	.500	1	.500
A A 7 EL 0411 P	AEGIS COMBAT COMPUTER SYSTEM			2	.980				
A A 8 EL 4410 P	UNMANNED AIR VEHICLE ALTITUDE FACILITY UPGRADE					1	.600		
A A 8 EL 4611 P	DYNAMIC CREW-SYSTEM INTEGRATION EVAL. FACILITY					1	.726	1	.560

000886

Capital Budget Summary
Non-ADP Program - Submit
Department of the Navy
Research and Development - Naval Air Warfare Center
($ in Million)

ITEM LINE #	ITEM DESCRIPTION	FY 1996 QTY	FY 1996 ACTUAL OBLIGNS	FY 1997 QTY	FY 1997 TOTAL COST	FY 1998 QTY	FY 1998 TOTAL COST	FY 1999 QTY	FY 1999 TOTAL COST
	New Mission								
A A 6 EL 0014 N	ELECT SYSTEM DEPT/ENVIRONMENTAL TEST UPGRADES	1	.946	1	.533				
A A 8 EL 4460 N	HELICOPTER DRIVE TRAIN FACILITY					1	.950		
A A 8 EL 4551 N	SYNTHETIC APERTURE RADAR MOTION COMP & REG ANL. SYS					1	.775		
A A 8 EL 4440 N	500 HP DRIVE STAND					1	.533		
A A 9 EL 4322 N	SIDE-BY-SIDE RECONFIGURABLE COCKPIT							1	.995
	SUBTOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)		6.860		6.736		8.714		9.258
N ES 0000	**1b. EQUIPMENT, OTHER THAN ADPE & TELECOM (<$500K)**		9.392		7.045		8.423		5.051
	2. GRAND TOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM		16.252		13.781		17.137		14.309
N MC 0000	**3. MINOR CONSTRUCTION**		2.884		2.924		.835		1.430
	GRAND TOTAL NON-ADP CAPITAL PURCHASES PROGRAM		19.136		16.705		17.972		15.739

Capital Budget Summary
ADP Program - Submit
Department of the Navy
Research and Development - Naval Air Warfare Center
($ in Million)

ITEM LINE #	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		QTY	ACTUAL OBLIGNS	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	1a. ADP & TELECOMMUNICATIONS EQUIPMENT (>$500K)								
	Computer Hardware (Production)								
A B 3 KL 0001 R	LOCAL AREA NETWORK	1	.989						
W C 4 KL 0401 R	COMPETITIVE ENGINEERING ENVIRONMENT	1	.623	1	.850	1	1.250	1	1.400
W C 4 KL 0517 R	GEOGRAPHIC INFORMATION SYSTEM	1	.316			1	.400	1	.400
W C 7 KL 6152 R	SIGNAL PROCESSING SYSTEM			1	2.017	1	2.005	1	1.725
A A 7 KL 0011 R	ELECTRONIC ARCHIVING			1	.990				
A C 4 KL 3701 R	CAD II WORKSTATIONS			1	.950				
A A 7 KL 0751 R	OPEN ARCHITECTURE AVIONICS			1	.550				
W P 7 KL 6014 R	SURVIVABILITY DIVISION COMPUTER SYS			1	.551	1	.352		
A A 7 KL 0411 P	VIPER SYSTEM			1	.520				
W C 7 KL 6171 R	ATR RAPID PROTOTYPING					1	.865	1	.800
A A 8 KL 7233 R	DMS TECHNOLOGY INSERTION					1	3.083	1	3.149
A A 8 KL 4300 N	COMPUTER FOR COMPUTATIONAL ANALYSIS					1	.650		
A A 9 KL 4133 R	ASQ-212/222 LABORATORY COMPUTER							1	.750
A A 9 KL 8015 P	AUTOMATED WAREHOUSING							1	.500
A A 9 KL 8013 N	CAD II							1	.500
	Telecommunications								
W C 3 TL 0084 R	COMMUNICATIONS SYSTEM UPGRADE	1	4.235	1	4.000	1	2.900	1	2.600
A A 7 TL 0723 R	FIBER OPTIC TRANSMISSION EQUIPMENT			1	2.449	1	1.750	1	1.250
W P 7 TL 6013 R	FM MOBILE TRUNKING SYSTEM			1	.645				
W C 8 TL 8006 R	FIBER OPTIC BRANCHING					1	1.150	1	1.000
A A 8 TL 81D0 R	PREMISES DISTRIBUTION					1	.750	1	.750

Capital Budget Summary
ADP Program - Submit
Department of the Navy
Research and Development - Naval Air Warfare Center
($ in Million)

ITEM LINE #	ITEM DESCRIPTION	FY 1996 QTY	FY 1996 ACTUAL OBLIGNS	FY 1997 QTY	FY 1997 TOTAL COST	FY 1998 QTY	FY 1998 TOTAL COST	FY 1999 QTY	FY 1999 TOTAL COST
W P 8 TL 8007 R	SNI/SW/CABLE UPGRADES					1	.579	1	.100
A B 9 TL 7000 R	BASE TELEPHONE SWITCHING SYSTEM							1	2.575
W P 9 TL 8012 R	CABLE PLANT UPGRADE (PM)							1	.705
	SUBTOTAL ADPE & TELECOMMUNICATIONS (>$500K)		6.163		13.522		15.734		18.204
N KS 0000	**1b. ADPE & TELECOMMUNICATIONS (<$500K)**		2.333		5.013		4.332		1.924
	2. GRAND TOTAL ADPE & TELECOMMUNICATIONS		8.496		18.535		20.066		20.128
N DL 0000	3a. SOFTWARE DEVELOPMENT (>$500K) NIFMS IMPLEMENTATION	1	.100	2	1.595	1	.150		
	SUBTOTAL SOFTWARE DEVELOPMENT (>$500K)		0.100		1.595		.150		
N DS 0000	**3b. SOFTWARE DEVELOPMENT (<$500K)**		0.000		0.545		0.150		0.450
	3. GRAND TOTAL SOFTWARE DEVELOPMENT		0.100		2.140		0.300		0.450
	GRAND TOTAL ADP CAPITAL PURCHASES PROGRAM		8.596		20.675		20.366		20.578

000869

Capital Budget Summary
Department of the Navy
Research and Development - Naval Air Warfare Center
($ in Million)

	ITEM DESCRIPTION		FY 1996 ACTUAL OBLIGNS		FY 1997 TOTAL COST		FY 1998 TOTAL COST		FY 1999 TOTAL COST
	GRAND TOTAL NON-ADP CAPITAL PURCHASES PROGRAM		19.136		16.705		17.972		15.739
	GRAND TOTAL ADP CAPITAL PURCHASES PROGRAM		8.596		20.675		20.366		20.578
	GRAND TOTAL CAPITAL PURCHASES PROGRAM		27.732		37.380		38.338		36.317

000490

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Mission Planning Digital Imaging Work Stations Replacement LINE # 4W4EL0007R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Mission Planning Equipment	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	1	1,000	1,000	
TOTAL		1,000	1,000		1,000	1,000		1,000	1,000		1,000	1,000	

Narrative Justification:

Operational Date: December 2000
Project Initiation Date: FY93
Payback Period = 4.22 years
Return on Investment (ROI) = 18.5%
Average Annual Savings = $1,075K
Saving to Investment Ratio = 1.85

DESCRIPTION: Mission Planning is important to the development, design, and utilization of modern weapons systems, and is a significant driver of the design of future weapons systems. Major programs are currently underway to control, improve, simplify and coordinate mission planning. Emerging new technologies and weapons systems will have to be integrated into these systems. NAWCWPNS programs such as the Joint Stand Off Weapon (JSOW), Standoff Land Attack Missile (SLAM), Highspeed Antiradiation Missile (HARM), the Harpoon Weapon System, the Joint Direct Attack Munition (JDAM), the emerging Tomahawk Baseline IV, and others, must develop systems unique mission planning capabilities to integrate into this complex mission planning environment. Mission planning encompasses a broad spectrum of activities. For a particular weapon and delivery platform, mission planning involves accessing imagery of a specific target, preparing a reference scene of the target from this imagery, locating the target precisely, determining weaponeering details associated with the target structure and kill mechanism, developing the route of access of the weapon and delivery platform to access the target area which includes consideration of various threats to the success of the mission, and calculating the number of weapons that will be required to neutralize the target and insure survival of the delivery platform. In addition, the individually planned missions must be coordinated with the overall operational plan being prosecuted.

These funds are to upgrade the mission planning resources required to support the broad spectrum of mission planning development activities. The mission planning laboratory is able to mimic all the mission planning activities performed aboard an aircraft carrier in the Command Intelligence Center. To accommodate these capabilities, the funds are being used to upgrade the Tactical Aircraft Mission Planning System (TAMPS) with automated weaponeering and knowledge engineering tools as well as facility computer hardware. The laboratory makes available to the technical development team of NAWCWPNS the resources required to perform mission planning development tasks essential to NAWCWPNS programs. Projects effected include F/A-18 mission planning, Airborne Tactical Information management System, TAMPS, Tactical Electronic Reconnaissance Processing and Evaluation System, Warrior, Real Time Retargeting, Weapons 6.2 block, Tomahawk, Joint Stand Off Weapon, Joint Direct Attack Munition, and Arid Hunter. These Programs generate $15M of direct labor in mission planning developments. A conservative estimate of savings of 5% of direct labor is used in the calculation of cost avoidance in section Q. Failure to upgrade the Mission Planning Development and Support Laboratory will seriously compromise our efforts to maintain the significant role of NAWCWPNS in the mission planning arena.

CAPITAL PURCHASES JUSTIFICATION
(Dollars in Thousands)

A. FY1998/1999 BIENNIAL BUDGET	
B. Department of the Navy/Research & Development	C. Instrumentation Upgrade (WSL) Replacement LINE #4W7EL0502R
	D. NAWCWD

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Instrumentation Equipment				1	565	565	1	590	590			
TOTAL					565	565		590	590			

Narrative Justification:

Operational Date: October 1999
Project Initiation Date: FY97
Payback Period = 3.1 years
Return on Investment (ROI) = 24%
Average Annual Savings = $311K
Saving to Investment Ratio = 2.4

DESCRIPTION: Weapons Survivability Lab (WSL) is the premiere test site for aircraft survivability and related testing. Past tests have looked at survivability of the F-4 Phantom, the F-14 Tomcat, the A-6 Intruder, the F/A-18 Hornet, the canceled P-3 and A-12, and Air Force airplanes including the F-15 Eagle and the F-22. Current test subjects include the F/A-18 E/F upgrade, the AX and the V-22 Osprey. The capability of the High Velocity Airflow System (HIVAS) to generate 500 kt airflow over test specimens makes WSL invaluable.

This procurement will purchase modern test support equipment for the WSL and service or replace existing equipment including instrumentation amplifiers, instrumentation tape recorders, instrumentation equipment rooms, event sequencer, digital oscilloscopes, pulse code modulated (PCM) equipment and landlines to test pads. Upgrade or replace existing control room equipment such as switches, control panels, and digital meters.

The cost avoidance indicated in the cost benefit analysis is based on the hours saved due to ease of operations of new equipment and the reduction of downtime caused by equipment failures. Additional savings are realized based on the current cost of maintenance for the existing systems. The alternative explored considers leasing the required equipment.

WSL is an example of leading-edge technology in aircraft survivability testing, vulnerability assessment, gunfire and ordnance damage assessment, etc... The integrity of WSL will quickly deteriorate if its technology is allowed to become obsolete. Failure to provide funding for this effort will result in a continued decline in the control and instrumentation capabilities of WSL, resulting in lost data, lost test opportunities, and customer dissatisfaction.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Imaging Seeker Simulation System Replacement LINE # 4W8EL6027R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Imaging Seeker Equipment							1	1,000	1,000				
TOTAL								1,000	1,000				

Narrative Justification:

Operational Date: June 1998
Project Initiation Date: FY98
Payback Period = 7.8
Return on Investment (ROI) = 12%
Average Annual Savings = $117K
Saving to Investment Ratio = 1.2

DESCRIPTION: The scene generator generates an infrared scene and presents it to the infrared scene projector which then projects an infrared scene which includes targets, countermeasures, and backgrounds to the unit under test. These scene features are replicated in the infrared scene projection system to be much like the seeker would see in the real world. The resolution, dynamic range, field-of-view, infrared band, and scene refresh rate must all be compatible with the seeker/guidance et al. unit under test. This type of system can repeat the same tests over and over again; this allows the engineers to identify and correct problems without having to worry about variables within the presented information. The device consists of a massive compute engine, together with the graphics and rendering engines necessary to support a hardware-in-the-loop test with only one frame of data latency. This requires generating and transferring approximately 6 billion to 16 trillion bits of data across the interface. This kind of data generation requires multiple parallel processors to handle the non-uniformity compensation (NUC) of the resistor arrays, to do the atmospheric effects, to calculate the changing backgrounds and countermeasures, and to do the same with the details of the multiple targets in the missile's field of view.

Missile programs such as Rolling Airframe Missile (RAM), Missile Homing Improvement Program (MHIP), Air Intercept Missile (AIM)-9X, and Tomahawk utilize imaging seekers as part of the overall guidance system of the missile. A major task for these programs is the design and analysis of signal processing algorithms, which is difficult without real world data that can be utilized in this process. Although measurement devices are available to gather required data, the devices can neither store adequate time sequences nor store a large variety of scene presentation without adequate recording assets. The sharing of such recording equipment between several programs provides valuable data at an affordable cost. The simulator hardware solves the second problem associated with the analysis of these types of seeker systems. The process of scanning over a scene and generating the detector response is a very time-consuming computational problem, which can be reduced by the special purpose simulator.

Without this simulation system, the wide range of potential applications are limited for testing of new seeker/signal processing designs. Actual hardware designs will be flown and could fail because the design and analysis were limited by this lack of test data and simulation capability. The cost avoidance rationale assumes the new system would save over half a work year in addition to an assumed 20% in contractor personnel who provide technical consultation services. Approximately $5K savings would be realized per year in maintenance costs. The alternative assumes a turn-key type operation where we would essentially contract out or buy the finished product.

CAPITAL PURCHASES JUSTIFICATION
(Dollars in Thousands)

A. FY1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Research & Development

C. CNC Vertical Mach CTR (Large) Replacement
LINE: 6AB8EL6608R

D. NAWC

Element of Cost	FY 1996 Qty	FY 1996 Unit Cost	FY 1996 Total Cost	FY 1997 Qty	FY 1997 Unit Cost	FY 1997 Total Cost	FY 1998 Qty	FY 1998 Unit Cost	FY 1998 Total Cost	FY 1999 Qty	FY 1999 Unit Cost	FY 1999 Total Cost
HARDWARE							1	755	755			
SOFTWARE												
INSTALLATION												
OTHER												
TOTAL								755	755			

Narrative Justification:
Operational Date: March 2000
Project Initiation Date: FY98
Payback Period = 12.5 years
Return on Investment (ROI) = 5%
Average Annual Savings = $39K
Saving to Investment Ratio = .52

DESCRIPTION:

CNC Vertical machining Center, 25 hp, bed type double housing, rail-type, 4-axis, single spindle, w/automatic tool changer.

Replacement of existing machining center. The existing machine, Kingsbury CNC Vert, Model VMC-960, is in constant use and is rapidly reaching its life expectancy. The increasing frequency and severity of downtime for maintenance is expected to continue and this lack of reliability negatively affects scheduling and workload.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Electronic Security System (ESS) Replacement LINE : #8W8EL8001R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Electronic Security Equipment							1	710	710	1	1,253	1,253	
TOTAL								710	710		1,253	1,253	

Narrative Justification:

Operational Date: December 2001
Project Initiation Date: FY98
Payback Period = 1.9 years
Return on Investment (ROI) = 37%
Average Annual Savings = $801K
Saving to Investment Ratio = 3.7

DESCRIPTION: The NAWS Security Department, Code 834000E, operates and manages an Electronic Security System (ESS) for the Pt. Mugu Station. This ESS services the security programs for all competencies in the Weapons Divisions and for many Station tenant activities. The ESS currently consists of 20 electronic subsystems: 11 intrusion detection systems (IDS), five access control systems (ACS), and four closed circuit television (CCTV) systems. The investment in these subsystems is over $4 million, and the age of the subsystems ranges from 5 to 20 years. 10 years is considered the useful life of most ESS. The current ESS saves the Corporation over $883,000 per year in guard and police services. ESS is a core/critical security process.

This CPP will purchase ESS upgrades to IDS, ACS, and CCTV subsystems resulting in total systems integration which will enhance overall system capabilities and performance, improve the Station's overall security posture, reduce current maintenance and operating costs.

ESS supports all the major security programs for the Weapons Division, Pt. Mugu. An upgraded and integrated ESS will enhance the security posture of a variety of programs.

Two separate studies, one conducted by the Naval Criminal Investigative Service and the other conducted by the Naval Interservice Engineering Command, concluded that the current ESS configuration was outdated, inefficient, and costly to maintain. Both studies recommended upgrades and sub-systems integration.

Due to age many of the subsystems are no longer parts or software supportable. For example, the Station' s primary ACS, RUSCO, will cease to function on the last day of 1999. Many of the card readers associated with the RUSCO system are no longer parts supportable.

Upgrades are needed to sustain labor savings, $883,000 per year. An ESS upgrade also has the potential for additional labor savings of $321,000 per year for 5 contract guards and 3 civil service maintenance billets.

Upgrades will include state of the art, systems technology permitting remote and real time assessment of intrusion alarms, improved information for management decision making, and automated preventive maintenance and trouble shooting.

Inefficiencies and high maintenance costs associated with the current ESS will be exacerbated. Subsystem failure will become more common resulting in increased maintenance and guard costs. The security posture for every Weapons Division security program will be degraded with the potential for loss of business associated with classified projects. The highest and best use of limited security forces will not be realized. Accreditation of major information systems could be lost.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Upgrade Microcircuit Machines Replacement LINE #5W8EL7000R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Microcircuit Machines Equipment							1	575	575				
TOTAL								575	575				

Narrative Justification:

Operational Date: February 1999
Project Initiation Date: FY98
Payback Period = 4.2 years
Return on Investment (ROI) = 19%
Average Annual Savings = $107K
Saving to Investment Ratio = 1.9

DESCRIPTION: This project is for the purchase of updated and technologically advanced Microcircuit Manufacture Machines. Purchases will include, infrared furnace, programmable wire bonders, fine pitch SMD pick and place, thick film screen printer, stencil and screen cleaning system, wire bond pull tester, hybrid die removal station, component solder tinning system, convection oven, and a hybrid circuit cleaning system.

Cost avoidance for contractual requirements to provide the machining required if the capability were not available on station and the maintenance costs for existing out-dated and degraded machinery.

New equipment is needed due to advances in technology and new obligations for more dense and complex instrumentation systems. Machine upgrades are essential for the continuing telemetry support for the SM-2, AMRAAM, and SLAM Missile Programs.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development										C Catapult Hydraulic System Fleet Stan Replacement LINE: 4AB9EL4812R			D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE										1	133	133	
SOFTWARE													
INSTALLATION										1	1767	1767	
OTHER													
TOTAL											1,900	1,900	

Narrative Justification:

Operational Date: November 1999
Project Initiation Date: FY99
Payback Period = 4.4 years
Return on Investment (ROI) = 17%
Average Annual Savings = $470K
Saving to Investment Ratio = 1.07

DESCRIPTION:

In order to align the Fleet Support test capability of the TC13 catapult, with current aircraft carrier launcher configurations, the incorporation of a full Rotary Retraction Engine/Hydraulic System is required. The system will consist of a Rotary Retraction Engine, Vertical Hydraulic Accumulator, Spherical Air Flask, Central Charging Panel and Gravity Tank.

The mission of the TC13 catapult test site is to duplicate shipboard configurations, thus permitting the investigation of existing fleet problems and evaluation of proposed improvements/high-risk development programs in a safe, cost effective environment utilizing unmanned deadload vehicles. The incorporation of the above hydraulic change provides the required Fleet/site and system/sub-system environment standardization. Additionally, the stock system support of the dated hydraulic supply system currently used on the TC13 site will disappear when the remaining fleet carriers using this type of system are removed from service by 1998.

The TC13 catapult test site was not provided with the above system change as it and others have been incorporated in the Fleet. The TC13 was programmed to receive the subject changes along with the fleet carriers and the TC7 at Pax River in 1992, via the Catapult Service Change Process, but was deleted due to funding constraints existing at the time.

The annual cost estimates provided in section Q. are based on best estimate cost inceases incurred to procure obsolete material outside the stock system and labor costs to maintain out of date material vice costs required for current stock system supportable equipment.

Incorporation of this change will provide a supportable launch capability paralleling the Fleet to safely investigate problems and proposed improvements.

The failure to provide the above change to the TC13 hydraulic system will contribute to a decline in Fleet support capability. The TC13 has supported Fleet problem investigations through duplication of the affected configuration. Fleet modernization without parallel standardization of its support facility, will inevitably contribute to a mission compromising gap. The stock system support for the system at the TC13 will cease in 1998.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Electrical Power Systems Environmental Test Rep Replacement LINE: 4AA9EL4440R						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE										1	960	960	
SOFTWARE													
INSTALLATION										1	115	115	
OTHER										1	25	25	
TOTAL											1,100	1,100	

Narrative Justification:

Operational Date: December 2000
Project Initiation Date: FY99
Payback Period = 3.6 years
Return on Investment (ROI) = 21%
Average Annual Savings = $233K
Saving to Investment Ratio = 2.12

DESCRIPTION:

This submission is to replace the current dust chamber with a self contained sand /dust chamber, the power amplifiers in the MB vibration laboratory, the combined temperature/humidity/vibration chambers and to complete the upgrade of the temperature/altitude walk in chamber with a new vacuum pump train. The dust chamber will provide sand abrasion and dust penetration testing on aircraft electrical power systems. The solid state amplifiers would provide clean, low noise level power to the vibration shakers for precise test level control. The combined chambers wil provide simultaneous environments for reliability testing of aircraft electrical power systems. The new vacuum train will provide advanced automated controls and safety interlocks and be capable of operating 24 hours per day. The system would consist of five vacuum pumps, five water to air heat exchangers, all associated plumbing and a digital control system.

The upgrading of obsolete equipment, increased capability, and automation will permit the Electrical Power System Division to remain state of the art and accomplish its assigned mission. These upgrades will result in higher quality, and increased accuracy and efficiency in environmental testing. In addition, these upgrades will permit the department to remain an independent DOD test laboratory.

Dust Chamber- Failure to replace the dust chamber will continue the inability to conduct blowing sand tests and continually require personnel to be exposured to hazardous material while loading and cleaning the chamber. Desert Storm placed great emphasis on the need for realistic blowing sand testing. As the current chamber ages further repair becomes more time consuming, reliability lessens and replacement parts become extremely difficult to obtain. A catastrophic failure from fatigue would result in the inability to conduct any form of dust or sand testing.
Power Amplifiers- Any failure of the power amplifiers involving the vacuum tubes would result in the inability to conduct vibration tests in the MB Vibration Laboratory until a replacement amplifier was procured. The loss of this capability would significantly reduce our capacity for accepting vibration testing requests and would adversely effect scheduling flexibiltiy.

Combined Chambers- The existing chambers are over 15 years old with primitive digital control. The new chambers will provide more precise control, digital recording capability, automated round the clock poperation and require less maintenance. The exisiting chambers' evaporators and condners units are experiencing advanced corrosion because of the humid operating environments utilized in testing. Excessive maintenance efforts have become necessary to prolong the life of this equipment. Repair to the major systems of the chambers would not be cost effective. The existing controls lose all commands with the slightest momentary power loss and must be reprogrammed manually in a step by step process. Modern digital controllers retain memory and can be programmed by computer or memory card. The existing chambers' refrigeration systems utilizes ozone depleting refrigerants, which under the Montreal protocol are being phased out and in the very near future will be unavailable. The new chambers would use non-ozone depleting refrigerants.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Surface Analysis Initiative Replacement LINE : #4W9EL8002R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Surface Analysis Initiative Equipment										1	885	885	
TOTAL											885	885	

Narrative Justification:

Operational Date:	October 1999
Project Initiation Date:	FY99
Payback Period =	3.9 years
Return on Investment (ROI) =	20%
Average Annual Savings =	$175K
Saving to Investment Ratio =	2.0

DESCRIPTION: This system provides surface elemental analysis with high resolution. Surface structures associated with electronic devices, fracture surfaces, or coatings can be chemically characterized with precision and without interference of substrate or bulk chemistry. It is used in support of a wide range of customer needs including research, production support, and in-service engineering (failure analysis).

The system would consist of a scanning electron spectroscopy chemical analysis (ESCA)/x-ray photoelectron spectroscopy station and an atomic force microscope station (AFM). The system (instruments) consists of a computer console, an ultra-high vacuum system, the x-ray source(s), hemispherical photoelectron detector, AFM probe/stage, and the control electronics/computer system. The AFM would provide detailed imaging of surfaces on an atomic scale allowing characterization of nano-powders, nano-engineered materials, and micromachines. The ESCA would allow chemical analysis of microstructures including composites and ceramics, chemical mapping of those structures, and chemical state determination.

The proposed surface analysis system would improve on a basic material characterization of a 10-year-old capability. The proposed system would provide analyses of a greater range of materials than currently possible with the existing scanning auger analysis system.

The primary functions of the proposed system would be to support weapons projects with regards to production and in-service engineering (failure analysis, characterization) and to support research. Secondarily, the item would support China Lake Prototype manufacture (reverse engineering services.)

The full range of in-service and in-production weapons system programs that China Lake supports would benefit from the services that the proposed instrument would provide; with Cruise Missile, Sidewinder, and various fuse systems as prominent customers. Typical fleet support and reverse engineering services require rapid turnaround and are high priority. On-site capability is the only means of providing the response such efforts require. Research on polymers, composites, ceramics, and optical materials would be supported as well, including future nano-engineered materials/structures for which no in-house analysis capability now exists. Examination of selected energetics would also be supported.

Estimated cost savings result from lower maintenance/service requirements (contract and labor). About 300 machine hours of paid work per year are currently lost due to the instrument being down; attributable to the poor reliability. A 1994 workload study based on historical utilization indicates that an upgraded surface analysis system with increased reliability, availability, and capability, would maintain a base customer service level of 800 machine hours per year (600 metallics/200 non-metallics). Without the proposed procurement, contract services would be the only option (Alt. 1).

If the proposed surface analysis system is not procured, a conscious decision will have been made to eliminate surface analysis from the repertoire of materials characterization services.

Because of its advanced age, the existing instrument requires a very expensive annual service contract ($33K) in addition to about 300 hrs of labor for maintenance. Continued support cannot be justified at this level for an obsolete system with declining reliability. The service contract would not be renewed beyond FY98 and the instrument would be excessed at its next major system breakdown. At that point, NAWC would no longer have the surface analysis capability to meet its customer needs.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. F&L Laboratory Replacement LINE: 4AA9EL4450R						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE										1	365	365	
SOFTWARE										1	90	90	
INSTALLATION										1	52	52	
OTHER										1	33	33	
TOTAL											540	540	

Narrative Justification:

Operational Date: November 1999
Project Initiation Date: FY99
Payback Period = 4.8 years
Return on Investment (ROI) = 10%
Average Annual Savings = $55K
Saving to Investment Ratio = 1.01

DESCRIPTION: This program consists of three specific items. Two maintain current capabilities while improving data quality and reducing manpower requirements. The third provides added capabilities to the PSEF facility. The proposal is to replace the control room consoles and associated test cell instrumentation used with the Navy Cold Flow Simulator and Coalesence Tests in R2 and for the T63 Lube Oil Test in D Rm. The new data acquisition and control system will replace the manual and semi-manual set-ups which have been in use since 1985 and 1978 respectively. Water coalescers are essential to shipboard operations and are a critical component of aircraft operational readiness. The T63 test has accumulated over 13,000 hours of lube oil performance data in 70 separate evaluations and is also used for experimental fuel, gas path cleaner and material development evaluations. All three test devices are used continuously and are manpower intensive. A new test device to increase the Navy's capability to test and evaluate the tribological properties of oils and materials is also proposed.

The existing control and acquisition systems are aging technology and require significant manpower to keep on-line. Some components are custom made and direct replacement parts are not readily available, leading to project delays and high part costs. A new system using "off-the-shelf" technology will reduce manpower needs while improving test control and data accuracy. The two fuel rigs use large quantities of JP fuel and require additional safety consideration for fire and explosion proof environments. Current technology components conform to modern safety codes and provide these added safety margins. The results from these systems will be essential to the current tri-service efforts looking at the suitability of +100 fuel additives and environmentally friendly icing system inhibitors. The T63 upgrade will lower manpower requirements (from two to one) for the lubricant test programs. In aviation oil specifications the parameter "Ryder Gear load carrying capacity" is used to measure gear scuffing resistance. While a useful point, it measures only one aspect of lubrication and represents 1950's technology. The PSEF Ryder facility is the only government lab capable of doing this test, specimens cost $1.0K each, are difficult to get (one source) and multiple tests are required on each product. Other devices are available to meaure anti-wear, traction coefficient, etc., but none provide a comprehensive view of lubricant performance. The proposed Wedeven Associates Machine 3 provides enchanced measurement capabilities and has the flexibility to simulate lubricated contact conditions in virtually any gear or bearing application. The device can develop oil "performance maps" which quantify oil characteristics over a wide range of contact conditions.

If the new data acquisition and automated control systems are not installed we will continue to operate using manual data recording and control. These are manpower intensive process and incur significant costs. Since the functions are critical to our mission we will continue with the inefficient use of assets since there is no alternative. Failure to modify the systems will increase the probability that critical test programs may be delayed because the systems cannot be supported.

If the proposed Wedeven Associates Machine 3 is not procured we will continue to use the expensive Ryder Gear test for oil qualification and service problem evaluations. Analysis will continue to be limited to measuring only the scuffing capacity of lubricants and will not allow us to develop a more comprehensive picture of a lubricant's properties. This limitation will perpetually handicap lubricant development and stagnate propulsion system improvements which could be realized through better products. Improved lubricant definition, as may be available through a "performance map", will permit development of lubricants having superior tribological properties. These improved lubricants will permit the development of lighter weight propulsion systems by providing better antiwear, improved friction and traction properties, load carrying capacity. Better oil with improved bearing and gear life properties will also lead to reduced propulsion system maintenance costs. Without a means to assess lubricant properties the inclusion of improved gear and bearing system will be greatly reduced. The upgrading of the test rigs will provide a better rate of return on investment than the combined three part effort. The WAM3 device provides added testing capability but is essentially a break even cost exchange.

000290

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Reconfigurable Cockpit Upgrade Replacement LINE: 4AA9EL4623R						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE										1	525	525	
SOFTWARE													
INSTALLATION													
OTHER													
TOTAL											525	525	

Narrative Justification:
Operational Date: June 1999
Project Initiation Date: FY99
Payback Period = 6.5 years
Return on Investment (ROI) = 8%
Average Annual Savings = $42K
Saving to Investment Ratio = .79

DESCRIPTION:

The Reconfigurable Cockpit has been purchased under FY95 CPP funds. This cockpit will benefit from upgrades including various display inserts, software upgrade to generate new displays and scenary (similar to Designer's Workbench) and the purchase of additional out-the-window databases. This will enhance the use of the cockpit in the field of human factors research.

These upgrades will be used for Human Factors evaluations as well as Advanced Tactical Cockpit concepts evaluations. The initial cockpit is currently being purchased using FY-95 CPP funds. There were additional items which were overlooked in the initial estimation of funds and therefore those items could not be purchased at the time of the original purchase. These items are being requested with this procurement.

In order to attract additional projects to use the cockpit it should be upgraded with the advanced software which is described above.

Additionally as technology changes the cockpit should be upgraded in order to be employing state-of-the-art equipment in the research of advanced technologies.

Without these upgrades additional costs will need to be incurred by the projects in order to purchase the additional software is required. Since project funding is being reduced, it may result in insufficient funds and projects not able to perform the required tasks on the platform.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Concurrent Engineering Workgroup Productivity LINE # 4W3EL0010P						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Concurrent Workgroup Equipment	1	1,198	1,198				1	500	500	1	500	500	
TOTAL		1,198	1,198					500	500		500	500	

Narrative Justification:

Operational Date: May 1999
Project Initiation Date: FY93
Cost Benefit Analysis was performed on the life of the Project:
Payback Period = 2.12 years
Return on Investment (ROI) = 33.54%
Average Annual Savings = $2,286K
Saving to Investment Ratio = 3.35

DESCRIPTION: This procurement consists of an integrated system which is being developed in several phases. In Phase I (FY92) the objective was to begin meeting current obligations of the Microprocessor Design Center, the Electronic Design and Simulation Facility, the Airframe Division Computer Aided Engineering (CAE) System, Weapon Systems Analysis System and to establish a prototype Concurrent Engineering Workgroup system. In our current phase (Phase II) the objective is to complete the obligations of each division and to expand the capabilities established in Phase I of the Concurrent Engineering Workgroup (CEW or CE) system and migrate these technologies into the other Divisions. The Phase III objective is to expand the networking environment of the Department to provide access to the key elements of the CE system. These key elements consist of: 1) a shared information model that captures complete descriptions of the product and all associated process activities and organizational resources; 2) a global object framework, utilities, and services that enable the use of the shared information model by a network of cooperating, computer-based clients; and 3) methods, tools and advisors that assist in concept evaluation, analysis, and decision making.

The Naval Air Warfare Center is actively pursuing CE projects throughout the Center. However, the technical aspects of CE are not being addressed. The three phased approach presented above will provide the foundation for CE technologies to be exploited. A key aspect of the CE technologies is the CALS initiative. The envisioned system will enable developed products to be CALS compliant and insure that the data transfer between multiple organizations, multiple disciplines, and multiple facilities will be seamless and understandable. Much of the system consists of design and analysis equipment and software. By focusing on an enterprise-wide development of tools such as CAD, CAE, CAM, and CAPP, more design iterations will occur (better quality), productivity will be enhanced (less time), and schedules will be compressed (less cost).

The National Institute for Standards sponsored an IDA report to investigate the benefits of concurrence in product development. This report stated that CE can reduce development time 30-50%, engineering changes 65-90%, time to market 20-90%, and increase overall quality 200-600%. It further stated that the productivity in organizations that adopted CE practices was up 20-110%. Industry leaders such as General Electric, Texas Instruments, Westinghouse, and Boeing are all claiming profound success by using CE technologies. This system will address the key technical issues associated with CE.
If this system is not procured the initial investment in Phase I will be nullified. There is a current investment of $879K in Phase I in the Microprocessor Design Center, the Electronic Design and Simulation Facility, the Airframe CAE System, and the Weapon Systems Analysis System. If the follow-on Phases are not implemented met, then our competitive advantage will be jeopardized, equipment and software will be outdated, inadequate and unable to execute state-of-the-art applications, NAWCWD needs to maintain the fundamental foundations to utilize CE and CALS technologies.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Unmanned Air Vehicle Altitude Facility Upgrade Replacement LINE: 4AA8EL4410P						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	475	475				
SOFTWARE							1	10	10				
INSTALLATION							1	75	75				
OTHER							1	40	40				
TOTAL								600	600				

Narrative Justification:
Operational Date: December 1999
Project Initiation Date: FY98
Payback Period = 1.1 years
Return on Investment (ROI) = 39%
Average Annual Savings = $233K
Saving to Investment Ratio = 3.89

DESCRIPTION:

The upgrade to our small engine test facility will produce extremely accurate flight environment simulation testing that is desired by both government and commercial UAV customers to reduce system development costs. With these upgrades our facility will be able to test propulsion systems and small air vehicles in any conditions that might be encountered in actual use, greatly reducing risk and loss of equipment. With the ability to do all required environmental testing at our facility, set up costs and schedule impacts incurred by using multiple facilities will be eliminated. This capability combined with upgrades to both our dynamometers and our fuel flow measurement equipment will make our test facility very desirable to the fast growing military and commercial UAV market.

With our current small engine test facility unable to create cold and hot day conditions, many potential customers will overlook our facility, as these conditions are critical to mission success required to verify equipment performance. Most UAVs use small propellers to produce thrust and it is very important to test propulsion systems with the propeller operating in a realistically simulated airstream (for both safety and performance reasons). Customers are currently severely limited in test facilities that can test with both the propeller and the dyno and correlate this data prior to flight testing. Without this capability the cost of system development is greatly increased and performance can only be predicted. The incorporation of eddy current dynamometers and increased accuracy fuel flow meters will greatly increase transient testing of small engine propulsions systems. Without such equipment, mission performance must be extrapolated from steady state data and is not verified under test conditions. This transient operation testing is very important as a large portion of the UAV mission consists of climbs, decents including takeoffs and landings. The incorporation of the exhaust gas intercooler is required if small UAV turboshaft engines are to be tested as our current exhauster cannot tolerate gas turbine exhaust temperatures. With more and more UAVs using turboshaft engines (due to inherent heavy fuel operation), we must not limit our testing to piston and rotary engines or an increasingly large portion of future UAV engine testing will occur elsewhere. This is important because once a customer is satisfied with previous testing, he will return, provided the facility can test his equipment.

000003

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Dynamic Crew-System Integration Evaluation Facility Productivity LINE: 4AA8ELA611P						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	526	526	1	400	200	
SOFTWARE							1	140	140	1	110	110	
INSTALLATION							1	35	35	1	30	30	
OTHER							1	25	25	1	20	20	
TOTAL								726	726		560	560	

Narrative Justification:
Operational Date: May 1999
Project Initiation Date: FY98
Payback Period = 1.5 years
Return on Investment (ROI) = 29%
Average Annual Savings = $368K
Saving to Investment Ratio = 2.85

DESCRIPTION: This proposal is for the development of a Dynamic Crew-System Integration Evaluation Facility (DCSIEF) to support Crew-System Integration evaluations during the development process. DCSIEF is intended to support performance evaluations of the cockpit control-display interface, night vision devices (NVDs), helmet mounted displays (HMDs), cockpit lighting, cockpit transparencies and helmet trackers, and crew workload and situational awareness measurement will be additional capabilities of the DCSIEF. These capabilities are now separately supported by a combination of laboratory, ground, and flight tests. However, the DCSIEF will unify and enhance the evaluation capability. The facility will be an engineering/research class fixed base simulator with a visual scene projected both in the NVD spectrum and visible range. Ambient illumination will be integral to emulate all anticipated conditions. Cockpits will be provided, using rapid prototyping technology, with the level of fidelity required to meet the goals of the planned evaluation. Sophisticated data extraction, recording, and analysis will be used to provide quantitative metrics of system performance. Absolute control over the environment, mission conditions, and scenarios will be available.

The crew-system RDT&E process is complicated by the ever increasing complexity of modern aircraft. Weapon system complexity is compounded by avionics, sensors, and weapons, in addition to the exacting mission requirements of threat, environment, cooperative engagements and mission scenarios. The crew-system development process has suffered by not having early, meaningful participation during the design phase due to the lack of comprehensive design, fabrication, and evaluation support tools. There has been limited success in improving this process. Crew-system tests have successfully addressed critical or obviously deficient design elements after the fact. Early involvement is crucial to effective crew-system integration, and this new facility will be a judicious use of valuable dollars with high payoff.

Even real-time flight tests do not account for inadequacies in comprehensive ground and simulator tests. The complexity of the test limits the available data to qualitative and, in many cases, anecdotal comments. The presence of actual night sky illumination and compatible cockpit lighting are, for example, offset by lack of experimental control over illumination levels. The night sky changes significantly with moon position and phase and weather. Typical flight test scenarios are time-limited, spread over several moon phases, and flown by different test pilots. This resultant data cannot be accurately correlated. The length of the flight test period is insufficient to characterize either an NVD or an HMD, much less a fully integrated helmet.

The DCSIEF will maintain a stand-alone capability while also being upwardly compatible with the Manned Flight Simulator at Patuxent River and downwardly compatible with many of the less elaborate rapid prototyping devices at DOD labs and contractor facilities. The DCSIEF will be linked directly to the Air Combat Environment Test and Evaluation Facility complex and, as such, will be available for participation in all full-mission simulations.

For the first time in the history of RDT&E, we will have the capability to evaluate all aspects of crew-system integration, as required, during various phases of the RDT&E cycle. This facility will help avoid an intolerable loss of life and equipment assets as a result of inadequate crew-system integration. Current efforts require extensive/repetitive simulation activities at the contractor's location. This effort will bring these functions in-house where they are directly accessible to members of the Naval Air Systems Team. The DCSIEF will reduce cost and increase productivity. This effort builds on other successful efforts executed by this office. As a result of I&M and CPP investments, we have become the Navy and Marine Corps lead for NVD R&D. We are responsible for NVD cockpit lighting evaluation support to the USN, USMC, USA, USAF and USCG. This office is responsible for all safety of flight decisions pertaining to NVDs and compatible lighting.

Current methods are not integrated for systems engineering. Existing equipment and facilities assets do not provide sufficient capability to adequately conduct the myriad of tests necessary to evaluate the effectiveness of today's complex weapon systems. Our aircraft systems are falling victim to overwhelming crew-system integration complexities. We need the capability to predict or detect design deficiencies early in the program so that corrective action can be taken in a timely, cost effective manner. The cost savings inherent in integrated design and evaluation far outweigh the cost of developing the DCSIEF, and are intangible when compared with the cost of lost life and equipment assets. The crew-systems functional area is under assault by the USAF R&D community. They, however, are not closely aligned with their T&E and integration assets. This facility and Navy Crew System's total integration, as a result of CAO, will allow us to strengthen our technological command of this area. The customer, the user, the competency and the NAST will benefit as a result.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Helicopter Drive Train Facility New Mission LINE: 4AA8EL4460N						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	740	740				
SOFTWARE							1	100	100				
INSTALLATION							1	110	110				
OTHER													
TOTAL								950	950				

Narrative Justification:

Operational Date: March 1999
Project Initiation Date: FY98
Payback Period = 1.3 years
Return on Investment (ROI) = 33%
Average Annual Savings = $313K
Saving to Investment Ratio = 3.29
DESCRIPTION:

This system is intended to increase the capability of the Helicopter Test Facility by automating the control and data system and increasing it's power absorption from 9,000 Shaft Horse Power to 17,500 Shaft Horse Power to match the needs of the Navy's inventory. The system will consist of a new speed increase gearbox designed to fit in the current design envelope of the facility and an automated control and data system.
The control and data system will be designed to operate both the test facility and the test article while monitoring system health and collecting data . This will allow for more accurate duplication of the flight test envelope and increase the margin of operational safety. The data acquisition system will greatly increase the accuracy and quality of the data .

The current Helicopter Test Facility is limited to testing aircraft of 9,000 Horsepower. Larger helicopters in the inventory have growth potential of up to 17,500 Horsepower and cannot be tested in this or any other facility. The increased capacity step-up gearbox will bring the facility up to" state of the art standards". The potential for attracting both military and commercial customers will be significant and this improved capability will allow us to meet our current customers needs.

Operating this test facility in its current configuration is labor intensive. A typical test requires a project engineer, a test engineer, and five aircraft mechanics. With the automated control and data system the facility will have the capability of operating with a project engineer and two aircraft mechanics. Operating the facility in an automated mode will greatly increase operational efficiency which will decrease indirect charges. The capability to automatically monitor and control the facility and test article will also reduce the potential of damage caused by operational error or system failure thus reducing repair cost and induced test article problems. Acquiring data automatically will increase the quality of data, allow us to increase the amount of data collected, allow for easier establishment of equipment health monitoring trending and reduce the time required to record and interpret test results.

The increased capacity of this test facility along with the automated control system will bring the facility up to state of the art standards and become a very attractive facility for both military and commercial customers . The increase in operational efficiency will make the system very cost effective to operate and allow it to meet or exceed our customers needs. Increase in Horsepower capacity will lend a uniqueness unsurpassed in the helicopter testing arena.

In it's current configuration the system is both expensive to operate and limited in its power absorption capability. Without these improvements the Navy will not have the capability to test future high horsepower helicopter drive systems in a test facility. Flight test would be the only option. The use of flight testing for concept exploration or to verify hardware life issues is both dangerous and costly. The current facility had been used in the past to identify mechanical design defects and to explore and verify improvements flight systems. The successful identification and redesign of the drive clutch on the H-3 Presidential helicopter is an example of how this system was used. This test could not have safely been performed with flight testing.

Without increasing the capability of this facility the Navy could lose an important asset and it's position as a leader in helicopter drive system testing and evaluation.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C Synthetic Aperture Radar Motion Comp & Reg New Mission LINE: 4AA8EL455IN						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	582	582				
SOFTWARE							1	50	50				
INSTALLATION							1	125	125				
OTHER							1	18	18				
TOTAL								775	775				

Narrative Justification:
Operational Date: April 1998
Project Initiation Date: FY98
Payback Period = 4.0 years
Return on Investment (ROI) = 24%
Average Annual Savings = $185K
Saving to Investment Ratio = 1.19

DESCRIPTION: The Advanced Multiband Polarimetric Synthetic Aperture Radar (SAR) Processing System is a hardware and software system component upgrade/replacement that is required to keep the NAWC P-3 SAR laboratory's processing capability in step with recent sponsor funded system improvements. This procurement includes a required high speed interface upgrade to the High Density Digital Recorder, additional internal memory (RAM) for the Silicon Graphics Onyx workstation, additional mass storage (Winchester and Magneto-Optical disc capacity) for image data storage, a networked satellite workstation/terminal to the Onyx, and application specific software for radar image formation, manipulation, formatting, analysis, storage/retrieval, and geocoding of tactical surveillance data to fixed earth coordinates (lat/long, etc.). Installation of this equipment and software will provide essential enhancements of the P-3 SAR laboratory to process multiband polarimetric SAR (POLSAR) data as well as data from other related radar/EO projects within the 4.5.5.1/4.5.5.2 Avionics Radar and EO Competency areas. The system will provide for a much needed faster data transfer capability from the Honeywell 101E HDDR to the host workstation (required for the new P-3 SAR UWB-UHF mode upgrade), a more efficient and cost effective means of extracting, processing, manipulating, and statistically analyzing sensor data, and a more flexible and modern means of transferring data products to a variety of media formats to match user needs. This approach to providing the required improvements in the P-3 SAR laboratory replaces aging and inefficient equipment currently used to perform the above tasks; and, in the case of the new P-3 SAR UltraWideband UHF mode (UWB/UHF), provides a critically needed capability where none currently exists, all at significantly reduced operating and maintenance cost (see section Q below). This approach also elliminates dependence on the Central Computer System, cutting costs dramatically (est. $90K/yr - see section Q), and accelerating the payback period accordingly. The existing equipment is over 10 years old and is currently operating in a degraded status, is extremely expensive to maintain, is growing increasingly unreliable, and in some cases is unable to provide required capabilities. The upgraded laboratory, when completed, will provide significantly improved throughput, will provide capabilities which are required to meet current and new sponsor needs in FY98 and which are currently unavailable with the existing system, and will provide an important cost savings impact in the process.

The replacement and upgrade of obsolete equipment, the enhancement of sensor application processing, and the significant improvement of sensor data handling (required for SAR UWB-UHF mode data), all will provide the NAWCAD and Navy with a modern essential facility for the collection and post processing of multiband/multipolarization SAR data. Although difficult to quantify, current plans include 14 major tests as a minimum over the next 18 months. These estimates (considered conservative) are distributed among the agencies as follows: USAF (4), Navy (3), DIA (1), ARPA (3), and EPA (3). This does not include new initiatives which are currently still in discussion. It is unlikely that the SAR processing facility, in its current configuration, can support such an aggressive workload without the proposed upgrades.

Without this upgrade to the SGI Onyx Workstation-based P-3 SAR laboratory, the facility will be unable to provide NAWC-AD with an UltraWideBand UHF (UWB/UHF) processing capability nor similarly data intensive sensor processing capability. This functionality is currently at the forefront of Joint 6.2 littoral surveillance R&D with the NAWC-AD P-3 being the only DoD platform with such high resolution, polarimetric, UWB/UHF radar imaging capability. Furthermore, this upgrade is required to provide a cost effective SAR data processing and management facility for producing SAR imagery in all four bands and all operating modes as well. The upgraded capability is required in FY98 in order to avoid jeopardizing the continued sponsorship of ARPA and ONR, and to avoid limiting the utilization/sponsorship/funding by other agencies such as USAF, EPA, Army, and DIA who require the use of the P-3 SAR's advanced multiband/multimode sensor capabilities. Currently, the P-3 SAR Project is committed to major exercises for the Navy as well as ARPA, USAF, DIA, and EPA in FY95; and for FY96, major exercises are planned for the Navy, ARPA, USAF, and EPA as a minimum. It is expected that R&D efforts in subsequent years will be of a similar nature, particularly as planned Navy and ARPA funded system improvements during this period will keep the P-3 SAR test bed on the cutting edge of Joint 6.2 radar imaging technology efforts.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. 500 HP Drive Stand New Mission LINE: 4AA8EL4440N						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	533	533				
SOFTWARE													
INSTALLATION													
OTHER													
TOTAL								533	533				

Narrative Justification:

Operational Date: December 1998
Project Initiation Date: FY98
Payback Period = 8.3 years
Return on Investment (ROI) = 11%
Average Annual Savings = $58K
Saving to Investment Ratio = 1.09

DESCRIPTION:

This submission is to replace one 300 HP drivestand. A 500 hp drivestand will provide a new capability to test the next generation aircraft generator at loads up to 540KVA. The drivestand will consist of a 500 hp motor, controls and instrumentation, load bank, and gearbox assembly.

The largest drivestand located at the Electric Power Systems Division is 300 hp. This drivestand is adequate for existing aircraft gneerator testing, but will not meet requirements for proposed new aircraft generators. Near term aircraft such as the F/A-18E/F, E-2C Upgrade and JSF are already projecting aircraft in excess of 90 KVA which is the largest rating in the Navy inventory. Next generator aircraft such as the EX (E-2C replacement) are predicting generating systems greater than 500 KVA. To meet these needs for testing aircraft generators, a 500hp drivestand is needed near term, and a 1000 hp drivestand is required for long term needs.

The upgrading of obsolete equipment, increased capability, and automation will permit the department to remain state of the art and accomplish its assigned mission. these upgrades will result in higher quality, and increased accuracy and efficiency in electrical power system testing. In addition, these upgrades will permit the department to remain an independent DOD test laboratory.

The Electrical Power Systems Division is the only DOD test and evaluation activity with the capability to conduct full qualification testing of aircraft electrical power systems. Without the 500 HP drivestand we will not be able to test the increased capacity generators proposed for new aircraft designs.

Without the above upgrades and replacements the Electrical Power Systems Division Facility improvements will be postponed causing the facilities to become obsolete and its usefulness to deteriorate.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)												A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Side by Side Reconfigurable Cockpit New Mission LINE: 4AA9EL4322N					D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
HARDWARE										1	538	538
SOFTWARE										1	457	457
INSTALLATION												
OTHER												
TOTAL											995	995

Narrative Justification:

Operational Date: January 2000
Project Initiation Date: FY99
Payback Period = 3.56 years
Return on Investment (ROI) = 21%
Average Annual Savings = $212K
Saving to Investment Ratio = 20%

DESCRIPTION:

Build a side by side (SBS) generic high fidelity multiply reconfigurable cockpit (SBS-MRC) at MFS. Provide high fidelity cockpit control system dynamics for control stick/column, rudder pedals and throttle/cyclic control effectors. The cockpit must be capable of representing a wide variety of Navy, Marine and commercial aircraft which use 2 and 4 seat SBS configurations.The cockpit must be easily reconfigured interfaced with all five cockpit stations at the MFS. The cockpit front console must be configured with touch sensitive screens or actual aircraft cockpit hardware and simulation gauges. Using simulation gauges different modular consoles would be required to support different fixed and rotary with aircraft models. Overhead and lower consoles would contain actual or simulation control heads. The control heads would be modular and capable of supporting a different aircraft model configurations. Cockpit and visual interface requirements would be met using existing MFS simulations. The cockpit would be capable of supporting touch sensitive screen requirements. MFS in-house developed software and computer systems running Virtual Avionics Prototyping System (VAPS) software would be used to create unique cockpit displays and instruments.

Current simulation costs at MFS are $400/hr. Actual flight testing costs are nominally $4,000/flt hr (not including lobor and ground support). It is conservatively estimated that 10% of actual flight tests could be reduced using high fidelity simulation. Using an estimate of 5,000 flt hrs/year (25 pilots at 200 hrs/yr) at a savings $3,500 per flt hour with 500 flt hours saved (10%) a savings of $1,750,000 per year is projected. With the exception of the V-22, the MFS has no SBS high fidelity cockpit simulation capability. This has had a significant negative impact on ability to support existing and new customer requiements for several SBS fixed and rotary wing aircraft platforms. In particular, Rotary Wing simulation support,with the exception of the V-22, has been very limited due to the lack of any high fidelity helicopter cockpit capability. While MFS has successfully fielded two AH-1W Cobra Aircrew Procedures Trainers for the Marines there is no forseeable possibility of building an AH-1W cockpit that will permanently reside at the MFS because of funding which is not expected to be available. It is expected that the availability of a generic SBS cockpit which is easily configured to a particular platform will be highly attractive to support current and future T&E and R&D requirements because of the wide range of fixed and rotary wing platforms that are 2 or 4 seat SBS configurations.

Customer impact, if not funded, will be continued reliance on the traditional methods of using flight testing to support existing and new aircraft development. The customer will continue to pay the long term high costs of actual flight testing or higher costs of relying on contractor simulation support during the life cycle of an aircraft platform. As is often stated but nevertheless true, high fidelity simulation can significantly reduce program costs if used in a complementary manner with actual flight testing by eliminating a significant percentage of planned flights to accomplish tasking. In some cases flight safety may be decreased if actual flight testing is performed in high risk areas because simulation does not have the required fidelity cockpit pilot vehicle interface. Experience at MFS has proven that it is more cost effective for the customer to have a government supported simulation/simulation cockpit capability at MFS during the life cycle of an aircraft platform for fleet support as contractor simulation support decreases and/or becomes more expensive.

In particular, the long term high fidelity support of rotary wing simulation, which is minimal now at MFS, will further stagnate. An unfortunate fact is that in many cases the customer may not realize that long term costs are significantly higher to him because he is unwilling or unable to support up front costs of creating a high fidelity simulation/simulation cockpit in the first place.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Competitive Engineering Environment Replacement LINE # 4W4KL0401R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Competitive Engineering Equipment	1	623	623	1	850	850	1	1,250	1,250	1	1,400	1,400	
TOTAL		623	623		850	850		1,250	1,250		1,400	1,400	

Narrative Justification:

Operational Date: July 1999
Project Initiation Date: FY94
Payback Period = 2.25 years
Return on Investment (ROI) = 39.31%
Average Annual Savings = $1,895K
Saving to Investment Ratio = 1.97

DESCRIPTION: The Competitive Engineering Environment consists of numerous workstations, personal computers, file servers, computer peripherals, software, and data bases connected via a network infrastructure and scattered organizationally throughout the Department. This procurement will take place over a four year period, beginning in FY 1994. The goal of this procurement is to continue to increase the availability of this working environment to department personnel so that tasks can be accomplished in a more cost effective manner with improved accuracy. The use of this environment has already resulted in better communication, increased savings, and improved product quality. The plan for FY 1995 is to enhance the Competitive Engineering Environment by performing the following specific items: (1) Expansion of the network to include outlying buildings not yet networked; (2)an electronic library; (3) User documentation for use of the network and network capabilities; (4) updating obsolete equipment; (5) Implement a shared Application program & server; (6) Upgrade Network Management hardware and software tools.

The enhancement of the Competitive Engineering Environment will provide better communications both inside and outside the department and will provide new, more efficient tools for personnel. These tools will provide the capability for such things as Department wide inventories, databases and eventually real-time data gathering. These tools will become increasingly important as we address the increased emphasis on safety and the protecting of our environment. The goal is for this environment to eventually provide the capability for Department wide databases such as explosive inventories, Material Safety Data Sheets, hazardous waste accumulation tracking, and Standard Operating Procedures (SOP). Another goal is the eventual ability to provide computer control to energetic material processing and evaluation. The addition of network monitoring software and hardware will reduce the workload of the network administrator, allowing more time to be devoted to other aspects of the network. The addition of the modeling software and hydrocodes will enable engineers and technicians to use state-of-the-art tools to visualize concepts, determine critical design and performance parameters, simplify the development process by reducing trial and error testing, and reduce the cost of prototype hardware. The addition of the specifications and standards on line will permit personnel to have access to current specifications in a timely manner without having to travel to other locations.

These enhanced capabilities will provide continuous improvement in mission areas and will ultimately lower administrative and project costs and increase the efficiency of the department's personnel. With today's military environment, it has become increasingly important to improve our ability to deliver Ordnance and Propulsion System using fewer personnel resources, fewer funds, and shorter schedules. The Competitive Engineering Environment provides modern and sophisticated tools with which to accomplish this.

This is based on the concept that planning for the future is better than crisis management and that continuous improvement is critical. The Competitive Engineering Environment exists and is in use. Expanding this engineering environment to include additional features and capabilities will provide more capability for NAWCWPNS personnel. If not expanded, this capability will be postponed causing the system to become obsolete and its usefulness to deteriorate. NAWCWPNS may be left in a position where compliance to increasingly difficult requirements will not be possible. NAWCWPNS will lose its ability to be leaders in the development and testing of systems using energetic materials.

000269

CAPITAL PURCHASES JUSTIFICATION
(Dollars in Thousands)

A. FY1998/1999 BIENNIAL BUDGET	
B. Department of the Navy/Research & Development	C. Geographic Information System Replacement LINE # 8W4KL0517R
	D. NAWCWD

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Geographic Information Equipment	1	316	316				1	400	400	1	400	400
TOTAL		316	316					400	400		400	400

Narrative Justification:

Operational Date: Continuous
Project Initiation Date: FY94
Cost Benefit Analysis for the FY97 Module is as follows:
Payback Period = 1.4 years
Return on Investment (ROI) = 59%
Average Annual Savings = $390K
Saving to Investment Ratio = 3.0

DESCRIPTION: This is an archival/retrieval system that focuses on relating facilities/real property textual data to mapping and design graphical data. Various databases will be incorporated into the GIS including mapping, utilities, real estate, capital improvements, and environmental data. The Geographic Information System (GIS) will be compatible with Tri-Service Computer Aided Digital Design (CADD)/GIS technology. The system will allow for the transfer of spatial data between all Departments within the Tri-Service community as well as the adjacent local, state and federal agencies.

This system allows comprehensive planning (master planning); real estate management; hazardous waste management; natural and cultural resources management and other environmental program management; utilities management; training and testing operations; land and air space use compatibility; and installation restoration/closure.

The cost benefit derived is based on the cost avoidance of the manpower required to maintain, manage and operate the facilities and other resources as described.

Disapproval of this request will have an initial detrimental impact on Public Works and the Environmental Project Office who will be the prime users of the initial phases of the GIS system. Disapproval will also have a negative effect on other potential users throughout the Station. As the expanded capabilities of the system are implemented, more impact will take place because the present system is antiquated and time consuming to use.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Signal Processing System Replacement LINE #4W7KL6152R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Signal Processing Equipment				1	2,017	2,017	1	2,005	2,005	1	1,725	1,725	
TOTAL					2,017	2,017		2,005	2,005		1,725	1,725	

Narrative Justification:

Operational Date: April 1997
Project Initiation Date: FY97
Cost Benefit analysis for the FY97 module is as follows:
Payback Period = 2.5 years
Return on Investment (ROI) = 35%
Average Annual Savings = $710K
Saving to Investment Ratio = 1.7

DESCRIPTION: This system is to complete the signal processing capability which is integrated into four separate facilities..
Phase I: The initial phase is to store, process and analyze imagery. Equipment will be purchased for the Data Collection (DCF) and Image Processing Facility (IPF) as well as initial acquisitions for the Sensor Characterization (SCF) and Signal Processing Evaluation Facilities (SPEF). (3/97 to 9/97)
Phase II: The DCF will be completed by the end of Phase II. The IPF will have all the computing power available to conduct high-speed simulations with the data provided by the DCF. (1/98 to 9/98)
Phase III: The last phase in FY99 is the Sensor Characterization Facility (SCF), which will evaluate the sensors performance. (3/99 to 9/99)
Future weapon systems are using multiple spectrums to do target and background discrimination. Current data acquisition and digital storage methods have been found to be inadequate to support modern image processing needs. Much of the current storage media is analog, which converts to digital with far fewer bits of accuracy than needed. Upgrading a two-color imager will make it compatible with the digital recording media. An interface is required to connect a suite of sensors in an F-18 aircraft pod to the digital recorder. To process this large volume of data and execute complex algorithms, high-speed computing power is required. The SCF will be used to accurately determine the characteristics of the sensors that are crucial in developing algorithms. The SPEF will take the algorithm developed in the IPF and partition them into the hardware and software architecture. This process will decrease development time significantly. Software tools will be used to develop a detailed simulation of the seeker and guidance section to evaluate the algorithms performance against the collected and simulated data streams. A special purpose instrumentation van will be required to house and transport the equipment to the test site, which may be on the local ranges or at a remote site. External communication requirements have not been met. A high-speed network is required for remote sites to access the high-end workstation and to provide the needed linkage to external agencies. Improved signal processing can have a direct impact on weapon performance. Without a commitment to a significant upgrade to the signal processing capability, there will be a rapid loss in ability to meet the processing needs of weapons seekers dependent on focal plan arrays, LADAR systems, passive MMW imaging, and high resolution radar systems. Cost avoidance was based on current methods of contracting for services to perform these functions, and the alternative method was evaluated on the basis of leasing some of the equipment.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Survivability Div Computer System Replacement LINE #4W7KL6014R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Survivability Div Computer Equipment				1	551	551	1	352	352				
TOTAL					551	551		352	352				

Narrative Justification:

Operational Date: October 1999
Project Initiation Date: FY97
Payback Period = .5 years
Return on Investment (ROI) = 176%
Average Annual Savings = $1,572K
Saving to Investment Ratio = 8.8

DESCRIPTION: The Survivability Division has four six-year old computer networks. The primary use of the networks is the running of complex missile/target of gun/target models to determine aircraft survivability. These networks address a broad spectrum of requirements, which are (1) unclassified network used for project management, local and national data exchange, pre/post-processing of analytical data, report writing, and provides access to international unclassified networks; (2) classified (SECRET) network to run the sophisticated simulations and models needed to evaluate system survivability; (3) TOP SECRET network isolated to run models and simulations at this classification level; (4) classified network for evaluating advanced projects. The four networks are considered to be at least two generations behind the current computing technology capability, and require upgrading.

This is a two-phased project. Phase I (FY97) to start upgrades of the four systems (10/1/96 to 4/1/97). Phase II completes the upgrades (10/1/97 to 4/1/98). The limited ability to respond to additional processing and graphics, the Air Force Studies and Analysis Agency is currently performing survivability analyses of Navy aircraft. The upgrade will meet the increased demand for more accurate analysis, as well as graphical analyses, the examination of more contingencies, simultaneous examination of missile, gun and directed energy threats. The deliverable product is a probability of kill (Pk) envelope that provides the customer with a graphic summary of the survivability of a given airborne weapon system, as a function of the position of that system with respect to a given ground-based threat. It is estimated survivability analysts will be able to perform at least twice as many analyses with the proposed upgrade. An alternative based on the use of contractor support and leased computer equipment is not cost effective.

The existing system has a marginal capability to meet the current needs of the Survivability tasking. It is anticipated that the demand for Pk envelopes and associated analyses will be greater than NAWCWD can meet without the system upgrade. Since this is the primary source for such data for Navy aircraft weapon system acquisition programs, the inability to supply this data would require Navy customers to find alternate sources.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)												A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. ATR Rapid Prototyping Environment for Real Time ATR System Replacement LINE #4W7KL6171R					D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ATR Equipment							1	865	865	1	800	800
TOTAL								865	865		800	800

Narrative Justification:

Operational Date: Continuous
Project Initiation Date: FY97
Cost Benefit Analysis for the FY97 module is as follows:
Payback Period = 1.2 years
Return on Investment (ROI) = 70%
Average Annual Savings = $349K
Saving to Investment Ratio = 3.5

DESCRIPTION: The Rapid Prototyping Environment for Automatic Target Recognition (ATR) Real-Time Systems is a hardware/software environment which will greatly improve the current method of designing and testing Real-Time systems for ATR applications. It will reduce the cost of Real-Time developments planned between FY96 and the year 2000 by providing a rapid prototyping environment for systems to be more efficiently designed, configured, and tested. The system consists of (1) on-line mass data storage, (2) high throughput data channel, and (3) Real-Time parallel embedded processor. This system will provide the necessary interfaces so that Real-Time and nonreal-time processors can be added. With these additional processors, this system will be compatible with the Configurable Real-Time Development Environment currently being developed by the Army for their real-time ATR developments. This system will also be compatible with the Real-Time Common ATR Architecture under development by the Navy, Army and the Air Force.

The following assumptions were used as the rationale for the economic analysis. Three systems will be developed--(1) Maritime ATR System, FY97.; (2) Terrestrial ISAR ATR System, FY98; (3) Real-Time Battle Damage Indication, FY99. The overlap in the development years means that each project will need a separate set of hardware using the present development method. Due to the availability of existing equipment, the Maritime ATR System cost is less than the alternate method. The current method costs for the Battle Damage Indication System and Terrestrial ISAR ATR System are greater because present processors cannot be used in the later systems. The alternate method of having a contractor perform the development requires more labor than the proposed method. This is due to the need to bring the contractor(s) up to speed on the algorithms and the cost of Government personnel to monitor the algorithms and implementations.

ATR projects are currently transitioning from laboratory systems to real-time demonstrations and the Rapid Prototyping Environment is a critical component of successful transitions. If this system is not procured, demonstration projects will be unable to accomplish these critical transitions.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. DMS Technology Insertion Replacement LINE: 7AA8KL7233R						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	1,654	1,654	1	1,690	1,690	
SOFTWARE							1	689	689	1	704	704	
INSTALLATION							1	740	740	1	755	755	
OTHER													
TOTAL								3,083	3,083		3,149	3,149	

Narrative Justification:
Operational Date: June 1998
Project Initiation Date: FY98
Payback Period = 3.3 years
Return on Investment (ROI) = 28%
Average Annual Savings = $2,577K BASED ON LIFE OF PROJECT
Saving to Investment Ratio = 1.39

DESCRIPTION:

DMS, an x.400 based messaging system will replace Autodin as well as proprietary email within DOD. Electronic Mail is recognized throughout the Navy as the primary mechanism used by all teams to communicate. This DMS Technology Insertion program supports various NAWC-AD sites (Patuxent River, St. Inigoes, Lakehurst, and Trenton) and the connectivity to other DOD sites including, but not limited to, NAVAIR, NAWC-WD (China Lake and Point Mugu), NAWC-TSD, NAVDEP (Jacksonville, North Island, Cherry Point, etc.), and other contractor sites. These E-Mail systems must comply with the X.400 and X.500 open systems standards that will enable seamless connectivity to the various DOD organizations. This investment will position us with the correct hardware and software to migrate to the Defense Messaging System (DMS) as mandated for both the clients and the backend systems. The systems include the hardware and software to support the local Post Offices, client workstations and peripherals, the Network Operating System, Message Hubs, Remote Dial-In/Dial-out solutions, software technology upgrades and Off-Site connection devices.

The Information Management Department within the NAWCAD has taken the lead role in the support and integration of E-Mail for all NAWC-AD sites. This requires us to maintain systems compatible with the current industry standards and to be ready for future requirements (DMS) as they become available. Currently the software being used is being re-written by the manufacturer to incorporate many new features including higher reliability, centralized and decentralized administration functions, compliance to industry standards (X.400/X.500), and a client-server architecture. This will greatly improve the capabilities of the E-Mail system for both the on-site users as well as those users that are "on the road". This will also position us on the necessary path to DMS. Hardware will need to be updated to take advantage of the software capabilities and adherence to DMS standards. The NAWCAD currently has over 11,000 desktop computers used by engineers, scientists, administrative personnel and management to perform business and scientific functions. Continual updates to the hardware and software is mandatory for NAWCAD to be in compliance with industry standards and DOD mandates.

All users within the NAWCAD community rely on the electronic mail system to communicate with team members located around the world. Through email they are able to reliably send messages with attachments and have responses back in a timely fashion thereby increasing productivity and giving the customer's additional time to work on other project related tasks.

If the procurement is not made, NAWCAD will not be able to comply with the mandatory DMS compliance requirement. This input is being submitted based on the concept that planning for the future is better than crisis management and that continuous improvement in our email system is critical.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Computer for Computational Analysis New Mission LINE: 4AA8KL4300N						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	650	650				
SOFTWARE													
INSTALLATION													
OTHER													
TOTAL								650	650				

Narrative Justification:
Operational Date: February 1998
Project Initiation Date: FY98
Payback Period = 1.53 years
Return on Investment (ROI) = 55.99%
Average Annual Savings = $364K
Saving to Investment Ratio = 2.8

DESCRIPTION:

Computer is a scalable parallel computer with 16 High-Speed Processors, and 2 GB of memory. Computer is classified as a mini-super computer which requires no special facilities or support personnel. It will be located in the Aeromechanics Computer Facility, (Bldg. 2187 at Pax) with air conditioning and power requirements well within the existing utility service designed into the Facility.

Use of current in-house computer, NASA computer systems and DoD High Performance Computing Centers is far short of our current requirements. The computational analysis being conducted in support of research and project support tasks has dramatically increased over the past three years, overwhelming our current capability. This computer will support the computational requirements associated with four current tasks within the Air Vehicle Technology Program (5 MYRS), fleet project support associated with the integration of new stores onto fleet aircraft (2MYRS), and four ILIR tasks (2MYRS), in addition to new work associated with analysis of ship airwake characteristics for both carrier landing of fixed wing aircraft and destroyer landing of helicopters, and new requirements of NAVAIR for analysis of aircraft aerodynamics with damaged or missing aerodynamic surfaces. These two additional tasks alone will expand our requirements by an additional 40%. As a result, the need for this computer is critical.

Significant benefits will be realized with increased productivity and efficiency. More computational runs for a particular task will be possible, thus providing a far better product to our customer. Since it will reside here, as opposed to a networked system, for instance, maximum efficiency will be obtained by 24 hour per day use without having to send massive data files over data transmission lines, which is a very great bottleneck in this type of work. Even more significant, however, is the increased amount of business we can accept and the opening of new business bases, primarily in developing unsteady airwake data associated with landing helicopters aboard aviation capable destroyers. This represents a tremendous business opportunity in the form of the various destroyers that require this type of analysis for each helicopter that lands aboard those ships. Failure to acquire this computer will severely restrict our business development associated with the use of computational fluid dynamics. We have spent the past eight years in developing such a capability, and are currently advancing the state-of-the-art in computational analysis with a reputation that is now recognized nationally and now being sought by our NAVAIR sponsors on fleet problems. Our current requirements exceed our current capacity, with any new tasks, two of which are currently in final negotiations, being impossible to undertake. This computer is critical to the continued development of this high visibility, highly successful business base.

CAPITAL PURCHASES JUSTIFICATION
(Dollars in Thousands)

A. FY1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Research & Development

C. ASQ-212/222 Laboratory Computer Replacement
LINE: 4AA9KL4133R

D. NAWC

Element of Cost	FY 1996 Qty	FY 1996 Unit Cost	FY 1996 Total Cost	FY 1997 Qty	FY 1997 Unit Cost	FY 1997 Total Cost	FY 1998 Qty	FY 1998 Unit Cost	FY 1998 Total Cost	FY 1999 Qty	FY 1999 Unit Cost	FY 1999 Total Cost
HARDWARE										1	735	735
SOFTWARE												
INSTALLATION										1	15	15
OTHER												
TOTAL											750	750

Narrative Justification:
Operational Date: October 1999
Project Initiation Date: FY99
Payback Period = 3.1 years
Return on Investment (ROI) = 29%
Average Annual Savings = $216K
Saving to Investment Ratio = 1.4

DESCRIPTION:

The current VP Maritime Patrol aircraft is undergoing an upgrade through the Avionics Improvement Program or AIP which consists of a major sensor suite upgrade as well as converting the current P-3C UIII ASQ-212 airborne computer to an AIP unique ASQ-222 configuration. The contract is with Lockheed-Martin(formerly LORAL/formally UNISYS, Eagan, MN.) and does not include any extra airborne computers for lab use at the NAWC for RDT&E. Additionally, there are no extra UIII ASQ-212 airborne computers available for the labs (only bought computers for aircraft).

Since there are no extra ASQ-212/ASQ-222 assets available under current NAVAIR/Lockheed-Martin contracts, this CPP request is to contract directly for a laboratory emulation of the ASQ-212 and ASQ-222 airborne computers. This emulator would consist of a rack mounted common backplane with unique I/O sections switchable depending on configuration desired. The hardware suite would be transparent to the software. This proposal for $750,000.00 vice $1,100,000.00 for a AN/ASQ-212 and AN/ASQ-222 airborne computers.

The current inventory of available AN/ASQ-212 airborne computers was purchased only for fleet deployable aircraft. No AN/ASQ-212's were purchased for the lab or trainer community. Currently, the MSA project is using a pre-production version of this computer for software development. No other AN/ASQ-212 assets are available, putting the MSA P-3 lab at risk (i.e., at a certain time, pre-production equipment becomes no longer supported by the supply system). Purchasable AN/ASQ-212 computers are not available.

Addition of this system will allow the NAWC to provide a RDT&E facility without draining scarce fleet assets.

Without this system, the MSA project would not have access to an AN/ASQ-222 asset and probably could not be a viable player in the AIP RDT&E effort, thus loss of NAWC business as well as future P-3 work is a reality.

Programs/Sponsors: The current and future MSA P-3 or VP facilities is sponsored by both PMA-290 and in part by PMA-264 for UIII and SASP work. Additionally, the VP facilities will be located at Building 2185 at Patuxent River and will support UIII as well as future projects such as AIP.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Automated Warehousing Productivity LINE: 8AA9KL8015P						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE										1	400	400	
SOFTWARE										1	80	80	
INSTALLATION										1	20	20	
OTHER													
TOTAL											500	500	

Narrative Justification:

Operational Date: December 1999
Project Initiation Date: FY99
Payback Period = 3.0 years
Return on Investment (ROI) = 31%
Average Annual Savings = $154K
Saving to Investment Ratio = 1.54

DESCRIPTION: Warehouse Bar Coding Project - This project will upgrade the automated warehousing system with the latest technologies.

Fuels Bar Coding Project - This project will automate the entire fueling process. Currently, customers are required to prepare 1348 stubs manually and the truck drivers annotate the quantity and return the copies to the Fuel Division at Supply. The current automated prototype allows for the aircraft to be bar-coded and a bar-coding device is carried by the truck drivers. Customers initiate their requests via the RAPS system. The bar-code device will be downloaded at the end of the day onto a PC whereby financial transactions will be initiated and reports will be produced for all the customers.

Warehouse Bar Coding Project - Current Navy policies encourage all sites to run their warehouses in a more efficient/economical manner. The loss of manpower requires better technologies to economize while still providing quality support to the customers. Bar-coding technology provides a streamlined, real-time process that interfaces with existing databases. It also provides an efficient means for conducting physical inventories of Navy owned consumable and repairable assets. The downsizing of personnel requires more efficient tools to maintain the inventory.

Fuels Bar Coding Project - This project would eliminate manual efforts, data entry and delays in financial processing. It would decrease the time it takes to process orders, therefore creating a more efficient system.

This procurement will increase the accuracy of material accountability and will provide the Supply Department with state-of-the-art technology in order to perform the demands of their mission.

The anticipated expansion will inevitably increase the number of Navy vehicles requiring fueling on base. Automating the entire motor vehicle fueling process from its current antiquated state will allow the system to work efficiently and economically. There will not be a need to increase personnel to maintain the fueling process.

Warehouse Bar Coding Project - If the procurement is not made to upgrade the automated warehousing system with the latest technologies, then it will mean a less efficient work environment for conducting physical inventories of Navy owned consumable and repairable assets. Because of the downsizing of personnel, there is an even greater need to efficiently and effectively track the Navy's physical inventory. An automated warehouse will cut down production costs, as well as provide a solid foundation for material handling records and receipt of material.

Fuels Bar Coding Project - If this procurement is not made, the motor vehicle fueling process will continue to work inefficiently with time delays in data entry, processing orders and financial processing.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. CAD II New Mission LINE: 8AA9KL8013N						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE										1	400	400	
SOFTWARE										1	100	100	
INSTALLATION													
OTHER													
TOTAL											500	500	

Narrative Justification:
Operational Date: September 1999
Project Initiation Date: FY99
Payback Period = 4.6 years
Return on Investment (ROI) = 22%
Average Annual Savings = $108K
Saving to Investment Ratio = 1.08

DESCRIPTION:

This project involves the purchase of Integraph hardware, communications products, operating systems, databases, management systems and software.

This procurement involves computer aided design equipment necessary to support ongoing engineering efforts within the Public Works area. Support provided by the Public Works engineering division has increased dramatically with the Warminster realignment and with the NAVAIR relocation efforts.

Anticipated unquantifiable benefits include increased engineering support provided by the Public Works department.

If this procurement is not made, the engineering division of Public Works will lack appropriate support in order to meet existing and future requirements. Current computer aided design systems will not appropriately handle the workload associated with on-going realignment and relocation efforts.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)												A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Communications System Upgrade Replacement LINE # 7W3TL0084R					D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
CSU Equipment	1	4,235	4,235	1	4,000	4,000	1	2,900	2,900	1	2,600	2,600
TOTAL		4,235	4,235		4,000	4,000		2,900	2,900		2,600	2,600

Narrative Justification:

Operational Date: Continuous
Project Initiation Date: FY93
Cost Benefit Analysis for the FY97 Module is as follows:
Payback Period = 1.6 years
Return on Investment (ROI) = 54%
Average Annual Savings = $1,801K
Saving to Investment Ratio = 2.7

DESCRIPTION: This procurement will provide upgraded hardware for use system wide and for addition of capabilities in certain portions of NAWCWD corporate communication system. The hardware is typically in the form of bridges, gateways, routers and network management systems. These are used to replace failed and obsolete units in the existing system, to extend the system to buildings not currently served, or to upgrade the capabilities of existing service. The upgrades are needed to make the system compatible with user computer and communication requirements or with network management requirements. Currently upgrades are needed to provide additional bandwidth and data speeds to allow the science and engineering community to utilize high performance networked workstations, to downsize from mainframes to distributed high power workstations, to distribute video, and to comply with project directives mandating the use of an engineering data distribution, storage and processing. All of these processing modes assume the existence of a robust communications foundation and architecture with high speed links to other sites nationwide.

The communications systems supported by this project are essential elements to the productivity requirements of doing more scientific and engineering work with fewer personnel who need to work in an integrated fashion but who are geographically spread around this site and the country as a whole.

If the network is not upgraded, NAWCWD will be plagued by operating in an environment of outdated technology which spawns inefficiencies and inadequate performance. Productivity will be severely impacted. The network has already begun to show signs of inadequacy, slow response times, failing applications from lack of memory, and denial of services. Repairs and trouble calls have increased. If the bridge to isolate a segment of the ethernet is not purchased, congestion will occur as more computers are added to the network.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Fiber Optic Transmission Equipment Replacement LINE: 7AA7TL0723R						D. NAWC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE				1	2,000	2,000	1	1,439	1,439	1	1,029	1,029	
SOFTWARE													
INSTALLATION				1	449	449	1	311	311	1	221	221	
OTHER													
TOTAL					2,449	2,449		1,750	1,750		1,250	1,250	

Narrative Justification:
Operational Date: January 1999
Project Initiation Date: FY97
Payback Period = 2.1 years
Return on Investment (ROI) = 42%
Average Annual Savings = $2,274K
Saving to Investment Ratio = 2.08

DESCRIPTION:

This submission is to provide a fiber optic system throughout Pax River. With the current data, video, and voice cable plants at the end of their life cycle and no room for expansion, it is essential to replace those existing plants with an integrated, state of the art, fiber optic system. BRAC II and III has funded a major portion of the backbone; this submission is for the transmission equipment for buildings/areas not covered by BRAC. The emerging high bandwidth information transfer technologies supporting both project and business requirements will only run on fiber and is essential in positioning NAWCAD at a competitive advantage in terms of attracting declining DOD and RDT&E project dollars.

Current coaxial and copper plants are saturated and cannot handle the influx of the additional 5000+ BRAC users.

If this program is not approved, non-BRAC users will not benefit from the fiber plant. They will be forced to operate on the existing, obsolete coaxial and copper plants. The base will continue to shoulder the burden of maintaining several cable plants of different technologies instead of an integrated fiber optic system.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Fiber Optic Branching Replacement LINE : #7W8TL8006R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Fiber Optic Equipment							1	1,150	1,150	1	1,000	1,000	
TOTAL								1,150	1,150		1,000	1,000	

Narrative Justification:

Operational Date: Continuous
Project Initiation Date: FY98
Cost Benefit Analysis for the FY98 module is as follows:
Payback Period = 1.9 years
Return on Investment (ROI) = 46%
Average Annual Savings = $535K
Saving to Investment Ratio = 2.3

DESCRIPTION: Fiber optic branching continues with installation of fiber optic cabling to provide corporate connectivity from major hub sites to endpoint buildings within population centers where required to meet user communication needs. Cost includes design, installation, materials, cable and termination hardware.

This submission is critical to the support of the China Lake portion of the existing NAWCWPNS corporate network and to the establishment of the infrastructure necessary to support the long term implementation of the Network Computing Utility concept. This is a NAWCWD Strategic Initiative.
Fiber optic branching is of three types.
1) The first is to replace old inadequate and failing copper media with fiber optics capable of supporting current and future computing and communications requirements. CLPL/Saltwells is one explicit example of this requirement.
2) The second is to interconnect existing facilities which do not presently have connectivity to corporate communications.
3) The third is to provide connectivity to newly constructed Major and Minor MILCON facilities or renovated facilities as soon as possible.
Branching fiber cable installations are designed to provide backbone transmission media that will meet the data, video and voice needs of the installed areas for 20 years based on a single installation cost. Fiber branching will provide media for isolated project oriented networks as well as meet the needs of all corporate communications. As old copper based systems become saturated or fail they will not be replaced. These systems are for both the China Lake and Point Mugu sites. The Information Management Department operational cost savings are achieved by reducing the number of personnel required to maintain the same level of service in the contractual and maintenance labor force by four Full Time Equivalents. It is also reduced by reducing the number of maintenance and troubleshooting systems necessary to provide the operational and maintenance support. This equates to a cost avoidance of approximately $300K per year.
It is estimated that one-fifth of the approximately 10,000 users will have their network downtime reduced by 4 minutes per week. This equates to approximately $1330K per year savings.
The total cost avoidance for the life of the systems is $1,630,000.
Users and projects with high performance communications requirements will attempt to use work-arounds which are inadequate as well as costly and provide no benefits to corporate communication needs.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A.FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Premises Distribution Replacement LINE: 8AA8TL81D0R						D. NAWCAD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
HARDWARE							1	750	750	1	750	750	
SOFTWARE													
INSTALLATION													
OTHER													
TOTAL								750	750		750	750	

Narrative Justification:
Operational Date: December 1998
Project Initiation Date: FY98
Payback Period = 4.1 years
Return on Investment (ROI) = 23%
Average Annual Savings = $352K
Saving to Investment Ratio = 1.17

DESCRIPTION:

This project involves the procurement of cabling and other hardware peripherals required to hook Shore Station Management buildings into the fiber backbone. The project will cover costs that are internal to NAS buildings in connection with establishing/maintaining local area networking associated with fiber installation. The purpose of the fiber network is to install an integrated voice video data security communications system. The Naval Air Station's involvement in this project is crucial in order to maintain an effective communications network not only within the Patuxent River complex, but also with outside activities and tenant commands. Once the fiber backbone is installed, being able to allow connectivity to it will ensure that all Shore Station Management buildings will effectively maintain an adequate communications network. Effective network communications will be an unquantifiable benefit of this project. Without this effort, communications will be at a standstill as far as effectively utilizing new project and business application technologies.

The Patuxent River complex is undergoing a major change in network communications with the installation of fiber backbone. This network involves the installation of a high band width in order to accommodate new project and business application technologies. Without this effort, communications will be at a standstill. This project involves covering the costs that are internal to NAS buildings in order to establish/maintain local area networks that function as a result of the fiber backbone.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. SNI/SW/Cable Upgrades Replacement LINE : #7W8TL8007R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
SNI/SW/Cable Equipment							1	579	579	1	100	100	
TOTAL								579	579		100	100	

Narrative Justification:

Operational Date: October 1998
Project Initiation Date: FY98
Cost Benefit Analysis for the FY98 module is as follows:
Payback Period = 3 years
Return on Investment (ROI) = 30%
Average Annual Savings = $172K
Saving to Investment Ratio = 1.5

DESCRIPTION: This is the first year of a multi-phased project to improve administrative telecommunications support to San Nicolas Island (SNI). This project provides funding to conduct a study to determine alternative approaches to resolve SNI Switching systems problems ($20K) and includes a projection of a worst-case scenario requiring switch replacement ($300K). The necessary spares will be acquired to maintain the existing system ($13K) until the problem is resolved. Additionally, it addresses the replacement of Telecommunications cables between buildings 128, 212 and 312 and correct cable deficiencies within the compound and airfield areas of the island ($245.5K). Project funding requirements are estimated into the out years to maintain a reliable cable infrastructure.
The telephone switch supporting all administrative telephone service to SNI has been experiencing disconnects, howl on the circuits and disruption of service and is generally considered to provide a sub-standard level of service. Until a solution can be implemented we need to establish spares to maintain the existing system. Additionally, telecommunications cables on SNI were installed an average of 30 to 40 years ago and designed to support minimal voice/data requirements. In some instances this cable has deteriorated to the point of being unable to meet these minimal requirements. Island cable, conduit and switching system improvements will directly or indirectly support all administrative and operational activities by providing the necessary capacity to conduct routine business. Outyear funding will support additional improvements to the infrastructure and may require replacement of cable linking building 212 and building 127, Range Communications.
Cost savings are established by reducing hours of lost productivity in direct labor of Government personnel required to operate and maintain this system. Information Management Department (IMD) maintains one full-time on-site technician who expends approximately .5 man-year to troubleshoot systems problems. IMD must also dispatch cable splicers and other technical support on a routine basis for an additional .5 man-years for an estimated total of $70,000 in costs. Hours of lost productivity implementing services work around for approximately 200 Island personnel for a week is estimated to equal .01 man-years ($700 per year each) totally $140,000. Additional savings are estimated to include; direct material ($15K), Maintenance ($10K) and Facility costs ($10K). The total estimated annual costs savings for the life of the system are estimated to be $245,000. FY99 outyear funding has been estimated to be $100,000 to complete cable distribution improvements since specific locations have not been determined at this time.
Failure to resolve administrative switching system and cable distribution issues on SNI would force existing customers to continue to live with technical and capacity limitations that fall short of meeting established or future requirements.

C02263

CAPITAL PURCHASES JUSTIFICATION
(Dollars in Thousands)

A. FY1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Research & Development

C. Base Telephone Switching System Replacement
LINE: 7AB9TL7000R

D. NAWC

Element of Cost	FY 1996 Qty	FY 1996 Unit Cost	FY 1996 Total Cost	FY 1997 Qty	FY 1997 Unit Cost	FY 1997 Total Cost	FY 1998 Qty	FY 1998 Unit Cost	FY 1998 Total Cost	FY 1999 Qty	FY 1999 Unit Cost	FY 1999 Total Cost
HARDWARE										1	2,325	2,325
SOFTWARE												
INSTALLATION										1	250	250
OTHER												
TOTAL											2,575	2,575

Narrative Justification:
Operational Date: August 1999
Project Initiation Date: FY99
Payback Period = 2.2 years
Return on Investment (ROI) = 40%
Average Annual Savings = $1,024K
Saving to Investment Ratio = 1.9

DESCRIPTION:

The requested Telephone Switching System will be a replacement and consolidation of the existing 13 year old Telephone system and a separate five year old voice mail system into a single integrated system. The new Telephone Switching System will continue to provide telephone and voice mail services to all Lakehurst Base activities.

With the current telephone system at the end of its life cycle and no room for expansion, it is essential to replace existing system with an integrated, state of the art telephone system. The present telephone switching system is over 13 years old and the manufacturer no longer supports or provides upgrades for the system due to its age. In addition, it is essential that we maintain a reliable, high volume capacity, responsive, and continues operational telephone system. The resulting down-time of the telephone system can seriously impact and jeopardize the CAO Operations as well as the missions of the Navy. The voice mail system is at total capacity and cannot accept any more users. By consolidating this functionality in a new switch the need for two separate systems and maintenance will be eliminated.

Not only all personnel within the NAWCADLAKE community rely on the telephone system to conduct their daily business, it also provides a modern reliable Telecommunications System to take NAWCADLAKE into the 21st century.

If the present telephone system is not replaced in the near future, system failures could occur with no parts available to repair. This failure can lead to major disaster on Base since not only common personnel will be without communication, but essential on Base personnel such as firemen, police, security, NIS, FBI, etc. will also be without communication. The potential risk of not procuring this new telephone switch will definitely have a major impact on the Lakehurst community since a single point of switch failure in the future may require the entire system to be replaced due to the unavailability of spare parts while the system is down. Also, any changes in the public network requiring software upgrade will not happen due to the manufacturer not supporting our present system.

000264

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)													A. FY1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Research & Development							C. Cable Plant Upgrade (PM) Replacement LINE : #7W9TL8012R						D. NAWCWD
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Cable Plant Equipment										1	705	705	
TOTAL											705	705	

Narrative Justification:

Operational Date:	October 1999
Project Initiation Date:	FY99
Payback Period =	0.8 years
Return on Investment (ROI) =	99%
Average Annual Savings =	$698K
Saving to Investment Ratio =	5.0

DESCRIPTION: This funding is required to provide cable plant replacement/upgrade from the fiber optic distribution hub located in bldg 700 and bldg 365. The procurement includes the purchase and installation of new cable and equipment to distribute telecommunications services from building 700 & 365 to areas in and around the beach and Main Campus areas. Cable upgrade and expansion will consist of various sized cables and support equipment (racks, frames, terminals etc) to extend the fiber optic network facilities (voice, 2/4 wire data, video) to beach area customers in outlying buildings The new plant facilities will simplify network maintenance and provide a dedicated plant to this area.
The upgrading and replacement of obsolete cable plant equipment (copper cable) , and the physical expansion of the facilities to extend ISDN services along with increased plant facilities to support current telecommunications network requirements (voice, 2/4 wire data, video, etc.) to other locations within the beach and Main Campus areas. Replacement of the aging copper cable plant (average age 22 years) will greatly reduce cable maintenance/repair time and increase the service capacity of the plant and allow for the current and future telecommunications services.

Building 33 is our Central Office and Building 700 & 365 is a communications building from which distribution is planned to buildings within the beach & Main Campus areas. Costs savings resulting from the completion of this project are established through improved personnel productivity and reduced maintenance and installation effort. Approximately 1500 personnel within this area currently share telephone numbers and have limited data capabilities necessary to conduct routine business. It is estimated that approximately 20 minutes per person/week in lost productivity results from the lack of individual telephone instrument and inadequate data connectivity. This totals approximately 300 man hours per week (15,600 m/h year). Additionally, IMD estimates that approximately 10 man hours per week (520 m/h year) is currently necessary to perform installation and maintenance. Utilizing $56 man/hour rate total costs savings are estimated to be $920,720. FY99 funding has been estimated to be $100,000 to complete cable distribution improvements. Since specific locations have not been determined at this time for FY99 cost savings have not been computed.

This input is being submitted based on inadequate telecommunications facilities in and around the beach and Main Campus areas. Expanding the cable facilities from the fiber optic telecommunications hub environment to include additional locations will provide updated state-of-the-art services and more capability/capacity for facilities in the area. If not expanded, continuous maintenance and piece mill work on the existing cable facilities would cause major disruption of services and continuous denial to beach area customers for upgraded telecommunications services.

CAPITAL PURCHASES JUSTIFICATION
(Dollars in Thousands)

A. FY1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Research & Development

C. NIFMS IMPLEMENTATION
LINE NDL0000

D. NAWC

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
AIRCRAFT DIVISION			100			750						
WEAPONS DIVISION						845			150			
TOTAL			100			1,595			150			

Narrative Justification:

The NAVAIR Industrial Financial Management System (NIFMS) is the Defense Business Operations Fund (DBOF) accounting and financial information system recommended to the DBOF Corporate Board and selected by the DoD Comptroller as the Navy Research and Development interim migratory system. The system makes extensive use of system integration and interfaces to support functionality and contains a single, interconnected core financial database with full subsidiary accountability.

DEPARTMENT OF THE NAVY - DEFENSE BUSINESS OPERATIONS FUND
RESEARCH & DEVELOPMENT -- NAVAL AIR WARFARE CENTER
CAPITAL BUDGET EXECUTION
(DOLLARS IN MILLIONS)
FY 1997

ITEM LINE #	DESCRIPTION	ORIGINAL REQUEST	CHANGE	REVISED REQUEST	EXPLANATION/REASON FOR CHANGE
	1a. EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)				
	Replacement				
W C 3 EL 0006 R	WEPTAC PHASE II	2.123	-2.123	.000	TRANSFER. PROJECT ACCELERATED OPERATIONAL DATE. WAR GAMING CUSTOMERS ARE NOW USING THE MULTI-PLATFORMED WEAPON SIMULATION MODULES DEVELOPED BY WEPTAC. WEPTAC IS BEING FULLY FUNDED BY THESE DIRECT SITED CUSTOMERS. TRANSFER TO CONCURRENT ENGINEERING, AMES II, INSTRUMENTATION UPGRADE, & SPUTTERING SYS.
W C 4 EL 0007 R	MISSION PLANNING/DIGITAL IMAGING W/S	1.000	.000	1.000	
W C 3 EL 0005 R	P-369 MILCON COLLATERAL EQUIPMENT	.300	-.140	.160	TRANSFER. DOWNSIZED REQUIREMENT. PROJECT WILL COMPLETE IN FY97. DECREASE TRANSFERRED TO CONCURRENT ENGINEERING.
W P 3 EL 4002 R	AMES II THREAT SIMULATOR	1.235	.315	1.550	INCREASED REQUIREMENT FOR TECHNICAL CAPABILITY. INCREASE TRANSFERRED FROM WEPTAC
W C 7 EL 0502 R	INSTRUMENTATION UPGRADE (WSL)	.565	.120	.685	INCREASED REQUIREMENT FOR TECHNICAL CAPABILITY. INCREASE TRANSFERRED FROM WEPTAC
	Productivity				
W C 3 EL 0010 P	CONCURRENT ENGINEERING WORKGROUP	.000	1.500	1.500	SUBSTITUTION. DUE TO NAVY FUNDING RESTRAINTS, THIS PORTION OF THE PROJECT WAS DEFERRED UNTIL FY 1997 AND BUDGETED IN FY 1998 AND FY 1999. THIS IS A REQUIREMENT FOR TECHNICAL CAPABILITY. INCREASE TRANSFERRED FROM WEPTAC.
A A 7 EL 0411 P	AEGIS COMBAT COMPUTER SYSTEMS	.980	.000	.980	
	New Mission				
A A 6 EL 0014 N	ELECT SYS DEPT/ENVIRON TEST UPGRADES	.533	.000	.533	
	SUBTOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM (>$500K)	6.736	-.328	6.408	
	1b. EQUIPMENT, OTHER THAN ADPE & TELECOM (<$500K)	7.045	-.297	6.748	
	2. GRAND TOTAL EQUIPMENT, OTHER THAN ADPE & TELECOM	13.781	-.625	13.156	
	3. MINOR CONSTRUCTION	2.924	.000	2.924	MINOR CONSTRUCTION FOR FY 1997 INCLUDES RALS TOWER OF $.758 FOR A LIFE/HEALTH/SAFETY PROJECT AND SYSTEMS ENGINEERING BUILDING OF $1.000 FOR THE DOD LABORATORY REVITALIZATION DEMO PROGRAM.
	GRAND TOTAL NON-ADP CAPITAL PURCHASES PROGRAM	16.705	-.625	16.080	

0002827

DEPARTMENT OF THE NAVY - DEFENSE BUSINESS OPERATIONS FUND
RESEARCH & DEVELOPMENT -- NAVAL AIR WARFARE CENTER
CAPITAL BUDGET EXECUTION
(DOLLARS IN MILLIONS)
FY 1997

ITEM LINE #	DESCRIPTION	ORIGINAL REQUEST	CHANGE	REVISED REQUEST	EXPLANATION/REASON FOR CHANGE
	1a. ADP & TELECOMMUNICATIONS EQUIPMENT (>$500K)				
	Computer Hardware (Production)				
W C 4 KL 0401 R	COMPETITIVE ENGINEERING ENVIRONMENT	.850	.150	1.000	INCREASED REQUIREMENT FOR TECHNICAL CAPABILITY. TRANSFER FROM ANALYST WORKBENCH, SURVIVABILITY DIV COMPUTER SYS, FM MOBILE TRUNKING, P-369 MILCON COLLATERAL EQUIP.
W C 7 KL 6152 R	SIGNAL PROCESSING SYSTEM	2.017	.000	2.017	
A A 7 KL 0011 R	ELECTRONIC ARCHIVING	.990	.000	.990	
A C 4 KL 3701 R	CAD II WORKSTATIONS	.950	-.950	.000	PROJECT CANCELLED DUE TO INDIANAPOLIS PRIVATIZATION AND REPROGRAMMED TO INCREASES IN OTHER PROJECTS.
W P 7 KL 6014 R	SURVIVABILITY DIVISION COMPUTER SYS	.551	-.010	.541	PRICE DECREASE TRANSFERRED TO COMPETITIVE ENGINEERING ENVIRONMENT.
A A 7 KL 0751 R	OPEN ARCHITECTURE AVIONICS	.550	.000	.550	
A A 7 KL 0411 P	VIPER SYSTEM	.520	.000	.520	
A B 6 KL 4820 R	CAD II CONCURRENT ENGR. NETWORK SYSTEM IMP.	.000	1.572	1.572	THIS PROPOSAL WILL PROVIDE A CONCURRENT ENGINEERING DESIGN, AND ANALYSIS NETWORK AT NAWCAD, THE NETWORK WILL INCLUDE ALL TECHNICAL DIVISIONS AT THE CENTER. THIS PROPOSAL WILL ALSO IMPLEMENT SIMULATION CAPABILITY FOR VIRTUAL ENVIRONMENTS, SOLID MODELING AND ENGINEERING ANALYSES RANGING FROM FINITE ELEMENT ANALYSIS, MECHANICAL DESIGN, ACCIDENT RECONSTRUCTION, AND ANIMATION, TO SPECIALIZED TOPICS IN ANALYSIS SUCH AS IMPACT LOADING OF UNIQUE SHIPBOARD AND AIRFRAME STRUCTURES. THE REALITIES OF DOWNSIZING HAS MADE IT IMPERATIVE THAT SYSTEMS SUCH AS THE ONE DESCRIBED HEREIN BE ACQUIRED. MOREOVER, AS GREATER EFFICIENCY IS DEMANDED BY AN EVER CHANGING MARKET UPON A CONTINUALLY WORKFORCE, IT IS OF PARAMOUNT IMPORTANCE THAT SYSTEMS SUCH AS THE ONE PROPOSED BE IMPLEMENTED TO MAINTAIN NAWCAD'S CORE MISSION REQUIREMENTS AND RESPONSIBILITIES.
W C 4 KL 0517 R	GEOGRAPHIC INFORMATION SYSTEM	.000	.656	.656	SUBSTITUTION. TO CONTINUE FY 94 PROJECT BY IMPLEMENTING MODULE FOR MAPPING FACILITY SPACE. INCREASE TRANSFERRED FROM COMMUNICATION SYS UPGRADE, ANALYST WORKBENCH.
W C 7 KL 6171 R	ATR RAPID PROTOTYPING	.000	.500	.500	FIRST PHASE OF A 3-YEAR PROJECT. PHASE II AND III ARE SUBMITTED FOR FY98 AND 99. AUTOMATIC TARGET RECOGNITION (ATR) DEVELOPMENTS PROVIDE COMPATIBILITY WITH ARMY, AIR FORCE & DARPA--ENABLING EVALUATION AND PORTING OF APPLICABLE ATR TECHNOLOGY TO AIR NAVY APPLICATIONS. TRANSFER FROM ANALYST WORKBENCH.
	Telecommunications				
W C 3 TL 0084 R	COMMUNICATIONS SYSTEM UPGRADE	4.000	-.643	3.357	TRANSFER. DOWNSIZED REQUIREMENT. DECREASE TRANSFERRED TO GEOGRAPHIC INFORMATION SYSTEM.
A A 7 TL 0723 R	FIBER OPTIC TRANSMISSION EQUIPMENT	2.449	.000	2.449	
W P 7 TL 6013 R	FM MOBILE TRUNKING SYSTEM	.645	-.002	.643	DECREASE TRANSFERRED TO COMPETITIVE ENGINEERING ENVIRONMENT
	SUBTOTAL ADPE & TELECOMMUNICATIONS (>$500K)	13.522	1.273	14.795	

000228

DEPARTMENT OF THE NAVY - DEFENSE BUSINESS OPERATIONS FUND
RESEARCH & DEVELOPMENT -- NAVAL AIR WARFARE CENTER
CAPITAL BUDGET EXECUTION
(DOLLARS IN MILLIONS)
FY 1997

ITEM LINE #	DESCRIPTION	ORIGINAL REQUEST	CHANGE	REVISED REQUEST	EXPLANATION/REASON FOR CHANGE
N ES 0000	**1b. ADPE & TELECOMMUNICATIONS (<$500K)**	5.013	-.103	4.910	
A C 5 KL 6102 R	OPTICAL DISK ARCHIVING SYSTEM	.225	-.225	.000	PURCHASE OF INITIAL SYSTEM (BUDGETED IN FY96) IS SUFFICIENT FOR CURRENT NEED
	FLIGHT TEST AUTOMATED SYSTEM	.000	.122	.122	EMERGENT FLIGHT TEST REQUIREMENT.
	2. GRAND TOTAL ADPE & TELECOMMUNICATIONS	18.535	1.170	19.705	
	3a. SUBTOTAL SOFTWARE DEVELOPMENT (>$500K)		1.595	1.595	NIFMS IMPLEMENTATION
N DS 0000	**3b. SOFTWARE DEVELOPMENT (<$500K)**	.545	-.545		DELETION OF ANALYST WORKBENCH
	3. GRAND TOTAL SOFTWARE DEVELOPMENT	.545	1.050	1.595	
	GRAND TOTAL ADP CAPITAL PURCHASES PROGRAM	19.080	2.220	21.300	
	GRAND TOTAL CAPITAL PURCHASES PROGRAM	35.785	1.595	37.380	

000269

NAVY WORKING CAPITAL FUND
NAVAL SURFACE WARFARE CENTER
FY 1998/FY 1999 PRESIDENT'S BUDGET

INTRODUCTION

The Naval Surface Warfare Center was established on 2 January 1992 with the following mission: "To operate the Navy's full spectrum research, development, test and evaluation, engineering and fleet support center for ship hull, mechanical, and electrical systems, surface combat systems, coastal warfare systems, and other offensive and defensive systems associated with surface warfare."

CENTER OVERVIEW

The Center is comprised of five operating divisions whose operations and locations are described briefly below.

CARDEROCK DIVISION. The mission of this division is to provide research, development, test and evaluation, fleet support and in-service engineering for surface and undersea vehicle hull, mechanical and electrical (HM&E) systems and propulsors: provide logistics R&D: and provide support to the maritime Administration and Maritime Industry. The division has major operating sites at Carderock, MD., Philadelphia, PA. and Annapolis, MD. with smaller operating sites at Ft. Lauderdale, FL., Memphis, TN., Norfolk, VA., White Oak, MD., Bremerton, WA., and Bayview, ID. The operations at White Oak and Annapolis are scheduled for termination in FY 1997 and FY 1998 respectively in accordance with BRAC plans.

CRANE DIVISION. The mission of this division is to provide engineering and industrial support of weapons systems, subsystems, equipment and components. Primary product areas of expertise include electronic warfare, gun and gunfire control systems, microelectronics components, electronic module test and repair, microwave components, electromechanical power systems, acoustic sensors, small arms, conventional ammunition, radars, and pyrotechnics. The division had two primary operating sites, Crane, IN. and Louisville, KY. The Louisville site was privatized in August 1996.

DAHLGREN DIVISION. The mission of this division is to provide research, development, test and evaluation, engineering and fleet support for surface warfare systems, surface ship combat systems, ordnance, mines and mine counter measures, amphibious warfare systems, special warfare systems, strategic warfare systems, and diving. The division has three primary operating sites, Dahlgren, VA., Panama City, FL., and White Oak, MD. The White Oak operation is to be terminated in FY 1997.

INDIAN HEAD DIVISION. The mission of this division is to provide technical capabilities in energetics for all warfare centers and to provide special weapons, explosive safety and ordnance environmental support to all warfare centers, the

military departments and ordnance industry. The primary site of operations is Indian Head, MD, with smaller operations at Yorktown, VA, Mcalester, OK, and White Oak, MD. The White Oak operation will be terminated in FY 1997 in line with the BRAC plans.

PORT HUENEME DIVISION. The mission of this division is to provide test and evaluation, in-service engineering and integrated support for surface warfare systems, system interface, weapons systems and subsystems, unique equipments, and related expendable ordnance of the surface fleet. The primary operating sites are Port Hueneme, CA., San Diego, CA., and Dam Neck, VA.

BUDGET OVERVIEW

This budget represents the warfare center financial operating plan. The plan reflects Center management's expectations for new orders and requisite human resources levels. The Workload Information System is used to calculate planned direct work levels.

The FY 1997 President's Budget assumed closure of Louisville with transfer of workload to other DBOF activities. The decision has since been made to privatize the Louisville site. Accordingly, the current budget reflects $31.8M in BRAC funding and 165 BRAC funded workyears to support the transition team. Also reflected in the budget is 165 workyears associated with a Louisville Detachment which will be transferred to Pt. Hueneme on 1 October 1997. On 17 August 1997, Louisville was officially privatized. In FY 1996 there were 443 SIP and 460 RIF separations at Louisville.

BUDGET HIGHLIGHTS

BUSINESS BASE

($ millions)	FY 1996	FY 1997	FY 1998	FY 1999
New Orders received	2,147.0	1,693.3	2,030.6	2,016.9
Cost of Goods & Services	2,470.5	2,120.2	2,068.8	2,068.5
Revenue	2,564.7	2,078.5	2,103.6	2,068.5

Estimated FY 1997 orders of $1.7B and reflect increased usage of Request for Contractual Procurements (RCPs), in order to minimize carryover. RCP's are not reflected in the NWCF budget. FY 1998 and FY 1999 orders of $2.0B and $2.0B respectively represent our best estimate of funded workload.

NET OPERATING RESULT (NOR) and ACCUMULATED OPERATING RESULT (AOR)

	FY 1996	FY 1997	FY 1998	FY 1999
NOR ($ millions)*	62.0	-41.6	34.7	0.0
AOR	6.9	-34.7	0.0	0.0

*exclusive of $32.2 million JLSC surcharge in FY 1996

FY 1996 NOR is below the FY 1997 President's budget, primarily at the Louisville site which was privatized in August of 1996.

The FY 1997 NOR estimate is $30M below the FY 1997 President's Budget, primarily due to reduced workload, although various factors also have an impact. Other large components include: Louisville losses ($4.9M), Military labor issues ($2.8M), and additional SIPs,($2.7M).

MANPOWER

	FY 1996	FY 1997	FY 1998	FY 1999
Civilian End Strength	16,404	15,724	15,203	14,782
Civilian Full Time Equivalent (FTE)	17,599	16,266	15,376	14,930
Military End Strength	340	361	313	313
Military Work Years	345	361	313	313

Civilian manpower levels continue to drop in response to workload reductions, consolidations and closures. Manpower reductions since the Center was established in FY 1992, total 28% through the end of FY 1996 and are projected to be 35% by the end of FY 1999.

The following SIP/VERA/RIF separations are budgeted through FY 1999 in order to balance staffing with workload projections:

- FY 1997: 786 persons (236 are BRAC related)
- FY 1998: 276 persons (11 are BRAC related)
- FY 1999: 80 persons

CUSTOMER RATES

	FY 1996	FY 1997	FY 1998	FY 1999
Stabilized Rate per Hour	$65.87	$60.69	$68.10	$67.64
Stabilized Rate Change		-7.9%	12.2%	-.7%
Composite Rate Change		-2.5%	8.1%	.4%

The stabilized customer billing rate is the composite price per direct labor hour that NSWC charges it's customers. It includes direct labor, overhead and a

factor to achieve zero accumulated operating result in the budget year. Other direct costs are billed to the customer at actual cost to NSWC. The composite customer rate change reflects the overall average cost change including direct material and contract costs which are excluded from the stabilized rate.

UNIT COST RATE

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hours (000s)	22,060	20,472	19,538	19,037
$ per Direct Labor Hour	60.08	63.71	65.38	66.24

Unit Cost (sum of direct labor and overhead cost divided by the number of direct labor hours) represents the cost of delivering goods and services and is relatively constant despite decreasing direct hours.

PRODUCTIVITY RATIO

FY 1996	FY 1997	FY 1998	FY 1999
69.8%	70.2%	70.9%	71.1%

The productivity ratio represents direct straight time workyears divided by total straight time workyears minus service cost center workyears.

CARRY-OVER

The Naval Surface Warfare Center has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($millions)	538.3	527.0	512.1	477.1
Months of Carryover	2.5	3.0	2.9	2.8

CAPITAL PURCHASES PROGRAM

($ millions)	FY 1996	FY 1997	FY 1998	FY 1999
Equipment	7.8	11.2	10.0	11.1
ADPE/Telecom Equipment	10.0	12.7	16.2	13.0
Software Development	1.9	2.7	6.6	2.9
Minor Construction	3.9	5.6	3.3	.9
Total Capital	23.6	32.2	36.1	27.9

The Capital Purchases Program is budgeted at the minimum level of investment to sustain warfare center R&D required investments, infrastructure

maintenance and environmental mandates. The budget also includes capitalization of migration to the NIFMS financial system.

BRAC FUNDING The new orders for BRAC efforts reflected in this budget include: $121M for FY 1996, $53M for FY 1997, $30M in FY 1998 and $1M in FY 1999.

PERFORMANCE INDICATORS The primary performance indicator is the Unit Cost discussed in the UNIT COST RATE paragraph above.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NSWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	2,501.9	2,045.3	2,070.1	2,034.2
Surcharges	32.2	.0	.0	.0
Depreciation excluding Major Constructio	30.6	33.3	33.4	34.3
Other Income				
Total Income	2,564.7	2,078.5	2,103.6	2,068.5
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	16.4	16.1	15.2	15.5
Civilian Personnel	1,092.0	1,060.4	1,023.7	1,008.8
Travel and Transportation of Personnel	75.4	66.1	61.7	62.3
Material & Supplies (Internal Operations	225.6	197.7	173.6	153.3
Equipment	91.5	77.6	79.6	79.7
Other Purchases from NWCF	93.7	75.9	72.5	71.5
Transportation of Things	4.8	7.5	9.9	5.3
Depreciation - Capital	30.6	33.3	33.4	34.3
Printing and Reproduction	8.4	9.8	10.2	10.2
Advisory and Assistance Services	2.4	2.3	2.1	2.2
Rent, Communication & Utilities	44.9	40.5	40.4	40.4
Other Purchased Sevices	796.4	533.3	546.8	585.3
Total Expenses	2,482.0	2,120.5	2,069.1	2,068.8
Work in Process Adjustment	-.5	.1	.0	.0
Comp Work for Activity Reten Adjustment	-11.0	-.4	-.3	-.3
Cost of Goods Sold	2,470.5	2,120.2	2,068.8	2,068.5
Operating Result	94.2	-41.6	34.7	.0
Less Surcharges	-32.2	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	62.0	-41.6	34.7	.0
Other Changes Affecting AOR	.0	.0	.0	.0
Accumulated Operating Result	6.9	-34.7	.0	.0

Exhibit Fund-14

BUSINESS AREA ANALYSIS
DEPARTMENT OF THE NAVY
NAVAL SURFACE WARFARE CENTER
SOURCE OF REVENUE
(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
1. New Orders	2,147.0	1,693.3	2,030.6	2,016.9
a. Orders from DoD Components	1,864.1	1,455.1	1,756.1	1,747.8
Department of the Navy	1,580.8	1,276.7	1,475.4	1,524.6
Operations and Maintenance, Navy	432.6	387.2	435.3	522.2
Operations and Maintenance, Marine Corps	9.3	0.0	0.0	0.0
O&M, Navy Reserve	5.9	3.8	2.9	3.1
O&M, Marine Corps Reserve	0.0	0.0	0.0	0.0
Aircraft Procurement, Navy	18.8	5.9	9.2	7.0
Weapons Procurement, Navy	48.9	61.4	88.4	83.6
Procurement of Ammunition, Navy/Marine Corps	22.5	33.8	43.0	41.9
Shipbuilding & Conversion, Navy	220.6	185.9	189.3	168.0
Other Procurement, Navy	148.8	103.2	151.7	177.9
Procurement, Marine Corps	9.2	13.1	11.0	3.6
Family Housing, Navy and Marine Corps	8.9	9.6	8.4	7.5
Research, Development, Test & Eval, Navy	642.8	459.9	521.1	497.4
Military Construction, Navy	0.0	0.0	0.0	0.0
Other Navy Appropriations	12.3	12.8	15.0	12.3
Other Marine Corps Appropriations	0.0	0.1	0.1	0.1
Department of the Army	9.1	24.6	25.0	25.5
Army Operation & Maintenance Accounts	2.2	3.7	2.3	3.1
Army Res, Dev, Test & Eval Accounts	3.2	3.9	4.5	4.9
Army Procurement Accounts	2.5	4.6	1.9	1.7
Army Other	1.2	12.4	16.3	15.7
Department of the Air Force	6.7	13.6	16.6	15.7
Air Force Operation & Maintenance Accounts	0.9	2.1	1.7	1.7
Air Force Res, Dev, Test & Eval Accounts	2.2	3.1	3.4	3.4
Air Force Procurement Accounts	3.4	0.7	1.2	1.3
Air Force Other	0.2	7.7	10.4	9.3
DoD Appropriated Accounts	267.5	140.3	239.2	181.9
Base Closure and Realignment	121.3	53.9	29.5	1.0
Operation & Maintenance Accounts	17.6	3.5	8.0	7.3
Res, Dev, Test & Eval Accounts	91.4	46.8	107.3	123.8
Procurement Accounts	13.6	21.4	65.6	31.7
DoD Other	23.6	14.7	28.7	18.2
b. Orders from DBOF Business Areas	186.0	137.4	169.7	170.2
c. Total DoD	2,050.1	1,592.6	1,925.9	1,918.0
d. Other Orders	96.9	100.7	104.7	99.0
Other Federal Agencies	9.5	8.9	7.4	7.9
Foreign Military Sales	77.1	79.6	83.6	75.7
Non Federal Agencies	10.3	12.2	13.7	15.3
2. Carry-In Orders	1,624.0	1,206.3	821.0	748.0
3. Total Gross Orders (available funding)	3,771.0	2,899.5	2,851.5	2,764.9
4. Funded Carry-Over*	1,206.3	821.0	748.0	696.4
5. Less Passthrough	0.0	0.0	0.0	0.0
6. Total Gross Sales	2,564.7	2,078.5	2,103.6	2,068.5

* Carry over data before adjustments for work-in-process, BRAC, FMS, non-DoD and contractual obligations

Adjusted Carry-over is:	538.3	527.0	512.1	477.1

CHANGES IN THE COST OF OPERATIONS
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: RESEARCH & DEVELOPMENT
SUBACTIVITY GROUP: NAVAL SURFACE WARFARE CENTER
FY 1998/FY 1999 PRESIDENT'S BUDGET

		Total Expenses
1.	**FY 1996 Actual**	**$2,482.0**
2.	**FY 1997 Estimate in President's Budget**	**$2,588.8**
3.	Impact in FY 1997 of Actual FY 1996 Experience	$12.7
4.	Pricing Adjustments	
5.	Productivity Initiatives	
	a. Consolidation/Efficiencies	($0.1)
	b. Savings from CPP	($0.1)
	c. Privatization - Louisville	($60.9)
6.	Program Changes	
	a. Workload	($333.1)
	b. BRAC	($78.3)
7.	Other Changes	
	a. Labor Repricing	$5.4
	b. SIP/VERA/RIF	($3.1)
	c. Accounting Adjustments	($1.2)
	d. Information Technology	($3.0)
	e. Depreciation	($13.1)
	f. Maintenance and Proj Mgmt Info System (Crane)	$4.6
	g. Other	$1.8
8.	**FY 1997 Current Estimate**	**$2,120.5**
9.	Pricing Adjustments	
	a. FY 1998 pay raise	
	1. civilian personnel	$21.6
	2. military personnel	$0.4
	b. Annualization of 97 pay raise	
	1. civilian personnel	$7.6
	2. military personnel	$0.1
	c. Stock fund - fuel	$0.9
	d. Stock fund - non-fuel	$16.4
	e. DWCF price changes	$1.2
	f. General purchase inflation	$16.4
10.	Productivity Initiatives	

CHANGES IN THE COST OF OPERATIONS
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: RESEARCH & DEVELOPMENT
SUBACTIVITY GROUP: NAVAL SURFACE WARFARE CENTER
FY 1998/FY 1999 PRESIDENT'S BUDGET

			Total Expenses
	a.	Consolidation/Efficiencies	($19.4)
11.	Program Changes		
	a.	Workload	($82.7)
	b.	BRAC	($21.6)
	c.	Human Resources	
		Regionalization Saving	($0.7)
		Transfer to AAUSN	($1.4)
12.	Other Changes		
	a.	Pricing Model Labor Cost Re-distribution	($0.4)
	b.	SIP/VERA/RIF	($2.9)
	c.	Military	($0.9)
	d.	Accounting Adjustments	$0.0
	e.	IT Budget Changes	$0.1
	f.	Depreciation	($0.2)
	g.	Other	$14.0
		Awards (96 NOR Deferral)	$2.7
		FECA	($1.6)
		Health Continuation	$0.5
		Transfers	($1.0)
		Compl. of HBNQ, MOSER, BuNena in FY97	($0.4)
		Facilities Maintenance (Partial 96 Deferral)	$2.0
		Training (Personnel Demo and 96 Deferral)	$1.9
		Other Engineering Services	$5.2
		Other Contracts	$0.8
		Transportation	$0.7
		ADP Support/Services (Dahlgren)	$3.4
		Other	($0.2)
13.	**FY 1998 Current Estimate**		**$2,069.1**
14.	Pricing Adjustments		
	a.	FY 1998 pay raise	
		1. civilian personnel	$15.1
		2. military personnel	$0.4
	b.	Annualization of 1997 pay raise	
		1. civilian personnel	$7.0
		2. military personnel	$0.1
	c.	Stock fund - fuel	($0.2)
	d.	Stock fund - non-fuel	($0.9)

CHANGES IN THE COST OF OPERATIONS
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: RESEARCH & DEVELOPMENT
SUBACTIVITY GROUP: NAVAL SURFACE WARFARE CENTER
FY 1998/FY 1999 PRESIDENT'S BUDGET

		Total Expenses
	e. DWCF price changes	$0.9
	f. General purchase inflation	$16.4
15.	Productivity Initiatives	
	a. Consolidation/Efficiencies	($7.3)
16.	Program Changes	
	a. Workload	$6.6
	b. BRAC	($29.7)
	c. Human Resources	
	Regionalization Saving	($0.2)
	Transfer to AAUSN	($2.4)
17.	Other Changes	
	a. SIP/VERA/RIF	($4.6)
	f. Depreciation	$0.7
	h. Other	($2.2)
18.	**FY 1999 Current Estimate**	**$2,068.8**

Business Area Capital Investment Summary
Component: Department of the Navy
Activity Group: Naval Surface Warfare Center / R&D
FY 98-99 President's Budget Submission
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	Non ADP								
1	HIGH-RISE PALLET STORAGE RACK SYSTEM FOR BLDG 40 (Replacement)					1	1.058		
2	Magnetic Physical Modeling Facility (New Mission)	1	.799						
3	Controllable Pitch Prop System (New Mission)			1	.700				
4	RAPID PROTOTYPING SYSTEM (Productivity)			1	.614				
5	HYPERSPECTRAL IMAGER (Replacement)							1	.600
6	BATTERY TEST SYSTEM (Replacement)	1	.205	1	.370				
7	RANGE SUPPORT EQUIPMENT (Replacement)					1	.250	1	.290
8	PULSE POWER (Productivity)					1	.175	1	.335
9	98EN001 - ELECTRONIC ACCESS CONTROL SYSTEM (Replacement)			1		1	.350	1	.150
10	10000 HP High Speed Water Brake (New Mission)							1	.500
11	Miscellaneous (Non ADP < $500K; > $100K)		6.796		9.524		8.211		9.250
	Non ADP Total:		**7.800**		**11.208**		**10.044**		**11.125**

CC00240

Business Area Capital Investment Summary
Component: Department of the Navy
Activity Group: Naval Surface Warfare Center / R&D
FY 98-99 President's Budget Submission
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	ADP								
12	CDNET Modernization (Hardware)					1	2.089	1	1.923
13	NIMIP EQUIPMENT (Hardware)	1	3.000	1	.726				
14	THEATER WARFARE SYSTEMS (Hardware)		.310			1	1.885	1	1.390
15	NETWORKS (Telecommunications Equip.)	1	.389	1	.600	1	.390	1	.761
16	DIVISION NETWORK (Hardware)					1	1.750		
17	98EA604 - NETWORK CONNECTIVITY (Hardware)					1	.600	1	.750
18	CSACT (COMBAT SYSTEMS ADV CONCEPTS AND TECH) LAB (Hardware)			1	.476	1	.400	1	.410
19	95EA504 - SERVER ARCHITECTURE (Hardware)	1	.475	1	.103	1	.375	1	.325
20	MODELING AND SIMULATION CENTER EQUIPMENT (Hardware)		.687		.555				
21	96EA407 - INTEGRATED SOFTWARE ENGINEERING ENVIRON (Hardware)			1	.360	1	.385	1	.385
22	ADPT: GENERAL FACILITY UPGRADE (Hardware)		.312		.365		.225		.225
23	96EA413 - COMPUTER SECURITY/INTRUSION PREVENTION (Hardware)	1	.237	1	.440	1	.200	1	.200

Business Area Capital Investment Summary
Component: Department of the Navy
Activity Group: Naval Surface Warfare Center / R&D
FY 98-99 President's Budget Submission
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
24	SCIENTIFIC VISUALIZATION AND VR LAB EQUIPMENT (Hardware)		.525		.540				
25	SATELLITE COMMUNICATION EQUIPMENT (Hardware)						1.050		
26	ENGINEERING ENVIRONMENT (Hardware)	1	.307	1	.220	1	.150	1	.340
27	ADP TELECOMMUNICATIONS CABLES (Hardware)						1.000		
28	WARFARE EVALUATION SYSTEM (Hardware)								.950
29	98EA605 - PAPERLESS ENVIRONMENT (Hardware)					1	.540	1	.400
30	ADVANCED WEAPONS CONTROL SYSTEM (Hardware)	1	.316	1	.475				
31	STRIKE WARFARE PROTOTYPING LABORATORY (Hardware)						.400		.300
32	LAN FIBER OPTIC SYSTEM (Hardware)					1	.300	1	.400
33	NEXT GENERATION ADVANCED NETWORK SYSTEM (Hardware)								.680
34	DTNET Extensions (Telecommunications Equip.)	1	.052	1	.600				
35	96EA502 - DOCUMENT MANAGEMENT SYSTEM (Hardware)	1	.298	1	.300				

000442

Business Area Capital Investment Summary
Component: Department of the Navy
Activity Group: Naval Surface Warfare Center / R&D
FY 98-99 President's Budget Submission
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
36	96EA406 - TRUSTED LAN HUB (Other Support Equip.)			1	.175	1	.200	1	.200
37	EXPEDITIONARY WARFARE SHIPBOARD NETWORK (Hardware)						.200		.322
38	JLSC Equipment (Hardware)			1	.500				
39	Miscellaneous (ADP < $500K; > $100K)		3.108		6.231		4.019		3.033
	ADP Total:		**10.016**		**12.666**		**16.158**		**12.994**
	Software								
40	NIMIP SOFTWARE	1	1.754	1	2.588	1	5.846	1	2.873
41	Miscellaneous (Software < $500K; > $100K)		.149		.146		.802		
	Software Total:		**1.903**		**2.734**		**6.648**		**2.873**
	Minor Construction								
42	93MC0001 - SUPPLY WAREHOUSE BLDG	1	.034	1	.300				
43	RIMS OPERATIONS BUILDING	1	.320						
44	RENOVATE B218	1	.110	1	.200				
45	HAZARDOUS MATERIAL WAREHOUSE (C)	1	.308						
46	WATER TREATMENT FACILITY							1	.300

C22203

Business Area Capital Investment Summary
Component: Department of the Navy
Activity Group: Naval Surface Warfare Center / R&D
FY 98-99 President's Budget Submission
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
47	DIVING IN-SERVICE ENGINEERING & DEVELOPMENT BLDG			1	.300				
48	Construct Wetlands at Sewage Plant			1	.300				
49	CHRIMP FAC (CONS HAZ REVITALIZATION IMPLEN MGT PL)					1	.300		
50	B1200 Renovations			1	.300				
51	WEAPONS O/H AREA B-2521			1	.299				
52	ELECTRIC POWER EXTENSION					1	.295		
53	Air Emissions, Three Boilers			1	.287				
54	Public Works Addition			1	.275				
55	B-9 Welding Shop Addition			1	.275				
56	LSMB Renovations			1	.274				
57	TEST SUPPORT SHOP					1	.262		
58	94MC4000 - ADDITION TO BLDG 452	1	.251						
59	RENO SECURITY COMMUNICATIONS ROOM B-10			1	.250				
60	CONSTRUCT FACILITY FOR MEDIA BLASTING					1	.250		
61	ROAD CONSTRUCTION			1	.240				
62	REPLACE 2.4 KV PHASE III	1	.240						
63	RENOVATE B-2084			1	.240				
64	INTEGRATED SITE ALARM SYSTEM	1	.240						
65	Stormwater System			1	.229				

Business Area Capital Investment Summary
Component: Department of the Navy
Activity Group: Naval Surface Warfare Center / R&D
FY 98-99 President's Budget Submission
($ in Millions)

Line Num	Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
66	FUEL CELL R&D LABORATORY - PHILADELPHIA					1	.226		
67	B.1 ADDITION 2ND STORY - BAYVIEW					1	.225		
68	NORTH HIGH VOLTAGE FEEDER	1	.220						
69	EXTEND STEAM DISTRIBUTION	1	.155	1	.060				
70	ADDITION TO B. 10					1	.201		
71	REPLACE FLASH X-RAY TEST FACILITY			1	.200				
72	RENOVATE OLD PHYSICAL REPAIR AREA							1	.200
73	RENO MOD & 8023 PROD ENGR	1	.200						
74	DEEP MOOR SHORE POWER					1	.200		
75	CASTING UPGRADE, PHASE 1, BLDG 743					1	.200		
76	B-152 Renovations			1	.200				
77	Miscellaneous (Minor Construction < $200K; > $100K)		1.847		1.331		1.131		.409
	Minor Construction Total:		**3.925**		**5.560**		**3.290**		**.909**
	Grand Total:		**23.644**		**32.168**		**36.140**		**27.901**

000245

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 1/HIGH-RISE PALLET STORAGE RACK SYSTEM FOR BLDG 40			D. Activity Identification NSWC Crane, IN					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							1	1058	1058			

Narrative Justification:

Description

Purchase necessary service, labor and material to furnish, install, test, illuminate, protect and make operational a high-rise pallet storage system in Building 40. The system will consist of the equipment required to store and retrieve assets, including a pallet rack system with related equipment such as lighting, fire protection and loading/unloading capability.

Justification

Existing warehouses have been maximized using conventional storage configurations. NAVSEA-custody material continues to be returned from ships and closed-down production plants. The material requires smarter use of cubic space in existing buildings. In addition, projects such as the Van Project for AN/ALQ-99 are using previously designated warehouse space in Building 40 for industrial repairs. Building 40 has not only heavy truck and rail access but installed overhead cranes. Estimated additional storage space needed is 200,000 square feet (SF). The addition of a high-rise pallet storage system would increase our storage capability by enabling us to utilize the cube space. Gross square feet would be increased from 45,000 SF to 270,000 SF, increasing gross storage by 225,000 SF. This investment would increase our corporate storage capability in Building 40 by 500% (375,100 cubic feet) while accommodating increasing industrial footprint needs.

Impact

Disapproval of this project would result in the Division's Supply Directorate not being able to properly store increased quantities of NAVSEA material returned from ships and closed-down facilities. Incidental storage for material awaiting repair induction for current projects is now limited and loss of funded projects could occur if proper stewardship of items in the repair pipeline is not maintained.

000346

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 5/HYPERSPECTRAL IMAGER (Replacement)					D. Activity Identification NSWC Crane, IN			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP										1	600	600

Narrative Justification:

Description

Hyperspectral Imager measuring device capable of simultaneously measuring spectral, spatial and temporal outputs of flare, missile, aircraft and ship signatures.

Justification

This system is designed to provide the necessary capability to measure the output of pyrotechnic devices consistent with the measurement techniques currently being projected for advanced missile seekers, including surface to air, air to air, air to surface and surface to surface. It will provide a single measurement instrument that can characterize flares spatially, spectrally and temporally. These are all techniques being used as flare countermeasures. The acquisition of this equipment both improves/maintains Navy weapons systems with respect to thermal signatures and provides the Navy with a capability not now available.

Impact

This capability would complement all other existing measurement capabilities currently at Crane and at all other measuring facilities in the world. It would be a one-of-a-kind system capable of measuring simultaneously all the features necessary to characterize decoy flares against any known or projected threat, important to the Navy because of the variety of thermal-directed threats.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 7/RANGE SUPPORT EQUIPMENT (Replacement)			D. Activity Identification NSWC Dahlgren, VA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							1	250	250	1	290	290

Narrative Justification:

Description

Replacement of Range Support Equipment at Dahlgren provides the capability to perform various tests of weapons systems. Several pieces of equipment require replacement due to physical and technical obsolescence, including a stabilized pedestal and various camera/video-type systems.

Justification

The existing stabilized pedestal has been frequently used for both shipboard and land-based testing as a base for cameras, lasers, radar, etc. It will soon need significant repairs in order to remain useful but even now is only marginally capable of handling payloads of many current testing requirements. A high speed video system is needed to replace the existing film system. The video system is less labor-intensive to operate and will replace technically obsolete equipment used for on-site evaluation of weapons' testing. An upgraded video range surveillance system is needed to replace old remote-controlled cameras. This system will identify obstructions on the range as real or clutter. Range tests support missile tracking, target tracking, gun mount motion tests, fuze tests, etc..

Impact

This equipment is needed to ensure safe, efficient operation of testing ranges at the Dahlgren site. The existing equipment is physically and technically obsolete and must be replaced. Tests will be delayed and/or incomplete because of equipment breakdown, and operational costs will rise due to increased maintenance and repair costs as shown by the economic analysis.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 8/PULSE POWER (Productivity)					D. Activity Identification NSWC Dahlgren, VA			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							1	175	175	1	335	335

Narrative Justification:

Description

Pulsed Power is the research and development of technologies associated with the generation, storage, control, and shaping of high-energy electrical, electromagnetic or optical pulses. These efforts support the development of high-power electrical systems, non-thermal discharges, lethal and non-lethal directed energy, electromagnetic effects, and electronic attack technologies. Investments in highly specialized lasers, microscopes, and deposition systems will provide improved in-house testing capabilities in this area.

Justification

These testing systems will provide the capabilities to perform required research in-house, which is more cost-effective than contracted testing over long periods of time. A tunable laser system provides the same capabilities of a much more costly family of lasers to support optics and photonics research and development. A surface analysis system provides the capability to characterize high-voltage electrodes and will allow the correlation of surface features and electrode performance. A deposition and coating system will add to the present semiconductor fabrication capabilities needed to explore new materials and concepts, particularly in high voltage optically-controlled switches.

Impact

Experience has shown long delays and poor performance for one-of-a-kind items that are contracted to companies, universities or other government laboratories. Most importantly, work is delayed because of long turn-around times. This equipment is required to perform cost-effective development and testing.

0023

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 9/98EN001 - ELECTRONIC ACCESS CONTROL SYSTEM (Replacement)			D. Activity Identification NSWC Port Hueneme, CA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							1	350	350	1	150	150

Narrative Justification:

Description

The project consists of a microprocessor driven alarm monitor/command subsystem including individual coded access cards, card readers, door strikes, and contact switches. This project will be completed in phases to secure more critical areas first.

Justification

The electronic Access Control System (ACS) will secure facilities in compliance with OPNAVINST 5530.14B and 5510.1H by limiting access, monitoring users, and alerting of unauthorized access. It will provide physical security, prevent access to information, protect personnel, and reduce the loss of government property. Execution of this project is accelerated to address critical security deficiencies cited in Port Hueneme Division's May 1996 Inspector General inspection.

Impact

This system will reduce theft of computer equipment to a minimum and secure information and assets that are vulnerable to unauthorized access.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 10/10000 HP High Speed Water Brake (New Mission)				D. Activity Identification NSWC Eng. Sta. Philadelphia, PA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP										1	500	500

Narrative Justification:

Description

This project is to procure a 10,000 Horsepower (HP) high speed waterbrake for the Naval Surface Warfare Center, Carderock Division, Philadelphia Site (SSES).

Justification

SSES is the Navy's principal agent for gas turbine engine testing and in-service engineering. The NAVY is currently introducing several new gas turbine engine platforms into the fleet. A number of these platforms have engines exceeding 5,000 brake horsepower (BHP) rendering the current waterbrake located in the Small Gas Turbine Engine Test Cell inadequate. By adding a 10,000 HP high speed waterbrake to the existing Small Gas Turbine Engine Test Cell independent test and evaluation is possible.

Impact

Independent evaluation will not be possible for high speed waterbrakes resulting in possible acceptance of substandard equipment from outside contractors.

(Dollars in Thousands)	A. Budget Submission FY 98-99 President's Budget Submission		
B. Component/Activity Group/Date DON / NSWC R&D / January 1997	C. Line# and Description 11/Miscellaneous (Non ADP < $500K; > $100K)	D. Activity Identification NA	

	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	6796	9524	8211	9250

000352

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 12/CDNET Modernization (Hardware)			D. Activity Identification NSWC Carderock Bethesda, MD					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	2089	2089	1	1923	1923

Narrative Justification:

Description

The Carderock Division network (CDNET) provides Information Technology (IT) infrastructure for the connection of all information resources and data exchange within Carderock Division. It is a state-of-the-art, integrated data/audio/visual network that provides the division with seamless communications.

Justification

Carderock Division's widely separated sites necessitate a Wide Area Network (WAN) capable of providing technical and business data as well as video teleconferencing to support mission tasks. Carderock sites operate on separate Local Area Networks (LAN). CDNET will provide all Carderock sites connectivity and compatibility. Additionally Carderock Division is required to connect and be compatible with the Defense Message System (DMS), the Naval Sea Systems Command (NAVSEA) WAN, NEWNET, and the emerging business support system under the Financial Information Management System (FIMS).

Impact

Failure to fund the continuous improvement of CDNET will prevent the Division from maintaining the high speed, high bandwidth IT infrastructure that it needs to meet the data and information processing, exchange, and interconnectivity requirements imposed by its mission. It will also impact the Division's ability to interface with the Fleet IT infrastructure.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 14/THEATER WARFARE SYSTEMS (Hardware)			D. Activity Identification NSWC Dahlgren, VA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP	1	310	310				1	1885	1885	1	1390	1390

Narrative Justification:

Description

Theater Warfare Systems will be used to visually depict dynamic engineering concepts and will tie into Division thrusts in warfare analysis, total ship, and combat systems development. It will enable decision-makers to explore various system/procurement options to evaluate the relative benefits and affordability of each in a unit/force/theater context.

Justification

Theater Warfare Systems will consist of display engines networked by video switching to panel display arrays. It will include high-power computing engines with sophisticated graphical and animation capabilities as well as interactive decision-support hardware and software. This system will be networked to both local and remote nodes on a wide-area network to enable participation in a variety of analytical and engineering scenarios for the development and evaluation of various weapons elements and systems. In a downsizing environment, affordability is a key component of smart procurement decisions. Acquisition decision-makers need the capability to explore procurement alternatives and quickly visualize respective decision impacts through real-time, interactive simulations of various weapons systems. Theater Warfare Systems provide these capabilities for components, ship/weapon systems, platforms, force, and theater options.

Impact

Theater Warfare Systems provide a cohesive environment to visualize and analyze the performance of systems and their cost effectiveness in a unit/force/theater context. It will support multiple users, especially those associated with warfare analysis and system engineering, new ship and system designs. Without this capability, much more costly and disjointed methods of evaluation must continue to be used, decision-making will be less comprehensive, and the full impact of decisions will not be known.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 15/NETWORKS (Telecommunications Equip.)				D. Activity Identification NSWC Dahlgren, VA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP	1	389	389	1	600	600	1	390	390	1	761	761

Narrative Justification:

Description

NSWCDD is continuing to upgrade its communications infrastructure. A multi-year effort to install a high-speed media trunking system was completed at Dahlgren in FY93. These networks primarily serve the scientific and engineering staff, providing access to scientific computing resources and permitting local area networking of research workstations. They allow the integration of distributed ADP resources, both secure and unclassified. This investment is for the routers, bridges, and control systems needed to upgrade the Dahlgren network backbone.

Justification

Benefits include better use of existing resources through interconnection, widespread access to tools and computer resources, and effective access to external activities. Expanded and enhanced networks will allow scientists and engineers to work more effectively due to data sharing capability and to save time and money due to higher speed, more reliable communications. This investment is a continuation of ongoing efforts to maintain and enhance network capability to standards. Efforts budgeted in FY95 were delayed to implement mandated budget reductions.

Impact

The NSWCDD network backbone is the primary means for data communication at the Dahlgren site and with off-site locations (other Dahlgren Division sites, Headquarters, sponsors, etc.). Insufficient capability to transmit data at adequate quantities and speed will delay operations and increase costs significantly.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 16/DIVISION NETWORK (Hardware)				D. Activity Identification NSWC Crane, IN				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	1750	1750			

Narrative Justification:

Description

The purpose of this project is to install a standards-based telecommunications network at Crane Division, Naval Surface Warfare Center to support the transmission of video, voice, data and imaging information to and from buildings occupied by the Navy and its tenant activities. The proposed network will employ state-of-the-art, cell-based switching technology while at the same time supporting interfaces which are compatible with legacy networks that are being used within the buildings today.

Justification

The existing network does not meet present or future requirements for several reasons. Reliability is very low, with aborted connections occurring on a frequent basis. This can be attributed to the large number of active components and an aerial trunk system that is exposed to the elements. A second limitation is speed. Given the technology used, the maximum speed and throughput that can be supported is 10Mbps. This is insufficient for the number of users that Crane has, and cannot handle the growing requirements for data transmission brought on by client-server applications. Lastly, the network is fast approaching saturation of its frequency spectrum. The proposed network will provide superior reliability, speed and throughput. Fewer active components will be required, also lowering the probability of system failure. Scaleable technologies will be used so that speed and bandwidth can be easily increased to accommodate Crane's ever-changing requirements for information transfer.

Impact

If this project is not approved, Crane will continue to be dependent upon a network technology that cannot even meet the needs of today. Crane will also be subject to communications outages that are now common place with the existing network. This will severely constrain any attempts to implement productivity savings through shared resources and computer technology. Furthermore, communications requirements increase each day as a result of new computer applications that are dependent upon data communications.

0525

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 17/98EA604 - NETWORK CONNECTIVITY (Hardware)					D. Activity Identification NSWC Port Hueneme, CA			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	600	600	1	750	750

Narrative Justification:

Description

This project will increase the capabilities and speed of Port Hueneme Division's network by procuring and installing networking devices including fiber optic routers, bridges, and/or gateways; multiport ethane hubs, optical fiber transmission equipment/material, and ATM devices.

Justification

This project replaces non-standard cable infrastructure, provide a higher bandwidth backbone, and allows implementation of a "global" system security architecture. Increasing engineering requirements in support of JCALS (Joint Computer-aided Acquisition & Logistics Support) and JEDMICS (Joint Engineering Data Management Information & Control System) require a more complex network to operate. The functions supported on the network are in direct support of testing and certifying weapon systems software to support the fleet. Continued manpower reductions will provide a requirement to ensure efficient electronic exchange in response to increasing fleet demands.

Impact

Port Hueneme Division will not be able to make use of and share data electronically, which is imperative to fulfilling mission requirements and providing quality fleet support, without network upgrades.

2000

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 18/CSACT (COMBAT SYSTEMS ADV CONCEPTS AND TECH) LAB			D. Activity Identification NSWC Dahlgren, VA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	476	476	1	400	400	1	410	410

Narrative Justification:

Description

The Combat Systems Advanced Concepts and Technology (CSACT) Laboratory has consolidated independent thrusts to provide an integrated software development and evaluation environment. The CSACT Laboratory is comprised of two primary emphasis areas, the Combat Information Center (CIC) and the Computing Resource Center (CRC). This investment supports these efforts with the acquisition of high-performance graphics processors, high- performance displays, and TAC workstations.

Justification

The requirement for a high-resolution graphics capability is urgent due to advancements in new concepts, technologies, and configurations. This capability is required to host CIC technology already developed and further develop additional concepts on information presentation and man-machine interaction. This equipment will be integrated into a network of workstations, high-performance graphic processors, and high-resolution and large-screen displays. The interconnection of these workstations and multiprocessors provides a network which enables the evaluation of new architecture concepts, algorithms, and implementation strategies.

Impact

The Naval Surface Warfare Center has the lead responsibility in guiding and developing the appropriate technologies required in the construction of all ship combat systems, including the Surface Combatant for the 21st Century (SC21). This equipment is needed to perform the critical analysis and prototyping required to demonstrate the feasibility of suitable advanced technologies.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 19/95EA504 - SERVER ARCHITECTURE (Hardware)				D. Activity Identification NSWC Port Hueneme, CA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP	1	475	475	1	103	103	1	375	375	1	325	325

Narrative Justification:

Description

This is a multi-year project which provides for open systems equipment including network/file servers, print servers, removable media servers, communications servers, client/server software, and network interface software to transition to a client-server AIS Architecture.

Justification

The purpose of the servers is to reduce the need for additional computer resources across the command by allowing sharing of resources such as printers, CD-ROM (Compact Disc Read Only Memory), towers, and fax machines. Servers provide a place for users to store and backup their data at a central location vice having to do it at every desktop. Most importantly, servers allow for storing of the application master files, thus greatly reducing the time it takes to install and setup applications across the division. Additionally, applications at the server level are easy to monitor, thus a lesser number of licenses than the actual number of total users is required, resulting in a lower cost for software and future upgrades.

Impact

Without this project, the command will be unable to migrate from the current mainframe environment to the downsized distributed environment required by NAVSEA. The current system is not capable of meeting the demands of increased usage requirements and transitioning to a full functioning "paperless office" environment. This project also supports and is consistent with NAVSEA Information Management Improvement Program (NIMIP) projects.

000365

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 21/96EA407 - INTEGRATED SOFTWARE ENGINEERING ENVIRON			D. Activity Identification NSWC Dam Neck, VA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	360	360	1	385	385	1	385	385

Narrative Justification:

Description

This phased project will procure large scale data base and application servers, workstations, support software, and communications services to tie into existing and future networks.

Justification

This project will integrate and redefine our Software Engineering Environments (SEES) to support all functional areas of the software engineering process. The Integrated Software Engineering Environment (ISEE) will support the Corporate Management Information System (CMIS) with metrics and real-time project status tracking. The increased control of products and processes will assist our software security and safety programs. With a common user interface across all platforms, the ISEE will allow a greater degree of flexibility in using limited and declining resources. This system will assist the division in raising its Software Engineering Institute's (SEI) Capability Maturity Model (CMM) level and maintaining it. This effort will support multiple projects including: FFG-7, DD963, DDG993, BFTT (Battle Force Tactical Trainer), Command Station, TENA (Test & training Enabling Architecture) and CDK (Common Display Kernal).

Impact

The current fragmented SEE is labor intensive and error prone. Inefficiencies within the current system, coupled with the continuing labor force reductions, will hamper our ability to adequately support fleet engineering requirements.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 22/ADPT: GENERAL FACILITY UPGRADE (Hardware)				D. Activity Identification NSWC Dahlgren, VA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP			312			365			225			225

Narrative Justification:

Description

The Advanced Distributed Processing System (ADPS) provides an environment for software development and analysis and the capability to process both unclassified and classified data. This procurement consists of memory, disk, and graphics upgrades as well as file server and workstation upgrades for previously purchased equipment.

Justification

Upgrading the file servers on the ADPS will increase the processing power of the system by increasing the speed at which network services are performed by the servers. Upgrading the workstations on the ADPS will allow users to analyze more complex problems while decreasing turn around time and improving productivity of individual workstations. Additional memory for workstations will also increase the performance by decreasing the network and hard disk access associated with virtual memory. Graphics boards and graphics accelerators facilitize the utilization of graphic tools increasing productivity as well as supplying graphics products to sponsors. Purchasing faster and larger capacity disks will increase the throughput of computing on the ADPS and create storage for large capacity databases.

Impact

Software development and analysis will be inadequate for programs such as AEGIS, Artificial Neural Networks (ANN), Tri-Service Strike ATD, ASTER, Navy Tactical Ballistic Missile Defense (Navy TBMD), Distributed Wargaming, and Global Positioning Satellite (GPS) Relative Positioning Research without a general facility upgrade.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 23/96EA413 - COMPUTER SECURITY/INTRUSION PREVENTION				D. Activity Identification NSWC Port Hueneme, CA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP	1	237	237	1	440	440	1	200	200	1	200	200

Narrative Justification:

Description

Project procures security/firewall hardware and software, high-speed encryption devices, and secure telecommunications devices to provide a secure network at the Port Hueneme and Dam Neck sites.

Justification

This multi-year project supports security/firewall hardware and software, high-speed encryption devices, and secure telecommunications devices to protect the command's network from intrusion and implement a global system security architecture that reduces the threat of unauthorized user access and satisfies (C-2 = Controlled Access Protection: A class of security as defined by DOD 5200.28-STD) security requirements. Implements initial electronic Naval Messaging System capability (DOD) as part of the paperless environment initiative.

Impact

The command is currently vulnerable to intrusion and security attacks which could lead to the compromise of sensitive data and can result in hundreds of workhours and thousands of dollars to recover. If this project were canceled, PHD NSWC could not be certified as C-2 compliant which could result in denied access to confidential or secret information. We currently have a waiver for such compliance for the near term since this project is budgeted with the 1st phase currently executing.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 25/SATELLITE COMMUNICATION EQUIPMENT (Hardware)			D. Activity Identification NSWC Panama City, FL					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP									1050			

Narrative Justification:

Description

The Satellite Communications Equipment is a bi-directional satellite link that will provide the Coastal Systems Station with real time connectivity to the fleet via the Modeling & Simulation resources. It will consist of associated satellite antenna, transmitters, receivers, control displays and a digital interface to the Modeling & Simulation facility.

Justification

This equipment is necessary to provide direct support to the fleet for contingency missions, to support fleet training, and to participate in large scale exercises. The Coastal Systems Station must maintain a close tie with the fleet, providing support for missions and fleet training within our mission areas of Mine Warfare, Special Operations, Amphibious Warfare, and Expeditionary Warfare. This equipment will allow the Coastal Systems Station to provide this support.

Impact

The need exists for the Coastal Systems Station to maintain real time communications with the fleet for training and simulated exercise missions. The satellite equipment will provide the Coastal Systems Station the ability to communicate in a real time environment with the fleet.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 26/ENGINEERING ENVIRONMENT (Hardware)				D. Activity Identification NSWC Dahlgren, VA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP	1	307	307	1	220	220	1	150	150	1	340	340

Narrative Justification:

Description

This investment will replace several workstations and PCs currently functioning as file servers, software license servers, and CAE workstations. Current equipment will be replaced by a graphics computer acquired incrementally during FY 96 and FY 97. A projection system will be acquired in FY98 and video upgrades acquired in FY99. This capability provides the necessary environment for design, documentation and analysis, as well as modeling and simulation, of weapons systems.

Justification

Several of the current workstations have reached the end of their useful life. All equipment to be replaced is much slower and less capable than current graphical processing technology (i.e., peripherals and future operating system releases will no longer be available for the existing equipment). The planned acquisition will support STANDARD Missile, ATBM SRAW, SMAW, and MARS among many other programs.

Impact

This equipment is essential to maintain current technology for engineering systems-level prototyping. Current operational costs are rising and will continue to increase and complex tasks will be much more difficult and costly to perform.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 27/ADP TELECOMMUNICATIONS CABLES (Hardware)			D. Activity Identification NSWC Indian Head, MD					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP									1000			

Narrative Justification:

Description

The project will replace the current copper backbone Local Area Network (LAN) with a fiber-optic backbone throughout the Indian Head Division.

Justification

Indian Head Division currently maintains a 135 building copper network, originally installed in 1983. This network does not provide the speed, bandwidth, or reliability that is required for client/server computing. Additionally, maintenance is becoming more costly due to frequent failures and the physical obsolescence of the backbone.

Impact

Without a base wide fiber optic backbone replacement client/server interface will be impeded, downtime will increase, and maintenance costs will continue to increase.

0026

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 28/WARFARE EVALUATION SYSTEM (Hardware)			D. Activity Identification NSWC Panama City, FL					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP												950

Narrative Justification:

Description

This investment will provide the Coastal Systems Station's Modeling & Simulation (M & S) development project with the computational power required to execute warfare simulation programs. It will include a next generation multi-processor supercomputer and an upgrade to the existing simulation visualization program hardware, providing a 120-degree panoramic viewing window or three independent viewing windows for the overhead projection system.

Justification

The computational load on existing computer resources will become prohibitive with the increase in number and complexity of systems being added to the current M & S system. For the Coastal Systems Station to remain a leader in the Expeditionary Warfare simulation arena, we must take advantage of new computer architectures that will ensure timely, accurate solutions. Mine Warfare Environmental Server functions, Hardware-in-the-Loop simulations, complex high-fidelity physics models, and complex multi-warfare scenario simulations, all require current M & S technological capabilities. The Simulation Visualization Program upgrade is necessary to maintain state-of-the-art technology in three-dimensional visualization software development.

Impact

If this project is not funded the productivity of simulation analysis will be negatively impacted. Currently hundreds of production runs are needed to ensure a valid statistical result for a study. The hours needed to make a production run will continue to increase as the fidelity of simulations increase, resulting in the need for more computational power just to maintain the status quo.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 29/98EA605 - PAPERLESS ENVIRONMENT (Hardware)			D. Activity Identification NSWC Port Hueneme, CA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	540	540	1	400	400

Narrative Justification:

Description

Acquisitions will include network/file servers, print servers, removable media servers, communications servers, web servers, database software, client/server software, and network interface software to be able to support a robust integrated data processing and retrieval architecture. This is a follow-on project to document management and reports/data retrieval projects.

Justification

This project will enable command users to share and maximize use of electronic information while protecting data from loss and unauthorized access. It will enable faster response time when reviewing technical data and urgent messages and will result in the streamlining of current processes.

Impact

Port Hueneme Division's ability to make use of and share data electronically will not be met without this procurement.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 31/STRIKE WARFARE PROTOTYPING LABORATORY (Hardware)				D. Activity Identification NSWC Dahlgren, VA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP									400			300

Narrative Justification:

Description

This equipment for the Strike Warfare Prototyping Laboratory will provide the capability to fully simulate all components of cruise missile systems, including: mission planning, communications, preparation and launch, and real-time missile simulation. These acquisitions consist of graphics engines a parallel processing system with subsequent upgrades for each. These investments will enhance and upgrade the parallel processing and visualization systems initiated in the Algorithm Development Facility.

Justification

The proposed facility will allow for a fully integrated and efficient testing, prototyping and Distributed Interactive Simulation (DIS) environment. Dahlgren Division is currently developing integrated testing and simulation resources in support of the advanced technology projects. The equipment will be used both for internal projects in concept development and prototyping and as a play in the DIS exercises in the areas of Strike Warfare and Naval Surface Fire Support mission planning and targeting systems.

Impact

These efforts will lead to more efficient and robust integration testing and the reduction of flight tests, and provide a full weapon system simulation bed for experimentation of new technology. Without this equipment, tasking will be performed manually with less capable computers, requiring four additional personnel. Completing the tasks will take longer and the probability of success will be greatly reduced due to inadequate tools.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 32/LAN FIBER OPTIC SYSTEM (Hardware)			D. Activity Identification NSWC Panama City, FL					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							1	300	300	1	400	400

Narrative Justification:

Description

This project will complete Phases V and VI, and begin Phase VII, of the LAN Fiber Optic System implementation plan. The Coastal Systems Station (CSS) has a very detailed implementation plan for its fiber optic system, dividing implementation into eight "phases." These phases divide CSS into regions, which are then ordered by urgency of implementation. Included in the project are Asynchronous Transfer Mode (ATM) electronics upgrades, fiber cable plant expansions, and Fiber Distributed Data Interface (FDDI) electronics.

Justification

Due to increasing LAN backbone traffic there is a need for migration to higher speed LAN technology. New technologies are being deployed in support of critical technical projects, utilizing larger amounts of network bandwidth. ATM is a scaleable technology which will meet our needs well into the future. The deployment of an ATM backbone is an integral part of the eight- phase Fiber Optic System implementation plan and is vital to the mission of the Coastal Systems Station.

Impact

If the proposed investment is not approved, it will delay completion of other phases of the LAN Fiber Optic System implementation plan. Some technical projects will put a large burden on available network backbone bandwidth causing slowdowns to the detriment of others.

0026969

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 33/NEXT GENERATION ADVANCED NETWORK SYSTEM (Hardware)			D. Activity Identification NSWC Dahlgren, VA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP												680

Narrative Justification:

Description

The Next Generation Advanced real-time Network System will replace, expand, and infuse new technology into the Integrated Interior Command/Control (IC2)-Data Fusion Technology engineering validation infrastructure currently used to support Navy information architecture. Acquisitions will include processing computers, network control computers, and fiber optic interconnections.

Justification

In the future, the Navy will depend even more heavily on modern information transfer and assimilation. State-of-the-art technology network architecture is essential for enhanced performance as well as increased cost and system efficiency. This equipment will be used in the development of next generation, state-of-the-art networks for information movement, operating systems for real-time combatant system functioning and network control, computers for real-time data/information fusion and management and multi-level security. These efforts have broad applicability for integration at the ship level (total ship engineering and integration); they support the majority of combat systems and weapons systems programs at the Dahglren Division; including LPD-17 and AEGIS network engineering efforts.

Impact

This equipment is essential for the development of the next generation network architecture, which will enhance performance and increase cost and system efficiency. This technology has broad application for many ship types and will provide modern information transfer and assimilation for tactical combat systems.

02-2003

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 35/96EA502 - DOCUMENT MANAGEMENT SYSTEM (Hardware)			D. Activity Identification NSWC Port Hueneme, CA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP	1	298	298	1	300	300						

Narrative Justification:

Description

This project provides for electronic routing of current working documents. The software which is the heart of the system has already been licensed to us by PRC Inc. This project provides document management hardware and connecting software for a storage/retrieval system, tracking/maintenance system, distribution/routing system, and an on-line viewing/red-lining system.

Justification

The purpose of this project is to provide command users the capability to store and retrieve technical and administrative documentation, distribute documentation electronically, route documents through review and approval processes electronically, view and markup documents on-line. This project is a subset of the paperless environment initiative.

Impact

Without this project the command will be unable to transition to a full functioning "paperless office" environment. Our capability for Engineering and Logistics expedient response in resolving U.S. Navy Fleet issues will erode if procurements are not made.
per copying will continue to be used as a duplicate system (a slower and more error-prone system) of moving and providing technical information to PHD employees.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 36/96EA406 - TRUSTED LAN HUB (Other Support Equip.)			D. Activity Identification NSWC Dam Neck, VA					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	175	175	1	200	200	1	200	200

Narrative Justification:

Description

The trusted Local Area Network (LAN) hub consists of the hardware and operating software to connect several heterogeneous LANs of various security classifications at our East Coast Operations (ECO). The resultant Local Area Network will comply with B2--Structured Protection: A class of security as defined by DOD 5200.28-STD, Trusted Computer Security Evaluation Criteria multi-level requirements of the National Security Center.

Justification

The proposed equipment has been evaluated and rated by NSWC and is approved as a trusted multi-level secure hub. The NAVSEA Information Management Improvement Program (NIMIP) mandates the establishment of on-line network access for message traffic and other NAVSEA organization management activities. In order to implement these requirements, a trusted hub is needed to connect networks of various classifications and architectures while still complying with NAVSEA 5239.1B.

Impact

Current East Coast Operations operate on separate networks resulting in a manual transfer of information. The Message Distribution System (MDS) will force the Office Automation Local Area Network to be isolated from administrative support system. With the procurement of a trusted LAN hub software engineering, and security systems for four locations will be centralized, standardized, and administered from one location.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 37/EXPEDITIONARY WARFARE SHIPBOARD NETWORK (Hardware)			D. Activity Identification NSWC Panama City, FL					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP							0	0	200	0	0	322

Narrative Justification:

Description

This proposal consists of a high speed Asynchronous Transfer Mode (ATM) network test bed for shipboard situation awareness and decision support for amphibious and mine warfare ships. Equipment purchased will include fiber optic links, workstations, lightstream switches, a multi-layer switch, and test bed simulation and control software.

Justification

Shipboard combat and support systems will facilitate the introduction of industrial technology in lieu of specially designed military systems. This new paradigm requires the ability to rapidly field and test new systems prior to installation aboard ship. This shipboard network will provide for full scale integration of combat systems and ship decision support systems, and will support systems located in multiple spaces, connected by a ship-wide, high-speed network. The result will be significant improvement in ship flexibility and survivability.

Impact

This equipment will provide the Coastal Systems Station with full scale integration of combat systems and ship decision support equipment for amphibious and mine warfare ships and analysis by field personnel.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 38/JLSC Equipment (Hardware)				D. Activity Identification NSWC Arlington, VA (all sites)				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	500	500						

Narrative Justification:

Description

The automated information systems are managed by the JLSC, the DOD designated Corporate Information Management agent for depot level logistics systems, to support Depot Maintenance functions. The depot standard systems include the Management Information System - Repairables (DIMMIS-R), Baseline Advances Industrial Management - Project Management (BAIM-PM), Laboratory Information Management System (LIMS), Hazardous Substance Management System (HSMS), Facilities and Equipment Management (FEM), Tool Inventory Management Application (TIMA), Inter-service Material Accounting and Control Systems (IMACS), Executive Information Systems (EIS), and the full integrated Depot Maintenance Standard System.

(Dollars in Thousands)	A. Budget Submission FY 98-99 President's Budget Submission			
B. Component/Activity Group/Date DON / NSWC R&D / January 1997	C. Line# and Description 39/Miscellaneous (ADP < $500K; > $100K)	D. Activity Identification NA		
	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	3108	6231	4019	3033

C/2000

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 40/NIMIP SOFTWARE					D. Activity Identification NSWC Arlington, VA (all sites)			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software	1	1754	1754	1	2588	2588	1	5846	5846	1	2873	2873

Narrative Justification:

1. The NAVSEA Information Management Improvement Program Implementation (NIMIP) is intended to provide the Information Technology (IT) support required to sustain Command missions. An essential element of the NSWC plan is to improve responsiveness and enhance capability and productivity. NSWC's business case stresses standardization of business systems which eliminates costly, specialized IT environments. The program requirements standardize automation support in the areas of: (1) personnel management (completed), (2) Payroll management (completed), (3) Finical Management (NIFIMS), and (4) materials and labor management (ILSMIS) and (SLDCADA). Standardized procedures will eliminate the need for redundant systems and migrate applications to an Open System Environment (OSE) eliminating in-house proprietary computers.

2. NSWC's portion of NIMIP places emphasis on standardization of DOD functions. NSWC has been directed to implement the DOD interim financial system of NAVAIR Industrial Financial Management System (NIFIMS) during FY 98 and FY 99 beginning with a pilot program in FY 97. NIFIMS will replace legacy systems currently being utilized by the research and development community. Because of the scope and magnitude of this project, the cost to eliminate the five NSWC DBOF systems is significant.

(Dollars in Thousands)	A. Budget Submission FY 98-99 President's Budget Submission	
B. Component/Activity Group/Date DON / NSWC R&D / January 1997	C. Line# and Description 41/Miscellaneous (Software < $500K; > $100K)	D. Activity Identification NA

	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	149	146	802	0

C2000C2

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 46/WATER TREATMENT FACILITY				D. Activity Identification NSWC Carderock Bethesda, MD				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction										1	0	300

Narrative Justification:

Description

This project will construct a facility for killing the algae in incoming Washington Sanitary Sewer Commission (WSSC) water at the Naval Surface Warfare Center, Carderock Division (NSWCCD).

Justification

Many hydrodynamic investigations involve underwater photography/video requiring optical clarity within the test facility. Incoming water from the WSSC is clouded by algae which prevents it from being used where optical clarity is necessary. Currently, optically clear water is obtained by time consuming and wasteful transfers of water between hydrodynamic facilities. Environmental and Occupational Safety and Health Administration (OSHA) constraints prevent chemical treatment of incoming water. The Water Treatment Facility would store incoming water in an algae killing lightless condition.

Impact

Failure to fund this project will result in the inability to support certain high priority NAVY hydromechanics/signature silencing programs.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 49/CHRIMP FAC (CONS HAZ REVITALIZATION IMPLEN MGT PL)				D. Activity Identification NSWC Dahlgren, VA				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							0	0	300			

Narrative Justification:

Description

The Consolidated Hazardous Revitalization Implementation Management Plan (CHRIMP) facility is an environmentally- controlled, centralized storage, purchasing and disposal site for hazardous materials.

Justification

The CNO directed full Navy implementation of CHRIMP by no later than May 1998 (CNO HE E0118102, May 1995). A centrally managed facility will allow the Division (Dahlgren site) to reduce excess hazardous materials (since the minimum purchase amount usually exceeds the amount needed for a particular testing requirement). Currently, each organization purchases hazardous materials needed for its requirements. Excess materials are stored throughout the site in numerous hazardous materials lockers.

Impact

This facility is required for Dahlgren Division to comply with the CNO directive. It will also reduce costs (by realizing economies of scale for purchases) and eliminating excess hazardous materials to be stored or disposed.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 52/ELECTRIC POWER EXTENSION					D. Activity Identification NSWC Eng. Sta. Philadelphia, PA			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							0	0	295			

Narrative Justification:

Description

This project will redistribute the electrical power system within Building 77H and increase the building electrical power capacity by adding a 4000 Ampere substation.

Justification

The current electrical power system of Building 77H cannot adequately support the increased requirements of additional test sites. This additional power will accommodate the requirements of the DDG-51 Land Based Test Site, the MHC-51 Trainer and Ship Support Activity, the AOE 6 Ship Support Activity, the Damage Control System Ship Support Activity and numerous other programs vital to the fleet.

000283

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 57/TEST SUPPORT SHOP					D. Activity Identification NSWC Carderock Bethesda, MD			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1		262			

Narrative Justification:

Description

This project will construct a concrete and masonry, high bay building addition in which to move an existing model preparation/machine shop area.

Justification

The current model preparation and machine shop area of the Maneuvering and Seakeeping Basin (MASK) of the Naval Surface Warfare Center, Carderock Division, is located in a back corner of the building. During cold weather, condensation makes this area cold and wet; water collects on the walls and pools on the floor. Fungus and mildew blooms are frequent. This exposes the model preparation personnel to multiple health and safety hazards and is detrimental to the machine tools located within the area. The geometry of the area makes adequate heating and dehumidifying impossible. There is no other place within the MASK to relocate the shop. By constructing an addition to the MASK, the model preparation area and machine shop could be relocated to a better environment.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 60/CONSTRUCT FACILITY FOR MEDIA BLASTING			D. Activity Identification NSWC Crane, IN					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	250	250			

Narrative Justification:

Description

This project constructs a 3,300 square foot addition to the activity's existing corrosion control facility to support the media blasting of large components of programs such as the ALQ-99 and the SLQ-32 electronic warfare systems and various radar systems. The addition will contain a staging area and a large plastic media blasting enclosure along with a recovery system.

Justification

The new facility is required to: (a) provide capability to blast larger components; (b) increase the corrosion controls capability to process more systems; (c) isolate dust-generating functions from other operations in the facility; (d) improve handling capability of these larger components; and (e) improve productivity. The media blast operation located in the original corrosion control facility was designed to handle components of the ALQ-99 program. Once the facility was placed into operation, other programs supported by Crane such as various radar systems, SLQ-32, Night Vision, Stinger missile, MK 86, mast mounts and numerous other projects began to come to the facility to have corrosion control provided for their components. The original media blast operations were not designed to handle these larger items and the volume of work. Although work-around procedures have been made to accommodate these items in several cases, this becomes very labor intensive and costly. In addition, it creates a bottleneck for the other operations in the facility. Due to the unexpected increase in the media blast workload, excessive dust from the media blast area migrates to other portions of the building adversely effecting the painting and conformal coating operation being performed in these spaces.

Impact

Without this facility, flow processes will continue to be disjointed and inefficient resulting in increased cost and turn-around time. In addition, without this project, the potential of health problems will continue for personnel working in this facility.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 66/FUEL CELL R&D LABORATORY - PHILADELPHIA			D. Activity Identification NSWC Carderock Bethesda, MD					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1		226			

Narrative Justification:

Description

This project will erect a 40 foot by 40 foot metal frame building with high bay doors, explosion proof electrical system, fume hoods, and adjacent concrete pads, to support Fuel Cell Research and Development Programs at the Philadelphia Detachment, Carderock Division.

Justification

Because fuel cell power systems offer enhanced ship survivability, reduced fuel consumption, and near zero pollution, the Navy has increased research and development (R&D) programs for these systems. The Philadelphia Detachment is the only Navy laboratory currently involved in this work. The growth in fuel cell programs has made existing laboratory space inadequate. The new laboratory building will provide the space needed to support the demonstration of shipboard fuel cell systems at sea and the development of advanced and high power density fuel cells.

Impact

Navy fuel cell R&D programs will be inadequately tested and evaluated without additional workspace.

C0023

(Dollars in Thousands)							A. Budget Submission FY 98-99 President's Budget Submission					
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 67/B.1 ADDITION 2ND STORY - BAYVIEW			D. Activity Identification NSWC Det. Bayview, ID					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1		225			

Narrative Justification:

Description

This project will add a 5000 square foot second story to the Building 1 Waterfront Wing at the Carderock Division, Naval Surface Warfare Center's (CARDEROCKDIV, NAVSURFWARCEN) Acoustic Research Detachment (ARD), Bayview, Idaho for the relocation of offices from the ground floor. The vacated space will then be used to expand the existing ground floor shop and engineering areas into the Waterfront Wing.

Justification

The growth of in-lake test programs with their associated support requirements at ARD has created a need for more shop and engineering space in the waterfront area. Existing facilities are fully utilized with no expansion space remaining in the existing waterfront buildings.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 70/ADDITION TO B. 10				D. Activity Identification NSWC Crane, IN				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	201	201			

Narrative Justification:

Description

A 2000 sq. ft addition to the north end of Building 10 will provide two (2) "drive-through" bays. This addition will house a new hazardous materials/heavy rescue truck, as well as two (2) emergency response vehicles also used for emergency response. The new vehicle will not fit in the existing building. (2000 sq ft)

Justification

Current building configuration does not provide sufficient environmentally controlled space to house the emergency response vehicles required to support the multiple emergency scenarios associated with the base.

Impact

Vehicles needed for emergency response will not be readily available during severe weather months. Deterioration of vehicles housed outdoors will require vehicle replacement at an earlier time.

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 72/RENOVATE OLD PHYSICAL REPAIR AREA				D. Activity Identification NSWC Crane, IN				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction										1	200	200

Narrative Justification:

Description

Renovate the Old Physical Repair Area. Provide power, ventilation, and air conditioning for test benches for ALQ-99 Transmitter repair and modifications. this renovation will eliminate poor ventilation in the existing space and provide additional work space for expanded transmitter requirements (ie EF-111A modifications).

Justification

This environmental project will improve the working environment for the employees working on the transmitter repair project by eliminating odors from coolant oil baths. The project will provide ventilated work area to perform transmitter repairs and modification to Air Force EF111 ALQ-99 transmitter (new work) and support expansion of Navy ALQ-99 transmitter mod program. Renovating this work area in Bldg 41 will greatly optimize the expanded operation because the old physical repair area is adjacent to existing transmitter repair facility, thus maximizing workflow, efficiency, & management.

Impact

Failure to fund this project will lead to the loss of capability to get new support equipment on line and also continued operation in an inadequate environmental space because of poor ventilation. The AN/ALQ-99 program is long term and this effort will help insure that Crane can continue to support the program.

000286

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 74/DEEP MOOR SHORE POWER					D. Activity Identification NSWC Det. Bayview, ID			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							1	200	200			

Narrative Justification:

Description

This project will provide shore-based electrical power to the Deep Moor Barge at the Acoustic Research Detachment (ARD), Carderock Division, Naval Surface Warfare Center in Bayview, Idaho.

Justification

At present, electrical power to the Deep Moor Barge (DMB) at ARD is provided by a gasoline powered generator/electrical switchboard unit located on the barge. The growth of programs supported by the DMB has created a need for both upgraded electrical capacity and additional work space aboard the barge. By supplying the needed electrical power from shore, the generator and its associated fuel tank and switchboard can be eliminated thus, freeing up more work space on the barge.

000282

(Dollars in Thousands)				A. Budget Submission FY 98-99 President's Budget Submission								
B. Component/Activity Group/Date DON / NSWC R&D / January 1997				C. Line# and Description 75/CASTING UPGRADE, PHASE 1, BLDG 743				D. Activity Identification NSWC Indian Head, MD				
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Minor Construction							0	0	200			

Narrative Justification:

Description

The casting bay upgrade will include the installation of a casting stand, upgrade of the existing casting pit, upgrade of the existing hvac (ids) system, and upgrade of the tempered water system.

Justification

The hoist system currently supporting a 300 gallon mixing bowl has had minor failures on several occasions. To avoid catastrophic failure of the hoist system replacement is required.

Impact

The casting bowl used for mixing explosives is unsafe and will be rendered useless without an upgrade to the hoist system.

(Dollars in Thousands)	A. Budget Submission FY 98-99 President's Budget Submission		
B. Component/Activity Group/Date DON / NSWC R&D / January 1997	C. Line# and Description 77/Miscellaneous (Minor Construction < $200K; > $100K)	D. Activity Identification	

	FY 1996	FY 1997	FY 1998	FY 1999
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	Total Cost
TOTAL COST	1847	1331	1131	409

000269

Capital Budget Execution
Navy Working Capital Fund
Activity Group: Research and Development
Sub-Activity Group: Naval Surface Warfare Center

	FY 1997 Presidents	+/-	FY 1997 Revised*	EXPLANATION
NON - ADPE EQUIPMENT				
BATTERY TEST SYSTEM	.370	.000	.370	No Change
RAPID PROTYPING SYSTEM	.614	-.614	.000	Scope Decreased to .486; Project Moved to Misc
LARGE SCALE STRUCTURAL MODEL	.200	.181	.381	Revised cost estimates after completion of design; Multi year project
CONTROLLABLE PITCH PROP SYSTEM	.700	.000	.700	No Change
BLDG 856 IDS AND LOW TEMP CHILLER	.000	.620	.620	Improve safety of personnel working with explosives
ELECTRONIC ACCESS CONTROL SYSTEM	.000	.200	.200	Project required due to a deficiency cited in IG Audit; multi year project
MOTOR DISSECTION	.000	.540	.540	Emergent requirement for direct work
AIR TEST SYSTEMS UPGRADE	.000	.195	.195	Emergent requirement runs concurrent with BRAC project; Multi year project
MISCELLANEOUS NON ADPE EQUIPMENT	9.324	-1.122	8.202	Misc Authority required for emergent requirements
SUBTOTAL (NON - ADPE EQUIPMENT)	**11.208**	.000	**11.208**	
ADPE EQUIPMENT				
CR-ADVANCED COMPUTER AIDED ENG SYS	0.272	.000	0.272	No Change
CR-ENG & TECH WORKSTATIONS	0.155	.000	0.155	No Change
CR-SECURITY COMMUNICATIONS EQUIP	0.173	.000	0.173	No Change
DA-ADPT: GEN FAC UPGRADE	0.365	.000	0.365	No Change
DA-ADVANCED WEAPONS CONTROL SYS	0.475	-.129	0.346	Scope Reduced; Revised Cost Estimate
DA-ALGORITHM DEV FAC: SGI ONYX COMP.	0.200	.000	0.200	No Change
DA-AUTOMATED CONTROL SYS (ACS)	0.450	.000	0.450	No Change
DA-COMBAT SYS ADV CONCEPTS & TECH	0.476	.085	0.561	Project combined with Software Assurance Fac Upg (.085)
DA-DESKTOP PUBLISHING UPGRADE	0.120	.000	0.120	No Change
DA-DIGITAL TECH SIM-D PROCESSOR	0.400	.000	0.400	No Change
DA-ENGINEERING ENVIRONMENT	0.220	-.220	0.000	Project eliminated for higher priority projects
DA-ENGINEERING NETWORK	0.115	-.115	0.000	Project no longer required - Work moved to Panama City
DA-ENGINEERING OF COMPLEX SYS	0.175	.000	0.175	No Change
DA-IPE WORKSTATIONS	0.250	.000	0.250	No Change
DA-LAN FIBER BACKBONE	0.300	.040	0.340	Increase due to delay in FY 96 acquisition
DA-MODELING AND SIMULATION CENTER	0.555	.000	0.555	No Change
DA-NETWORKS	0.600	.000	0.600	No Change
DA-SCIENTIFIC VISUALIZATION&VR LAB	0.540	-.025	0.515	Revised Cost Estimate; Reduction in Scope
DA-SECURE DATA LINK BLDG 94 TO BLDG 470	0.150	-.150	0.000	System no longer required due to planned phase out
DA-SOFTWARE QUALITY ASSURANCE FAC	0.085	-.085	0.000	Project consolidated with CSCAT scope
DA-TTSP:DATA FUSION TEST BED	0.300	.000	0.300	No Change

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Undersecretary of Defense (Comptroller) for approval.

000290

Capital Budget Execution
Navy Working Capital Fund
Activity Group: Research and Development
Sub-Activity Group: Naval Surface Warfare Center

	FY 1997 Presidents	+/-	FY 1997 Revised*	EXPLANATION
DA-UNCLASSIFIED SYSTEM	0.300	.000	0.300	No Change
DA-VME-BASED SIMULATION CHASSIS	0.250	-.250	0.000	System no longer required due to planned phase out
DA-T&E FIBER OPTICS	0.000	.120	0.120	New requirement to support new work
DA-SOFTWARE ENEGINEERING CAPABILITY IMP II	0.000	.373	0.373	Emergent Requirement to support software component
DA-THEATER WARFARE SYSTEMS	0.000	.429	0.429	Emergent requirement to support Development and Evaluation
DT-DAAS CPU REPLACEMENT	0.336	.000	0.336	No Change
DT-DTNET EXTENSIONS	0.600	.000	0.600	No Change
DT-HIGH PERFORMANCE VISUALIZATION NET	0.050	.060	0.110	FY 96 & FY 97 Projects Consolidated in FY 97
DT-SPARC/ASSESSMENT SYS	0.110	.000	0.110	No Change
JLSC HARDWARE	0.000	.500	0.500	PBD 426 Transferred funds to NSWC for JLSC Implementation
NETWORK UPGRADE	.200	.000	.200	No Change
NIMIP	0.726	.307	1.033	Scope Increased
PH-ATM SWITCHING NETWORK	0.485	.000	0.485	No Change
PH-CDS INTEGRATION UPGRADE	0.322	-.322	0.000	Project Canceled
PH-COMPUTER SECURITY/INTRUSION	0.440	.000	0.440	No Change
PH-DOCUMENT MANAGEMENT SYS	0.300	.000	0.300	No Change
PH-DOWNSIZING OF MAINFRAMES	0.125	.000	0.125	No Change
PH-INTEGRATED SOFTWARE ENG ENV.	0.360	.000	0.360	No Change
PH-LIGHTS OUT PGC	0.118	-.118	0.000	Requirement Reduced; Funds for Server Architecture
PH-OPTICAL DISK STORAGE - CALS	0.100	.000	0.100	No Change
PH-REPORTS/DATA RETRIEVAL	0.390	.000	0.390	No Change
PH-SATELLITE DATA NETWORK INTERFACE	0.100	.000	0.100	No Change
PH-SERVER ARCHITECTURE	0.103	.000	0.103	No Change
PH-TRUSTED LAN HUB	0.175	.000	0.175	No Change
PH-VIDEO NETWORK	0.200	.000	0.200	No Change
SUBTOTAL (ADPE EQUIPMENT)	**12.166**	**.500**	**12.666**	
SOFTWARE DEVELOPMENT				
NIMIP SOFTWARE	.726	1.862	2.588	NAVCOMPT adjustment; NIFIMS implementation schedule
ENGINEERING INFORMATION SYSTEM	.146	.000	.146	No Change
SUBTOTAL (SOFTWARE DEVELOPMENT)	**.872**	1.862	**2.734**	

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Undersecretary of Defense (Comptroller) for approval.

Capital Budget Execution
Navy Working Capital Fund
Activity Group: Research and Development
Sub-Activity Group: Naval Surface Warfare Center

	FY 1997 Presidents	+/-	FY 1997 Revised*	EXPLANATION
MINOR CONSTRUCTION				
EXTEND STEAM DISTRIBUTION	.060	.080	.140	Multi year project; princing increase for FY 97
SUPPLY WAREHOUSE BUILDING	.300	.000	.300	No Change
B1200 RENOVATIONS	.300	-.300	.000	Internal audit determined renovations not required
DIVING IN-SERVICE ENG AND DEV BLDG	.300	.000	.300	No Change
CONSTRUCT WETLANDS AT SEWAGE PLANT	.300	-.300	.000	No longer required for environmental compliance
WEAPONS O/H AREA B-2521	.299	.000	.299	No Change
AIR EMMISSIONS, THREE BOILERS	.287	-.287	.000	Current boilers were found to be in compliance with standards
PUBLIC WORKS ADDITION	.275	-.275	.000	Project funded by BRAC
B9 WELDING SHOP ADDITION	.275	-.275	.000	Project requested and completed in FY 96
LSMB PIER	.274	-.274	.000	Emergent Misc Env projects take precedence
RENO SECURITY COMMUNICATIONS	.250	.000	.250	No Change
RENOVATE B-2084	.240	.000	.240	No Change
ROAD CONSTRUCTION	.240	.000	.240	No Change
STORMWATER SYSTEM	.229	-.229	.000	Project scheduled in outyears to run concurrent with MILCONS
REPLACE FLASH X-RAY TEST FACILITY	.200	.000	.200	No Change
RENOVATE B218	.200	-.200	.000	Completed in FY 96
B152 RENOVATIONS	.200	-.200	.000	AS a result of downsizing, not required
MINOR CONSTRUCTION DESIGN COST	.000	.157	.157	Design required for FY 97 and FY 98 Minor Construction
PAVING FOR SOIL CONSERVATION	.000	.240	.240	Env. deficiency sighted by NSWC internal review
CONTROL ROOM EXTENSION	.000	.280	.280	Control system supporting ship R&D and engineering initiatives
REPLACE QUONSENT HUTS	.000	.280	.280	Replacement of antiquated (circa 1950) offices
TTSP FACILITY	.000	.273	.273	Current operation in mobile trailers
MISC MINOR CONSTRUCTION	1.331	1.030	2.361	
SUBTOTAL (MINOR CONSTRUCTION)	**5.560**	.000	**5.560**	
CSE BATTERY SUPPORT EQUPMENT	.698	-.698	.000	
SUBTOTAL (RM&S MODS)	**.698**	-.698	**.000**	
GRAND TOTAL	**30.504**	**1.664**	**32.168**	

* Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Undersecretary of Defense (Comptroller) for approval.

NAVY WORKING CAPITAL FUND
NAVAL UNDERSEA WARFARE CENTER
FY 1998/1999 PRESIDENT'S BUDGET

MISSION STATEMENT

The mission of the Naval Undersea Warfare Center (NUWC) is to operate the Navy's full-spectrum research, development, test and evaluation, engineering and fleet support Center for submarines, autonomous underwater systems, and offensive and defensive weapon systems associated with Undersea Warfare.

ACTIVITY GROUP COMPOSITION

NUWC was established in January 1992, and is comprised of two Divisions, located in Newport, RI and Keyport, WA, and several detachments assigned to these Divisions. The Center Management organization is located at Newport RI. All NUWC organizations are included in the Navy Working Capital Fund (NWCF).

BUDGET HIGHLIGHTS

Summary

	FY1996	FY1997	FY1998	FY1999
New Orders	816.4	610.6	636.9	608.0
Revenues	1029.0	768.2	647.3	613.4
Total Costs	1000.0	773.4	646.1	613.4
Operating Result	29.0	(5.2)	1.2	0.0
JLSC Surcharge	12.8			
Accumulated Operating Results	4.0	(1.1)	0	0
End Strength (civilian)	5,490	4,935	4,712	4,501
Civilian Work years (FTE)	5,727	5,241	4,824	4,580
Military End Strength	92	54	53	53

Management Statement

NUWC's budget continues to reflect a decline of personnel. By the end of Fiscal Year 1999, 3,142 people (a 41 percent reduction) will have left the workforce since Fiscal Year 1992

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and new work and funds will have decreased 41% to about $616 million annually which is $417 million less than the annual funds received during FY 1992.

The strength of our planning and budget lies in our continual pursuit of quality and customer satisfaction. We have been successful despite the demanding environment, and our efforts will sustain our customer base. In the near term, right-sizing will continue in a disciplined manner to preserve our competitive posture and meet budget realities.

The Center's budget submission for fiscal years 1996-1999 includes provisions to continue the use of Voluntary Early Retirement Authority/Separation Incentive Pay to ease right-sizing, selective hiring in critical areas, training to match workforce skills with workload requirements, reinvestment to maintain our technical competence and leadership, and cost containment objectives essential to maintaining competitive rates and a sound financial base. Implementing these budgets will not be without difficulty, but our business strategy requires a sound financial base to continue effective Fleet support.

However, cost reduction can not in itself be an objective. The true objective of the Center is to provide best value goods and services to its customers. Toward that end, the principles of Total Quality will continue to be proactively implemented. We will ensure that tasks being performed are appropriate and then work to continuously improve the manner in which those tasks are carried out. This, then, will result in effective and efficient operations and yield real and lasting cost savings.

Overhead

($ millions)

Presidents Budget	FY 1996	FY 1997
Total Overhead	216.5	208.0

Current Estimate	FY 1996	FY 1997	FY 1998	FY 1999
Total Overhead	252.4	202.2	189.2	176.1
Prod	110.9	60.8	54.3	50.5
G&A	141.5	141.4	134.9	125.6
Less Autec	(45.1)	-	-	-

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An unbudgeted increase in General & Administrative Expense is the additional cost of maintenance and operation of the NAVAIR Industrial Financial Management System (NIFMS) of $.9M starting in FY 1997.

NWCF funding of the Separation Incentive Pay (SIP) and severance pay increased overhead in FY 1996 and in the out years. However, these are one time costs necessary to right size for the future. In FY 1997 SIP/Voluntary Early Retirement Authority (VERA) increases $2.3M over the President's budget since the incentive will be offered to 100 more people then planned.

Beginning in FY 1997, Division Newport will change the methodology for recording Major Range and Test Facilities Base (MRTFB) expenditures. In the President's Budget, these costs were reflected as Production/Overhead expenditures; commencing in FY 1997 these costs will be recorded as service cost center charges and will be applied to institutional customer funding monthly. This methodology of charging will more accurately reflect the Division's expenditures.

The following breakdown is provided for MRTFB costs, which beginning in FY 1997 will originate in a Service Cost Center:

MRTFB COSTS (MILLIONS)

	FY1996	FY1997	FY1998	FY1999
Contract Cost	34.2	32.8	31.1	31.5
Labor Cost	5.2	5.1	5.3	5.4
Material Cost	3.4	2.7	2.8	2.9
Other Cost	4.4	4.5	4.6	4.7
TOTAL MRTFB	47.2	45.1	43.8	44.5

Accumulated Operating Results (AOR)

	FY 1996	FY 1997	FY 1998	FY 1999
Revenue-Expense	$ 29.0	(5.2)	1.2	0.0
less JLSC Surcharge	12.8	-	-	-
Extraordinary Adj.	(1.0)	-	-	-
Begin AOR	(11.4)	4.0	(1.2)	0.0
Ending AOR	4.0	(1.2)	0.0	0.0

The FY 1996 NOR goal reflected in the FY 1997 President's budget of $28.0M was achieved through overhead cost reductions. An Extraordinary Current Year Adjustment of $1.0M was also

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included in FY 1996. This adjustment was the remainder of a planned $2.0M adjustment due to the explosion of the System Test Facility Building at NUWC Division Newport.

The $1.0M extraordinary adjustment carried into FY 1997 and the unbudgeted cost increase of $.9M due to implementation of NIFMS result in a previously unbudgeted AOR loss which will be recovered in FY 1998.

Selected Interest Items

The budget includes projected civilian SIP/VERA reductions funded through the NWCF. Additionally, we included the impact of the Federal Workforce Restructuring act of 1994 which mandated costs of 9 percent of final basic pay for CSRS employees who take a VERA with a SIP, and an annual $80 per person fee for those remaining on board in FY 1996/97/98. In FY 1996 costs were included for the involuntary separations of 55 employees at NUWC Division Keyport on 14 October 1995 which was necessary due to insufficient voluntary downsizing in certain skill categories. We project the following SIP offers/acceptances:
FY 1996 254, FY 1997 407, FY 1998 120, and FY 1999 75.

b. The NUWC budget includes four Base Realignment and Closure (BRAC) 1995 recommended actions reflected in previous budgets.

Stabilized Billing Rates

	FY 1996	FY 1997	FY 1998	FY 1999
Stabilized Rate	70.03	67.88	68.90	67.46
Stabilized Rate Change		-3.1%	+1.5%	-2.1%
Composite Rate Change		-.2%	+1.7%	-.6%

The Stabilized Billing Rate is the composite price per hour NUWC charges its customers. The rates above reflect direct labor and overhead costs only. Other direct costs are billed at actual. The composite rate change reflects the overall cost change to NUWC customers, including direct material and contract costs which are excluded from the stabilized rate.

The rate decrease from FY 1996 to FY 1997 reflects the removal of the JLSC surcharge from the rates. The rate increase in FY 1998 reflects a positive AOR Surcharge while the decrease

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in the FY 1999 rate reflects the removal of the AOR Surcharge and continuing overhead cost efficiencies.

Unit Cost

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hours (000s)	6,928	6,288	6,012	5,878
$ per Direct Labor Hour	71.93	68.12	68.44	67.77

Unit Cost (sum of direct labor and overhead cost divided by the number of direct labor hours) represents the cost of delivering goods and services.

Carry-over

The Naval Undersea Warfare Center has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding($millions)	188.4	83.6	85.6	77.8
Months of Carryover	2.2	1.3	1.6	1.5

Manpower

	FY 1996	FY 1997	FY 1999	FY 1999
End Strength (civilian)	5490	4935	4712	4501
Military End Strength	143	54	53	53
Direct Workyears	3791	3418	3260	3187
Indirect Workyears	1526	1351	1124	1004
Service Workyears	410	472	440	389
Total Workyears (less OT)	5727	5241	4824	4580

Civilian End Strength declines 4.5% in FY 1998 and FY 1999 after an 11% decline in FY 1997. The steep decline in FY 1997 reflects the BRAC actions of moving the combat systems console refurbishment depot maintenance and general industrial workload to Naval Shipyard Puget Sound and operational closure of the New London and Orlando detachments of NUWC Division Newport.

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The decline in military end strength from FY 1996 to FY 1997 reflects the civilianization of the range service craft at NUWC Division Keyport and the decline of one officer billet in FY 1998 reflects the removal of the admiral billet from NUWC.

Capital Purchases Program (CPP)

($Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
Non ADP Equipment	12.2	9.7	6.3	4.2
ADP	6.7	12.6	11.7	12.9
Minor Construction	1.8	2.7	2.1	1.5
Software Develop	.8	.1	.9	.4
Total CPP	21.5	25.1	21.0	19.0

The FY 1997 President's budget amount has been increased by the NIFMS software development cost of $0.8M in FY 1996. Savings associated with the productivity items have been incorporated in budgeted costs.

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INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NUWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	998.5	749.2	626.6	591.9
Surcharges	12.8	.0	.0	.0
Depreciation excluding Major Constructio	17.7	19.0	20.7	21.6
Other Income				
Total Income	1,029.0	768.2	647.3	613.4
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	4.7	2.9	2.7	2.7
Civilian Personnel	359.4	345.2	321.5	311.7
Travel and Transportation of Personnel	34.4	19.3	15.2	15.0
Material & Supplies (Internal Operations	55.1	47.8	41.8	39.6
Equipment	34.8	31.7	21.3	17.4
Other Purchases from NWCF	56.5	43.6	39.8	38.8
Transportation of Things	1.0	.9	.8	.7
Depreciation - Capital	17.7	19.0	20.7	21.6
Printing and Reproduction	6.7	2.4	2.3	2.1
Advisory and Assistance Services	.0	.0	.0	.0
Rent, Communication & Utilities	29.9	30.1	30.1	29.7
Other Purchased Sevices	393.4	230.4	149.9	134.1
Total Expenses	993.5	773.4	646.1	613.4
Work in Process Adjustment	6.0	.0	.0	.0
Comp Work for Activity Reten Adjustment	.5	.0	.0	.0
Cost of Goods Sold	1,000.0	773.4	646.1	613.4
Operating Result	29.0	-5.2	1.2	.0
Less Surcharges	-12.8	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	-.9	.0	.0	.0
Net Operating Result	15.4	-5.2	1.2	.0
Other Changes Affecting AOR	.0	.0	.0	.0
Accumulated Operating Result	4.0	-1.1	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NUWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	816.4	610.6	636.9	608.0
a. Orders from DoD Components	743.1	569.6	566.5	547.8
Department of the Navy	687.1	558.6	557.8	541.5
O & M, Navy	167.1	137.8	125.3	136.2
O & M, Marine Corps	.0	.0	.0	.0
O & M, Navy Reserve	.4	2.9	2.2	2.5
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	-10.3	5.8	4.8	7.6
Weapons Procurement, Navy	83.7	67.7	71.3	75.4
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	53.3	49.6	54.0	44.9
Other Procurement, Navy	110.4	84.1	94.0	74.5
Procurement, Marine Corps	.0	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	282.4	210.6	206.1	200.4
Military Construction, Navy	.2	.0	.0	.0
Other Navy Appropriations	-.1	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	2.7	1.4	5.0	2.9
Army Operation & Maintenence	1.6	1.0	4.5	2.4
Army Res, Dev, Test, Eval	.9	.3	.4	.3
Army Procurement	.2	.1	.1	.1
Army Other	.0	.0	.0	.0
Department of the Air Force	.7	.2	.2	.2
Air Force Operation & Maintenence	.3	.2	.2	.2
Air Force Res, Dev, Test, Eval	.4	.0	.0	.0
Air Force Procurement	.0	.0	.0	.0
Air Force Other	.0	.0	.0	.0
DOD Appropriation Accounts	52.6	9.5	3.5	3.2
Base Closure & Realignment	48.9	6.6	.0	.0
Operation & Maintence Accounts	.8	.2	.3	.2
Res, Dev, Test & Eval Accounts	2.7	2.5	3.0	2.8
Procurement Accounts	.2	.2	.2	.2
DOD Other	.0	.0	.0	.0
b. Orders from NWCF Business Area	38.0	18.7	39.8	31.6
c. Total DoD	781.1	588.3	606.3	579.4
d. Other Orders	35.3	22.3	30.6	28.6
Other Federal Agencies	1.6	.8	1.0	.9
Foreign Military Sales	27.5	17.8	22.9	22.4
Non Federal Agencies	6.2	3.6	6.7	5.2

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NUWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	576.3	363.7	206.1	195.6
3. Total Gross Orders	1,392.7	974.3	842.9	803.6
4. Funded Carry-Over **	363.7	206.1	195.6	190.2
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	1,029.0	768.2	647.3	613.4

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

Adjusted Carry-over is:	188.4	83.6	85.6	77.8

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Changes in the Costs of Operations
Navy Working Capital Fund
Naval Undersea Warfare Center

(Dollars in Thousands)

		Costs
1.	FY 1996 Actual	$993,502
2.	FY 1997 President's Budget	$856,442
3.	Pricing Adjustments	
4.	Other Changes	
	a. Depreciation	$1,973
	b. BRAC IV	($2,340)
	c. Realignment of funding to Direct Cite	($65,068)
	d. Decline in workload	($9,027)
	e. Overhead efficiencies	($1,439)
	f. Increase in FECA	$177
	g. Increase due to NIFMS	$1,979
	h. Increase in AUTEC	$1,382
	i. Reduction to travel	($10,676)
5.	FY 1997 Estimate	$773,403
6.	Pricing Adjustments	
	a. Civilian Labor	
	1. Annualization of Payraise	$3,763
	2. Current Payraise	$6,655
	b. Materials and Supplies	$4,424
	c. DBOF Purchases	$1,198
	d. Other Purchases	$5,711
	e. Military Labor	$132
7.	Program Changes	
	a. Workload	
	1. Direct Workyear Changes	($8,029)
	2. CPP Savings	($8,480)
	b. Direct Program Changes	
	1. Contracts and Material	($29,760)
	2. Civilianization of Military	($270)
8.	Other Program Changes	
	a. Depreciation	$1,656
	b. Overhead Efficiencies/Savings	($12,274)
	c. BRAC related cost	($6,379)
	d. Separation Incentive Pay	($5,300)
	e. Increase in Maintenance	$2,620

	f. Realignment of funding to Direct Cite	($81,967)
	g. Regionalization of HRO	($986)
9.	FY 1998 Estimate	$646,117
10.	Pricing Adjustments	
	a. Civilian Labor	
	1. Annualization of Payraise	$2,327
	2. Current Payraise	$4,132
	b. Materials and Supplies	$577
	c. DBOF Purchases	$709
	d. Other Purchases	$3,983
	e. Military Labor	$51
11.	Program Changes	
	a. Workload	
	1. Direct Workyear Changes	($5,754)
	b. Direct Program Changes	
	1. Contracts	($15,595)
	2. Savings from Capital Investment	($7,584)
8.	Other Changes	
	a. Depreciation	$856
	b. Overhead Efficiencies/Savings	($10,200)
	c. Regionalization of HRO	($1,144)
	d. Separation Incentive Pay	($2,540)
	f. Decrease in Maintenance	($2,501)
9.	FY 1999 Estimate	$613,434

R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D/NAVAL UNDERSEA WARFARE CENTER
JAN 1997
($ in Millions)

LINE #	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST
	1. Non ADP Equipment								
	a. Productivity (Major)								
L002	Intrusion Detection System (Productivity)	1	.200	1	.200	1	.200	1	.200
L198	High-Bandwidth Test Data Transmission (Productivity)			1	.700				
	Productivity Non ADP Equipment (Minor)	7	.991	9	1.930	2	.770	2	.550
	b. Replacement (Major)								
	Replacement Non ADP Equipment (Minor)	5	.644	4	.630	2	.330	1	.420
	c. Environmental (Major)								
L181	SSTP Track Installation (Environmental)	1	.500	1	.500				
L086	Transducer & Hull Array Lab Upgrade (Environmental)	1	.440	1	.480	1	.620	1	.635
	Environmental Non ADP Equipment (Minor)	5	.760	5	1.310	4	.670		
	d. New Mission (Major)								
L182	P105 Tapered Anechoic Chamber (New Mission)	1	.950						
L183	Littoral Undersea Warfare Complex Improvements (New Mission)	1	3.530	1	1.800				
L087	Towed and Deployed Sensor Lab Upgrade (New Mission)	1	.625	1	.505	1	.400	1	.400
L013	Small Launcher Test Facility (New Mission)	1	.200						
L225	Shallow Water Sny Env Eval Facility (New Mission)					1	1.000	1	1.500
L088	Standard Submarine Radio Room Integration Fac (New Mission)	1	.310	1	.350				
L090	Submarine Sail Measurement Platform (New Mission)	1	.500	1	1.000	1	1.000	1	.250
L226	3 Axis Motion Facility (New Mission)					1	1.300		
L089	Submarine Image Transmission Laboratory (New Mission)	1	.439						
	New Mission Non ADP Equipment (Minor)	7	2.101	3	.271			1	.200
	Total Non ADP Equipment	**34**	**12.190**	**29**	**9.676**	**14**	**6.290**	**9**	**4.155**

UC DBOF EXHIBIT 9A

0003043

R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D/NAVAL UNDERSEA WARFARE CENTER
JAN 1997
($ in Millions)

LINE #	ITEM DESCRIPTION	FY 1996 QUANT	FY 1996 TOTAL COST	FY 1997 QUANT	FY 1997 TOTAL COST	FY 1998 QUANT	FY 1998 TOTAL COST	FY 1999 QUANT	FY 1999 TOTAL COST
	2. ADP & Telecommunications Equipment								
	a. Other Computer & Telecommunications Support Equip (Major)								
L243	JLSC Hardware Redistribution			1	2.800				
L129	Upgrade Test Data Analysis Platforms (Productivity)	1	.120	1	.500				
L186	Simulation Based Design (Productivity)			1	.225	1	.800	1	2.300
L187	Sub Sonar Dev. & Evaluation (Productivity)	1	.800	1	.800	1	.500	1	.500
L061	Undersea Synthetic Environments Concept (Productivity)	1	.450	1	.130	1	.215	1	.240
L204	Data Systems Integration (Productivity)	1	.840	1	.520				
L205	Centralized Real-Time Test Data Processing Systems (Productivity)	1	.400	1	.500				
L207	RIDC Upgrade (Productivity)			1	.500				
L193	Advanced Attack Center Test Bed (Productivity)			1	.400	1	.320	1	.200
L227	Simulator Expansion Capability (Productivity)					1	.365	1	.300
L216	Project Enterprise (Productivity)			1	.500				
L218	OMS Re-Engineering Project (Productivity)			1	.500				
L023	Undersea Warfare Systems Analysis Project (New Mission)	1	.758	1	.675	1	.645	1	.610
L228	Synthetic Environmental Training Initiative (New Mission)					1	.500	1	.500
L229	Fleet Support Data Links (Productivity)					1	.900	1	.700
L230	Target Physics Analysis System (Replacement)					1	.317	1	.314
L231	Virtual Systems Design (New Mission)					1	.700	1	.700
L232	Supportability Analysis Tools (Productivity)					1	.375	1	.375
L233	Northwest Range Ancillary Tracking (Productivity)					1	1.500	1	.900
L064	NUWC Information Technology Improvement Program (Replacement)	1	.520						
L030	Replacement of Central Scientific & Engineering Computers (Replacement)	1	.882	1	.181	1	.071		
L097	Antenna Range Modernization (Replacement)	1	.291	1	.555	1	.505	1	.450
L234	Tactical Active Sonar Acoustic Database (New Mission)					1	.460	1	.615
L238	Scientific & Management Computer System Upgrade (Replacement)					1	.800	1	.800
L239	EMC Measurement Facility (New Mission)							1	.505
L240	Strategic Management Information Center (New Mission)					1	.175	1	.515
L130	Range Data Consolidation/Collection System (Productivity)			1	.300				

UC DBOF EXHIBIT 9A

0000003

R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D/NAVAL UNDERSEA WARFARE CENTER
JAN 1997
($ in Millions)

LINE #	ITEM DESCRIPTION	FY 1996 QUANT	FY 1996 TOTAL COST	FY 1997 QUANT	FY 1997 TOTAL COST	FY 1998 QUANT	FY 1998 TOTAL COST	FY 1999 QUANT	FY 1999 TOTAL COST
L206	COTS Supportability Planning Tools (Productivity)			1	.175				
L190	Financial MIS (Productivity)			1	.330				
L191	Automated Purchasing Process (Productivity)			1	.110				
L208	On-line Databases for Technical Test Data (Productivity)			1	.200				
L209	Depot Test Equip Software & Interface Hardware (Productivity)			1	.445				
L210	COTS Obsolescence Management Tools (Productivity)			1	.150				
L194	Network Integration (Productivity)			1	.060				
L211	Building Fiber Optic Cable Plants (Productivity)			1	.180				
L212	Tracking Receiver Equipment (Productivity)			1	.490				
L213	CAE System Upgrades (Productivity)			1	.400				
L214	Coordinate Measuring Machine Upgrade (Productivity)			1	.130				
L215	CAO/CAM/CAE (Productivity)			1	.200				
L219	Comp Aided Proc Plan EDI Enhance System (Productivity)			1	.300				
L220	CAD/CAE Workstations (Productivity)			1	.329				
	a. Other Computer & Tele Support Equip Total (Minor)	7	1.643			9	2.601	9	2.397
	Total ADP & Telecommunication Equipment	**16**	**6.704**	**29**	**12.585**	**26**	**11.749**	**26**	**12.921**
	3. Software								
	a. Software (Major)								
L241	NIFMS - Newport Division	1	.831	1	.115				
L242	NIFMS - Keyport Division					1	.931	1	.414
	b. Software (Minor)								
	Total Software	**1**	**.831**	**1**	**.115**	**1**	**.931**	**1**	**.414**

UC DBOF EXHIBIT 9A

000306

R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D/NAVAL UNDERSEA WARFARE CENTER
JAN 1997
($ in Millions)

LINE #	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST
	4. Minor Construction								
	Minor Construction (Minor)		1.813		2.755		2.070		1.550
	Total Minor Construction		**1.813**		**2.755**		**2.070**		**1.550**
	Grand Total Capital Purchase Program		**21.538**		**25.131**		**21.040**		**19.040**

000007

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L002 INTRUSION DETECTION SYSTEM						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Intrusion Detection System	1		200	1		200	1		200	1		200

Narrative Justification:

The Intrusion Detection System (IDS) is an integrated security management system which is being installed throughout the Naval Undersea Warfare Center (NUWC) Division, Newport. The system is a computerized, menu driven alarm and access control monitoring system which will reduce/ replace the contractor guard force personnel and meet the minimum physical security requirements specified in OPNAVINST 5530.14B. The system is capable of handling 258 card readers, 21,000 cardholders, and 64 access groups to provide superior protection of restricted areas. The system can also be used to monitor over 2,000 alarms or environmental sensors for building management control. In addition, closed circuit televisions will be installed to monitor activity at strategic locations throughout the Division.

For each Fiscal Year (FY), systems will be operational providing for an interim capability. A system expansion is planned for each year until FY99 when the system will be fully operational throughout the entire Division. This plan for system integration in stages will allow for adequate planning to best accommodate for modified and expanding security requirements.

NUWC Division Newport cannot attain an improved security posture and make significant reductions in overhead costs without the IDS. This system will provide improved access control, intrusion detection, surveillance and record keeping that is essential to the protection of NUWC Division Newport resources. After hours security inspections by contractor guards would continue to be totally reliant on the on-site personnel rather that IDS support.

An economic analysis was performed on this project indicating a net present value of $1,569 thousand after 10 years, a payback period of 3.46 years, and a benefit/investment ratio of 1.96.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L086 TRANSDUCER & HULL ARRAY LAB UPGRADE						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Transducer & Hull Array Lab Upgrade	1		440	1		480	1		620	1		635

Narrative Justification:

The Naval Undersea Warfare Center (NUWC) Division, Newport is responsible for work under its leadership areas of submarine and surface ship sonar systems including acoustic sensors, transducers and arrays. In order for NUWC Division Newport to maintain its transducer technology expertise to provide the most advanced, compatible, efficient, and cost effective sensors for submarine systems of the future, the existing laboratory must be thoroughly updated. The Transducer and Hull Array Lab is used for the design and development of transducers and arrays for future sonar systems. The operation supports theoretical modeling, design, prototyping, test and analysis of sonar transducers and arrays. One function of this facility is certification for hazardous materials and hazardous waste. Upgrades to this lab will position NUWC Division Newport as a site which can perform state certification for hazardous materials as well as on-going R&D tasks.

Equipment purchased in previous fiscal years is operational and provides for enhanced capabilities. Following year funding provides additional upgrades such as state-of-the-art acoustic calibration & materials and mechanical analysis capabilities which will lead to totally integrated, fully operational transduction research, development and engineering operation in FY01.

This project is being pursued for compliance with environmental reasons to continue work on this new technology; therefore an economic analysis is not relevant.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L087 TOWED & DEPLOYED SENSOR LAB UPGRADE						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Towed & Deployed Sensor Lab Upgrade	1		625	1		505	1		400	1		400

Narrative Justification:

The Towed and Deployed Sensor Lab Upgrade is intended to enhance NUWC Division Newport's submarine sensor research, development, test and evaluation (RDT&E) capabilities to meet the challenges of shallow water missions during a period of diminishing budgets. New capabilities necessary for designing ultra-thin, ultra compact acoustic arrays will be gained with this laboratory upgrade. The enhanced laboratory will enable researchers to insure that the future of submarine sensors will be low cost, as well as adaptable and common across platforms and missions. In addition, this lab upgrade will provide NUWC Division Newport with the capability to conduct towed array laboratory testing while avoiding costly at-sea testing.

The incremental upgrades made during each fiscal years have and will provide for continuously improved capabilities such as array fabrication, low cost manufacturing, and sybsystem packaging and testing. Each stage of this project will enhance the capabilities for acoustic array research and development with a fully integrated laboratory to be realized in FY01.

This project will provide NUWC Division Newport with a new capability, and as a result an economic analysis is not relevant for this project.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L225 SHALLOW WATER SYNTHETIC ENVIRONMENT EVALUATION FACILITY						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Shallow Water Syn Env Eval Facility							1		1000	1		1500

Narrative Justification:

The Naval Undersea Warfare Center (NUWC) Division, Newport is responsible for the Research, Development, Test and Evaluation (RDT&E) of submarine and surface ship systems. The Shallow Water Synthetic Environment Evaluation Facility project is composed of systems to test and evaluate weapons, Unmanned Undersea Vehicles (UUV), and sonar in a synthetic shallow water environment in combination with a variety of virtual systems.

The RDT&E of submarine and surface ship systems requires in-water tests in shallow water. Due to reductions in funding, in-water testing in shallow water has been significantly reduced due to the cost associated with conducting in-water exercises. Over the past several years, although there has been a significant decrease in the number of in-water evaluations, there has been an even greater need to Test and Evaluate (T&E) systems in a multitude of shallow water environment against various threat targets. In order to maintain the necessary levels of T&E in shallow water, but with less funding, more and more emphasis is being placed on utilization of synthetic environments and simulated systems. The Shallow Water Synthetics Environment Evaluation Facility will provide the synthetic environment and virtual systems required to support the T&E of sonar, weapons, and UUVs in a synthetic shallow water environment which would otherwise not be performed.

The Shallow Water Synthetic Environment Evaluation Facility will provide NUWC, Division Newport with a new capability; therefore, an economic analysis is not relevant.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L090 SUBMARINE SAIL MEASUREMENT PLATFORM						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Submarine Sail Measurement Platform	1		500	1		1000	1		1000	1		250

Narrative Justification:

The Submarine Electromagnetic Systems Department at the Naval Undersea Warfare Center (NUWC) Division, Newport is developing the submarine sail measurement platform to measure antenna performance and radar cross section of full-scale submarine sail new designs with communications and Electronic Warfare Support Measures (ESM) sensors, and stealth coatings.

This project, completed in FY99, enables the development of innovative, stealth sails for submarines which allows more effective connectivity and surveillance capability with reduced vulnerability in littoral waters. The measurement of antenna performance, satellite communications throughput, and radar cross section will all be achieved by this platform. Following a comprehensive platform and range design, evaluation, and fabrication the measurement platform will commence operation in FY99 providing for improved test & evaluation of submarine sail and sail systems.

An economic analysis on this project is not relevant since this is a new capability for NUWC Division Newport and the Navy.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L226 3-AXIS MOTION FACILITY						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
3-Axis Motion Facility							1		1300			

Narrative Justification:

A facility for evaluating performance of submarine systems with 3-axis motion is essential to the Research Development Test and Evaluation (RDT&E) efforts of the Naval Undersea Warfare Center (NUWC) Division, Newport. The facility will establish a means of evaluating the physical performance of systems in a simulated environment prior to acceptance of new systems and modifications to existing systems. By utilizing simulated testing, cost savings will be realized due to a reduction in at-sea testing and support of rapid prototyping. As the TDA for various submarine systems, NUWC Division Newport is responsible for testing rapid prototype systems, such as submarine mast mounted sensors. One of the key performance areas to be evaluated is system accuracy and control when subjected to dynamic conditions. This facility would provide the capability to assess the performance under dynamic conditions. A 3-axis motion facility will provide a unique capability for testing submarine systems including communications and intelligence sensors. True at-sea conditions can be simulated and accurate at-sea performance of submarine systems or proposed system modification can be assessed.

NUWC Division Newport will not adequately be able to assess true at-sea dynamic performance of submarine systems if this facility is not funded. Sponsors are looking to NUWC Division Newport to provide technical expertise in the area of submarine unique equipment design, development and installation. The area of antenna/sensor pointing and control under dynamic conditions is just one key area for evaluation of submarine communications/ESM system performance under at-sea dynamic conditions to enable the development of quality products and equipment upgrades for the Fleet. If NUWC Division Newport does not develop a motion simulation capability sponsors requirements will not be met.

The 3-Axis Motion Facility will provide NUWC Division Newport and the Navy with a new capability, therefore an economic analysis is not relevant.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Data NUWC / R&D / January 1997				C. Line No. & Item Description L243 CONFIGURATION MANAGEMENT INFORMATION SYSTEM					D. Activity Identification NUWC Division, Keyport			
	FY 1996			FY 1997			FY 1988			FY 1989		
ELEMENTS OF COST	Quant	Unit Cost	Tota l Cost	Quant	Unit Cost	Tota l Cost	Quant	Unit Cost	Tota l Cost	Quant	Unit Cost	Tota l Cost
Configuration Management Information System				1	2880	2880						

Narrative Justification:
This project provides for procurement resources for required infrastructure to implement configuration management information systems as they relate to regional maintenance and Keyport main product lines. The project will include implementation of DOD standard Configuration Management Information Systems (CMIS) as well as local and regional related information delivery systems (Joint Computer-Aided Logistics Systems - JCALS)

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RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L186 SIMULATION BASED DESIGN						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Simulation Based Design				1		225	1		800	1		2300

Narrative Justification:

To afford a better, more cost effective, efficient simulation suite for weapon systems and unmanned Undersea Vehicles (UUV), the Simulation Based Design (SBD) project will integrate capabilities that exist within the departments of the Weapon Systems Directorate at the Naval Undersea Warfare Center (NUWC) Division, Newport. The NUWC Division Newport will enhance systems design and development efforts by implementing a SBD which will support recent Navy-wide mandate for enhanced modeling and simulation capabilities. The capabilities which will be achieved by this project will accelerate the design process and assist with identification of optimum solutions. The project will standardize input/output generation of SBD tools for submarine weapon systems and UUV's with integrated menu-driven graphical user interface of pre/post-processing. The standardization and centralization of SBD multi-tasking will improve product development and minimize in-house labor. The SBD will combine tools for analysis of fluids, structures, acoustics, trajectory, and systems performance in order to optimize and standardize submarine weapon system and UUV design and development. The SBD system will allow the integration and standardization of design ideas across the NUWC Division Newport mission areas. This includes torpedoes, UUV's, sonar, combat control, communications and launchers.

As NUWC Division, Newport undertakes implementation of a SBD, the capability will incrementally achieved from FY97-99. Following each phase of the project, a preliminary SBD will be operational with an enhanced design proficiency achieved in each fiscal year.

An economic analysis was conducted on this project indicating a net present value at $4,946.98 thousand in 5 years with a benefit/investment ration of 1.49 and project payback in 2.87 years.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L187 SUB SONAR DEVELOPMENT & EVALUATION						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Sub Sonar Development & Evaluation	1		800	1		800	1		500	1		500

Narrative Justification:

The Submarine Sonar Development and Evaluation Complex (SSDEC) is a collection of sonar simulation, research and development, processing, and display technology laboratories for the Submarine Sonar Department at NUWC Division Newport. SSDEC will provide, over a secure network, a cost effective configurable high fidelity stimulation capability to support acoustic undersea warfare research, acquisition, test & evaluation, analysis, war gaming, and training. It will provide an environment to develop, evaluate, and promulgate acoustic models, techniques and software. It will provide a system flexible enough to stimulate a variety of acoustic environments and systems including fixed surveillance sensors, mobile undersea sensors (submarines), mobile surface sensors (surface ships), and air dropped sensors (sonobouys). This simulated acoustic environment will then be used over the secure network to stimulate simulation activities occurring throughout the Division and elsewhere on the Defense Simulation Internet (DSI) network.

The funding for SSDEC will provide the required secure network for SSDEC integration. The integration of the acoustic simulation and stimulation labs to the sonar processing labs via the SSDEC network will provide the ability to test the projects with both real and simulated data in the lab. Without CPP funding, systems simulation will cost more or may not be achievable. In addition submarine sonar in lab pre-testing will not be conducted prior to at-sea tests and NUWC Division, Newport with loose ground technologically in the Modeling and Simulation arena.

Incremental upgrades to the simulation system will be conducted until FY01. The upgrades will entail enhancements to the processing capabilities, display hardware and software and networking systems.

An economic analysis was performed on this project indicating a net present value of $1,573 thousand after 5 years. Payback is expected in 3.94 years, with a benefit/investment ratio of 1.21.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L061 UNDERSEA SYNTHETIC ENVIRONMENTS CONCEPT					D. Activity Identification NUWC Division, Newport			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Undersea Synthetic Environment Concept	1		450	1		130	1		215	1		240

Narrative Justification:

The Undersea Synthetic Environment Concept Evaluation Facility will provide the Naval Undersea Warfare Center (NUWC) Division, Newport with a test-bed simulator used for advanced submarine combat control systems studies in human factors, operability, performance, evaluation and attack center configurations. This hardware test-bed provides a state-of-the-art facility for rapid prototyping and dynamic evolution of innovative algorithms, information displays and operational concepts related to submarine attack center functions. The associated software environment incorporates sophisticated models of the ocean, ship and weapons kinematics and sensor systems so as to provide a realistic dynamically reconfigurable means of stimulation for the algorithms, information display and concepts under investigation. The facility will also be utilized for conducting, recording and analyzing of COOPEX and STOW events. This test-bed will provide for rapid prototyping and dynamic evaluation of submarine combat control system concepts as well as a mechanism for packaging and transfer of prototypes for at-sea evaluation.

Expansion of the Undersea Synthetic Environments Concept is planned until FY99. The improvements will be made to the synthetic environment simulation, the analysis systems, and the visualization capabilities with initial operation commencing in FY97.

An economic analysis was performed on this project indicating a net present value of $1,214 thousand after 5 years, a payback period of 4.26 years, and a benefit/investment ratio of 1.17.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L193 ADVANCED ATTACK CENTER TESTBED						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Advanced Attack Center Testbed				1		460	1		320	1		200

Narrative Justification:

The Naval Undersea Warfare Center (NUWC) Division, Newport is responsible for research, development, test and evaluation of submarine combat systems. In designing and developing for the next generation submarines, it is a requirement to consider the newest technology available. The Advanced Attack Center Testbed will be used to transition state-of-the-art hardware, software, display, and communications technology into an integrated combat system-level testbed. Current efforts do not reach the same level of integration capabilities or leverage high risk technologies which would have a high pay-off for the Navy. Utilizing new technologies and concepts utilizing Commercial Off The Shelf (COTS) equipment will create a high quality simulation for cost effective validation of concepts.

In addition the Advanced Attack Center Test Bed will provide an integration site for high risk/ high pay-off technologies for the purpose of advanced concept demonstrations and evaluation. This will provide a path for transition of these technologies into the Division from other organizations and industry. The integrated demonstrations and evaluations will support transitioning from existing combat system designs to advanced next generation designs, which will be significantly different in attack center size, layout, automation and staffing. This will reduce future transition risks and costs while ensuring that program decision makers and engineers share a common vision of long term next generation system upgrades and capabilities.

During each phase of the project, systems will be operational providing an interim capability until the system is fully integrated in FY99. Initial development will be followed by required improvements which reflect the changing technology, advanced concept designs and operational requirements.

An economic analysis was performed on this project indicating a net present value of $1,212 thousand after 5 years, a payback period of 3.50 years, and a benefit/investment ratio of 1.24.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L227 SIMULATOR EXPANSION CAPABILITY						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Simulator Expansion Capability							1		365	1		300

Narrative Justification:

This project will expand the simulation capabilities of the Weapons Analysis Facility (WAF) to handle a broader variety of entities for both existing and anticipated undersea systems, side scan sonar operations, UUVs, exploitation of foreign weapons, training, Distributed Interactive Simulation (DIS), and more complex environments.

Funding of this project directly supports Division initiatives to expand our marketing horizons in advanced undersea systems, UUV operations, foreign weapon exploitation, DIS, and training either hands-on or remote. This project will provide the necessary facility expansion and functionality needed to support a broader based simulation complex. Notable gains realized will benefit both Navy and Naval Undersea Warfare Center (NUWC) Division, Newport . Benefits are derived from leveraging substantially lower simulation costs for research and development versus costly fleet services and in-water testing.

The expansion will be conducted in three phases with a completed expansion in FY01. The enhanced capabilities gained each year will be operational and provide improvements which reflect changing synthetic environment technology and advanced processing. If this project is not funded, it would be increasingly difficult to optimize both weapon capability in the weapon acquisition decision process and fleet personnel training due to escalated costs associated with utilizing traditional engineering development practices to maintain undersea superiority.

An economic analysis was performed on this project indicating a net present value of $3,031 thousand after 5 years, a payback period of .89 years, and a benefit/investment ratio of 4.56.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L023 UNDERSEA WARFARE SYSTEMS ANALYSIS PROJECT					D. Activity Identification NUWC Division, Newport			
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Undersea Warfare Systems Analysis Project	1		758	1		675	1		645	1		610

Narrative Justification:

The research, development, and acquisition of naval warfare force ships and ship systems is being increasingly focused on their ability to support an effective U.S. maritime strategy. The rapidly changing world has dramatically changed the nature of the threat and the most likely types of conflicts. System acquisition and technology investment decision must be carefully assessed in terms of theses changes as well as in declining assets, the complex contribution of coordinated joint assets, and the commitment to maintain technological superiority. The Defense Planning Guidance for FY94-99 states that the acquisition process will use advanced technology demonstrations and prototypes to demonstrate and validate technologies' and systems' operational performance, producibility, and associated doctrine. It further states ... we will use newly available simulation technologies continuously through the systems acquisition process to evaluate how system prototypes meet these criteria and contribute across warfare areas. The Navy Research Advisory Council (NRAC) outlined a Distributed Simulation Based Acquisition System using both distributed interactive simulation between live, virtual and constructive models as well as a seamless linkage of physics based modeling and simulation for virtual system prototyping.

Current capabilities of the Undersea Warfare Analysis Laboratory (USWAL) have been integrated with equipment previously obtained under the Integrated Warfare Analysis Laboratory (IWAL) project to provide a distributed parallel processing environment supporting efficient batch processing of Monte Carlo computer (constructive) simulations for Cost and Operational Effectiveness Analyses (COEAs) and Joint Mission Assessments (JMAs); the development of campaign level simulations and enhancements to existing platform level simulations; the demonstration of advanced visualization and linkage with other virtual and constructive simulations in recent Synthetic Theater of War (STOW) exercises and the networking and storage capabilities to archive large data files and study outputs for the Undersea Warfare Systems Analysis Project (UWSAP).

In order to develop new applications consistent with Navy high level architecture and other emerging standards state-of-the-art technology must be obtained and obsolete systems must be replaced. This will provide the necessary capability and conductivity which is essential for conducting warfare systems analysis for the Navy. This project continues to provide NUWC Division, Newport with new capabilities; Therefore an economic analysis was not pertinent.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 1998/1999 President's Budget					
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L228 SYNTHETIC ENVIRONMENTAL TRAINING INITIATIVE			D. Activity Identification NUWC Division, Newport					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Synthetic Environmental Training Initiative							1		500	1		500

Narrative Justification:

The Naval Undersea Warfare Center Division, Newport is undertaking a major initiative to link Fleet submarines, surface ships and aircraft operating on instrumented ranges with the high fidelity submarine and weapon systems Research Development Test and Evaluation (RDT&E) simulation facilities at NUWC Division Newport for purposes of providing significant enhancements to Undersea Warfare (USW) training as well as collection of additional system performance data. This initiative is being accomplished under the Synthetic Environmental Training Initiative (SETI) project.

SETI will initially connect submarines at existing underwater tracking ranges with the Weapons Analysis Facility (WAF) using a communications link to enable the firing of Virtual Torpedoes (VIRTORPs). Follow-on efforts will include linking LAMPS Mk-III helicopters operating on range with the WAF as well as the Naval Air Warfare Test Center (NAWC) Aircraft Division's Ship Ground Station (SGS) to expand the effectiveness of air ASW training. In addition, expanded capabilities will include linking with other submarine system simulation facilities at NUWC Division Newport.

SETI will provide enhanced training and system test and evaluation (T&E) capabilities in both deep water as well as littoral waters. This will improve the Fleet's ability to remain ASW ready during a period of significant decline in funding resources for training and readiness resources and will also provide additional weapon and submarine systems performance data to support system upgrades. Additional cost savings are expected due to direct funding as a result of increased utilization of the ranges and simulation facilities by the Fleet as they take advantage of this effective test and training capability. Failure to implement this capability will negatively impact Fleet training and readiness, will result in a reduction in the T&E of weapon and submarine systems, and will decrease the funding to support simulation facilities and underwater ranges.

The SETI will provide NUWC Division, Newport and the Navy with a new capability, therefore an economic analysis in not applicable.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L229 FLEET SUPPORT DATA LINKS						D. Activity Identification NUWC Division, Keyport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Fleet Support Data Links							1	900	900	1	700	700

Narrative Justification:

Implement Fleet tactical data links, portable satellite communications and sonobuoy communications to establish range connectivity with fleet platforms operating at PACNORWEST range sites. Integrate PACNORWEST range data and Fleet tactical data with existing T & E analysis processes. Enable an environment for real time test and training interaction by Fleet participants on PACNORWEST ranges. Provide connectivity between the Fleet and the T & E center using a combination of existing Fleet technology and COTS data links.

An economic analysis was performed on this project indicating a net present value of $3,450 thousand after 6 years, a payback period of 2.22 years, and a benefit/investment ratio of 2.16.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)	A. Budget Submission FY 1998/1999 President's Budget	
B. Component/Business Area/Date NUWC / R&D / January 1997	C. Line No. & Item Description L230 TARGET PHYSICS ANALYSIS SYSTEM	D. Activity Identification NUWC Division, Newport

	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Target Physics Analysis System							1		317	1		314

Narrative Justification:

The Target Physics Analysis System (TarPAS) will provide an integrated modeling, simulation, data storage and analysis facility for search sonar frequency target physics of US and foreign submarines, surface ships and mines. This facility will augment Naval Undersea Warfare Center (NUWC) Division Newport's presence in the mid-frequency target physics community by acquiring flexible platforms that are compatible and available to interface with other facilities. In securing the facility, NUWC Division, Newport will have the capability of utilizing the validated mid-frequency target model for expanded modeling and simulation applications such as Simulation Based Design (SBD), training, war gaming (Synthetic Theater of War), fleet support analysis and active classification algorithm evaluation.

The TarPAS will enable a fast flexible response to current customers by reducing the overhead labor costs of accessing and distributing analyzed sea-trial data sets and target modeling results. The facility will support the expansion of NUWC Division Newport's target physics expertise to a wide variety of simulations that are currently not feasible for the target physics group due to outdated computer resources, an absence of a secure network to link with other modeling and simulation facilities and antiquated data transport processes. The NUWC Division Newport mid-frequency target physics program assets are outdated and will become more outdated as other labs and facilities upgrade their resources. NUWC Division Newport will loose opportunities to participate in emerging Navy modeling and simulation demonstrations and thrusts due to the non-compatibility of the current hardware and software. In addition, the Navy will not be fully utilizing the validated NUWC Division Newport mid-frequency model and may, therefore, resort to using less accurate models.

For each Fiscal Year (FY) systems will be operational providing for an interim capability. Improved capabilities will be achieved each FY including upgrading for DIS compatibility of the system and full networking capabilities. The system will be fully operational in FY01.

An economic analysis was performed on this project indicating a net present value of $982 thousand after 5 years, a payback period of 2.73 years, and a benefit/investment ratio of 1.56.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L231 VIRTUAL SYSTEMS DESIGN						D. Activity Identification NUWC Division,		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Virtual Systems Design							1		700	1		700

Narrative Justification:

As the Navy continues to deal with reduced budgets, more and more emphasis is being placed on our Modeling and Simulation (M&S) capabilities. In order to provide a more cost effective, inter operable, value-added M&S suite for submarine systems, weapon systems, and Unmanned Undersea Vehicles (UUVs) the Virtual Systems Design (VSD) project will integrate capabilities that exist within the departments of the Naval Undersea Warfare Center (NUWC) Division, Newport. The NUWC Division Newport will enhance systems Research, Development, Test and Evaluation (RDT&E) capabilities by implementing VSD which will support the recent Navy-wide mandate for enhanced M&S.

The capabilities which will be achieved by this project will facilitate reduced acquisition and ownership costs, support an even greater degree of the "model-test-model-build" concept, and expand the M&S within the training and assessment areas. The VSD will combine tools for analysis in order to optimize and standardize submarine and weapon system RDT&E. The VSD will allow the integration and standardization of M&S across the NUWC Division Newport mission areas. In addition, the systems will be developed with data interface considerations for connectivity not only within the Division, but also to other Navy, DOD, academic, and industry facilities.

An economic analysis was not applicable in this project since this will provide a new capability for the NUWC Division Newport.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L232 SUPPORTABILITY ANALYSIS TOOLS						D. Activity Identification NUWC Division, Keyport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Supportability Analysis Tools							1	375	375	1	375	375

Narrative Justification:

Supportability Analysis Tools improves our ability to develop system and unit level life-cycle cost profiles with comparison of various design options on supportability and associated costs, support infrastructure requirements, and training and manning cost comparisons. The investment focuses on analytical methods automation. The project integrates expert system methods with electronic system market analysis, technology assessment results, and historical data bases into an analytical engine which provides system supportability profiles with time phased cost data, risk analysis, and support structure requirements.

An economic analysis was performed on this project indicating a net present value of $1,769 thousand after 7 years, a payback period of 2.80 years, and a benefit/investment ratio of 2.36.

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RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L233 NORTHWEST RANGE ANCILLARY TRACKING						D. Activity Identification NUWC Division, Keyport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Northwest Range Ancillary Tracking							1	1500	1500	1	900	900

Narrative Justification:

Procure ancillary range tracking systems that allow augmentation of the existing PACNORWEST Range Sites on short notice. These ancillary range tracking systems will incorporate the features of both sub-surface and surface/air tracking as well as communications and data transmission. There is an emerging requirement for increased tracking area driven by increased Fleet presence (surface and air) in the PACNORWEST. Augmentation of existing ranges using previously prepared ancillary tracking systems provides an affordable and efficient way to support this additional requirement.

An economic analysis was performed on this project indicating a net present value of $6,272 thousand after 6 years, a payback period of 1.21 years, and a benefit/investment ratio of 2.61.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L030 REPLACEMENT OF CENTRAL SCIENTIFIC AND ENGINEERING COMPUTERS						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Replace Central Scientific & Engineering Computers			882			181			71			

Narrative Justification:

The Computer and Information Services Department of the Naval Undersea Warfare Center (NUWC) Division, Newport provides central scientific and engineering computational services for the Newport laboratories. By FY96, the current general purpose scientific and engineering computers will have an average installed age of 11 years. This places the equipment past its anticipated 8-10 year life cycle. It is expected that as the equipment ages system reliability will decrease, system maintenance costs will increase, and system software will have reduced compatibility as newer versions fail to operate on the older equipment. Historically equipment maintenance costs increase rapidly during the final phases of the life cycle. Replacement of the obsolete computer equipment will provide the activity with more reliable and cost effective computer resources as well as ensuring that the department can provide adequate computational resources to meet the research and development computational requirements of the Division's scientific and engineering community.

If the equipment is not replaced, the NUWC Division Newport can expect to incur rapidly escalating maintenance costs, loss of system productivity as system reliability decreases, loss of personnel productivity as new software productivity enhancements are available but are unable to function on the existing equipment, reduced services to the user community and technical obsolescence. Consequently, the Division will be unable to provide the necessary corporate computer resources necessary to meet the future research and development computational requirements of the scientific and engineering community.

An economic analysis performed for this project indicates a net present value of $1,339 thousand after 5 years with investment payback in 3.68 years, and a benefit/investment ratio of 1.18.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L097 ANTENNA RANGE MODERNIZATION						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Antenna Range Modernization	1		291	1		555	1		505	1		450

Narrative Justification:

The Communication Systems of future submarines depends on the research and development being performed at the Naval Undersea Warfare Center (NUWC) Division, Newport by the Submarine Electromagnetic System Department. The Antenna Range Modernization project will provide the Department with the up-to-date facility for conducting this R&D as well as performing the testing required for these future systems.

The existing antenna range provides measurement capabilities including both free-space and seawater environments to support submarine antenna developments. The modernization of this range will provide the ability to test antennas over an increased portion of the spectrum required to support new submarine communication development. Specifically, enhancements to the existing system Radio Frequency (RF) instrumentation and positioning equipment which is antiquated will be replaced in order to improve the measurement speed and accuracy of the data. Improved frequency and calibration capabilities will also be implemented. Additionally, this project will upgrade Fisher's Island site link in frequency range and automated data collection capabilities. Finally, the existing overwater arch elevation axis quickly failing mechanical components will be replaced. All of these improvements to the antenna range will enable NUWC Division Newport to maintain its high standards of RDT&E for the design and development of submarine communication systems of the future.

The replacement of equipment for the Antenna Range is necessary for upgrading outdated computer resource this is necessary for the facility to remain functional. No cost savings are expected, so an economic justification in invalid.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L234 TACTICAL ACTIVE SONAR ACOUSTIC DATABASE						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Tactical Active Sonar Acoustic Database							1		460	1		615

Narrative Justification:

This project will expand Naval Undersea Warfare Center (NUWC) Division, Newport's initiative in the reuse of existing data resources for 6.2, 6.3 and 6.4 RDT&E programs by ensuring continued rapid programmatic access to the complete suite of active sonar measurements via utilization of a state of the art database computational facility.

Due to increased re-use of existing data resources for RDT&E efforts, funding required from sponsors will be decreased. In addition, this capability will increase NUWC Division Newport's potential funding base through requests for data acquisition and retrieval. Benefits to the Navy include decreased sonar system RDT&E costs through utilization of existing data measurements vice conducting at-sea trials.

Without the ability to store and access active sonar measurements, the loss of the data resources will result in increased RDT&E costs which translate into increased demands on funding sponsors. This also leads to duplication of data collection efforts, increased costs due to acquisition of data from outside agencies and lack of information about the conditions of the data measurements. In addition, the loss of a potential funding sources would also result .

This project will provide NUWC Division Newport with a new capability, and as a result an economic analysis is not relevant for this project.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 1998/1999 President's Budget					
B. Component/Business Area/Date NUWC / R&D / January 1997	C. Line No. & Item Description L238 SCIENTIFIC AND MANAGEMENT COMPUTER SYSTEM UPGRADE						D. Activity Identification NUWC Division, Newport					
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Scientific And Mgmt Computer System Upgrade							1		800	1		800

Narrative Justification:

In order to provide the necessary general scientific and managerial computer system resources for the Naval Undersea Warfare Center (NUWC) Division, Newport for adequate computational resources to meet both the Research, Development, Test and Evaluation (RDT&E), as well as the Business Resources Directorate (BRD) needs, the current general purpose computers need to be replaced. The average age of existing general computer equipment is 12 years and has resulted in decreased system reliability, increased maintenance cost, decreased efficiency due to an increase in down time, and hardware/software incompatibilities.

As the technical and management sectors of the NUWC Division Newport continue to communicate more and more electronically, upgraded computer systems are required to provide sufficient electronic communications capability within NUWC Division Newport as well as externally to a multitude of individuals and organizations . The scientific and management computer resources are also essential in order to meet the electronic protocol established with sponsors, contractors, and academia to both transmit and receive data electronically.

Replacement of the obsolete computer equipment will provide the NUWC Division Newport with more reliable and cost effective computer resources which will ensure that the technical and business areas have the capabilities to meet their requirements. Increased reliability will reduce maintenance cost, increase overall efficiency, and enhance compatibility internally and externally to the organization If the equipment is not replaced, the Division can expect to incur loss of personnel productivity, decreased customer satisfaction, rapidly escalating maintenance costs, reduced services to the technical and business community, and technical obsolescence. Consequently, the Division will be unable to provide the necessary corporate computer resources necessary to meet the current and future computational requirements of the RDT&E population and the BRD.

An economic analysis was performed on this project indicating a net present value of $2,925 thousand after 5 years, a payback period of 2.30 years, and a benefit/investment ratio of 1.83.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L239 EMC MEASUREMENT FACILITY						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
EMC Measurement Facility										1		505

Narrative Justification:

Electromagnetic Environmental Effects (E3) Testing of Commercial Off the Shelf (COTS) equipment to be installed aboard the NSSN is required in support of the NSSN Program. Evaluating the susceptibility of COTS equipment to Electromagnetic Interference (EMI) is critical in order to identify EMI problems early so modifications can be made with minimal cost. In support of the NSSN program, Naval Undersea Warfare Center (NUWC) Division, Newport's responsibility for EMI testing. In order to test Electromagnetic Environmental effects to support NSSN integration and future submarines, test systems must be acquired, consolidated and calibrated in the EMC Measurement Facility where the testing will be conducted.

Not having the required equipment to conduct adequate EMI testing can result in determining EMI problems at a later date which will result in higher fixed costs.

An economic analysis was not relevant for this project since this will provide a new capability.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L240 STRATEGIC MANAGEMENT INFORMATION CENTER						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Strategic Management Information Center							1		175	1		515

Narrative Justification:

The changing Department of Defense (DoD) fiscal environment has forced changes in operation of the facilities that support DoD activities. The need for Naval Undersea Warfare Center (NUWC) Division, Newport to better manage funds, work force, and information (both technological and financial) is crucial to remaining a strong force in the DoD Research and Development (R&D) world. To address these management issues, NUWCDIVNPT has outlined in its strategic goals the need to focus on responding to customer needs with quality products and services, and on improving business management with well-defined performance measures and maintenance of a skilled work force. Implementation of these strategic goals requires a coordinated effort throughout NUWCDIVNPT to optimize effectiveness. Such a coordinated effort establishes the need to create and maintain a center that provides access to information and facilitates structured, organized decision-making.

The Strategic Management Information Center (SMIC), was created to enable NUWC Division Newport management to conduct its strategic planning in an environment providing on-line electronic access to key business and technical information. The goal of such an environment is to provide a user-friendly, single-site resource which supports management efforts for both short-term reporting requirements and long-term strategic planning. Daily SMIC activities include data scans of information. These data scans provide insight into activities *external* to NUWC Division Newport such as regulatory, market, and resource development. They also provide insight into technological advances and programmatic activities *internal* to NUWC Division Newport . Synthesizing these massive amounts of data with the equally massive amounts of internal business operations data (associated with budget and personnel activities), requires a structured information processing scheme. Once the data is collected, a forum is needed to disseminate the information to the appropriate parties for planning and decision-making. The SMIC is designed to access these data and utilize an electronic decision support process to conduct structured strategic planning sessions.

The net result is that the SMIC provides the equipment, personnel and facilities to accommodate better planning, provide faster response to the customer, and promote inter-department connectivity. This will greatly enhance NUWC Division Newport's implementation of its strategic goals and expedite the operational improvements necessary to stay competitive in the changing DoD R&D environment.

An economic analysis was not relevant for this project since this will provide a new capability of NUWC Division Newport.

RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L241 NIFMS - NEWPORT DIVISION						D. Activity Identification NUWC Division, Newport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
NIFMS	1		831	1	115							

Narrative Justification:

Provide Division Newport portion of the Defense Finance Accounting Service (DFAS) NAVAIR Industrial Financial Management System (NIFMS) requirements. An economic analysis is not relevant for this project.

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RESEARCH & DEV. CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)				A. Budget Submission FY 1998/1999 President's Budget								
B. Component/Business Area/Date NUWC / R&D / January 1997				C. Line No. & Item Description L242 NIFMS - KEYPORT DIVISION						D. Activity Identification NUWC Division, Keyport		
	FY 1996			FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
NIFMS							1		931	1		414

Narrative Justification:

Provide Division Keyport portion of the Defense Finance Accounting Service (DFAS) NAVAIR Industrial Financial Management System (NIFMS) requirements. An economic analysis is not relevant for this project.

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R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D NAVAL UNDERSEA WARFARE CENTER
JAN 1997
(Dollars in Millions)
FY 1997

Item #	Approved Project	Original Request	Change	Revised Request	Explanation
ADP and TELCOM					
L023	Undersea Warfare Systems Analysis Project (UWSA	.675	.000	.675	
L030	Replacement of Central Scientific & Engineering Coı	.181	.000	.181	
L061	Undersea Synthetic Environments Concept	.130	.000	.130	
L097	Antenna Range Modernization	.555	.000	.555	
L129	Upgrade Test Data Analysis Platforms	.500	.000	.500	
L186	Simulation Based Design	.225	.000	.225	
L187	Sub Sonar Dev. & Evaluation (SSDEC)	.800	.000	.800	
L193	Advanced Attack Center Test Bed	.400	.000	.400	
L204	Data Systems Integration	.520	.000	.520	
L205	Centralized Real-Time Test Data Processing System	.500	.000	.500	
L207	RIDC Upgrade	.500	.000	.500	
L216	Project Enterprise	.500	.000	.500	
L218	OMS Re-Engineering Project	.500	.000	.500	
L243	Configuration Management Information System	.000	2.800	2.800	JLSC hardware redistributed from Supply
L130	Range Data Consolidation/Collection System	.300	.000	.300	
L206	COTS Supportability Planning Tools (Productivity)	.175	.000	.175	
L190	Financial MIS (Productivity)	.330	.000	.330	
L191	Automated Purchasing Process (Productivity)	.110	.000	.110	
L208	On-line Databases for Technical Test Data (Productiv	.200	.000	.200	
L209	Depot Test Equip Software & Interface Hardware (Pr	.445	.000	.445	
L210	COTS Obsolescence Management Tools (Productivit	.150	.000	.150	
L194	Network Integration (Productivity)	.060	.000	.060	
L211	Building Fiber Optic cable Plants (Productivity)	.180	.000	.180	
L212	Tracking Receiver Equipment (Productivity)	.490	.000	.490	
L213	CAE System Upgrades (Productivity)	.400	.000	.400	
L214	Coordinate Measuring Machine Upgrade (Productivit	.130	.000	.130	
L215	CAO/CAM/CAE (Productivity)	.200	.000	.200	
L219	Comp Aided Proc Plan EDI Enhance System (Produc	.300	.000	.300	
L220	CAD/CAE Workstations (Productivity)	.329	.000	.329	
	ADP and TELCOM Minor (>$100K <$500K)	.000	.000	.000	
	ADP and TELCOM Subtotal	9.785	2.800	12.585	

R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D NAVAL UNDERSEA WARFARE CENTER
JAN 1997
(Dollars in Millions)
FY 1997

Approved Project	Original Request	Change	Revised Request	Explanation
Item # Non-ADP Equipment				
L002 Intrusion Detection System (IDS)	.200	.000	.200	
L086 Transducer & Hull Array Lab Upgrade	.480	.000	.480	
L087 Towed and Deployed Sensor Lab Upgrade	.505	.000	.505	
L088 Standard Submarine Radio Room (SSRR) Integration	.350	.000	.350	
L090 Submarine Sail Measurement Platform	1.000	.000	1.000	
L181 SSTP Track Installation	.500	.000	.500	
L183 Littoral Undersea Warfare Complex Improvements	1.800	.000	1.800	
L198 High-Bandwidth Test Data Transmission	.700	.000	.700	
Non-ADP Equipment Minor (>$100K <$500K)	4.141	.000	4.141	
Non-ADP Equipment Subtotal	9.676	.000	9.676	
Software				
L241 Software (Major)	.000	.115	.115	Implementation of NIFMS
Software Subtotal	.000	.115	.115	
Item # Minor Construction				
Misc Minor Construction	2.755	.000	2.755	
Minor Construction Subtotal	2.755	.000	2.755	
Total NUWC FY97	22.216	2.915	25.131	

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R&D CAPITAL BUDGET SUMMARY
Department of the Navy
R&D NAVAL UNDERSEA WARFARE CENTER
JAN 1997
(Dollars in Millions)
FY 1997

Approved Project		Original Request	Change	Revised Request	Explanation
Software					
L241	Software (Major)	.115	0.000	.115	
Software Subtotal		.115	0.000	.115	
Item # Minor Construction					
	Misc Minor Construction	2.755	0.000	2.755	
Minor Construction Subtotal		2.755	0.000	2.755	
Total NUWC FY97		25.131	0.000	25.131	

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DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: RESEARCH AND DEVELOPMENT
SUB-ACTIVITY GROUP: NCCOSC

Activity Group Function: The Naval Command, Control and Ocean Surveillance Center (NCCOSC) is the Navy's full spectrum research, development, test and evaluation, engineering and fleet support center for command, control and communication systems and ocean surveillance and the integration of those systems which overarch multiplatforms. NCCOSC supports the Fleet in mission and capability by providing the most capable and ready command and control systems for the Navy. NCCOSC provides innovative scientific and technical expertise, facilities, and understanding of defense requirements necessary to ensure that the Navy can develop, acquire, and maintain the warfare systems needed to meet requirements at an acceptable price. NCCOSC also provides engineering and fleet support for assigned systems to maintain the Fleet's warfighting capability. NCCOSC:

1. Provides warfare systems analysis.
2. Plans and conducts effective technology programs.
3. Provides cost conscious systems engineering and technical support to program managers in all phases of systems development and acquisition.
4. Provides test and evaluation support including the development and operation of major RDT&E and measurement facilities.
5. Provides technical input to the development of operational tactics.
6. Provides electronics material support (technical and management) for systems and equipment under the cognizance of SPAWAR.
7. Provides specialized technical support to the Fleet for quick-reaction requirements.

Activity Group Composition: NCCOSC is composed of a Research, Development, Test and Evaluation Division and an In-Service Engineering East Coast Division. This organizational structure best facilitates the entire cycle of systems engineering from research and development through to waterfront support.

The NCCOSC RDT&E Division (or NRaD) is located in San Diego, CA. In a base realignment and closure action described below, NRaD has merged with the former NCCOSC In-Service Engineering West Coast Division (or NISE West), located in San Diego, CA with detachments in Pearl Harbor, HI; Guam; and Japan.

The NCCOSC In-Service Engineering East Coast Division (or NISE East) is headquartered in Charleston, SC with detachments in St. Inigoes, MD and Norfolk, VA.

Summary of Base Closure and Realignment (BRAC) impacts:

NCCOSC has undergone and will undergo further significant BRAC actions as a result of the BRAC 1991, 1993, and 1995 processes. NCCOSC BRAC 1991, 1993, and 1995 efforts include:

BRAC 1991

- Closure of NRaD Detachment Kaneohe, HI (effective FY 1993) with functions relocating to San Diego, CA and Pearl Harbor, HI
- Closure of NRaD Detachment Los Angeles, CA (effective FY 1993), with all functions relocating to NRaD San Diego, CA
- Closure of NISE West Detachment Vallejo, CA (effective FY 1995) with all functions relocating to NISE West San Diego, CA

BRAC 1993

- Closure of NISE East Detachment Washington, DC (effective FY 1995), with all functions relocating to Charleston, SC
- Functional transfer of the Modular Maintenance Facility from the Charleston Naval Shipyard to NISE East (effective FY 1995)
- Functional transfer of 70% of NISE East Detachment St. Inigoes, MD functions to the Naval Air Warfare Center (effective FY 1995)
- Closure of all remaining NISE East Detachment St. Inigoes, MD functions (effective FY 1997), with all functions relocating to Charleston, SC
- Realignment of NISE East Detachment Norfolk, VA (effective FY 1998), with a small detachment remaining in place and all other functions relocating to Charleston, SC

BRAC 1995

- Closure of NRaD Detachment Warminster, PA (effective FY 1996), with functions relocating to NRaD San Diego, CA and Bay St. Louis, MS. The NRaD Detachment Philadelphia, PA which was scheduled to relocate to Warminster, will also relocate to San Diego under the BRAC 1995 recommendation (effective FY 2000).
- Consolidation of NISE West and NRaD (starting in FY 1996)

Additionally, the BRAC 1995 action to collocate NCCOSC's parent command, the Space and Naval Warfare Systems Command (SPAWAR), with the combined NRaD/NISE West organization (effective FY 1998) will have a significant impact on NCCOSC.

Financial Profile:

(Millions $)

	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	$1,305.1	$ 969.6	$ 921.6	$ 910.0
Costs of Goods Sold	$1,280.5	$ 968.9	$ 936.2	$ 910.0
Net Operating Results	$ 24.7	$ 0.7	$ -14.6	$ 0.0
Accumulated Operating Results	$ 15.0	$ 14.6	$ 0.0	$ 0.0

Costs of Goods Sold

Net cost decreases from FY 1996 to FY 1997 are mainly due to the reduction in carryover from conversion of contractual efforts from reimbursable to direct cite. Additional cost decreases reflect declining DoD workload/budgets, particularly for hardware/equipment acquisitions in support of customer procurement accounts; the acquisition volume has disproportionate savings

not directly correlated to the amount of associated in-house labor. Further reductions are the result of savings from Base Relocation and Closure (BRAC) actions and Capital Purchases Program (CPP) acquisitions and efforts to reduce overhead costs. These decreases are partially offset by increases due to pricing adjustments, and additional direct labor hours (although the execution of BRAC actions will lead to fewer direct hours).

Net cost decreases from FY 1997 to FY 1998 represent further reductions in customer workload, further impact of the shift to direct cite, reduced BRAC implementation costs, increased savings from BRAC actions and CPP acquisitions. The decreases are partially offset by increases due to pricing adjustments.

Net cost decreases from FY 1998 to FY 1999 represent further reductions in customer workload, reduced BRAC implementation costs, and savings from BRAC actions and CPP acquisitions, and other efforts to reduce overhead costs. The decreases are partially offset by increases due to pricing adjustments.

Operating Results

The changes in Net Operating Results (NOR) from year to year are primarily due to differences in the level of prior year loss to be made up by each year's rates. FY 1997 rates were set to recover a projected -$6.0 million prior year loss in the FY 1997 President's Budget, and FY 1998 rates will be set based on the $14.6 million profit projected for the end of FY 1997 in the current submission. FY 1996 and FY 1997 NOR also reflect changes in direct labor hours, direct labor costs, and overhead costs from the budgets on which stabilized rates for these years were set.

The FY 1996 AOR is the result of the positive NOR ($24.7 million) for the year, which offset a prior year adjustment of -$1.9 million, military labor variance of -$1.8 million, and the negative AOR of -$6.0 million as of the end of FY 1995. The positive FY 1997 NOR of $0.7 million, offset by a prior year adjustment of -$1.1 million, will bring AOR to $14.6 million by the end of FY 1997. FY 1998 revenue and rates are budgeted at the level necessary to break even ($0.0 AOR) by the end of FY 1998.

Workload:

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hours	5,913,394	5,734,346	5,695,833	5,605,171

(Millions $)

	FY 1996	FY 1997	FY 1998	FY 1999
Reimbursable Orders	958.9	907.5	911.5	898.2
Direct Cite Funds	614.3	649.4	649.3	648.7
TOTAL NEW FUNDS	1,573.2	1,556.9	1,560.8	1,546.9

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Direct Labor Hours

The decrease in direct labor hours (DLHs) from FY 1996 to FY 1997 (-3.0%) is mainly caused by personnel not relocating from Warminster, PA to San Diego under a BRAC 1995 action. DLHs decrease by 0.7% from FY 1997 to FY 1998 due to BRAC savings resulting from the co-location of NRaD and SPAWAR offset by the full year impact of hiring to offset Warminster losses, and a small anticipated decline in customer workload. DLHs decrease by 1.6% from FY 1998 to FY 1999 due to an anticipated decline in customer workload

Orders Received

Approximately 85% of the services provided by NCCOSC are to Navy or DoD working capital fund (primarily Navy) customers, with the balance provided mostly to other DoD and Federal customers. The projected funding levels in FY 1997-99 are based on NCCOSC program managers' discussions and planning efforts with major customers, as well as from input received from other Navy Budget Submitting Offices (BSO) for budget estimates that BSOs include in the RD-3, OP-32, and P-32 exhibits projecting their planned purchases from NCCOSC. The funding profile is probably conservative, as customers tend to understate during the budgeting process their support required from NWCF activities. A significant portion of the projected funding reductions between FY 1996 and FY 1999 are due to reduced hardware acquisitions/installations in the procurement appropriation that, while reducing the overall business base, have minimal impacts on the level of the in-house workforce. Also, large direct contracts and equipment purchases will be accepted as direct cite, lowering reimbursable orders received.

Performance Indicators:

NCCOSC outputs are scientific and engineering designs, developments, tests, evaluations, analyses, installations and fleet support for systems in the assigned NCCOSC mission areas. The measure of this output is the direct labor worked for a customer. Customers are charged a predetermined stabilized billing rate per employee hour worked. The rate includes the salary and benefits costs of the performing employee (direct labor costs) and a share of the overhead costs of NCCOSC, both general base operating support and unique production overhead costs of the performing employee's cost center. Non-labor, non-overhead costs, such as customer-required material and equipment purchases, travel expenses, and contractual services, are charged to the customer on an actual cost reimbursable basis, and thus are not part of the NCCOSC stabilized pricing structure. As discussed in the March 1993 Milestone II Report to Congress, definitive performance measures for the Research and Development (R&D) Activity group have not yet been developed. However, per the October 1994 DoD Guidance on Form and Content of Financial Statements, the financial performance measure for the R&D Activity group is total costs less direct non-labor costs per direct hour. Annual Cost Authority reports unit cost

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measures based on a similar calculation. NCCOSC therefore uses total stabilized cost per hour as its performance criterion.

The composite stabilized rate and the average total stabilized cost per direct labor hour (DLH) (unit cost) for NCCOSC are discussed below.

Customer Rate Changes:

	FY 1996	FY 1997	FY 1998	FY 1999
Stabilized Rate	$73.37	$75.68	$72.57	$77.01
Change from Prior Year		3.1%	-4.1%	6.1%

Stabilized Rate

Changes in composite stabilized rates are the result of changes between years in DLHs, stabilized (rather than total) costs, and AOR recovery factors in the budgets on which each year's rates are set.

From FY 1996 to FY 1997, the stabilized rate increases by $2.31 (3.1%). Although budgeted overhead costs actually increase by only 1.2%, these costs are spread over fewer direct hours. In addition, direct labor costs per hour increase due to standard pay raise guidance.

From FY 1997 to FY 1998, the stabilized rate decreases by $3.11 (-4.1%), primarily due to the AOR recovery surcharge to reflect the higher than budgeted FY 1996 NOR. Although budgeted overhead costs actually decrease by 1.7%, these costs are spread over fewer direct hours. In addition, direct labor costs per hour increase due to standard pay raise guidance.

From FY 1998 to FY 1999, the stabilized rate increases by $4.44 (6.1%), primarily due to the much smaller AOR recovery surcharge. Direct labor costs per hour increase due to standard pay raise guidance. Offsetting this increase, overhead costs decrease by 3.0%.

Unit Costs:

	FY 1996	FY 1997	FY 1998	FY 1999
Total Stabilized Cost ($M)	413.2	436.2	434.6	425.6
Workload (DLH)	5,913,394	5,734,346	5,695,833	5,605,171
Unit Cost (per DLH)	$69.88	$76.06	$76.30	$76.29

Total Stabilized Costs

The minimal increase in total stabilized costs from FY 1996 to FY 1997 represents pricing adjustments, reduced direct labor hours, offset by decreases due to BRAC and CPP savings, efforts to reduce overhead costs. The changes in stabilized costs from FY 1997 to FY 1998 and

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from FY 1998 to FY 1999 represent pricing adjustments, more than offset by decreased direct labor hours and BRAC, CPP, and other savings.

Unit Cost

Changes in unit cost (total stabilized cost per direct labor hour (DLH)) from year to year are due to changes in total stabilized costs relative to changes in DLHs. The 3.4% increase in unit cost from FY 1996 to FY 1997 reflects increases in total stabilized costs of only 1.3%, while DLHs decrease by 2.0%. Although total stabilized costs decrease by 0.8% from FY 1997 to FY 1998, the 0.7% decrease in DLHs results in a 0.1% decrease in unit cost. As total stabilized costs decrease by 1.7% from FY 1998 to FY 1999, the 1.6% decrease in DLHs results in a 0.1% decrease in unit cost.

Staffing:

	FY 1996	FY 1997	FY 1998	FY 1999
Civilian End Strength	5,162	5,164	5,109	5,029
Civilian Work Years	5,205	5,187	5,107	4,992
Military End Strength	125	110	107	106
Military Work Years	125	110	107	106

Civilian Personnel

The FY 1996 on-board level was 114 lower than in the FY 1997 President's Budget, primarily at the RDT&E Division which experienced higher attrition mainly due to the closure of its Warminster, PA detachment. Replacement hiring to attain the targeted workforce level did not occur fast enough to offset the attrition. While the FY 1997 plan is to partially restore particular skill and geographical employment areas of the civilian workforce in order to perform customer workload requirements (+72), these increases will be offset by additional attrition and increased savings resulting from BRAC and capital investments. The civilian workforce reductions between FY 1997 and FY 1998 reflect additional BRAC savings (-136), personnel efficiencies from capital investments (-5), assumed human resource office (HRO) efficiencies (-8), transfer of some HRO personnel to regional HRO centers (-14), and other workload changes reflecting customer workload funding projections (+100). The civilian workforce reductions between FY 1998 and FY 1999 reflect additional BRAC savings (-6), additional personnel efficiencies from capital investments (-14), further assumed HRO efficiencies (-2), further transfer of personnel to regional HRO centers (-32), and other workload reductions/ efficiencies (-30) reflecting reduced customer workload funding projections.

Military Personnel

The FY 1996 through FY 1999 end strengths represent projected on-board levels based on the most recent military authorizations. Military labor costs reimbursements have been reflected in the budget based on civilian equivalent rates. FY 1996 and FY 1997 are fixed based on prior

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President's Budgets; FY 1998 and FY 1999 have been repriced based on the manning level included in this budget submission and revised civilian equivalency rates.

Carryover:

The NCCOSC has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($M)	$367.8	$316.6	$322.6	$314.1
Months of Carryover	1.7	2.4	2.6	2.6

Headquarters Cost:

(Millions $)

	FY 1996	FY 1997	FY 1998	FY 1999
Cost of Management Headquarters	3.8	3.9	0.7	0.7

The change from FY 1996 to FY 1997 is due to inflation. In FY 1998, the NCCOSC headquarters organization will be disestablished due to a BRAC 1995 action, leaving only costs of those SPAWAR headquarters organizations directly supporting NCCOSC.

Capital Budget Authority:

(Millions $)

	FY 1996	FY 1997	FY 1998	FY 1999
Equipment-Non ADPE/Telecom	0.976	1.490	1.170	1.500
ADPE/Telecom Equipment	5.316	5.350	4.397	4.545
Software Development	1.134	2.340	0.567	0.000
Minor Construction	0.519	1.071	1.570	0.575
Reliability, Maintainability, and Supportability Modifications	0.000	0.000	0.000	0.000
TOTAL	7.945	10.251	7.704	6.620

NCCOSC spends less than one percent of revenues on capital investments. This represents a modest investment to maintain a technically efficient organization to support the Fleet and other

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Navy and Defense customers in their requirements. While not the primary reason for these capital investments, it should be noted that these CPP investments will result in savings of $2.5 million in FY 1997, increasing by $2.8 million in FY 1998 and $1.9 million in FY 1999. The majority of NCCOSC CPP investments are purchased to provide technical capabilities so that NCCOSC can meet its customer requirements. These CPP investments also allow NCCOSC to perform its assigned mission at a lower cost to customers than would otherwise be possible, but the driving reason for buying these items is for NCCOSC to have the ability to meet its technical customer requirements.

NCCOSC, an R&D activity group activity, is scheduled to convert from its existing accounting system to the selected DoD migratory accounting system , the NAVAIR Industrial Financial Management System (NIFMS), effective 1 July 1997. Software development costs of $0.692 million in FY 1996 and $2.340 million in FY 1997 have been included to reflect NIFMS conversion costs.

Adjusting for NIFMS conversion costs, the increase between FY 1996 and FY 1997 (0.9%) is less than inflation. The slight decrease between FY 1997 and FY 1998 is mainly due to reduced requirements for general purpose non-ADP equipment and ADP items, offset by software development items to reduce manpower requirements. The decrease from FY 1998 to FY 1999 is mainly due to reduced minor construction requirements.

Economies and Efficiencies:
Cost estimates include savings from Base Relocation and Consolidation (BRAC) initiatives, other overhead reductions (including initiatives to re-invent shore infrastructure management) and from productivity improvements from Capital Purchases Program (CPP) projects. The table below summarizes the additional savings included in the budget which are to be achieved each year from these initiatives.

	FY 1996			FY 1997			FY 1998			FY 1999		
	E/S	W/Y	$M	E/S	W/Y	$M	E/S	W/Y	$M	E/S	W/Y	$M
BRAC 1991	0	14	0.7	0	0	0.0	0	0	0.0	0	0	0.0
BRAC 1993	12	12	1.0	2	2	0.1	0	0	0.0	6	6	0.4
BRAC 1995	98	18	1.0	23	92	6.2	136	125	9.1	0	11	0.8
Other efficiencies	0	0	0.0	0	0	0.0	8	8	1.1	2	2	6.6
CPP	2	2	0.5	21	9	2.0	5	14	2.8	14	9	1.8
Total	112	46	3.2	46	103	8.3	149	147	13.0	22	28	9.6

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INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NCCOSC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	1,297.8	961.4	912.4	900.2
Surcharges	.0	.0	.0	.0
Depreciation excluding Major Constructio	7.3	8.2	9.2	9.8
Other Income				
Total Income	1,305.1	969.6	921.6	910.0
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	4.8	6.4	6.4	6.5
Civilian Personnel	347.8	364.7	366.1	363.8
Travel and Transportation of Personnel	33.1	31.6	29.7	29.6
Material & Supplies (Internal Operations	131.5	76.3	65.9	61.6
Equipment	33.7	41.5	39.9	37.2
Other Purchases from NWCF	66.3	71.8	71.6	69.7
Transportation of Things	1.2	.9	.9	.9
Depreciation - Capital	7.3	8.2	9.2	9.8
Printing and Reproduction	1.3	1.4	1.4	1.4
Advisory and Assistance Services	3.0	5.2	5.7	6.2
Rent, Communication & Utilities	17.1	19.0	18.3	17.6
Other Purchased Sevices	664.7	342.1	321.0	305.6
Total Expenses	1,311.7	968.9	936.3	910.0
Work in Process Adjustment	-31.1	.0	.0	.0
Comp Work for Activity Reten Adjustment	-.1	-.1	-.1	-.1
Cost of Goods Sold	1,280.5	968.9	936.2	910.0
Operating Result	24.7	.7	-14.6	.0
Less Surcharges	.0	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	24.7	.7	-14.6	.0
Other Changes Affecting AOR	-3.6	-1.1	.0	.0
Accumulated Operating Result	15.0	14.6	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NCCOSC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	958.9	907.5	911.5	898.2
a. Orders from DoD Components	869.7	816.6	813.0	812.6
Department of the Navy	706.2	618.4	625.9	657.4
O & M, Navy	253.8	184.5	224.4	235.8
O & M, Marine Corps	14.0	13.7	13.5	13.8
O & M, Navy Reserve	6.5	1.1	1.2	1.3
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	4.1	4.7	1.7	.7
Weapons Procurement, Navy	3.9	5.4	4.2	4.2
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	37.8	50.1	39.4	39.3
Other Procurement, Navy	202.2	202.7	181.6	197.8
Procurement, Marine Corps	7.2	5.8	6.2	5.2
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	175.8	150.1	153.4	159.1
Military Construction, Navy	.9	.3	.4	.1
Other Navy Appropriations	.0	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	8.3	3.8	8.5	4.2
Army Operation & Maintenence	4.9	2.6	4.6	1.7
Army Res, Dev, Test, Eval	1.1	1.0	3.4	2.0
Army Procurement	1.4	.6	.5	.5
Army Other	.9	-.4	.0	.0
Department of the Air Force	39.0	38.3	39.4	34.0
Air Force Operation & Maintenence	12.9	13.1	12.9	10.9
Air Force Res, Dev, Test, Eval	19.0	19.0	19.3	18.8
Air Force Procurement	7.4	6.1	7.3	4.4
Air Force Other	-.3	.0	.0	.0
DOD Appropriation Accounts	116.2	156.2	139.2	116.9
Base Closure & Realignment	28.1	45.4	8.9	.1
Operation & Maintence Accounts	10.7	17.5	17.1	17.5
Res, Dev, Test & Eval Accounts	71.1	81.8	96.7	88.8
Procurement Accounts	1.6	10.9	16.0	10.2
DOD Other	4.7	.6	.4	.4
b. Orders from NWCF Business Area	54.0	46.9	53.3	53.1
c. Total DoD	923.7	863.6	866.3	865.7
d. Other Orders	35.2	44.0	45.2	32.5
Other Federal Agencies	21.8	24.9	26.9	16.4
Foreign Military Sales	10.3	17.6	15.3	13.9
Non Federal Agencies	3.2	1.4	3.0	2.3

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NCCOSC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	835.6	489.4	427.4	417.3
3. Total Gross Orders	1,794.6	1,397.0	1,338.9	1,315.5
4. Funded Carry-Over **	489.4	427.4	417.3	405.5
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	1,305.1	969.6	921.6	910.0
** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.	367.8	316.6	322.6	314.1

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Exhibit Fund-2

CHANGES IN THE COST OF OPERATIONS
SUB-ACTIVITY GROUP: SPAWAR/NAVAL COMMAND, CONTROL AND OCEAN SURVEILLANCE CENTER (NCCOSC)
(Dollars in Millions)

	EXPENSES (DBC 4970)
FY 1996 Actual	**1,311.7**
FY 1997 Estimate in President's Budget	**1,060.4**
Price Change:	
Labor Repricing	-0.7
Program Changes:	
Underexecution Of Direct Work Due To BRAC Moves	-6.2
Increased VERA/SIP Costs & Severance Pay	0.2
Reduction in Depreciation Expense	-2.0
Increased Civilian Workyears	0.9
Increase in New Professional Program	2.1
Reduced Customer Workload (Due To Shift To Direct Cite)	-71.4
Purification of NISE East Database (From Four Sites To One)	1.1
Decrease in Military Authorization	-0.9
Overhead Reduction Of Non-Labor Costs To Offset Reduced Direct Labor Hours	-14.6
FY 1997 Current Estimate	**968.9**
Pricing Adjustments:	
Civilian Personnel	9.4
Military Personnel	0.6
Materials and Supplies	
Fuel	0.0
All Other	2.6
DBOF Price Changes	1.9
Other Purchases	9.5
Productivity Initiatives and Other Efficiencies:	
CPP Savings	-2.8
BRAC IV Savings	-9.1
Other efficiencies (HRO servicing ratio, etc.)	-1.1

Program Changes:	
Reduced Severance Pay	-2.4
Increased Depreciation Expense	0.6
Change in Military Authorization	0.4
Reduced Customer Workload (Due To Shift To Direct Cite)	-36.3
Reduced BRAC Implementation Costs	-3.7
Purification of NISE East Database (From Four Sites To One)	-0.6
Decrease In Direct Workyears	-1.6
FY 1998 Current Estimate	**936.3**
Pricing Adjustments:	
Civilian Personnel	9.7
Military Personnel	0.1
Materials and Supplies	
Fuel	0.0
All other	2.4
DBOF Price Changes	2.0
Other Purchases	9.3
Productivity Initiatives and Other Efficiencies:	
CPP Savings	-1.8
BRAC III Savings	-0.4
BRAC IV Savings	-0.8
Other Reductions (HRO servicing ratio, etc.)	-6.6
Program Changes:	
Purification of NISE East Database (From Four Sites To One)	-0.6
Reduced Customer Workload	-27.8
Completion of BRAC Efforts	-7.5
Reduction in Severance Pay	-1.5
Decreased Direct Work Years	-3.4
Increase In Depreciation Expense	0.6
FY 1999 Current Estimate	**910.0**

Activity Group Capital Budget Summary
Department of the Navy
NCCOSC

($ in Millions)

LINE #	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quant	Total Cost	Quant	Total Cost	Quant	Total Cost	Quant	Total Cost
	1. Non-ADP Equipment								
L0001	Misc. Non-ADP Equipment (> = $.100M and < $.250M)	VAR	0.547	VAR	1.490	VAR	1.170	VAR	1.500
L0002	10 Channel Simulator	1	0.429						
	Subtotal Non-ADP Equipment	**VAR**	**0.976**	**VAR**	**1.490**	**VAR**	**1.170**	**VAR**	**1.500**
	2. ADPE and Telecommunications Resouces								
	(a). Computer Hardware (Production)								
	(b). Computer Software (Operating System)								
	(c). Other ADPE and telecommunications resources								
L0003	Misc. ADP Equipment (> = $.100M and < $.500M)	VAR	2.413	VAR	2.195	VAR	2.017	VAR	4.645
L0004	Supercomputer - New Mission	VAR	1.104	VAR	2.155				
L0005	Security System, San Diego - New Mission	1	1.400						
L0006	Security System Extension, San Diego - New Mission					1	0.600		
L0007	Corporate Data Server					1	1.000		
L0008	Barcoding System			1	1.000				
L0009	Video Teleconferencing System - New Mission	1	0.399						
L0010	Electronic Boardroom - Productivity						0.780		
	Subtotal ADPE & Telecommunications	**VAR**	**5.316**	**VAR**	**5.350**	**VAR**	**4.397**	**VAR**	**4.645**
	3. Software Development (> = $.100M and < $1M)								
L0011	SOW/CDRL Generator	1	0.342						
L0012	Human Resources Office Forms Routing System					1	0.277		
L0013	Corporate Excessing System					1	0.290		
L0014	NIFMS Conversion Effort	VAR	0.692	VAR	2.340				
L0015	Modification of Command Local System	1	0.100						
	Subtotal Software Development (> = $.100M and < $1M)	**2**	**1.134**	**0**	**2.340**	**2**	**0.567**	**0**	**0.000**

Activity Group Capital Budget Summary
Department of the Navy
NCCOSC

($ in Millions)

LINE #	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quant	Total Cost	Quant	Total Cost	Quant	Total Cost	Quant	Total Cost
	4. Minor Construction (> = $.100M and < $.500M)								
L0016	Minor Construction (> $.100M and < $.200M)			VAR	1.071				
L0017	Test Lab - Hawaii	1	0.275						
L0018	Library Air Conditioning - San Diego					1	0.260		
L0019	Warehouse Replacement - Hawaii					1	0.275		
L0020	Alteration/Upgrade of Building - Charleston					1	0.280		
L0021	Alteration/Upgrade of Building - Charleston							1	0.290
L0022	Staging/Ready - Issue Facilities - Charleston	1	0.095						
L0023	Facilities Refurbishment and Improvement - Charleston					1	0.245		
L0024	Pre Installation, Testing & Check Out Facilities - Charleston					1	0.285	1	0.285
L0025	Air Conditioning Plant Conversions - Charleston					1	0.225		
L0026	Security Fencing For Warehouses - Charleston	1	0.149						
	Subtotal Minor Construction (> = $.100M and < $.500M)	VAR	0.519	VAR	1.071	VAR	1.570	VAR	0.575
	Grand Total Capital Purchases Program	VAR	7.945	VAR	10.251	VAR	7.704	VAR	6.620

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)										A. FY 1998 President's Budget		
B. Navy/Research and Development/NCCOSC				C. L0001 - Non-ADP Equipment - (> $100,000 < $250,000)						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	VAR		547	VAR		1,490	VAR		1,170	VAR		1,500
TOTAL			547			1,490			1,170			1,500

Justification:

This category provides NCCOSC means to procure technical items used for multiple projects. Examples of NCCOSC non-ADP equipment requirements are as follows:

Equipment for the Staging/Ready-Issue Facilities (FY96 176K, FY97 880K). Item L0022 provides for the construction of six 10,000 sq ft facilities to support ready issue staging requirements. This item provides for the equipment required to outfit these facilities.

Lightwave Signal Analysis Equipment (FY97 170K). This equipment will provide a basic lightwave measurement/test/evaluation capability needed to accomplish planned development and evaluation efforts related to the use of optical systems and components for internal and external aircraft communications systems.

Ship Motion Simulator (SMS) Controller (FY97 195K). This controller will allow for the collection of synchronized digitalized data from the inertial systems under test as well as the SMS. This capability will improve the decision making process, relative to the test conducted and objectives. The controller will allow the utilization of actual at-sea digitized ship attitude/attitude rate data to control the SMS and emulate the actual shipboard dynamic environment. This will significantly improve the capability to support investigations and resolution of fleet supported programs.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0001 - Non-ADP Equipment - (> $100,000 < $250,000) (Page 2)	D. NCCOSC

Justification: (cont)

Wide Area Augmentation System (WAAS) Satellite Simulators (FY97 150K). Acquisition of these simulators will allow the Global Positioning Station (GPS) laboratory to replicate the evolving WAAS signal environment, or synthesize "what if" environment. The simulators are capable of simulating one of the following: a geostationary satellite broadcasting WAAS augmentation data, a pseudolite (ground based satellite which enhances local system accuracies) or an interference source.

Portable Satellite Simulator Test Set (PSSTS) (FY97 120K). The PSSTS provides state-of-art technological testing capabilities for highly technical fleet direct satellite equipment. System provides a technical capability for Depot Maintenance and Restoration of Direct Fleet repair items.

Wide Band High Frequency Channel Simulators (FY99 300K). This equipment is necessary to keep the signal and jammer as independent paths, and will enhance ongoing research in the Electronic countermeasures programs.

Compact Antenna Range Reflector Plate and Pedestal (FY99 325K). This equipment will allow the anechoic chamber located at NRAD to be used as a compact range with will improve dynamic range and quieting. Every year the electromagnetic noise level increased thereby reducing the ability to measure a sidelobe performance.

Other Administrative/Operational Equipment. The procurements in the category are lathes and other equipment for making tools and machine shop equipment. Also included are testing equipment, oscilloscopes, and Xerox machines.

Other Scientific/Technical Equipment. This includes such items as monitoring/recording systems, spectrum analyzers, and radar components/receivers.

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ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)										A. FY 1998 President's Budget		
B. Navy/Research and Development/NCCOSC				C. L0002 - Ten Channel Simulator - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment	1		374									
Installation			20									
Testing			35									
TOTAL			429									

Justification:

The Naval Command, Control and Ocean Surveillance Center, RDTE Division's (NRAD) Global Positioning Station (GPS) laboratory is the primary test facility supporting research, development, test, and evaluation of the GPS and GPS related products for all DoD services, other government agencies and commercial organizations. NRAD is currently the primary participating test organization for the GPS Joint Test Agency (JTA). The JTA is a Joint Service Organization, established by the GPS Joint Program Office (SMC/CZTU) and Hq Space and Missile Systems Center (AFMC) Los Angeles Air Force Base. The primary purpose of the JTA is to operate as a world renowned GPS Center of Expertise (COE) which is used by both government and civilian activities as well as foreign governments for the testing and development of GPS related equipment. It is imperative that the existing capability of NRAD to test GPS equipment and to perform elate studies be expanded.

The purchase of the 10 channel Stel 7200 GPS Satellite Signal Simulator with the Selective Availability/Anti-Spoofing, Rubidium Oscillator and User Motion Generator Options will greatly enhance the long term capability of the GPS laboratory. The existing simulation capability is currently one of the most heavily utilized features of NRAD's GPS laboratory; currently several shifts are required to accommodate the simulation demand. The additional simulator will greatly improve the timeliness of the response to customer's testing and development tasking requirements by increasing the amount of available simulation time. The additional simulator will also allow unequaled spoofing jamming test capability.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0002 - Ten Channel Simulator-New Mission	D. NCCOSC

Justification: (cont)

This expanded capability will more easily allow the testing of next generation all-in-view receivers, as well as various other integrity assurance algorithms which is becoming of greater importance with the ever expanding role that GPS plays in government and commercial operations. Other GPS equipment which simultaneously requires a large number of simulated satellites and an extensive array of jamming/spoofing or faulty satellites could also easily be accommodated.

There is no feasible alternative to the purchase of this equipment. There is no other commercially available simulation capability which is compatible with NRAD's existing simulation control software programs and/or could not be integrated in a cost effective and efficient manner.

000556

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0003 - Miscellaneous ADP Equipment (> $100,000, < $500,000)						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	VAR		2.413	VAR		2,195	VAR		2,017	VAR		4,545
TOTAL			2,413			2,195			2,017			4,545

Justification:

This category provides NCCOSC means to procure ADP items used for multiple projects. Examples of NCCOSC ADP equipment requirements are as follows:

Network Servers (FY 96 180K, FY 97 150K, FY 98 352K, FY 99 352K): This equipment is required to support the corporate information system. Hardware will include peripheral connection interchange bus architecture, symmetric multi-purpose work group servers, and server peripheral equipment (tape drives, remote access, terminal servers, modems, etc). These servers will provide file-served applications to NCCOSC technical and support personal. This equipment will support related applications as processing travel orders, training requests, purchase requests, and timekeeping.

3D Graphics System (FY 96 236K): This equipment will be used to provide real-time 3-dimensional visualization capabilities for the Naval Virtual Surveillance System. Current equipment is not fast enough to handle the graphic or processing load, and cannot be expanded to include additional processors and graphic displays.

TAC-4 Processing System (FY 96 124K): The TAC-4 is the Navy designated C4I computer system. The use of this complete computer system is an operational necessity; it provides new capabilities and capacity that cannot otherwise be met with current equipment.

Database Licenses and Computer Software: These licenses and Software are needed to allow additional users to have access to and to better utilize the Corporate information system

C00537

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0003 - Miscellaneous ADP Equipment (> $100,000, < $500,000)	D. NCCOSC

Justification: (cont)

Microfiche System (FY 97 150K): This equipment is required to replace equipment that was purchased in 1993. The current equipment currently produces over three million masters and copies each month. At this rate of usage, the life cycle is estimated to be three to five years.

Array Processor System for Satellite Vulnerability Collection and Analysis System (FY 97 145K): This system consists of threes Mercury Race Series 6U Multicomputer system with their associated development packages. This system is required to replace the current array processor which does not have the processing speed needed to keep up with the number of data snapshots being taken by the collection subsystem.

Video Equipment (FY 97 100K): This purchase is for a conferencing server that would allow up to 28 locations to participant in the same multipoint VTC meeting.

Voice Mail (FY 96 170K): The consolidation of the NCCOSC divisions in San Diego has resulted in the need to expand the voice mail system. The purchase of this equipment will allow for this expansion.

Command and Control Network (FY 96 430K, FY 97 485K, FY 98 455K, FY 99 435K): This Command and Control network will be a backbone network service for classified and unclassified, high bandwidth, high speed, multi-media internetworking between the NCCOSC R&D Division laboratory spaces located throughout Point Loma. Also will provide connectivity to other tenant activity laboratories and provide connection to other networks.

Universal Radar Moving Target Transponder (URMTT) (FY 96 241K): URMTT is a generic, low cost, portable radar moving target transponder. It can provide realistic radar targets for most radars, including frequency agile radars such as the Aegis SPY-I radar. The operator controls the target parameters on a 486 computer using a keyboard and mouse.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0004 - Supercomputer - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	VAR		1104	VAR		2,155						
TOTAL			1104			2,155						

Justification:

The Supercomputer System is an integral part of a secure signal processing facility. The Naval Command, Control and Ocean Surveillance Center Research, Development, Test and Evaluation (RDT&E) Division (NRaD), received $1.0 million in FY 94 to purchase an Intel PARAGON XP/S and Convex SSP-1 parallel supercomputer system, Silicon Graphics scientific visualization systems and ATM/SONET high speed networking systems and peripherals. The PARAGON has 25 Gigaflops (billion floating point operations per second) minimum peak performance; the SSP-1 has 1.6 Gigaflops. The systems are used primarily for solving classified scientific problems, investigations and experimental development of embedded system applications (real time, databases, simulations, signal and image processing and Communications Command and Control functions. Scientists and engineers at over 40 different RDT&E activities of all branches of DOD will have access to the PARAGON via the Defense Research and Engineering Network. High Performance Computing (HPC) and communications are vital, essential base technologies that will drive or limit the conduct of virtually all science and engineering for the foreseeable future. Increased HPC capability in DoD is needed to raise performance levels in advanced, embedded military computing systems, to pioneer cost reductions in these systems, and to enhance the opportunity for commercialization of computational products by other sectors. This is an initiative by the Office of the Director of Defense Research and Engineering summarized by the "Invitation for Proposals, DoD High Performance Computing Mod Plan (HPC-MP)" of 11 September 1992. In it, specific functions and applications fundamental to progress in scientific and technologic areas of interest to the DoD were assessed. The requirements were found to far exceed current DoD capabilities.

000358

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0004 - Supercomputer - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

The initial NRAD response to this initiative was the PARAGON, which was selected based on the following criteria: contribution to DoD mission, synergism with science and technology R&D, technical merit, organizational commitment to HPC, cost efficiency, complement of DoD long-range goals, readiness, and track record. The subsequent response of NRaD to these requirements was the Convex SSP-1 system, which is a parallel supercomputing extension to the Tactical Advanced Computer (TAC-4). It will support development of parallel tactical information integration and display technology software via using the TAC-4 processors. Other commercial parallel and sequential computers were also considered. However, the SSP-1 meets the current and projected requirements, its computing power cannot be obtained elsewhere for the comparable price and existing and planned TAC-4 installations in the fleet are candidates for upgrades to such parallel processing capability.

Funds will be used to increase the current capability of the DoD PARAGON system placed at NRaD in FY 93 and FY 94 acquisitions of the SSP-1 system, visualization systems and ATM networking. In addition, network access to that system and other DoD systems nationwide will be facilitated for NRaD scientists and engineers. The Center will purchase additional disks, memory, and processing nodes for the PARAGON and the SSP-1, visualization workstation upgrades and an archival storage system. Additionally parallel processor upgrades, visualization peripherals, high speed networks and other system enhancements will be acquired. Effectiveness of NRaD's HPC systems, such as the two Convex Systems, the C3240 and Exemplar SSP1000, increases dramatically as these machines are upgraded with additional new processors, memory and auxiliary storage. The Exemplar is now becoming an integral component of ongoing NRaD R&D programs across our C4I mission area and upgrades of our existing C3240 system to this machine is required to permit the broad scientific and engineering work across the laboratory to attain the increased productivity such upgrade and enhancement offer. Recent inclusion of the new Exemplar in the DoD HPC Modernization Program Distributed Center at NRaD will lead to broad use of this facility by researchers DoD-wide and make it imperative that our own capability represented by this HPC system be expanded commensurate with growing programmatic demand. The existing Convex C3240 will thus be upgraded to provide a second Exemplar model, with archival storage capability, for general laboratory-wide use allowing a natural migration of all of our HPC users and their computing tasks to a scaleable, parallel machine offering dramatically improved capability and corresponding efficiencies in the performance of our mission area tasking.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0004 - Supercomputer - New Mission (Page 3)	D. NCCOSC

Justification: (cont)

The alternative to increasing the capability of these systems, scientific visualization systems, and ATM networks at NRaD is to purchase new computer systems, visualization systems, and networks to support NRaD projects. This solution would be far more expensive than leveraging the substantial NRaD and DoD investments by making additions to the capability of existing systems.

C000054

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)				A. FY 1998 President's Budget								
B. Navy/Research and Development/NCCOSC				C. L0005 - Security System - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment	VAR		1,350									
Installation												
Testing												
Software			50									
TOTAL			1,400									

Justification:

The NCCOSC RDTE Division (NRaD) currently has a variety of different access control systems in specific project areas, a separate non-integrated alarm system that protects selected spaces, and several CCTV cameras which continuously feed images of a limited number of areas to a bank of CCTV monitors in a central alarm monitoring and guard dispatch control center. The various badges for these multiple access control systems are not compatible, requiring employees who require access to different spaces to carry several such badges in addition to their primary identification badge. Production and production support personnel expend approximately two man-years of additional effort in issuing these badges and managing access lists over the effort which would be required by a single-badge system. Even in those areas using a common badge, individual workstations must be managed separately, adding to the administration effort.

This complete electronic security system is composed of cardreaders, numbered keypads, alarm sensors, Closed Circuit Television (CCTV), microprocessor-based distributed wall panels, thermal imagers or portable radar units, intercom units, personal computers and software that integrate these components into a complete system.

The NRAD facility in Old Town district of San Diego has at least two incompatible access control systems. Adding a third system to permit eliminating a static guard post and a fourth to control avoid having to man a new turnstile to be installed in the northern fenceline will significantly increase the effort required to administer all these systems.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0005 - Security System - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

NRaD's alarm system is not integrated with any access control system or CCTV cameras. Alarms from access control portals are not integrated into the alarm display, resulting in the assignment of one additional security monitoring person to handle these responsibilities. Additionally, a separate alarm system requires that NRaD maintain an additional standalone computer system and its associated microprocessor-based local wall panels. The current alarms also do not provide for communications line encryption of alarm reports for Sensitive Compartmented Information Facilities (SCIFs). This has resulted in NRaD having two separate alarm systems to protect these extremely sensitive areas. The alarm system uses computer network protocols that are not supported by the NRaD's general communications network. As a result, the alarm system must use expensive dedicated circuits.

NRaD's CCTV cameras are also not integrated with either of the other two types of security systems. Security personnel must manually direct cameras to view areas of concern vice having the image automatically appear on screen. Camera monitors are not automatically switched on based on an alarm condition. If they were, security guards would more readily notice the display and take appropriate action. The CCTV system installed at NISE West is not integrated with their alarms or access control system or with those at NRaD. Finally, the existing CCTV systems at NRaD are inadequate to cover additional areas which require monitoring. An additional 54 marine mammals from NRaD's former detachment in Hawaii were recently moved into new waterborne pens along the waterfront but no comprehensive security system is available to provide surveillance to the area. NRAD has a significant problem with incursions of homeless and migrant personnel over the existing fenceline. No CCTV cameras are positioned to detect these trespasses. The combination of non-integrated systems requires two full-time security officers to monitor; a fully integrated system should only require one officer.

Finally, no access control portal has an intercom system for communications between people attempting to gain access to the facility and the access control system operator. This requires that personnel experiencing difficulty at these access points must find other means to gain access or seek a phone to report the difficulty.

000263

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0005 - Security System - New Mission (Page 3)	D. NCCOSC

Justification:

The proposed integrated electronic security system is a series of cardreaders, numbered keypads, alarm sensors, intercom units, and CCTV cameras connected to microprocessor-based distributed wall panels and redundant Personal Computers in a control center which will combine multiple functions (controlling access to spaces based on access lists, reporting alarm conditions, and automatically activating CCTV cameras in alarmed areas) into a single easily monitored and managed console. The resultant system would provide security for NRaD yet be easily managed by a single security guard. The proposed system will replace the plethora of incompatible badges with a single identification badge encoded to the latest Dept. of Defense standard for magnetic stripe badges. This will ensure that a single badge technology can be economically used for both the permanent and temporary badges issued at both commands. It will also achieve maximum interoperability by permitting the use of existing NRaD badges at other sites such as the Pentagon.

The access control portion of the system uses cardreaders to read information encoded on the magnetic stripes of employees and authorized visitors. Similar to Automated Teller Machines, when a badge authorized for entry to a particular area is swiped through the respective cardreader, the microprocessor in a local wall panel controlling several readers in that area sends a signal to release the area locking mechanism, allowing that person to enter the space, building, or gate without other human direct involvement. This type of access control eliminates the need for an individual to visually control access to the area in question while providing an automated record of who accessed areas and when. The access control portion of the system will permit space managers to directly manage the access lists for their spaces which will be located in the corporate database. All command personnel who enter either a access control system-controlled turnstile or gate will experience more reliable operation but will have the ability to easily report any problems which do occur.

The alarm system portion of the system will use standard commercial alarm sensors in an encryption protected network running over the existing communications infrastructure. The use of government-approved encryption will ensure that a single system can monitor both the general areas and the extremely sensitive SCIFs without a duplicate control center. The integration of alarms and CCTV will ensure that assessments of alarm conditions can be more immediate and positive. Space custodians will be recalled to the command on fewer occasions to check the integrity of selective alarmed spaces.

000054

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0005 - Security System - New Mission (Page 4)	D. NCCOSC

Justification: (cont)

The CCTV portion of the system will use alarm conditions and motion sensing software to trigger monitors to display the images captured by the cameras. Since typical motion sensing software is not effective in a water environment, thermal imaging or portable radar units will also be used to trigger cameras around the NRaD waterfront. This will give the guards an immediate assessment capability of the cause of an alarm and provide additional information to the roving guards dispatched to the area in question.

The new system will provide an integrated system of controlling access to spaces based on access lists, reporting alarm condition, and automatically activating CCTV cameras in alarmed areas into a single easily monitored and managed console. This system will also provide security for both NRaD and NISE West yet be easily managed by a single security guard. The proposed system will replace the plethora of incompatible badges with a single identification badge encoded to the latest Dept. of Defense standard for magnetic stripe badges. This will ensure that a single badge technology can be economically used for both the permanent and temporary badges issued at both commands. This will also achieve maximum interoperability by permitting the use of existing NRaD badges at other sites such as the Pentagon.

Alternatives considered include: (1) using an alternate integrated security system which encodes badges using an encoding format that is not compatible with the DoD spec; (2) continuing to use the existing separate security systems or expand them as necessary to cover the additional areas and assets and adding intercoms or phones as required at access portals to provide direct communications to the guard dispatch center; or (3) continuing to use existing systems and adding guard positions as necessary to man the new access portal and retaining the current static post at NRAD.

Using an alternate integrated security system (Option 1) which does not use magnetic stripe badges or which encodes to other than the DoD specification would be incompatible with the badges issued at NRaD San Diego and other DoD sites. The lack of DoD encoding compatibility would result in additional work for administrative personnel to prepare additional badges specifically for visitors to this site and would needlessly delay our scientists and engineers when they visit other sites which conform to the DoD encoding spec.

000367

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0005 - Security System - New Mission (Page 5)	D. NCCOSC

Justification: (cont)

While option one would provide most of the integration desired between the access control, alarm, and CCTV components, saving one man-year of effort in contract guards and two man-years of effort of technical or technical support personnel, it would result in additional work to ensure that personnel can gain access at other facilities which use the DoD encoding specification.

Continuing (Option 2) to use existing systems and adding to them incrementally will result in no savings from guard post elimination and administration of dissimilar systems.

Option 3 also fails to take advantage of potential savings but also adds further costs by increasing guard post requirements to cover the new NISE West turnstile location.

The alternative selected was based on maximum cost savings and improved maintainability. Continuing to use separate security systems will result in a less-integrated approach which does not save the two man-years of administration effort and two guard posts and will make maintenance more difficult.

000363

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0006 - Security System Extension - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing							1	600	600			
TOTAL									600			

Justification:

The NCCOSC RDTE Division (NRAD) has an integrated security system that combines access control, CCTV camera monitoring, and intrusion detection alarms into a comprehensive system providing electronic security for a major portion of the installation. This system does not, however, extend to a remote portion of the installation located approximately 8 miles away. This remote location requires the same effective security system to address illegal trespass and general security of classified and sensitive information areas but has an assemblage of non-integrated systems that make integration very difficult.

There is a requirement for cardreaders, numbered keypads, alarm sensors, Closed Circuit Television (CCTV) cameras, microprocessor-based distributed wall panels, and intercom units that will permit upgrading the security of an additional portion of the NRaD installation.

The proposed extension of the current integrated electronic security system will: provide automated electronic access control to the remote site perimeters, buildings and spaces; permit monitoring alarm conditions at any of these areas; and provide CCTV cameras for monitoring and assessing incidents at those locations. This will allow the current monitoring force at the NRaD main site to monitor the remote area.

00962

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0006 - Security System Extension - New Mission (page 2)	D. NCCOSC

Justification: (cont)

Existing security systems at the remote site are not integrated to permit easily managing all functions with minimal personnel. Installing the new equipment as an extension of the configuration at the main portion of NRaD will provide interoperability among sites and allow existing guard force monitoring personnel to operate the system.

The alternative to upgrading the security systems at the remote area is to continue using currently installed equipment and add-on as necessary to support new requirements. As more personnel move into the remote site and more security equipment is required to support their projects, administrative costs will continue to increase.

The alternative selected was based on minimum administrative cost and improved maintainability. Continuing to use separate non-integrated security systems will be more difficult to administer and maintain.

000068

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0007 - Corporate Data Server - New Mission					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing							1	1000	1000			
TOTAL									1000			

Justification:

NCCOSC is currently designing and building a Corporate Data Warehouse. This is a tool designed to help management make Corporate decisions. The Data Warehouse is designed to serve the decision making community. The expectation is that the decision maker is a business person and as such, he/she will require more help navigating around the system than the average computer user. For this reason, the formal establishment "data about data" becomes important in the Data Warehouse environment. The decision maker needs to know what is available and where it is in the Data Warehouse. Additionally, it provides information about the nature of the data (i.e. data source, point of contact, when summaries created, what queries and other help is available, what changes have occurred in business definitions and terms, and business assumptions that have been made in the past regarding that data). This machine is necessary as the home for the Data Warehouse.

Currently there is no existing system which can accommodate the size, speed requirements, or the expected user community of this Data Warehouse. The BRAC consolidations will require that NCCOSC/SPAWAR can provide corporate data to locations throughout the United States and the World.

The Data Warehouse is designed to serve the information needs of the entire SPAWAR/NCCOSC environment.

Specifically it will provide:

(a) Enhanced customer service (all customer information is correlated via a single Data Warehouse).
(b) Provide management with a capability to ascertain the big picture.

000063

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0007 - Corporate Data Server - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

Currently information of importance to the Corporation is distributed through the corporate database and is extremely difficult for the decision maker to obtain. The resultant subject oriented database is designed with the end-user in mind.

The alternative would be to upgrade an existing system to accommodate the requirements of the Data Warehouse.

A new database server machine was selected over upgrading existing systems because of the following reasons:

- -Upgrade possibilities are limited since technology is moving so fast that much of what is available is not compatible with the technology in the current machines.
- -The major feature of the current system that needs to be upgraded is the bus. If the bus could be upgraded then all the devices that interface to that bus would also need upgrading. By the time all hardware is upgraded to the current configuration, the cost is equivalent (or greater) to a new system but without the integration and system warranty.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)				A. FY 1998 President's Budget								
B. Navy/Research and Development/NCCOSC				C. L0008 - Electronic Bar Coding System - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing				VAR		1,000						
TOTAL						1,000						

Justification:

This proposed system will automate the NISE East equipment tracking process through the use of software and hardware (scanner, readers, printers and other associated bar coding equipment) to eliminate the requirement for fifteen (15) contractor workyears each year after the system becomes fully operational.

NISE East is responsible for over $224 million of sponsor technical equipment items. NISE East warehouses receive and issue over 8,000 items each month. In addition, NISE East has over $46 million of internal items, and is required to conduct a triennial inventory for these items. Currently, accountability for all equipment items are done by manual paper inventories at the NISE East sites. This manual process is inefficient and results in incorrect and incomplete records. This project sill result in more accurate and complete equipment tracking information at a significantly lower cost. The system will pay for itself in less then three years. And within five years, savings will be twice as much as the investment cost.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)												
A. FY 1998 President's Budget												
B. Navy/Research and Development/NCCOSC				C. L0009 - Video Teleconferencing System - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	VAR		399									
TOTAL			399									

Justification:

The expansion of current Video/Electronic Boardroom capabilities planned for the NCCOSC In-Service Engineering East Coast Division (NISE East) Headquarters will directly support directly NISE East as it executes the BRAC ordered transition from four separate work sites to the consolidated facility in Charleston SC by allowing the organization to remain productive through avoidance of per diem and other travel costs and lost worker time while traveling. Without this system, the cost of managing the BRAC established NISE East organization will be significantly higher than budgeted.

NISE East began in FY 95 to establish a Video teleconferencing (VTC) network. The network will support NISE East Charleston, and its detachments at Norfolk, VA; and St. Inigoes, MD. The network will eliminate time-consuming cross reference of available air time facilities. The network will also allow audio/video connections as a network node located in Charleston. The advantages of the network will be realized in travel and per diem cost avoidances. Productivity savings will result from minimizing travel due to numerous simultaneous "on the air" meetings.

The system will consist of the following item:

- Digital Access Control System
- Multi Control Unit
- Video projection capabilities
- Front/rear projection screens

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0009 - Video Teleconferencing System - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

The current Video Teleconferencing Facility will receive additional equipment to incorporate greater system configurations. The NISE East studios will receive full studio audio/video/data setups. All sites will be monitored by a video editing console. Remote VTC capabilities will expand the "on site" effect as "live" training, demonstrations and meetings take place.

The Digital Access Control System (DACS) will be used in the current Charleston studio to enable the configuration of the calls, and will also be used for network control will the additional studios and equipment. The network would be inflexible without this vital piece of equipment. The DACS will be used to allow network connections to be make at variable bandwidths to various sites on an on-demand basis. This will provide the best possible use of the network trunks and allow connections to various sites operating at various bandwidths.

The network will be controlled from the Charleston site. This control will be managed via the DACS and the Multipoint Control Unit (MCU). This equipment allows the configuration of all VTC calls and can functionally carry out the setup of several meeting at once. This equipment is essential to the operation of the network. It is the main focal point for multipoint conferences and studio scheduling. Its purchase is vital, for without it, the network cannot meet its requirements. The MCU will allow the elimination of time-consuming schedule cross-referencing and allow all NISE East personnel to increase their productivity by reducing travel time while also reducing travel and per diem costs.

NISE East currently has a video studio in which the analog and video signals are digitized and compressed. This signal is sent through a T-1 circuit to the network hub. The Codec is the single most vital piece of equipment because it converts the analog video and audio signals into a digital data stream which can then be transmitted via digital circuits. The Codec has features built in such as picture-in-picture and stacked screen. There are also ports built in to allow other data to be embedded in the data stream and transmitted concurrently with the audio and video signals. The equipment is essential to the operation of any cart type video system.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0009 - Video Teleconferencing System - New Mission (Page 3)	D. NCCOSC

Justification: (cont)

The Databeam is a high resolution graphics system that allows graphics (such as a brief or report) to be viewed and manipulated during a video conference. This system allows for viewing of graphics during a conference. An additional feature of the Databeam is the ability to transfer hard copy or disk files during a conference. This function is carried out transparently to the attendees. The Databeam scanner allows documents to be scanned and hard-copy files to be transferred to another studio which also has a Databeam.

NISE East will be establishing several audio systems. The equipment will vary by site based on their requirements. Stabilizers, equalizers, speakers, microphone systems, mixings consoles, and amplifying equipment will be the basis of the audio system installations. This equipment will support the VTC/Electronic boardrooms and any additional remote requirements.

Front/Rear projection screen allow a clearer resolution of the intended materials to be viewed. IN-wall electrical screens create the best presentation abilities. These screens allow advantages such as eliminating projector noise and not having a projector beam, therefore eliminating the fuzzy appearance on the screen while also increasing VTC seating capacity.

Video projectors allow high resolution computer graphics and data to be displayed via the front/rear projection screens. This product is a necessity, as it is compatible with most currently available computers. By recognizing the frequencies of an input signal, precise images can be displayed. Another advantage is the wide screen coverage of the front/rear screens that the projector provides. Fan noise is not heard if the projector is mounted on the ceiling and manipulated by remote control. This gives a presentation a flawless quality and allows viewers to concentrate solely on the presentation materials.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0010 - Electronic Boardroom - Productivity						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment									480			
Installation									160			
Testing									40			
Software									100			
TOTAL									780			

Justification:

The purpose of this project is to provide the NCCOSC In-Service Engineering East Coast Division (NISE East) a central conference style room with the capability of displaying live video, still pictures (slides and overhead projection), and interactive electronic documentation. By using a facility such as this, senior management or project personnel can gather at separate locations and share concepts, drawing and documentation in real time. Electronically transmitted media can be reviewed, revised and retransmitted in real time through the use of the "Groupware" capability to electronically share documents.

This facility will combine meeting room capabilities with the ability to electronically enable the transfer of supporting information, including video teleconferencing, electronic presentation, 35 MM slides, electronic whiteboards, and collaborative review markup and edit of electronic documents. This facility will be provided technical control services from a centralized control center.

The equipment to be procured will include electronic whiteboards, high quality monitors, electronic conferencing software, VTC subsystem and video matrix switch. The boardroom will require LAN, ADP, telephone and full videoconferencing connectivity. Soundproofing is required to isolate room from surrounding spaces. Controls for room lighting, video/audio projection and conferencing systems will be integrated into as single control panel. This control panel will allow switching from computer monitors, graphics presentation devices, video codecs and cameras to projection screen.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0010 - Electronic Boardroom - Productivity (Page 2)	D. NCCOSC

Justification: (cont)

Control panel will also control audio levels.

The electronic boardroom will facilitate rapid response to emerging customer-driven requirements allowing NISE East to assemble the required expertise and support self directed project teams, without regard to physical location. Using enabling technology from commercial sources, persons using the facility will be able to share documents by printing local copies at the team members respective location: displaying, modifying or marking up documents, slides and data on large screen displays and on interactive workstations; and providing video teleconferencing technology for near face-to-face contact.

NISE East will be able to lend its expertise and program execution abilities to the SPAWAR/NCCOSC team while saving travel costs and time. In addition, the ability to rapidly share, modify and transmit data and documentation will ensure all team members have the latest information on the project. This project is intended to permit the advantages of video teleconferencing to be extended to electronically enabled conferences without requiring an increase in support personnel. The cost advantages of video conferencing are well established, as it allows NISE East personnel to avoid turning a one hour scheduled into an eight hour travel day plus associated airfare and per diem expenses. Our recent acquisition of dialup teleconferencing permits us to schedule DCTN and FTS-2000 dialup and multipoint conferences for all existing studio and video mounted assets.

This alternative was selected by first examining what equipment is presently available and what would be needed to augment them to provide the requisite capability.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)													A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC				C. L0011 - SOW/CRDL Generator - New Mission									D. NCCOSC
	FY 1996			FY 1997			FY 1998			FY 1999			
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	
Equipment	1												
Installation			9										
Testing													
Software			333										
TOTAL			342										

Justification:

The Naval Command, Control and Ocean Surveillance Center, Research, Development, Test & Evaluation Division (NRAD) under the Enterprise Corporation Information Management (ECIM) System program is pursuing the development of an automated system for producing basic procurement documents to reduce the time for planning and placement of contracts and delivery orders. The Joint Acquisition Management System (JAMS)-Procurement Management Information System (ProMIS) application (hereafter referred to as the SOW/CDRL Generator) will generate the Statement of Work (SOW), Source Selection Plan (SSP), Contract Data Requirements List (CDRL), and Delivery Order Module.

This effort encompasses the design, development, and integration of the SOW/SSP/CDRL Generator application system and related documentation. This will provide for design, development, coding, testing, integration, maintenance and training related to the software package. The software modules will be modified to incorporate NRAD specific functionality.

STATEMENT OF WORK (SOW): The SOW provides the technical requirements for a material, product, or service that includes the criteria for determining whether these requirements are met. A SOW describes tasks and directs methodologies in service acquisitions. It may incorporate specifications that provide details covering performance. Since 1994, there has been an effort to reduce use of military standards and specifications.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0011 - SOW/CRDL Generator - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

CONTRACT DATA REQUIREMENTS LIST (CDRL): The CDRL, DD Form 1423, is included in the contract for establishing the data required, specifying the format and delivery of data generated by the contractor, and delineating specific data approval and acceptance criteria. A properly written SOW establishes tasks that inherently generate information in performance of that effort.

SOURCE SELECTION PLAN (SSP): Award based on factors other than price alone is used in negotiated acquisitions to ensure impartial and comprehensive evaluation of the offeror's proposals and selection of the source whose proposal has the highest degree of realism and whose performance is expected to best meet stated government requirements. This evaluation method provides the government the best value in terms of performance and other factors.

The SOW/CDRL Generator is a Government-owned software package that is easily modified. It includes tutorial and help features. It is commercially supported and industry driven so the recurring maintenance costs will be low. The implementation of the SOW/CDRL generator developed specifically to meet NCCOSC requirements will result in increased efficiency. With one automated acquisition system everyone in the organization will be able to share data and locate documents from their desktop. It accomplishes its tasks through the integration of user and machine by fully utilizing the power of intelligent application software that allows one-time data entry. It is designed to integrate seamlessly with the actual work processes. It will increase productivity through accelerated processing of actual work. It will eliminate redundant labor-intensive and repetitive tasks. It will allow access to pertinent Federal, departmental, systems command, and agency directives, instructions, regulations, and guidelines. This will enable all users of the system to access any of the aforementioned documents from their desktops. At present work levels, we estimate over 2000 SOW and CDRL packages plus 300 SSPs will be generated using the new program. Due to the learning curve we anticipate a 6 work-year cost saving in the first year with subsequent savings of 11 work-years in each of years 2 through 5.

Current NRAD procedures for the preparation of SOW/CDRLs are as follows:

a. Technical codes develop a draft statement of work and source evaluation plan. These drafts take an average of two months to develop.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0011 - SOW/CRDL Generator - New Mission (Page 3)	D. NCCOSC

Justification: (cont)

b. Drafts are manually reviewed by contract specialists, data specialists, and legal council and, based on the review, are redone/rewritten. Review time can be up to one month. After the review is complete, packages are returned to the originator for revision. Revision time averages two months.

The SOW/CDRL Generator will provide the following to the technical community which prepares SOWs and SSPs, the contract specialists responsible for acquisitions, and the contractors that receive the Requests for Proposals (RFP):

The system contains boilerplate questions, answers, and templates which will be tailored to our procurement specifications for our type of acquisitions.

a. Provides a question interface to the user. After the questions are answered the software will build the SOW. If the user determines that the answers to the questions have been inaccurate, the system will provide a mechanism to modify.

b. Assists the users in developing the SSP which is used to describe the organization, criteria, weighting factors, and procedures for use by the Source Selection Board (SSB) to evaluate the offeror's proposals in response to the Request for Proposal (RFP).

c. Provides for the analysis of the requirements necessary to incorporate the unique functionality that exists in the delivery order program into the SOW/CDRL Generator delivery order module.

d. Provides the development of the delivery order which will incorporate the unique functionality that exists in the delivery order.

e. Furnishes the user with the ability to run a search (look up) of the Acquisition Management System and Requirement Contract Data List (AMSDL). The user may search on either the Data Item Description DID) number or on a Title Keyword. The DID from the search will populate the DD 1423 form with both the DID number and title, as well as any other relevant information.

f. Allows parallel reviews for gathering comments in the acquisition review cycle.

g. Provides a standardized format.

h. Reduces the preparation time by approximately two months due to automation of the process.

i. Reduces the review and revision time by approximately three months because of standardization.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0011 - SOW/CRDL Generator - New Mission (Page 4)	D. NCCOSC

Justification:

j. Reduces the number of protests as Government requirements are clearly defined and ambiguity is eliminated.

k. Ports easily into the Acquisition Management Automated System (AMAS) module via commercial software applications.

Implementation of the SOW/CDRL Generator will automate the preparation of acquisition packages and provide the following significant enhancements to current procedures:

a. Eliminates a manual, error prone, inconsistent, and time consuming process.
b. Reduces Process Action Lead Time by two to four months.
c. Eliminates rework.
d. Provides training. Users will have access to help screens and tables.
e. Contract Specialists will receive packages that contain more defined requirements.
f. Reduces contractor's response time based on their receiving a better acquisition package. Eliminates extension request time so on average proposal preparation time should be reduced by one month.
g. Most up-to-date acquisition rules will be built into the system.
h. Provides on-line review and approval. On-line review and approval will eliminate the requirement for approvers/reviewers to individually sign/initial packages, and provides the flexibility to access the system from various locations. The system will provide parallel reviews for gathering comments.
I. Provides a question query tree which will build the SOW/CDRL packages. The query tree will eliminate errors by providing structured questions and answers.
j. The AMSDL database will be built in a generic fashion in order to accommodate future potential modifications with the least impact. There is a commercial service available that will provide the AMSDL updates. This will free NCCOSC personnel of maintaining the AMSDL database.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0011 - SOW/CRDL Generator - New Mission (Page 5)	D. NCCOSC

Justification: (cont)

If this software package is not provided, the projected savings in production overhead costs will not be realized. Failure to develop the SOW/CDRL Generator will have a grave and serious impact on scarce Navy and DoD dollar resources. Only through reductions in the acquisition cycle time for material and services will NRaD develop the capability to prevent the loss of DoD and Navy funding. This is particularly true in light of the "Zero Dollar Carryover" policy recently established by NAVCOMPT. NRaD obligates .54 billion dollars annually. A four month reduction in the acquisition cycle effectively increases NRaD's ability to obligate funds by 33% (the equivalent of four months of carryover dollars) and fields critical C4I, communications, and weapons systems to the fleet in two-thirds the cycle time, directly affecting fleet readiness.

NRAD has evaluated several other existing systems with respect to its requirements. Some of the systems evaluated were developed to support activities unique functional and system requirements and did not support NRaD overall methodology. Some did not include significant elements required by NCCOSC.

a. Rules/Regulations were not built into the system.
b. No on-line up-to-date database.
c. No guidance provided.
d. No query tree used.
e. No central wide LAN capability.

The following systems were evaluated:

a. Hanscom Air Force Package (was just microword templates)
b. Texas Instruments Automated SOW generator (Templates)
c. SPAWAR WISE Program - (old - not currently maintained)
d. In-house Code 029 Development (estimated an 11 work-year effort 3-6 people over 34 months at $3M cost.)

A best value analysis of the technical merit of these systems and the cost was conducted. Based on the technical proposal and low cost, this system was selected.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0012 - HRO Routing System - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing							1	277	277			
TOTAL									277			

Justification:

The Naval Command, Control and Ocean Surveillance Center (NCCOSC) has undertaken an initiative to create a Corporate information system. Existing computer applications supporting business processes that include procurement, material management, personnel, security, and base level business functions are being modified to interface with a centralized data repository. The Corporate database provides a consistent format and source of data for the Corporation. This data in the Corporate database is to be shared among applications and will serve as a central source for queries and reports.
In some cases existing business processes are accomplished manually. Where there is an appropriate return on investment, NCCOSC proposes to develop a new computer application to support current manual process. Electronic Human Resources Forms Routing falls into this category. The HRO Forms Routing System will enable supervisors and employees to initiate electronic requests for HRO support services. Data needed to populate these forms will in part be extracted from data that exists in the Corporate database. Forms will be routed through appropriate review and approval points. Supported electronic forms will be routed to the Human Resources Office where form data will be interfaced with existing systems. Development will be staffed with a combination of in-house government resources and contract resources.

Preparation and routing of HRO forms and service requests is currently done manually. This manual process does not take advantage of available data sources in the Corporate database. Existing processes in some cases lack standardization which increases the workload in HRO. Email requests for services are an example of this. Manual form preparation and routing is also inefficient in comparison to automated approaches.

000382

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0012 - HRO Routing System - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

Automation of this process can reduce the number of work hours required to support this process.

The Electronic HRO Forms Routing System will allow the end user--an employee, supervisor, or manager, to prepare and approve an electronic version of a variety of forms and service requests that are used to interface with the HRO Office. Form content will be assembled from a combination of direct user input and also data that is already resident in the Corporate database. As an example, identification of an employee during form preparation will allow other data associated with that employee to be extracted from the Corporate database and populated within the form. This will improve data accuracy. These forms will be routed based on type to appropriate review and approval points. The system will be capable of identifying where a form resides in the routing process. Where possible, routed form data that reaches HRO will be reformatted as input transactions to existing HRO support systems.

Development of an Electronic HRO Forms Routing System will provide a more efficient way for the end user to request HRO services. There will be an associated reduction in operating cost for this function. The accuracy and visibility of data will also be improved. The system will be able to identify where a form is in the routing process eliminating time spent in follow up research. HRO efficiencies can be gained where forms input can be translated into input transactions to existing HRO systems.

Alternatives considered include continuation of the status quo and research into commercial off the shelf products and Government off the shelf products.

No appropriate commercial or government of the shelf candidates were located. The selected alternative was determined to be an improvement over the status quo in term of both cost saving and improved functional capability. Cost saving were calculated via the attached economic analysis.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0013 - Corporate Excessing System - New Mission					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing							1	290	290			
TOTAL									290			

Justification:

The Naval Command Control and Ocean Surveillance Center (NCCOSC) has undertaken an initiative to create a Corporate information system. Existing computer applications supporting business processes that include procurement, material management, personnel, security, and base level business functions are being modified to interface with a centralized data repository. The Corporate database provides a consistent format and source of data for the Corporation. This data in the Corporate database is to be shared among applications and will serve as a central source for queries and reports.
In some cases existing business processes are accomplished manually. Where there is an appropriate return on investment, NCCOSC proposes to develop a new computer application to support current manual process. Material Excessing falls into this category. This project is to develop an automated capability to support the Material Excessing process. Development will be staffed with a combination of in-house government resources and contract resources.

The material excessing process is currently performed manually. Automation of this process can reduce the number of work hours required to support this process. The material excessing also relates to other processes which include custody and management of accountable property. Because material excessing is manual, there is not automated integration with the other systems that relate to this process. Also, the Corporate database lacks the data associated with excessing and therefore is not a complete information source for reporting and query processes.

C0053

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0013 - Corporate Excessing System - New Mission (Page 2)	D. NCCOSC

Justification:

The Material Excessing System will allow the end user with custody of material to initiate a request for excessing using appropriate automated forms. These forms will be routed, based on the type of material to appropriate review and approval points. The system will interface via the Corporate database with both the Property Custody System and the Plant Property System. Appropriate reports will be generated. Interfaces to DRMO will be developed. The system will track events and provide reporting of event status.

Automation of material excessing will provide cost savings over current manual processes. The system will provide appropriate automated interfaces to the Property Custody and Plant Property Systems. These interfaces will eliminate the need for manual input to the associated systems. Integrating the Material Excessing System with the Corporate database will enable query and reporting access to this data.

Alternatives considered included continuation of the status quo and research into commercial off the shelf products. The commercial off the shelf alternative was not feasible as appropriate candidates were not located. The selected alternative was determined to be an improvement over the status quo in terms of both cost savings and improved functional capability.

C0056

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0014 - NIFMS Conversion Effort New Mission					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment			15			98						
Installation			505			589						
Testing												
Software			172			1653						
TOTAL			692			2340						

Justification:

This project supports the implementation of the NAVAIR Industrial Financial Management System (NIFMS) at the Naval Command, Control and Ocean Surveillance Center (NCCOSC). NIFMS is the interim migratory accounting system for NWCF R&D activity group activities selected by the Department of Defense. NCCOSC is scheduled for conversion to NIFMS in July 1997. NCCOSC conversion tasks include the following: data mapping between NIFMS and the existing NCCOSC accounting system data elements, transaction mapping, testing, data conversion, data upload, and program management.

000363

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0015 - Modification of Command Local System - New Mission					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	1		100									
TOTAL			100									

Justification:

This item is for modifications to the existing NCCOSC in-Service Engineering East Coast Division (NISE East) Management Accounting System (MAS) computer system software, as a result of NISE East's conversion to DBOF in FY 1994.

The 1991 BRAC process established NCCOSC. NCCOSC has a critical business requirement for its subordinate activities to adopt unified platforms suitable to interface with he NCCOSC Finance and Accounting System (NFAS). The adoption of an Open System compliant platform is required to allow NCCOSC financial applications performed at the corporate headquarters to coexist on the same computer system and for its operating divisions to be able to report their existing business functions to NCCOSC as the cognizant accounting organization. Requirements have emerged as the legacy systems were transitioned to the DBOF accounting methodology, and these obsolete systems were found to be deficient in properly executing necessary business transactions and interworking capabilities. NCCOSC currently obtains operating financial information as the Authorized Accounting Activity paying office for all NCCOSC operating divisions. Each division is in turn interconnected by the NCCOSC Command Internet. Separate interfaces report management data to NFAS. Management information for internal use is collected at each site and integrated.

The specific rationale for this item is to provide conversion of the existing financial data and applications to an open system platform. Without this conversion, reliable data retrieval from prior years cannot be assured. In addition, this conversion will result in significant cost avoidance since all prior year data will not have to be manually keyed into the replacement system.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0016 - Minor Construction < $200,000 - New Mission					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing				VAR		1.071						
TOTAL												

Justification:

Minor Construction is used by the NCCOSC research, development, and engineering centers to accommodate new requirements, modernize, and replace obsolete facilities. The centers are located in 11 sites throughout the world and have 4.01 million square feet of laboratory and office space. Minor construction is used at NCCOSC activities to:

- modify existing spaces to provide suitable space to test and design new equipment (often in a protected environment) for the forces afloat
- construct new facilities to provide suitable space to test and design new equipment, frequently in physically secure areas
- upgrade hazardous waste facilities to ensure compliance with applicable laws/regulations
- improve existing security measures
- reduce operating expenses by building government-owned space so that leased space may be vacated

000288

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)				A. FY 1998 President's Budget								
B. Navy/Research and Development/NCCOSC				C. L0017 - Test Laboratory - Replacement						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	1	275	275									
TOTAL			275									

Justification:

A requirement exists at the NCCOSC RDTE Division (NRAD) Hawaii site for additional office and a laboratory/testbed area for bench testing, prototype system testing and storage of sensitive test equipment. This laboratory must be air conditioned, humidity controlled environment and a minimum floor space of approximately 2200 sq. feet. The testbed will include a complete mockup of the AUTOMATED AN/FRM-19 test system for testing, training and field support. In order to maintain test equipment in a calibrated state, the equipment must be stored in a secure, environmentally controlled (air conditioned) space.

In March 1995, NRAD Hawaii relocated its office from the Pearl Harbor Naval Shipyard to a new facility in Pearl City. This included engineers/technicians who provide ISEA support of the Navy's Circulary Disposed Antenna Arrays (CDAA) located throughout the world; engineers/technicians who provide ISEA support of the JMCIS (Joint Maritime Communication Information System) installed at USCINCPAC, CINCPACFLT, COMSUBPAC and COMASWFORPAC; and engineers/technicians who provide testing support of COMSPAWARSYSCOM TEMPEST, INFOSEC, Electromagnetic Environmental Effects (E3) and Network Interoperability and Compatibility Engineering (NICE) programs.

Although barely enough office space was available at the new facility to accommodate the engineers/technicians, no space was available for relocating the existing laboratory/testbed used by these personnel in support of their programs. All of the equipment and spaces still remain in the laboratories at the Pearl Harbor Naval Shipyard, which has been designated for demolition in 1997.

C00369

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0017 - Test Laboratory - Replacement (Page 2)	D. NCCOSC

Justification:

The shortfall at the new NRAD Hawaii facility was the lack of an available room of approximately 2200 sq. feet for laboratory/test beds for equipment testing and storage to support this functional requirement.

The AUTOMATED AN/FRM-19 Test System is an automated maintenance tool that is used to test and analyze the condition of antennas, multicouplers, beamformers, goniometers, cables and other RF distribution equipment at Navy receiving sites worldwide. The primary customers are receiving sites located throughout the world, with additional support provided to the National Security Agency.

The C2 system laboratory/testbed is used to provide ISEA support for the JMCIS, which is the prime command and control system installed in the Command Centers at USCINCPAC, CINCPACFLT, COMSUBPAC and COMASWFORPAC. The lab/testbed will provide a suitable environment necessary and essential for the engineers and technicians to work in, in order to provide our mission support of this prime C2 system for these major commands.

The test equipment and testing performed supports the Navy, Marine, CINCPAC, and joint commands throughout the Pacific and Indian Ocean. The testing performed includes the Navy's TEMPEST and INFOSEC programs consisting of instrumented TEMPEST surveys, countermeasures review consultation, RED/BLACK installation consultation and Secure Network Server support. E3 testing includes testing for electromagnetic radiation hazards to personnel and fuel, electromagnetic interference, and electromagnetic compatibility. NICE testing includes broadband transmission system testing and on-line and bench testing of digital systems.

An air conditioned, environmentally controlled laboratory/testbed is required due to the operation of computers that control the testing of the AN/FRM-19, JMCIS/C4I and other prototype systems, along with the sensitive electronic test equipment that the computers control to run the various tests.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0017 - Test Laboratory - Replacement (Page 3)	D. NCCOSC

Justification: (cont)

In addition to using the testbed to check out equipment and to stage systems prior to installation, it is also used as a work area for troubleshooting systems, performing fault isolation and preventive and corrective hardware maintenance. With the use of data scopes, LAN analyzers, and serial and network communication equipment in the lab, the engineers and technicians are also able to simulate, investigate and study different sites' system configurations, without the possibility of interfering with Command Center operations. The current open, dirty, non-air conditioned warehouse space would not support the operation or even storage of such sensitive computers and test equipment.

The current alternative is to remain status quo and continue to use the existing laboratory spaces at Pearl Harbor Naval Shipyard in a building which is scheduled for demolition next year. This will only temporarily postpone a move which is inevitable. The temporary Shipyard spaces is located 9 miles away and requires engineers/technicians to make this 20 minute drive each way to get access to equipment they need to test as they work on any software and hardware upgrades, fabrication or testing.

Another alternative would be to refurbish another vacant government-owned building either in the Pearl Harbor Naval Shipyard or another warehouse nearer our current location. However, refurbishment costs are generally higher than new construction.

The final alternative of renting suitable laboratory space from a commercial contractor is not feasible due to the remote location of our office at the end of Pearl City Peninsula. Suitable, secure, affordable, commercial labor space cannot be found for renting.

Construction of this laboratory/testbed to be located adjacent to our office space in an existing, brand new warehouse is our preferred alternative. This would save the time wasted in traveling to a distant site and provide enough space to adequately support the work required. It would also save the cost of having to build or refurbish another building nearby. Therefore, the methodology used in choosing this alternative was lower cost, labor time savings, better efficiency and increased productivity.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0018 - Library Air Conditioning and Environmental Controls - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Tot Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing							1	250	250			
TOTAL									250			

Justification:

A new system to provide air conditioning and environmental controls is required for the Naval Command, Control and Ocean Surveillance Center RDT&E Division's (NRaD) Library. A central system with appropriate power supply will be designed and procured to provide proper temperature, humidity, and dust controls to protect the Library's valuable and unique collections of books, periodicals, maps and charts, and technical reports.

The NRaD Library's collections are deteriorating because there are no temperature, humidity, or dust controls in the building. Mold, mildew, and dust are causing increasing damage, such as curling pages, pages stuck together, and books covered with dirt. Many valuable and unique items have been discarded because of this environmental damage, and more will be lost in the future.

In one area of the Library, ineffective dehumidifiers run continuously in an effort to remove small amounts of excess humidity. Trays from these dehumidifiers must be manually dumped on a regular basis.

The proposed central system will provide proper temperature, humidity, and dust controls to preserve the Library's valuable and unique collections. The improved environmental conditions will also lengthen the life of the Library's large number of computers and will improve working conditions for the staff, many of whom suffer from allergy-related problems.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0018 - Library Air Conditioning and Environmental Controls - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

The proposed system will be appropriate for the Library's environment and efficient from an energy and maintenance standpoint. The NRaD Library's collection is valued at approximately $12 million and is a major Center asset. Because the Library is also an archive for Center materials, including historical materials, many of the books, periodicals, maps and charts, and technical reports are unique and cannot be replaced. Others are very expensive to replace even if copies could be located. These materials must be protected by proper environmental controls to ensure their availability in the future.

The Point Loma area, because it is located between two large bodies of water, experiences particularly high humidity all year. This humidity and the area's variations in temperature have already caused significant damage to the Library's collections. In addition, because of the lack of air conditioning and the high temperature and humidity occurring during the summer months, windows and doors are kept open, which allows dirt to blow in (this is a particular problem during construction). Mildew, curling pages, pages stuck together, books covered with dirt, and other signs of damage have all been observed. Archival preservation requires that temperature, humidity, and dust all be controlled to minimize deterioration of the paper.

The proposed system is also needed to preserve the health of the Library staff. Most of the staff suffers from allergies due to mold, mildew, and dust, and much sick leave is used because of these allergy-related problems. Better temperature, humidity, and dust controls would result in a significant decrease in sick leave and an improvement in productivity.

An evaluation by an architect and civil engineers in the NRaD Facilities Office has determined that alternatives such as window units would not provide adequate temperature, humidity, or dust controls to protect the Library's collections. Window units would also be much less energy efficient than a centralized system and more maintenance would be required.

C0363

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0018 - Library Air Conditioning and Environmental Controls - New Mission (Page 3)	D. NCCOSC

Justification: (cont)

The only other alternative to a new, central system is to continue to operate with no air conditioning or environmental controls. Because of the deteriorating state of the collections due to mold, mildew, dirt, and the high humidity of the Point Loma area, many valuable and unique items have been lost already and more will be lost in the near future if the situation is not corrected.

Only a central system will insure that the proper temperature, humidity, and dust controls are in place to preserve the Library's valuable and unique resources for future use. Window units do not provide the proper environmental controls, are not energy efficient, and require more maintenance.

C00594

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0019 - Warehouse Building - New Mission						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment							1		275			
Installation												
Testing												
TOTAL									275			

Justification:

The NCCOSC Research and Development Division (NRAD) Hawaii, requires 40,000 to 80,000 square ft of covered storage warehousing. NRAD Hawaii is to become the West Coast/Pacific Area Maintenance center for maintenance of all towed arrays for the Navy, increasing the need for storage space. Storage of Integrated Undersea Surveillance System Operation (IUSSOP) array module reels (6 ft in diameter and 6 ft wide) are now taking valuable space in the present location. Additionally, in the near future, the Pearl Harbor shipyard plans to relocate NRAD warehousing functions to another site located 12 miles away from the NRAD facilities at Pearl City Hawaii.

This project is to modify two existing roofed structures owned by the Marine Corps that have been offered to NRAD. These buildings are located 200 yards from the Pearl City facilities. Modification of existing structures would provide not only the required storage for the array reels but also accommodate the movement of the warehousing function from the shipyard.

Having warehouse structure located close to our present location vice the Shipyard will be cost effective, and direct labor hours spent traveling to and from Pearl Harbor Shipyard will be eliminated resulting in more time spent working directly on projects.

Primary program sponsors being supported are: Navy, Marine and CINCPAC and joint commands throughout the Pacific and Indian Ocean.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)		A. FY 1998 President's Budget
B. Navy/Research and Development/NCCOSC	C. L0019 - Warehouse Building - New Mission (Page 2)	D. NCCOSC

Justification: (cont)

This project replaces the one previously proposed. A year after submitting the initial justification for constructing a PEB (Pre-Fab Engineering Building), the situation has changed wherein we are being offered ownership of existing roofed buildings that are located in the immediate area to our present location.

Considered alternatives:

Status Quo: Array reels presently located in existing location take valuable space and will be stored to the elements and would suffer deterioration. Project material is presently stored in another Pearl Harbor Naval Shipyard facility. The shipyard has notified us of their plan to relocate us to another site in Pearl Harbor Naval Shipyard sometime in FY96/FY97.

Alternative A: Modify exiting buildings on Navy/FISC owned property 200 yards away from our present location at the Pearl City Peninsula.

Alternative B: Lease a commercial warehousing facility in the nearby Pearl City area. Cost of leasing of commercial warehousing facility in Pearl City is $523,000 per year. At this time, the new cost to NRAD Hawaii by the shipyard on a new location is unknown.

Overall conclusion is that selection of Alternative A will increase our productivity, increase morale, and provide a capability to be more responsive to our nearby CINC and FORCE commander customers. Engineers and technicians will not have to drive 12 miles to facilitate the warehouse oversight of project/program material assets and to preserve the condition of IUSSOP array module reels along with other critical program material equipment/systems.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)										A. FY 1998 President's Budget		
B. Navy/Research and Development/NCCOSC				C. L0020 - Alteration/Upgrade of Building - Productivity						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing									290			
TOTAL									290			

Justification:

At the present time the NCCOSC In-Service Engineering East Coast Division (NISE East) has buildings located on the Naval Weapons Station, South Annex in Charleston South Carolina which are in need of alteration/upgrade due to age/deterioration. These building are currently used as laboratory space in support of Integration/mock up work. It is proposed that these buildings be upgraded in a "generic" fashion utilizing as many modular components as possible to support variable requirements as they arise with the Technical Codes. The utilization of "generic" modular components to satisfy requirements in the past has proven to be both cost effective as well as auspicious.

This project is to alter/upgrade building occupied by personnel support the Radiac Calibration and Standardization program (RCPS) and the Nuclear Power Training Unit.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0021 - Alteration/Upgrade of Building - Productivity					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing												290
TOTAL												290

Justification:

At the present time the NCCOSC In-Service Engineering East Coast Division (NISE East) has buildings located on the Naval Weapons Station, South Annex in Charleston South Carolina which are in need of alteration/upgrade due to age/deterioration. These buildings are currently used as laboratory space in support of Integration/mock up work. It is proposed that these buildings be upgraded in a "generic" fashion utilizing as many modular components as possible to support variable requirements as they arise with the Technical Codes. The utilization of "generic" modular components to satisfy requirements in the past has proven to be both cost effective as well as auspicious.

This project is to alter/upgrade building occupied by personnel supporting the Extremely Low Frequency Laboratory (ELF) and the Command Safety and Facilities Offices.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0022 - Staging/Ready-Issue Facilities - Productivity					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	1	95	95									
TOTAL			95									

Justification:

The NCCOSC In-Service Engineering East Coast Division (NISE East) leases approximately 60,000 Square Feet of commercial space to support ready-issue staging requirements. This allows short-fused, emergent requirements to be satisfied by the Technical Support Codes in-house in an expeditious manner. The proposed project will eliminate this leased space while further enhancing response time to customers by providing the equivalent space located at NISE East space at the Naval Weapons Station, South Annex Charleston, South Carolina.

NISE East will be able to provide better service to its customers by the benefits realized upon relocation of this function the Weapons Station. In addition, the "generic" design of the facilities will allow adjustments as required between NISE East Technical Codes as work loads increase/decrease, thereby eliminating the cumbersome process of attaining commercial leases.

This project envisions the construction of six (6) 10,000 sq ft facilities over a two year time span.

This project covers only the actual construction of the facilities co-located with the technical codes, which will be installed over a two year period. Project L0001 provides for the procurement and install of the equipment.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0023 - Facilities Refurbishment and Improvement - New Mission					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing									245			
TOTAL									245			

Justification:

As a result of increasing mission capabilities at USACOM in Norfolk VA, additional space is required for equipment and personnel. These facilities are currently occupied by personnel assigned to the Tactical Commemorations Division of the NCCOSC In-Service Engineering East Coast Division (NISE East), which provides Interior Communication (IC) technical support, repair and training to numerous Navy and DoD activities in the area. The NISE East Technical Detachment facilities in Yorktown, VA can provide accommodations for personnel and equipment with minor building modifications and refurbishment. Co-location of administrative support will increase efficiency, and by maintaining IC capabilities in the local area, customer support will greatly improve.

This project will refurbish current facilities occupied by NISE East personnel in Yorktown, VA to accommodate the additional personnel from the Norfolk area. It will also provide facilities for administrative spaces, adequate communication/electronic capacity and training facilities to support the IC branch mission. This project will also result in the maintaining of IC support, repair capabilities and training platforms close to the customer and will increase the productivity of the technical support personnel and significantly reduce travel and administrative support.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)										A. FY 1998 President's Budget		
B. Navy/Research and Development/NCCOSC				C. L0024 - Pre Installation, Testing and Check Out Facilities - Replacement						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing									285			285
TOTAL									285			285

Justification:

NCCOSC In-Service Engineering East Coast Division (NISE East) Pre Installation, Testing and Check Out (PITCO) facilities are utilized for testing and checking out equipment prior to shipment to customers. This function is currently performed at various sites, including relocatable buildings. The proposed PITCO facilities will be used to replace these existing relocatable facilities now located on the Naval Weapons Station, South Annex, Charleston SC.

Navy guidance pertaining to the use of relocatable facilities notes the inefficiency of this type of facility. In addition, with some exceptions, a three year usage limitation is imposed. This project, along with current MILCON initiatives, will commence bringing NISE East into compliance with Navy guidance. It should be noted that conventional construction, as requested, has a higher initial cost. However, due to the life expectancy and overall efficiency of this type facility, as compared to modular construction in this application, benefits will be realized long after the initial payback has been attained.

C00704

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)									A. FY 1998 President's Budget			
B. Navy/Research and Development/NCCOSC				C. L0025 - Air Conditioning Plant Conversions - Replacement					D. NCCOSC			
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment									90			
Installation									135			
Testing												
TOTAL									225			

Justification:

The NCCOSC In-Service Engineering East Coast Division (NISE East) currently has a number of buildings with air conditioning equipment which use Ozone Depleting Substances (ODS). The Environmental Protection Agency (EPA) has mandated that this equipment be replaced by equipment which does not use these substances. The EPA requires that this equipment be replaced no later than the year 1999. This will require a complete rip out of the existing mechanical components. It will be attempted to utilize the existing ductwork and other system components where possible.

C03402

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION ($ in Thousands)												
							A. FY 1998 President's Budget					
B. Navy/Research and Development/NCCOSC				C. L0026 - Security Fencing For Warehouses - Replacement						D. NCCOSC		
	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment Installation Testing	1		149									
TOTAL			149									

Justification:

The NCCOSC In-Service Engineering East Coast Division (NISE East) occupies 300,000 sq ft of warehouse space located in Charleston. This project will construct a perimeter fence around the warehouses. This will require demolition of approximately 3300 linear feet of existing fencing which has deteriorated beyond economical repair, along with six inoperable electrically operated gates. Approximately 2100 linear feet of new fencing will be required along with four electrically operated gates. In addition, a hard stand for storage of sponsor equipment and a parking lot will be constructed within the perimeter fence. This will provide security/segregation in the area for sponsor owned equipment and NISE East assets, as well as provide safe/segregated parking. Security lighting will also be provided.

0203

CAPITAL BUDGET EXECUTION
BSO: SPAWAR
BUSINESS AREA: R&D
FY 1997
FY 1998/1999 BUDGET ESTIMATE

PROJECTS IN THE FY 1998 PRESIDENT'S BUDGET
(Dollars in Millions)

Summary:

FY	Approved Project	Reprogs	Approved Proj Cost	Current Proj Cost	Asset/ Deficiency	Explanation
97						
Equip. (non-ADPE)	3.323	-1.833	1.490	1.490	.000	
Equip. (ADPE)	5.171	+ .179	5.350	5.350	.000	
Software Develop	0.100	+2.240	2.340	2.340	.000	
Minor Construction	1.355	- . 284	1.071	1.071	.000	
Total (FY 97)	9.949	+ .302	10.251	10.251	.000	

Detail:

Equipment (Non-ADPE)	Approved Project	Current Proj Cost	Reprogs	
Miscellaneous Non-ADP Equipment	3.323	1.490	-1.833	Change to reflect reduced investment requirements.
Equipment (ADPE and Telecomm.)				
Supercomputer	2.155	1.540	-0.615	This item has been decreased due to reprioritization of requirements and more current pricing data. ATM Encryption Devices moved from FY96 to FY97.
Bar-coding System	1.000	0.000	-1.000	This requirement has been moved from FY 1997 to FY 1999 due to reprioritization of requirements.

C03404

Detail:

Equipment (Non-ADPE)	Approved Project	Current Proj Cost	Reprogs	
Video Conferencing Center	0.000	0.782	+0.782	This new requirement will provide a single control center for video, satellite, and networked video services throughout NISE East Charleston, S.C. This system will be capable of originating, receiving, and distributing studio and desktop video teleconferencing signals throughout the command.
Electronic Briefing Theater	0.000	0.762	+0.762	This new requirement will provide a central briefing theater with the capability of displaying live video, still pictures (slides and overhead projection source material) and audio presentations. The theater arrangement allows large numbers of people to gather to hear the same presentations, and provisions are made for some interactive sessions through built-in microphones and video systems.
Video Teleconferencing Equipment	0.000	0.100	+0.100	This new requirement will provide funding for a Conferencing Server that will allow up to 28 locations to participate in the same Video Teleconferencing session.
Data Warehouse	0.000	0.100	+0.100	This new requirement will provide Corporate Management access to summary data which will be used for the purpose of measuring and managing the enterprise. This capability is crucial for making timely decisions and responding to changing business conditions.
Command & Control Advanced Research Network	0.435	0.485	+0.050	The estimated cost for this project has increased form the original estimate.
Software Development				
NIFMS Conversion Effort	0.000	2.340	+2.340	The NAVAIR Industrial Financial Management System (NIFMS) is the interim migratory account system for NWCF R&D activity group activities selected by the Department of Defense. NCCOSC has been directed to implement this system in FY July 1997.
Modification of Command Local System	0.100	0.000	-0.100	This requirement was canceled due to reprioritization of requirements.

C03620

Detail:

Minor Construction	Approved Project	Current Proj Cost	Reprogs	
Minor Construction	1.355	0.277	-1.078	Misc., minor construction projects were canceled due to reprioritization of requirements. Also reflects the change in threshold from $50,000 to $100,000.
Alteration/Upgrade of Building - Charleston	0.000	0.290	+0.290	Due to the age of the facility, alteration/upgrades are required to reduce operating costs.
Staging/Ready Issue Facilities - Charleston	0.000	0.475	+0.475	Purchase of these pre-fabricated facilities will reduce current lease operating costs.
Facilities Refurbishment and Improvement - Charleston	0.000	0.029	+0.029	NISE East tenant spaces at USACOMM Norfolk must be vacated. This project provides alternative space for these personnel.

000406

NAVY WORKING CAPITAL FUND NARRATIVE
DEPARTMENT OF THE NAVY
RESEARCH AND DEVELOPMENT/NAVAL RESEARCH LABORATORY
FY 1998/1999 PRESIDENT'S SUBMISSION

Activity Group Function:

The Naval Research Laboratory (NRL), the Department of the Navy's corporate laboratory, is under the command of the Chief of Naval Research (CNR). As the corporate laboratory, NRL is an important component in the Office of Naval Research's effort to meet its science and technology responsibilities.

For its basic research effort, the Laboratory receives guidance from the CNR that establishes the level of effort and trend direction. The Laboratory then develops a comprehensive research proposal package that is submitted to the CNR for consideration for Navy basic research support. The total Navy basic research program ultimately is evaluated by Congress.

In addition to internal critical review and the evaluation by the CNR and others, the research at NRL is published in refereed journals and/or reported at national and international scientific conferences. In an aggressive policy of scientific interaction, scientists from around the world visit NRL and are visited by NRL scientists. In this way, NRL research is subject not only to management review but also to peer evaluation.

NRL has had a long and fruitful relationship with industry as a collaborator, most recently in Cooperative Research and Development Agreements (CRADA). NRL values this linkage and intends for it to continue to develop.

NRL is an important link in the Navy research and development chain. Through NRL, the Navy has direct ties with sources of fundamental ideas in industry and the academic community throughout the world and provides an effective coupling point to the research and development chain for the Office of Naval Research (ONR).

The mission of the NRL is to conduct a broadly based multi-disciplinary program of scientific research and advanced technological development directed toward maritime applications of new and improved materials, techniques, equipment, systems, and ocean, atmospheric, and space sciences and related technologies. The NRL provides:

Primary in-house scientific research and development for the physical, engineering, space, and environmental sciences.

Broadly based exploratory and advanced development programs in response to identified and anticipated Navy needs.

Broad multi-disciplinary support to the Naval Warfare Centers.

Space and space systems technology development and support.

Major NRL customers include the Office of Naval Research, the Naval Sea Systems Command, the Naval Air Systems Command, the Space and Naval Warfare

Systems Command, the Ballistic Missile Defense Office, the Advanced Research Projects Agency, Naval Warfare Centers, the Army, the Air Force, other Navy and Department of Defense customers, the Department of Energy, and the National Aeronautics and Space Administration.

Activity Group Composition:

In addition to its Washington, D.C. campus of about 130 acres and 102 main buildings, NRL maintains 13 other research sites, including a vessel for fire research and a Flight Support Detachment. The many diverse scientific and technological research and support facilities include the large facility located at the Stennis Space Center in Bay St. Louis, Mississippi; a facility at the Naval Postgraduate School in Monterey, California; the Chesapeake Bay Detachment in Maryland; and additional sites located in Maryland, Virginia, Alabama, and Florida.

The Flight Support Detachment, located aboard the Patuxent River Naval Air Station in Lexington Park, Maryland, operates and maintains five uniquely configured P-3 Orion turboprop aircraft as airborne research platforms for worldwide scientific research operations.

The Chesapeake Bay Detachment occupies a 168-acre site near Chesapeake Beach, Maryland, and provides facilities and support services for research in radar, electronic warfare, optical devices, materials, communications, and fire research. Because of its location high above the Chesapeake bay on the western shore, unique experiments can be performed in conjunction with Tilghman Island site 16 km across the bay.

The Naval Research Laboratory-Stennis Space Center is a tenant activity at NASA's Stennis Space Center. Other Navy tenants at the Stennis Space Center include the Naval Meteorology and Oceanography Command and the Naval Oceanography Command and the Naval Oceanographic Office, who are major operational users of the oceanographic and atmospheric research and development performed by the Naval Research Laboratory. This unique concentration of operational and research oceanographies make Stennis Space Center the center of naval oceanography and the largest such grouping in the Western world.

The Marine Meteorology Division at Monterey, California, a tenant activity of the Naval Postgraduate School, is collocated with the Fleet Numerical Meteorology and Oceanography Center to support development and upgrades of numerical atmospheric forecast systems and related user products. This collocation allows access to the Navy's largest vector supercomputer, providing real time as well as archived global atmospheric and oceanographic databases for research at Monterey and at other NRL locations.

Accumulated Operating Results

	(Dollars in Millions)			
	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	492.4	519.3	517.2	549.2
Cost of Goods Sold	494.9	529.6	537.5	549.2
Net Operating Results	(2.6)	(10.3)	(20.4)	0.0
Previous Year AOR Balance	33.3	30.7	20.4	0.0
Accumulated Operating Results	30.7	20.4	0.0	0.0

Funding. Funding reflected in customer appropriation budgets for NRL in-house operations reflects modest changes, as shown in the following table:

	(Dollars in Millions)			
	FY 1996	FY 1997	FY 1998	FY 1999
FY 1997 Pres Bud (3/96)	556.9	566.2	N/A	N/A
Current Submission	497.9	525.1	518.8	550.9
Change	(59.0)	(41.1)	N/A	N/A

Cost Profile. Decreases in overhead are due to efficiencies achieved through specific, targeted reductions. Changes in the costs of operations are consistent with budgeted workload, as shown in the following table:

	(Dollars in Millions)			
	FY 1996	FY 1997	FY 1998	FY 1999
Direct Costs:				
FY 1997 Pres Bud (3/96)	420.4	434.2	N/A	N/A
Current Submission	357.4	376.8	390.6	401.3
Changes	(63.0)	(57.4)	N/A	N/A
Indirect Costs:				
FY 1997 Pres Bud (3/96)	148.0	158.2	N/A	N/A
Current Submission	137.1	152.8	146.9	147.9
Changes	(10.9)	(5.4)	N/A	N/A
Total Cost:				
FY 1997 Pres Bud (3/96)	568.4	592.4	N/A	N/A
Current Submission	494.5	529.6	537.5	549.2
Changes	(73.9)	(62.8)	N/A	N/A

Capital Purchase Program (CPP). The CPP program for FY 1996 through FY 1999 is as follows:

	(Dollars in Millions)			
	FY 1996	FY 1997	FY 1998	FY 1999
Equipment-Non ADPE/ TELECOM	8.9	8.3	9.4	11.9
ADPE/Telecommunications Equipment/Software	3.5	1.1	4.3	2.0
Software Development	0.1	0	0.1	.8
Minor Construction	1.5	1.5	1.2	1.1
Reliability, Maintainability and Supportability Modifications	0	0	0	0
TOTAL ($ millions)	$14.0	$10.9	$15.0	$15.8

Staffing:

Civilian Personnel: CIVPERS estimates are consistent with funded programs in FY 1996 through FY 1999 as shown in the following table:

FTEs	FY 1996	FY 1997	FY 1998	FY 1999
FY 1997 Pres Bud (3/96)	3476	3372	N/A	N/A
Current Submission	3225	3347	3332	3223
Change	(251)	(25)	N/A	N/A
End-Strength				
FY 1997 Pres Bud (3/96)	3470	3367	3327	3191
Current Submission	3310	3356	3312	3154
Change	(160)	(11)	(15)	(37)

Military Personnel: Military personnel levels for FY 1997 are 19 officers and 55 enlisted, a total of 74 billets. For FY 1998 and FY 1999, the levels are 14 officers and 69 enlisted, a total of 83 billets. The increase in enlisted personnel staffing levels is required to support increases in customer workload and research flights at the Patuxent River detachment.

Workload:

Direct Labor Hours:	FY 1996	FY 1997	FY 1998	FY 1999
FY 1997 Pres Bud (3/96)	3,901,905	3,744,871	N/A	N/A
Current Submission	3,522,232	3,716,080	3,702,336	3,616,292
Changes	(379,673)	(28,791)	N/A	N/A

Customer Rate Changes:

	FY 1996	FY 1997	FY 1998	FY 1999
Stabilized Customer Rate	$74.98	$81.49	$79.85	$89.51
Stabilized Rate Change		8.7%	(2.0%)	12.1%
Composite Customer Rate Change		5.51%	(.07%)	7.5%

The stabilized billing rate consists of direct labor and applied overhead. All remaining direct costs are billed on a reimbursable basis. The rate changes shown above incorporate both the stabilized and non-stabilized costs.

Unit Costs:

	FY 1996	FY 1997	FY 1998	FY 1999
Unit Cost Per Direct Labor Hour	$79.78	$82.08	$82.66	$85.18

Although not the basis for customer billing or stabilized rates, unit cost is a measurement of stabilized costs per direct labor hour. The change in unit cost per direct labor hour shown above primarily reflects increases for annual inflation/price changes from year to year, offset by overhead and other program cost reductions.

Carryover:

The NRL has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($M)	$90.6	$96.0	$97.5	$98.9
Months of Carryover	1.0	0.9	0.9	0.9

Economies and Efficiencies:

The Naval Research Laboratory is taking aggressive action to reduce overhead costs. FY 1996 indirect costs were $10.9 million under the approved President's Budget. This trend continues with FY 1997 planned at $5.4 million below the approved President's Budget resulting in an Accumulated Operating Results profit of $20.4 million that will result in rate reductions for customers in FY 1998.

The NRL budget submission reflects even further reductions in overhead by $10.4 million in FY 1998, and $1.0 million in FY 1999.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
RES LABS / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	481.6	504.6	501.9	532.7
Surcharges	.0	.0	.0	.0
Depreciation excluding Major Constructio	10.8	14.7	15.3	16.5
Other Income				
Total Income	492.4	519.3	517.2	549.2
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	3.1	2.9	3.1	3.1
Civilian Personnel	215.8	225.4	232.2	231.7
Travel and Transportation of Personnel	9.9	11.1	11.4	11.5
Material & Supplies (Internal Operations	39.3	44.7	45.4	46.4
Equipment	33.7	38.6	39.5	40.3
Other Purchases from NWCF	17.0	21.8	22.4	22.8
Transportation of Things	1.1	1.4	1.4	1.5
Depreciation - Capital	10.8	14.7	15.3	16.5
Printing and Reproduction	.9	1.2	1.0	1.0
Advisory and Assistance Services	.0	.0	.0	.0
Rent, Communication & Utilities	15.8	15.7	15.7	16.1
Other Purchased Sevices	147.2	152.1	150.1	158.3
Total Expenses	494.4	529.6	537.5	549.2
Work in Process Adjustment	.5	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	494.9	529.6	537.5	549.2
Operating Result	-2.6	-10.3	-20.4	.0
Less Surcharges	.0	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-2.6	-10.3	-20.4	.0
Other Changes Affecting AOR	.0	.0	.0	.0
Accumulated Operating Result	30.7	20.4	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
RES LABS / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	497.9	525.2	518.8	550.9
a. Orders from DoD Components	448.9	471.2	465.8	495.4
Department of the Navy	307.4	317.5	311.2	340.5
O & M, Navy	12.3	11.0	11.4	12.3
O & M, Marine Corps	.0	.3	.3	.3
O & M, Navy Reserve	.0	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	.8	.4	.3	.3
Weapons Procurement, Navy	.0	.0	.0	.0
Ammunition Procurement, Navy/MC	2.0	.5	.5	.5
Shipbuilding & Conversion, Navy	2.8	.7	.7	.7
Other Procurement, Navy	7.6	7.1	6.4	7.1
Procurement, Marine Corps	.0	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	280.7	295.5	289.4	317.0
Military Construction, Navy	.0	.0	.0	.0
Other Navy Appropriations	1.1	2.2	2.2	2.3
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	7.0	8.5	8.4	8.8
Army Operation & Maintenence	.6	.6	.6	.6
Army Res, Dev, Test, Eval	5.4	7.1	7.0	7.4
Army Procurement	.9	.8	.8	.9
Army Other	.0	.0	.0	.0
Department of the Air Force	75.5	76.5	78.2	74.5
Air Force Operation & Maintenence	1.1	.4	.4	.4
Air Force Res, Dev, Test, Eval	46.8	49.9	51.9	46.9
Air Force Procurement	27.6	26.2	26.0	27.3
Air Force Other	.0	.0	.0	.0
DOD Appropriation Accounts	59.0	68.7	68.0	71.5
Base Closure & Realignment	.0	.0	.0	.0
Operation & Maintence Accounts	1.4	1.2	1.2	1.3
Res, Dev, Test & Eval Accounts	57.3	67.2	66.5	69.9
Procurement Accounts	.4	.2	.2	.2
DOD Other	.0	.2	.2	.2
b. Orders from NWCF Business Area	15.5	18.3	17.8	18.4
c. Total DoD	464.4	489.5	483.6	513.8
d. Other Orders	33.4	35.6	35.3	37.0
Other Federal Agencies	29.8	32.1	31.8	33.4
Foreign Military Sales	.4	.7	.7	.7
Non Federal Agencies	3.2	2.8	2.8	3.0

000213

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
RES LABS / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	102.8	108.3	114.2	115.9
3. Total Gross Orders	600.7	633.5	633.0	666.7
4. Funded Carry-Over **	108.3	114.2	115.9	117.5
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	492.4	519.3	517.2	549.2

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

Adjusted Carryover	90.6	96.0	97.5	98.9

C00154

Changes in the Cost of Operation
Activity Group: Naval Research Laboratory
Date: 03 February 1997
(DOLLARS IN MILLIONS)

	Expenses
FY 1996 Actual:	494.9
FY 1997 Estimate in President's Budget:	592.4
Pricing Adjustments:	n/a
Program Changes:	
Direct Customer Contract Efforts	
Reduced/Transferred To Direct Cite Funding	(56.7)
Overhead Cost Savings	(5.4)
Other	(0.7)
FY 1997 Estimate:	529.6
Pricing Adjustments:	
FY 1998 Pay Raise	
Civilian Personnel	5.6
Military Personnel	0.1
Annualization of Prior Year Pay Raise	1.9
General Purchase Inflation	6.8
Productivity Initiatives and Other Efficiencies:	
Overhead Cost Savings	(10.4)
Program Changes:	
Additional Direct Workyears and Labor Costs	3.9
FY 1998 Estimate:	537.5
Pricing Adjustments:	
FY 1998 Pay Raise	
Civilian Personnel	3.4
Military Personnel	0.1
Annualization of Prior Year Pay Raise	1.6
General Purchase Inflation	5.4
Productivity Initiatives and Other Efficiencies:	
Overhead Cost Reduction	(1.0)
Program Changes:	
Direct Reimbursable Customer Workload	2.2
FY 1999 Estimate:	549.2

Exhibit Fund-2 Changes in the Costs of Operation

ACTIVITY GROUP CAPITAL INVESTMENT SUMMARY
Department of the Navy
H - Research and Development
Naval Research Laboratory
(Dollars in Millions)
3-Feb-97

Line No.	Item Description	FY 1997 Quant	FY 1997 Total Cost	FY 1998 Quant	FY 1998 Total Cost	FY 1999 Quant	FY 1999 Total Cost
	Non-ADP Equipment (>$500K)						
	Replacement						
1001	Large Wafer Ion Mill and Chemically Assisted Ion Beam Etch System	1	0.800				
1002	Air Acoustics System and Digital Data Acquisition System	1	0.700				
1003	Sea-Going Acoustic Measurement System					1	0.850
	Productivity						
1004	Stabilized Precision Aircraft Optical Mount			1	1.200		
1005	Mobile Global Broadcast System			1	0.960		
1006	Enhancements for the Structural Sensing and Attitude Control Laboratory			1	0.660		
1007	Scanning Slope Sensor Buoy			1	0.520		
1008	Robotics Engineering Laboratory					1	1.000
1009	EMI Test Chamber					1	0.750
1010	Airborne Salinity Mapper					1	0.625
	Total Non-ADP Equipment (>$500K)	**2**	**1.500**	**4**	**3.340**	**4**	**3.225**
2001	**Total Non-ADP Equipment (>$100K<$500K) (Repl./Productivity/New Mission)**	**40**	**6.729**	**33**	**5.999**	**47**	**8.709**
	ADP Equipment (>$500K)						
3001	Virtual Reality Research Facility	1	0.650				
3002	Andrew File System/Distributed File Server			1	0.982		
3003	Multi-Use Workstation Cluster			1	0.700		
3004	High Speed Network Infrastructure					1	0.698
	Total ADP Equipment (>$500K)	**1**	**0.650**	**2**	**1.682**	**1**	**0.698**
4001	**Total ADP Equipment (>$100K<$500K)**	**2**	**0.491**	**10**	**2.625**	**6**	**1.295**
	Total Off The Shelf Software (>$500K)						
5001	NAVAIR Industrial Financial Management System (NIFMS)	0	0.000	0	0.000	1	0.805
	Total Off The Shelf Software (>$500K)	**0**	**0.000**	**0**	**0.000**	**1**	**0.805**
6001	**Total Off The Shelf Software (>$100K<$500K)**	**0**	**0.000**	**1**	**0.135**	**0**	**0**
7001	**Total Minor Construction (>$100K<$300K)**	**6**	**1.500**	**5**	**1.219**	**6**	**1.073**
	TOTAL CAPITAL PURCHASE PROGRAM	**51**	**10.870**	**55**	**15.000**	**65**	**15.805**

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1001. Large Wafer Ion Mill Chemically Assisted Ion Beam Etch System	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Replacement) > $500,000				1	800	800						

Narrative Justification: Status Quo and Shortcomings. The project supported is the development of new electronic devices based upon non-traditional materials whose operation depends upon spin polarized carriers. This new field of research is called "Magnetoelectronics." The materials involved are magnetic metals and magnetic oxides. The Conventional processing techniques, which have been developed for fabricating electronic devices based upon elemental or compound semiconductors, completely fail for fabrication of these new devices. The only currently successful technique is ion milling, which is presently being performed for the Naval Research Laboratory (NRL) by outside contractors. There are currently no facilities at the Naval Research Laboratory (NRL) to carry out this important step in processing non-traditional electronic materials. Requirement of CPP Project. The proposed ion mill and chemically assisted ion beam etch system will provide NRL with the capability for carrying out processing in non-traditional electronic materials including magnetic metals and magnetic oxides in order to fabricate prototype device structures in magnetoelectronics. NRL has established itself as a pioneer in this new field, which promises to provide solutions to several current DoD electronics problems, among them low-cost sensors, high-density non-volatile computer memory and re-programmable logic elements for computing. These new developments will find applications in satellite reconnaissance, shipboard computing, aircraft navigation, missile guidance, mines, perimeter defense and biological sensors. The proposed new acquisition will permit in-house fabrication of prototype device structures in the field of magnetoelectronics. Economic Analysis Summary. Compared to the status quo purchase of this system has a .96 benefit to investment ratio which is a much more cost effective system than contracting out. Lease to purchase is not a viable option. It would cost an additional $216K over purchase price of $800K.. Impact of Project Disapproval. Without this state-of-the-art capability, NRL's leadership role in this field which it pioneered will be in jeopardy. Without NRL's leadership, the potential for developing this new technology will be lost. Research programs supported are ARI "Spin Polorized Heterostructures," ARI "Oxide Electronic Materials," ARPA-ULTRA "Non-Volatile Magnetic Memory," ARPA GMR Consortim, Vacuum Microelectronics, and ARPA Advanced Lithography.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1002. Air Acoustics System Digital Data Acquisition System	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Replacement) > $500,000				1	700	700						

Narrative Justification: Status Quo and Shortcomings . The present capabilities do not possess the sophisticated large workspace robotic systems with multi-axis LDV and acoustic probe arrays along with the necessary processing power for data acquisition and display. Limitations in the status quo would result in NRL petitioning sponsors to fund very expensive in-flight and at sea alternatives, e.g., heavily instrumented rocket launches and jet aircraft studies for the conduct of experiments "in-flight." The success of many current and proposed research programs is predicated on an ability to measure large scale structures like rocket payload fairings, jet aircraft fuselages, and large maritime mechanical systems using sophisticated tools such as robotically scanned Laser Doppler Vibrometry (LDV) and Nearfield Acoustic Holography (NAH) in a controlled laboratory environment. These capabilities currently do not exist at NRL and are required to conduct forefront research in in-air structural acoustics. The 10-year-old data acquisition and data reduction system for vibration, acoustic and modal testing is obsolete. The data reduction and analysis software is no longer supported by the source company. Replacement components for the hardware are becoming increasingly difficult to find. Requirement for CPP Project . This laboratory system represents a unique capability which exists at present nowhere in the world. The two new major components- 1) the digital data acquisition system and 2) the laser 3-D vibrometer/microphone holographic scanning systems - would themselves remove the major shortcomings associated with our current capability. The proposed digital data acquisition system solves the problems associated with our current analog system. It provides greatly improved signal quality (at least 20dB). It is sized to allow acquisition of all data for one test at once. At the completion of the test, the data is immediately available to the analyst for review, processing and comparison with analytical modeling data. NRL's current acoustic holography systems operate underwater in our pool facilities. In order to apply near field acoustic holography to non-underwater Naval problems, a similar system capable of operating in air must be realized. This includes the sensor systems (both conventional and new 3-D laser vibrometer systems), the robotic scanning systems, and the display and processing systems. Economic Analysis Summary . Leasing is not an option because of the unique custom nature of the hardware. The chosen alternative is based on cost avoidance with a benefit to investment ratio of 31.12 and a payback period of .28 years. This is because of the ability to run the laboratory measurements in-house versus the estimated cost of a rocket launch add-on to an existing flight (minimum of $2 million per flight and a minimum of one flight per year). Such experiments have not been carried out to date due to the high associated cost. Impact of Project Disapproval . The overall new air acoustics laboratory system would allow NRL to address a number of structural acoustics issues and apply this knowledge to solving a number of related problems in areas important to the Navy, DoD, and the Nation, in general. These presently include (A) the vibro-acoustic payload fairing damage launch problem; (B) submarine machinery noise quieting; (C) aircraft interior noise control, and (D) a number of "dual use" applications. Both existing NRL programs and planned future initiatives will have to be either refocussed or in some cases eliminated without availability of the state-of-the-art capability.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1003. Sea-Going Acoustic Measurement System	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Replacement) > $500,000										1	850	850

Narrative Justification: Status Quo and Shortcomings . The Naval Research Laboratory (NRL) has several data acquisition systems which were developed for Arctic Research. These systems used modified VCRs and have limited bandwidth (5-150 Hertz) and channel capacity (256) in addition the VCRs are all over seven years old and are becoming fatigue casualties. These systems do not have the necessary bandwidth capabilities to respond to the Navy ASW system design issues for the next 20 years. It is not cost effective to replace the VCRs since they require extensive modification and the system would still be of limited capacity. Requirement for CPP Project . The optimum design (array length and inter-node distances) and implementation of the next generation Anti-Submarine Warfare (ASW) systems requires a detailed understanding of the physics of random media propagation and scatter in the littoral seas. The relationship between acoustic signal amplitude and coherence variability and the oceanographic processes which cause that variability must be established. The relationship of the size and temporal extent and spatial distribution of sound ribbons to oceanographic variability must be established. These sound ribbons may offer ASW system gain greater than ideal. The broadband acoustic clutter resulting from scatter from the bottom and subbottom and the relationship to the bottom roughness and subbottom heterogeneity and surface roughness must be understood. The angular distribution of sound radiated from hulls in the far field must be measured. The measurements required to establish the relationship of the above variables to environmental variability and the operation parameters of vessels have not been made for broadband acoustic signals propagating in the spatial temporal variable littoral seas. The reason for the lack of measurement is the lack of a research quality portable Sea-Going Acoustic Measurement System (SGAMS) which permits the placement of multinode multichannel broadband (0-2-kHz) large aperture arrays, multichannel beamformers and recording systems in the littoral setting. It is expected that this system would be deployed at-sea two to four times a year. Economic Analysis Summary . Commercial-off-the-shelf systems that would meet the unique needs of NRL researchers do not exist. One time engineering cost for a leased system would make the lease cost higher than purchasing the system, given the expected 7-year life. System justification is based on cost avoidance to other alternatives. This system provides new technology to accomplish current mission. The proposed system will provide NRL with a flexible system usable in Acoustics research and is one which will support the Navy's acoustic measurement needs into the next century. The system is based on the latest state-of-the-art sampling equipment and recording equipment and will be designed to have maximum flexibility. Impact of Project Disapproval . To maintain responsiveness to acoustic research issues which must be addressed for the next generation of Navy surveillance and tactical ASW systems, it is imperative that a SGAMS system be acquired by NRL. The SGAMS will be used to conduct at-sea measurements in support of a broad range of NRL 6.1, 6.2 and 6.3 programs. NRL owns several other systems, but none have the frequency bandwidth, multinode and large channel capacity necessary to support experiments which will enable acoustic experimentist and theoreticians to define the environmentally imposed limits on modern acoustic signal processing and multinode ASW systems. The arrays associated with the existing systems are all fixed in frequency and aperture; there is no reconfiguration flexibility as required for present day research.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1004. Stabilized Precision Aircraft Optical Mount	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000							1	1200	1200			

Narrative Justification: Status Quo and Shortcomings . This will provide a new research capability. A primary objective of NRL work in tactical surveillance/reconnaissance is the development of a paradigm shift, to Smart Imaging. Current image exploitation practices require that all imagery be inspected by photo interpreters (PI) to extract information. This practice is not feasible for the Defense Airborne Reconnaissance Office (DARO) requirement of NIIRS 4-6 imagery of the canonical 40,000 sq nmi/day battlefield. The digital focal plane simply produces too many pixels for the eye-brain system to process efficiently. Some means is needed to cue the PI to the area of images that contain targets or other objects of interest and exclude background areas. Smart Imaging uses advanced multispectral digital image processing technologies to autonomously cue the PI to areas of interest. The PI can then utilize the high spatial resolution of the imagery to identify and analyze only those areas of the image of importance in the context of the overall scene. Since the vast majority of pixels are background pixels, Smart Imaging will dramatically reduce the PI's workload. Currently the development of the Smart Imaging Technology has been accomplished with surface based sensors. The next step will require airborne sensors to acquire a sufficient data base for false alarm statistics and to demonstrate concept utility. To be useful these data must be taken under conditions which are similar to those that future operational sensors will operate in. This implies altitudes of 20 kft or higher, ranges to 20nm or more and sensor resolution of 5 micro radians or less. These altitudes and ranges do not push the expected operations envelope but are sufficient to determine and demonstrate utility of the Smart Imaging concept. NRL's sensor technology surpasses its ability to point and stabilize these sensors in flight without sacrificing resolution and image quality. Requirement for CPP Project . To overcome this problem, NRL proposes to purchase a high quality stabilized optical mount suitable for flight on NRL P-3 (and perhaps other) aircraft. This mount would serve as a suitable stabilized platform for a large number of sensors the division is currently developing. To this point the sensors under development have been used from ground based platforms. This method is suitable for preliminary development only. Since these sensors ultimately will be on airborne platforms, they must be flown at some point to obtain realistic data for algorithm development and demonstration. Simply body-fixing them to the aircraft is not an option when the requirement for imagery is NIIRS-6 or higher. Based on current sponsor requirements plus additional new sponsor interest, we anticipate a continually increasing workload in this technology for the foreseeable future. Programs supported are NRL 6.2 Multi-Spectral EO/IR Program DARO Multi-Spectral Program, and ARPA CCD, ACTD. Economic Analysis Summary. An economic analysis on the proposed CPP purchase has been performed. The proposed CPP purchase has incremental operational costs of $25,000 per year. The item will provide a new technology for research in current mission requirements. There is no viable alternative to procuring a stabilized platform for these sensors. The equipment is not available for sharing at other government organizations. Rental of a stabilized mount is not a viable alternative, as manufacturers of these mounts are in the business for sales only and when approached about the possibility of rental of this equipment, they rejected it. Impact of CPP Project Disapproval . Without a high precision stabilized mount for its developing EO/IR surveillance/reconnaissance sensor technology, NRL cannot fulfill research requirements. The existing stabilization methods NRL has at its disposal (land based platform and P-3 body fixed mounting of these high spatial resolution sensors) are totally inadequate to meet the requirement of NIIRS 6 or greater resolution for airborne applications. Without a stabilization capability, NRL will be at a great disadvantage in developing these sensors and testing our state-of-the-art multispectral algorithms.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1005. Mobile Global Broadcast System	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000							1	960	960			

Narrative Justification: Status Quo and Shortcomings. The Global Broadcast System (GBS) Conops identifies two methods of uplink "primary and mobile." To date, no mobile uplink system or concept of how to do a mobile uplink system, has been identified. Requirement for CPP Project. The proposed project is a portable satellite base station for data insertion into the GBS. It will have the capability to uplink digital data into a Ku-band satellite transponder for rebroadcast on downlink channels to ground receiver transceiver nodes. The ground receivers are small tactical units deployed in areas of interest. The proposed project will allow study and investigation of data collection from deployable data gathering services such as Unmanned Aeronautical Vehicles and other intelligence gathering sources which are presently limited to line-of-site communication. The Mobile GBS Injection Vehicle would insert this data into the GBS for dissemination to Tactical Commanders and other units on a real time basis. This should enable almost immediate battlefield awareness to all commanders who have GBS reception capability. The Mobile GBS Injection Vehicle would allow the Naval Research Laboratory (NRL) to experiment with enhance protocols and modulation techniques for data gathering and insertion into the GBS network. It provides NRL the ability to influence the early stages of this program and to develop military communications technologies that will carry into the next century. Economic Analysis Summary. This system is a new technology. Leasing is not a practical option as this would prohibit extensive modification as needed and because of liability issues would limit the areas that it could be used in (i.e., world hot spots). Use of other government owned systems would cost $462K for seven tests per year. Therefore that option is not cost effective. Justification for purchase is based on cost avoidance compared to the alternative. Impact of CPP Project Disapproval. The mobile GBS injection system, combined with NRL's experience in space technology, will position NRL to lead this research effort. Without the GBS, NRL will be left without the resources to contribute in this effort.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1006. Enhancements for the Structural Sensing and Attitude Control Laboratory	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000							1	660	660			

Narrative Justification: Status Quo and Shortcomings. The current Structural Sensing and Attitude Control Laboratory (RESHAPE) airbearing does not provide enough capability to support the Tactical Imagery Architectural Study (TICAS) development test article and includes no provisions for doing accurate metrology of payloads. The current RESHAPE facility cannot support large aperture optical system testing nor multiple small aperture system testing. The current facility has a maximum load capacity of 2500 lb. and no high accuracy alignment devices. Requirement for CPP Project. The proposed facility will be used to study satellite attitude control designs and develop techniques for jitter suppression applicable to a variety of satellite payloads. The laboratory will include a unique spherical air bearing platform used to test spacecraft slewing maneuvers and attitude control methodologies prior to implementation on flight vehicles. The laboratory will also utilize a laser metrology system for high accuracy translational and rotational motions. A separate collimated light system consisting of a high power laser source and a large aperture parabolic reflector will be used for optical alignments and end-to-end (fore optics to focal plane array) verification of optical systems. The new facility will include: An upgrade modification to the existing three axis of rotation spherical air bearing providing a capacity of 6500 lb.; a spacecraft structural simulator, equipped with proof-mass actuators acting as jitter sources installed on the spherical air bearing; and a high accuracy laser vibrometer; and light collimator consisting of a dedicated high power laser and >24" large off-axis parabolic optical reflector. Each program utilizing the facility will provide project specific attitude control and determination components and well as payload elements. TICAS is an ongoing funded effort to develop an alternative architecture for space based reconnaissance systems that utilizes existing small satellite technologies to reduce costs while maintaining overall performance. The proposed CPP equipment will allow NRL to continue to apply new technology to current missions. No on-site leasing is available and no contractor facilities with these unique capabilities exist. Impact of CPP Project Disapproval. Without the enhancements, the NRL would not be able to conduct the required ground testing in support of the TICAS system development.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1007. Scanning Slope Sensor Buoy	D. Activity Identification Naval Research Laboratory Stennis Space Center, MS 39529

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000							1	520	520			

Narrative Justification: Status Quo and Shortcomings. One of NRL's research requirements is to provide an understanding of fine scale ocean physics. NRL requires the capability of measuring short waves in the ocean in our research of surface fine structure and support interpretation of ocean remote sensing from space. At present NRL has no capability of measuring the surface fine structure. Requirement for CPP Project. Short ocean waves are the primary contributors to the ocean surface roughness, which is of critical importance to the interpretation of ocean features from remote sensing, and to the understanding of air-sea interaction processes driving the ocean circulation and water waves. The wave measurement system is designed to acquire in situ spatial properties of water waves with wavelengths ranging from 4 mm to 1 m, covering the band of Bragg resonance waves of most microwave radars used in ocean remote sensing. In ocean remote sensing using microwave radars, short water waves on the ocean surface serve as the roughness elements to scatter back the electromagnetic waves. Because these short water waves respond to many environmental parameters, they are natural tracers for monitoring these parameters. Notable features detected from short wave modulation include surface gravity waves, internal waves, ship wakes, slicks and bottom bathymetry from SAR images, significant wave height from altimeter, and wind stress estimate from scatterometer or altimeter. One to two deployments per year is expected from the related research projects. This equipment provides new technology for current Navy missions. There are no viable alternatives. Purchase of this buoy is justified on the basis of meeting current research requirements. Impact of CPP Project Disapproval. Information extractable from remotely sensed data remains qualitative up to this date. One of the roles of NRL is to provide an understanding of fine scale ocean physics. We require the capability of acquiring field measurements of short waves (millimeter to meter wavelength range) in the ocean to support research of surface fine structure and to support the interpretation of ocean remote sensing from space. The proposed equipment will provide the critical field data of these short-scale surface waves to enhance our understanding of the dynamics and modulation of capillary-gravity waves in the natural environment. This understanding is needed such that remote sensing can provide accurate and quantitative information about the ocean processes that are important to the safe operation of the Navy.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1008. Robotics Engineering Laboratory	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000										1	1000	1000

Narrative Justification: Status Quo and Shortcomings. There are no existing specialized facilities at the Naval Research Laboratory (NRL) to support Robotic Engineering projects. Requirement for CPP Project. NRL's robotics engineering capability will be developed to study a variety of topics in such diverse areas as autonomous spacecraft docking, control of rigid and flexible manipulators, interaction of spacecraft and manipulator dynamics, teleoperation of space robots, micro-miniaturization of spacecraft, and design of terrestrial and extra-terrestrial rovers. Applications of artificial intelligence, microelectronics, and microelectromechanical systems, laser metrology, GPS technology, smart structures technology, lightweight composite materials, and advanced control theories will be investigated to develop state-of-the-art robot guidance, navigation, and control systems. NRL robotics engineering laboratory will initially consist of three primary test facilities: Autonomous Docking Facility; Manipulator Control Facility; and the Autonomous Rover Facility. NRL will facilitate applied research and development of prototype robotic vehicles and mechanisms, and their applications to support military and space missions including signal collection, weapon delivery, toxic material handling, autonomous spacecraft docking, repair, servicing, operations, and extra-terrestrial exploration. Economic Analysis Summary. This equipment provides new technology for current missions. The economic justification is based on cost avoidance compared to use of alternative facilities. Use of an existing government facility would be impractical and costly. For a three-month test, it would cost approximately $625K. This would limit our testing to one per year. Other government facilities would require extensive modification and augmentation to support the proposed NRL programs. Purchase of this Laboratory equipment is based on its critical research capabilities. With the proposed laboratory, NRL would be able to conduct four to five test periods per year. Impact of CPP Project Disapproval. In short, there are no reasonable alternatives to funding the NRL Robotics Engineering Laboratory if we are to develop the increasing trends toward miniaturization to automated space and terrestrial systems in support of advanced military systems of the future.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1009. EMI Test Chamber	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000										1	750	750

Narrative Justification: Status Quo and Shortcomings. The Electromagnetic Interference (EMI) test chamber consists of two welded steel test enclosures with associated EMI tight doors, anechoic material and appropriate 60 Hz AC power isolation. The equipment/facility is necessary for large test articles requiring the capability of testing at the constantly lowered levels of EMI. Over the past several years, electronic complexity and sensitivity has lead to an extreme need to verify the electromagnetic compatibility (EMC), of the space and terrestrial military electronics developed by the Naval Research Laboratory (NRL). Current existing facilities are inadequate to test larger sized or lower EMI level specifications. Requirement for CPP Project. Significant new work in military avionics and space electronics are dependent on the ability to validate the safety and mission success attributes of that design. Reports have been received on military avionics/EMI interactions that lead to mission failure and in some cases loss of life. The ability to validate designs incrementally during the design cycle is key to getting that design fielded in a timely, successful fashion. The requested Test Chamber will allow multiple users to speed up that cycle. We fully expect that our continued business will require continued EMI and EMC testing of new components and systems to the more stringent levels for future equipment. It is expected that even more work could be accepted if a larger, more EMI stringent chamber were available. Economic Analysis Summary. This proposal is the recommended choice as indicated by the economic analysis. The benefit to investment ratio is 1.14 and the payback period is 6.64 years. Impact of CPP Project Disapproval. The facility will allow the pursuit of research opportunities on newer, more difficult design verification tasks, and accomplish them in house, at optimal cost to the Government. Not procuring the facility will inhibit our ability to maintain a necessary function developed over 20 years.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 1010. Airborne Salinity Mapper	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment (Productivity) > $500,000										1	625	625

Narrative Justification: Status Quo and Shortcomings . Research into phenomena which affect currents, optics and acoustics in the ocean is a fundamental part of the Naval Research Laboratory (NRL) mission. A major problem in coastal oceanography is the lack of knowledge of the spatial and temporal scales at which water masses of various origins interact within the coastal zone and estuaries. The dynamics of such interactions are presently under investigation (e.g., the Coastal Remote Sensing program, the Littoral Optical Environments program, the MCM coastal optics program, etc.). Research efforts are currently aimed at the use of dissolved organic matter for tracing the dispersion of coastal salinity properties. Knowledge of the salinity field is crucial both to coastal physical oceanographic research efforts and to operational efforts in the littoral zone. While their gross characteristics may be known, the two-dimensional horizontal variability of many water mass properties such as salinity cannot be adequately determined using conventional ship-based oceanographic measurement methods. Typically, such variations are measured only in one dimension (e.g., vertical profiles at discrete stations or at a single discrete near-surface depth along a ship track) using conventional techniques and usually only at great expense: Requirement for CPP Project. Since salinity significantly influences the currents which transport chemical, biological, geological and physical properties in near shore regions, the SLFMR salinity mapper will be useful to virtually all projects which require oceanographic measurements in the littoral zone. Demand for its usage will arise whenever shipbased and/or moored instruments are to be deployed. Recent developments in microwave remote sensing technology have created the possibility to synoptically map surface salinity in two dimensions with very high spatial resolution. Previously, the routine deployment of such instruments was prohibitively expensive and their use has been limited primarily to developmental efforts coordinated by NASA and carried out on large aircraft. The new Scanning Low Frequency Microwave Radiometer (SLFMR) produced by Quadrant Engineering to measure sea surface salinity is designed to be flown on small inexpensive aircraft and, therefore, provides a means for coastal oceanographers to obtain high resolution imagery of sea surface salinity on a routine basis and in a synoptic fashion. Economic Analysis Summary . The SLFMR is the only instrument available which can meet the programmatic and technical requirements. There are no alternatives. Ship-based mapping does not meet the requirements but is the traditional method employed so it is used in the following economic analysis. To synoptically map a tidally-influenced coastal area requires covering the area in substantially less than half of a tidal cycle. A typical research ship steams at 5 m/s whereas small aircraft fly at about 50 m/s. During a quarter of a M2 tidal cycle the ship covers 55 kilometers while the aircraft covers 550 kilometers. The ship provides data only along its track whereas the SLFMR salinity mapper provides data not only at nadir but also across a swath perpendicular to the flight track. The SLFMR has been flown on the Virginia Institute of Marine Science's DeHavilland Beaver aircraft which rents for $125 per hour. An inexpensive coastal research vessel rents for about $2500 per day or $100 per hour, essentially the same as the aircraft. The prototype SLFMR has been very reliable (only one minor component failure since 1993). Maintenance and support costs are expected to be similar to standard ship-based CTD systems. Therefore we expect approximately a 10:1 cost benefit ratio compared to conventional means of mapping surface salinity. If considered in terms of cost of data per track kilometer, the swath scanning capability of the SLFMR increases this ratio to 60:1. Impact of Project Disapproval . If the airborne salinity mapper is not procured, NRL's ability to measure and predict spatial and temporal variability within the littoral zone will be significantly compromised and will be costly.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 2001. Various Non-ADP Equipment	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Non-ADP Equipment >$100,000 <$500,000				40		6729	33		5999	47		8709

Narrative Justification: This investment provides the most impact to the greatest number of people and projects supported by the Laboratory. All items in this category are research equipment for research divisions. Examples follow: Closed-Loop radio Frequency (RF) Irradiation System, Masked Aligned Wafer Coating System, Xband Antenna Array System, RF Signal Processing System, Environmental Data Acquisition System, Epicenter Vacuum Processing Capability, SPSI 4400 Data Collection System, Single Frequency Ring Laser System, Portable Cellular Test Bed, Magic Edge Capsule and Motion Base, Electrospray Ion Trap Mass Spectrometer, MCM 2045-450 Precision System, Millimeter Wave Vector Network Analyzer System Upgrade, Variable Temperature Analysis System for the Transmission Electron Microscope, Chemical Methanical Polishing System, Infrared Hyperpectrual Imager System, GaN MBE Gas Source Upgrade, Glebe Therm-mechanical Testing Unit, Cryogen-free Superconducting Magnet for Gyro-Amplifier, FIR System upgrade, Two Wavelength, Automated Ellipsometer, XENON Weather-Ometer Environmental Test Chamber, LAMBDA 900mm Integrating Sphere, X-ray Framing Camera, Time Resolved X-ray Detection System, HPE3238A 2 to 2650 Megahertz (Mhz) Scanning Signal Analysis System, Protein Sequencing System, High Average Power Modular, Frequency Agile Signal Simulator (FASS), High Frequency (K Band) Variable Frequency Microwave, Solar and Atmospheric Remote Sensing Instrument Development Facility, 32 Element, RF Telemetered, Acoustic Receiver Array System, Bimolecular Synthesis and Fabrication System, Receiver Dynamic Range Measurement System, Vibration Isolated, Vacuum Collimator, Six-Inch DUV Mast Aligned, Femtosecond Optical Parametric Oscillator Laser, Piosecond Laser System, Frequency Synthesizers for Step Frequency Radar, Underwater-towed Electromagnetic Survey System, IR Threat Image Processing Lab, Increased Capacity Auto Changer, Frequency Agile Signal Simulator Upgrade, Antenna System, Digital RF Memory Unit, 8703A Lightwave Component Analyzer, Capability for High Resolution Time Domain, Hard X-ray Multiple-Frame Camera, Four-Circle Goniometer with Controller and Detectors, High Performance Multispectral Processing System, High-Speed Digitizing, Recording, and Analyzing System, Microscope Nanostructure Spectrometer, X-ray Diagnostic System, Visible/X-ray Time-Resolved Spectroscopic Detection System, SDH/SONET Analyzer, Scanning Acoustic Microscope, Thermo/Electric Properties Measurement System, Satellite Earth Station Downlink, Femosecond Laser Source for Nonlinear Optics Evaluation, Micro-UAV Wind Tunnel Test Facility, Microelectronics Test and Measurement System, Pulsed Laser Deposition Facility, Snapshot Mode Focal Plane Array IR Camera System, LEGe 13-Element Soft X-ray Fluorescence Detector, Variable Temperature Magnet System, Confocal Scanning Laser Microscope, Atmosphere Controlled Tape Casting System, and Atomic Emission Spectrometer. The Naval Research Laboratory is a highly technical and sophisticated research center requiring state-of-the-art technology to satisfactorily accomplish its mission. Much of the equipment planned for purchase replaces items that are currently operating in a degraded mode because of their age and because their technology no longer supports current and projected requirements. The need to maintain a state-of-the-art equipment base is critical in all areas of science, technology, warfare systems, sensors research, materials and space technology.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 3001. Virtual Reality Research Facility	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
ADP Equipment >$500,000				1	650	650						

Narrative Justification: Status Quo and Short Comings. NRL provides researchers with an immersive virtual environment that can be utilized effectively by multiple persons for scientific data exploration, training system design, and other applications of virtual reality. NRL currently has virtual reality head-mounted displays and the first U.S. version of the Virtual Workbench. These both fail to meet the needs of a virtual reality system that supports multi-user immersion. Head mounted displays are specifically single user and have poor visual quality (resolution), in our case 300 x 400 pixels over a 60 degree field-of-view. A real-life user with similar eyesight would be legally blind. The Virtual Workbench supports multiple users, but it is non-immersive and is applicable only to a small subset of the virtual reality problems of interest to NRL, namely those applications where users would normally stand over a table or workbench. Requirement for CPP Project. The Cave Automated Virtual Environment (CAVE) is a revolutionary concept for visualizing and interacting with virtual environments (virtual reality). It fulfills all criteria for a virtual reality system that supports multiple users and a strong interactive capability. We chose the new acquisition because it is the only way to provide NRL with a virtual reality capability that will enhance NRL science through a significantly improved visualization capability and will also provide a unique platform to expand its exploration of both virtual reality research and advanced development for Navy applications. Multiple users will operate effectively within a high-resolution virtual reality that supports powerful interactive paradigms. Virtual Reality has emerged as the key computer science tool for advancing a number of disciplines of interest to the Navy. These include training, education, scientific and engineering analysis, cooperative work (rapid prototyping for manufacturing), telecommunications, telepresence, and military medicine. As noted above, current NRL/ITD VR Lab equipment (head mounted displays and the Virtual Workbench) for virtual reality is limited in capability and cannot support the needed interaction of multiple team-members over a wide range of virtual reality applications. Investigation has shown the selected alternative as the only method to meet the needed capability. Economic Analysis Summary. This equipment provides a new technology which can not be met with current equipment. The proposed CPP purchase, which supports current research capability, has operational costs of $30,000 per year. There is no viable alternative to procuring a Virtual Reality Research Facility. Current assets cannot be modified to provide the needed capability nor will any leased system provide this capability. Impact of CPP Project Disapproval. Failure to acquire this item will (1) deny NRL scientists access to a powerful tool for data analysis and enhanced scientific understanding, (2) limit the ability of NRL researchers to explore new methods and techniques for utilizing virtual reality, and (3) make impossible planned work in support of current ARPA and ONR projects as well as planned future proposals that would be designed around this unique and powerful capability.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 3002. Andrew File System/Distributed File Server	D. Activity Identification Naval Research Laboratory Monterey, CA 93943

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
ADP Equipment >$500,000							1	982	982			

Narrative Justification: Status Quo and Shortcomings. The Naval Research Laboratory (NRL) is currently straining to meet its file serving needs by employing over a dozen Network File System servers. These servers are predominately based on SPARC 2 platforms. The current arrangement has severely limited processing power and is constrained in its ability to address additional disk space. The administrative concerns of trying to balance server loads and evenly distribute disk usage, while still presenting an orderly interface to the users has reached a critical limit. Requirement for CPP Project. A major upgrade in the hardware and software used to meet the file serving needs of NRL will increase NRL's productivity by presenting a consistent, more secure, user interface accessible from the local workstation through global file space. The proposal will increase availability of software to the local user by allowing access to the Online-software project managed by NRL DC's Central Computer Facility. It will allow more consistent access to DOD High Performance Computer assets as they begin to be incorporated into the Distributed Computer Environment/Distributed File System environment. This project will further provide the storage space and access method to both internal researchers and external research collaborators to perform studies on the data stored (e.g., the 10-year re-analysis) in the system. The proposed hardware will allow local storage and access to data so that projects such as a 10 year re-analysis can be carried out without depending on unreliable access to Fleet Numerical Meteorology and Oceanography Center, silos and resources. It will provide reliable access to data, not only on site, but also to remote users who access data. It will allow individuals to access data and programs from their offices as if the data was actually on their computers, thus increasing efficiency by providing the users with a familiar interface. Economic Analysis Summary. With a benefit to investment ratio of 10.70 this is the recommended choice. Leasing is not an option since our research requires access to third party software not readily available under lease contracts. Systems also contain sensitive data which also makes leasing impractical. Impact of CPP Project Disapproval. NRL's file servers are currently straining to keep up with user demand because they are based on old disk technology and slow processors. The file server infrastructure has grown without any design or consideration of file storage or migration needs. Disapproval of this project would exacerbate an already undesirable situation that currently impacts the ability of researchers to reliably process, store, archive, and retrieve their data.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 3003. Multi-Use Workstation Cluster	D. Activity Identification Naval Research Laboratory Stennis Space Center, MS 39529

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
ADP Equipment >$500,000							1	700	700			

Narrative Justification: Status Quo and Short Comings. The Naval Research Laboratory (NRL) current workstations, which consist of 33 Sun SPARCstation 10/20 compatible workstations and 26 older SPARCSTATIONS (a mix of SCL's, IPC's, IPX's, LX's, 1+'s, and 2's), fail to meet our future goals. Almost half of our workstations will be two or even three generations behind the state-of-the-art. This significantly degrades their usefulness as tools for scientific productivity in areas such as visualization and diagnostic calculations. Requirements for CPP Project. To maintain a leading technological edge in ocean modeling, NRL needs to upgrade the 26 older workstations to state-of-the-art workstations. NRL's ocean modelers represent about 50% of the Navy's overall High Performance Computing requirement. The UltraSPARC systems would all be configured with mid-performance 3-D graphics hardware, giving us desktop 3-D capability. The most significant and unique aspect of this acquisition, however, is the "clustering" of these workstations. In addition to acting as individual desktop systems, the use of the load-sharing package "LSF" (Load Sharing Facility) will allow all 26 systems to act as a powerful "workstation cluster" at night and during the day when the interactive workload permits. ATM (Asynchronous Transfer Mode) networking will be employed to connect the nodes of the cluster. We project an ever-increasing need to do our model development on our local systems since it is very difficult to perform on DOD's High Performance Computer (HPC) computer systems. An average batch wait time of two days is not excessive for a 36 CPU hour job, but tens of debug/compile/run cycles are needed every workday at some stages of development. The compilers on some HPC systems are very low and less than reliable, which makes a stable local platform an attractive alternative. Providing a separate multi-cpu compute server as well as individual workstations also meets our goals, but at a higher cost and with less room for expansion. Economic Analysis Summary. The status quo will not support research needs. The benefit to investment ratio of 5.42 make this proposal the recommended choice. Impact of Project Disapproval. NRL does not currently have a shared compute server, and existing individual workstations, even acting as a workstation cluster, are not sufficiently powerful to handle the projected increase in local computing needs caused by the tripling of DOD HPC capacity every 12 to 18 months for the next several years. We will have nowhere to run time-cricital applications, and the disparity in capability amongst our existing workstations limits their usefulness as a platform for developing scalable applications. The NRL core 6.1 Low Latitude Western Boundary Currents, 6.2 Very High Resolution Coastal Currents, and 6.2 Coastal Ocean Simulation, as well as our 6.2 NOMP Coastal and Semi-Enclosed Seas and Large Scale Modeling project, will all see immediate positive impacts in enhanced model development speed, more realistic pseudo-operational testing, and highly improved graphics capabilities.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 3004. High Speed Network Infrastructure	D. Activity Identification Naval Research Laboratory Monterey, CA 93943

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
ADP Equipment >$500,000										1	698	698

Narrative Justification: Status Quo and Short Comings. Currently, the existing network at the Naval Research Laboratory (NRL) consists of 6 ethernet segments providing a combined 60 mbit/sec bandwidth. This configuration negatively impacts many research projects that require distributed processing, high-speed data access, web access, and archive capacity. System backups frequently time-out due to network latency and many systems are not backed up at all, or are done very infrequently. In addition, the network components are not based on industry standards; they are proprietary and becoming more expensive to maintain and replace. Requirement For CPP Project. Implement a novel high-speed network infrastructure to facilitate data migration, multimedia applications, telecollaboration, and distributed processing. The proposed network consists of three switching enterprise hubs with an Arynchromous Transfer Mode (ATM) backbone that would provide 200 mbit/sec dedicated network throughput to each office space at the NRL Monterey compound. This throughput would be accomplished by switching full duplex Fiber Distributed Data Interface (FDDI) network segments to hubs located in each office. Thus, each office becomes its own collision domain with a dedicated 200 mbit/sec uplink to the ATM backbone. Such a network can be accomplished with FDDI technology, a stable, well documented standard that has a proven track record of use as a backbone technology. This approach leverages the existing fiber cable plant already in place at NRL Monterey and is compatible and adaptable to existing and future technologies. Economic Analysis Summary. The financial benefits of establishing a reliable network cannot be overstated. The benefit to investment ratio is 16.51. Leasing is not an option for a high-speed network because of the extensive customization and configuration required to service a constantly changing user base. The flexibility required to quickly respond to new or moved users, increases in bandwidth, and new technology cannot be realized with leased systems. In addition, the dynamic physical cable paint and switching components required to accommodate many user changes cannot be handled efficiently with a leased system. Impact of CPP Project Disapproval. The current technology does not have the capacity to provide the bandwidth required now, let alone the bandwidth anticipated to be required at the turn of the century. The limited performance of the network when operating correctly negatively impacts researchers because of the inability to do distributed processing, data access, web access, and archiving in a timely manner.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 4001. Various ADP Equipment	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
ADP Equipment >$100,000 <$500,000				2		491	10		2625	6		1295

Narrative Justification: Status Quo and Short Comings. At the core of much of the highly technical and sophisticated research accomplished at the Naval Research Laboratory are equally technical and sophisticated computer systems. NRL research divisions make use of a wide variety of computers to accomplish the objectives of R&D projects. The uniqueness and complexity of these projects requires equally unique and complex ADP support. In some cases, upgrades are required because manufacturers will not support obsolete operating systems/equipment. The items scheduled for purchase are the minimum necessary to meet daily R&D mission operating requirements, effectively manage R&D resources and meet customers R&D requirements. Examples of items to be purchased are SGI Shared-Memory Multiprocessor, Very High-Perforamnce Local Area Research Network, Network Server System, Distributed Virtual Environment System, Airborne Marconi/Calcomp Satellite Telephone System, Integrated Design Facility, Network Multicast Capability, Special Projects Multi-CPU Compute-Server, Multiple Mobile Robots Facility Upgrade, Network Enhancement System, Computer System Upgrade, DCE/DFS Server System, File Server and Archive System.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 5001. NAVAIR Industrial Financial Management System (NIFMS)	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Off-the-Shelf Software $500,000										1	805	805

Narrative Justification: Status Quo and Short Comings. The Under Secretary of Defense, Comptroller designated the Naval Air Systems Command Industrial Financial Management System (NIFMS) as the interim migratory system for the Research and Development DBOF business area. The implementation schedule provided by the Principal Deputy, Assistant Secretary of the Navy, Financial Management and Comptroller, states that NRL will begin NIFMS deployment in November 1998 and complete full implementation by January 2000. Funding is required for approved NIFMS system enhancements, site preparation, interfaces, activity unique business process requirements, hardware, connectivity and training. Estimated funding requirements for FY 1999 are $804,904 and $536,602 for FY 2000.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission **FY 1998 PRESIDENT'S BUDGET**
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 6001. Various Off-the-Shelf Software	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Off-the-Shelf Software >$100,000 <$500,000							1	135	135			

Narrative Justification: Status Quo and Short Comings. At the core of much of highly technical and sophisticated research accomplished at the Naval Research Laboratory are equally technical and sophisticated computer systems. NRL research divisions make use of a wide variety of computers and software to accomplish the objectives of R&D projects. The uniqueness and complexity of these projects requires equally unique and complex ADP software support. The item to be purchased is the STILAS Replacement Library On-Line Information System.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)		A. Budget Submission FY 1998 PRESIDENT'S BUDGET
B. Component/Activity Group/Date Department of the Navy Research and Development 3 February 1997	C. Line No. & Item Description 7001. Various Minor Construction	D. Activity Identification Naval Research Laboratory Washington, DC 20375

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Minor Construction >$100,000 <$300,000				6	1500	1500	5	1219	1219	6	1073	1073

Minor construction funds will be used for the improvement and the upkeep of the physical plant at NRL. The infrastructure provides lab and office space required to permit the Navy to conduct the necessary basic research, applied science, and applied technology applicable to uses of space in support of Navy DoD mission. Specifically, minor construction facilities are needed for the management and integration of satellite systems and subsystems into scientific and mission payloads. Labs are needed to allow exploratory development of subsystems, systems analysis and engineering, and mission system simulations. NRL will provide for additional space by constructing a mezzanine in the high bay area for lab space. Existing mechanical and electrical systems do not have the capacity to support state-of-the-art research. Expanded mechanical rooms, mechanical chases and mechanical and electrical capabilities are required. Stormwater runoff from a large section of the Stennis Space Center is required. Another example of minor construction projects to be accomplished with this authorization is the upgrade of existing ductbanks for cableways. NRL will provide adequate cableway to accommodate continuing state-of-the-art telephone and communication requirements.

CAPITAL BUDGET EXECUTION
Department of the Navy - Navy Working Capital Fund
Activity Group: RESEARCH AND DEVELOPMENT/Activity Group: NAVAL RESEARCH LABORATORY
FY 97
FY 1998/1999 Budget Estimate

PROJECTS ON THE FY 1997 PRESIDENT'S BUDGET
(Dollars in Millions)
03 Feb 97

FY	Approved Project	Reprogs	Approved Proj Cost	Current Proj Cost	Asset/ Deficiency	Explanation/ Reason for Change
	Equipment except ADPE and TELECOM					
97	Equipment except ADPE and TELECOM < 500K		9.559	6.729	2.830	1/
97	Large Wafer Ion Mill & Chemically Assisted Ion Beam Etch System		0.800	0.800	0.000	
97	Air Acoustics System and Digital Data Acquisition System		0.700	0.700	0.000	
	Total Equipment except ADPE and TELECOM	0.000	11.059	8.229	2.830	
	Equipment - ADPE and Telecomm					
97	Equipment - ADPE < 500K		0.491	0.491	0.000	
97	Virtual Reality Research Facility		0.650	0.650	0.000	
	Total Equipment - ADPE and Telecomm	0.000	1.141	1.141	0.000	
97	Minor Construction					
	Total - Minor Construction	0.000	1.500	1.500	0.000	
	Total FY 1997 Capital Purchase Program	0.000	13.700	10.870	2.830	

1/ Changes due to reduced investment requirements.

FY1998/1999 PLANNING BUDGET
Navy Working Capital Fund
Military Sealift Command
Budget Narrative
Congressional Submit

MISSION STATEMENT: Military Sealift Command (MSC) operates under the Working Capital Fund (WCF) and acts as the single managerial operating agency for sealift services. Under the auspice of the TRANSPORTATION COMMAND, MSC provides sealift support for the Department of Defense (DoD) in emergencies and transportation for DoD cargoes during peacetime. MSC supports CINCPACFLT, CINCLANTFLT, NAVSEA, COMNAVMETOCCOM, SPAWAR and DIRSSP service requests with unique vessels and programs. The three programs budgeted through the Navy Working Capital Fund (NWCF) are:

1. Naval Fleet Auxiliary Force (NFAF) which provides support utilizing civilian manned non-combatant ships for material support.

2. Special Mission Ships (SMS) which provides unique seagoing platforms.

3. Afloat Prepositioning Force-Navy (APF-N) which deploys advance material for strategic lifts.

COMPOSITION OF COMPONENT BUSINESS AREA: Military Sealift Command is headquartered in Washington, D.C. and encompasses five area commands, Bayonne, N.J., Oakland, Ca., London, England, Yokohama, Japan and Washington, D.C.

BUDGET HIGHLIGHTS: The number of total per diem operating days increases 11.3% from 25,133 in FY96 to 27,979 in FY99 and primarily affects the special use, high-cost type of ship by MSC. NFAF added six ships and incurred a 17.1% increase in workload with the T-AEs having the largest impact. The SMS program added four ships, a T-AGOS 23 class vessel, two reactivated T-AGOSs and the last T-AGS. The APF-N program in FY99 includes the first of the Maritime Preposition Force-Enhancement (MPF-E) ships. Deactivation of four ships in NFAF and SMS partially offset some of this increased workload.

ANALYSIS OF FINANCIAL CONDITIONS: The following table displays the financial conditions through FY 1999.

FY1998/1999 PLANNING BUDGET
Navy Working Capital Fund
Military Sealift Command
Budget Narrative
Congressional Submit

Table One - Financial Condition

	FY 1996	FY 1997	FY 1998	FY 1999
REVENUE	1,156.5	1,086.2	1,267.9	1,217.4
EXPENSE	1,127.9	1,150.3	1,150.1	1,196.6
NOR	14.0	(64.1)	52.1	20.8
SURCHARGE	14.6	0.0	65.7	20.8
PRIOR YR ADJ	11.6	0.0	0.0	0.0
AOR	12.0	(52.1)	0.0	0.0

REVENUE ANALYSIS: The variance between FY 1996 and FY 1997 can be attributed to two factors: (1) FY 1996 rates were based on recouping $48 million from prior year losses, (2) FY 1997 rates reflect returning $32 million from prior year gains and did not include a surcharge. FY 1998 and FY 1999 projections reflect combined surcharges of $65.7M and $20.8M respectively.

ANALYSIS OF AOR/NOR: Variance in NOR between FY 1996 and FY 1997 is primarily attributable to increased Ship Maintenance and Repair (M&R) costs. In the FY 1997 President's Budget, savings were incorporated which lowered projected FY 1996 and FY 1997 M&R expenses. Actual FY 1996 expenditure and current FY 1997 estimates did not support FY 1996 projections and caused a negative financial result. NOR for FY 1998 and FY 1999 are designed to achieve a zero AOR per OSD guidance.

ANALYSIS OF COST OF OPERATIONS: Overall MSC FY97 cost increases include civilian modification of two T-AEs which, in addition to another T-AE, will assume Full Operating Status(FOS) late in FY98. Two T-AGOSs and one T-AGS will also be placed into service during FY98. Two T-AEs will be turned over for repair and placed in Reduced Operating Status(ROS) late in FY98. In addition, FY99 cost increases reflect addition of the MPF-E program, delivery of the first T-AGOS 23 class vessel and one year's operation of those ships added in FY98.

Table Two - COST ($ in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
DIRECT COST	1,030.1	1,054.9	1,050.6	1,094.2
COST OF G&A	97.8	95.4	99.5	102.4
TOTAL COST	1,127.9	1,150.3	1,150.1	1,196.6

FY1998/1999 PLANNING BUDGET
Navy Working Capital Fund
Military Sealift Command
Budget Narrative
Congressional Submit

UNIT COST ANALYSIS: COMSC operates under distinct unit cost goals for each program. All programs utilize cost per diem days as their unit cost base (costs include per diem and reimbursable expenses in their annual operating budget (AOB) per OSD guidelines). The NFAF program is stabilizing after civilian modification of T-AEs and T-AFSs while the APF-N program reaches stasis after experiencing increased OPTEMPO and forward deployment of a squadron to the Mediterranean in FY97.

Table Three - UNIT COST

	FY 1997	FY 1998	FY 1999
Cost per ship day			
NFAF	40,707	42,660	42,199
SMS	16,146	17,159	16,387
APF-N	76,151	76,674	73,370

WORKLOAD INDICATORS: The NFAF program shows a significant increase due to the transfer of six T-AEs and deactivation of only one ship. SMS workload reflects addition of four vessels and deactivation of three others. The APF-N workload increases by one ship in FY 1999 for the MPF-E program. Budgeted workload estimates are provided directly by each funding sponsor. Due to the dedicated nature of these ships, programs receive their inputs directly from their sponsors by message or other direct communication.

Table Four - WORKLOAD

	FY 1997	FY 1998	FY 1999
Per Diem Ship Days			
NFAF	11,315	12,288	13,460
SMS	8,434	8,363	9,044
APF-N	5,110	5,110	5,475

CUSTOMER RATE PERCENTAGE CHANGES: Table Five displays the difference between each year's approved composite rates. Major changes in FY 1998 and 1999 rates include charges to improve the Navy's cash position.

FY1998/1999 PLANNING BUDGET
Navy Working Capital Fund
Military Sealift Command
Budget Narrative
Congressional Submit

Table Five - CUSTOMER RATE CHANGES

	FY 1997	FY 1998	FY 1999
NFAF	(7.5%)	41.1%	(20.0%)
SMS	(28.0%)	3.0%	8.9%
APF-N	(4.0%)	9.6%	(2.7%)

OVERHEAD TRENDS/ANALYSIS: MSC is striving to reduce G&A cost incurred by the ashore staff. Multiple QMB and PAT teams were chartered to review infrastructure and processes. To wit, MSC scrubbed all costs with an eye toward achieving prudent reductions and projects zero growth between FY 1996 and FY 1997. Relatively minor program growth in FY 1998 and FY 1999 is associated with continuing realignment of TRANSCOM and Navy commands

MANPOWER TRENDS: Direct: NFAF program increases reflect addition of two T-AEs and deactivation of one T-AO and T-ATF. SMS changes reflect switching one ship from CIVMAR to contract operations and deactivation of one T-AGM. Overhead: Changes reflect efficiencies anticipated from MSC's Reinvention Initiative.

Table Six - Manpower by Major Program

	FY 1996	FY 1997	FY 1998	FY 1999
End strength (Civ/Mil)				
NFAF	2,872/747	2,711/886	2,997/735	2,977/727
SMS	413/33	356/33	381/33	305/33
APF-N	6/68	6/68	6/68	6/68
Overhead	1,198/189	1,265/196	1,256/185	1,250/185
Total	4,489/1,037	4,338/1,183	4,640/1,021	4,538/1,013
Work Years	5,676/1,037	5,560/1,183	5,631/1,021	5,927/1,013

CARRYOVER: MSC has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

FY1998/1999 PLANNING BUDGET
Navy Working Capital Fund
Military Sealift Command
Budget Narrative
Congressional Submit

Table Seven - Carryover

	FY 1996	FY 1997	FY1998	FY 1999
Carryover Funding ($M)	82.2	82.2	82.2	82.2
Months of Carryover	.9	.9	.8	.8

CAPITAL BUDGET AUTHORITY: All CPP costs are associated with information efforts - i.e. systems development and ADPE acquisitions.

Table Eight - Capitol Budget Authority

	FY 96	FY 97	FY 98	FY 99
Equipment-Non ADPE/TELECOM	0.0	0.0	0.0	0.0
APDE/TELCOM	2.2	0.0	0.0	0.0
Software Development	2.4	1.3	1.2	0.5
Minor Construction	0.0	0.0	0.0	0.0
Total	4.6	1.3	1.2	0.5

PRODUCTIVITY INITIATIVES/COST REDUCTIONS: MSC strives to obtain total cost reductions through productivity initiatives. Although no specific guidelines were established for productivity, COMSC continues to take proactive strides in projecting productivity savings at or above prior year's goal by saving three percent of total cost. Each program is in some way affected by these initiatives. MSC reexamined the MPS and NAVOCEANO operating contracts and was able to reduce total expense by nearly $19.1 million in FY 1996. MSC projects eventual cost avoidance in operating hire of $22.5 million in FY 1999. MSC has also held costs down by procuring lube oil and associated chemicals in bulk. The hull/propeller polishing program has demonstrated fuel savings of nine percent on affected ships. MSC has initiated a proactive program to test lube oil for foreign matter and used vibration analysis to help project possible engineering failures before they happen. These and other afloat program initiatives help minimize direct costs.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
COMSC / COMSC

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	1,139.6	1,085.0	1,200.5	1,194.4
Surcharges	14.6	.0	65.8	20.8
Depreciation excluding Major Constructio	2.3	1.3	1.6	2.2
Other Income				
Total Income	1,156.5	1,086.2	1,267.9	1,217.4
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	35.3	39.7	35.2	35.7
Civilian Personnel	273.9	281.5	282.1	308.6
Travel and Transportation of Personnel	8.8	10.6	11.0	11.2
Material & Supplies (Internal Operations	86.6	101.7	130.5	131.1
Equipment	32.7	23.6	26.2	26.6
Other Purchases from NWCF	1.1	2.1	5.1	5.3
Transportation of Things	1.4	1.9	1.9	2.0
Depreciation - Capital	2.3	1.3	1.6	2.2
Printing and Reproduction	.1	.1	.3	.3
Advisory and Assistance Services	4.4	1.9	3.0	2.5
Rent, Communication & Utilities	17.7	13.0	18.4	19.3
Other Purchased Sevices	663.5	672.9	634.7	651.7
Total Expenses	1,127.9	1,150.3	1,150.1	1,196.6
Work in Process Adjustment	.0	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	1,127.9	1,150.3	1,150.1	1,196.6
Operating Result	28.6	-64.1	117.8	20.8
Less Surcharges	-14.6	.0	-65.7	-20.8
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	14.0	-64.1	52.1	.0
Other Changes Affecting AOR	11.6	.0	.0	.0
Accumulated Operating Result	12.0	-52.1	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
COMSC / COMSC

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	1,165.7	1,086.2	1,267.9	1,217.4
a. Orders from DoD Components	1,162.2	1,085.5	1,267.1	1,216.7
Department of the Navy	1,144.2	1,052.4	1,213.1	1,158.1
O & M, Navy	1,135.4	982.1	1,204.7	1,146.4
O & M, Marine Corps	.0	.0	.0	.0
O & M, Navy Reserve	.0	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	.0	.0	.0	.0
Weapons Procurement, Navy	.0	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	7.1	69.5	7.6	9.2
Other Procurement, Navy	-.1	.8	.8	2.5
Procurement, Marine Corps	.0	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	-.2	.0	.0	.0
Military Construction, Navy	.0	.0	.0	.0
Other Navy Appropriations	1.9	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	.0	.0	.0	.0
Army Operation & Maintenence	.0	.0	.0	.0
Army Res, Dev, Test, Eval	.0	.0	.0	.0
Army Procurement	.0	.0	.0	.0
Army Other	.0	.0	.0	.0
Department of the Air Force	16.4	15.1	21.6	21.5
Air Force Operation & Maintenence	16.4	15.1	21.6	21.5
Air Force Res, Dev, Test, Eval	.0	.0	.0	.0
Air Force Procurement	.0	.0	.0	.0
Air Force Other	.0	.0	.0	.0
DOD Appropriation Accounts	1.6	18.0	32.4	37.1
Base Closure & Realignment	.0	.0	.0	.0
Operation & Maintence Accounts	.0	.0	.0	.0
Res, Dev, Test & Eval Accounts	.0	.0	.0	.0
Procurement Accounts	.0	.0	.0	.0
DOD Other	1.6	18.0	32.4	37.1
b. Orders from NWCF Business Area	2.8	.8	.8	.8
c. Total DoD	1,165.0	1,086.2	1,267.9	1,217.4
d. Other Orders	.7	.0	.0	.0
Other Federal Agencies	.7	.0	.0	.0
Foreign Military Sales	.0	.0	.0	.0
Non Federal Agencies	.0	.0	.0	.0

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
COMSC / COMSC

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	73.3	82.4	82.4	82.4
3. Total Gross Orders	1,239.0	1,168.7	1,350.3	1,299.8
4. Funded Carry-Over **	82.4	82.4	82.4	82.4
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	1,156.5	1,086.2	1,267.9	1,217.4

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

ADJUSTED CARRYOVER	82.2	82.2	82.2	82.2

0004445

FY 1998/1999 PLANNING BUDGET
Changes in the Costs of Operation
Military Sealift Command/Transportation
Date: Congressional Submission
(Dollars in Millions)

	Expenses
FY 1996 Actual:	1,127.9
FY 1997 Estimate in President's Budget:	1,179.2
Estimated Impact in FY 1997 of Actual FY 1996 Experience:	0.0
Pricing Adjustments:	
a. FY 1996 Pay Raise	0.0
(1) Civilian Personnel	0.0
(2) Military Personnel	0.0
b. Annualization of Prior Year Pay Raises	0.0
(1) Civilian Personnel	0.0
(2) Military Personnel	0.0
c. Fuel	0.0
d. Supplies	0.0
e. General Purchase Inflation	0.0
Program Changes (list) as appropriate	
a. DLRs	0.0
b. Manning	0.0
c. Depot Maintenance	0.0
d. Commercial Augmentation	0.0
e. Military Augmentation	0.0
f. Flying Hour Change	0.0
g.Other	
Mars/San Diego conversion cancelled	(1.1)
Decrease in time charter/reimb/ workload	(1.6)
Deferred M&R from FY 96	14.5
Reengineering/reinvention costs	4.4
Early turnover of USNS Mt Baker	2.5
Additional projected CIVMOD costs	15.5
Early inactivation of Range Sentinel	(1.2)
Delayed conversion of the Kiska	(35.0)
Cancellation of T-LKA program	(15.6)
Reduction of Time Charters	(2.9)
Butte conversion cancelled	(8.4)
FY1997 Current Estimate:	1,150.3
Pricing Adjustments:	
a. FY 1998 Pay Raise	
(1) Civilian Personnel	2.2
(2) Military Personnel	0.0
b. Annualization of Prior Year Pay Raises	
(1) Civilian Personnel	5.3
(2) Military Personnel	0.0
c. Fuel	16.4
d. Supplies	2.2
e. DLRs	0.0
f. General Purchase Inflation	15.7
Productivity Initiatives & Other Efficiencies:	
a.	0.0
Program Changes:	
a. DLRs	0.0
b. Manning	0.0
c. Depot Maintenance	0.0
d. Commercial Augmentation	0.0
e. Military Augmentation	0.0
f. Flying Hour Change	0.0

FY 1998/1999 PLANNING BUDGET
Changes in the Costs of Operation
Military Sealift Command/Transportation
Date: Congressional Submission
(Dollars in Millions)

	Expenses
Program Changes:	
g. Other	
Increase in M&R	3.4
Decrease in time charters	(1.3)
Activation of Mt Hood/Santa Barbara	3.8
Activation of MPF-E and MCDS	7.1
AMSEA contract Renagotiation	(18.0)
Two T-AE (Mt Baker/Shasta) FOS	33.1
USNSTriumph/Assurance reactivation	4.4
Three less T-AE conversions	(52.2)
USNS Waters full year FOS	0.4
USNS Henson Delivery	4.2
Inact two SMS ships during FY 97	(9.6)
Inactivation of Range Sentinel and Kane	(2.5)
T-AO/T-AFS/T-AE Deep ROS	(11.6)
Depreciation	0.3
Deactivation of USNS WYMAN	(5.5)
Reallocation of G&A between "T" and "N"	2.0
FY 1998 Estimate:	1,150.1
Pricing Adjustments:	
a. FY 1999 Pay Raise	
(1) Civilian Personnel	2.3
(2) Military Personnel	0.0
b. Annualization of Prior Year Pay Raises	
(1) Civilian Personnel	4.1
(2) Military Personnel	0.0
c. Fuel	(4.9)
d. Supplies	0.6
e. DLRs	
f. General Purchase Inflation	14.1
Productivity Initiatives & Other Efficiencies:	
a.	0.0
Program Changes:	
a. DLRs	
b. Manning	
c. Depot Maintenance	
d. Commercial Augmentation	
e. Military Augmentation	
f. Flying Hour Change	
g. Other	
Inactivation two T-ATF	(1.4)
USNS Mt Baker/Shasta full year FOS	17.4
USNS Mt Hood/Santa Barbara ROS vice CIVMOD	12.3
USNS Henson full year FOS	1.5
USNS Impecccable delivery	4.0
USNS Assurance full year FOS	4.3
Increase in Time Charters/ Reimb.	8.8
Decrease in OPTEMPO/M&R	(12.8)
MPF-E & MCDS full year OPS	10.5
AMSEA contract renegotiation	(7.0)
SCN (CIVMOD/PSA/Outfitting T-AE)	(7.3)
FY 1999 Estimate:	1,196.6

Business Area Capital Investment Summary
Component: Military Sealift Command
Business Area: Transportation
Date: Congressional Submission
($ in Millions)

Line Number	Item Description	FY 1996 Qty	FY 1996 Total Cost	FY 1997 Qty	FY 1997 Total Cost	FY 1998 Qty	FY 1998 Total Cost	FY 1999 Qty	FY 1999 Total Cost
	Equipment								
	Replacement								
	Productivity								
	New Mission								
	Environmental Compliance								
	Sub-total	0	0.0	0	0.0	0	0.0	0	0.0
	ADPE & Telecomm								
	Computer Hardware (Production)								
C001	APM		0.7						
C002	TDMS		0.1						
C003	LAN		1.4						
	Computer Software (Operating)								
	Telecommunications								
	Other Communications and Telecommunications Support Equipment								
	Sub-total	0	2.2	0	0.0	0	0.0	0	0.0
	Software Development		2.4		1.3		1.2		0.5
C004	Systems		2.0		1.0		0.9		0.5
C005	LAN		0.3						
C006	TDMS		0.1		0.3		0.3		
C007	Minor Construction - APM		0.0						
	Total	0	4.6	0	1.3	0	1.2	0	0.5

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION
(Dollars in Thousands)

A. Budget Submission
FY 1998/1999 Planning Budget - Congressional

B. Component/Business Area/Date	C. Line No. & Item Description	D. Activity Identification
Military Sealift Command/Transportation/ February 1997	C001 APM	

		FY 1996		FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	**Qty**	**Unit Cost**	**Total Cost**	**Qty**	**Unit Cost**	**Total Cost**	**Qty**	**Unit Cost**	**Total Cost**	**Qty**	**Unit Cost**	**Total Cost**
ADPE		Varies	738									
Total	0		738	0		0	0		0	0		0

Narrative Justification:

MSC began its reinvention initiatives last year. As a result, MSC is consolidating its civmar personnel functions as an Afloat Personnel Management (APM) Center. Although the above requirement was not identified during the FY 1997 Congressional Submission, through a realignment of priorities. MSC has been able to absorb cost.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)	A. Budget Submission FY 1998/1999 Planning Budget - Congressional
B. Component/Business Area/Date: Military Sealift Command/Transportation/ February 1997	C. Line No. & Item Description: C002 TDMS
	D. Activity Identification

		FY 1996		FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADPE		Varies	37									
Total	0		37	0		0	0		0	0		0

Narrative Justification:

TDMS equipment provides a secure physical archive and replaces the existing manual, labor intensive, paper based system that has a high risk of loss of critical material due to age and handling.

C0042

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION
(Dollars in Thousands)

A. Budget Submission
FY 1998/1999 Planning Budget - Congressional

B. Component/Business Area/Date	C. Line No. & Item Description	D. Activity Identification
Military Sealift Command/Transportation/ February 1997	C003 LAN	

		FY 1996		FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	**Qty**	**Unit Cost**	**Total Cost**	**Qty**	**Unit Cost**	**Total Cost**	**Qty**	**Unit Cost**	**Total Cost**	**Qty**	**Unit Cost**	**Total Cost**
ADPE		Varies	1,429									
Total	0		1,429	0		0	0		0	0		0

Narrative Justification:

As a result of an IG audit, it was determined that all LAN related procurements should be obtained with investments vice expense funding. Accordingly, the able represents MSC requirements to implement LANS at all offices, area commands, and headquarters. Equipment includes servers, micros, printers, etc.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)										A. Budget Submission FY 1998/1999 Planning Budget - Congressional		
B. Component/Business Area/Date: Military Sealift Command/Transportation/ February 1997				C. Line No. & Item Description: C004 Systems						D. Activity Identification		
		FY 1996		FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software Development			1,959			1,000			900			500
Total	0		1,959	0		1,000	0		900	0		500

Narrative Justification:

All systems operate on existing MSC or NCTS computers. All funds are for system design, test, implementation, documentation, and user training.

Certain systems providing ship schedule/voyage management and storage/archiving/distribution of ship technical date (drawings/technical manuals) are mission critical.

Various modules integrate existing worldwide procurement system with developing/deploying financial system; this ensures validation of accounting data at time of origination, and tracking of both procurement and funds control from obligation through payment.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)										A. Budget Submission FY 1998/1999 Planning Budget - Congressional		
B. Component/Business Area/Date: Military Sealift Command/Transportation/ February 1997				C. Line No. & Item Description: C005 LAN						D. Activity Identification		
		FY 1996		FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software		Varies	274									
Total	0		274	0		0	0		0	0		0

Narrative Justification:

As a result of an IG audit, it was determined that all LAN related procurements should be obtained with investments vice expense funding. Accordingly, the able represents MSC requirements to implement LANS at all offices, area commands, and headquarters. Software includes such items as Oracle and Banyan.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)										A. Budget Submission FY 1998/1999 Planning Budget - Congressional		
B. Component/Business Area/Date: Military Sealift Command/Transportation/ February 1997				C. Line No. & Item Description: C006 TDMS						D. Activity Identification		
		FY 1996		FY 1997			FY 1998			FY 1999		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software Development		Varies	138		Varies	260		Varies	285			
Total	0		138	0		260	0		285	0		0

Narrative Justification:

The Technical Data and Management System (TDMS) provides CALS and industry compatibility. TDMS provides electronic storage, import, export, revision, reproduction, and distribution of MSC technical data for global engineering and logistics operations.

Department of the Navy - Defense Business Operations Fund
Transportation/ Military Sealift Command
CAPITAL BUDGET EXECUTION
(dollars in millions)
FY 1997

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
Equipment (non-ADPE/TEL):				
Subtotal - Equipment				
ADPE and Telecomm Equip				
Computer Hardware	1.3	(1.3)	0.0	All costs associated with LAN have been deleted
Subtotal - ADPE/TEL Equip	1.3	(1.3)	0.0	
Software Development:				
TDMS/Systems/LAN	1.5	(0.2)	1.3	All costs associated with LAN have been deleted
Subtotal - Software Develop	1.5	(0.2)	1.3	
Minor Construction:				
	0.0		0.0	
Subtotal - Minor Construction	0.0	0.0	0.0	
TOTAL CAPITAL INVESTMENT	2.8	(1.5)	1.3	

DEPARTMENT OF THE NAVY
NAVAL COMPUTER AND TELECOMMUNICATIONS STATIONS
NAVY WORKING CAPITAL FUND

Activity Group Functions: The mission of the Naval Computer and Telecommunications Station (NAVCOMTELSTA) is to provide regional communication and automated information systems (AIS) services to customers; to manage and direct remote facilities, as required; to provide local Information Services (IS) support in coordination with the regional center; and to design, develop, and maintain standard Navy automated information systems. NAVCOMTELSTAs are Base Level Computing IS service centers which provide IS support to a wide range of DOD customers.

Activity Group Composition:

ACTIVITIES	LOCATION
NAVCOMTELSTA Washington	Washington, D.C.
NAVCOMTELSTA Pensacola	Pensacola, Florida
NCTAMS LANT Norfolk	Norfolk, Virginia
NAVCOMTELSTA San Diego	San Diego, California
NAVCOMTELSTA Jacksonville	Jacksonville, Florida
NCTAMS EASTPAC	Pearl Harbor, Hawaii

Budget Highlights: Significant issues regarding FY 1996, FY 1997, FY 1998, and FY 1999 are as follows:

o The NAVCOMTELSTA submission reflects the disestablishment and closure of the Naval Computer and Telecommunications Detachment, San Francisco.

o The Conference Report on the FY 1997 DOD Appropriations Act directed the Navy to transfer the operations and control of Naval Computer and Telecommunications Station New Orleans from COMNAVCOMTELCOM to the Naval Reserve Forces and to continue DBOF financing. The Commander, Naval Reserve Force took operational control of the Naval Computer and Telecommunications station, New Orleans, effective 10 November 1996. This submission reflects full transfer in FY 1998 and out.

DEPARTMENT OF THE NAVY
NAVAL COMPUTER AND TELECOMMUNICATIONS STATIONS
NAVY WORKING CAPITAL FUND
Summary of Operations

Financial Profile

	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	$305.9	$135.2	$134.1	$120.2
Cost of Goods Sold ($ in M)	$311.2	$145.8	$120.7	$118.4
Cash Surcharge	$ 0.0	$ 0.0	+$ 6.4	+$ 1.8
Net Operating Results	-$ 6.5	-$10.6	+$ 7.0	+$ 0.0
Accumulated Operating Results	+$ 7.5	-$ 7.0	+$ 0.0	+$ 0.0

Decline in operating costs between FY 1998 and FY 1999 reflects workload and operating cost reductions caused by functional transfer of NCTS New Orleans to Commander, Naval Reserve Force.

Workload

	FY 1996	FY 1997	FY 1998	FY 1999
Labor Hours	1,562,769	1,425,879	1,415,295	1,413,211

The reductions in total billable (stabilized and non-stabilized) labor hours are associated with the anticipated decrease in workload requirements.

Customer Rate Changes

	FY 1996	FY 1997	FY 1998	FY 1999
Stabilized Rate	$47.59	$43.34	$71.96	$50.47
Change From Prior Year		-8.9	+66.0	- 29.9

Percent change in customer rate in FY 1998 reflects removal of a negative AOR in FY 1997 rates. FY 1998 and FY 1999 rates also include a cash surcharge of $6.4M in FY 1998 and $1.8M in FY 1999.

Unit Costs

	FY 1997	FY 1998	FY 1999
Direct Labor Hour	$ 43.33	$ 47.82	$ 49.06

The direct labor hour unit cost is calculated by dividing total stabilized costs by direct billable labor hours. The increase in

unit cost between FY 1997 and FY 1998 reflects a reduction in direct labor hours due to further transition of direct contractor effort to direct cite funding, as well as an increased inflation factor and approved pay raises. The decrease in unit cost between FY 1998 and FY 1999 is primarily due to an increased inflation factor and approved pay raises.

Staffing

	FY 1996	FY 1997	FY 1998	FY 1999
Civilian End Strength	1,193	1,088	1,088	1,086
Civilian Workyears	1,181	1,083	1,080	1,083
Military End Strength	49	40	29	29
Military Workyears	49	39	29	29

Decrease in military personnel reflects billet reduction (7 E/S) as a result of the NCTS New Orleans transfer to NAVRESFOR. After the merge of the two workforces, these billets were not required. The residual reduction of 4 military personnel end strength reflects continued sizing to actual requirements.

Carryover

The NAVCOMTELSTAs have begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($M)	$37.9	$15.8	$11.3	$3.0
Months of Carryover	1.2	1.2	.8	.2

DEPARTMENT OF THE NAVY
NAVAL COMPUTER AND TELECOMMUNICATIONS STATIONS
NAVY WORKING CAPITAL FUND
Summary of Operations

Capital Budget Authority

	FY 1997	FY 1998	FY 1999
Authority:			
Equipment	.05	1.0	-
Major Construction (MILCON)	-	-	-
Minor Construction	-	-	-
Management Information Systems	-	-	-
Major Repairs	-	-	-
Obligations	.05	1.0	-
Total Outlays	.05	-	1.0
Depreciation	.2	.2	.5

Headquarters Costs

	FY 1997	FY 1998	FY 1999
Civilian Personnel	.6	.6	.6
Travel/Equip/Materials/Supplies	.1	.1	.1
Total	.7	.7	.7

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NCTC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	305.3	134.7	127.1	117.8
Surcharges	.0	.0	6.4	1.8
Depreciation excluding Major Constructio	.6	.6	.6	.6
Other Income				
Total Income	305.9	135.2	134.1	120.2
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	2.2	1.9	1.0	1.1
Civilian Personnel	69.2	63.8	65.7	66.6
Travel and Transportation of Personnel	3.1	1.9	1.9	1.9
Material & Supplies (Internal Operations	3.7	2.2	2.2	2.2
Equipment	138.9	12.2	12.5	12.5
Other Purchases from NWCF	9.2	4.4	3.5	3.6
Transportation of Things	.3	.3	.3	.3
Depreciation - Capital	.6	.6	.6	.6
Printing and Reproduction	.4	.7	.7	.7
Advisory and Assistance Services	31.7	5.0	2.5	2.5
Rent, Communication & Utilities	3.2	9.2	5.3	5.3
Other Purchased Sevices	48.0	43.6	24.5	21.2
Total Expenses	310.5	145.8	120.7	118.4
Work in Process Adjustment	.8	.0	.0	.0
Comp Work for Activity Reten Adjustment	-.2	.0	.0	.0
Cost of Goods Sold	311.2	145.8	120.7	118.4
Operating Result	-5.4	-10.6	13.4	1.8
Less Surcharges	.0	.0	-6.4	-1.8
Plus Appropriations Affecting NOR/AOR	-1.2	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-6.5	-10.6	7.0	.0
Other Changes Affecting AOR	.2	-4.0	.0	.0
Accumulated Operating Result	7.5	-7.0	.0	.0

BUSINESS AREA ANALYSIS
DEPARTMENT OF THE NAVY
NAVAL COMPUTER AND TELECOMMUNICATIONS COMMAND
SOURCE OF REVENUE
(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
1. New Orders	144.4	117.0	135.0	116.1
a. Orders from DoD Components	89.2	56.0	94.5	79.7
Department of the Navy	54.2	25.6	60.3	45.5
Operations and Maintenance, Navy	51.2	24.4	57.4	42.5
Operations and Maintenance, Marine Corps	0.4	0.3	0.4	0.4
O&M, Navy Reserve	0.2	0.2	0.2	0.2
O&M, Marine Corps Reserve	0.0	0.0	0.0	0.0
Aircraft Procurement, Navy	0.5	0.2	0.5	0.5
Weapons Procurement, Navy	0.0	0.0	0.0	0.0
Procurement of Ammunition, Navy/Marine Corps	0.0	0.0	0.0	0.0
Shipbuilding & Conversion, Navy	(0.1)	0.0	0.0	0.0
Other Procurement, Navy	1.3	0.0	1.3	1.3
Procurement, Marine Corps	0.0	0.0	0.0	0.0
Family Housing, Navy and Marine Corps	0.0	0.0	0.0	0.0
Research, Development, Test & Eval, Navy	0.4	0.3	0.4	0.4
Military Construction, Navy	0.1	0.0	0.0	0.0
Other Navy Appropriations	0.1	0.1	0.1	0.1
Other Marine Corps Appropriations	0.0	0.0	0.0	0.0
Department of the Army	11.5	9.6	11.2	11.2
Army Operation & Maintenance Accounts	11.1	9.3	10.9	10.9
Army Res, Dev, Test & Eval Accounts	0.3	0.3	0.3	0.3
Army Procurement Accounts	0.1	0.1	0.1	0.1
Army Other	0.0	0.0	0.0	0.0
Department of the Air Force	1.9	4.7	1.9	1.9
Air Force Operation & Maintenance Accounts	1.8	4.6	1.8	1.8
Air Force Res, Dev, Test & Eval Accounts	0.1	0.1	0.1	0.1
Air Force Procurement Accounts	0.0	0.0	0.0	0.0
Air Force Other	0.0	0.0	0.0	0.0
DoD Appropriated Accounts	21.5	16.2	21.0	21.0
Base Closure and Realignment	0.0	0.0	0.0	0.0
Operation & Maintenance Accounts	12.9	9.0	12.6	12.6
Res, Dev, Test & Eval Accounts	0.9	0.8	0.9	0.9
Procurement Accounts	7.8	6.5	7.6	7.6
DoD Other	0.0	0.0	0.0	0.0
b. Orders from DBOF Business Areas	38.2	35.5	24.0	19.9
c. Total DoD	127.4	91.5	118.5	99.6
d. Other Orders	16.9	25.5	16.5	16.5
Other Federal Agencies	16.9	25.5	16.5	16.5
Foreign Military Sales	0.0	0.0	0.0	0.0
Non Federal Agencies	0.0	0.0	0.0	0.0
2. Carry-In Orders	185.3	50.8	32.5	33.5
3. Total Gross Orders (available funding)	329.7	167.8	167.6	149.6
4. Funded Carry-Over **	50.8	32.5	33.5	29.4
5. Less Passthrough	(1.2)	0.0	0.0	0.0
6. Total Gross Sales	280.1	135.3	134.1	120.2
Adjusted Carryover	39.9	15.8	11.3	3.0

** Carryover data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

000460

Changes in the Costs of Operation
NAVAL COMPUTER AND TELECOMMUNICATIONS STATIONS
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: INFORMATION SERVICES
(Dollars in Millions)

		Expenses
FY 1996 Estimate Actual		$310.5
FY 1997 Estimate in President's Budget:		169.6
Estimated Impact in FY 1997 of Actual FY 1996 Experience		+.3
Pricing Adjustments:		
Program Changes:		---
Transfer of NCTS New Orleans to NAVRESFOR effective November 1996		- 24.1
FY 1997 Current Estimate		145.8
Pricing Adjustments:		
Annualization of Prior Year Pay Raises		+ .5
FY 1998 Pay Raise		+ 1.2
Civilian Personnel	+ 1.1	
Military Personnel	+ .1	
Fund Price Changes		- .7
General Purchase Inflation		+ 1.0
Other Price changes		+ 1.7
Productivity Initiatives and Other Efficiencies:		---

Exhibit Fund-2

Changes in the Cost of Operation
NAVAL COMPUTER AND TELECOMMUNICATIONS STATIONS
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: INFORMATION SERVICES
(Dollars In Millions)

	Expenses
Program Changes:	
Decrease in other contracts and other costs reflect elimination of supplemental resources required to accelerate the reduction of the activity group's carryover workload and reduced overhead costs.	-28.8
Other Changes:	---
FY 1998 Estimate	120.7
Pricing Adjustments:	
Annualization of Prior Year Pay Raises	+ .4
FY 1999 Pay Raise	+1.1
Civilian Personnel +1.1	
Military Personnel	
Fund Price Changes	---
General Purchase Inflation	+ .6
Other Price Changes	---
Productivity Initiatives and Other Efficiencies	---
Program Changes:	
Reductions in Civilian Personnel, Other Contracts, and Other Costs reflects continuation of the Activity Group's initiative to reduce overhead in accordance with DON direction.	-4.4
FY 1999 Estimate	118.4

Exhibit Fund-2

BUSINESS AREA CAPITAL INVESTMENT SUMMARY
NAVCOMTELSTAs
Information Services / CDA
Feb-97
($ in Millions)

Line #	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	Non ADPE Equipment								
001	Non ADPE Equipment (Replacement)					1	0.238		
002	Non ADPE Equipment (Productivity)								
003	Non ADPE Equipment (New Mission)								
004	Non ADPE Equipment (Environmental Compl)								
	Subtotal Non ADPE Equipment		0.000		0.000	1	0.238		0.000
	ADPE Equipment								
005	ADPE Equipment (Comp Hardware-Production)					1	0.735		
006	ADPE Equipment (Comp Software-Oper System)								
007	ADPE Equipment (Telecommunications)								
008	ADPE Equipment (Other Comp/Telcom Sup Eq)			1	0.049				
	Subtotal ADPE Equipment		0.000	1	0.049	1	0.735		0.000
009	Software Development								
	Subtotal Software Development		0.000		0.000		0.000		0.000
010	Minor Construction								
	Subtotal Minor Construction		0.000		0.000		0.000		0.000
	Grand Total Capital Purchase Program		0.000	1	0.049	2	0.973		0.000

EXHIBIT FUND-9A

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION ($ In Thousands)							A. Budget Submission FY 1998/1999 PRESIDENT'S BUDGET		
B. Component/Business Area/Date NAVCOMTELSTAs/Information Services (CDA)/ Feb-97			C. Line No. & Item Description 008 Material Management - CMIS				D. Activity Identification NCTS, PENSACOLA		
	FY 1996			FY 1997			FY 1998		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
END ITEM				1	0.049	0.049			

Narrative Justification

Various Navy activities will acquire material management hardware equipment to enhance connectivity to the Configuration Management Information System (CMIS). This hardware will support the deployment of Material Management applications at various Navy locations. Once implementation of the systems is complete, inventories, rework and labor requirements will be reduced. CMIS manages system configuration data both within and between program offices and System Commands. The deployment of CMIS will enhance the accuracy of configuration data delivered through the system to faciliate the implementation of advanced readiness based sparing models, which will result in less investment for inventory spares while maintaining and possibly improving fleet readiness. A more streamlined, accurate flow of configuration data through the CMIS application will reduce the logistics infrastructure and workforce.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION ($ in Thousands)							A. Budget Submission FY 1998/1999 PRESIDENT'S BUDGET		
B. Component/Business Area/Date NAVCOMTELSTAs/Information Services (CDA)/ Feb-97			C. Line No. & Item Description 001 Fire Protection System				D. Activity Identification NCTAMSLANT (N68057)		
	FY 1996			FY 1997			FY 1998		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
END ITEM							1	0.238	0.238

Narrative Justification

Building V-53 is a large three story building of fire-realstive construction and erected in the 1940's for a warehouse type occupancy. In recent years the building has been converted mainly into an office facility but still has some open storage areas. Office areas are constructed of numerous partitions and suspended tile ceilings. The original building was protected by an automatic wet pipe sprinkler system. Presently, approximately 50 percent of the building is not protected with sprinklers due to office construction and existing unsprinklered areas. The entire building may be completely sprinklered by extending the existing sprinkler systems into the unsprinklered areas.

Building V-53 is provided with an inadequate fire alarm evacuation system. The existing fire alarm system has been extended numerous times into the constructed office areas which has resulted in overload notification alarm circuits and alarms sounding weakly or not at all in remote areas. Additional alarm notification sounding devices are needed in many areas of the building to adequately alert occupants of a fire. The existing fire alarm system requires extensive upgrading to be considered adequate.

The existing doors to the fire-rated stair enclosures are not approved fire-rated doors as required by building and fire codes. Some of these doors have excessive glass area and lack adequate protection for the required stairway exits.

Conclusions: The automatic sprinkler system should be extended to properly protect all areas that are currently unsprinklered. The existing building fire alarm system should be replaced to provide a complete fire alarm system throughout the building. The existing unapproved doors to stairways should be replaced with approved fire doors. Due to unsafe conditions, this puts the life and safety potential of almost 400 people in jeopardy.

Building V-53 does not comply with current Navy and Life Safety Code Criteria; reference DOD MIL-HDBK-100B, paragraph 6.1.4.2.;7.2.1.;(C);2.5.1 and 2.5.2.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION ($ in Thousands)							A. Budget Submission FY 1998/1999 PRESIDENT'S BUDGET		
B. Component/Business Area/Date NAVCOMTELSTAs/Information Services (CDA)/ Feb-97				C. Line No. & Item Description 005 Local Area Network (LAN) Upgrade			D. Activity Identification NCTAMSLANT (N68057)		
	FY 1996			FY 1997			FY 1998		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
END ITEM							1	0.735	0.735

Narrative Justification

The NCTAMSLANT LAN was initially installed in 1986 using IBM 4MB Token Ring technology. The bandwidth provided by the 4MB token ring backbone and 10MB ethernet workgroup segments is not sufficient to support today's high traffic volume. NCTAMSLANT is experiencing network failure do to age of network components and are faced with increased network maintenance cost. Network failures have increased 15 percent over the last year due to congestion and age of network components.

Installing a intelligent switched based 100Mbps network backbone with ATM protocol will increase network capacity tenfold. It will allow use of centralized network management software to pinpoint and quickly isolate network malfunctions. The proposed upgrade will create a standardized topology and cable plant.

If the NCTAMSLANT LAN is not upgraded than new client/server applications, which require more bandwidth, will further congest and tax existing resources. Management of the mechanical-based token ring infrastructure and 10Base-2 ethernet environment is very labor intensive, fault isolation is difficult, and the system is not capable of supporting known future requirements.

An economic analysis has been performed. Implementation of the capital investment will realize a cost savings of $665,000 over the status quo.

OFFICE OF THE SECRETARY OF DEFENSE & OFFICE OF MANAGEMENT AND BUDGET

Defense Business Operations Fund

INFORMATION TECHNOLOGY/NAVCOMTELSTAs

CAPITAL BUDGET EXECUTION

(Dollars in Millions)

FY 1997

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
Equipment (non-ADPE/TEL):	0.000	0.000	0.000	
Subtotal - Equipment	0.000	0.000	0.000	
ADPE and Telecomm Equip:	0.000	0.049	0.049	Transfer of funding responsibility to end user.
Subtotal - ADPE/TEL Equip	0.000	0.049	0.049	
Software Development:	0.320	-0.320	0.000	Project no longer required.
Subtotal - Software Develop	0.320	-0.320	0.000	
Minor Construction:	0.000	0.000	0.000	
Subtotal - Minor Construction	0.000	0.000	0.000	
TOTAL CAPITAL INVESTMENT	**0.320**	**-0.271**	**0.049**	

EXHIBIT FUND-9D

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
NAVY/INFORMATION SERVICES/FMSO
FEBRUARY 1997

Activity Group Functions:

The Navy Fleet Material Support Office (FMSO) is a progressive, full service software design agency with over 30 years of proven experience providing high quality, on time products and services to customers, under the management of the Naval Supply Systems Command (NAVSUP). FMSO possesses a multi-talented workforce, highly experienced in state of the art systems development using information technology to design, develop, maintain, and environmentally support business systems.

Customer services provided include system design, analysis, programming, business process and data modeling, integration with interfacing information systems, documentation, configuration management, customer system training and others. FMSO operates as a Fee for Service agency in the Navy Working Capital Fund, Information Services Activity Group. As such, FMSO is responsible for the development, implementation and maintenance of Automated Information Systems (AIS) for the business areas required by customers. Customers include Department of Defense (DOD), Non-DOD, other Federal, and authorized foreign military sales; specific customers include NAVSUP and all of its field activities, the Defense Finance and Accounting Service Cleveland Center, the Joint Logistics Systems Center (JLSC), the Defense Information Systems Agency, the Strategic Systems Project (SSP), the Royal Saudi Naval Forces, the Defense Logistics Agency, and others. FMSO is the first Navy activity to achieve a Capability Maturity Model (CMM) Level III rating. The CMM rating certifies that FMSO is in a select group of software agencies, since fewer than ten percent of all activities assessed have a rating of III or higher.

Activity Group Composition:
Navy Fleet Material Support Office
Mechanicsburg, PA 17055

Financial Profile	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	91.8	73.8	72.0	74.1
Cost of Goods Sold ($ Millions)	101.8	78.1	71.1	73.0
Cash Surcharge	0	0	+3.7	+1.1
Net Operating Results	-10.0	-4.2	- 2.9	0
Accumulated Operating Results	7.1	2.9	0	0

Cost of goods sold:

(a) The 23.3% decrease in cost from $101.78M in FY 1996 to $78.07M in FY 1997 is due to: price changes composed of $1,264K in pay raises and $1,002K in approved non labor inflation; Program Changes of -$675K for civilian attrition, and $1,185K in increased other direct costs/Trident transfer; and a change in prior year (PY) and current year (CY) other direct costs (ODCs) of -$26M, related to the incorrect reporting of reimbursable other direct costs as discussed under the Net Operating Result/Accumulated Operating Result section.

(b) The decrease between FY 1997 and FY 1998 is a net change of -$8M in PY ODCs and approved price increases. The increase between FY 1998 and FY 1999 is attributed to pricing increases.

Overhead Rate:

The labor overhead rate is 22.0% of total labor cost in FY 1996 and declines to 18.5% in FY 1997. This rate for both FY 1998 and FY 1999 is 18.6%.

Net Operating Result/Accumulated Operating Result:

FMSO incorrectly recorded other direct costs/other direct costs' reimbursements in their budget execution reports through the end of FY 1995. This adjustment is reflected in the Exhibit Fund 14 - Other Changes Affecting AOR value. The adjustment is further supported by the Defense Business Management System accounting reports for expenses and revenue. The Net Operating Result (NOR) of -$9.95M in FY 1996 is composed of two elements, the planned use of $1.4M of AOR and $8.5M in prior year costs, which brings the adjusted FY 1995 Accumulated Operating Result (AOR) of $17.1M to $7.09M. For FY 1997, the effect of PY ODC processing results in an NOR of -$4.23M and brings the AOR to $2.86M. The AOR for both FY 1998 and FY 1999 is projected to be zero.

Workload:

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hours	1,204,715	1,242,945	1,242,945	1,242.945

Direct Labor hours at FMSO reflect the hours worked against a customer's project. In general, a direct workyear has 1,650 hours of direct billable support; hours spent in a leave status, training, collateral duties, other non-customer support or general administrative support are not charged directly to the customer but recovered in the rate. The increase in direct hours from FY 1996 to FY 1997 is due to the inclusion of the Trident project as direct billable vs. previously budgeted other direct costs.

Performance Indicators:

	FY 1996	FY 1997	FY 1998	FY 1999
Timeliness	95%	95%	95%	95%
Customer Satisfaction	85%	85%	85%	85%
Quantity	96%	98%	98%	98%

Performance Indicator: These measures are negotiated with our customers during the Service Level Agreement process. Timeliness of 95% means that 95% of the time we deliver on or before the required customer due date. Quantity of 96% means that we delivered the product 96% of the time within the quarter of the fiscal year required. Customer satisfaction surveys are sent to the actual users of the systems and data is tallied.

Customer Rate Changes:

	FY 1998	FY 1999
Percent Change in Customer Rate	6.77%	2.55%

The increase in the customer rate is due to pricing changes, plus the effect of the cash surcharge assessment.

Unit Costs:

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hour	84.485	62.810	57.235	58.731

Unit Cost is measuring total costs divided by direct billable labor hours. The 84.485 unit cost for FY 1996 is due to the PY ODC activity in that year. FY 1997 has $13M less in PY ODC activity and FYs 1998 and 1999 show more uniform unit costs. The unit cost increase between FY 1998 and FY 1999 is attributed to application of approved labor pay raises and non labor inflation rates.

Stabilized Rate:

	FY 1996	FY 1997	FY 1998	FY 1999
Direct Labor Hour	48.17	48.97	52.29	53.62

Stabilized Rate: The 1.7% increase between FY 1996 and FY 1997 is the result of: shifting Trident from ODCs to direct billable, the application of the pay raise and the non labor price escalation and the utilization of a favorable PY gain of $1.028M. The changes between FYs 1997, 1998 and 1999 are due to approved pay raises and non labor price escalation rates, the cash surcharge assessment in FYs 1998 and 1999 and the application in FY 1998 of a favorable PY gain of $2.86M.

Staffing:	FY 1996	FY 1997	FY 1998	FY 1999
Civilian End Strength	874	873	873	873
Civilian Work Years	861	873	873	873
Military End Strength	18	19	19	19
Military Work Years	18	19	19	19

Staffing: The decrease in civilian end strength from FY 1996 to FY 1997 is caused by the FY 1997 attrition of 12 people. Military end strength/workyears are level at 19 for years 1997 - 1999.

Carryover:

The FMSO has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($M)	$12.6	$6.7	$6.8	$6.9
Months of Carryover	1.6	1.1	1.1	1.1

Headquarters Cost:

	FY 1996	FY 1997	FY 1998	FY 1999
Cost of Management Headquarters ($ Millions)	0.180	0.180	0.184	0.188

Capital Budget Authority:

	FY 1996	FY 1997	FY 1998	FY 1999
ADP and Telecom (Millions)	0.478	0.503	0.500	0.500

Capital Budget Authority: The requested funding supports the following two programs:

a. Local Area Network Upgrade

FY 1996	FY 1997	FY 1998	FY 1999
$.338	$.383	$.500	$.500

Purpose: To update/upgrade the hardware and software used at FMSO which will improve response time and reduce maintenance costs by using technology improvements.

b. Management Information Systems Rehost

FY 1996	FY 1997	FY 1998	FY 1999
$.140	$.120	$.0	$.0

Purpose: Move mainframe computer work to a lower cost client/server environment.

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
FMSO / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	91.8	73.3	67.8	72.4
Surcharges	.0	.0	3.7	1.1
Depreciation excluding Major Constructio	.0	.5	.5	.6
Other Income				
Total Income	91.8	73.8	72.0	74.1
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	1.4	1.4	1.6	1.6
Civilian Personnel	44.7	51.8	53.6	55.1
Travel and Transportation of Personnel	.1	.2	.2	.3
Material & Supplies (Internal Operations	.4	.4	.5	.5
Equipment	1.5	.8	.7	.8
Other Purchases from NWCF	.4	.8	.8	.8
Transportation of Things	.0	.1	.1	.1
Depreciation - Capital	.0	.5	.5	.6
Printing and Reproduction	.1	.2	.2	.2
Advisory and Assistance Services	.0	.0	.0	.0
Rent, Communication & Utilities	.4	.3	.3	.3
Other Purchased Sevices	52.8	21.6	12.7	12.9
Total Expenses	101.8	78.1	71.1	73.0
Work in Process Adjustment	.0	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	101.8	78.1	71.1	73.0
Operating Result	-10.0	-4.2	.8	1.1
Less Surcharges	.0	.0	-3.7	-1.1
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-10.0	-4.2	-2.9	.0
Other Changes Affecting AOR	14.1	.0	.0	.0
Accumulated Operating Result	7.1	2.9	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
FMSO / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	90.8	69.4	73.4	74.4
a. Orders from DoD Components	7.4	9.8	9.8	10.7
Department of the Navy	7.4	9.8	9.8	10.7
O & M, Navy	7.4	9.8	9.8	10.7
O & M, Marine Corps	.0	.0	.0	.0
O & M, Navy Reserve	.0	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	.0	.0	.0	.0
Weapons Procurement, Navy	.0	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	.0	.0	.0	.0
Other Procurement, Navy	.0	.0	.0	.0
Procurement, Marine Corps	.0	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0	.0
Research, Dev., Test, & Eval., Navy	.0	.0	.0	.0
Military Construction, Navy	.0	.0	.0	.0
Other Navy Appropriations	.0	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	.0	.0	.0	.0
Army Operation & Maintenence	.0	.0	.0	.0
Army Res, Dev, Test, Eval	.0	.0	.0	.0
Army Procurement	.0	.0	.0	.0
Army Other	.0	.0	.0	.0
Department of the Air Force	.0	.0	.0	.0
Air Force Operation & Maintenence	.0	.0	.0	.0
Air Force Res, Dev, Test, Eval	.0	.0	.0	.0
Air Force Procurement	.0	.0	.0	.0
Air Force Other	.0	.0	.0	.0
DOD Appropriation Accounts	.0	.0	.0	.0
Base Closure & Realignment	.0	.0	.0	.0
Operation & Maintence Accounts	.0	.0	.0	.0
Res, Dev, Test & Eval Accounts	.0	.0	.0	.0
Procurement Accounts	.0	.0	.0	.0
DOD Other	.0	.0	.0	.0
b. Orders from NWCF Business Area	78.4	55.1	59.2	59.5
c. Total DoD	85.8	65.0	69.0	70.2
d. Other Orders	5.0	4.5	4.4	4.3
Other Federal Agencies	.0	.0	.0	.0
Foreign Military Sales	5.0	4.5	4.4	4.3
Non Federal Agencies	.0	.0	.0	.0

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
FMSO / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	18.5	17.5	13.1	14.6
3. Total Gross Orders	109.3	87.0	86.5	89.0
4. Funded Carry-Over **	17.5	13.1	14.6	14.8
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	91.8	73.8	72.0	74.1

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

Adjusted Carryover	12.6	6.7	6.8	6.9

CHANGES IN THE COSTS OF OPERATION
NAVY/INFORMATION SERVICES/FMSO
February 1997
($ in millions)

	Expenses
FY 1996 Actual	101.781
FY 1997 Estimate in President's Budget:	79.948
Pricing Adjustments:	
Program Changes:	
ODC Realignment	-9.800
PY Other Direct Costs	8.000
Misc Other	-0.074
FY 1997 Current Estimate:	78.074
Pricing Adjustments:	
Annualization of Prior Year Pay Raises	0.399
FY 1998 Pay Raise	
Civilian Personnel	1.361
Military Personnel	0.135
General Purchase Inflation	0.510
Program Changes:	
Other Direct Cost Reduction	-9.163
Training/Travel for Training	0.002
Supplies/Material	0.028
Real Property Maint	0.023
Equip Purchase	-0.069
Misc Other	-0.162
FY 1998 Estimate:	71.138

000475

CHANGES IN THE COSTS OF OPERATION
NAVY/INFORMATION SERVICES/FMSO
February 1997
($ in millions)

FY 1998 Estimate:	71.138
Pricing Adjustments:	
Annualization of Prior Year Pay Raises	0.386
FY 1998 Pay Raise	
Civilian Personnel	0.821
Military Personnel	0.024
General Purchase Inflation	0.325
Program Changes:	
Other Direct Cost Increase	0.245
Training/Travel for Training	0.009
Supplies/Material	0.016
Consulting Contract Costs	-0.124
Training/Tuition	0.034
Depreciation	0.088
Misc Other	0.042
FY 1999 Estimate:	73.004

030176

BUSINESS AREA CAPITAL INVESTMENT
NAVY/INFORMATION SERVICES/FMSO
February 1997
($ In Millions)

Line Number	Item Description	FY 96		FY 97		FY 98		FY 99	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	Equipment								
	- Replacement								
	- Productivity								
	- New Mission								
	- Environmental								
	- Compliance								
	ADP & Telecom		0.478		0.503		0.500		0.500
	Software Development								
	Minor Construction								
	TOTAL	0.000	0.478	0.000	0.503	0.000	0.500	0.000	0.500

Exhibit Fund-9a
Business Area Capital Investment Summary

($ in Thousands)

A. Budget Submission
FY98 President Budget

B. Component/Business Area/Date
Navy/Information Services/FMSO Jul 96

C. Line No. & Item Description
ADP & Telecom

D. Activity Identification

	FY 96			FY 97			FY 98			FY 99		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
1. LAN UPGRADE			**338**			**383**			**500**			**500**
Bridges to Routers												
Windows/Mice												
PCs												
Memory Upgrades												
O/A Software												
Superserver	1	250	250									
Office Automation Software	1	40	40	1	213	213						
Upgrade to Novel 4.01	1	48	48									
Install Bridge in 308				1	20	20						
Ethernet 16 port hubs				2	20	40						
Upgrade Repeaters				10	10	100						
Token Ring Cable				1	10	10						
2. MIS REHOST			**140**			**120**			**0**			**0**
Oracle SQL NET	600	0.098	59	1	55	55						
Upgrade Support	600	0.014	8	1	5	5						
FTP PC/TCP OnNet Version	400	0.158	63	1	60	60						
OnNet Support & Maintenance	400	0.024	10									
TOTAL			**478**			**503**			**500**			**500**

Narrative Justification:

1. UPGRADE LOCAL AREA NETWORK (LAN): The purpose of this initiative is to upgrade the hardware/software for the FMSO LAN to a basic configuration which should remain functional for the foreseeable future. This project is required to keep FMSO current with technology in order to efficiently operate.

2. MANAGEMENT INFORMATION SYSTEM/CLIENT SERVER: The purpose of this initiative is to move mainframe computer work to a client/server environment. This will allow us to start migrating our work from a mainframe development/maintenance environment to a less costly internal client server.

CAPITAL BUDGET EXECUTION
NAVY/INFORMATION SERVICES/FMSO
February 1997
($ in thousands)

FY 1996

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
LAN UPGRADE	338	0	338	
MIS REHOST	140	0	140	
Total Capital Investment	478	0	478	

FY 1997

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
LAN UPGRADE	383	0	383	
MIS REHOST	120	0	120	
Total Capital Investment	503	0	503	

FY 1998

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
LAN UPGRADE	500	0	500	
Total Capital Investment	500	0	500	

FY 1999

Title/Description	Original Request	Change	Revised Request	Explanation/Reason for Change
LAN UPGRADE	500	0	500	
Total Capital Investment	500	0	500	

DEPARTMENT OF THE NAVY
NAVAL RESERVE INFORMATION SYSTEMS OFFICE
NAVY WORKING CAPITAL FUND

Activity Group Functions:

The mission of NAVRESINFOSYSOFF is to provide data processing support and information system technology design and development for the Department of Defense, Department of the Navy, and Commander, Naval Reserve Force. Associated services provided to customers include network engineering/maintenance, Information Systems (IS) engineering/maintenance, micro-computer technology, IS/ADP security database systems and other IS related services, as required.

Activity Group Composition:

ACTIVITY	LOCATION
Naval Reserve Information Systems Office	New Orleans, Louisiana

Budget Highlights: Significant issues regarding FY 1998 and FY 1999 are as follows:

o The Conference Report on the FY 1997 DOD Appropriations Act directed the transfer of the Naval Computer and Telecommunications Station, New Orleans operations and control to the Commander, Naval Reserve Force.

o Effective 10 November 1996, operational control and reporting requirements were transferred to Naval Reserve Force as directed from the Commander, Naval Computer and Telecommunications Command.

DEPARTMENT OF THE NAVY
NAVAL RESERVE INFORMATION SYSTEMS OFFICE
NAVY WORKING CAPITAL FUND
Summary of Operations

Financial Profile:	FY 1997	FY 1998	FY 1999
Revenue	$20.2	$17.6	$16.4
Cost of Goods Sold ($ Millions)	$24.1	$16.7	$16.0
Cash Surcharge	$ 0.0	$ 0.9	$ 0.4
Net Operating Results	-$3.9	$ 0.9	$ 0.0
Accumulated Operating Results	$ 0.0	$ 0.0	$ 0.0

Decline in operating costs between FY 1997 and FYs 1998/1999 reflects workload reductions as NAVRESINFOSYSOFF concentrates on Reserve Force requirements.

Workload	FY 1997	FY 1998	FY 1999
Labor Hours	103,350	98,685	99,241

The decrease in labor hours between FY 1997 and FYs 1998/1999 reflects personnel reductions due to reduced workload as NAVRESINFOSYSOFF concentrates on Reserve Force requirements.

Customer Rate Changes:	FY 1997	FY 1998	FY 1999
Stabilized Rate	$43.34	$71.96	$50.47
Change from Prior Year		66.0	-29.9

FY 1998 rate includes a cash surcharge and a negative AOR adjustment. A cash surcharge of $942K in FY 1998 and $399K in FY 1999 are included in the customer rate charge.

Unit Costs	FY 1997	FY 1998	FY 1999
Direct Labor Hour	$ 43.54	$ 47.36	$ 49.37

The direct labor hour unit cost is calculated by dividing total stabilized costs by direct billable labor hours. The increase in unit cost between FY 1997 and FY 1998 reflects a reduction in direct labor hours due to further transition of direct contractor effort to direct cite funding, as well as an increased inflation factor and approved pay raises. The increase in unit cost

between FY 1998 and FY 1999 is primarily due to increased inflation factor and approved pay raises.

Staffing	FY 1997	FY 1998	FY 1999
Civilian End Strength	97	94	93
Civilian Workyears	97	94	92
Military End Strength	-0-	-0-	-0-
Military Workyears	-0-	-0-	-0-

The decrease in civilian end strength and workyears between FY 1997 and FYs 1998/1999 reflects personnel reductions due to reduced workload as NAVRESINFOSYSOFF concentrates on Reserve Force requirements.

Carryover

The NAVRESINFOSYSOFF has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

	FY 1996	FY 1997	FY 1998	FY 1999
Carryover Funding ($M)	$5.0	$1.8	$1.2	$2.2
Months of Carryover	1.4	1.0	0.9	1.6

NAVAL RESERVE INFORMATION SYSTEMS OFFICE
NAVY WORKING CAPITAL FUND
Summary of Operations

Capital Budget Authority	FY 1997	FY 1998	FY 1999
Authority:			
Equipment	0.04	-0-	-0-
Major Construction (MILCON)	-0-	-0-	-0-
Minor Construction	-0-	-0-	-0-
Management Information Systems	0.32	-0-	-0-
Major Repairs	-0-	-0-	-0-
Obligations	0.36	-0-	-0-
Total Outlays	0.36	-0-	-0-
Depreciation	0.02	0.02	0.02

Headquarters Costs	FY 1997	FY 1998	FY 1999
Civilian Personnel	$ .1	$ -0-	$ -0-
Travel/Equip/Materials/Supplies	-0-	-0-	-0-
Total	.1	-0-	-0-

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NRISO / NRISO

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	.0	20.2	16.7	16.0
Surcharges	.0	.0	.9	.4
Depreciation excluding Major Constructio	.0	.0	.0	.0
Other Income				
Total Income	.0	20.2	17.6	16.4
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	.0	.0	.0	.0
Civilian Personnel	.0	4.6	4.5	4.5
Travel and Transportation of Personnel	.0	.2	.2	.2
Material & Supplies (Internal Operations	.0	.0	.0	.0
Equipment	.0	7.6	2.9	2.2
Other Purchases from NWCF	.0	.2	.1	.0
Transportation of Things	.0	.0	.0	.0
Depreciation - Capital	.0	.0	.0	.0
Printing and Reproduction	.0	.0	.0	.0
Advisory and Assistance Services	.0	8.3	5.7	5.8
Rent, Communication & Utilities	.0	.1	.1	.1
Other Purchased Sevices	.0	3.0	3.1	3.1
Total Expenses	.0	24.1	16.7	16.0
Work in Process Adjustment	.0	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	.0	24.1	16.7	16.0
Operating Result	.0	-3.9	.9	.4
Less Surcharges	.0	.0	-.9	-.4
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	.0	-3.9	.0	.0
Other Changes Affecting AOR	.0	3.9	.0	.0
Accumulated Operating Result	.0	.0	.0	.0

Exhibit Fund-14

BUSINESS AREA ANALYSIS
DEPARTMENT OF THE NAVY
NAVAL RESERVE INFORMATION SYSTEM OFFICE
SOURCE OF REVENUE
(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
1. New Orders	12.0	13.4	17.8	19.7
a. Orders from DoD Components	7.0	9.3	7.6	8.9
Department of the Navy	4.5	3.7	4.3	3.9
Operations and Maintenance, Navy	3.3	2.8	3.2	2.9
Operations and Maintenance, Marine Corps	0.0	0.0	0.0	0.0
O&M, Navy Reserve	0.9	0.7	0.8	0.7
O&M, Marine Corps Reserve	0.0	0.0	0.0	0.0
Aircraft Procurement, Navy	0.0	0.0	0.0	0.0
Weapons Procurement, Navy	0.0	0.0	0.0	0.0
Procurement of Ammunition, Navy/Marine Corps	0.0	0.0	0.0	0.0
Shipbuilding & Conversion, Navy	0.0	0.0	0.0	0.0
Other Procurement, Navy	0.3	0.3	0.3	0.3
Procurement, Marine Corps	0.0	0.0	0.0	0.0
Family Housing, Navy and Marine Corps	0.0	0.0	0.0	0.0
Research, Development, Test & Eval, Navy	0.0	0.0	0.0	0.0
Military Construction, Navy	0.0	0.0	0.0	0.0
Other Navy Appropriations	0.0	0.0	0.0	0.0
Other Marine Corps Appropriations	0.0	0.0	0.0	0.0
Department of the Army	0.0	0.0	0.0	0.0
Army Operation & Maintenance Accounts	0.0	0.0	0.0	0.0
Army Res, Dev, Test & Eval Accounts	0.0	0.0	0.0	0.0
Army Procurement Accounts	0.0	0.0	0.0	0.0
Army Other	0.0	0.0	0.0	0.0
Department of the Air Force	0.2	3.6	0.9	2.7
Air Force Operation & Maintenance Accounts	0.2	0.1	0.2	0.3
Air Force Res, Dev, Test & Eval Accounts	0.0	0.0	0.0	0.0
Air Force Procurement Accounts	0.0	3.4	0.8	2.4
Air Force Other	0.0	0.0	0.0	0.0
DoD Appropriated Accounts	2.4	2.0	2.3	2.2
Base Closure and Realignment	0.0	0.0	0.0	0.0
Operation & Maintenance Accounts	1.4	1.2	1.4	1.2
Res, Dev, Test & Eval Accounts	0.1	0.1	0.1	0.1
Procurement Accounts	0.9	0.7	0.8	0.9
DoD Other	0.0	0.0	0.0	0.0
b. Orders from DBOF Business Areas	3.9	3.3	9.1	9.8
c. Total DoD	10.9	12.5	16.7	18.7
d. Other Orders	1.1	0.9	1.1	1.0
Other Federal Agencies	1.1	0.9	1.1	1.0
Foreign Military Sales	0.0	0.0	0.0	0.0
Non Federal Agencies	0.0	0.0	0.0	0.0
2. Carry-In Orders	26.9	11.9	5.2	5.3
3. Total Gross Orders (available funding)	38.9	25.4	22.9	25.0
4. Funded Carry-Over **	11.9	5.2	5.3	8.6
5. Less Passthrough	0.0	0.0	0.0	0.0
6. Total Gross Sales	27.0	20.2	17.6	16.4
Adjusted Carryover	5.0	1.8	1.2	2.2

** Carryover data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

000185

Changes in the Costs of Operation
NAVAL RESERVE INFORMATION SYSTEM OFFICE
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: INFORMATION SERVICES
(Dollars in Millions)

	Expenses
FY 1996 Estimate Actual	$ ---
FY 1997 Estimate in President's Budget:	---
Estimated Impact in FY 1997 of Actual FY 1996 Experience	---
Pricing Adjustments:	
Program Changes:	---
FY 1997 Current Estimate	24.1
Pricing Adjustments:	
Annualization of Prior Year Pay Raises	---
FY 1998 Pay Raise	+ .1
Civilian Personnel	
Military Personnel	
Fund Price Changes	
General Purchase Inflation	+ .2
Other Price changes	+ .2
Productivity Initiatives and Other Efficiencies:	---

Exhibit Fund-2

Changes in the Cost of Operation
NAVAL RESERVE INFORMATION SYSTEM OFFICE
NAVY WORKING CAPITAL FUND
ACTIVITY GROUP: INFORMATION SERVICES
(Dollars In Millions)

Program Changes:	Expenses
Reductions in materials and supplies, interfund purchases and other purchases represents activity's initiative to reduce overhead costs.	- 7.9
Other Changes:	---
FY 1998 Estimate	16.7
Pricing Adjustments:	
Annualization of Prior Year Pay Raises	---
FY 1999 Pay Raise	+ .1
Civilian Personnel	
Military Personnel	
Fund Price Changes	
General Purchase Inflation	+ .1
Other Price Changes	
Productivity Initiatives and Other Efficiences:	---
Program Changes:	
Reductions in Other Purchases and Materials and Supplies represents activity's initiative to reduce additional overhead.	- .9
FY 1999 Estimate	16.0

Exhibit Fund-2

NRISO
4400 Dauphine Street
New Orleans, LA 70145

Business Area Capital Budget Summary
Component: Navy
Business Area: Information Services
Date: February 1997
($ in Millions)

Line Number	Item Description	FY 1997		FY 1998		FY 1999	
		Quantitiy	Total Cost	Quantity	Total Cost	Quantity	Total Cost
1	Equipment - Replacement - Productivity - New Mission >$15,000	1	.040				
	Minor Construction >$15,000						
2	Management Information Systems Support >$15,000	1	.320				
	Real Property Maint >$15,000						
	Leasehold Improvements >$15,000						
	Management Improvement Initiatives >$15,000						
	SUBTOTAL		.360				
	Major Construction - Replacement - Productivity - New Mission						
	TOTAL		.360				

EXHIBIT FUND - 9A

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION
($ in Thousands)

A. Budget Submission: FY98 President's Budget

B. Component/Business Area/Date: Navy/Information Services/Feb 97

C. Line No. & Item Description: 1 Software Development - DMARS

D. Activity Identification: N68608 - NRISO

	FY 96			FY 97			FY 98			FY 99		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Software Development - DMARS	0	0	0	1	.320	.320						

See attached justification.

003483

Business Area Capital Purchases Justification Narrative Justification

1. There are a variety of semi-automated and manual systems currently being employed at DBOF activities to track labor hours. Most of the current systems are designed specifically to support time and labor reporting. In many cases, source data is still initially recorded on actual card stock inherited from the second generation computer era for input to up line accounting systems. These systems, procedures and methods were developed to support mission-funded activities. Many are now totally outdated and never had a requirement for the reporting and analysis capabilities necessary for management decision support to assist in realizing the efficient business practices and cost avoidances promised by DBOF operations. As a result, the data capture necessary to support reporting and analysis is not taking place although most of the data is available on the source documents.

2. The DBOF Management and Reporting System (DMARS) will automate source data input, capture the data necessary to populate a Decision Support System (DSS) database and allow for transfer of source data to up line systems. It will feature a wide range of reporting capabilities in the areas of time and attendance, labor activity, funding document management, procurement management, travel management, training management, project management and direct cite funds management. Summary data will be displayed in summary reports with drill down capability to view detail data. Cross reference can be made in categories including Employee, Organization Code, Job Order Number, Labor Category, Project, Project Phase, and Task. DMARS will give upper management easy views of overhead and direct bill activities in tabular and graphic form for management, planning and budgeting activities. It will support project managers in reporting project activity to management and customers. There are currently no tools of this type designed to support the detailed reporting requirements of the Office of the Under secretary of Defense projects such as the Military Personnel Management System for the Twenty First Century (MPM-21). This level of reporting will probably become standard for large DoD Information System development projects. DMARS will provide statistical information to support analysis of the impacts of new methodologies and tools on organizational productivity and product quality.

3. No economic analysis has been performed. The need was generally recognized within the NCTC claimancy. There was no automated system that had these capabilities. The ability to capture most of the source data for decision support as a by-product of automating the time and labor input was seen as an incredible benefit. Standardization within the claimancy was also seen as an advantage for reporting to NCTC. Maintenance of a single well-designed system was highly preferable to supporting a variety of home-grown applications. The DBOF system will take advantage of the capabilities of the client/server environment and associated networking facilities. Using the open systems approach will maximize the use of presently installed LAN servers and software as well as the installed base of desktop computers.

4. The impact of not making the proposed capital investment will be to continue without adequate automated tools for decision support within the DBOF community. Management will have impaired ability to make insights into DBOF operations that could otherwise result in business efficiency improvements and attendant cost avoidances. Many processes will remain as

labor-intensive manual functions. This results in higher costs and more opportunities for human error. Maintenance of local, unique applications will continue to cause duplication of functions at each activity. Second and third generation computer processes will still be employed which cannot provide the user-friendly, intuitive advantages of the modern graphical user interfaces employed in state-of-the-art application design. Remaining in these old environments drives up maintenance costs, training costs, error rates and restricts usability/access to information that we already possess.

000191

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION ($ in Thousands)												A. Budget Submission: FY98 President's Budget
B. Component/Business Area/Date: Navy/Information Services/ Feb 97				C. Line No. & Item Description: 1 Equipment - CMIS						D. Activity Identification: N68608 - NRISO		
FF	FY 96			FY 97			FY 98			FY 99		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Equipment - CMIS	0	0	0	1	.040	.040						

The purchase of the Configuration Management Information System (CMIS) provides a number of benefits to the Material Management (MM) community. The overriding benefit is the capability of all personnel (engineers, manufacturers, contractors, logisticians, and procurement personnel) within the configuration management process to interact through a common database.

Benefits of the CMIS include:

- Develop a system to support DoD Configuration Management (CM)
- Provide an interface to the JEDMICS drawing repository for image retrieval.
- Provide the capability to create, distribute, review, and disposition electronic engineering change control data.
- Provide the procurement community information concerning pending configuration changes, so as to preclude the purchase of obsolete parts
- Improve accuracy of the information maintained in the database by safeguarding access to the system.
- Provide visibility of configuration management data via extensive progress and status reporting, as well as content of production baselines.
- Provide access to user-friendly, accurate configuration management product data via GUI interfaces and screens.

OFFICE OF THE SECRETARY OF DEFENSE & OFFICE OF MANAGEMENT AND BUDGET
Defense Business Operations Fund
INFORMATION TECHNOLOGY/NAVRES INFOSYSOFF
CAPITAL BUDGET EXECUTION
(Dollars in Millions)
FY 1997

Title/Description Change	Original Request	Change	Revised Request	Explanation/Reason for
Equipment (non-ADPE/TEL):	0.000	0.000	0.000	
Subtotal - Equipment	0.000	0.000	0.000	
ADPE and Telecomm Equip:	0.000	0.040	0.040	Transfer of funding responsibility to end user.
Subtotal - ADPE/TEL Equip	0.000	0.040	0.040	
Software Development:	0.000	0.320	0.320	Project responsibility transferred from NCTC to NRISO due to activity transfer to COMNAVRESFOR control.
Subtotal - Software Develop	0.000	0.320	0.320	
Minor Construction:	0.000	0.000	0.000	
Subtotal - Minor Construction	0.000	0.000	0.000	
TOTAL CAPITAL INVESTMENT	0.000	0.360	0.360	

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT/NAVY PUBLIC WORKS CENTERS

ACTIVITY GROUP FUNCTION: The Navy Public Works Centers (PWCs) provide utilities services, facilities maintenance, transportation support, engineering services and shore facilities planing support required by operating forces and other activities.

PWCs have a unique Command and Control structure. They operate under the Command of the regional Naval Base Commander serving as Immediate Superior in Command (ISIC) and under the technical control of the Naval Facilities Engineering Command as a Major Claimant.

The Public Works Centers are base support providers to military, federal, state and local activities located within the regional areas serviced by the Public Works Centers and their detachments. Currently, Public Works Centers provide services to Defense, Navy, Army, Air Force, Marine Corps, Coast Guard, National Aeronautics and Space Administration, state and other federal and non-federal activities.

The mission of the PWCs is to provide customers with the BEST public works services required to meet their diverse needs, thereby becoming the provider of choice.

ANALYSIS OF FINANCIAL CONDITION: Costs decrease due to DoD downsizing, Base Realignment and Closure actions, overhead and maintenance reductions in accordance with the NAVFAC Improvement Plan, utility cost savings from rate re-negotiations and savings from consolidation of human resources and functions.

Net Operating Results and Accumulated Operating Results are increasing in FY 1997 and FY 1998, and decreasing in FY 1999. Prior year gains are returned to the customers through rate reductions.

TABLE ONE - Financial Profile

	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	2,064.4	1,907.3	1,847.8	1,816.3
Cost of Goods Sold ($M)	2,063.9	1,916.9	1,765.4	1,785.9
Net Operating Results	.5	-9.6	82.4	30.4
Surcharges			99.2	30.4
Accum. Operating Results	26.4	16.8	0.0	0.0

EFFICIENCY - Key corporate performance measures for Navy Public Works Centers have been established by the PWC Corporate Steering Group (CSG) to measure products/services to gauge effectiveness, assist in management of the products/services, assure accountability, and assist in making sound budget decisions. The developed metrics were meaningful to the majority of the reporting groups (e.g., PWCs, Naval Facilities Engineering Command, Assistant Secretary of the Navy (Financial Management and Comptroller), and the Office of the Secretary of Defense), controlled by the product/service manager, and already measured through normal reporting process or could be measured without significant additional cost to prevent establishment of a "measurement bureaucracy."

TABLE TWO - WORKLOAD

	UNIT OF MEASURE	FY 1996	FY 1997	FY 1998	FY 1999
Utilities					
Electricity	MWH	4,278,093	4,133,387	3,876,758	3,922,148
Potable water	KGAL	24,836,147	23,470,186	22,790,286	22,826,358
Salt water	KGAL	6,773,941	7,677,604	7,555,474	7,537,320
Heating	MBTU	543,093	525,463	525,463	525,463
Steam	MBTU	7,933,828	6,971,065	6,895,575	7,041,470
Clean Steam	MBTU	2,744,501	2,983,778	1,963,067	1,963,067
Sewage	KGAL	16,107,080	15,975,693	15,341,404	15,387,478
Natural Gas	MBTU	1,765,976	1,746,322	1,712,803	1,691,214
Compressed Air	KCF	8,361,918	8,003,994	8,221,800	8,214,293
Sanitation Services					
Refuse Coll	CUYD	4,198,515	4,282,743	3,839,724	4,310,589
Pest Control	HRS	87,847	80,025	71,597	71,294
Haz Waste I	GAL	747,812	859,131	880,844	886,159
Haz Waste II	HRS	13,527,462	12,404,253	12,044,404	11,834,620
Environ Eng	HRS	112,451	111,175	115,338	115,397
Indust Waste	KGAL	59,610	62,048	63,653	60,939
Transportation Services					
Equip rental	HRS	29,564,795	22,804,001	22,161,167	22,149,185
Vehicle Ops	HRS	790,106	963,511	914,314	925,469
Vehicle Maint	SRO	125,218	121,820	125,520	125,938
Maintenance & Repair					
Specifics	JOBS	9,754	12,552	11,415	11,244
Minors	ITEMS	18,595	20,268	19,359	18,766
Emer/Serv	CHITS	306,733	345,862	327,225	334,826
Recurring	ITEMS	188,829	151,548	155,933	171,300

Design					
Design Mgmt	CWE	289.051M	252.333M	247.970M	254.645M
PWC Design	CWE	171.488M	179.808M	163.290M	164.691M
Planning	HRS	406,006	486,243	517,044	513,652
Contracting					
FSC Admin	WIP	329.867M	352.560M	345.244M	350.206M
FSC Inspection	WIP	309.931M	318.436M	315.522M	311.955M
Non-MCON Admin	WIP	192.874M	195.768M	181.005M	178.172M
Non-MCON Insp	WIP	133.893M	152.818M	147.777M	146.039M
Spec Develop	WIP	29.782M	27.983M	39.332M	40.296M

UNIT COST - Higher investments were required following the consolidation efforts of the early 1990s, but maintenance and repair for the budget years have been reduced in line with other base support providers. PWC set productivity improvement goals concurrent with establishment of the Navy Working Capital Fund through the FY 1999 budget cycle. Cumulative PWC stabilized rate growth will be 1% below cumulative general escalation. PWCs have surpassed this cumulative level of productivity through consolidation, process improvement, benchmarking, competitive practices and partnering efforts. When considering normal escalation, this represents a cost aviodance of $984 million over the life of the Future Years Defense Plan (FYDP). These gains are reflected below in the customer rate changes:

TABLE THREE - RATE CHANGES

	FY 1996	FY 1997	FY 1998	FY 1999
East Coast and Great Lakes:				
Utilities and Sanitation	(3.0)	(2.0)	(4.9)	0.4
Other services	(2.9)	2.5	3.1	1.9
Composite	(2.9)	0.7	.4	1.4
West Coast and Pacific				
Utilities and Sanitation	(11.3)	2.2	2.8	(6.2)
Other services	1.0	4.3	(1.0)	1.9
Composite	(3.8)	3.6	0.4	(1.0)

CUSTOMER SATISFACTION - Customer Satisfaction is clearly viewed as the most important PWC product/service indicator since cost, quality, quantity, and timeliness affect the outcome. A annual customer survey is given by each PWC. Using a five-point scale, PWC Business Area average indices are tracked. The customer satisfaction goal is to achieve a .1 improvement each year through FY 1999.

TABLE FOUR - CUSTOMER SATISFACTION

	FY 1996	FY 1997	FY 1998	FY 1999
Overall Rating	3.8	3.9	4.0	4.1

QUALITY - Although customer satisfaction remains the best indicator of overall value which includes quality, other indicators have been established that have an immense impact on the productivity of our customer base:

Electricity outage -- percent of unplanned interruption hours to hours of service.

FY 1996	FY 1997	FY 1998	FY 1999
4.15%	4.0%	4.0%	4.0%

Transportation available/utilization -- actual rental hours of equipment divided by total possible rental hours.

FY 1996	FY 1997	FY 1998	FY 1999
89%	90%	90%	90%

Lost Time Accident Rate -- percentage of productive time lost due to on-the-job injuries/accidents

FY 1996	FY 1997	FY 1998	FY 1999
4.58%	4.85%	4.9%	4.9%

TIMELINESS - Timeliness Indicators are most important in the area of maintenance of real property. During the PWC Corporate Steering Group meeting in June 1996, PWCs agreed to common definitions and performance targets for emergency work, service work, minor work and specific work.

-- Service work requires minimal planning or processing and can be accomplished in a short time, but is not of an emergency nature. The goal is next day response and completion within 72 hours.

-- Minor work is larger than emergency/service (16 hours), but does not exceed $25,000. The goal is response within 7 days and completion within 30 days.

-- Specific work are jobs that cost more than $25,000. The goal is response within 90 days and completion within 150 days.

Mechanisms for tracking job completion have been installed at each PWC. Performance targets will be reported quarterly beginning with the last quarter of FY 1996.

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
Emergency Work Response	15.6	11.0	10.5	10.0	9.5
Service Work Turnaround	197	156	150	145	144
Minor Work Turnaround	124	69	65	60	60
Specific Work Turnaround	347	226	220	215	210

TABLE FIVE - UNIT COSTS

	UNIT OF MEASURE	FY 1996	FY 1997	FY 1998	FY 1999
Utilities					
Electricity	MWH	81.95	82.80	75.96	77.25
Potable water	KGAL	2.37	2.56	2.19	2.32
Salt water	KGAL	0.57	0.49	0.53	0.56
Heating	MBTU	9.80	10.38	10.96	11.52
Steam	MBTU	14.69	14.60	13.36	14.14
Clean Steam	MBTU	13.82	12.89	12.70	12.63
Sewage	KGAL	3.91	3.67	3.70	3.74
Natural Gas	MBTU	4.57	5.03	5.14	5.50
Compressed Air	KCF	1.26	1.07	1.02	.91
Sanitation Services					
Refuse Coll	CUYD	5.30	5.08	5.23	4.53
Pest Control	HRS	37.89	39.64	35.79	35.82
Haz Waste I	GAL	5.86	4.45	4.42	4.47
Haz Waste II	HRS	1.29	1.74	1.84	1.91
Environ Eng	HRS	61.41	60.53	58.76	58.96
Indust Waste	KGAL	116.83	128.01	132.16	131.90

Transportation Services					
Equip rental	HRS	2.24	2.98	2.96	2.94
Vehicle Ops	HRS	56.19	47.13	45.91	45.32
Vehicle Maint	SRO	106.55	115.50	99.65	102.56
Maintenance & Repair					
Specifics	JOBS	41,960	28,683	27,300	28,047
Minors	ITEMS	5,313	5,087	4,836	4,830
Emer/Serv	CHITS	259.60	239.49	230.63	229.93
Recurring	ITEMS	1,731	1,862	1,713	1,543
Design					
Design Mgmt	CWE	0.03	0.04	0.04	0.04
PWC Design	CWE	0.12	0.09	0.10	0.09
Planning	HRS	48.36	51.18	51.48	52.39
Contracting					
FSC Admin	WIP	0.07	0.06	0.06	0.06
FSC Inspection	WIP	0.06	0.06	0.05	0.05
Non-MCON Admin	WIP	0.06	0.07	0.06	0.07
Non-MCON Insp	WIP	0.03	0.04	0.04	0.04
Spec Develop	WIP	0.09	0.09	0.08	0.07

TABLE SIX - MANNING

	FY 1996	FY 1997	FY 1998	FY 1999
Civilian End Strength	13,787	12,530	12,276	12,146
Civilian Work Years	13,984	13,428	12,147	12,004
Military End Strength	108	108	106	106
Military Work Years	108	108	104	104

TABLE SEVEN - INDIRECT COSTS

Headquarters Costs:	FY 1996	FY 1997	FY 1998	FY 1999
($ Millions)	1.0	1.0	1.0	1.0

Headquarters costs remain constant over all years because of efforts to control/reduce overhead expenditures, which is consistent with the PWC trust.

TABLE EIGHT - CAPITAL BUDGET AUTHORITY

	FY 1996	FY 1997	FY 1998	FY 1999
Equipment-Non ADPE/TELECOM	8,323	10,982	10,429	12,497
ADPE/Telecom Equip.	120	250	550	730
Software Development	457		5,250	
Minor Construction	6,300	6,734	3,263	4,500
Total ($millions)	15,200	17,966	19,492	17,727

CARRYOVER: PWC has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

Table NINE - CARRYOVER

	FY 1996	FY 1997	FY1998	FY 1999
Carryover Funding ($M)	318.6	356.4	363.4	344.9
Months of Carryover	1.9	2.2	2.4	2.3

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
PWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	2,043.0	1,886.5	1,729.1	1,766.8
Surcharges	.0	.0	99.2	30.4
Depreciation excluding Major Constructio	21.5	20.8	19.6	19.1
Other Income				
Total Income	2,064.4	1,907.3	1,847.8	1,816.3
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	6.7	7.5	7.7	7.8
Civilian Personnel	668.3	643.7	577.4	583.9
Travel and Transportation of Personnel	6.0	5.2	3.8	3.8
Material & Supplies (Internal Operations	181.8	167.5	155.0	157.2
Equipment	28.4	25.7	26.7	27.4
Other Purchases from NWCF	12.5	15.0	11.0	11.3
Transportation of Things	1.6	2.0	1.2	1.7
Depreciation - Capital	21.5	20.8	19.6	19.1
Printing and Reproduction	4.2	2.5	1.9	2.0
Advisory and Assistance Services	1.3	1.1	.3	.3
Rent, Communication & Utilities	354.2	322.4	310.8	308.9
Other Purchased Sevices	769.2	703.5	650.3	662.5
Total Expenses	2,055.5	1,916.9	1,765.4	1,785.9
Work in Process Adjustment	8.4	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	2,063.9	1,916.9	1,765.4	1,785.9
Operating Result	.5	-9.6	82.4	30.4
Less Surcharges	.0	.0	-99.2	-30.4
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	.5	-9.6	-16.8	.0
Other Changes Affecting AOR	-1.1	.0	.0	.0
Accumulated Operating Result	26.4	16.8	.0	.0

Exhibit Fund-14

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
PWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	2,021.6	1,816.1	1,825.4	1,765.0
a. Orders from DoD Components	1,568.7	1,404.1	1,425.7	1,367.6
Department of the Navy	1,315.2	1,151.7	1,192.7	1,144.2
O & M, Navy	946.7	819.8	853.1	804.8
O & M, Marine Corps	37.0	15.6	32.8	34.6
O & M, Navy Reserve	6.8	6.4	6.1	6.2
O & M, Marine Corp Reserve	.7	1.6	1.3	1.2
Aircraft Porcurement, Navy	.1	.2	.2	.2
Weapons Procurement, Navy	.0	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	1.2	1.7	3.2	2.5
Other Procurement, Navy	1.1	1.1	1.2	1.2
Procurement, Marine Corps	.1	.0	.0	.0
Family Housing, Navy/MC	306.5	297.3	284.3	283.1
Research, Dev., Test, & Eval., Navy	3.9	4.8	6.0	5.5
Military Construction, Navy	6.1	1.5	2.0	1.9
Other Navy Appropriations	3.7	1.7	2.3	2.7
Other Marine Corps Appropriations	1.3	.1	.2	.2
Department of the Army	36.2	36.4	33.3	34.7
Army Operation & Maintenence	10.1	24.8	21.5	22.0
Army Res, Dev, Test, Eval	2.0	.1	.1	.1
Army Procurement	.0	.0	.0	.0
Army Other	24.2	11.5	11.7	12.6
Department of the Air Force	30.8	28.1	27.8	18.5
Air Force Operation & Maintenence	11.7	24.5	25.2	15.1
Air Force Res, Dev, Test, Eval	.0	.0	.0	.0
Air Force Procurement	.0	.0	.0	.0
Air Force Other	19.1	3.5	2.6	3.4
DOD Appropriation Accounts	186.5	187.9	171.9	170.2
Base Closure & Realignment	23.6	29.7	6.4	8.2
Operation & Maintence Accounts	91.5	104.5	107.4	111.8
Res, Dev, Test & Eval Accounts	1.6	3.4	3.4	3.1
Procurement Accounts	.3	.0	.0	.0
DOD Other	69.5	50.4	54.6	47.1
b. Orders from NWCF Business Area	405.3	364.9	354.2	350.6
c. Total DoD	1,974.0	1,769.0	1,779.9	1,718.3
d. Other Orders	47.6	47.1	45.5	46.7
Other Federal Agencies	15.4	14.3	14.9	12.5
Foreign Military Sales	.4	.0	.0	.1
Non Federal Agencies	31.8	32.8	30.6	34.2

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INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
PWC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	803.8	761.0	669.8	647.4
3. Total Gross Orders	2,825.4	2,577.1	2,495.2	2,412.4
4. Funded Carry-Over **	761.0	669.8	647.4	596.1
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	2,064.4	1,907.3	1,847.8	1,816.3

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

ADJUSTED CARRYOVER	318.6	356.4	363.4	344.9

000303

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT
NAVY PUBLIC WORKS CENTERS

CHANGES IN THE COSTS OF OPERATIONS
($ in Millions)

	Costs
1. FY 1996 Actuals	2,063.9
2. FY 1997 Estimate in President's Budget:	1,904.5
3. Estimated Impact in FY 1997 of Actual FY 1996 Experience:	
Increased cost because of utility rate increases at PWCs Guam and Washington	11.8
Decreased utility costs at PWCs Norfolk and Jacksonville resulting from rate negotiations	(6.7)
Increased cost at PWC Yokosuka because of "Yen Cap"	9.0
Consolidation of Naval Weapons Station Yorktown Public Works functions into PWC Norfolk	50.0
Regionalization of Public Works functions at PWC Jacksonville	60.0
4. Program Changes:	
Return of match and batch function from Defense Finance and Accounting Service	1.0
Early disestablishment of Charleston detachment support of BRAC contracting	(10.0)
NWCF/COTS financial system initial operating costs	1.2
Increased customer workload to reduce backlog/carryover	2.8
Revenue billing work-in-process	30.9
Transfer of Human Resources Office functions from PWC Pearl Harbor to COMNAVBASE	(5.8)
Increased work in support of BRAC closures in San Francisco Bay area	4.0
Increased outsourcing of PW functions through direct cite contracts in continued effort to reduce carryover	(88.0)
Offering customer choice alternatives (warranting Staff Civil officers, use of credit cards, and ordering officer authority)	(22.0)
NAVFAC Improvement Plan (NIP) (overhead & maintenance reduction)	(19.9)
Transfer of remaining housing management function to EFDs	(5.9)
5. FY 1997 Current Estimate:	1,916.9

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT
NAVY PUBLIC WORKS CENTERS

CHANGES IN THE COSTS OF OPERATIONS
($ in Millions)

	Costs
5. FY 1997 Current Estimate:	1,916.9
6. Pricing Adjustments:	
Pay Raise:	
FY 1998 CIVPERS Pay Raise	10.0
Annualization of FY 1997 Pay Raise	5.9
Fuel	4.1
Material and Supplies	6.1
General Purchases	21.4
7. Productivity Initiatives and Other Efficiencies:	
NAVFAC Improvement Plan (NIP) (overhead & maintenance reduction)	(58.0)
Reduced costs due to rate negotiation	(12.7)
Savings from Human Resource consolidation	(0.9)
8. Program Changes:	
Decreased workload at PWC Guam due to BRAC downsizing	(15.9)
Consolidation of Human Resource functions	(1.8)
NWCF/COTS financial system initial operating costs	0.2
Early closure of PWC San Francisco	(94.5)
Increase in Yen rate	(4.5)
Decreased workload due to Defense downsizing	(10.8)
9. FY 1998 Current Estimate:	1,765.4

0000005

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT
NAVY PUBLIC WORKS CENTERS

CHANGES IN THE COSTS OF OPERATIONS
($ in Millions)

	Costs
9. FY 1998 Current Estimate	1,765.4
10. Pricing Adjustments:	
Pay Raise:	
FY 1999 CIVPERS Pay Raise	8.0
Annualization of FY 1998 Pay Raise	5.6
Fuel	(0.9)
Materials and Supplies	2.6
General Purchases	20.4
11. Productivity Initiatives and Other Efficiencies:	
Dismantling the DPS-6000 financial management computer	(5.8)
Savings from Human Resource consolidation	(0.2)
12. Program Changes:	
Final phase of NWCF/COTS financial system initial operating costs	0.2
Consolidation of Human Resource functions	(3.2)
Decreased workload due to Defense downsizing	(6.1)
13. FY 1999 Current Estimate:	1,785.9

Fund-9a

BUSINESS AREA CAPITAL BUDGET SUMMARY
Component: Department of the Navy
Base Operations/Public Works Centers
(Dollars in Millions)

PWC TOTAL

LINE #	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quant	Total Cost	Quant	Total Cost	Quant	Total Cost	Quant	Total Cost
	1a. Equipment- Non ADPE(>$500K)								
	- Replacement								
L0001	Portal Crane Upgrade	1	1.794						
L0002	Crane Truck MTD 2-ENG PRT			1	0.898	1	0.934	3	2.923
L0003	Crane Truck MTD HYD DED 51 Ton & UP			4	2.381	5	2.649	3	2.105
	- Productivity								
	- New Mission								
	- Environmental								
	Subtotal Equipment (>$500K)	1	1.794	5	3.279	6	3.583	6	5.028
	1b. Equipment-Non ADPE (<$500K)								
L0004	- Replacement	29	6.104	40	6.613	27	4.541	40	6.473
	- Productivity								
	- New Mission								
L0005	- Environmental	2	0.425	6	1.090	11	2.305	6	0.996
	Subtotal Equipment (<$500K)	31	6.529	46	7.703	38	6.846	46	7.469
L0006	2. Minor Construction (>$100K<$300K)	32	6.300	31	6.734	18	3.263	26	4.500
L0007	3. ADPE & Telecomm (>$100K)	1	0.120	1	0.250	4	0.550	4	0.730
L0008	4. Software Development	1	0.457	0	0.000	1	5.250	0	0.000
	TOTAL	66	15.200	83	17.966	67	19.492	82	17.727

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Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION
($ in Thousands)
PWC TOTAL

A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support

C. L0001 Equipment- Replacement >$500,000

D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**
Equipment-Replacement	1	1,794.00	1,794	0	0.00	0	0	0.00	0	0	0.00	0
TOTAL	1	1,794.00	1,794	0	0.00	0	0	0.00	0	0	0.00	0

Narrative Justification:

Requirements budgetd represent one portal crane installation and upgrade. This requirement will support fleet personnel and customer maintenance, repair, lift requirements, and cargo handeling needs. New facility construction is underway at North Island Naval Air Station to support the homeporting of Nuclear Aircraft Carriers. Effective crane support provided by PWC San Diego is critical to the mission of these carriers, as it is indispensable in loading and off loading aircraft, vital equipment such as crash cranes, and mast repairs.

Replacement of exsisting crane assets is essential in maintaining Navy lift requirements at the PWC San Diego graving dock facilities. Failure to provide this service will result in lost cost avoidance and downtimes in meeting critical fleet CVN requirements.

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION
($ in Thousands)
PWC TOTAL

A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support

C. L0002 Equipment- Replacement >$500,000

D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**
Equipment-Replacement	0	0.00	0	1	898.00	898	1	934.00	934	3	974.33	2,923
TOTAL	0	0	0	1	898	898	1	934	934	3	974.33	2,923

Narrative Justification:

Equipment budgeted represents five crane trucks twin engine. One of which has special boom specifications. This equipment supports fleet personnel and customer maintenance, repair, construction, and transportation requirements. These cranes will replace overaged cranes which are beyond economical repair. Replacement will reduce workload delays and equipment downtimes which will result in operational savings to the Navy .

PWC expansions have increased demands on PWC crane equipment causing accelerated deterioration and costly maintenance and repair. In particular the age of PWC cranes inventories are significantly beyond expected useful age. Delays and or reductions in requested authorization will result in lost budgeted cost improvements, resulting in higher unit costs to PWC customers.

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION
($ in Thousands)
PWC TOTAL

A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support

C. L0003 Equipment- Replacement >$500,000

D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**
Equipment-Replacement	0	0.00	0	4	595.25	2,381	5	529.80	2,649	3	701.67	2,105
TOTAL	0	0.00	0	4	595.25	2,381	5	529.80	2,649	3	701.67	2,105

Narrative Justification:

Equipment budgeted represents twelve crane trucks with a lift capability of 51 tons and up. This equipment supports fleet personnel and customer maintenance, repair, construction, and transportation requirements. These cranes will replace a overaged cranes which are beyond economical repair. Replacement will reduce workload delays and equipment downtimes which will result in operational savings to the Navy .

PWC expansions have increased demands on PWC crane equipment causing accelerated deterioration and costly maintenance and repair. In particular the age of PWC cranes inventories are significantly beyond expected useful age. Delays and or reductions in requested authorization will result in lost budgeted cost improvements, resulting in higher unit costs to PWC customers.

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Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION
($ in Thousands)
PWC TOTAL

A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support

C. L0004 Equipment- Replacement <$500,000

D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**	**Quant**	**Unit Cost**	**Total Cost**
Equipment-Replacement	29	210.48	6,104	40	165.33	6,613	27	168.19	4,541	40	161.83	6,473
TOTAL	29	210.48	6,104	40	165.33	6,613	27	168.19	4,541	40	161.83	6,473

Narrative Justification:

Items budgeted represent Civil Engineering Support Equipment (CESE) and industrial plant equipment. CESE includes trucks, trailers, tankers, snow plows, crane trucks and other vehicles incident to public works transportation functions. Industrial plant equipment includes portable generator substations, power brake machines, rotary drum vacuum, solid waste separators and processing equipment , printer copiers, and other equipment incidental to public works functions.

PWC CESE and industrial plant equipment supports customer maintenance, repair, construction, utilities, and transportation requirements. Equipment purchases as budgeted will replace overaged as well as equipment beyond economical repair. This will reduce workload delays and equipment downtimes. Replacements will provide for stable equipment maintenance costs and avoid downtimes which are directly related to unit costs.

Expansions at PWCs has increased total inventories by more than 32% and have significantly increased the average age of equipment inventories. In particular the average age of contributed CESE vehicles is approximately twice the age of current PWC fleets. As such, procurement objectives have been established for each category to replace equipment within guidance. Delays and or reductions in requested authorizations will result in lost budgeted cost improvements, resulting in higher unit cost to the Navy.

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION ($ in Thousands) PWC TOTAL	A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support	C. L0005 Equipment- Environmental <$500,000	D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment-Environmental	2	212.50	425	6	181.67	1,090	11	209.55	2,305	6	166.00	996
TOTAL	2	212.50	425	6	181.67	1,090	11	209.55	2,305	6	166.00	996

Narrative Justification:

Items budgeted represent PWC operational as well as environmental lab equipment for evaluation and testing and PWC operational requirements in compliance with state, local and Federal environmental standards. Equipment includes automated sample extractors, odor control devices, supercritical fluid extractors, automated absorption spectrophotometers, portable emergency shower units, oil skimmers and other equipment incidental to meeting environmental standards.

PWC environmental equipment and operational requirements replace overaged or outdated equipment which no longer meet compliance and evaluation standards. Replacement of this equipment will reduce workload delays, equipment downtimes, as well as assure PWC meets state, local and Federal requirements. Failure to meet operational as well as testing requirements will results in a notice of violation and increased cost due to violation penalties.

PWC procurement objectives have been established to replace equipment and stay within environmental standards. Delays and or reductions in the PWC budget request will result in lost improvement in operational capabilities which will result in higher unit costs to the Navy.

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION
($ in Thousands)
PWC TOTAL

A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support

C. L0006 Minor Construction

D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Construction	32	196.88	6,300	31	217.23	6,734	18	181.28	3,263	26	173.08	4,500
TOTAL	32	196.88	6,300	31	217.23	6,734	18	181.28	3,263	26	173.08	4,500

Narrative Justification:

Items budgeted for minor construction include mission facilities and environmental projects to construct shelters for hazardous waste, improve electrical service, enclose and construct shelters for utility equipment and distribution substations, paving, fuel storage, install street lights, and other facilities in support of PWC products and services.

Construction projects as budgeted provide enhanced PWC shop and operational facilities which include safety, security and environmental compliance requirements. These projects will reduce operational hazards, stabilize maintenance costs and meet environmental standards which are directly related to unit costs.

Expansions have increased total facilities inventories by 34%. As such, construction objectives have been established to enhance and secure PWC facilities within guidance. Delays and or reductions in requested authorizations will result in lost budgeted cost improvements, resulting in higher unit cost to the Navy.

C00313

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION ($ in Thousands) PWC TOTAL	A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support	C. L0007 ADPE & Telecomm - Computer Hardware	D. Public Works Centers

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
ADPE & Telecomm-Hardware	1	120.00	120	1	250.00	250	4	137.50	550	4	182.50	730
TOTAL	1	120.00	120	1	250.00	250	4	137.50	550	4	182.50	730

Narrative Justification:

Items budgeted for ADPE equipment represent optical filing systems, LSN and WAN equipment, fiber optic equipment, and computer aided design (CAD) equipment and servers and other hardware and operational system software in support of the PWC Management Information System (PWCMIS).

Information Management equipment supports PWCMIS system requirements as projected under the latest implementation plans for a new PWC production and management system associated with the COTS implementation. The system consists of applications designed to fulfill the management requirements of commercial accounting, budget and cost; production management , which includes controls for the production workforce; and all categories of work from receipt to completion in the Planning, Maintenance, Utilities and Transportation Departments. Equipment purchases in support of PWCMIS will replace overaged and obsolete equipment which is incompatible with COTS implementation.

Expansions have increased the demands on existing PWCMIS system hardware both in quantity and compatibility. As such, procurement objectives have been established to replace equipment within guidance. Deferrals and or reductions in requested authorizations will delay budgeted savings from the implementation of the revised PWCMIS system.

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION ($ in Thousands) PWC TOTAL	A. FY 1998/1999 BIENNIAL BUDGET
B. Department of the Navy/Base Support	C. L0008 Software Development
D. Public Works Centers	

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
ADPE & Telecomm-Software	1	457.00	457	0	0.00	0	1	5,250.00	5,250	0	0.00	0
TOTAL	1	457.00	457	0	0.00	0	1	5,250.00	5,250	0	0.00	0

Narrative Justification:

PWCs currently operate the financial, production, and material functions on Honeywell DPS 6000 hardware. Hardware maintenance support has become costly since the DPS 6000s are outdated, and shift operations consume considerable resources in terms of labor, consumable supplies, maintenance, and utility expenses.

The Defense Finance and Accounting Service is purchasing a contractor-off-the-shelf financial system for the PWCs. The contractor has been selected and beta testing begins soon.

To continue to maintain the DPS 6000 for only material and production systems is uneconomical. In addition, the technology of batch processing and cumbersome report printing prevents immediate access to data. Because reports are delayed, it is a common occurrence for customer projects to overrun the funding documents before we are able to notify them of the need for additional funding. This leads to high unbillable accounts, and reduces expected Navy Defense Business Operations Fund cash balances.

PWCs are under tremendous pressure to reduce overhead as a cost of service provision. Procurement and installation of the material and production COTS will help PWCs to achieve and 20% overhead reduction mandated by the Naval Facilities Engineering Command's Improvement Plan and result in significant savings to the Navy.

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT
NAVY PUBLIC WORKS CENTERS
FY 1997 BUDGET ESTIMATE

PROJECTS ON THE FY 1997 PRESIDENT'S BUDGET
(Dollars in Millions)

FY	Approved Project	APPROVED PROJ COST	REPROGS	CURRENT PROJ COST	ASSET/ DEFICIENCY	EXPLANATION
1997	Equipment except ADPE and TELCOM	10.982	(2.168)	8.800		Reprog to FY 1998 for Maximo proj
	Equipment - ADPE and TELCOM	0.250	0.000	0.250		CANCEL INTRA-SITE WIDE AREA NETWORK
	Software Development	0.000	5.100	5.100		Reprog from FY 1998 for Maximo proj
	Minor Construction	6.734	(2.932)	3.800		Reprog to FY 1998 for Maximo proj
	TOTAL FY 1997	17.966	(0.000)	17.950		

Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Under Secretary of Defense (Comptroller) for approval.

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT BUSINESS AREA
NAVAL FACILITIES ENGINEERING SERVICE CENTER

FUNCTION AND TECHNICAL CAPABILITIES - Naval Facilities Engineering Service Center (NFESC) is the Navy's resource for specialized facilities engineering and technology. In partnership with it's customers, NFESC delivers quality analysis, troubleshooting and technical support for DoD shore, ocean, and waterfront facilities; environmental, amphibious and expeditionary operations; as well as energy and utility services. As a member of the Naval Facilities Engineering Command(NAVFAC) team, NFESC provides worldwide support to NAVFAC's headquarters, Public Work Centers as well as fleet and shore activities of the Marine Corps, SYSCOMS, SECNAV/CNO special projects and other DOD agencies. NFESC provides solutions to problems through engineering, design, construction, consultation, test and evaluation, technology implementation, and management support. NFESC leverages technology to enhance the effectiveness and efficiency of it's customers, using existing technology where it can and identifying and adapting breakthrough technology when appropriate.

NFESC fosters a cooperative, mutually supportive and valued relationships with it's customers and suppliers, proactively anticipating and understanding their needs and then exceeding their expectations. NFESC is responsive, cost effective, competitive and fiscally viable.

SIGNIFICANT CHANGES IN BUSINESS SINCE PRESIDENTS BUDGET -In recognition of the characteristics of its current primary functions, NFESC was transferred from the Research and Development activety group to the Base Support activity group. NFESC has also completed the physical move of it's Port Hueneme facility into a new, multi-million dollar facility, consolidating work areas that were once spread over 33 acres and 65+ buildings into one building centrally located within the Naval Construction Battalion Center (NCBC) compound at Port Hueneme. The physical move has resulted in a permanent reduction of overhead costs.

ANALYSIS OF BUDGET STATEMENTS

REVENUE - Revenue for NFESC decreased slightly due to estimated decreases in DLH from 415,300 in FY 1998 and FY 1999, to 405,300 and 406,200 respectively. Additionally, NFESC will not receive Reimbursable funding for the DoD lock program further exacerbating decreased DLH, revenue and expense figures.

COST OF OPERATIONS - A decrease in the cost of operations resulted from a decrease in reimbursable costs associated with termination of the DoD lock program and decreased overhead costs for fiscal years 1998 and 1999. Indirect expenses decreased significantly as a result of cost savings realized from the physical move of NFESC onto the CB compound at Port Hueneme. NFESC continues to identify overhead cost savings, targeting a 5% reduction in FY 1998 and zero growth in FY 1999 by improving efficiency and implementing standard processing methods throughout the command.

TABLE ONE - FINANCIAL CONDITION

	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	$73,706	$55,359	$53,648	$54,204
COGS	$74,089	$56,004	$54,221	$54,204
NOR	($383)	($645)	($573)	-0-
AOR	1,218	$573	-0-	-0-

PERSONNEL - All new workload efforts are being renegotiated under the NWCF price structure when feasible due to relocation of NFESC under the Base Support account in FY 1998. This change affects some workloads formerly part of the RMS pricing structure. Some personnel have shifted from previous RMS positions to NWCF positions. Positions that become vacant are being reviewed to determine if they can be filled under NWCF versus RMS responsibility. Changes in personnel for all years depicted below are due to the increase in direct workload positions identified for transfer from RMS to NWCF responsibility.

TABLE THREE - PERSONNEL

MILITARY END STRENGTH AND WORKYEARS:

	FY 1996		FY 1997		FY 1998		FY 1999	
	E/S	W/Y	E/S	W/Y	E/S	W/Y	E/S	W/Y
Congress Submit	4	4	4	4				
Current Est	4	4	4	4	4	4	4	4

CIVILIAN END STRENGTH AND WORKYEARS:

	FY 1996	FY 1997	FY 1998	FY 1999
Congress:	336/330	340/340		
Current Est:	332/331	345/340	350/350	350/350

DIRECT CITE FUNDING - Direct cite funding is estimated to increase from FY 1995 actuals as a result of continued efforts to minimize carryover at the end of the fiscal year. NFESC works with sponsors to shift from issue/receipt of work orders, citing only reimbursable work orders which cite more direct cite funding.

TABLE FOUR - DIRECT CITE FUNDING

	FY 1996	FY 1997	FY 1998	FY 1999
FUNDING	$10.9M	$11.4M	$15.3M	$17.3M

DIRECT VERSUS INDIRECT COSTS - The ratio of direct to indirect costs is another measure of performance. NFESC's low ratio for FY 1996 is attributable to the DOD lock program which overstates direct costs incurred. In FY 1997, termination of the DoD lock program allows the ratio to more accurately reflect NFESC's operations.

TABLE FIVE - PERCENTAGE OF DIRECT TO INDIRECT COSTS

	FY 1996	FY 1997	FY 1998	FY 1999
Congress Budget	71/29%	73/27%		
Current Estimate	80/20%	76/24%	76/24%	76/24%

CUSTOMER RATE - NFESC shows a downward trend in both unit cost and stabilized billing rates from the FY 1996 Congressional budget. This is mainly due to higher direct labor hour execution and lower overhead costs as NFESC moves more projects from RMS to NWCF responsibility.

TABLE SIX - UNIT COST AND STABILIZED BILLING RATES

UNIT COST

	FY 1996	FY 1997	FY 1998	FY 1999
Congress Budget:	$87.11	$73.02		
Current Estimate:	$83.25	$73.78	$73.44	$74.19

STABILIZED BILLING RATE:

Congress Budget:	$81.60	$70.61		
Current Estimate:	$81.60	$70.61	$72.06	$74.35
Percent Change:		-13.5%	2.1%	3.2%

TABLE SEVEN - CAPITAL BUDGET AUTHORITY

	FY 1996	FY 1997	FY 1998	FY 1999
Equipment-Non ADPE/TELECOM	.524	.255	1.25	.5
ADPE/Telecom Equip.	0	0	0	0
Software Development	0	0	0	0
Minor Construction	0	0	0	0
Total ($millions)	.524	.255	1.25	.5

CARRYOVER: NFESC has begun managing and computing funded carryover of customer workload in accordance with the guidelines established by the Under Secretary of Defense (Comptroller) in

August 1996 following completion of a carryover study by representatives of OSD and the Military Departments. Carryover from one fiscal year to the next will be limited to no more than three months. Specific carryover data is presented below:

TABLE EIGHT - CARRYOVER

	FY 1996	FY 1997	FY1998	FY 1999
Carryover Funding ($M)	10.2	7.8	9.1	6.5
Months of Carryover	1.7	1.7	2.0	1.4

INDUSTRIAL BUDGET INFORMATION SYSTEM
REVENUE and EXPENSES
AMOUNT IN MILLIONS
NFESC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
Revenue:				
Gross Sales				
Operations	73.0	54.9	53.1	53.5
Surcharges	.0	.0	.0	.0
Depreciation excluding Major Constructio	.7	.5	.6	.7
Other Income				
Total Income	73.7	55.4	53.6	54.2
Expenses				
Cost of Materiel Sold from Inventory				
Salaries and Wages:				
Military Personnel	.3	.3	.3	.3
Civilian Personnel	21.3	23.5	24.7	25.2
Travel and Transportation of Personnel	1.4	1.1	1.1	1.1
Material & Supplies (Internal Operations	20.7	1.6	1.6	1.7
Equipment	1.2	1.3	1.3	1.2
Other Purchases from NWCF	1.7	2.2	2.3	2.3
Transportation of Things	.4	.3	.3	.3
Depreciation - Capital	.7	.5	.6	.7
Printing and Reproduction	.1	.2	.2	.2
Advisory and Assistance Services	.0	.0	.0	.0
Rent, Communication & Utilities	.9	.7	.7	.7
Other Purchased Sevices	27.3	24.3	21.1	20.3
Total Expenses	75.9	56.0	54.2	54.2
Work in Process Adjustment	-1.8	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0	.0
Cost of Goods Sold	74.1	56.0	54.2	54.2
Operating Result	-.4	-.6	-.6	.0
Less Surcharges	.0	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0	.0
Net Operating Result	-.4	-.6	-.6	.0
Other Changes Affecting AOR	.0	.0	.0	.0
Accumulated Operating Result	1.2	.6	.0	.0

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NFESC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
1. New Orders	64.3	54.3	53.8	50.6
a. Orders from DoD Components	59.9	49.5	48.8	45.1
Department of the Navy	34.0	30.1	31.0	29.9
O & M, Navy	11.1	5.7	6.1	5.9
O & M, Marine Corps	5.0	.3	.3	.3
O & M, Navy Reserve	.1	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0	.0
Aircraft Porcurement, Navy	.0	.0	.0	.0
Weapons Procurement, Navy	.0	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0	.0
Shipbuilding & Conversion, Navy	.1	.0	.0	.0
Other Procurement, Navy	.1	2.0	1.2	2.0
Procurement, Marine Corps	.0	.0	.0	.0
Family Housing, Navy/MC	.2	.2	.2	.2
Research, Dev., Test, & Eval., Navy	16.1	21.0	22.3	20.3
Military Construction, Navy	.9	.8	.8	1.2
Other Navy Appropriations	.4	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0	.0
Department of the Army	1.0	1.2	1.2	1.2
Army Operation & Maintenence	.1	.8	.8	.8
Army Res, Dev, Test, Eval	.5	.4	.4	.5
Army Procurement	.0	.0	.0	.0
Army Other	.4	.0	.0	.0
Department of the Air Force	.2	.5	.6	.5
Air Force Operation & Maintenence	.0	.0	.0	.0
Air Force Res, Dev, Test, Eval	.0	.0	.0	.0
Air Force Procurement	.0	.5	.0	.5
Air Force Other	.2	.0	.6	.0
DOD Appropriation Accounts	24.6	17.8	16.1	13.4
Base Closure & Realignment	2.5	2.4	.8	.0
Operation & Maintence Accounts	15.0	6.5	6.1	4.4
Res, Dev, Test & Eval Accounts	7.0	8.9	9.2	9.0
Procurement Accounts	.0	.0	.0	.0
DOD Other	.1	.0	.0	.0
b. Orders from NWCF Business Area	3.7	4.1	4.3	4.9
c. Total DoD	63.6	53.7	53.1	50.0
d. Other Orders	.7	.6	.7	.7
Other Federal Agencies	.0	.2	.3	.3
Foreign Military Sales	.1	.0	.0	.0
Non Federal Agencies	.6	.4	.4	.4

INDUSTRIAL BUDGET INFORMATION SYSTEM
Source of Revenue
AMOUNT IN MILLIONS
NFESC / TOTAL

	FY 1996 CON	FY 1997 CON	FY 1998 CON	FY 1999 CON
2. Carry-In Orders	42.3	33.0	31.9	32.0
3. Total Gross Orders	106.7	87.2	85.7	82.7
4. Funded Carry-Over **	33.0	31.9	32.0	28.5
5. Less Passthrough	.0	.0	.0	.0
6. Total Gross Sales	73.7	55.4	53.6	54.2

** Carry over data before adjustments for work-in-process, BRAC, FMS, non-DOD and contractual obligations.

ADJUSTED CARRYOVER	10.3	7.8	9.1	6.5

000723

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL FUND
BASE SUPPORT
NAVAL FACILITIES ENGINEERING SERVICE CENTER
CHANGES IN THE COSTS OF OPERATIONS
(DOLLARS IN MILLIONS)

	Costs
FY 1996 Actual	74.1
FY 1997 Estimate in President's Budget:	52.5
Estimated Impact in FY 1997 of Actual FY 1996 Experience:	
Program Changes:	
Direct Citation of Funds	3.5
Decrease in overhead costs due to management initiatives	-0.8
FY 1997 Current Estimate:	56.0
Pricing Adjustments:	
Pay Raise:	
FY 1997 CIVPERS Pay Raise	0.5
Annualization of FY 1996 Pay Raise	0.1
General Purchase Inflation	0.8
Productivity Initiatives and Other Efficiencies:	
Decrease in G&A and Production Overhead costs	-0.4
Program Changes:	
Carryover reduction action	-2.8
FY 1998 Estimate	54.2
Pricing Adjustments:	
Pay Raise:	
FY 1998 CIVPERS Pay Raise	0.6
Annualization of FY 1997 Pay Raise	0.1
General Purchase Inflation	0.5
Productivity Initiatives and Other Efficiencies:	
Decrease due to management initiatives to control overhead cost	-0.3
Program Changes:	
Completion of carryover reduction action	-0.9
FY 1999 Estimate	54.2

Fund-9a

BUSINESS AREA CAPITAL BUDGET SUMMARY
Component: Department of the Navy
Research and Development
(Dollars in Millions)

NAVAL FACILITIES ENGINEERING SERVICE CENTER

LINE #	Item Description	FY 1996		FY 1997		FY 1998		FY 1999	
		Quant	Total Cost	Quant	Total Cost	Quant	Total Cost	Quant	Total Cost
	1a. Equipment- Non ADPE(>$500K)								
	- Replacement								
L0001	Ship Engine	0	0.000	0	0	1	0.500	1	0.500
	- Productivity								
	- New Mission								
	- Environmental								
	Subtotal Equipment (>$500K)	0	0.000	0	0.000	1	0.500	1	0.500
	1b. Equipment-Non ADPE (<$500K)								
L0002	- Replacement	2	0.524	2	0.255	3	0.750	0	0.000
	- Productivity								
	- New Mission								
L0003	- Environmental	0	0.000	0	0.000	0	0.000	0	0.000
	Subtotal Equipment (<$500K)	2	0.524	2	0.255	3	0.750	0	0.000
L0004	2. Minor Construction (>$100K<$300K)	0	0.000	0	0.000	0	0.000	0	0.000
L0005	3. ADPE & Telecomm (>$100K)	0	0.000	0	0.000	0	0.000	0	0.000
L0006	4. Software Development	0	0.000	0	0.000	0	0.000	0	0.000
	TOTAL	2	0.524	2	0.255	4	1.250	1	0.500

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION
($ in Thousands)
NAVAL FACILITIES ENGINEERING SERVICE CENTER

A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support	C. L0001 Equipment- Replacement >$500,000	D. Naval Facilities Engineering Service Center

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment-Replacement	0	0.00	0	0	0.00	0	1	500.00	500	1	500.00	500
TOTAL	0	0.00	0	0	0.00	0	1	500.00	500	1	500.00	500

Narrative Justification:

The risk of main engine failure is becoming greater each year. This situation has the potential of seriously degrading the operational availability of the vessel and jeopardizing its mission readiness. The historical data records for the engine show unusual and uncommon heating, fatigue and stress failures resulting in an average of $20K to $25K per year cost for maintenance, repair, diagnosing and troubleshooting (labor and parts). These high maintenance costs are expected to continually rise each year as the engine reaches the end of its useful service life. The problems experienced by the engine has reduced its life expectancy to an estimated 15 years. Due to cracks in the block, Cummins Engine Co., the manufacturer recommended changing out the engine as soon as possible or when economically practical. The cracks have been patched, however, patching is only a temporary fix and does not increase its reliability.

9200-26

Fund-9b

BUSINESS AREA CAPITAL PURCHASES JUSTIFICATION ($ in Thousands) NAVAL FACILITIES ENGINEERING SERVICE CENTER	A. FY 1998/1999 BIENNIAL BUDGET

B. Department of the Navy/Base Support	C. L0002 Equipment- Replacement <$500,000	D. Naval Facilities Engineering Service Center

	FY 1996			FY 1997			FY 1998			FY 1999		
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Equipment-Replacement	2	262.00	524	2	127.50	255	3	250.00	750	0	0.00	0
TOTAL	2	262.00	524	2	127.50	255	3	250.00	750	0	0.00	0

Narrative Justification:

Items budgeted represent a Deepwater Piezocone to accurately determine soil properties, an automatic halon fire suppression system onboard the M/V INDEPENDENCE, a seafloor geotechnical survey and analysis system, a self-contained Double Drum Winch, and a Dynamic Lateral Load System for the Advanced Waterfront Technology Test Site.

DEPARTMENT OF THE NAVY
NAVY WORKING CAPITAL
RESEARCH AND DEVELOPMENT
NAVAL FACILITIES ENGINEERING SERVICE CENTER
FY 1997 BUDGET ESTIMATE

PROJECTS ON THE FY 1997 PRESIDENT'S BUDGET
(Dollars in Millions)

FY	Approved Project	APPROVED BUDGET	REPROGS	APPROVED PROJ COST	CURRENT PROJ COST	ASSET/ DEFICIENCY	EXPLANATION
1997	Equipment except ADPE and TELCOM	0.000	0.000	0.000	0.000	0.000	
	Equipment - ADPE and TELCOM	0.500	0.000	0.255	0.255	0.245	CANCELED DUE TO WORKLOAD CHANGES
	Software Development	0.000	0.000	0.000	0.000	0.000	
	Minor Construction	0.000	0.000	0.000	0.000	0.000	
	TOTAL FY 1997	0.500	0.000	0.255	0.255	0.245	

0003783

NAVY WORKING CAPITAL FUND
Supply Management Activity Group
FY 1998 and FY 1999 BUDGET

BACKGROUND

The Supply Management Activity Group performs inventory management functions that result in the sale of aviation and shipboard components, fuel, ships store stock, general use consumables including subsistence material, and publications and forms to a wide variety of customers. Major customers include Fleet and Marine Corps forces, Department of the Navy shore activities, Army , Air Force, Defense agencies, and other government agencies and foreign governments. All costs related to supplying this material to the customer are recouped through a stabilized price which includes a surcharge to cover costs such as inventory losses, transportation, obsolescence and cost of inventory management, the receipt and issue of Department managed material and Department owned retail material at distribution depots, and the depreciation of capital assets.

Operations costs for the following activities are funded in this business area:

Naval Inventory Control Point, Mechanicsburg/Philadelphia, PA
Fleet and Industrial Supply Center, Norfolk, VA
Fleet and Industrial Supply Center, San Diego, CA
Fleet and Industrial Supply Center, Puget Sound, WA
Fleet and Industrial Supply Center, Jacksonville, FL
Fleet and Industrial Supply Center, Pearl Harbor, HI
Fleet and Industrial Supply Center, Yokosuka, JA
Fleet and Industrial Supply Center, Oakland, CA
Fleet and Industrial Supply Center, Guam

Due to the decisions announced through the BRAC III and IV process, FISC Guam will close by the end of FY 1997 and FISC Oakland by the end of FY 1998. In FY1997, the Logistics Support Activities activity group will be merged with the Supply Management Activity Goup due to decreasing size.

The workload or unit cost resourcing unit of measure for Supply Management is gross sales, both wholesale and retail.

BUDGET HIGHLIGHTS

Workload

Wholesale and Retail gross sales (Standard Price) are depicted below:

	(Dollars in Millions)			
	FY 1996	FY 1997	FY 1998	FY 1999
Wholesale	3,479.1	3,413.6	3,841.7	3,362.4
Retail	2,178.2	2,235.2	2,420.3	2,428.9
Total Gross Sales	5,657.3	5,648.8	6,262.0	5,791.3

Aviation material requirements are based upon the recurring demand from the currently funded flying hour program. Shipboard recurring demand has been reduced to match the decreased number of ships. The submission is based the force structure, OPTEMPO and funded workload which resulted from Program Review (PR) 98.

Adjusting for the surcharge difference from year to year, wholesale sales are trending downward. as depicted below:

	(Dollars in Millions)			
	FY 1996	FY 1997	FY 1998	FY 1999
Wholesale Sales (Std.)	3,479.1	3,413.6	3,841.7	3,362.4
Wholesale Sales (less surch)	2,992.1	2,478.3	1,632.3	1,691.4

The primary factors contributing to reduced sales are: (1) reduced recurring demand to match force structure reductions; (2) transfer of material management of the majority of consumable items to the Defense Logistics Agency and (3) elimination of intermediate retail levels of inventory.

Performance Indicators

	FY 1996	FY 1997	FY 1998	FY 1999
No. of Items Managed	334,302	337,645	341,021	344,431
No. of Receipts	1,343,784	1,387,726	1,386,477	1,297,742
No. of Issues	3,777,752	3,848,604	3,845,140	3,599,051
Requisitions Received	1,051,068	870,600	573,400	594,200
Contracts Executed	25,581	24,225	22,750	19,700

Supply Material Availability:	79.3%	78.0%	78.0%	78.0%
Unit Cost:				
Wholesale	.887	.888	.783	.786
Retail	.996	1.021	1.016	1.007
Personnel (End Strength):				
Civilian	6,991	7,034	6,660	6,420
Military	563	531	477	477
Total	7,554	7,565	7,137	6,897
Personnel (FTE):				
Civilian	6,971	7,138	6,753	6,521
Military	580	547	504	477
Total	7,551	7,685	7,257	6,998
Customer Rate Changes	-22.5%	8.6%	26.3%	-2.9%
Composite Surcharge	14.0%	28.4%	57.4%	49.7%
Cost of Goods Sold ($M)	5,876.3	5,794.7	6,007.9	5,738.9
Net Operating Results ($M)	-306.3	-200.4	+87.5	0.0
Acum. Operating Result ($M)	+112.9	- 87.5	0.0	0.0
Collections ($B)	5.7	5.7	6.3	5.8
Disbursements ($B)	5.8	5.5	5.9	5.6
Net Outlay ($B)	.1	- .2	- .4	- .2

Inventories/Efficiencies

The DON continues to aggressively pursue the goals of the DOD Inventory Reduction Plan and this submission supports the objective of reducing inventory to optimize inventory investment and match force structure decreases.

Inventory values are expressed at standard price on the SM-1 Exhibit and the various budget statements. Since wholesale rates and surcharges vary greatly from year to year, comparison of ending inventory from one year to another can be misleading. The SM-1 provides the following end of period inventory values at standard price:

(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
Retail	1,640.5	1,642.4	1,630.4	1,610.5
Wholesale	26,844.3	27,395.2	31,128.6	29,238.4
Total	28,484.8	29,037.6	32,759.0	30,848.9

Since the retail inventory value at standard price contains the effects of DLA and GSA surcharges or in the case of BP21 (Ship's Store) market inflation specific to retail consumer goods, the year to year comparison of the inventory is difficult, however, it reflects a downward trend.

The following analysis removes the year to year surcharge from the Wholesale inventory values to provide a more accurate projection of the Wholesale inventory decrease which this submission supports. This submission shows an inventory increase beginning in FY 1998. This is primarily due to the capitalization of afloat AVDLR assets into the Navy Working Capital Fund.

	FY 1996	FY 1997	FY 1998	FY 1999
Wholesale Inv. (Std.)	26,844.3	27,395.1	31,128.6	29,238.4
Wholesale Inv. (less surch)	23,547.6	21,503.2	19,764.2	19,531.3

The Navy Supply Management Activity Group is committed to minimizing inventory investments through the Inventory Reduction Program (IRP). Significant initiatives incorporated into this submission are:

- Aggressive program to cancel contracts and or buys in process for material when the requirement changes
- Continuation of an aggressive disposal policy to reduce holding and storage cost for inventory which is no longer required
- Introduction of cultural change in inventory management
  - Personnel evaluations based on IRP objectives
  - Personal Qualifications Standards established
- Improved automated tools
- State of the art demand forecasting techniques
- Elimination of requirements and recurring demand for operating units 24 months prior to their decommissioning
- Increased reliance on wholesale inventories
- Reduced consumer level inventories through Readiness Based Sparing (RBS)
- Consolidation ashore of insurance stock (low mission criticality).
- Expanded reliability improvement initiatives to reduce inventories and lower maintenance costs.
- Expansion of total asset visibility.

03-Feb-97

COMPONENT: NAVY SUPPLY MANAGEMENT
REVENUE AND EXPENSE SUMMARY
(Dollars in Millions)

	FY 1996	FY 1997	FY 1998	FY 1999
REVENUES:				
Net Sales:				
Operations	5228.7	5260.2	5879.5	5423.6
Fixed Fee Retail Reimbursement	27.4	29.1	30.8	32.8
Collection for JLSC	38.7	59.5	48.0	40.1
Depreciation except Maj Const	5.4	24.3	26.0	26.2
Major Construction Dep	0.0	0.0	0.0	0.0
Other Income	308.5	280.7	285.8	291.3
Refunds / Discounts (-)				
Total Income:	5608.7	5653.8	6270.1	5813.9
EXPENSES:				
Cost of Materiel Sold from Inventory	4911.9	4722.2	4693.1	4482.3
Salaries and Wages:				
Military Personnel	5.9	22.1	21.3	21.7
Civilian Personnel	300.7	304.3	295.1	290.0
Travel and Transportation of Personnel	13.3	14.3	14.4	14.4
Materials and Supplies	30.8	54.7	55.4	53.2
Equipment				
Other Puchases from Revolving Funds	230.4	293.5	413.1	342.7
Transportation of Things	105.8	107.0	106.0	103.1
Depreciation - Capital	5.4	24.3	26.0	26.2
Printing and Reproduction	0.2	0.2	0.2	0.2
Advisory and Assistance Services				
Rent, Communications, Utilities & Misc	163.9	163.1	176.8	178.7
Other Purchased Services	69.5	89.2	206.5	226.5
To Logistics Support	38.4	0.0	0.0	0.0
To Distribution Depots	0.0	0.0	0.0	0.0
TOTAL EXPENSES	5876.3	5794.7	6007.9	5738.9
Cost of Goods Sold	5876.3	5794.7	6007.9	5738.9
Operating Results	-267.6	-140.9	262.2	74.9
Less Expense for JLSC / Cash	38.7	59.5	174.7	75.0
Plus Appropriations Affecting NOR / AOR	0.0	0.0	0.0	0.0
Other Changes Affecting NOR / AOR	0.0	0.0	0.0	0.0
Retention Adj	0.0	0.0	0.0	0.0
Net Operating Result	-306.3	-200.4	87.5	0.0
Transfers Not Affecting NOR / AOR	0.0	0.0	0.0	0.0
Prior Year and Other Adjustments	0.0	0.0	0.0	0.0
Other Inventory Adjustments	0.0	0.0	0.0	0.0
WRM Appropriations	0.0	0.0	0.0	0.0
Net Result	-306.3	-200.4	87.5	0.0
Redistribution of Accumulated Result	-367.5			
Bosnia	-12.2			
Accumulated Result	112.9	-87.5	0.0	0.0

Logistics Support Activities - Navy
Revenue and Expense
(Dollars in Millions)

	FY 96	FY 97	FY 98	FY 99
Revenue:				
Gross Sales				
Operations				
Depreciation except Maj Const	15.5	0.0	0.0	0.0
Major Construction Depreciation	0.0	0.0	0.0	0.0
Total Gross Sales	15.5	0.0	0.0	0.0
Other Income	121.3	0.0	0.0	0.0
Reimbursable	82.9	0.0	0.0	0.0
From Supply Management	38.4	0.0	0.0	0.0
Total Income	136.7	0.0	0.0	0.0
Expenses:				
Cost of Material Sold from Inventory				
Negotiated Purchases from Customers				
Transportation	0.0	0.0	0.0	0.0
Salaries and Wages	20.4	0.0	0.0	0.0
Military Personnel	16.1	0.0	0.0	0.0
Civilian Personnel	4.3	0.0	0.0	0.0
Materials, Supplies, and				
Parts used in Operations	22.6	0.0	0.0	0.0
Facility Repair Charge	1.2	0.0	0.0	0.0
Depreciation - Capital	15.5	0.0	0.0	0.0
Contracted Engineering Services	0.0	0.0	0.0	0.0
Lease Costs	0.1	0.0	0.0	0.0
Purchased Utilities	1.6	0.0	0.0	0.0
Purchased Communications	1.5	0.0	0.0	0.0
Equipment Maintenance	0.0	0.0	0.0	0.0
Fuel	0.0	0.0	0.0	0.0
Other Expenses	73.9	0.0	0.0	0.0
Total Expenses	136.8	0.0	0.0	0.0
Net Operating Result	0.0	0.0	0.0	0.0

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
SOURCE OF REVENUE
(Dollars in Millions)

FUND-11

	FY 1996	FY 1997	FY 1998	FY 1999
1. New Orders				
a. Orders from DoD Components:				
Own Component				
1105 Military Personnel, M.C.	0.0	0.0	0.0	0.0
1106 O & M, Marine Corps	0.0	0.0	0.0	0.0
1107 O & M, M.C. Reserve	7.2	7.1	9.1	10.4
1108 Reserve Personnel, M.C.	20.0	7.9	9.3	18.1
1109 Procurement, M.C.	0.0	0.0	0.0	0.0
1319 RDT & E, Navy	0.0	0.0	0.0	0.2
1405 Reserve Personnel, Navy	2.2	2.4	2.8	2.8
1453 Military Personnel, Navy	27.0	43.3	37.8	37.1
1506 Aircraft Procurement, Navy	271.9	404.3	462.0	460.2
1611 Shipbuilding & Conv. Navy	97.1	60.4	34.8	25.3
1804 O & M, Navy	2989.4	2848.8	3464.9	3398.4
1806 O & M, Navy Reserve	227.1	220.4	270.5	269.7
1810 Other Procurement, Navy	93.9	76.4	120.1	154.3
4930 Defense Business Operations Func	1318.8	1377.6	1097.7	673.6
8421 Trust Revolving Fund, M.C.	0.2	0.1	0.0	0.1
	5,054.9	5,048.6	5,509.2	5,050.3
Orders from other DoD Components				
2100 Army	1.8	4.3	4.3	6.6
5700 Air Force	5.6	3.0	1.3	5.0
9700 other DoD	273.3	326.1	381.8	378.8
	280.7	333.4	387.4	390.4
b. Orders from other Fund Business Areas:				
Distribution Depots Navy	0.0	0.0	0.0	0.0
Logistics Support Navy	81.7	0.0	0.0	0.0
	81.7	0.0	0.0	0.0
c. Total DoD	5,417.3	5,382.0	5,896.6	5,440.7
d. Other Orders:				
Other Federal Agencies	44.5	46.7	54.5	49.4
Trust Fund	0.0	0.0	0.0	0.0
Non Federal Agencies	63.6	63.9	75.6	76.1
Foreign Military Sales (FMS)	131.9	156.2	235.3	225.1
	240.0	266.8	365.4	350.6
2. Carry-In Orders	0	0	0	0
3. Total Gross Orders	5,657.3	5,648.8	6,262.0	5,791.3
4. Change to Backlog	0.0	0.0	0.0	0.0
5. Total Gross Sales *	5,657.3	5,648.8	6,262.0	5,791.3
Reimbursable Orders (BP 91)	308.5	309.8	316.6	324.1

* Revenue and Expense Statement reflects Net Sales

Navy Working Capital Fund
Supply Management Activity Group
(dollars in thousands)
Fund 2

		EXPENSES
1.	FY 1996 Actual	5,524.9
2.	FY 1997 Estimate in President's Budget	4,798.8
3.	Pricing Adjustments:	
	Fund Price Changes	179.6
	Supplies, Material & Equipment	3.0
	Other Intrafund Purchases	138.0
	Industrial Fund Purchases	(71.8)
	General Purchase Inflation	110.4
4.	Workload Changes:	783.8
	Consumable Item Transfer	4.6
	Force Reduction (Wholesale Procurement)	356.0
	Force Reduction (Retail)	(48.4)
	Force Reduction (Wholesale Repair)	128.0
	Master Labor Contract (FNIH) with GOJ	5.0
	FISC "pass-thru"	22.2
	ICP "pass-thru"	47.7
	CPP	(11.5)
	NULO/UMD Clearance	245.4
	Change in Workload	34.8
5.	FY 1997 Current Estimate	5,762.2
6.	Pricing Adjustments:	209.1
	Annualization of Prior Year Pay Raises	2.0
	FY 1997 Pay Raise	6.6
	Civilian Personnel	6.0
	Military Personnel	0.6
	DBOF Price Changes:	200.5
	Supplies, Material & Equipment	9.5
	Other Intrafund Purchases	46.1
	Industrial Fund Purchases	-7.8
	General Purchase Inflation	152.7
7.	Productivity Initiatives and Other Efficie	(148.5)
	DMRD Reduction	(144.7)
	HRO Regionalization	(1.7)
	POM OH Reduction	(2.1)

8. Workload Changes:	(8.5)
Active Duty Personnel Downsizing	(1.3)
Force Level Reduction (Operations)	(14.6)
Adjustment driven by Change in Sales	(6.5)
Force Reduction (Wholesale Procurement)	(77.1)
Force Reduction (Retail)	20.1
Force Reduction (Wholesale Repair)	70.9
9. Other Changes:	(104.5)
Milpers Adjustment	(0.2)
FISC Guam to NAVACTs/BRAC IV Savings	(8.9)
Over Ocean Transportation	8.3
DLA Distribution Depots Pricing	17.6
DRMS Guidance	85.9
NULO/UMD Clearance	(209.6)
CPP Adjustment	2.4
10. FY 1998 Current Estimate:	5,709.8
11. Pricing Adjustments:	(18.6)
FY 1998 Pay Raise	3.4
Military Personnel	0.7
Civilian Personnel	2.7
Annualization of Prior Year Pay Raises	3.0
DBOF Price Changes:	(25.0)
Supplies, Material & Equipment	7.2
Other Intrafund Purchases	23.2
Industrial Fund Purchases	(40.4)
General Purchase Inflation	(15.0)
12. Workload Changes:	(275.8)
Force Level Reduction (Operations)	(9.2)
Adjustment driven by change in sales	(20.4)
Force Reduction (Wholesale Procurement)	(240.3)
Force Reduction (Retail)	18.1
Force Reduction (Wholesale Repair)	(23.8)
Active Duty Decline	(0.2)
13. Productivity Initiatives and Other Effic	(10.4)
HRO Regionalization	(6.0)
POM OH Reduction	(4.4)
14. Other Changes:	(60.7)
Milpers Adjustment	(1.0)
FISC Guam to NAVACTs/BRAC IV Savings	(0.4)
DFAR to FISC Yoko	1.1
DRMS Guidance	(64.1)
DLA Distribution Depots Pricing	3.7
NULO/UMD Clearance	0.1
CPP Adjustment	(6.6)
15. FY 1999 Current Estimate:	5,344.3

LOGISTICS SUPPORT ACTIVITIES - NAVY
CHANGE IN OPERATIONS
(Dollars in Millions)

	Expenses
FY 1996 Actual	141.0
FY 1997 Estimate in President's Budget	0.0
Pricing Adjustments:	0.0
Civilian Personnel	0.0
Change in Economic Assumption (General Inflation)	0.0
Program Changes:	0.0
FY 1997 Current Estimate:	0.0
FY 1998	0.0
FY 1999	0.0

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project SUMMARY
(Dollars in Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	34,457.7	260.8	13,342.0	20,854.9
2. BOP INVENTORY ADJUSTMENTS	(6,109.8)	(23.0)	(544.1)	(5,542.7)
A. RECLASSIFICATION CHANGE (memo)	0.0	(9.1)	1,531.0	(1,521.9)
B. PRICE CHANGE AMOUNT (memo)	(6,109.8)	(13.8)	(2,075.1)	(4,020.8)
C. INVENTORY RECLASSIFIED AND REPRICED	28,347.9	237.8	12,797.8	15,312.2
3. RECEIPTS AT STANDARD	3,989.7	3.5	3,915.8	70.4
4. SALES AT STANDARD	5,657.2	0.0	5,657.2	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	789.6	(0.2)	1,220.0	(430.2)
B. RETURNS FROM CUSTOMERS FOR CREDIT	356.9	0.4	219.7	136.8
C. RETURNS FROM CUSTOMERS, NO CREDIT	10,731.1	0.1	3,989.7	6,741.3
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(3,236.4)	0.0	(0.4)	(3,236.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(687.8)	(0.0)	(201.1)	(486.6)
G. OTHER (listed in Section 9)	(5,915.6)	(8.2)	(4,680.5)	(1,226.9)
H. TOTAL ADJUSTMENTS	2,037.8	(8.0)	547.5	1,498.3
6. INVENTORY EOP	28,718.1	233.3	11,603.8	16,881.0
7. INVENTORY EOP (REVALUED)	18,180.6	177.6	7,790.1	10,212.9
A. APPROVED ACQUISITION OBJECTIVE (memo)				6,193.9
B. ECONOMIC RETENTION (memo)				2,481.0
C. CONTINGENCY RETENTION (memo)				1,449.2
D. POTENTIAL DOD REUTILIZATION (memo)				88.7
8. INVENTORY ON ORDER EOP (memo)	1,988.7	3.0	1,892.0	93.8

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(1,007.4)	0.0	(763.2)	(244.2)
Strata Transfers	0.0	(8.2)	990.9	(982.7)
Net/Std Difference	(4,908.2)	0.0	(4,908.2)	0.0
Total	(5,915.6)	(8.2)	(4,680.5)	(1,226.9)

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT SM-4
INVENTORY STATUS
BUDGET PROJECT 14
(Dollars In Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	1,250.9	1.8	434.1	815.0
2. BOP INVENTORY ADJUSTMENTS	(286.8)	(0.4)	(80.6)	(205.8)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2.4	(2.4)
B. PRICE CHANGE AMOUNT (memo)	(286.8)	(0.4)	(82.9)	(203.4)
C. INVENTORY RECLASSIFIED AND REPRICED	964.1	1.4	353.5	609.2
3. RECEIPTS AT STANDARD	121.8	0.0	121.1	0.7
4. SALES AT STANDARD	99.2	0.0	99.2	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(36.7)	0.0	(13.2)	(23.5)
B. RETURNS FROM CUSTOMERS FOR CREDIT	6.1	0.0	4.6	1.5
C. RETURNS FROM CUSTOMERS, NO CREDIT	51.2	0.0	5.7	45.5
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	
E. TRANSFERS TO PROP. DISPOSAL (-)	(96.3)	0.0	0.0	(96.3)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(21.4)	0.0	(7.7)	(13.7)
G. OTHER (listed in Section 9)	(21.1)	(0.2)	(91.2)	70.3
H. TOTAL ADJUSTMENTS	(118.2)	(0.2)	(101.9)	(16.1)
6. INVENTORY EOP	868.6	1.2	273.6	593.8
7. INVENTORY EOP (REVALUED)	649.7	1.1	236.5	412.1
A. APPROVED ACQUISITION OBJECTIVE (memo)				145.3
B. ECONOMIC RETENTION (memo)				138.4
C. CONTINGENCY RETENTION (memo)				125.0
D. POTENTIAL DOD REUTILIZATION (memo)				3.4
8. INVENTORY ON ORDER EOP (memo)	83.9	0.0	82.2	1.7

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(21.1)	0.0	(9.1)	(12.0)
Strata Transfers	0.0	(0.2)	(82.1)	82.3
Total	(21.1)	(0.2)	(91.2)	70.3

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 15
(Dollars in Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	21.8	0.3	8.2	13.3
2. BOP INVENTORY ADJUSTMENTS	0.2	0.0	0.9	(0.7)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.7	(0.7)
B. PRICE CHANGE AMOUNT (memo)	0.2	0.0	0.2	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	22.0	0.3	9.1	12.6
3. RECEIPTS AT STANDARD	10.0	0.0	10.0	0.0
4. SALES AT STANDARD	8.2	0.0	8.2	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.8	0.0	0.0	0.8
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.1)	0.0	0.0	(0.1)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(3.8)	0.0	(3.7)	(0.1)
H. TOTAL ADJUSTMENTS	(3.2)	0.0	(3.7)	0.5
6. INVENTORY EOP	20.6	0.3	7.2	13.1
7. INVENTORY EOP (REVALUED)	9.0	0.0	0.0	9.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				8.5
B. ECONOMIC RETENTION (memo)				0.3
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.1
8. INVENTORY ON ORDER EOP (memo)	1.3	0.0	1.3	0.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(3.8)	0.0	(3.8)	0.0
Strata Transfers	0.0	0.0	0.1	(0.1)
Total	(3.8)	0.0	(3.7)	(0.1)

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 21
(Dollars in Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	48.0	0.0	48.0	0.0
2. BOP INVENTORY ADJUSTMENTS	0.1	0.0	0.1	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.1	0.0	0.1	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	48.1	0.0	48.1	0.0
3. RECEIPTS AT STANDARD	91.7	0.0	91.7	0.0
4. SALES AT STANDARD	91.2	0.0	91.2	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(7.4)	0.0	(7.4)	0.0
H. TOTAL ADJUSTMENTS	(7.4)	0.0	(7.4)	0.0
6. INVENTORY EOP	41.2	0.0	41.2	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(7.4)	0.0	(7.4)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(7.4)	0.0	(7.4)	0.0

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 23
(Dollars In Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	65.4	0.0	65.4	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	65.4	0.0	65.4	0.0
3. RECEIPTS AT STANDARD	19.8	0.0	19.8	0.0
4. SALES AT STANDARD	17.9	0.0	17.9	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.1	0.0	0.1	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(1.8)	0.0	(1.8)	0.0
H. TOTAL ADJUSTMENTS	(1.7)	0.0	(1.7)	0.0
6. INVENTORY EOP	65.5	0.0	65.5	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	14.5	0.0	14.5	0.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(1.8)	0.0	(1.8)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(1.8)	0.0	(1.8)	0.0

C03543

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 25
(Dollars In Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	0.0	0.0	0.0	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	0.0	0.0	0.0	0.0
3. RECEIPTS AT STANDARD	0.0	0.0	0.0	0.0
4. SALES AT STANDARD	0.0	0.0	0.0	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (Ilsted In Section 9)	0.0	0.0	0.0	0.0
H. TOTAL ADJUSTMENTS	0.0	0.0	0.0	0.0
6. INVENTORY EOP	0.0	0.0	0.0	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):

	Total	Mobilization	Operating	Other
Other Gains/Losses	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0

C03544

DEPARTMENT OF NAVY, SUPPLY MANAG SM-4
INVENTORY STATUS
BUDGET PROJEC 28
(Dollars in Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	1,623.0	175.9	1,055.4	391.7
2. BOP INVENTORY ADJUSTMENTS	56.2	6.2	70.6	(20.6)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	35.1	(35.1)
B. PRICE CHANGE AMOUNT (memo)	56.2	6.2	35.5	14.5
C. INVENTORY RECLASSIFIED AND REPRICED	1,679.2	182.1	1,126.0	371.1
3. RECEIPTS AT STANDARD	934.8	0.0	976.7	(41.9)
4. SALES AT STANDARD	998.2	0.0	998.2	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(330.3)	0.0	0.1	(330.4)
B. RETURNS FROM CUSTOMERS FOR CREDIT	25.5	0.0	25.5	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	632.8	0.0	94.9	537.9
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(151.3)	0.0	0.0	(151.3)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(223.2)	0.0	(120.6)	(102.6)
G. OTHER (listed in Section 9)	(100.9)	0.0	(138.1)	37.2
H. TOTAL ADJUSTMENTS	(147.4)	0.0	(138.2)	(9.2)
6. INVENTORY EOP	1,468.4	182.1	966.3	320.0
7. INVENTORY EOP (REVALUED)	1,029.3	138.5	725.0	165.8
A. APPROVED ACQUISITION OBJECTIVE (memo)				161.9
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				3.9
8. INVENTORY ON ORDER EOP (memo)	123.6	0.0	123.6	0.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(100.9)	0.0	(138.1)	37.2
Strata Transfers	0.0	0.0	0.0	0.0
Total	(100.9)	0.0	(138.1)	37.2

DEPARTMENT OF NAVY, SUPPLY MANAGEM SM-4
INVENTORY STATUS
BUDGET PROJECT 34
(Dollars In Millions)
FY1996

	Total	Mobilization	--- Peacetime --- Operating	Other
1. INVENTORY BOP	1,991.1	3.6	785.8	1,201.7
2. BOP INVENTORY ADJUSTMENTS	(380.2)	(0.9)	(173.3)	(206.1)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	1.1	(1.1)
B. PRICE CHANGE AMOUNT (memo)	(380.2)	(0.9)	(174.4)	(204.9)
C. INVENTORY RECLASSIFIED AND REPRICED	1,610.9	2.7	612.5	995.7
3. RECEIPTS AT STANDARD	510.5	2.1	479.2	29.2
4. SALES AT STANDARD	486.0	0.0	486.0	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(336.4)	(0.3)	(148.0)	(188.1)
B. RETURNS FROM CUSTOMERS FOR CREDIT	15.1	0.2	12.7	2.3
C. RETURNS FROM CUSTOMERS, NO CREDIT	127.3	0.1	6.4	120.8
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	
E. TRANSFERS TO PROP. DISPOSAL (-)	(135.6)	0.0	0.0	(135.6)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(101.0)	(0.0)	(59.9)	(41.1)
G. OTHER (listed in Section 9)	59.4	(3.0)	79.8	(17.4)
H. TOTAL ADJUSTMENTS	(371.1)	(3.0)	(109.1)	(259.0)
6. INVENTORY EOP	1,264.3	1.8	496.7	765.9
7. INVENTORY EOP (REVALUED)	936.7	1.6	418.9	516.2
A. APPROVED ACQUISITION OBJECTIVE (memo)				339.3
B. ECONOMIC RETENTION (memo)				152.5
C. CONTINGENCY RETENTION (memo)				20.9
D. POTENTIAL DOD REUTILIZATION (memo)				3.5
8. INVENTORY ON ORDER EOP (memo)	480.2	0.1	437.2	43.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	59.4	0.0	19.5	40.0
Strata Transfers	0.0	(3.0)	60.3	(57.3)
	0.0	0.0	0.0	0.0
Total	59.4	(3.0)	79.8	(17.4)

C03546

DEPARTMENT OF NAVY, SUPPLY MANAG SM-4
INVENTORY STATUS
BUDGET PROJEC 38
(Dollars in Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	187.0	0.0	187.0	0.0
2. BOP INVENTORY ADJUSTMENTS	5.9	0.0	5.9	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	5.9	0.0	5.9	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	192.9	0.0	192.9	0.0
3. RECEIPTS AT STANDARD	1,091.9	0.0	1,091.9	0.0
4. SALES AT STANDARD	1,062.7	0.0	1,062.7	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	1.5	0.0	1.5	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.5	0.0	0.5	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.4)	0.0	(0.4)	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(0.3)	0.0	(0.3)	0.0
G. OTHER (listed in Section 9)	3.8	0.0	3.8	0.0
H. TOTAL ADJUSTMENTS	5.1	0.0	5.1	0.0
6. INVENTORY EOP	227.2	0.0	227.2	0.0
7. INVENTORY EOP (REVALUED)	177.0	0.0	177.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	29.7	0.0	29.7	0.0

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	3.8	0.0	3.8	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	3.8	0.0	3.8	0.0

C00347

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT
INVENTORY STATUS
BUDGET PROJECT 81
(Dollars In Millions)
FY1996

SM-4

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	8,333.4	61.2	3,499.0	4,773.3
2. BOP INVENTORY ADJUSTMENTS	(1,956.2)	(15.6)	(470.0)	(1,470.7)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	115.2	(115.2)
B. PRICE CHANGE AMOUNT (memo)	(1,956.2)	(15.6)	(585.2)	(1,355.5)
C. INVENTORY RECLASSIFIED AND REPRICED	6,377.2	45.6	3,029.0	3,302.6
3. RECEIPTS AT STANDARD	289.2	0.0	228.7	60.5
4. SALES AT STANDARD	563.3	0.0	563.3	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	50.7	0.0	22.4	28.4
B. RETURNS FROM CUSTOMERS FOR CREDIT	44.0	0.0	15.6	28.4
C. RETURNS FROM CUSTOMERS, NO CREDIT	1,592.4	0.0	303.6	1,288.7
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(952.3)	0.0	0.0	(952.3)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(32.9)	0.0	(12.6)	(20.3)
G. OTHER (listed in Section 9)	(850.6)	(3.2)	(794.2)	(53.2)
H. TOTAL ADJUSTMENTS	(148.6)	(3.2)	(465.3)	319.8
6. INVENTORY EOP	5,954.4	42.4	2,229.1	3,682.9
7. INVENTORY EOP (REVALUED)	4,013.8	32.7	1,679.1	2,302.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				1,239.1
B. ECONOMIC RETENTION (memo)				825.9
C. CONTINGENCY RETENTION (memo)				215.7
D. POTENTIAL DOD REUTILIZATION (memo)				21.3
8. INVENTORY ON ORDER EOP (memo)	286.0	0.0	282.8	3.2

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(336.1)	0.0	(125.8)	(210.3)
Strata Transfers	0.0	(3.2)	(153.9)	157.1
Net/Standard Difference	(514.5)	0.0	(514.5)	0.0
Total	(850.6)	(3.2)	(794.2)	(53.2)

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 85
(Dollars In Millions)
FY1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	20,937.1	18.0	7,259.1	13,660.0
2. BOP INVENTORY ADJUSTMENTS	(3,549.0)	(12.3)	102.2	(3,638.9)
A. RECLASSIFICATION CHANGE (memo)	0.0	(9.1)	1,376.5	(1,367.4)
B. PRICE CHANGE AMOUNT (memo)	(3,549.0)	(3.2)	(1,274.3)	(2,271.5)
C. INVENTORY RECLASSIFIED AND REPRICED	17,388.1	5.7	7,361.3	10,021.1
3. RECEIPTS AT STANDARD	920.0	1.4	896.8	21.9
4. SALES AT STANDARD	2,330.6	0.0	2,330.6	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	1,442.3	0.0	1,358.8	83.4
B. RETURNS FROM CUSTOMERS FOR CREDIT	264.7	0.2	159.9	104.6
C. RETURNS FROM CUSTOMERS, NO CREDIT	8,326.0	0.0	3,578.5	4,747.5
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	
E. TRANSFERS TO PROP. DISPOSAL (-)	(1,900.4)	0.0	0.0	(1,900.4)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(309.0)	0.0	0.0	(309.0)
G. OTHER (Ilsted In Section 9)	(4,993.3)	(1.9)	(3,727.6)	(1,263.7)
H. TOTAL ADJUSTMENTS	2,830.3	(1.6)	1,369.6	1,462.3
6. INVENTORY EOP	18,807.8	5.4	7,297.1	11,505.3
7. INVENTORY EOP (REVALUED)	11,365.1	3.7	4,553.6	6,807.8
A. APPROVED ACQUISITION OBJECTIVE (memo)				4,299.8
B. ECONOMIC RETENTION (memo)				1,363.9
C. CONTINGENCY RETENTION (memo)				1,087.6
D. POTENTIAL DOD REUTILIZATION (memo)				56.5
8. INVENTORY ON ORDER EOP (memo)	969.5	2.9	920.7	45.9

9. NARRATIVE:

Other adjustments (total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(599.5)	0.0	(500.4)	(99.1)
Strata Transfers	0.0	(1.9)	1,166.5	(1,164.6)
Net/Std Difference	(4,393.8)	0.0	(4,393.8)	0.0
Total	(4,993.3)	(1.9)	(3,727.6)	(1,263.7)

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project SUMMARY
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	28,718.1	233.3	11,603.8	16,881.0
2. BOP INVENTORY ADJUSTMENTS	2,270.2	6.4	3,292.9	(1,029.1)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2,730.4	(2,730.4)
B. PRICE CHANGE AMOUNT (memo)	2,270.2	6.4	562.5	1,701.3
C. INVENTORY RECLASSIFIED AND REPRICED	30,988.3	239.7	14,896.7	15,851.9
3. RECEIPTS AT STANDARD	3,810.0	3.0	3,813.5	(6.5)
4. SALES AT STANDARD	5,648.8		5,648.8	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	212.8	(0.1)	640.4	(427.5)
B. RETURNS FROM CUSTOMERS FOR CREDIT	304.8	0.2	181.9	122.6
C. RETURNS FROM CUSTOMERS, NO CREDIT	9,323.8	0.0	4,013.4	5,310.3
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(3,993.1)	0.0	(0.4)	(3,992.7)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(229.6)	0.0	(119.8)	(109.7)
G. OTHER (listed in Section 9)	(5,487.7)	0.0	(4,771.6)	(716.2)
H. TOTAL ADJUSTMENTS	131.0	0.2	(56.1)	186.9
6. INVENTORY EOP	29,280.5	242.9	13,005.3	16,032.3
7. INVENTORY EOP (REVALUED)	19,076.6	185.1	9,611.9	9,279.6
A. APPROVED ACQUISITION OBJECTIVE (memo)				5,713.0
B. ECONOMIC RETENTION (memo)				2,217.8
C. CONTINGENCY RETENTION (memo)				1,270.1
D. POTENTIAL DOD REUTILIZATION (memo)				78.8
8. INVENTORY ON ORDER EOP (memo)	1,813.0	1.9	1,798.9	12.2

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(158.3)	0.0	(212.1)	53.8
Strata Transfers	0.0	0.0	769.9	(769.9)
Net/Std Difference	(5,329.4)	0.0	(5,329.4)	0.0
Total	(5,487.7)	0.0	(4,771.6)	(716.2)

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT SM-4
INVENTORY STATUS
BUDGET PROJECT 14
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	868.6	1.2	273.6	593.8
2. BOP INVENTORY ADJUSTMENTS	162.7	0.2	31.6	130.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2.7	(2.7)
B. PRICE CHANGE AMOUNT (memo)	162.7	0.2	28.9	133.6
C. INVENTORY RECLASSIFIED AND REPRICED	1,031.4	1.5	305.2	724.7
3. RECEIPTS AT STANDARD	96.8	0.0	96.0	0.8
4. SALES AT STANDARD	113.6		113.6	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(12.4)	0.0	(12.4)	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	5.9	0.0	4.2	1.7
C. RETURNS FROM CUSTOMERS, NO CREDIT	29.4	0.0	0.0	29.4
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(200.0)	0.0	0.0	(200.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(6.3)	0.0	38.7	(45.0)
H. TOTAL ADJUSTMENTS	(183.4)	0.0	30.6	(214.0)
6. INVENTORY EOP	831.2	1.5	318.2	511.5
7. INVENTORY EOP (REVALUED)	595.1	1.2	262.1	331.8
A. APPROVED ACQUISITION OBJECTIVE (memo)				126.9
B. ECONOMIC RETENTION (memo)				106.3
C. CONTINGENCY RETENTION (memo)				96.0
D. POTENTIAL DOD REUTILIZATION (memo)				2.6
8. INVENTORY ON ORDER EOP (memo)	100.1	0.0	99.2	0.9

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(6.3)	0.0	(2.1)	(4.2)
Strata Transfers	0.0	0.0	40.8	(40.8)
Total	(6.3)	0.0	38.7	(45.0)

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 16
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	20.6	0.3	7.2	13.1
2. BOP INVENTORY ADJUSTMENTS	0.3	0.0	1.7	(1.4)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	1.6	(1.6)
B. PRICE CHANGE AMOUNT (memo)	0.3	0.0	0.2	0.1
C. INVENTORY RECLASSIFIED AND REPRICED	20.9	0.3	8.9	11.7
3. RECEIPTS AT STANDARD	9.5	0.0	9.5	0.0
4. SALES AT STANDARD	7.7		7.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.6)	0.0	0.0	(0.6)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(2.7)	0.0	(3.2)	0.6
H. TOTAL ADJUSTMENTS	(3.2)	0.0	(3.2)	0.0
6. INVENTORY EOP	19.4	0.3	7.4	11.7
7. INVENTORY EOP (REVALUED)	8.0	0.0	0.0	8.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				7.8
B. ECONOMIC RETENTION (memo)				0.2
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.1
8. INVENTORY ON ORDER EOP (memo)	1.0	0.0	1.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(2.7)	0.0	(2.7)	0.0
Strata Transfers	0.0	0.0	(0.6)	0.6
Total	(2.7)	0.0	(3.2)	0.6

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 21
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	41.2	0.0	41.2	0.0
2. BOP INVENTORY ADJUSTMENTS	(0.3)	0.0	(0.3)	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	(0.3)	0.0	(0.3)	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	40.9	0.0	40.9	0.0
3. RECEIPTS AT STANDARD	91.5	0.0	91.5	0.0
4. SALES AT STANDARD	92.0		92.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	0.3	0.0	0.3	0.0
H. TOTAL ADJUSTMENTS	0.3	0.0	0.3	0.0
6. INVENTORY EOP	40.7	0.0	40.7	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	0.3	0.0	0.3	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	0.3	0.0	0.3	0.0

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 23
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	65.5	0.0	65.5	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	65.5	0.0	65.5	0.0
3. RECEIPTS AT STANDARD	39.4	0.0	39.4	0.0
4. SALES AT STANDARD	36.1		36.1	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(1.8)	0.0	(1.8)	0.0
H. TOTAL ADJUSTMENTS	(1.8)	0.0	(1.8)	0.0
6. INVENTORY EOP	67.0	0.0	67.0	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	12.6	0.0	12.6	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(1.8)	0.0	(1.8)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(1.8)	0.0	(1.8)	0.0

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 25
(Dollars In Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	0.0	0.0	0.0	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	0.0	0.0	0.0	0.0
3. RECEIPTS AT STANDARD	1.0	0.0	1.0	0.0
4. SALES AT STANDARD	1.0		1.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	0.0	0.0	0.0	0.0
H. TOTAL ADJUSTMENTS	0.0	0.0	0.0	0.0
6. INVENTORY EOP	0.0	0.0	0.0	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0

DEPARTMENT OF NAVY, SUPPLY MANAGE SM-4
INVENTORY STATUS
BUDGET PROJECT 28
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	1,468.4	182.1	966.3	320.0
2. BOP INVENTORY ADJUSTMENTS	(14.6)	(1.9)	22.2	(34.9)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	31.6	(31.6)
B. PRICE CHANGE AMOUNT (memo)	(14.6)	(1.9)	(9.4)	(3.3)
C. INVENTORY RECLASSIFIED AND REPRICED	1,453.8	180.2	988.5	285.1
3. RECEIPTS AT STANDARD	1,191.5	0.0	1,233.5	(42.0)
4. SALES AT STANDARD	1,086.2		1,086.2	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(327.4)	0.0	0.2	(327.6)
B. RETURNS FROM CUSTOMERS FOR CREDIT	21.6	0.0	21.6	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	581.4	0.0	49.4	532.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(149.8)	0.0	0.0	(149.8)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(229.2)	0.0	(119.5)	(109.7)
G. OTHER (listed in Section 9)	6.9	0.0	(145.9)	152.8
H. TOTAL ADJUSTMENTS	(96.5)	0.0	(194.2)	97.7
6. INVENTORY EOP	1,462.6	180.2	941.6	340.8
7. INVENTORY EOP (REVALUED)	990.2	137.1	706.2	146.9
A. APPROVED ACQUISITION OBJECTIVE (memo)				143.5
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				3.4
8. INVENTORY ON ORDER EOP (memo)	126.1	0.0	126.1	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	6.9	0.0	(145.9)	152.8
Strata Transfers	0.0	0.0	0.0	0.0
Total	6.9	0.0	(145.9)	152.8

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INVENTORY STATUS
Budget Project 34
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	1,264.3	1.8	496.7	765.9
2. BOP INVENTORY ADJUSTMENTS	125.1	0.3	140.8	(15.9)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	57.3	(57.3)
B. PRICE CHANGE AMOUNT (memo)	125.1	0.3	83.4	41.4
C. INVENTORY RECLASSIFIED AND REPRICED	1,389.4	2.0	637.4	750.0
3. RECEIPTS AT STANDARD	490.6	0.1	475.6	14.9
4. SALES AT STANDARD	375.0		375.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(401.9)	(0.1)	(233.8)	(168.0)
B. RETURNS FROM CUSTOMERS FOR CREDIT	9.6	0.1	7.9	1.6
C. RETURNS FROM CUSTOMERS, NO CREDIT	75.8	0.0	3.7	72.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(134.1)	0.0	0.0	(134.1)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(105.3)	0.0	(74.1)	(31.2)
G. OTHER (listed in Section 9)	(9.5)	0.0	(7.2)	(2.3)
H. TOTAL ADJUSTMENTS	(565.3)	0.0	(303.4)	(262.0)
6. INVENTORY EOP	939.7	2.2	434.6	502.9
7. INVENTORY EOP (REVALUED)	680.6	1.7	319.3	359.6
A. APPROVED ACQUISITION OBJECTIVE (memo)				264.9
B. ECONOMIC RETENTION (memo)				81.6
C. CONTINGENCY RETENTION (memo)				11.2
D. POTENTIAL DOD REUTILIZATION (memo)				1.9
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(9.5)	0.0	(7.9)	(1.6)
Strata Transfers	0.0	0.0	0.7	(0.7)
Total	(9.5)	0.0	(7.2)	(2.3)

DEPARTMENT OF NAVY, SUPPLY MANAGE SM-4

INVENTORY STATUS

BUDGET PROJECT 38

(Dollars in Millions)

FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	227.2	0.0	227.2	0.0
2. BOP INVENTORY ADJUSTMENTS	6.0	0.0	6.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	6.0	0.0	6.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	233.2	0.0	233.2	0.0
3. RECEIPTS AT STANDARD	1,020.5	0.0	1,020.5	0.0
4. SALES AT STANDARD	1,012.2		1,012.2	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	2.0	0.0	2.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.5	0.0	0.5	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.4)	0.0	(0.4)	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(0.3)	0.0	(0.3)	0.0
G. OTHER (listed in Section 9)	(10.1)	0.0	(10.1)	0.0
H. TOTAL ADJUSTMENTS	(8.3)	0.0	(8.3)	0.0
6. INVENTORY EOP	233.2	0.0	233.2	0.0
7. INVENTORY EOP (REVALUED)	196.5	0.0	138.1	58.4
A. APPROVED ACQUISITION OBJECTIVE (memo)				58.4
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	25.6	0.0	25.6	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(10.1)	0.0	(10.1)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(10.1)	0.0	(10.1)	0.0

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT SM-4
INVENTORY STATUS
BUDGET PROJECT 81
(Dollars in Millions)
FY1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	5,954.4	42.4	2,229.1	3,682.9
2. BOP INVENTORY ADJUSTMENTS	1,419.1	7.3	379.8	1,032.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	134.2	(134.2)
B. PRICE CHANGE AMOUNT (memo)	1,419.1	7.3	245.6	1,166.2
C. INVENTORY RECLASSIFIED AND REPRICED	7,373.5	49.8	2,608.9	4,714.9
3. RECEIPTS AT STANDARD	252.1	0.0	249.6	2.5
4. SALES AT STANDARD	632.8		632.8	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	59.9	0.0	18.5	41.4
C. RETURNS FROM CUSTOMERS, NO CREDIT	1,708.3	0.0	400.2	1,308.1
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(1,500.0)	0.0	0.0	(1,500.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(676.6)	0.0	(187.1)	(489.4)
H. TOTAL ADJUSTMENTS	(408.4)	0.0	231.6	(640.0)
6. INVENTORY EOP	6,584.4	49.8	2,457.3	4,077.4
7. INVENTORY EOP (REVALUED)	4,356.9	38.2	1,962.6	2,356.1
A. APPROVED ACQUISITION OBJECTIVE (memo)				1,262.8
B. ECONOMIC RETENTION (memo)				849.5
C. CONTINGENCY RETENTION (memo)				221.9
D. POTENTIAL DOD REUTILIZATION (memo)				21.9
8. INVENTORY ON ORDER EOP (memo)	373.7	0.0	372.4	1.3

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(47.5)	0.0	(22.1)	(25.4)
Strata Transfers	0.0	0.0	464.0	(464.0)
Net/Standard Difference	(629.1)	0.0	(629.1)	0.0
Total	(676.6)	0.0	(187.1)	(489.4)

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 85
(Dollars In Millions)
FY1997

	Total	Mobilization	--- Peacetime --- Operating	Other
1. INVENTORY BOP	18,807.8	5.4	7,297.1	11,505.3
2. BOP INVENTORY ADJUSTMENTS	571.8	0.5	2,711.0	(2,139.7)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2,502.9	(2,502.9)
B. PRICE CHANGE AMOUNT (memo)	571.8	0.5	208.1	363.2
C. INVENTORY RECLASSIFIED AND REPRICED	19,379.6	6.0	10,008.1	9,365.6
3. RECEIPTS AT STANDARD	617.1	2.9	596.9	17.3
4. SALES AT STANDARD	2,292.2		2,292.2	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	954.5	0.0	886.4	68.1
B. RETURNS FROM CUSTOMERS FOR CREDIT	205.8	0.1	127.7	78.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	6,928.3	0.0	3,559.5	3,368.8
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(2,008.3)	0.0	0.0	(2,008.3)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	105.3	0.0	74.1	31.2
G. OTHER (listed in Section 9)	(4,788.0)	0.0	(4,455.3)	(332.7)
H. TOTAL ADJUSTMENTS	1,397.6	0.1	192.4	1,205.1
6. INVENTORY EOP	19,102.2	9.0	8,505.2	10,588.0
7. INVENTORY EOP (REVALUED)	12,249.3	6.9	6,223.6	6,018.8
A. APPROVED ACQUISITION OBJECTIVE (memo)				3,848.7
B. ECONOMIC RETENTION (memo)				1,180.2
C. CONTINGENCY RETENTION (memo)				941.0
D. POTENTIAL DOD REUTILIZATION (memo)				48.9
8. INVENTORY ON ORDER EOP (memo)	1,173.9	1.9	1,162.0	10.0
9. NARRATIVE:				

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(87.6)	0.0	(19.8)	(67.8)
Strata Transfers	0.0	0.0	264.9	(264.9)
Net/Std Difference	(4,700.4)	0.0	(4,700.4)	0.0
Total	(4,788.0)	0.0	(4,455.3)	(332.7)

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project SUMMARY
(Dollars in Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	29,280.5	242.9	13,005.3	16,032.3
2. BOP INVENTORY ADJUSTMENTS	4,109.3	12.0	4,532.1	(434.8)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2,209.2	(2,209.2)
B. PRICE CHANGE AMOUNT (memo)	4,109.3	12.0	2,322.9	1,774.4
C. INVENTORY RECLASSIFIED AND REPRICED	33,389.7	254.9	17,537.4	15,597.5
3. RECEIPTS AT STANDARD	3,915.6	2.0	3,951.5	(37.9)
4. SALES AT STANDARD	6,262.0		6,262.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	1,943.6	(0.2)	2,336.5	(392.6)
B. RETURNS FROM CUSTOMERS FOR CREDIT	308.5	0.2	182.4	125.9
C. RETURNS FROM CUSTOMERS, NO CREDIT	10,270.0	0.0	4,308.6	5,961.4
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(4,190.6)	0.0	(0.5)	(4,190.1)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(250.4)	0.0	(130.4)	(120.0)
G. OTHER (listed in Section 9)	(6,108.6)	0.0	(5,581.6)	(527.0)
H. TOTAL ADJUSTMENTS	1,972.5	0.0	1,114.9	857.7
6. INVENTORY EOP	33,015.9	256.8	16,341.8	16,417.2
7. INVENTORY EOP (REVALUED)	17,177.0	181.5	9,433.9	7,561.6
A. APPROVED ACQUISITION OBJECTIVE (memo)				4,826.8
B. ECONOMIC RETENTION (memo)				1,679.3
C. CONTINGENCY RETENTION (memo)				994.3
D. POTENTIAL DOD REUTILIZATION (memo)				61.2
8. INVENTORY ON ORDER EOP (memo)	2,289.3	1.1	2,159.2	129.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(144.7)	0.0	(241.9)	97.3
Strata Transfers	(0.1)	0.0	624.2	(624.3)
Net/Std Difference	(5,963.9)	0.0	(5,963.9)	0.0
Total	(6,108.6)	0.0	(5,581.6)	(527.0)

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT SM-4
INVENTORY STATUS
BUDGET PROJECT 14
(Dollars In Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	831.2	1.5	318.2	511.5
2. BOP INVENTORY ADJUSTMENTS	190.8	0.1	78.8	111.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	3.0	(3.0)
B. PRICE CHANGE AMOUNT (memo)	190.8	0.1	75.8	114.9
C. INVENTORY RECLASSIFIED AND REPRICED	1,022.0	1.6	397.0	623.5
3. RECEIPTS AT STANDARD	118.6	0.0	117.8	0.9
4. SALES AT STANDARD	124.7		124.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(4.3)	0.0	(4.3)	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	6.5	0.0	4.7	1.8
C. RETURNS FROM CUSTOMERS, NO CREDIT	29.4	0.0	0.0	29.4
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(100.0)	0.0	0.0	(100.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(5.9)	0.0	(16.3)	10.3
H. TOTAL ADJUSTMENTS	(74.4)	0.0	(15.9)	(58.4)
6. INVENTORY EOP	941.6	1.6	374.2	565.9
7. INVENTORY EOP (REVALUED)	557.8	1.1	249.9	306.8
A. APPROVED ACQUISITION OBJECTIVE (memo)				121.2
B. ECONOMIC RETENTION (memo)				96.3
C. CONTINGENCY RETENTION (memo)				87.0
D. POTENTIAL DOD REUTILIZATION (memo)				2.3
8. INVENTORY ON ORDER EOP (memo)	96.8	0.0	96.8	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(5.9)	0.0	(1.8)	(4.2)
Strata Transfers	0.0	0.0	(14.5)	14.5
Total	(5.9)	0.0	(16.3)	10.3

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 15
(Dollars in Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	19.4	0.3	7.4	11.7
2. BOP INVENTORY ADJUSTMENTS	0.3	0.0	1.5	(1.2)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	1.3	(1.3)
B. PRICE CHANGE AMOUNT (memo)	0.3	0.0	0.2	0.1
C. INVENTORY RECLASSIFIED AND REPRICED	19.7	0.3	8.9	10.5
3. RECEIPTS AT STANDARD	9.2	0.0	9.2	0.0
4. SALES AT STANDARD	7.5		7.5	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.5)	0.0	0.0	(0.5)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(2.7)	0.0	(3.1)	0.5
H. TOTAL ADJUSTMENTS	(3.2)	0.0	(3.1)	(0.1)
6. INVENTORY EOP	18.2	0.3	7.5	10.4
7. INVENTORY EOP (REVALUED)	7.6	0.0	0.0	7.6
A. APPROVED ACQUISITION OBJECTIVE (memo)				7.4
B. ECONOMIC RETENTION (memo)				0.2
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.7	0.0	0.7	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(2.6)	0.0	(2.6)	0.0
Strata Transfers	(0.1)	0.0	(0.5)	0.5
Total	(2.7)	0.0	(3.1)	0.5

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 21
(Dollars In Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	40.7	0.0	40.7	0.0
2. BOP INVENTORY ADJUSTMENTS	(0.4)	0.0	(0.4)	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	(0.4)	0.0	(0.4)	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	40.3	0.0	40.3	0.0
3. RECEIPTS AT STANDARD	90.3	0.0	90.3	0.0
4. SALES AT STANDARD	91.5		91.5	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(0.5)	0.0	(0.5)	0.0
H. TOTAL ADJUSTMENTS	(0.5)	0.0	(0.5)	0.0
6. INVENTORY EOP	38.6	0.0	38.6	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(0.5)	0.0	(0.5)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(0.5)	0.0	(0.5)	0.0

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 23
(Dollars in Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	67.0	0.0	67.0	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	67.0	0.0	67.0	0.0
3. RECEIPTS AT STANDARD	44.2	0.0	44.2	0.0
4. SALES AT STANDARD	40.0		40.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(0.9)	0.0	(0.9)	0.0
H. TOTAL ADJUSTMENTS	(0.9)	0.0	(0.9)	0.0
6. INVENTORY EOP	70.3	0.0	70.3	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	12.9	0.0	12.9	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(0.9)	0.0	(0.9)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(0.9)	0.0	(0.9)	0.0

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 25
(Dollars in Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	0.0	0.0	0.0	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	0.0	0.0	0.0	0.0
3. RECEIPTS AT STANDARD	1.0	0.0	1.0	0.0
4. SALES AT STANDARD	1.0		1.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	0.0	0.0	0.0	0.0
H. TOTAL ADJUSTMENTS	0.0	0.0	0.0	0.0
6. INVENTORY EOP	0.0	0.0	0.0	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0

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DEPARTMENT OF NAVY, SUPPLY MANAG SM-4
INVENTORY STATUS
BUDGET PROJECT 28
(Dollars In Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	1,462.6	180.2	941.6	340.8
2. BOP INVENTORY ADJUSTMENTS	32.2	4.1	48.5	(20.4)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	28.4	(28.4)
B. PRICE CHANGE AMOUNT (memo)	32.2	4.1	20.1	8.0
C. INVENTORY RECLASSIFIED AND REPRICED	1,494.8	184.3	990.1	320.4
3. RECEIPTS AT STANDARD	1,230.1	0.0	1,273.1	(43.0)
4. SALES AT STANDARD	1,163.5		1,163.5	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(331.0)	0.0	0.1	(331.1)
B. RETURNS FROM CUSTOMERS FOR CREDIT	23.2	0.0	23.2	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	538.8	0.0	50.5	488.3
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(155.0)	0.0	0.0	(155.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(250.0)	0.0	(130.0)	(120.0)
G. OTHER (listed in Section 9)	33.0	0.0	(165.3)	198.3
H. TOTAL ADJUSTMENTS	(141.0)	0.0	(221.5)	80.5
6. INVENTORY EOP	1,420.4	184.3	878.2	357.9
7. INVENTORY EOP (REVALUED)	951.3	140.2	657.9	153.2
A. APPROVED ACQUISITION OBJECTIVE (memo)				149.6
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				3.6
8. INVENTORY ON ORDER EOP (memo)	129.0	0.0	0.0	129.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	33.0	0.0	(165.3)	198.3
Strata Transfers	0.0	0.0	0.0	0.0
Total	33.0	0.0	(165.3)	198.3

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 34
(Dollars in Millions)
FY1998

	Total	Mobilization	--- Peacetime --- Operating	Other
1. INVENTORY BOP	939.7	2.2	434.6	502.9
2. BOP INVENTORY ADJUSTMENTS	260.9	0.8	212.7	47.3
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	39.0	(39.0)
B. PRICE CHANGE AMOUNT (memo)	260.9	0.8	173.7	86.4
C. INVENTORY RECLASSIFIED AND REPRICED	1,200.6	3.0	647.4	550.2
3. RECEIPTS AT STANDARD	462.2	0.0	461.3	0.9
4. SALES AT STANDARD	250.0		250.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(376.6)	(0.2)	(314.9)	(61.5)
B. RETURNS FROM CUSTOMERS FOR CREDIT	4.1	0.0	3.4	0.7
C. RETURNS FROM CUSTOMERS, NO CREDIT	55.1	0.0	2.7	52.3
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(116.9)	0.0	0.0	(116.9)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(9.8)	0.0	(6.6)	(3.3)
H. TOTAL ADJUSTMENTS	(444.1)	(0.1)	(315.3)	(128.7)
6. INVENTORY EOP	968.6	2.9	543.3	422.4
7. INVENTORY EOP (REVALUED)	581.6	1.7	301.4	278.5
A. APPROVED ACQUISITION OBJECTIVE (memo)				226.4
B. ECONOMIC RETENTION (memo)				44.9
C. CONTINGENCY RETENTION (memo)				6.1
D. POTENTIAL DOD REUTILIZATION (memo)				1.1
8. INVENTORY ON ORDER EOP (memo)	407.6	0.0	407.6	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(9.8)	0.0	(8.2)	(1.7)
Strata Transfers	0.0	0.0	1.6	(1.6)
Total	(9.8)	0.0	(6.6)	(3.3)

DEPARTMENT OF NAVY, SUPPLY MANAG SM-4
INVENTORY STATUS
BUDGET PROJECT 38
(Dollars in Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	233.2	0.0	233.2	0.0
2. BOP INVENTORY ADJUSTMENTS	7.1	0.0	7.1	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	7.1	0.0	7.1	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	240.3	0.0	240.3	0.0
3. RECEIPTS AT STANDARD	1,154.1	0.0	1,154.1	0.0
4. SALES AT STANDARD	1,116.8		1,116.8	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	2.1	0.0	2.1	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.6	0.0	0.6	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.5)	0.0	(0.5)	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(0.4)	0.0	(0.4)	0.0
G. OTHER (listed in Section 9)	(11.9)	0.0	(11.9)	0.0
H. TOTAL ADJUSTMENTS	(10.1)	0.0	(10.1)	0.0
6. INVENTORY EOP	267.5	0.0	267.5	0.0
7. INVENTORY EOP (REVALUED)	221.5	0.0	155.8	65.7
A. APPROVED ACQUISITION OBJECTIVE (memo)				65.7
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	7.9	0.0	7.9	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(11.9)	0.0	(11.9)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(11.9)	0.0	(11.9)	0.0

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DEPARTMENT OF NAVY, SUPPLY MANAGEMENT
INVENTORY STATUS
BUDGET PROJECT 81
(Dollars in Millions)
FY1998

SM-4

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	6,584.4	49.8	2,457.3	4,077.4
2. BOP INVENTORY ADJUSTMENTS	1,197.7	4.9	698.9	493.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	134.2	(134.2)
B. PRICE CHANGE AMOUNT (memo)	1,197.7	4.9	564.7	628.2
C. INVENTORY RECLASSIFIED AND REPRICED	7,782.1	54.6	3,156.2	4,571.3
3. RECEIPTS AT STANDARD	274.4	0.0	272.7	1.7
4. SALES AT STANDARD	777.3		777.3	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	65.5	0.0	20.3	45.2
C. RETURNS FROM CUSTOMERS, NO CREDIT	1,846.6	0.0	462.1	1,384.5
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(1,500.0)	0.0	0.0	(1,500.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(835.4)	0.0	(296.1)	(539.3)
H. TOTAL ADJUSTMENTS	(423.4)	0.0	186.3	(609.6)
6. INVENTORY EOP	6,855.9	54.6	2,837.9	3,963.4
7. INVENTORY EOP (REVALUED)	3,526.6	31.0	1,697.0	1,798.6
A. APPROVED ACQUISITION OBJECTIVE (memo)				1,018.1
B. ECONOMIC RETENTION (memo)				606.4
C. CONTINGENCY RETENTION (memo)				158.4
D. POTENTIAL DOD REUTILIZATION (memo)				15.7
8. INVENTORY ON ORDER EOP (memo)	407.5	0.0	407.5	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(51.3)	0.0	(23.8)	(27.4)
Strata Transfers	0.0	0.0	511.9	(511.9)
Net/Standard Difference	(784.1)	0.0	(784.1)	0.0
Total	(835.4)	0.0	(296.1)	(539.3)

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 85
(Dollars in Millions)
FY1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	19,102.2	9.0	8,505.2	10,588.0
2. BOP INVENTORY ADJUSTMENTS	2,420.7	2.0	3,485.0	(1,066.4)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2,003.2	(2,003.2)
B. PRICE CHANGE AMOUNT (memo)	2,420.7	2.0	1,481.8	936.8
C. INVENTORY RECLASSIFIED AND REPRICED	21,522.9	11.0	11,990.2	9,521.6
3. RECEIPTS AT STANDARD	531.4	1.9	527.8	1.7
4. SALES AT STANDARD	2,689.7		2,689.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	2,655.5	0.0	2,655.5	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	207.1	0.1	128.8	78.2
C. RETURNS FROM CUSTOMERS, NO CREDIT	7,799.5	0.0	3,792.7	4,006.9
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(2,317.6)	0.0	0.0	(2,317.6)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(5,274.5)	0.0	(5,081.0)	(193.5)
H. TOTAL ADJUSTMENTS	3,070.1	0.1	1,496.0	1,574.0
6. INVENTORY EOP	22,434.7	13.1	11,324.2	11,097.3
7. INVENTORY EOP (REVALUED)	11,330.6	7.5	6,371.9	4,951.2
A. APPROVED ACQUISITION OBJECTIVE (memo)				3,238.4
B. ECONOMIC RETENTION (memo)				931.5
C. CONTINGENCY RETENTION (memo)				742.8
D. POTENTIAL DOD REUTILIZATION (memo)				38.5
8. INVENTORY ON ORDER EOP (memo)	1,226.9	1.1	1,225.8	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(94.7)	0.0	(27.0)	(67.8)
Strata Transfers	(0.0)	0.0	125.7	(125.7)
Net/Std Difference	(5,179.7)	0.0	(5,179.7)	0.0
Total	(5,274.5)	0.0	(5,081.0)	(193.5)

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project SUMMARY
(Dollars in Millions)
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	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	33,015.9	256.8	16,341.8	16,417.2
2. BOP INVENTORY ADJUSTMENTS	(328.7)	3.0	2,842.5	(3,174.2)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	3,042.7	(3,042.7)
B. PRICE CHANGE AMOUNT (memo)	(328.7)	3.0	(200.1)	(131.5)
C. INVENTORY RECLASSIFIED AND REPRICED	32,687.2	259.8	19,184.4	13,243.0
3. RECEIPTS AT STANDARD	4,054.6	1.1	4,097.5	(44.0)
4. SALES AT STANDARD	5,791.3		5,791.3	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	465.7	(0.0)	704.4	(238.7)
B. RETURNS FROM CUSTOMERS FOR CREDIT	301.4	0.0	178.5	122.9
C. RETURNS FROM CUSTOMERS, NO CREDIT	9,376.6	0.1	4,181.2	5,195.3
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(4,150.3)	0.0	(0.5)	(4,149.8)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(257.4)	0.0	(130.4)	(127.0)
G. OTHER (listed in Section 9)	(5,576.6)	0.0	(5,029.4)	(547.2)
H. TOTAL ADJUSTMENTS	159.5	0.1	(96.1)	255.5
6. INVENTORY EOP	31,109.9	261.0	17,394.3	13,454.6
7. INVENTORY EOP (REVALUED)	18,005.5	189.0	10,468.4	7,348.1
A. APPROVED ACQUISITION OBJECTIVE (memo)				4,724.8
B. ECONOMIC RETENTION (memo)				1,585.7
C. CONTINGENCY RETENTION (memo)				978.1
D. POTENTIAL DOD REUTILIZATION (memo)				59.5
8. INVENTORY ON ORDER EOP (memo)	2,074.2	1.1	2,073.1	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(106.4)	0.0	(175.9)	69.5
Strata Transfers	0.0	0.0	616.7	(616.7)
Net/Std Difference	(5,470.3)	0.0	(5,470.3)	0.0
Total	(5,576.6)	0.0	(5,029.4)	(547.2)

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT — SM-4
INVENTORY STATUS
BUDGET PROJECT 14
(Dollars in Millions)
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			---- Peacetime ----	
	Total	Mobilization	Operating	Other
1. INVENTORY BOP	941.6	1.6	374.2	565.9
2. BOP INVENTORY ADJUSTMENTS	15.7	0.0	10.8	4.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	3.0	(3.0)
B. PRICE CHANGE AMOUNT (memo)	15.7	0.0	7.8	7.9
C. INVENTORY RECLASSIFIED AND REPRICED	957.4	1.6	385.0	570.7
3. RECEIPTS AT STANDARD	93.1	0.0	93.1	0.0
4. SALES AT STANDARD	120.3		120.3	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	6.6	0.0	4.8	1.9
C. RETURNS FROM CUSTOMERS, NO CREDIT	29.4	0.0	0.0	29.4
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(100.0)	0.0	0.0	(100.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(7.1)	0.0	(0.8)	(6.2)
H. TOTAL ADJUSTMENTS	(71.0)	0.0	3.9	(74.9)
6. INVENTORY EOP	859.1	1.6	361.7	495.8
7. INVENTORY EOP (REVALUED)	533.7	1.1	251.2	281.4
A. APPROVED ACQUISITION OBJECTIVE (memo)				115.3
B. ECONOMIC RETENTION (memo)				86.1
C. CONTINGENCY RETENTION (memo)				77.8
D. POTENTIAL DOD REUTILIZATION (memo)				2.2
8. INVENTORY ON ORDER EOP (memo)	91.0	0.0	91.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(7.1)	0.0	(2.5)	(4.5)
Strata Transfers	0.0	0.0	1.7	(1.7)
Total	(7.1)	0.0	(0.8)	(6.2)

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Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 15
(Dollars In Millions)
FY1999

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	18.2	0.3	7.5	10.4
2. BOP INVENTORY ADJUSTMENTS	0.2	0.0	1.3	(1.2)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	1.2	(1.2)
B. PRICE CHANGE AMOUNT (memo)	0.2	0.0	0.2	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	18.4	0.3	8.8	9.2
3. RECEIPTS AT STANDARD	9.0	0.0	9.0	0.0
4. SALES AT STANDARD	7.2		7.2	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.5)	0.0	0.0	(0.5)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(2.5)	0.0	(3.0)	0.5
H. TOTAL ADJUSTMENTS	(3.0)	0.0	(3.0)	0.0
6. INVENTORY EOP	17.2	0.3	7.6	9.3
7. INVENTORY EOP (REVALUED)	7.2	0.0	0.0	7.2
A. APPROVED ACQUISITION OBJECTIVE (memo)				7.1
B. ECONOMIC RETENTION (memo)				0.1
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.5	0.0	0.5	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(2.5)	0.0	(2.5)	0.0
Strata Transfers	0.0	0.0	(0.5)	0.5
Total	(2.5)	0.0	(3.0)	0.5

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INVENTORY STATUS
Budget Project 21
(Dollars In Millions)
FY1999

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	38.6	0.0	38.6	0.0
2. BOP INVENTORY ADJUSTMENTS	(0.4)	0.0	(0.4)	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	(0.4)	0.0	(0.4)	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	38.2	0.0	38.2	0.0
3. RECEIPTS AT STANDARD	91.0	0.0	91.0	0.0
4. SALES AT STANDARD	90.0		90.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(0.5)	0.0	(0.5)	0.0
H. TOTAL ADJUSTMENTS	(0.5)	0.0	(0.5)	0.0
6. INVENTORY EOP	38.7	0.0	38.7	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(0.5)	0.0	(0.5)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(0.5)	0.0	(0.5)	0.0

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INVENTORY STATUS
Budget Project 23
(Dollars in Millions)
FY1999

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	70.3	0.0	70.3	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	70.3	0.0	70.3	0.0
3. RECEIPTS AT STANDARD	42.1	0.0	42.1	0.0
4. SALES AT STANDARD	45.0		45.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(0.8)	0.0	(0.8)	0.0
H. TOTAL ADJUSTMENTS	(0.8)	0.0	(0.8)	0.0
6. INVENTORY EOP	66.6	0.0	66.6	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	13.4	0.0	13.4	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(0.8)	0.0	(0.8)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(0.8)	0.0	(0.8)	0.0

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INVENTORY STATUS
Budget Project 25
(Dollars In Millions)
FY1999

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	0.0	0.0	0.0	0.0
2. BOP INVENTORY ADJUSTMENTS	0.0	0.0	0.0	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	0.0	0.0	0.0	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	0.0	0.0	0.0	0.0
3. RECEIPTS AT STANDARD	1.0	0.0	1.0	0.0
4. SALES AT STANDARD	1.0		1.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	0.0	0.0	0.0	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.0	0.0	0.0	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	0.0	0.0	0.0	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	0.0	0.0	0.0	0.0
H. TOTAL ADJUSTMENTS	0.0	0.0	0.0	0.0
6. INVENTORY EOP	0.0	0.0	0.0	0.0
7. INVENTORY EOP (REVALUED)	0.0	0.0	0.0	0.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				0.0
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0

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INVENTORY STATUS
BUDGET PROJECT 28
(Dollars in Millions)
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	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	1,420.4	184.3	878.2	357.9
2. BOP INVENTORY ADJUSTMENTS	32.7	4.4	45.2	(16.9)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	25.6	(25.6)
B. PRICE CHANGE AMOUNT (memo)	32.7	4.4	19.6	8.7
C. INVENTORY RECLASSIFIED AND REPRICED	1,453.1	188.7	923.4	341.0
3. RECEIPTS AT STANDARD	1,199.8	0.0	1,243.8	(44.0)
4. SALES AT STANDARD	1,156.7		1,156.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(238.6)	0.0	0.1	(238.7)
B. RETURNS FROM CUSTOMERS FOR CREDIT	23.1	0.0	23.1	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	486.0	0.0	51.0	435.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(158.6)	0.0	0.0	(158.6)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(257.0)	0.0	(130.0)	(127.0)
G. OTHER (listed in Section 9)	62.2	0.0	(108.8)	171.0
H. TOTAL ADJUSTMENTS	(82.9)	0.0	(164.6)	81.7
6. INVENTORY EOP	1,413.3	188.7	845.9	378.7
7. INVENTORY EOP (REVALUED)	937.8	143.5	633.4	160.9
A. APPROVED ACQUISITION OBJECTIVE (memo)				157.1
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				3.8
8. INVENTORY ON ORDER EOP (memo)	132.0	0.0	132.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	62.2	0.0	(108.8)	171.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	62.2	0.0	(108.8)	171.0

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INVENTORY STATUS
Budget Project 34
(Dollars in Millions)
FY1999

	Total	Mobilization	--- Peacetime --- Operating	Other
1. INVENTORY BOP	968.6	2.9	543.3	422.4
2. BOP INVENTORY ADJUSTMENTS	(42.8)	(0.2)	103.6	(146.2)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	143.6	(143.6)
B. PRICE CHANGE AMOUNT (memo)	(42.8)	(0.2)	(40.0)	(2.6)
C. INVENTORY RECLASSIFIED AND REPRICED	925.8	2.7	647.0	276.1
3. RECEIPTS AT STANDARD	440.8	0.0	440.8	0.0
4. SALES AT STANDARD	178.7		178.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(98.0)	(0.0)	(98.0)	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	3.6	0.0	2.9	0.6
C. RETURNS FROM CUSTOMERS, NO CREDIT	100.2	0.1	5.0	95.2
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(114.8)	0.0	0.0	(114.8)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(10.6)	0.0	(8.2)	(2.5)
H. TOTAL ADJUSTMENTS	(119.6)	0.1	(98.2)	(21.5)
6. INVENTORY EOP	1,068.3	2.8	810.8	254.7
7. INVENTORY EOP (REVALUED)	708.6	1.8	494.1	212.7
A. APPROVED ACQUISITION OBJECTIVE (memo)				195.1
B. ECONOMIC RETENTION (memo)				15.2
C. CONTINGENCY RETENTION (memo)				2.1
D. POTENTIAL DOD REUTILIZATION (memo)				0.3
8. INVENTORY ON ORDER EOP (memo)	371.7	0.0	371.7	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(10.6)	0.0	(8.8)	(1.8)
Strata Transfers	0.0	0.0	0.7	(0.7)
Total	(10.6)	0.0	(8.2)	(2.5)

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BUDGET PROJECT 38
(Dollars in Millions)
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	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	267.5	0.0	267.5	0.0
2. BOP INVENTORY ADJUSTMENTS	6.8	0.0	6.8	0.0
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	6.8	0.0	6.8	0.0
C. INVENTORY RECLASSIFIED AND REPRICED	274.3	0.0	274.3	0.0
3. RECEIPTS AT STANDARD	1,128.0	0.0	1,128.0	0.0
4. SALES AT STANDARD	1,129.0		1,129.0	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	2.1	0.0	2.1	0.0
C. RETURNS FROM CUSTOMERS, NO CREDIT	0.6	0.0	0.6	0.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(0.5)	0.0	(0.5)	0.0
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(0.4)	0.0	(0.4)	0.0
G. OTHER (listed in Section 9)	(11.4)	0.0	(11.4)	0.0
H. TOTAL ADJUSTMENTS	(9.6)	0.0	(9.6)	0.0
6. INVENTORY EOP	263.7	0.0	263.7	0.0
7. INVENTORY EOP (REVALUED)	180.8	0.0	162.9	17.9
A. APPROVED ACQUISITION OBJECTIVE (memo)				17.9
B. ECONOMIC RETENTION (memo)				0.0
C. CONTINGENCY RETENTION (memo)				0.0
D. POTENTIAL DOD REUTILIZATION (memo)				0.0
8. INVENTORY ON ORDER EOP (memo)	0.0	0.0	0.0	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(11.4)	0.0	(11.4)	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(11.4)	0.0	(11.4)	0.0

DEPARTMENT OF NAVY, SUPPLY MANAGEMENT SM-4
INVENTORY STATUS
BUDGET PROJECT 81
(Dollars In Millions)
FY1999

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	6,855.9	54.6	2,837.9	3,963.4
2. BOP INVENTORY ADJUSTMENTS	(73.1)	(0.9)	103.7	(175.9)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	137.2	(137.2)
B. PRICE CHANGE AMOUNT (memo)	(73.1)	(0.9)	(33.4)	(38.7)
C. INVENTORY RECLASSIFIED AND REPRICED	6,782.8	53.7	2,941.6	3,787.5
3. RECEIPTS AT STANDARD	293.2	0.0	293.2	0.0
4. SALES AT STANDARD	748.7		748.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	67.0	0.0	20.7	46.3
C. RETURNS FROM CUSTOMERS, NO CREDIT	1,674.7	0.0	418.7	1,256.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(1,500.0)	0.0	0.0	(1,500.0)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (Ilsted In Section 9)	(775.5)	0.0	(241.6)	(534.0)
H. TOTAL ADJUSTMENTS	(533.8)	0.0	197.9	(731.7)
6. INVENTORY EOP	5,793.5	53.7	2,684.0	3,055.8
7. INVENTORY EOP (REVALUED)	3,369.0	34.4	1,706.6	1,628.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				943.2
B. ECONOMIC RETENTION (memo)				532.1
C. CONTINGENCY RETENTION (memo)				139.0
D. POTENTIAL DOD REUTILIZATION (memo)				13.7
8. INVENTORY ON ORDER EOP (memo)	385.2	0.0	385.2	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(51.3)	0.0	(23.8)	(27.4)
Strata Transfers	0.0	0.0	506.6	(506.6)
Net/Standard Difference	(724.3)	0.0	(724.3)	0.0
Total	(775.5)	0.0	(241.6)	(534.0)

Department of Navy, Supply Mangement SM-4
INVENTORY STATUS
Budget Project 85
(Dollars in Millions)
FY1999

	Total	Mobilization	--- Peacetime --- Operating	Other
1. INVENTORY BOP	22,434.7	13.1	11,324.2	11,097.3
2. BOP INVENTORY ADJUSTMENTS	(267.8)	(0.4)	2,571.4	(2,838.9)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2,732.1	(2,732.1)
B. PRICE CHANGE AMOUNT (memo)	(267.8)	(0.4)	(160.6)	(106.8)
C. INVENTORY RECLASSIFIED AND REPRICED	22,166.9	12.7	13,895.7	8,258.5
3. RECEIPTS AT STANDARD	756.6	1.1	755.4	0.0
4. SALES AT STANDARD	2,314.7		2,314.7	
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	802.3	0.0	802.3	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	199.0	0.0	124.9	74.2
C. RETURNS FROM CUSTOMERS, NO CREDIT	7,085.7	0.0	3,706.0	3,379.7
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(2,275.9)	0.0	0.0	(2,275.9)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	0.0	0.0	0.0	0.0
G. OTHER (listed in Section 9)	(4,830.4)	0.0	(4,654.3)	(176.1)
H. TOTAL ADJUSTMENTS	980.8	0.0	(21.1)	1,001.9
6. INVENTORY EOP	21,589.5	13.8	12,315.2	9,260.4
7. INVENTORY EOP (REVALUED)	12,268.4	8.2	7,220.2	5,040.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				3,289.1
B. ECONOMIC RETENTION (memo)				952.2
C. CONTINGENCY RETENTION (memo)				759.2
D. POTENTIAL DOD REUTILIZATION (memo)				39.5
8. INVENTORY ON ORDER EOP (memo)	1,080.4	1.1	1,079.3	0.0

9. NARRATIVE:

Other adjustments (Total posted to line 5g):	Total	Mobilization	Operating	Other
Other Gains/Losses	(84.4)	0.0	(16.6)	(67.8)
Strata Transfers	0.0	0.0	108.3	(108.3)
Net/Std Difference	(4,746.0)	0.0	(4,746.0)	0.0
Total	(4,830.4)	0.0	(4,654.3)	(176.1)

C03582

NAVY STOCK FUND
BUDGET PROJECT 38
FUEL DATA
FY 1996

PRODUCT	------PROCURED FROM DFSC------ Barrels	U/P	Ext Cost	--------PROCURED LOCALLY-------- Barrels	U/P	Ext Cost
JP5	14.920	32.76	488.8	0.000	28.52	0.0
JP4	0.000	31.92	0.0	0.000	25.66	0.0
AVGAS	0.002	94.92	0.2	0.000	73.79	0.0
Distillates (DFM)	17.780	30.66	545.1	0.000	28.24	0.0
MOGAS Leaded	0.000	37.80	0.0	0.000	37.80	0.0
MOGAS Unleaded	0.081	30.66	2.5	0.003	28.79	0.1
Residual (Heat. Oil)	1.535	18.48	28.4	0.067	13.02	0.9
Lube Oil	0.015	101.01	1.5	0.000	102.00	0.0
Reclaimed	0.193	18.90	3.6	0.000	20.25	0.0
TOTAL	34.527		1,070.2	0.070		1.0

TOTAL OBLIGATIONS = 1,071.2

NAVY STOCK FUND
BUDGET PROJECT 38
FUEL DATA
FY 1997

PRODUCT	------PROCURED FROM DFSC------ Barrels	U/P	Ext Cost	--------PROCURED LOCALLY-------- Barrels	U/P	Ext Cost
JP5	13.931	33.18	462.2	0.000	28.89	0.0
JP4	0.000	32.34	0.0	0.000	25.99	0.0
AVGAS	0.002	99.12	0.2	0.000	74.75	0.0
Distillates (DFM)	16.587	31.08	515.5	0.000	28.61	0.0
MOGAS Leaded	0.000	38.22	0.0	0.000	38.29	0.0
MOGAS Unleaded	0.076	31.08	2.4	0.003	29.16	0.1
Residual (Heat. Oil)	1.419	18.90	26.8	0.063	13.19	0.8
Lube Oil	0.014	102.48	1.4	0.000	103.33	0.0
Reclaimed	0.178	19.32	3.4	0.000	22.18	0.0
TOTAL	32.207		1,011.9	0.066		0.9

TOTAL OBLIGATIONS = 1,012.8

4C958

DBOF
BUDGET PROJECT 38
FUEL DATA
FY 1998

PRODUCT	------PROCURED FROM DFSC------ Barrels	U/P	Ext Cost	--------PROCURED LOCALLY-------- Barrels	U/P	Ext Cost
JP5	13.147	39.06	513.5	0.000	28.52	0.0
JP4	0.000	49.56	0.0	0.000	25.66	0.0
AVGAS	0.001	153.30	0.2	0.000	73.79	0.0
Distillates (DFM)	15.556	36.96	574.9	0.000	28.24	0.0
MOGAS Leaded	0.000	44.94	0.0	0.000	37.80	0.0
MOGAS Unleaded	0.071	36.96	2.6	0.003	28.79	0.1
Residual (Heat. Oil)	1.319	23.10	30.6	0.084	13.02	1.0
Lube Oil	0.015	105.35	1.5	0.000	102.00	0.0
Reclaimed	0.222	14.28	3.1	0.000	20.25	0.0
TOTAL	30.333		1,126.5	0.086		1.1

TOTAL OBLIGATIONS = 1,127.6

DBOF
BUDGET PROJECT 38
FUEL DATA
FY 1999

PRODUCT	------PROCURED FROM DFSC------ Barrels	U/P	Ext Cost	--------PROCURED LOCALLY-------- Barrels	U/P	Ext Cost
JP5	13.798	37.38	515.8	0.000	28.52	0.0
JP4	0.000	47.46	0.0	0.000	25.66	0.0
AVGAS	0.002	146.58	0.2	0.000	73.79	0.0
Distillates (DFM)	16.302	35.28	575.1	0.000	28.24	0.0
MOGAS Leaded	0.000	42.84	0.0	0.000	37.80	0.0
MOGAS Unleaded	0.075	35.28	2.6	0.003	28.79	0.1
Residual (Heat. Oil)	1.344	22.26	29.9	0.071	13.02	0.9
Lube Oil	0.015	108.51	1.6	0.000	102.00	0.0
Reclaimed	0.261	14.70	3.8	0.000	20.25	0.0
TOTAL	31.795		1,129.2	0.073		0.9

TOTAL OBLIGATIONS = 1,130.1

99C30

NAVY SUMMARY
FY 1996
(Dollars in Millions)

DIVISION	PRACTICE INVENTORY	NET CARRYOVER ORDERS	NET SALES	OBLIGATION TARGETS: OPERATING	OBLIGATION TARGETS: MODERNIZATION	OBLIGATION TARGETS: OTHER	TOTAL OBLIGATIONS	CARRYOVER TARGET	TARGET TOTAL	CARRY SALES
BP 14										
Approved	949.3	79.4	81.4	68.0	0.0	0.0	68.0	0.0	68.0	5.9
Request	867.4	84.1	93.1	86.2	0.0	0.0	86.2	0.0	86.2	6.1
Delta	(81.9)	4.7	11.7	18.2	0.0	0.0	18.2	0.0	18.2	0.2
BP 15										
Approved	20.7	7.9	7.9	8.5	0.0	0.0	8.5	0.0	8.5	0.0
Request	20.3	8.2	8.2	5.7	0.0	0.0	5.7	0.0	5.7	0.0
Delta	(0.4)	0.3	0.3	(2.8)	0.0	0.0	(2.8)	0.0	(2.8)	0.0
BP 21										
Approved	46.4	99.8	99.8	98.8	0.0	0.0	98.8	0.0	98.8	0.0
Request	41.2	91.2	91.2	89.7	0.0	0.0	89.7	0.0	89.7	0.0
Delta	(5.2)	(8.6)	(8.6)	(9.1)	0.0	0.0	(9.1)	0.0	(9.1)	0.0
BP 23										
Approved	58.0	37.0	37.0	28.9	0.0	0.0	28.9	0.0	28.9	0.0
Request	65.5	17.9	17.9	16.4	0.0	0.0	16.4	0.0	16.4	0.0
Delta	7.5	(19.1)	(19.1)	(12.5)	0.0	0.0	(12.5)	0.0	(12.5)	0.0
BP 25										
Approved	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0
Request	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	0.0	0.0	(1.0)	(1.0)	0.0	0.0	(1.0)	0.0	(1.0)	0.0
BP 28										
Approved	1,328.6	922.0	926.9	877.0	0.0	0.0	877.0	0.0	877.0	20.5
Request	1,286.3	946.5	972.7	960.5	0.0	0.0	960.5	0.0	960.5	25.5
Delta	(42.3)	24.5	45.8	83.5	0.0	0.0	83.5	0.0	83.5	5.0
BP 34										
Approved	944.7	324.0	368.4	281.6	0.0	0.0	281.6	0.0	281.6	19.4
Request	1,262.5	393.8	470.9	431.4	0.0	0.0	431.4	0.0	431.4	15.1
Delta	317.8	69.8	102.5	149.8	0.0	0.0	149.8	0.0	149.8	(4.3)
BP 38										
Approved	215.6	1,059.4	1,059.4	1,079.3	0.0	0.0	1,079.3	0.0	1,079.3	2.1
Request	227.2	1,061.2	1,061.2	1,071.2	0.0	0.0	1,071.2	0.0	1,071.2	1.5
Delta	11.6	1.8	1.8	(8.1)	0.0	0.0	(8.1)	0.0	(8.1)	(0.6)
BP 81										
Approved	5,147.1	537.0	537.0	382.1	0.0	0.0	382.1	0.0	382.1	57.2
Request	5,912.0	501.0	519.3	436.5	0.0	0.0	436.5	0.0	436.5	44.0
Delta	764.9	(36.0)	(17.7)	54.4	0.0	0.0	54.4	0.0	54.4	(13.2)
BP85			** *REPAIR->*	*183.7*						
Approved	18,883.1	1,814.6	2,110.4	1,342.4	0.0	0.0	1,342.4	0.0	1,342.4	450.6
Request	18,802.4	2,002.1	2,065.9	1,291.3	0.0	0.0	1,291.3	0.0	1,291.3	264.7
Delta	(80.7)	187.5	(44.5)	(51.1)	0.0	0.0	(51.1)	0.0	(51.1)	(185.9)
BP 91			** *REPAIR->*	*959.5*						
Approved	0.0	0.0	0.0	1,055.1	0.0	0.0	1,055.1	0.0	1,055.1	0.0
Request	0.0	0.0	0.0	1,136.0	0.0	0.0	1,136.0	0.0	1,136.0	0.0
Delta	0.0	0.0	0.0	80.9	0.0	0.0	80.9	0.0	80.9	0.0
TOTAL										
Approved	27,593.5	4,881.1	5,229.2	5,222.7	0.0	0.0	5,222.7	0.0	5,222.7	555.7
Request	28,484.8	5,106.0	5,300.4	5,524.9	0.0	0.0	5,524.9	0.0	5,524.9	356.9
Delta	891.3	224.9	71.2	302.2	0.0	0.0	302.2	0.0	302.2	(198.8)

NAVY SUMMARY

SM-1

FY 1997

(Dollars in Millions)

DIVISION	PRIOR YEAR INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS: OPERATING	OBLIGATION TARGETS: MOBILIZATION	OBLIGATION TARGETS: OTHER	TOTAL OBLIGATIONS	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
BP 14										
Approved	1,092.0	89.2	78.5	48.7	0.0	0.0	48.7	0.0	48.7	5.9
Request	829.7	107.7	107.7	84.1	0.0	0.0	84.1	6.8	90.9	5.9
Delta	(262.3)	18.5	29.2	35.4	0.0	0.0	35.4	6.8	42.2	0.0
BP 15										
Approved	20.2	7.7	7.7	8.1	0.0	0.0	8.1	0.0	8.1	0.0
Request	19.1	7.7	7.7	8.1	0.0	0.0	8.1	0.7	8.8	0.0
Delta	(1.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.0
BP 21										
Approved	43.2	98.7	98.7	95.7	0.0	0.0	95.7	0.0	95.7	0.0
Request	40.7	92.0	92.0	90.5	0.0	0.0	90.5	7.3	97.8	0.0
Delta	(2.5)	(6.7)	(6.7)	(5.2)	0.0	0.0	(5.2)	7.3	2.1	0.0
BP 23										
Approved	50.4	33.2	33.2	24.9	0.0	0.0	24.9	0.0	24.9	0.0
Request	67.0	36.1	36.1	30.3	0.0	0.0	30.3	2.5	32.8	0.0
Delta	16.6	2.9	2.9	5.4	0.0	0.0	5.4	2.5	7.9	0.0
BP 25										
Approved	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	1.0	0.0
Request	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	0.0
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
BP 28										
Approved	1,272.4	943.5	943.2	924.4	0.0	0.0	924.4	0.0	924.4	18.4
Request	1,282.4	1,058.4	1,064.6	1,116.1	0.0	0.0	1,116.1	90.4	1,206.5	21.6
Delta	10.0	114.9	121.4	191.7	0.0	0.0	191.7	90.4	282.1	3.2
BP 34										
Approved	408.6	306.9	289.8	198.1	0.0	0.0	198.1	0.0	198.1	15.5
Request	937.5	379.0	365.4	272.6	0.0	0.0	272.6	22.1	294.7	9.6
Delta	528.9	72.1	75.6	74.5	0.0	0.0	74.5	22.1	96.6	(5.9)
BP 38										
Approved	139.9	1,020.7	1,020.7	1,016.0	0.0	0.0	1,016.0	0.0	1,016.0	2.1
Request	233.2	1,010.2	1,010.2	1,012.8	0.0	0.0	1,012.8	82.0	1,094.8	2.0
Delta	93.3	(10.5)	(10.5)	(3.2)	0.0	0.0	(3.2)	82.0	78.8	(0.1)
BP 81										
Approved	5,176.5	556.2	556.2	347.6	0.0	0.0	347.6	0.0	347.6	66.5
Request	6,534.7	572.9	572.9	413.5	0.0	0.0	413.5	33.5	447.0	59.9
Delta	1,358.2	16.7	16.7	65.9	0.0	0.0	65.9	33.5	99.4	(6.6)
BP85			*** REPAIR->*	*208.0*						
Approved	21,273.6	2,229.1	2,182.1	1,104.5	0.0	0.0	1,104.5	0.0	1,104.5	361.1
Request	19,093.2	2,085.7	2,086.4	1,355.2	0.0	0.0	1,355.2	109.8	1,465.0	205.8
Delta	(2,180.4)	(143.4)	(95.7)	250.7	0.0	0.0	250.7	109.8	360.5	(155.3)
BP 91			*** REPAIR->*	*873.1*						
Approved	0.0	0.0	0.0	1,029.8	0.0	0.0	1,029.8	0.0	1,029.8	0.0
Request	0.0	0.0	0.0	1,378.0	0.0	0.0	1,378.0	0.0	1,378.0	0.0
Delta	0.0	0.0	0.0	348.2	0.0	0.0	348.2	0.0	348.2	0.0
TOTAL										
Approved	29,476.8	5,285.2	5,211.1	4,798.8	0.0	0.0	4,798.8	0.0	4,798.8	469.5
Request	29,037.6	5,349.8	5,344.0	5,762.2	0.0	0.0	5,762.2	355.1	6,117.3	304.8
Delta	(439.2)	64.6	132.9	963.4	0.0	0.0	963.4	355.1	1,318.5	(164.7)

NAVY SUMMARY

FY 1998

SM-1

(Dollars in Millions)

OBLIGATION TARGETS

DIVISION	BEGINNING INVENTORY	NET CUSTOMER ORDERS	NET SALES	OPERATING	MOBILIZATION	OTHER	TOTAL OBLIGATIONS	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
BP 14										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	940.1	118.2	118.2	81.8	0.0	0.0	81.8	6.1	87.9	6.5
Delta	940.1	118.2	118.2	81.8	0.0	0.0	81.8	6.1	87.9	6.5
BP 15										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	17.9	7.5	7.5	7.9	0.0	0.0	7.9	0.6	8.5	0.0
Delta	17.9	7.5	7.5	7.9	0.0	0.0	7.9	0.6	8.5	0.0
BP 21										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	38.6	91.5	91.5	90.2	0.0	0.0	90.2	6.8	97.0	0.0
Delta	38.6	91.5	91.5	90.2	0.0	0.0	90.2	6.8	97.0	0.0
BP 23										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	70.3	40.0	40.0	34.0	0.0	0.0	34.0	2.6	36.6	0.0
Delta	70.3	40.0	40.0	34.0	0.0	0.0	34.0	2.6	36.6	0.0
BP 25										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	0.0
Delta	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	0.0
BP 28										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	1,236.1	1,134.1	1,140.3	1,173.6	0.0	0.0	1,173.6	88.1	1,261.7	23.2
Delta	1,236.1	1,134.1	1,140.3	1,173.6	0.0	0.0	1,173.6	88.1	1,261.7	23.2
BP 34										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	965.7	262.3	245.9	136.7	0.0	0.0	136.7	10.3	147.0	4.1
Delta	965.7	262.3	245.9	136.7	0.0	0.0	136.7	10.3	147.0	4.1
BP 38										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	267.5	1,114.7	1,114.7	1,127.6	0.0	0.0	1,127.6	84.7	1,212.3	2.1
Delta	267.5	1,114.7	1,114.7	1,127.6	0.0	0.0	1,127.6	84.7	1,212.3	2.1
BP 81										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	6,801.3	711.8	711.8	434.0	0.0	0.0	434.0	32.6	466.6	65.5
Delta	6,801.3	711.8	711.8	434.0	0.0	0.0	434.0	32.6	466.6	65.5
BP85			*** REPAIR->*	*223.1*						
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	22,421.5	2,244.6	2,482.6	1,344.4	0.0	0.0	1,344.4	100.9	1,445.3	207.1
Delta	22,421.5	2,244.6	2,482.6	1,344.4	0.0	0.0	1,344.4	100.9	1,445.3	207.1
BP 91			*** REPAIR->*	*922.9*						
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	1,278.6	0.0	0.0	1,278.6	0.0	1,278.6	0.0
Delta	0.0	0.0	0.0	1,278.6	0.0	0.0	1,278.6	0.0	1,278.6	0.0
TOTAL										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	32,759.0	5,724.7	5,953.5	5,709.8	0.0	0.0	5,709.8	332.7	6,042.5	308.5
Delta	32,759.0	5,724.7	5,953.5	5,709.8	0.0	0.0	5,709.8	332.7	6,042.5	308.5

NAVY SUMMARY
FY 1999
(Dollars in Millions)

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS: OPERATING	OBLIGATION TARGETS: MODERNIZATION	OBLIGATION TARGETS: OTHER	TOTAL OBLIGATIONS	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
BP 14										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	857.5	113.7	113.7	81.8	0.0	0.0	81.8	6.0	87.8	6.6
Delta	857.5	113.7	113.7	81.8	0.0	0.0	81.8	6.0	87.8	6.6
BP 15										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	16.9	7.2	7.2	7.8	0.0	0.0	7.8	0.6	8.4	0.0
Delta	16.9	7.2	7.2	7.8	0.0	0.0	7.8	0.6	8.4	0.0
BP 21										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	38.7	90.0	90.0	88.5	0.0	0.0	88.5	6.5	95.0	0.0
Delta	38.7	90.0	90.0	88.5	0.0	0.0	88.5	6.5	95.0	0.0
BP 23										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	66.6	45.0	45.0	38.3	0.0	0.0	38.3	2.8	41.1	0.0
Delta	66.6	45.0	45.0	38.3	0.0	0.0	38.3	2.8	41.1	0.0
BP 25										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	0.0
Delta	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	0.0
BP 28										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	1,224.6	1,127.4	1,133.6	1,155.2	0.0	0.0	1,155.2	84.8	1,240.0	23.1
Delta	1,224.6	1,127.4	1,133.6	1,155.2	0.0	0.0	1,155.2	84.8	1,240.0	23.1
BP 34										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	1,065.5	174.8	175.1	93.8	0.0	0.0	93.8	6.9	100.7	3.6
Delta	1,065.5	174.8	175.1	93.8	0.0	0.0	93.8	6.9	100.7	3.6
BP 38										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	263.7	1,126.9	1,126.9	1,130.1	0.0	0.0	1,130.1	83.0	1,213.1	2.1
Delta	263.7	1,126.9	1,126.9	1,130.1	0.0	0.0	1,130.1	83.0	1,213.1	2.1
BP 81										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	5,739.8	681.7	681.7	418.7	0.0	0.0	418.7	30.7	449.4	67.0
Delta	5,739.8	681.7	681.7	418.7	0.0	0.0	418.7	30.7	449.4	67.0
BP85			** *REPAIR->*	*212.2*						
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	21,575.6	2,067.7	2,115.7	1,132.9	0.0	0.0	1,132.9	83.2	1,216.1	199.0
Delta	21,575.6	2,067.7	2,115.7	1,132.9	0.0	0.0	1,132.9	83.2	1,216.1	199.0
BP 91			** *REPAIR->*	*880.5*						
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	1,196.2	0.0	0.0	1,196.2	0.0	1,196.2	0.0
Delta	0.0	0.0	0.0	1,196.2	0.0	0.0	1,196.2	0.0	1,196.2	0.0
TOTAL										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	30,848.9	5,434.4	5,489.9	5,344.3	0.0	0.0	5,344.3	304.5	5,648.8	301.4
Delta	30,848.9	5,434.4	5,489.9	5,344.3	0.0	0.0	5,344.3	304.5	5,648.8	301.4

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1996

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
AN/UYQ-21	0.2	0	0	0.2
Air/Air Missiles	0.1	0	0	0.1
Aviation Guns	0.3	0	0	0.3
BQQ 5 & 6 Sonar Systems	0.1	0	0	0.1
Base Mobile Supp Sys	0.3	0	0	0.3
Berthing	0	0	4.5	4.5
Bulk Material for Ball Valve Seat	0	0	0	0
CIWS MK-15 PHALANX	9.7	0.3	3.2	13.2
Crypto	0.3	0	0	0.3
DK Replen & Weap Hdlg Equip	0.1	0	0	0.1
DSSP	0.7	0.3	0	1
Damage Control	4.4	0	0	4.4
Damage Control GFE New Construction	0	0	1.3	1.3
Defective EEBD Replacement	0	0	11.6	11.6
EOD	1	0	0	1
ESGN System	0.2	0	0	0.2
ESM System	0.1	0	0	0.1
Guns	0.1	0	0	0.1
Handling Equip	0.9	0	0	0.9
Harpoon Missile	0.1	0	0	0.1
Internal Commun; AN/UNQ-7	0.1	0	0	0.1
LM 2500	0.1	0	0	0.1
Load List	0	0	0	0
MK 46 Torpedo	0.8	0	0	0.8
MK 48 ADCAP	0.4	0	0	0.4
MK 48 Torpedo	0.3	0	0	0.3
MK 50 Torpedo	0.2	0	0	0.2
MK 75 Gun Mount	0.3	0	0	0.3
MK 92 GFCS	0.1	0	0	0.1
Mines/Mine Sweeping Equip AN/WQN-1	0.1	0	0	0.1
Misc Sub Sonar Equip	0.1	0	0	0.1
Misc Test Equipment	1.1	0	0	1.1
Miscellaneous Low $ Special Programs	0	0	0.8	0.8
Nuclear	23.5	8.9	0	32.4
OSI Maintenance EXCONUS	0	0	0	0
Periscope Equip	0.1	0	0	0.1
Pumps, Comprs, Bearings	0.7	0	0	0.7
RAM	0.1	0	0	0.1
SIDEWINDER	0.1	0	0	0.1
SLQ 48	0.1	0	0	0.1
SPEC WARFARE	0.2	0	0	0.2
SWS Code 84	0.3	0	0	0.3
Ship Aux Supp Sys	0.4	0	0	0.4
Ship Boilers	0.1	0	0	0.1
Ship Communications UHF/VHF/HF	0.1	0	0	0.1
Ship Diesel Engines	0.1	0	0	0.1
Ship Elec Serv/Motors & Gen	0.5	0	0	0.5
Ship Habitability	0.2	0	0	0.2
Small Boats	0.1	0	0	0.1
Sub Armament & Elec	0.9	0	0	0.9
Sub Aux System	1.8	0	0	1.8
Sub Comm & Data Processing	1.8	0	0	1.8
Sub Propulsion	1.4	0	0	1.4
Sub Ship Control Equip	0.1	0	0	0.1
Submarine Ventilation	0.1	0	0	0.1
Subsafe Level I	7.9	0	0	7.9
TRIREFFAC Load List	0	0	0	0
URT-23	0.1	0	0	0.1
Valves	0.3	0	0	0.3
Gross Requirement	**63.2**	**9.5**	**21.4**	**94.1**

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT BUSINESS AREA
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1996

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
Gross Requirement	63.2	9.5	21.4	94.1
>$1M Special Program Deduct	0	0	-1.4	-1.4
BOSS Savings	-1.8	-0.4	-0.8	-3
Asset Offset	0	-2.1	0	-2.1
Credit Mods	-4.3	-0.5	-1.5	-6.3
Contract Terminations	-1.8	-0.3	-0.5	-2.6
Balance to Execution	0	0	-2.9	-2.9
Ball Valve Mark	0	0	0	0
Reduction for Efficiency	-8.1	0	0	-8.1
Initial/FOO	3.6	0.1	4.8	8.5
NULOs				10.0
Net Requirement	50.8	6.3	19.1	86.2

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NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1997

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
AEGIS	0.1	0.3	0.0	0.4
AIMS IFF	0.1	0.0	0.0	0.1
AN/BSY-1	1.5	0.0	0.0	1.5
AN/UYQ-21	1.7	0.0	0.0	1.7
Aviation Guns	0.2	0.0	0.0	0.2
BQQ 5 & 6 Sonar Systems	0.1	0.0	0.0	0.1
Base, Mobile Supp Sys	0.2	0.0	0.0	0.2
Berthing	0.0	0.0	5.4	5.4
CIWS, MK-15 PHALANX	4.7	0.6	2.4	7.7
Catapults	0.0	0.0	4.7	4.7
DK Replen & Weap Hdlg Equip	0.1	0.0	0.0	0.1
DSSP	0.5	0.4	0.0	0.9
Damage Control	7.8	0.0	0.0	7.8
Damage Control GFE New Construction	0.0	0.0	4.2	4.2
EEBD Shelf Life Replacement	0.0	0.0	4.2	4.2
EOD	0.7	0.0	0.0	0.7
GPETE/Cal Standards	0.0	3.6	0.0	3.6
Guns	0.1	0.0	0.0	0.1
Handling Equip	1.8	0.0	0.0	1.8
LM 2500	0.1	0.0	0.0	0.1
Load List	0.0	0.0	0.0	0.0
MK 45 Guns	0.5	0.0	0.0	0.5
MK 46 Torpedo	0.3	0.0	0.0	0.3
MK 48 ADCAP	0.3	0.0	0.0	0.3
MK 48 Torpedo	0.1	0.0	0.0	0.1
MK 75 Gun Mount	0.2	0.0	0.0	0.2
MK 86 GFCS	0.1	0.0	0.0	0.1
MK 92 GFCS	0.1	0.0	0.0	0.1
Mines/Mine Sweeping Equip,AN/WQN-1	0.1	0.0	0.0	0.1
Misc Sub Sonar Equip	0.1	0.0	0.0	0.1
Misc Test Equipment	0.8	0.0	0.0	0.8
Miscellaneous Low $ Special Programs	0.0	0.0	1.5	1.5
Navigation Conventional	0.1	0.0	0.0	0.1
Nuclear	14.2	7.2	0.0	21.4
Nuclear MSL Churn	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0
Periscope Equip	0.3	0.0	0.0	0.3
Pumps, Comprs, Bearings	0.6	0.0	0.0	0.6
SIDEWINDER	0.7	0.0	0.0	0.7
SPEC WARFARE	0.1	0.0	0.0	0.1
SWS Code 84	0.1	0.0	0.0	0.1
Ship Aux Supp Sys	0.2	0.0	0.0	0.2
Ship Boilers	0.1	0.0	0.0	0.1
Ship Communications UHF/VHF/HF	0.2	0.0	0.0	0.2
Ship Elec Serv/Motors & Gen	0.2	0.0	0.0	0.2
Ship Habitability	0.5	0.0	0.0	0.5
Small Boats	0.1	0.0	0.0	0.1
Steam Turbine Generators	0.1	0.0	0.0	0.1
Sub Armament & Elec	0.3	0.0	0.0	0.3
Sub Aux System	2.0	0.0	0.0	2.0
Sub Comm & Data Processing	3.6	0.0	0.0	3.6
Sub Propulsion	0.6	0.0	0.0	0.6
Sub Ship Control Equip	0.1	0.0	0.0	0.1
Submarine Ventilation	0.1	0.0	0.0	0.1
Subsafe Level I	9.8	0.0	0.0	9.8
Trident Refit Facility Load List	0.0	0.0	0.0	0.0
Unassigned Weapon Systems	0.1	0.0	0.0	0.1
Valves	0.1	0.0	0.0	0.1
Vertical Launch	0.2	0.0	0.0	0.2
WSC-3	0.2	0.0	0.0	0.2
Gross Requirement	**56.9**	**12.1**	**22.4**	**91.4**

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1997

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
Gross Requirement	**56.9**	**12.1**	**22.4**	**91.4**
DMR 971 Program Adj.	(5.0)	(1.2)	(2.1)	(8.3)
<1M Deduct			(1.9)	(1.9)
Asset Offset		(2.0)		(2.0)
Credit Mods	(0.5)	(0.2)	(0.1)	(0.8)
BOSS	(1.4)	(0.2)	(0.6)	(2.2)
Contract Terminations	(0.5)	(0.2)	(0.1)	(0.8)
Reduction for Efficiency	(2.2)	(0.5)	(1.1)	(3.8)
Initial/FOO	4.8	0.8	6.9	12.5
Net Requirement	**52.1**	**8.6**	**23.4**	**84.1**

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1998

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
AEGIS	0.1	0.5	0.0	0.6
AIMS IFF	0.2	0.0	0.0	0.2
AN/BSY-1	1.2	0.0	0.0	1.2
AN/UYQ-21	0.7	0.0	0.0	0.7
Aviation Guns	0.3	0.0	0.0	0.3
Base, Mobile Supp Sys	0.2	0.0	0.0	0.2
Berthing	0.0	0.0	5.9	5.9
CIWS, MK-15 PHALANX	2.4	0.2	1.5	4.1
Catapults	0.0	0.0	4.9	4.9
Crypto	0.1	0.0	0.0	0.1
DK Replen & Weap Hdlg Equip	0.1	0.0	0.0	0.1
DSSP	0.6	0.3	0.0	0.9
Damage Control	7.8	0.0	0.0	7.8
Diving and Salvage	0.1	0.0	0.0	0.1
EEBD Shelf Life Replacement	0.0	0.0	3.5	3.5
EOD	1.3	0.0	0.0	1.3
ESGN System	0.1	0.0	0.0	0.1
ESM System	0.2	0.0	0.0	0.2
Expiration of EEBDs for MSC Ships	0.0	0.0	1.0	1.0
Handling Equip	0.7	0.0	0.0	0.7
Internal Commun; AN/UNQ-7	0.1	0.0	0.0	0.1
LM 2500	0.3	0.0	0.0	0.3
MK 45 Guns	0.6	0.0	0.0	0.6
MK 46 Torpedo	0.5	0.0	0.0	0.5
MK 48 ADCAP	0.4	0.0	0.0	0.4
MK 48 Torpedo	0.2	0.0	0.0	0.2
MK 50 Torpedo	0.1	0.0	0.0	0.1
MK 75 Gun Mount	0.4	0.0	0.0	0.4
MK 86 GFCS	0.1	0.0	0.0	0.1
MK 92 GFCS	0.1	0.0	0.0	0.1
Military Sealift Command	0.1	0.0	0.0	0.1
Misc Sub Sonar Equip	0.1	0.0	0.0	0.1
Misc Test Equipment	0.9	1.2	0.0	2.1
Miscellaneous	0.0	0.0	0.8	0.8
Navigation Conventional	0.1	0.0	0.0	0.1
Nuclear	16.5	6.5	0.0	23.0
Nuclear MSL Churn	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0
Props/Shaft Control	0.3	0.0	0.0	0.3
Pumps, Comprs, Bearings	0.3	0.0	0.0	0.3
SIDEWINDER	0.9	0.0	0.0	0.9
SLQ 48	0.1	0.0	0.0	0.1
SPEC WARFARE	0.2	0.0	0.0	0.2
SVTT MK 32	0.2	0.0	0.0	0.2
SWS Code 84	0.2	0.0	0.0	0.2
Ship Aux Supp Sys	0.2	0.0	0.0	0.2
Ship Boilers	0.1	0.0	0.0	0.1
Ship Communications UHF/VHF/HF	0.2	0.0	0.0	0.2
Ship Diesel Engines	0.1	0.0	0.0	0.1
Ship Elec Serv/Motors & Gen	0.3	0.0	0.0	0.3
Ship Habitability	0.2	0.0	0.0	0.2
Steam Turbine Generators	0.1	0.0	0.0	0.1
Sub Armament & Elec	0.4	0.0	0.0	0.4
Sub Aux System	2.4	0.0	0.0	2.4
Sub Comm & Data Processing	2.4	0.0	0.0	2.4
Sub Propulsion	0.6	0.0	0.0	0.6
Sub Ship Control Equip	0.2	0.0	0.0	0.2
Submarine Ventilation	0.1	0.0	0.0	0.1
Subsafe Level I	9.6	0.0	0.0	9.6

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

FY1998

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
Trident Refit Facility Load List	0.0	0.0	0.0	0.0
Valves	0.2	0.0	0.0	0.2
Vertical Launch	0.2	0.0	0.0	0.2
WSC-3	0.2	0.0	0.0	0.2
Gross Requirement	56.3	8.7	17.6	82.6
Asset Offset	0.0	(2.0)	0.0	(2.0)
Credit Mods	(0.6)	(0.1)	(0.2)	(0.9)
Contract Terminations	(0.6)	(0.1)	(0.2)	(0.9)
BOSS Savings	(1.4)	(0.2)	(0.5)	(2.1)
Reduction for Efficiency	(3.7)	(0.5)	(1.0)	(5.2)
Initial/FOO	4.6	0.1	5.6	10.3
Net Requirement	54.6	5.9	21.3	81.8

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1999

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
AEGIS	0.1	0.3	0.0	0.4
AIMS IFF	0.2	0.0	0.0	0.2
AN/BSY-1	1.2	0.0	0.0	1.2
AN/UYQ-21	0.7	0.0	0.0	0.7
Aviation Guns	0.3	0.0	0.0	0.3
BQQ 5 & 6 Sonar Systems	0.1	0.0	0.0	0.1
Base, Mobile Supp Sys	0.2	0.0	0.0	0.2
Berthing	0.0	0.0	6.1	6.1
CIWS, MK-15 PHALANX	2.4	0.1	0.0	2.5
Catapults	0.0	0.0	4.9	4.9
Crypto	0.1	0.0	0.0	0.1
DK Replen & Weap Hdlg Equip	0.1	0.0	0.0	0.1
DSSP	0.6	0.3	0.0	0.9
Damage Control	7.9	0.0	0.0	7.9
Diving and Salvage	0.1	0.0	0.0	0.1
EEBD Shelf Life Replacement	0.0	0.0	6.0	6.0
EOD	1.3	0.0	0.0	1.3
ESGN System	0.1	0.0	0.0	0.1
ESM System	0.2	0.0	0.0	0.2
Expiration of EEBDs for MSC Ships	0.0	0.0	1.0	1.0
HELO Land Sys	0.1	0.0	0.0	0.1
Handling Equip	0.7	0.0	0.0	0.7
Internal Commun; AN/UNQ-7	0.1	0.0	0.0	0.1
LM 2500	0.3	0.0	0.0	0.3
MK 45 Guns	0.7	0.0	0.0	0.7
MK 46 Torpedo	0.5	0.0	0.0	0.5
MK 48 ADCAP	0.4	0.0	0.0	0.4
MK 48 Torpedo	0.2	0.0	0.0	0.2
MK 50 Torpedo	0.1	0.0	0.0	0.1
MK 75 Gun Mount	0.4	0.0	0.0	0.4
MK 86 GFCS	0.1	0.0	0.0	0.1
MK 92 GFCS	0.1	0.0	0.0	0.1
Military Sealift Command	0.1	0.0	0.0	0.1
Misc Sub Sonar Equip	0.1	0.0	0.0	0.1
Misc Test Equipment	1.0	0.8	0.0	1.8
Miscellaneous	0.0	0.0	1.9	1.9
Navigation Conventional	0.1	0.0	0.0	0.1
Nuclear	14.7	7.3	0.0	22.0
Nuclear MSL Churn	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0
Periscope Equip	0.1	0.0	0.0	0.1
Props/Shaft Control	0.3	0.0	0.0	0.3
Pumps, Comprs, Bearings	0.3	0.0	0.0	0.3
SIDEWINDER	0.9	0.0	0.0	0.9
SLQ 48	0.1	0.0	0.0	0.1
SPEC WARFARE	0.2	0.0	0.0	0.2
SVTT MK 32	0.2	0.0	0.0	0.2
SWS Code 84	0.2	0.0	0.0	0.2
Ship Aux Supp Sys	0.2	0.0	0.0	0.2
Ship Boilers	0.1	0.0	0.0	0.1
Ship Communications UHF/VHF/HF	0.2	0.0	0.0	0.2
Ship Diesel Engines	0.1	0.0	0.0	0.1
Ship Elec Serv/Motors & Gen	0.3	0.0	0.0	0.3
Ship Habitability	0.2	0.0	0.0	0.2
Steam Turbine Generators	0.1	0.0	0.0	0.1
Sub Armament & Elec	0.4	0.0	0.0	0.4
Sub Aux System	2.4	0.0	0.0	2.4
Sub Comm & Data Processing	2.4	0.0	0.0	2.4
Sub Propulsion	0.6	0.0	0.0	0.6
Sub Ship Control Equip	0.2	0.0	0.0	0.2
Submarine Ventilation	0.1	0.0	0.0	0.1
Subsafe Level I	11.8	0.0	0.0	11.8
Trident Refit Facility Load List	0.0	0.0	0.0	0.0
Valves	0.2	0.0	0.0	0.2
Vertical Launch	0.2	0.0	0.0	0.2
WSC-3	0.2	0.0	0.0	0.2
Gross Requirement	**57.3**	**8.8**	**19.9**	**86.0**

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 14

SM-3B

FY1999

Weapon System	Basic Replen	Outfitting	Special Programs	Total SM-3B
Gross Requirement	57.3	8.8	19.9	86.0
Asset Offset	0.0	(2.2)	0.0	(2.2)
Contract Terminations	(0.3)	0.0	(0.1)	(0.4)
Reduction for Efficiency	(7.5)	(1.0)	(2.5)	(11.0)
Initial/FOO	3.4	0.1	5.9	9.4
Net Requirement	52.9	5.7	23.2	81.8

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 81

SM-3B

FY1996

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
.5 FLSIP+ COSAL	0.0	0.0	14.2	0.0	14.2
49 RADAR	0.1	0.0	0.0	1.1	1.2
5'/54 Gun Mount	0.1	0.0	0.0	0.0	0.1
ACLS	0.1	0.0	0.0	2.5	2.6
AEGIS	1.9	1.9	0.0	6.3	10.1
AIMS IFF	0.2	0.2	0.0	1.4	1.8
AN/BSY-1	0.4	0.0	0.0	1.4	1.8
AN/BSY-2	0.1	0.0	5.3	0.5	5.9
AN/SPS-40,10,53,67 AN/SSF	0.1	0.0	0.0	2.1	2.2
AN/SPS-48,SYS-1/2	0.1	0.1	0.0	2.9	3.1
AN/SPS-55,63 RADAR	0.0	0.0	0.0	0.7	0.7
AN/SQQ-89	2.4	0.0	0.0	2.7	5.1
AN/SYQ-17	0.0	0.1	0.0	0.0	0.1
AN/USQ-82	0.6	0.6	0.0	0.6	1.8
AN/UYA-4 Gun Mount	0.0	0.0	0.0	2.0	2.0
AN/UYK-43	0.8	1.4	0.0	0.6	2.8
AN/UYK-44	0.2	0.0	0.0	0.4	0.6
AN/UYQ-21	0.1	1.5	0.0	1.6	3.2
AN/UYQ-70 (NDI)	0.0	0.1	0.0	0.0	0.1
ANDVT,JTIDS	0.0	4.8	0.0	0.2	5.0
Advanced Signal Processor	0.0	0.0	0.0	0.2	0.2
Air/Air Missiles	1.2	0.0	0.0	1.0	2.2
Air/Ground Missiles	0.0	0.0	0.0	0.5	0.5
Annual NSO Maintenance	0.0	0.0	0.0	0.0	0.0
Aviation Guns	0.1	0.0	0.0	0.2	0.3
Avionics	0.0	0.0	0.0	1.3	1.3
BQQ 5 & 6 Sonar Systems	0.5	0.2	0.0	5.0	5.7
Bleed Air Valves	0.4	0.0	0.0	0.5	0.9
CARPER	0.2	0.0	16.9	0.3	17.4
CFEE	0.2	0.0	0.0	1.9	2.1
CIWS, MK-15 PHALANX	6.1	8.0	5.8	12.2	32.1
Catapults	0.0	0.0	7.6	0.0	7.6
Commercial Computers	0.1	0.2	0.0	0.1	0.4
Common Computers	0.1	0.1	0.0	1.3	1.5
Cryogenics & Mobile Facilities	0.1	0.0	0.0	0.0	0.1
Crypto	0.2	0.0	0.0	0.7	0.9
DD 963/DDG 993 CL Fuel Oil Purifier Bowl Assy	0.0	0.0	2.6	0.0	2.6
DK Replen & Weap Hdlg Equip	0.9	0.0	0.0	0.0	0.9
DSSP	1.6	1.3	0.0	1.0	3.9
Damage Control	0.5	0.0	0.0	1.6	2.1
Diving and Salvage	0.0	0.0	0.0	0.0	0.0
EOD	0.2	0.0	0.0	0.4	0.6
ESGN System	1.5	0.0	0.0	13.7	15.2
ESM System	1.2	0.0	0.0	7.8	9.0
Electronic Surveillance	0.2	0.6	0.0	1.8	2.6
Gages	0.1	0.0	0.0	0.1	0.2
GPETE/Cal Standards	0.6	35.8	0.0	0.0	36.4
Guns	0.3	1.7	0.0	0.2	2.2
HELO Land Sys	0.1	0.0	0.0	0.8	0.9
Handling Equip	0.0	0.0	0.0	0.2	0.2
Harpoon Missile	0.1	0.0	0.0	0.2	0.3
ICSS 05121	0.1	0.0	0.0	0.2	0.3
Internal Commun; AN/UNQ-7	0.4	0.0	0.0	0.7	1.1
LM 2500	1.0	0.0	0.0	6.1	7.1
Load List	0.0	0.0	0.0	0.0	0.0
MATCS	0.5	0.0	0.0	1.0	1.5
MK 45 Guns	0.0	0.8	0.0	0.0	0.8
MK 46 Guns	0.2	0.0	0.0	0.3	0.5
MK 46 Torpedo	0.0	0.0	0.0	0.3	0.3
MK 48 ADCAP	0.2	0.0	0.0	1.8	2.0
MK 48 Torpedo	0.2	0.0	0.0	0.8	1.0
MK 50 Torpedo	0.1	0.0	0.0	0.7	0.8
MK 68 GFCS	0.1	0.0	0.0	0.1	0.2
MK 75 Gun Mount	0.1	0.0	0.0	0.2	0.3

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 81

SM-3B

FY1996

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
MK 86 GFCS	0.2	0.2	0.0	2.9	3.3
MK 92 GFCS	0.5	0.0	0.0	8.0	8.5
Meteorological	0.5	0.0	0.0	1.7	2.2
Military Sealift Command	0.4	0.0	0.0	0.4	0.8
Mines/Mine Sweeping Equip,AN/WQN-1	0.3	0.5	0.0	0.6	1.4
Misc 2D RADAR	0.2	0.6	0.0	0.6	1.4
Misc SPAWARS	0.1	0.0	0.0	0.1	0.2
Misc Sub Sonar Equip	0.2	0.0	0.0	2.2	2.4
Misc Test Equipment	0.8	0.0	0.0	1.0	1.8
Miscellaneous Low $ Special Programs	0.0	0.0	7.0	0.0	7.0
Model 28 Teletype	0.0	0.0	0.0	0.1	0.1
NATO Seasparrow Missile	0.6	0.2	2.5	5.8	9.1
NAVSTAR GPS	0.1	0.1	0.0	0.3	0.5
NCCS	0.2	0.0	0.0	0.4	0.6
Navigation (Electronic)	0.0	0.7	0.0	1.2	1.9
Navigation Conventional	0.4	0.0	0.0	3.8	4.2
Non-FBM Navigation	0.1	0.0	0.0	1.4	1.5
Nuclear	3.5	1.5	0.0	1.4	6.4
NULOS	13.0	0.0	0.0	0.0	13.0
OOD	0.4	0.0	0.0	0.7	1.1
OSI Maintenance CONUS	0.0	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0	0.0
Ocean Surveillance	0.0	0.0	0.0	0.4	0.4
Periscope Equip	0.2	0.0	0.0	3.5	3.7
Phoenix Missile AIM-54C Sealed	0.0	0.0	0.0	0.0	0.0
Props/Shaft Control	0.4	0.0	0.0	0.4	0.8
Pumps, Comprs, Bearings	1.1	0.0	0.0	4.7	5.8
R-2368	0.0	0.0	0.0	0.0	0.0
RADIAC	0.0	0.0	0.0	0.3	0.3
RAM	0.3	0.0	0.0	0.0	0.3
RD-358A	0.0	0.0	0.0	0.3	0.3
Reliability and Maintainability (BOSS III)	0.0	0.0	4.0	0.0	4.0
Reverse Engineering	0.0	0.0	0.1	0.0	0.1
SATCOM	0.2	0.0	0.0	0.9	1.1
SHIPALT	0.0	0.0	3.9	0.0	3.9
SIDEWINDER	0.0	0.0	0.0	0.7	0.7
SINS/DMINS	0.1	0.0	0.0	0.3	0.4
SLQ 48	0.2	0.0	0.0	0.5	0.7
SLQ-32 Cutboard Launcher	0.4	1.3	0.0	3.1	4.8
SNAP 2	0.0	0.0	0.0	0.1	0.1
SPEC WARFARE	0.9	0.0	0.0	0.7	1.6
SQQ-30	0.1	0.0	0.0	0.3	0.4
SQQ-32	1.3	8.9	0.0	2.2	12.4
STC-2	0.1	0.0	0.0	0.3	0.4
SVTT MK 32	0.1	0.0	0.0	0.1	0.2
Ship Aux Supp Sys	0.8	0.0	0.0	4.7	5.5
Ship Boilers	0.4	0.0	0.0	1.1	1.5
Ship Communications UHF/VHF/HF	0.1	1.0	0.0	2.6	3.7
Ship Diesel Engines	0.0	0.0	0.0	2.3	2.3
Ship Elec Serv/Motors & Gen	1.3	0.0	0.0	4.9	6.2
Ship Gas Turbines	1.7	0.0	0.0	5.6	7.3
Ship Habitability	0.0	0.0	0.0	0.1	0.1
Shore Communications	0.1	0.0	0.0	0.4	0.5
Small Arms, Night Vision Devices	0.3	0.0	2.8	1.4	4.5
Small Boats	0.1	0.0	0.0	0.0	0.1
Steam Turbine Generators	0.3	0.0	0.0	0.6	0.9
Strategic Submarine Protection Level	0.0	0.0	0.0	0.0	0.0
Sub Armament & Elec	0.7	0.0	0.0	1.9	2.6
Sub Aux System	0.1	0.0	0.0	0.7	0.8
Sub Comm & Data Processing	1.0	2.2	0.0	6.5	9.7
Sub Propulsion	2.1	0.0	0.0	1.8	3.9
Sub Ship Control Equip	0.1	0.3	0.0	3.0	3.4
Submarine FCS, LCAC	0.1	0.0	0.0	0.4	0.5
Submarine Sonar,AN/SQR-15,17,18,AN/SQS-35,38	0.0	0.0	0.0	0.6	0.6

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 81

FY1996

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
Submarine Ventilation	1.0	0.8	0.0	7.0	8.8
Subsafe Level I	0.0	0.0	0.0	1.7	1.7
Surface AWS FCS	0.0	0.0	0.0	0.1	0.1
Surface Rewson	0.2	0.0	0.0	0.3	0.5
Surface Sonar,Transducers/Hydrophones	0.1	0.0	0.0	1.8	1.9
TAC-3	0.0	0.7	0.0	0.1	0.8
TAS MK 23	0.1	0.0	0.0	1.9	2.0
TCN	0.1	0.0	0.0	2.1	2.2
TERRIER	0.1	0.0	0.0	0.1	0.2
TRIREFFAC Load List	0.0	0.0	0.0	0.0	0.0
Tactical Displays.	0.0	0.1	0.0	0.2	0.3
Tartar Missile	0.6	0.6	0.0	2.1	3.3
Technical Data Acquisition	0.0	0.0	0.1	0.0	0.1
Technical Referrals, Out of Production	0.0	0.0	2.8	0.0	2.8
Tomahawk	0.2	0.8	0.0	1.1	2.1
Training Div	0.2	0.0	0.0	0.5	0.7
UGC-143	0.1	0.0	0.0	0.1	0.2
URT-23	0.0	0.0	0.0	0.4	0.4
USC-38	4.1	16.7	0.0	1.5	22.3
Unassigned Weapon Systems	0.0	0.9	0.0	0.1	1.0
Valves	0.9	0.0	0.0	2.4	3.3
Vertical Launch	0.3	2.0	0.0	1.5	3.8
WSC-3	0.1	0.0	0.0	1.5	1.6
WSC-6	0.1	0.0	0.0	0.1	0.2
Gross Requirement	70.9	99.5	75.6	208.8	454.8
<$2M Special Program Deduct	0.0	0.0	(8.6)	0.0	(8.6)
BOSS Savings	(2.6)	(4.7)	(2.9)	0.0	(10.2)
Asset Offset	0.0	(18.0)	0.0	0.0	(18.0)
Credit Mods	(6.9)	(10.8)	(7.1)	(10.0)	(34.8)
Contract Terminations	(1.8)	(2.8)	(2.2)	0.0	(6.8)
Balance to Execution	0.0	0.0	0.0	0.0	0.0
Reduction for Efficiency	(13.0)	0.0	(13.6)	(15.1)	(41.7)
Initial/FOO	20.9	15.1	25.8		61.8
NULOs					40.0
Net Requirement	67.5	78.3	67.0	183.7	436.5

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 81

SM-3B

FY 1997

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
.5 FLSIP+ COSAL	0.0	0.0	10.9	0.0	10.9
49 RADAR	0.0	0.0	0.0	1.9	1.9
ACLS	0.4	0.0	0.0	1.5	1.9
AEGIS	1.9	9.0	0.0	10.9	21.8
AIMS IFF	0.2	0.2	0.0	1.9	2.3
AN/BSY-1	0.9	0.0	0.0	0.8	1.7
AN/BSY-2	0.4	0.0	0.0	0.3	0.7
AN/SPS-40,10,53,67 AN/SSF	0.0	0.0	0.0	1.5	1.5
AN/SPS-48,SYS-1/2	0.7	1.0	0.0	3.1	4.8
AN/SPS-55,63 RADAR	0.0	0.0	0.0	0.4	0.4
AN/SQQ-89	1.0	1.3	0.0	2.3	4.6
AN/SYQ-17	0.0	0.0	0.0	0.0	0.0
AN/USC-38	1.5	0.7	0.0	1.1	3.3
AN/USQ-82	0.1	0.9	0.0	0.2	1.2
AN/UYA-4 Gun Mount	0.0	0.0	0.0	1.8	1.8
AN/UYK-43	0.1	0.6	0.0	0.7	1.4
AN/UYK-44	0.0	0.0	0.0	0.5	0.5
AN/UYQ-21	0.5	0.9	0.0	1.9	3.3
AN/UYQ-70 (NDI)	0.0	0.1	0.0	0.0	0.1
ANDVT,JTIDS	0.0	1.0	0.0	0.2	1.2
Advanced Signal Processor	0.0	0.0	0.0	0.2	0.2
Air/Air Missiles	0.2	0.0	0.0	1.2	1.4
Air/Ground Missiles	0.5	0.0	0.0	0.6	1.1
Annual NSO Maintenance	0.0	0.0	0.0	0.0	0.0
Aviation Guns	0.0	0.0	0.0	0.2	0.2
Avionics	1.3	0.0	0.0	1.0	2.3
BQQ 5 & 6 Sonar Systems	0.4	0.2	0.0	4.2	4.8
Bleed Air Valves	0.1	0.0	0.0	0.4	0.5
CARPER	0.3	0.0	34.1	0.2	34.6
CFEE	0.0	0.0	0.0	1.8	1.8
CIWS, MK-15 PHALANX	2.8	14.1	5.8	8.9	31.6
Commercial Computers	0.0	0.2	0.0	0.1	0.3
Common Computers	0.1	0.6	0.0	1.7	2.4
Cryogenics & Mobile Facilities	0.2	0.0	0.0	0.0	0.2
Crypto	0.1	0.0	0.0	0.8	0.9
DD963/DDG993 Class Fuel Oil Purifier	0.0	0.0	4.1	0.0	4.1
DDG-51 CL FOSS	0.0	0.0	0.0	0.0	0.0
DK Replen & Weap Hdlg Equip	1.0	0.0	0.0	0.7	1.7
DSSP	0.5	1.4	0.0	1.2	3.1
Damage Control	0.1	0.0	0.0	1.4	1.5
Damage Control GFE New Construction	0.0	0.0	1.4	0.0	1.4
EOD	0.1	0.0	0.0	0.2	0.3
ERQ	0.0	0.0	0.0	28.3	28.3
ESGN System	0.0	0.0	0.0	13.9	13.9
ESM System	1.5	0.0	0.0	7.3	8.8
Electronic Surveillance	0.3	0.7	0.0	1.6	2.6
GPETE/Cal Standards	0.2	31.4	0.0	1.1	32.7
Gages	0.1	0.0	0.0	0.0	0.1
Guns	0.4	0.4	0.0	0.2	1.0
HELO Land Sys	0.3	0.2	0.0	1.2	1.7
HM&E Provisioning	0.0	0.6	0.0	0.0	0.6
Handling Equip	0.2	0.0	0.0	0.0	0.2
Harpoon Missile	0.1	0.0	0.0	0.1	0.2
ICSS 05121	0.2	0.0	0.0	0.1	0.3
Internal Commun; AN/UNQ-7	0.1	0.7	0.0	0.7	1.5
Isotta Fraschini Corporate Contract	0.0	0.0	1.5	0.0	1.5
LCAC	0.0	0.0	0.0	1.0	1.0
LM 2500	1.3	0.0	0.0	6.6	7.9
LM2500 Engine Deterioration Effort	0.0	0.0	1.2	0.0	1.2
Load Lists	0.0	0.0	0.0	0.0	0.0
MATCS	0.4	0.0	0.0	1.1	1.5
MHC 51 CLASS FOSS	0.0	0.0	0.0	0.0	0.0
MK 45 Guns	0.0	0.4	0.0	0.0	0.4
MK 46 Guns	0.1	0.0	0.0	0.3	0.4

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Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
MK 46 Torpedo	0.0	0.0	0.0	0.2	0.2
MK 48 ADCAP	0.2	0.0	0.0	2.5	2.7
MK 48 Torpedo	0.0	0.0	0.0	0.6	0.6
MK 50 Torpedo	0.0	0.0	0.0	1.0	1.0
MK 72/92, Simulator	0.0	0.0	0.0	0.1	0.1
MK 75 Gun Mount	0.0	0.0	0.0	0.3	0.3
MK 86 GFCS	0.1	0.6	0.0	3.7	4.4
MK 92 GFCS	0.5	0.0	0.0	6.4	6.9
Meteorological	0.2	0.0	0.0	1.5	1.7
Military Sealift Command	0.3	0.0	0.0	0.5	0.8
Mines/Mine Sweeping Equip,AN/WQN-1	0.1	0.2	0.0	0.6	0.9
Misc 2D RADAR	0.1	0.2	0.0	0.7	1.0
Misc SPAWARS	0.8	0.0	0.0	0.1	0.9
Misc Sub Sonar Equip	0.3	0.3	0.0	2.1	2.7
Misc Test Equipment	0.2	0.0	0.0	0.6	0.8
Miscellaneous Low $ Special Programs	0.0	0.0	1.9	0.0	1.9
Model 28 Teletype	0.0	0.0	0.0	0.1	0.1
NATO Seasparrow Missile	0.8	0.1	0.0	5.6	6.5
NAVSTAR GPS	0.2	0.3	0.0	0.4	0.9
NCCS	0.1	0.0	0.0	0.6	0.7
NDI	0.0	0.0	0.0	0.5	0.5
Navigation (Electronic)	4.9	0.0	0.0	1.1	6.0
Navigation Conventional	0.3	0.0	0.0	3.1	3.4
Non-FBM Navigation	0.1	0.0	0.0	0.8	0.9
Nuclear	0.7	1.8	0.0	0.7	3.2
OOD	0.3	0.0	0.0	0.4	0.7
OSI Maintenance CONUS	0.0	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0	0.0
Ocean Surveillance	0.0	0.0	0.0	0.1	0.1
Other GFCS	0.1	0.0	0.0	0.0	0.1
Overhaul Program	0.0	0.0	0.0	0.5	0.5
Periscope Equip	0.1	0.0	0.0	2.1	2.2
Props/Shaft Control	2.0	0.0	0.0	1.1	3.1
Pumps, Comprs, Bearings	2.4	0.0	0.0	4.1	6.5
RADIAC	0.0	0.0	0.0	0.4	0.4
RAM	0.1	0.0	0.0	0.0	0.1
RD-358A	0.0	0.0	0.0	0.4	0.4
Reliability and Maintainability	0.0	0.0	10.0	0.0	10.0
Repairable Option	0.0	0.0	0.0	0.9	0.9
SATCOM	4.1	0.0	0.0	1.2	5.3
SHIPALT	0.0	0.0	3.4	0.0	3.4
SIDEWINDER	0.1	0.0	0.0	0.4	0.5
SINS/DMINS	0.1	0.1	0.0	1.8	2.0
SLQ 48	0.4	0.0	0.0	0.8	1.2
SLQ-32 Outboard Launcher	0.2	0.8	0.0	2.9	3.9
SNAP 1	0.0	0.0	0.0	0.2	0.2
SNAP 2	0.0	0.0	0.0	0.6	0.6
SPEC WARFARE	0.1	0.2	0.0	0.4	0.7
SQQ-30	0.3	0.0	0.0	0.2	0.5
SQQ-32	1.9	4.8	0.0	2.0	8.7
STC-2	0.1	0.0	0.0	0.4	0.5
Ship Aux Supp Sys	0.2	0.0	0.0	5.0	5.2
Ship Boilers	0.3	0.0	0.0	0.9	1.2
Ship Communications UHF/VHF/HF	0.6	1.7	0.0	2.0	4.3
Ship Diesel Engines	0.5	0.0	0.0	1.7	2.2
Ship Elec Serv/Motors & Gen	3.6	0.0	0.0	4.0	7.6
Ship Gas Turbines	1.6	0.0	0.0	6.2	7.8
Shore Communications	0.3	0.0	0.0	0.3	0.6
Small Arms, Night Vision Devices	0.4	0.0	0.0	1.4	1.8
Small Boats	2.0	0.0	0.0	0.0	2.0
Steam Turbine Generators	0.8	0.0	0.0	0.4	1.2
Strategic Submarine Protection Level	0.0	0.0	0.0	0.0	0.0
Sub Armament & Elec	1.7	0.0	0.0	1.6	3.3
Sub Aux System	0.0	0.0	0.0	0.6	0.6

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Sub Comm & Data Processing	0.1	6.1	0.0	5.5	11.7
Sub Propulsion	1.3	0.0	0.0	2.3	3.6
Sub Ship Control Equip	0.1	0.1	0.0	3.1	3.3
Submarine FCS, LCAC	0.1	0.0	0.0	0.2	0.3
Submarine Sonar,AN/SQR-15,17,18,AN/SQS-35,38	0.2	0.0	0.0	0.2	0.4
Submarine Ventilation	0.1	1.0	0.0	7.4	8.5
Subsafe Level I	0.0	0.0	0.0	1.3	1.3
Surface AWS FCS	0.0	0.0	0.0	0.1	0.1
Surface Rewson	0.1	3.9	0.0	0.4	4.4
Surface Sonar,Transducers/Hydrophones	0.1	0.2	0.0	0.9	1.2
TAC-3	0.0	0.5	0.0	0.1	0.6
TAS MK 23	0.1	0.0	0.0	1.9	2.0
TCN	0.4	0.0	0.0	2.1	2.5
TERRIER	0.1	0.0	0.0	0.1	0.2
Tactical Displays	0.0	0.1	0.0	0.1	0.2
Tartar Missile	1.7	0.1	0.0	1.9	3.7
Technical Data Acquisition	0.0	0.0	0.1	0.0	0.1
Technical Referrals, Out of Production	0.0	0.0	3.0	0.0	3.0
Tomahawk	0.8	0.4	0.0	0.4	1.6
Training Div	0.2	0.0	0.0	0.5	0.7
Trident Refit Facility Load List	0.0	0.0	0.0	0.0	0.0
UGC-143	0.0	0.0	0.0	0.2	0.2
URT-23	0.0	0.0	0.0	1.6	1.6
Unassigned Weapon Systems	0.1	0.1	0.0	0.0	0.2
VLS	0.0	0.0	4.3	1.0	5.3
Valves	0.4	0.0	0.0	1.4	1.8
Vertical Launch	0.5	0.0	0.0	1.5	2.0
WSC-3	0.0	0.0	0.0	1.8	1.8
WSC-6	0.1	0.1	0.0	0.2	0.4
Gross Requirement	**61.3**	**90.3**	**81.7**	**234.3**	**467.6**
<$1M Deduct Special Programs			(3.1)		(3.1)
DMRD 971 Deduct	(7.7)	(11.8)	(6.3)		(25.8)
Asset Offset		(9.4)			(9.4)
Credit Mods	(3.7)	(4.8)	(3.1)	(4.9)	(16.5)
Contract Terminations	(2.4)	(3.3)	(2.0)		(7.7)
BOSS Savings	(1.4)	(1.9)	(1.2)		(4.5)
Reduction for Efficiency	(8.0)	(3.6)	4.4	(28.8)	(36.0)
Initial/FOO	17.3	5.0	26.6		48.9
Net Requirement	**55.4**	**60.5**	**97.0**	**200.6**	**413.5**

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SM-3B

FY1998

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
.5 FLSIP+ COSAL	0.0	0.0	9.3	0.0	9.3
49 RADAR	0.0	0.0	0.0	2.2	2.2
ACLS	0.5	0.2	0.0	1.6	2.3
AEGIS	4.2	14.9	0.0	12.4	31.5
AIMS IFF	0.3	0.3	0.0	2.1	2.7
AN/BSY-1	1.1	0.0	0.0	0.9	2.0
AN/BSY-2	0.3	0.0	0.0	0.5	0.8
AN/SPS-40,10,53,67 AN/SSF	0.1	0.0	0.0	1.9	2.0
AN/SPS-48,SYS-1/2	1.3	0.4	0.0	3.1	4.8
AN/SPS-55,63 RADAR	0.1	0.0	0.0	0.4	0.5
AN/SQQ-89	1.8	1.5	0.0	2.4	5.7
AN/USC-38	0.7	5.8	0.0	1.0	7.5
AN/USG-1	0.0	1.8	0.0	0.0	1.8
AN/USQ-82	0.5	0.6	0.0	0.5	1.6
AN/UYA-4 Gun Mount	0.0	0.0	0.0	2.1	2.1
AN/UYK-43	0.6	0.9	0.0	0.8	2.3
AN/UYK-44	0.2	0.0	0.0	0.6	0.8
AN/UYQ-21	0.7	0.0	0.0	2.2	2.9
AN/UYQ-70 (NDI)	0.0	0.1	0.0	0.0	0.1
ANDVT,JTIDS	0.0	1.4	0.0	0.2	1.6
Advanced Signal Processor	0.0	0.0	0.0	0.4	0.4
Air/Air Missiles	0.1	0.0	0.0	1.2	1.3
Air/Ground Missiles	0.0	0.0	0.0	0.6	0.6
Annual NSO Maintenance	0.0	0.0	0.0	0.0	0.0
Aviation Guns	0.1	0.0	0.0	0.2	0.3
Avionics	1.2	4.0	0.0	1.5	6.7
BQQ 5 & 6 Sonar Systems	0.5	0.0	0.0	4.8	5.3
Bleed Air Valves	0.2	0.0	0.0	0.5	0.7
CARPER	0.2	0.0	15.5	0.2	15.9
CFEE	0.0	0.0	0.0	2.1	2.1
CIWS, MK-15 PHALANX	3.1	6.7	4.8	8.4	23.0
CVN-68	0.0	0.0	0.0	0.0	0.0
Commercial Computers	0.0	0.5	0.0	0.1	0.6
Common Computers	0.1	0.3	0.0	2.2	2.6
Crypto	0.3	0.0	0.0	0.9	1.2
DDG-51 CL FOSS	0.0	0.0	0.0	0.0	0.0
DK Replen & Weap Hdlg Equip	6.8	0.0	0.0	0.4	7.2
DSSP	0.3	1.1	0.0	1.2	2.6
Damage Control	0.1	0.0	0.0	1.5	1.6
Diving and Salvage	0.0	0.0	0.0	0.0	0.0
EOD	0.0	0.1	0.0	0.2	0.3
ESGN System	0.3	0.0	0.0	14.4	14.7
ESM System	2.3	0.0	0.0	8.1	10.4
Electronic Surveillance	0.6	1.0	0.0	2.1	3.7
GPETE	0.9	0.0	0.0	1.2	2.1
Guns	0.2	0.6	0.0	0.3	1.1
HELO Land Sys	0.3	0.2	0.0	1.1	1.6
HM&E Provisioning	0.0	0.5	0.0	0.0	0.5
Handling Equip	0.1	0.0	0.0	0.1	0.2
Harpoon Missile	0.1	0.0	0.0	0.1	0.2
ICSS 05121	0.4	0.0	0.0	0.1	0.5
Internal Commun; AN/UNQ-7	0.2	0.6	0.0	0.8	1.6
Isotta Fraschini Corporate Contract	0.0	0.0	1.5	0.0	1.5
LCAC propeller Depot Repair Parts	0.0	0.0	0.0	1.0	1.0
LM 2500	1.8	0.0	0.0	8.3	10.1
MATCS	0.5	0.0	0.0	1.3	1.8
MK 45 Guns	0.0	0.2	0.0	0.0	0.2
MK 46 Guns	0.1	0.0	0.0	0.4	0.5
MK 46 Torpedo	0.0	0.0	0.0	0.1	0.1
MK 48 ADCAP	0.7	0.0	0.0	2.9	3.6
MK 48 Torpedo	0.1	0.0	0.0	0.8	0.9
MK 50 Torpedo	0.2	0.0	0.0	1.1	1.3
MK 68 GFCS	0.1	0.0	0.0	0.0	0.1
MK 75 Gun Mount	0.1	0.0	0.0	0.3	0.4

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SM-3B

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Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
MK 86 GFCS	0.1	1.0	0.0	4.6	5.7
MK 92 GFCS	0.5	0.0	0.0	7.1	7.6
Meteorological	0.4	0.0	0.0	1.6	2.0
Military Sealift Command	0.2	0.0	0.0	0.5	0.7
Mines/Mine Sweeping Equip,AN/WQN-1	0.2	0.8	0.0	0.7	1.7
Misc 2D RADAR	0.1	0.1	0.0	0.8	1.0
Misc SPAWARS	2.5	0.0	0.0	0.1	2.6
Misc Sub Sonar Equip	0.5	0.3	0.0	2.3	3.1
Misc Test Equipment	0.4	27.7	0.0	0.6	28.7
Model 28 Teletype	0.1	0.0	0.0	0.1	0.2
NATO Seasparrow Missile	0.2	0.6	0.0	6.4	7.2
NAVSTAR GPS	0.3	0.0	0.0	0.4	0.7
NCCS	0.2	0.0	0.0	0.6	0.8
Navigation (Electronic)	0.7	0.1	0.0	1.2	2.0
Navigation Conventional	0.6	0.0	0.0	3.4	4.0
Non-FBM Navigation	0.3	0.7	0.0	1.0	2.0
Nuclear	0.7	1.7	0.0	0.8	3.2
OOD	1.3	0.0	0.0	0.5	1.8
OSI Maintenance CONUS	0.0	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0	0.0
Ocean Surveillance	0.0	0.0	0.0	0.1	0.1
Overhaul Program	0.0	0.0	0.0	0.5	0.5
Periscope Equip	0.3	0.0	0.0	2.2	2.5
Props/Shaft Control	0.1	0.0	0.0	2.2	2.3
Pumps, Comprs, Bearings	5.3	0.0	0.0	4.0	9.3
R-2368	0.0	0.0	0.0	0.0	0.0
RADIAC	0.1	0.0	0.0	0.5	0.6
RAM	0.6	1.3	0.0	0.0	1.9
RD-358A	0.0	0.0	0.0	0.5	0.5
Reliability and Maintainability (BOSS III)	0.0	0.0	15.0	0.0	15.0
Repairable Options	0.0	0.0	0.0	0.9	0.9
SATCOM	4.4	0.7	0.0	1.5	6.6
SHIPALT	0.0	0.0	3.7	0.0	3.7
SIDEWINDER	0.1	0.0	0.0	0.4	0.5
SINS/DMINS	0.1	0.0	0.0	1.9	2.0
SLQ 48	0.5	0.0	0.0	0.8	1.3
SLQ-32 Outboard Launcher	0.2	0.5	0.0	3.1	3.8
SNAP 1	0.0	0.0	0.0	0.3	0.3
SNAP 2	0.0	0.0	0.0	0.9	0.9
SPEC WARFARE	0.6	0.1	0.0	0.5	1.2
SQQ-30	0.1	0.0	0.0	0.2	0.3
SQQ-32	2.3	0.6	0.0	2.1	5.0
STC-2	0.1	0.0	0.0	0.5	0.6
SVTT MK 32	0.1	0.0	0.0	0.0	0.1
Ship Aux Supp Sys	0.0	0.0	0.0	3.5	3.5
Ship Boilers	1.1	0.0	0.0	1.0	2.1
Ship Communications UHF/VHF/HF	1.0	1.6	0.0	2.0	4.6
Ship Diesel Engines	1.7	0.0	0.0	1.8	3.5
Ship Elec Serv/Motors & Gen	1.5	0.0	0.0	3.3	4.8
Ship Gas Turbines	7.5	0.0	0.0	6.9	14.4
Shore Communications	1.1	0.0	0.0	0.4	1.5
Small Arms, Night Vision Devices	0.5	0.0	0.0	1.4	1.9
Steam Turbine Generators	0.3	0.0	0.0	0.4	0.7
Strategic Submarine Protection Level	0.0	0.0	0.0	0.0	0.0
Sub Armament & Elec	0.4	0.0	0.0	1.6	2.0
Sub Aux System	0.1	0.0	0.0	0.6	0.7
Sub Comm & Data Processing	0.2	3.8	0.0	6.4	10.4
Sub Propulsion	1.1	0.0	0.0	2.5	3.6
Sub Ship Control Equip	0.1	0.5	0.0	3.2	3.8
Submarine FCS, LCAC	0.1	0.0	0.0	0.2	0.3
Submarine Sonar,AN/SQR-15,17,18,AN/SQS-35,38	0.0	0.0	0.0	0.3	0.3
Submarine Ventilation	0.5	0.0	0.0	7.4	7.9
Subsafe Level I	0.9	0.0	0.0	1.6	2.5
Surface AWS FCS	0.0	0.0	0.0	0.1	0.1

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Surface Rewson	0.1	3.6	0.0	0.4	4.1
Surface Sonar,Transducers/Hydrophones	0.0	0.1	0.0	0.9	1.0
TAC-3	0.0	0.5	0.0	0.1	0.6
TAS MK 23	0.2	0.0	0.0	2.0	2.2
TCN	0.4	0.0	0.0	2.2	2.6
TERRIER	0.1	0.0	0.0	0.1	0.2
Tactical Displays	0.0	0.0	0.0	0.5	0.5
Tartar Missile	0.5	0.1	0.0	2.4	3.0
Technical Data Acquisition	0.0	0.0	0.1	0.0	0.1
Technical Referrals, Out of Production	0.0	0.0	3.0	0.0	3.0
Tomahawk	0.2	1.0	0.0	0.5	1.7
Training Div	0.2	0.0	0.0	0.5	0.7
Trident Refit Facility Load List	0.0	0.0	0.0	0.0	0.0
UGC-143	0.0	0.0	0.0	0.2	0.2
URT-23	0.0	0.0	0.0	2.1	2.1
Unassigned Weapon Systems	0.0	0.1	2.3	0.5	2.9
VLS	0.0	0.0	0.0	0.5	0.5
Valves	0.7	0.0	0.0	1.4	2.1
Vertical Launch	0.9	0.8	0.0	1.6	3.3
WSC-3	0.1	0.0	0.0	1.9	2.0
WSC-6	0.0	4.1	0.0	0.2	4.3
Gross Requirement	**80.1**	**96.1**	**55.2**	**224.2**	**455.6**
Asset Offset	0.0	(13.4)	0.0		(13.4)
Credit Mods	(3.1)	(3.5)	(1.3)	(5.0)	(12.9)
Contract Terminations	(3.1)	(3.5)	(1.3)		(7.9)
Boss Savings	(2.0)	(2.3)	(0.9)		(5.2)
Reduction for Efficiency	(14.2)	(9.6)	(6.7)	3.9	(26.6)
Initial/FOO	18.2	6.5	19.7		44.4
Net Requirement	**75.9**	**70.3**	**64.7**	**223.1**	**434.0**

NAVY WORKING CAPITAL FUND
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OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
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SM-3B

FY1999

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
.5 FLSIP+ COSAL	0.0	0.0	11.2	0.0	11.2
49 RADAR	0.0	0.0	0.0	2.3	2.3
ACLS	0.5	0.3	0.0	1.7	2.5
AEGIS	4.3	10.0	0.0	12.8	27.1
AIMS IFF	0.3	0.2	0.0	2.2	2.7
AN/BSY-1	1.2	0.0	0.0	1.0	2.2
AN/BSY-2	0.2	0.0	0.0	0.5	0.7
AN/SPS-40,10,53,67 AN/SSF	0.1	0.0	0.0	2.0	2.1
AN/SPS-48,SYS-1/2	1.3	0.3	0.0	3.2	4.8
AN/SPS-55,63 RADAR	0.1	0.0	0.0	0.4	0.5
AN/SQQ-89	1.8	2.3	0.0	2.5	6.6
AN/USC-38	0.7	5.8	0.0	1.0	7.5
AN/USG-1	0.0	1.3	0.0	0.0	1.3
AN/USQ-82	0.5	0.6	0.0	0.5	1.6
AN/UYA-4 Gun Mount	0.0	0.0	0.0	2.1	2.1
AN/UYK-43	0.6	0.1	0.0	0.8	1.5
AN/UYK-44	0.2	0.0	0.0	0.6	0.8
AN/UYQ-21	0.7	0.0	0.0	2.2	2.9
AN/UYQ-70 (NDI)	0.0	0.1	0.0	0.0	0.1
ANDVT,JTIDS	0.0	0.4	0.0	0.3	0.7
Advanced Signal Processor	0.0	0.0	0.0	0.4	0.4
Air/Air Missiles	0.1	0.0	0.0	1.2	1.3
Air/Ground Missiles	0.0	0.0	0.0	0.6	0.6
Annual NSO Maintenance Level of Effort	0.0	0.0	0.0	0.0	0.0
Aviation Guns	0.1	0.0	0.0	0.2	0.3
Avionics	1.2	0.0	0.0	1.5	2.7
BQQ 5 & 6 Sonar Systems	0.5	0.4	0.0	5.0	5.[redacted]
ir Valves	0.2	0.0	0.0	0.5	[redacted]
R	0.2	0.0	8.8	0.3	9.[redacted]
Cr LE	0.1	0.0	0.0	2.2	2.3
CIWS, MK-15 PHALANX	3.2	4.5	3.3	8.7	19.7
Commercial Computers	0.0	0.8	0.0	0.1	0.9
Common Computers	0.1	1.0	0.0	2.3	3.4
Crypto	0.3	0.0	0.0	0.9	1.2
DK Replen & Weap Hdlg Equip	6.9	0.0	0.0	0.4	7.3
DSSP	0.3	1.3	0.0	1.2	2.8
Damage Control	0.1	0.0	0.0	1.5	1.6
Diving and Salvage	0.0	0.1	0.0	0.0	0.1
EOD	0.0	0.1	0.0	0.2	0.3
ESGN System	0.3	0.0	0.0	14.9	15.2
ESM System	2.4	0.0	0.0	8.4	10.8
Electronic Surveillance	0.6	2.6	0.0	2.2	5.4
GPETE	0.9	0.0	0.0	1.2	2.1
Guns	0.2	0.5	0.0	0.3	1.0
HELO Land Sys	0.3	0.2	0.0	1.1	1.6
HM&E Provisioning	0.0	0.6	0.0	0.0	0.6
Handling Equip	0.1	0.0	0.0	0.1	0.2
Harpoon Missile	0.1	0.0	0.0	0.2	0.3
ICSS 05121	0.4	0.0	0.0	0.1	0.5
Internal Commun; AN/UNQ-7	0.2	0.2	0.0	0.8	1.2
Isotta Fraschini Corporate Contract	0.0	0.0	1.5	0.0	1.5
LM 2500	1.8	0.0	0.0	8.6	10.4
Load List	0.0	0.0	0.0	0.0	0.0
MATCS	0.5	0.0	0.0	1.3	1.8
MK 45 Guns	0.0	0.2	0.0	0.0	0.2
MK 46 Guns	0.1	0.0	0.0	0.4	0.5
MK 46 Torpedo	0.0	0.0	0.0	0.2	0.2
MK 48 ADCAP	0.7	0.0	0.0	3.0	3.7
MK 48 Torpedo	0.1	0.0	0.0	0.8	0.9
MK 50 Torpedo	0.2	0.0	0.0	1.1	1.[redacted]
GFCS	0.1	0.0	0.0	0.0	0.[redacted]
Gun Mount	0.1	0.0	0.0	0.3	0.4
GFCS	0.1	0.8	0.0	4.8	5.7
MK 92 GFCS	0.6	0.0	0.0	7.4	8.0

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 81

SM-3B

FY1999

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
Meteorological	0.4	0.3	0.0	1.6	2.3
Military Sealift Command	0.2	0.0	0.0	0.5	0.7
Mines/Mine Sweeping Equip,AN/WQN-1	0.2	0.6	0.0	0.7	1.5
Misc 2D RADAR	0.1	0.1	0.0	0.9	1.1
Misc SPAWARS	2.6	0.0	0.0	0.1	2.7
Misc Sub Sonar Equip	0.5	0.2	0.0	2.4	3.1
Misc Test Equipment	0.4	32.1	0.0	0.7	33.2
Misc Torpedo	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	1.5	0.0	1.5
Model 28 Teletype	0.1	0.0	0.0	0.1	0.2
NATO Seasparrow Missile	0.2	1.7	0.0	6.5	8.4
NAVSTAR GPS	0.3	0.0	0.0	0.5	0.8
NCCS	0.2	0.0	0.0	0.6	0.8
Navigation (Electronic)	0.7	0.1	0.0	1.3	2.1
Navigation Conventional	0.6	0.0	0.0	3.5	4.1
Non-FBM Navigation	0.3	1.1	0.0	1.0	2.4
Nuclear	0.8	0.8	0.0	0.8	2.4
OOD	1.3	0.0	0.0	0.5	1.8
OSI Maintenance CONUS	0.0	0.0	0.0	0.0	0.0
OSI Maintenance EXCONUS	0.0	0.0	0.0	0.0	0.0
Ocean Surveillance	0.0	0.0	0.0	0.1	0.1
Periscope Equip	0.3	0.0	0.0	2.3	2.6
Props/Shaft Control	0.1	0.0	0.0	2.2	2.3
Pumps, Comprs, Bearings	5.4	0.0	0.0	4.2	9.6
RADIAC	0.1	0.0	0.0	0.5	0.6
RAM	0.6	1.2	0.0	0.0	1.8
RD-258A	0.0	0.0	0.0	0.5	0.5
[redacted]ity and Maintainability	0.0	0.0	15.0	0.0	15.0
[redacted]M	4.5	0.7	0.0	1.5	6.7
SHIPALT	0.0	0.0	3.4	0.0	3.4
SIDEWINDER	0.1	0.0	0.0	0.4	0.5
SINS/DMINS	0.1	0.0	0.0	2.0	2.1
SLQ 48	0.5	0.0	0.0	0.9	1.4
SLQ-32 Outboard Launcher	0.2	0.4	0.0	3.2	3.8
SNAP 1	0.0	0.0	0.0	0.3	0.3
SNAP 2	0.0	0.0	0.0	0.9	0.9
SPEC WARFARE	0.6	0.0	0.0	0.5	1.1
SQQ-30	0.1	0.0	0.0	0.2	0.3
SQQ-32	2.4	0.0	0.0	2.2	4.6
STC-2	0.1	0.0	0.0	0.6	0.7
SVTT MK 32	0.1	0.0	0.0	0.1	0.2
Ship Aux Supp Sys	0.0	0.0	0.0	3.6	3.6
Ship Boilers	1.2	0.0	0.0	1.0	2.2
Ship Communications UHF/VHF/HF	1.0	14.4	0.0	2.1	17.5
Ship Diesel Engines	1.8	0.0	0.0	1.9	3.7
Ship Elec Serv/Motors & Gen	1.5	0.0	0.0	3.5	5.0
Ship Gas Turbines	7.7	0.0	0.0	7.2	14.9
Shore Communications	1.2	0.0	0.0	0.4	1.6
Small Arms, Night Vision Devices	0.5	0.0	0.0	1.5	2.0
Steam Turbine Generators	0.3	0.0	0.0	0.4	0.7
Strategic Submarine Protection Level	0.0	0.0	0.0	0.0	0.0
Sub Armament & Elec	0.4	0.0	0.0	1.7	2.1
Sub Aux System	0.1	0.0	0.0	0.7	0.8
Sub Comm & Data Processing	0.2	2.0	0.0	6.6	8.8
Sub Propulsion	1.1	0.0	0.0	2.6	3.7
Sub Ship Control Equip	0.1	0.5	0.0	3.3	3.9
Submarine FCS, LCAC	0.1	0.0	0.0	0.2	0.3
Submarine Sonar,AN/SQR-15,17,18,AN/SQS-35,38	0.0	0.0	0.0	0.3	0.3
Submarine Ventilation	0.5	0.0	0.0	7.7	8.2
[redacted]afe Level I	0.9	0.0	0.0	1.6	2.5
[redacted]e AWS FCS	0.0	0.0	0.0	0.1	0.1
[redacted]e Rewson	0.1	2.7	0.0	0.4	3.2
[redacted]e Sonar,Transducers/Hydrophones	0.0	0.1	0.0	1.0	1.1
TAC-3	0.0	0.3	0.0	0.1	0.4

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT ACTIVITY GROUP
OPERATING OBLIGATIONS BY WEAPON SYSTEMS ($M)
BUDGET PROJECT 81

FY1999

Weapon System	Basic Replen	Outfitting	Special Programs	Rework	Total SM-3B
TAS MK 23	0.2	0.0	0.0	2.1	2.3
TCN	0.4	0.0	0.0	2.2	2.6
TERRIER	0.1	0.0	0.0	0.1	0.2
Tactical Displays	0.0	0.0	0.0	0.6	0.6
Tartar Missile	0.5	0.0	0.0	2.6	3.1
Technical Data Acquisition	0.0	0.0	0.1	0.0	0.1
Technical Referrals, Out of Production	0.0	0.0	3.0	0.0	3.0
Tomahawk	0.2	1.4	0.0	0.5	2.1
Training Div	0.2	0.0	0.0	0.5	0.7
Trident Refit Facility Load List	0.0	0.0	0.0	0.0	0.0
UGC-143	0.0	0.0	0.0	0.2	0.2
URT-23	0.0	0.0	0.0	2.1	2.1
Unassigned Weapon Systems	0.0	0.1	0.0	0.5	0.6
VLS	0.0	0.0	1.3	0.0	1.3
Valves	0.7	0.0	0.0	1.5	2.2
Vertical Launch	0.9	0.0	0.0	1.7	2.6
WSC-3	0.1	0.0	0.0	2.0	2.1
WSC-6	0.1	6.9	0.0	0.2	7.2
Gross Requirement	**81.8**	**102.4**	**49.1**	**229.5**	**462.8**
Asset Offset		(14.7)			(14.7)
Credit Mods	(1.6)	(1.8)	(0.5)	(5.0)	(8.9)
Contract Terminations	(1.6)	(1.8)	(0.5)		(3.9)
Reduction for Efficiency	(18.0)	(17.7)	(10.7)	(12.3)	(58.7)
Initial/FOO	12.0	5.4	24.7		42.1
Net Requirement	**72.6**	**71.8**	**62.1**	**212.2**	**418.7**

Navy Working Capital Fund

SM-3B

Supply Management Activity Group

Operating Obligations by Weapon System

Budget Project 34

FY 1996

Weapon	Operating Outfitting	Special Programs	Basic Replen	Total
A4			1.510	1.510
SUP EQUIP		0.000	43.060	43.060
HELOS		25.305	93.697	119.002
F14		0.000	33.257	33.257
P3		3.200	33.304	36.504
S3		18.051	11.247	29.298
A6/EA6		1.937	1.001	2.938
E2/C2		0.000	16.129	16.129
AV8		22.097	31.346	53.443
F/A18A		106.000	54.300	160.300
OTHER		4.000	28.820	32.820
TERM/CR MO				-37.480
CIT				-29.300
DMR SAVINGS				-47.764
TOTAL		180.590	347.672	413.718
SYSTEM STOCK:INITIAL FOLLOW-ON				17.682
OPERATING REQUIREMENT				431.400

C0301

Navy Working Capital Fund SM-3B
Supply Management Activity Group
Operating Obligations by Weapon System
Budget Project 34
FY 1997

Weapon	Operating Outfitting	Special Programs	Basic Replen	Total
A4			1.255	1.255
SUP EQUIP		0.000	35.780	35.780
HELOS		11.000	77.855	88.855
F14		1.163	27.634	28.797
P3		1.402	27.673	29.075
S3		0.000	9.345	9.345
A6/EA6		0.000	0.832	0.832
E2/D2		0.000	13.402	13.402
AV8		20.689	26.046	46.735
F/A18A		111.371	45.119	156.490
OTHER		4.000	23.947	27.947
TERM/CR MO				-15.693
CIT				-122.971
DMR SAVINGS				-37.618
TOTAL		149.625	288.888	262.231
SYSTEM STOCK:INITIAL FOLLOW-ON				10.348
OPERATING REQUIREMENT				272.579

C95912

Navy Working Capital Fund SM-3B
Supply Management Activity Group
Operating Obligations by Weapon System
Budget Project 34
FY 1998

Weapon	Operating Outfitting	Special Programs	Basic Replen	Total
A4			1.506	1.506
SUP EQUIP		0.000	42.938	42.938
HELOS		0.608	93.432	94.040
F14		0.000	33.163	33.163
P3		0.000	33.210	33.210
S3		0.000	11.215	11.215
A6/EA6		0.000	0.998	0.998
E2/D2		0.000	16.083	16.083
AV8		2.122	31.257	33.379
F/A18A		40.000	54.145	94.145
OTHER		4.000	28.739	32.739
TERM/CR MO				-17.183
CIT				-245.730
DMR SAVINGS				-1.100
TOTAL		46.730	346.687	129.403
SYSTEM STOCK:INITIAL FOLLOW-ON				7.296
OPERATING REQUIREMENT				136.699

C160C3

Navy Working Capital Fund SM-3B
Supply Management Activity Group
Operating Obligations by Weapon System
Budget Project 34
FY 1999

Weapon	Operating Outfitting	Special Programs	Basic Replen	Total
A4			1.430	1.430
SUP EQUIP		0.000	40.794	40.794
HELOS		0.000	88.766	88.766
F14		0.000	31.507	31.507
P3		0.000	31.552	31.552
S3		0.000	10.655	10.655
A6/EA6		0.000	0.949	0.949
E2/D2		0.000	15.280	15.280
AV8		0.000	29.696	29.696
F/A18A		7.000	51.441	58.441
OTHER		4.000	27.303	31.303
TERM/CR MO				-3.497
CIT				-251.000
DMR SAVINGS				-1.100
TOTAL		11.000	329.374	84.776
SYSTEM STOCK:INITIAL FOLLOW-ON				9.025
OPERATING REQUIREMENT				93.801

C0003174

Navy Working Capital Fund

SM-3B

Supply Management Activity Group

Operating Obligations by Weapon System

BUDGET PROJECT 85

FY 1996

Weapon System	Buy In Outfitting	Special Programs	Basic Replen	Repair	Total
A-4	0.000	0.000	0.689	7.645	8.334
SUPPT EQUIPMT	30.904	0.000	0.902	19.600	51.406
HELOS	49.710	14.393	24.695	283.000	371.798
F-14	4.696	3.350	13.689	107.400	129.135
P-3	0.173	0.000	5.466	104.600	110.239
S-3	6.253	15.062	3.601	57.600	82.516
A-6/EA-6	4.969	0.000	5.159	33.300	43.428
E2/C2	39.483	0.000	4.873	41.600	85.956
AV8	43.546	0.000	9.379	51.500	104.425
F/A18	124.039	30.372	27.944	248.500	430.855
COMMON A/C & AVIONICS	33.342	2.487	7.803	72.600	116.232
TERM/CR MODS	-5.044		-67.825		-72.869
DMR SAVINGS	0.000		-90.603	-67.800	-158.403
REDUCTIONS FOR EFFICIENCES	-38.562				-38.562
LECP'S INVESTMENT/SAVINGS					0.000
TOTAL	293.509	65.664	-54.227	959.545	1264.491
STEM STOCK: INITIAL/FOLLOW-ON					26.773
OPERATING REQUIREMENT					1291.264

C1C3C3

Navy Working Capital Fund
Supply Management Activity Group
Operating Obligations by Weapon System
BUDGET PROJECT 85
FY 1997

SM-3B

Weapon System	Buy In Outfitting	Special Programs	Basic Replen	Repair	Total
A-4	0.000	0.000	1.007	7.300	8.307
SUPPT EQUIPMT	22.000	0.000	1.226	16.400	39.626
HELOS	30.736	3.760	40.915	228.900	304.311
F-14	29.441	0.000	22.592	107.400	159.433
P-3	9.589	4.700	8.638	85.200	108.127
S-3	7.339	4.474	7.250	49.135	68.198
A-6/EA-6	21.485	7.100	6.765	29.940	65.290
E2/C2	45.761	0.000	8.454	44.840	99.055
AV8	21.525	0.000	14.714	36.000	72.239
F/A18	104.486	28.251	46.404	214.740	393.881
COMMON A/C & AVIONICS	49.865	12.200	12.182	79.640	153.887
TERM/CR MODS	-5.044		-45.980		-51.024
DMR SAVINGS	0.000		-98.736	-26.400	-125.136
REDUCTIONS FOR EFFICIENCES	-54.779				-54.779
LECP'S INVESTMENT/SAVINGS			100.000		100.000
TOTAL	282.404	60.485	125.431	873.095	1341.415
SYSTEM STOCK: INITIAL/FOLLOW-ON					13.785
OPERATING REQUIREMENT					1355.200

C3516

Navy Working Capital Fund SM-3B

Supply Management Activity Group

Operating Obligations by Weapon System

BUDGET PROJECT 85

FY 1998

Weapon System	Buy In Outfitting	Special Programs	Basic Replen	Repair	Total
A-4	0.000	0.000	0.626	6.700	7.326
SUPPT EQUIPMT	20.000	0.000	0.937	18.600	39.537
HELOS	20.280	4.610	29.357	235.749	289.996
F-14	8.413	2.200	16.911	109.100	136.624
P-3	3.690	0.000	6.479	89.200	99.369
S-3	6.111	5.090	5.568	52.800	69.569
A-6/EA-6	9.451	0.000	4.804	31.800	46.055
E2/C2	9.402	0.000	6.120	48.540	64.062
AV8	42.835	0.000	11.301	38.400	92.536
F/A18	85.538	21.000	35.807	226.840	369.185
COMMON A/C & AVIONICS	96.439	0.333	9.563	84.300	190.635
TERM/CR MODS	-5.044		-6.081		-11.125
DMR SAVINGS	0.000		0.000		0.000
REDUCTIONS FOR EFFICIENCES	-65.710	0.000			-65.710
LECP'S INVESTMENT/SAVINGS			23.100	-19.100	4.000
COMPETITION SAVINGS			-13.288		-13.288
TOTAL	231.405	33.233	131.204	922.929	1318.771
SYSTEM STOCK: INITIAL/FOLLOW-ON					25.629
OPERATING REQUIREMENT					1344.400

Navy Working Capital Fund
Supply Management Activity Group
Operating Obligations by Weapon System
BUDGET PROJECT 85
FY 1999

SM-3B

Weapon System	Buy In Outfitting	Special Programs	Basic Replen	Repair	Total
A-4	0.000	0.000	0.091	6.600	6.691
SUPPT EQUIPMT	20.000	0.000	0.137	18.100	38.237
HELOS	14.119	0.000	4.288	230.300	248.707
F-14	0.483	0.000	2.470	106.600	109.553
P-3	12.932	0.000	0.946	87.100	100.978
S-3	4.639	5.346	0.813	51.600	62.398
A-6/EA-6	1.947	0.000	0.702	31.100	33.749
E2/C2	15.200	0.000	0.894	47.400	63.494
AV8	10.728	0.000	1.651	37.500	49.879
F/A18	120.529	21.000	5.230	221.500	368.259
COMMON A/C & AVIONICS	43.514	0.000	1.397	82.443	127.354
TERM/CR MODS	0.000		-12.000		-12.000
DMR SAVINGS	0.000		0.000		0.000
REDUCTIONS FOR EFFICIENCES	-74.965	0.000			-74.965
LECP'S INVESTMENT/SAVINGS			40.000	-33.800	6.200
			-13.580		-13.580
TOTAL	169.126	26.346	33.037	886.443	1114.952
SYSTEM STOCK: INITIAL/FOLLOW-ON					17.949
OPERATING REQUIREMENT					1132.901

FOIA 00091

SUPPLY MANAGEMENT CAPITAL BUDGET SUMMARY
DEPARTMENT OF THE NAVY
JANUARY 1997
($ IN MILLIONS)

LINE NUMBER	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
	1a. Non-ADP Equipment (>500,000)								
0001	Replacement			1	300	1	440	1	225
0002	Environmental Compliance			VAR	4,455	VAR	3,700	VAR	3,100
	Subtotal Equipment (>500,000)		**0**		**4,755**		**4,140**		**3,325**
0003	1b. Non-ADPE Equipment (>25,000<500,000)	VAR	977	VAR	5,194	VAR	4,230	VAR	4,430
	Subtotal Non-ADPE Equipment (>25,000<500,000)		**977**		**5,194**		**4,230**		**4,430**
	2. ADP Equipment (>100,000)								
0004	Computer Hardware (production)	VAR	11,354	VAR	5,299	VAR	9,150	VAR	6,881
	Subtotal ADP Equipment (>100,000)		**11,354**		**5,299**		**9,150**		**6,881**
	3. Software Development (>100,000)								
0005	APADE			3	256				
0006	CD ROM				512		25		25
0007	E-MAIL			1	85				
0008	ITIMP EDI UADPS-ICP			3	256	9	727	9	745
0009	LAN			4	341				
0010	AIT				392		364		371
0011	UADPS-SP/U2			50	4,251	88	7,282	88	7,450
0012	Transportation			9	768	11	868	11	888
0013	BPX Switch				1,100				
0014	UICP Modification				757		3,000		2,000
	Subtotal Software Development		**0**		**8,718**		**12,266**		**11,479**
0015	4. Minor Construction	VAR	0	VAR	4,000	VAR	1,200	VAR	1,200
	Subtotal Minor Construction		**0**		**4,000**		**1,200**		**1,200**
	GRAND TOTAL CAPITAL PURCHASE PROGRAM		**12,331**		**27,966**		**30,986**		**27,315**

LOGISTICS SUPPORT CAPITAL BUDGET SUMMARY
DEPARTMENT OF THE NAVY
JANUARY 1997
($ IN MILLIONS)

LINE NUMBER	ITEM DESCRIPTION	FY 1996		FY 1997		FY 1998		FY 1999	
		QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
	1a. Non-ADP Equipment (>500,000)								
0001	Replacement	VAR	300						
0002	Environmental Compliance	VAR	4,455						
	Subtotal Equipment (>500,000)		**4,755**						
0003	1b. Non-ADPE Equipment (>25,000<500,000)	VAR	2,547						
	Subtotal Non-ADPE Equipment (>25,000<500,000)		**2,547**						
	2. ADP Equipment (>100,000)								
0004	Computer Hardware (production)	VAR	5,607						
	Subtotal ADP Equipment (>100,000)		**5,607**						
	3. Software Development (>100,000)								
0005	APADE	0	0						
0006	CD ROM	1	95						
0007	E-MAIL	0	0						
0008	ITIMP EDI UADPS-ICP	3	262						
0009	LAN	0	0						
0010	AIT	6	477						
0011	UADPS-SP/U2	52	4,135						
0012	Transportation	11	874						
0013	BPX Switch		0						
0014	ALL TV Camera		0						
0015	UICP Modification		0						
	Subtotal Software Development		**5,843**						
0016	4. Minor Construction	VAR	1,000						
	Subtotal Minor Construction		**1,000**						
	GRAND TOTAL CAPITAL PURCHASE PROGRAM		**19,752**						

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						01 ITEM DESCRIPTION AUTOMATED MATERIAL HANDLING						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
01 AUTOMATED MATERIAL HANDLING SYSTEM				1	Var	300	1	VAR	440	1	VAR	225

Narrative Justification:

Automated Material Handling System - 1997 - $300K: Purchase and install 8 Horizontal NISTARS Carousels, FISC Pearl Harbor. Each carousel will hold 46 bins which can be configured in various ways to hold as many as 1,700 individual storage locations per carousel. All items stored in carousels will be NISTARS controlled fast movers. These carousels will replace the pallet racks in building 474-1 and will allow for 8 logical aisles and increase the density and pick rate in building 474.

The system at FISC, Pearl Harbor has outlived its useful life. Maintenance costs are high and spare parts are hard to find. Funding will replace this outdated conveyor system. This project is imperative since fleet readiness and shorebased logistical support are dependent upon availability of reliable AMHS. Funding for this project will allow FISC Pearl Harbor to increase utilization of both manpower and equipment and will improve the efficiency and productivity of warehouse operations. If not funded, this system will become a safety hazard.

1998 - $440K: During an 1995 visit to FISC Pearl Harbor, DLA Operations Support Office (DOSO) made a recommendation to replace the old black angle iron universal pallet racks in building 475 with a new package rack system. The $440K will replace the racks on two of the three floors only. This is a drawn out process which will take approximately two years to complete. By installing these racks a better utilization of storage space will be achieved, the old system is small and takes up a lot of valuable space.

1999 - $225K: Continue replacement of pallet racks at FISC Pearl Harbor, with package racks in building 475. These racks will be installed on the 4th floor of building 475.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						02 ITEM DESCRIPTION HAZARDOUS INVENTORY CONTROL SYSTEM						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
02 HAZARDOUS INVENTORY CONTROL SYSTEMS					VAR	4,455		VAR	3,700		VAR	3,100

Narrative Justification

Continuing funding is required for execution of Hazardous Material Control and Management Program by establishing Hazardous Material Minimization Centers and hazardous material inventory control systems. These systems will ensure shore activity compliance with Executive Order 12856 of 3 Aug 93, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements." Capital Equipment and automated systems are required to manage these specialized materials, track specific chemical issues to industrial and work processes, return excess chemicals to supply systems, management of distribution control centers, and redistribution or dispose of excess chemicals through the Defense Reutilization and Marketing Service (DRMS). Delay in funding these systems will place Navy Commanding Officers at risk in developing systems to comply with the Executive Order. Deficiencies may result in criminal and civil penalties under Federal and State statutes. Investment requirements are in three distinct sub-categories:

FISC HAZMAT MANAGEMENT INITIATIVES: FY96 $1,655; FY97 $1,655; FY98 $1,470; FY99 $1,090. Funds are for establishment of comprehensive material minimization (HAZMIN) centers at all FISCs and regional partners. Projected funding requirements based on detailed estimate for startup of FISC single service point at NAVBASE San Diego which was funded in FY92 as well as initial rough order magnitude (ROM) estimates from all other FISCs. These sites require a capital investment of approximately $300-400K each to procure state-of-the-art inventory management systems and warehouse equipment. The fiscal year 1996 requirement was for 6 HAZMAT equipment installations. The fiscal years 1997, 19098, and 1999 funding will cover an additional 4-6 equipment installations. This will result in better customer coverage in each region, more efficient use of available facilities, and Navy-wide implementation of HAZMINCENT concept.

HSMS (formerly HMC &M) TRACKING SYSTEM EQUIPMENT: FY96 $2,300; FY97 $2,300; FY98 $1,750; FY99 $1,650. This project, now called the Hazardous Substance Management System (HSMS) is required for procurement of hardware and software to support installation of a comprehensive cradle-to-grave hazardous substance management system. HSMS has been selected by DUSD (ES) and ASD as the standard DoD migration system for tracking of hazardous chemicals. During the last year, the Defense Environmental Corporate Information Management (DESCIM) and Logistics Corporate Information Management (LOGCIM) program offices have agreed to merge all requirements for ashore activity hazardous substance management into a single system, HSMS. LOGCIM and DESCIM have jointly funded a project to enable incorporation of the LOGCIM's DM-HMMS functionality into the HSMS system. In any case, services now have responsibility for funding all hardware requirements to support hazardous substance management systems. Funds for this purpose are not available through either CIM office. Prior year funds were used for procurement of systems to support various Naval activities including Shipyards, Public Works Centers, Fleet and Industrial Supply Centers, Air Stations, and shore facilities. The fiscal year 1997, 1998 and 1999 requirements will fund an additional 30-40 systems for operational shore activities in each fiscal year.

AFLOAT HAZMAT CONTROL SYSTEM IMPLEMENTATION: FY96 $500K; FY97 $500K; FY97 $480K; FY99 $360K. Funding is required to continue outfitting of all navy afloat commands with necessary hardware and software to operate the Hazardous Material Inventory Control System (HICS), a method for managing hazardous material which minimized usage and reduces waste. HICS is a shipboard management system unique tot he Navy and, as such, it does not overlap with any other hazardous material management systems, including HSMS and DM-HMMS. Earlier funding resulted in installation of approximately 200 systems on large and medium-sized ships. Fiscal Year 1996 funds were used to procure 50 additional systems to enable installation on smaller ships. Fiscal year 1997, 1998 and 1999 requirements will cover installation on remaining ships, including submarines, as well as maintenance and update of installed systems.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						03 ITEM DESCRIPTION COLLATERAL EQUIPMENT						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 COLLATERAL EQUIPMENT					VAR	500						

Narrative Justification:

Collateral Equipment - Due to the Increase in the Expense/Investment Threshold, Collateral Equipment will be funded by the Operating Budget beginning in FY 98.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						03 ITEM DESCRIPTION CIVIL ENGINEERING SUPPORT EQUIPMENT						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 CIVIL ENGINEERING SUPPORT EQUIPMENT		VAR	977		VAR	2,239		VAR	2,230		VAR	2,230

Narrative Justification:

Civil Engineering Support Equipment: This program funds the procurement of overaged, poor condition work vehicles utilized for Public Works functions from delivering mail and moving materials to excavating equipment to snow removal equipment. Equipment that is not replaced at the end of its expected life becomes uneconomical to maintain, unsafe, and unreliable. The NAVSUP claimancy currently has 425 vehicles which are overage and in poor condition.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						03 ITEM DESCRIPTION OTHER SUPPLY SUPPORT EQUIPMENT						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 SHOP AND OFFICE EQUIPMENT					VAR	800						

Narrative Justification:

Shop and Office Equipment - Due to the Increase in the Expense/Investment Threshold, Collateral Equipment will be funded by the Operating Budget beginning in FY 98.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						03 ITEM DESCRIPTION FORKLIFT TRUCKS						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 FORKLIFT TRUCKS				63	27	1,655	69	29	2,000	51	39	2,200

Narrative Justification:

Forklift Trucks - This program funds the procurement of new/initial outfitting and replacement material handling equipment (MHE) requirements for the Fleet and Industrial Supply Centers (FISC) and Inventory Control Points (ICP).

Equipment which is not replaced at the end of it's expected service life becomes uneconomical to maintain, unsafe, unreliable and unable to sustain increased operational tempos. Many of the over-aged forklifts currently in service are technologically obsolete, impacting mission capabilities. Additional intangible costs are also incurred, such as: increased manpower requirements, productivity losses, ineffective space utilization, material damage and leasing costs. New replacement equipment enables activities to meet handling and logistical requirements in an efficient and effective manner.

The fine tuning of requirements and identification of additional requirements are accomplished through an annual data call. This review reports on utilization and condition codes of MHE equipment ashore and afloat. The results of that review were assimilated into the management information system following the January review.

Relative to BRAC, only about 30 units have been acquired as a result of BRAC decisions and these units have required extensive overhauling. Most equipment has been awarded to the local economies by the respective base commanders.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						04 ITEM DESCRIPTION BLC						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 BLC						2,199			2,265			2,333

Narrative Justification:

Base Level Computing - Base Level Computing (BLC) is a program designed to replace and upgrade the aging interface between the end user at the keyboard and the Defense Information Systems Office (DISO) data center, for NAVSUP managed activities using the Uniform Data Processing System for Stock Points (UADPS-SP). This interface will also support the CIM system which ultimately replaces UADPS-SP. The overall program concept is described in a Mission Need Statement (MNS) approved by the Assistance Secretary of the Navy (ASN(RD&A)) and milestone decision authority was delegated to the naval Supply Systems Command (NAVSUP). The program consists of a number of individual and independent Abbreviated System Decision Papers (ASDPs) which conform to the overall concept described in the approved MNS. The ASDPs include the justification and economic analysis associated with the work at each individual site.

During FY96 and FY97 we will continue equipment installations at Fleet and Industrial Supply Centers (FISCs) which began in FY94 and FY95 and will begin work at other smaller activities. The ultimate goal is to build an architecture which will support a three tier computing and information system plan. If executed in accordance with the overall plan described in the MNS, the BLC Program will, over time, significantly improve ashore supply processing for the fleet.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						04 ITEM DESCRIPTION AUTOMATED IDENTIFICATION TECHNOLOGY						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 AIT (EQUIPMENT)						2,300			6,385			4,548

Narrative Justification:

AIT - AIT is an automated data capture technology. The Logistics Applications of Automated Marking and Reading Symbols (LOGMARS) is a major initiative under the AIT umbrella. LOGMARS funds provide ships and stock points with capability to "read" bar coded information for entry into existing computer systems. LOGMARS has generated significant cost avoidance savings in the functional area of physical inventory, inventory location survey, material receiving and issue, and government property accounting as documented in the final report of the OSD-sponsored LOGMARS Steering Group. In order to utilize bar coded data, the funding will provide the necessary equipment and programs to interface with existing computer systems. With greater emphasis on acquisition of commercial products and the associated bar codes, this will place greater emphasis on automated source data entry initiatives. Increased productivity, data accuracy, and visibility and control of inventories will be realized with LOGMARS technology.

Funding continues to equip Navy activities ashore and afloat with bar code equipment and programs. As equipment ages and technology advances, there will continue to be a need to replace obsolete equipment and old equipment that breaks down as the cost for repair approaches the cost of replacement. Also, replacement equipment is required when equipment is no longer being manufactured. DMRD 987 Inventory Reduction Plan Improvement (IRP) specifically cites LOGMARS as a new technology that the services must continue to implement to enhance readiness, responsiveness, productivity inventory control and the overall quality of support.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						04 ITEM DESCRIPTION UADPS-SP/U2						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 UADPS-SP/U2 (EQUIPMENT)						500			500			0

Narrative Justification:

UADPS-SP - The Uniform Automated Data Processing System for Stock Points (UADPS-SP) is the standard Navy-wide automated supply and financial management application system designed to support Navy operating forces. An enhancement of UADPS-SP, called UADPS-SP/U2, expands the current UADPS-SP functionality to incorporate the concept of "regionalization" of inventory management within the Department of Defense. These capital investment requirements support peripheral and telecommunications infrastructure required to support implementationof UADPS-SP/U2 at all potential Fleet and Industrial Supply Centers (FISCs) and partner sites (the FISCs become the Navy's primary provider of regional logistics support services). All expenditures of these funds are supported by business case analyses. These investments fully support both the Defense Information Infrastructure (DII) initiative and the Regional Maintenance plan endorsed by the Chief of Naval Operations.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						04 ITEM DESCRIPTION JEDMICS						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 JEDMICS (EQUIPMENT)			4,244									

Narrative Justification:

JEDMICS - JEDMICS is an OSD-directed effort in response to Congressional direction in PL 96-525 to develop a centralized automated system to index, store, retrieve, and distribute technical drawings. The Joint Engineering Data Management Information and Control System (JEDMICS), which was developed in response to Congressional direction, replaces labor intensive, inefficient manual and semi-automated technical repositories with automated central repositories for all engineering and manufacturing information on ships, aircraft and electronics. This information is used by the fleet shore establishment and industry in support of spares acquisition, equipment maintenance and modernization and preparation of technical publications.

JEDMICS was designated the DoD standard system for storing engineering drawings by ASD C31 ltr of 14 Nov 1991. FY 1996 and FY 1997 dollars are being used for technology refreshment and follow-on expansion to additional users for the eight primary technical data repositories.

A pre-investment economic analysis was completed/approved before JEDMICS received MAISRC authority to proceed with implementation. The discounted savings investment ratio is 1.5. Total program benefits for life cycle 1992 through 2005 are projected at $42.4M.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						04 ITEM DESCRIPTION MATERIAL MANAGEMENT SYSTEM (MMS)						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 MATERIAL MGMT SYSTEM (EQUIPMENT)			7,110			300			0			0

Narrative Justification:

Material Management System - These funds are to support the fielding of the Material Management System (MMS) being developed by the Joint Logistics Systems Center to the Navy Inventory Control Points (ICPs). The responsibility for acquisition of MMS hardware for Fiscal Years 1995-1997 was transferred from the JLSC to the Military Services and the Defense Logistics Agency (DLA).

The MMS was created in response to the DoD initiative to standardize logistics systems across DoD. The JLSC, working with the Military Services and the DLA, has evaluated the processes of the DoD ICPs, selected and developed the optimum automated information systems to support improved standard business practices. This request funds the continued deployment with connectivity of fourteen systems to the Navy Inventory Control Point (ICP), Mechanicsburg and Philadelphia, PA; and two deployments with connectivity to the Marine Corps Logistics Bases, Albany, GA.

The MMS will provide a radically improved functional capability to the Military Services and DLA, reduce DoD costs for information services and establish an information systems infrastructure on which DoD can improve the way it does business. Specific improvements include:

- Reduced inventories through better management information on purchase decisions.
- Reduced labor requirements for materiel management processes.
- Reduced Information Technology costs.
- Improved visibility and control of assets.

Once implementation is completed, legacy applications will be reduced or eliminated significantly decreasing ADP costs.

The projected reductions in the DoD inventories cannot be met without an improved supply information management infrastructure. In addition, the Department cannot comply with its objective to standardize information systems and business practices and effectively implement throughout the Department ICPs. This initiative supports the sustainment of readiness in a downsizing environment.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						05 ITEM DESCRIPTION APADE						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
05 APADE				3	85	256						

Narrative Justification:

APADE - These Central Design Agency (CDA) personnel are modifying Automation of Procurement and Accounting Data Entry System (APADE) programs for enhancements to accommodate small purchase, Electronic Data Interchange and non-standard requisitioning by FISCs.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						06 ITEM DESCRIPTION COMPACT READ ONLY MEMORY (CD-ROM)						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
06 CD-ROM (CDA)						512			25			25

Narrative Justification:

CD-ROM - The Compact Disc-Read Only Memory (CD-ROM) provides information digitally for direct use with personal computers replacing both paper and microfiche as a means to distribute manuals, publications, and data bases. CD-ROM is one of the technologies whose primary importance is increasing the currency, consistency, security and accessibility of information. This product provides massive storage capacity, saves money on warehousing and mailing costs, and increases productivity by providing data in a rapid lookup and retrieval mode. A single CD-ROM can hold 300,000 pages of text which equates to 2,500 pounds of paper, takes up 120 feet of shelf space and costs $958 to mail. A single CD-ROM weighs 0.7 ounces, takes less than an inch of space and cost $0.75 to mail. CD-ROM is the most practical and economical media for the multiple distribution of digital data. Real savings are to be achieved from the reduction of printing, decreased mailings, less necessary manpower for the handling of documents, and the diminished need for warehouse space.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						07 ITEM DESCRIPTION E-MAIL						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
07 E-MAIL (CDA)				1	85	85						

Narrative Justification:

E-MAIL- NAVSUP is installing a corporate wide electronic mail facility with Hub located in Mechanicsburg, Pa. We will use a small number of Fleet Material Support Office (FMSO) resources to manage the mail hub, install new users, and provide new Internet capabilities through the installation of a new Internet Domain Name System.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						08 ITEM DESCRIPTION ITIMP EDI UADPS-ICP (CDA)						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
08 ITIMP EDI UADPS-ICP (CDA)				3	85	256	9	83	727	9	85	745

Narrative Justification:

ITIMP - These Central Design Agency (CDA) resources will be modifying ADP programs for enhancements to Integrated Technical, Item Management and Procurement (ITIMP) to accommodate Inventory Control Point (ICP) procurement Electronic Data Interchange (EDI) including expanding upon baseline transactions to incorporate the 841 transaction set for commercial and organic manufacturing solicitations.

The growth in the number of workyears reported is attributable to the Corporate Information System (CIS). It is an executive information/decision support system that allows senior headquarters management, functional managers, field activities and NAVSUP customers to view performance data for specific activities within the NAVSUP claimancy as well as overall supply readiness metrics. The development effort will provide the CIS with direct data feeds from the UICP database. The current system requires large amounts of UICP data to be manually entered into CIS spreadsheets. The automation of the data feeds will not only eliminate the manual effort but allow for additional data to be included in CIS, thereby improving the utility of the CIS.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						09 ITEM DESCRIPTION LAN						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
09 LAN (CDA)				4	85	341						

Narrative Justification:

LAN- NAVSUP will be installing Local Area Networks in a number of small activities that are users of the UADPS-SP. NAVSUP plans to use FMSO resources for the installations. These resources will also be used to establish a help desk to provide technical support and trouble shooting services to activities with installed LANs. the LAN installations at small sites are supported by an approved Abbreviated System Decision Paper (ASDP).

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						10 ITEM DESCRIPTION AUTOMATED IDENTIFICATION TECHNOLOGY						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
10 AIT (CDA)						392			364			371

Narrative Justification:

AIT - AIT is an automated data capture technology. Major initiatives include the Logistics Applications of Automated Marking and Reading Symbols (LOGMARS) and the electronic Point of Sale (EPOS) projects. LOGMARS provides ships and stock points with the capability to "read" bar coded information for entry into existing computer systems. Increased productivity, data accuracy, and visibility and control of inventories will be realized with LOGMARS technology, and these benefits contribute to improved Fleet support and readiness.

The CDA efforts reflected here also support software modification required to implement Electronic Point of Sale (EPOS) initiatives within the AIT technology. EPOS is an automated retail program designed to provide accurate material and financial accountability to all DON activities. EPOS is currently being run as a propriety system. Both hardware and some of the software are available only from Dataflow Technologies, Inc. The software coming out of the design process would break that proprietary lock. This is important because the hardware currently being used is nearing the end of its life cycle. Replacement of it through Dataflow would be expensive. The new software runs on commercial-off-the-shelf (COTS) hardware. Replacement of the old hardware with COTS hardware would be much less expensive. In addition, the new software is being developed with Year 2000 processing capabilities. Should we not support implementation of this software, we'll have to invest in incorporating Year 2000 processing into our current system.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						11 ITEM DESCRIPTION UADPS-SP/UADPS-2						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
11 UADPS-SP/U2 (CDA)				50	85	4,251	88	83	7,282	88	85	7,450

Narrative Justification:

UADPS-SP - The Uniform Automated Data Processing System for Stock Points (UADPS-SP) is the Navy-wide automated supply, financial and resources management application system designed to support Navy operating forces. It is a Navy legacy system operated at over 35 Naval Commands including Fleet and Industrial Supply Centers (FISCs), Naval Air Stations, Naval Shipyards and Training Centers. The UADPS-SP system provides uniform logistics data support to the Chief of Naval Operations, Commander in Chief Atlantic Fleet (CINCLANTFLT), Commander in Chief Pacific Fleet (CINCPACFLT), Chief of Naval Education and Training, Chief of Naval Reserves, Comptroller of the Navy, and Commandant of the Marine Corps. This system is operated primarily at Defense Information Systems Agency (DISA) ADP installations and at several remote activities. The Central Design Agency (CDA) efforts reflected herein are directed toward complying with OSD/Congressionally-mandated changes, and corrective software maintenance efforts. An additional CDA effort for this AIS has been directed toward incorporating the FISC facts of CNO Management Review Initiative #20 which provides the necessary functionality to complement Corporate Information Management (CIM) enterprise-wide systems. Specifically, these efforts provide the necessary management tools:

To reduce inventory and infrastructure costs through centralized inventory management and expanded regional asset visibility.
To supply centralized management of separate consumer inventories to the "wrench-turner" level.
To consolidate geographic "stovepipe" inventories under a single ADP system to achieve personnel and inventory.
To expand consumer level asset visibility and sharing.
To achieve cost avoidance as legacy systems are eliminated.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						12 ITEM DESCRIPTION TRANSPORTATION						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
12 TRANSPORTATION (CDA)				9	85	768	11	83	868	11	85	888

Narrative Justification:

Transportation - The funds provide for development of the Navy Material Transportation Office Management Information System's Budget Management System and Integration of the Transportation Operations Management System.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						13 ITEM DESCRIPTION PBX SWITCHBOARD						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
13 PBX SWITCHBOARD						1,100						

Narrative Justification:

PBX Switchboard - The existing services at FISC Norfolk are currently being provided by Naval Computer and Telecommunications Area Master Station Atlantic Command (NCTAMSLANT), Norfolk, VA. Installing a Private Branch Exchange (PBX) switch would allow dealing directly with a commercial communications vendor. Objectives of this effort include:

Decreasing the number of trunk lines.
Reducing cost of service/lines.
Reduce time on service calls.

Norfolk currently has over 2000 Centrex lines (telephone pairs) costing $800,000 annually. Installing a PBX system at Norfolk will allow the volume of the existing 2,000 Centrex lines to be carried on 111 trunc lines. Cost for 111 trunc lines is $10,000 annually. The capital investment for a PBX switching system for 111 trunc lines is estimated at $840,000. The cost benefit comparison of Centrex ($800K) every year favors a PBX with first year purchase cost of $840K, installation costs of $250K plus $10K recurring line costs. Maintenance costs for Centrex and PBX systems are similar.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						14 ITEM DESCRIPTION UICP MODIFICATION						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
14 UICP MODIFICATION						757			3,000			2,000

Narrative Justification:

UICP - This project will rearchitect and re-engineer this legacy UICP COBOL system, currently on mainframe, into a logical three tiered, client server environment.

The benefits derived from this are 1) with an open system, the development costs of any future enhancement will be dramatically reduced, and 2) with the elimination of the mainframe environment, operations and maintenance costs will be dramatically reduced. These savings will be manifested in significantly reduced processing payments to DISA.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/SUPPLY MANAGEMENT/JAN 1997						15 ITEM DESCRIPTION MINOR CONSTRUCTION						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
15 MINOR CONSTRUCTION					VAR	4,000		VAR	1,200		VAR	1,200

Narrative Justification:

Minor Construction - Minor construction funds are used for alterations to facilities to accommodate changes in mission, or methods of operations, and to accomplish minor facility improvements having an impact on the work environment. Examples of current requirements include providing emergency back-up power capabilities for a critical facility, addition of a loading ramp for operational purposes, and accommodating a consolidation of mail functions to a regional facility. Although these types of alterations are accomplished at a relatively small cost, they have significant impacts on the methods or economies of performing work.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						01 ITEM DESCRIPTION AUTOMATED MATERIAL HANDLING						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
01 AUTOMATED MATERIAL HANDLING SYSTEM		VAR	300									

Narrative Justification:

Automated Material Handling System - 1996 - $300K: Conveyor system in building 474, 475, 452 at FISC Pearl Harbor was installed in 1941 and updated in 1985. This system consists of approximately 5 miles of tote pan conveyor used to transport binnable receipts to storage, issues to packing, and packed issued to shipping. The system has outlived its useful life. Maintenance costs are high and spare parts are hard to find.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						02 ITEM DESCRIPTION HAZARDOUS INVENTORY CONTROL SYSTEM						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
02 HAZARDOUS INVENTORY CONTROL SYSTEMS		VAR	4,455									

Narrative Justification:

Continuing funding is required for execution of Hazardous Material Control and Management Program by establishing Hazardous Material Minimization Centers and hazardous material inventory control systems. These systems will ensure shore activity compliance with Executive Order 12856 of 3 Aug 93, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements." Capital Equipment and automated systems are required to manage these specialized materials, track specific chemical issues to industrial and work processes, return excess chemicals to supply systems, management of distribution control centers, and redistribution or dispose of excess chemicals through the Defense Reutilization and Marketing Service (DRMS). Delay in funding these systems will place Navy Commanding Officers at risk in developing systems to comply with the Executive Order. Deficiencies may result in criminal and civil penalties under Federal and State statutes. Investment requirements are in three distinct sub-categories:

FISC HAZMAT MANAGEMENT INITIATIVES: FY96 $1,655; FY97 $1,655; FY98 $1,470; FY99 $1,090. Funds are for establishment of comprehensive material minimization (HAZMIN) centers at all FISCs and regional partners. Projected funding requirements based on detailed estimate for startup of FISC single service point at NAVBASE San Diego which was funded in FY92 as well as initial rough order magnitude (ROM) estimates from all other FISCs. These sites require a capital investment of approximately $300-400K each to procure state-of-the-art inventory management systems and warehouse equipment. The fiscal year 1996 requirement was for 3 HAZMAT equipment installations. The fiscal years 1997, 19098, and 1999 funding will cover an additional 4-6 equipment installations. This will result in better customer coverage in each region, more efficient use of available facilities, and Navy-wide implementation of HAZMINCENT concept.

HSMS (formerly HMC&M) TRACKING SYSTEM EQUIPMENT: FY96 $2,300; FY97 $2,300; FY98 $1,750; FY99 $1,650. This project, now called the Hazardous Substance Management System (HSMS) is required for procurement of hardware and software to support installation of a comprehensive cradle-to-grave hazardous substance management system. HSMS has been selected by DUSD (ES) and ASD as the standard DoD migration system for tracking of hazardous chemicals. During the last year, the Defense Environmental Corporate Information Management (DESCIM) and Logistics Corporate Information Management (LOGCIM) program offices have agreed to merge all requirements for ashore activity hazardous substance management into a single system, HSMS. LOGCIM and DESCIM have jointly funded a project to enable incorporation of the LOGCIM's DM-HMMS functionality into the HSMS system. In any case, services now have responsibility for funding all hardware requirements to support hazardous substance management systems. Funds for this purpose are not available through either CIM office. Prior year funds were used for procurement of systems to support various Naval activities including Shipyards, Public Works Centers, Fleet and Industrial Supply Centers, Air Stations, and shore facilities. The fiscal year 1997, 1998 and 1999 requirements will fund an additional 30-40 systems for operational shore activities in each fiscal year.

AFLOAT HAZMAT CONTROL SYSTEM IMPLEMENTATION: FY96 $500K; FY97 $500K; FY97 $480K; FY99 $360K. Funding is required to continue outfitting of all navy afloat commands with necessary hardware and software to operate the Hazardous Material Inventory Control System (HICS), a method for managing hazardous material which minimized usage and reduces waste. HICS is a shipboard management system unique tot he Navy and, as such, it does not overlap with any other hazardous material management systems, including HSMS and DM-HMMS. Earlier funding resulted in installation of approximately 200 systems on large and medium-sized ships. Fiscal Year 1996 funds were used to procure 50 additional systems to enable installation on smaller ships. Fiscal year 1997, 1998 and 1999 requirements will cover installation on remaining ships, including submarines, as well as maintenance and update of installed systems.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						03 ITEM DESCRIPTION COLLATERAL EQUIPMENT						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 COLLATERAL EQUIPMENT			0									

Narrative Justif cation:

Collateral Equipment - Due to the Increase in the Expense/Investment Threshold, Collateral Equipment will be funded by the Operating Budget beginning in FY 96.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						03 ITEM DESCRIPTION CIVIL ENGINEERING SUPPORT EQUIPMENT						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 CIVIL ENGINEERING SUPPORT EQUIPMENT		VAR	356									

Narrative Justification:

Civil Engineering Support Equipment: This program funds the procurement of overaged, poor condition work vehicles utilized for Public Works functions from delivering mail and moving materials to excavating equipment to snow removal equipment. Equipment that is not replaced at the end of its expected life becomes uneconomical to maintain, unsafe, and unreliable. The NAVSUP claimancy currently has 425 vehicles which are overage and in poor condition.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						03 ITEM DESCRIPTION OTHER SUPPLY SUPPORT EQUIPMENT						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 SHOP AND OFFICE EQUIP		VAR	533									

Narrative Justification:

Shop and Office Equipment - Due to the increase in the Expense/Investment Threshold, Collateral Equipment will be funded by the Operating Budget beginning in FY98.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						03 ITEM DESCRIPTION FORKLIFT TRUCKS						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
03 FORKLIFT TRUCKS	44	34	1,658									

C03548

Narrative Justification:

Forklift Trucks - This program funds the procurement of new/initial outfitting and replacement material handling equipment (MHE) requirements for the Fleet and Industrial Supply Centers (FISC) and Inventory Control Points (ICP).

Equipment which is not replaced at the end of it's expected service life becomes uneconomical to maintain, unsafe, unreliable, and unable to sustain increased operational tempos. Many of the over-aged forklifts currently in service are technologically obsolete, impacting mission capabilities. Additional intangible costs are also incurred, such as: increased manpower requirements, productivity losses, ineffective space utilization, material damage, and leasing costs. New replacement equipment enables activities to meet handling and logistical requirements in an efficient and effective manner.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						04 ITEM DESCRIPTION BLC						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 BLC			2,230									

Narrative Justification:

Base Level Computing - Base Level Computing (BLC) is a program designed to replace and upgrade the aging interface between the end user at the keyboard and the Defense Information Systems Office (DISO) data center, for NAVSUP managed activities using the Uniform Data Processing System for Stock Points (UADPS-SP). This interface will also support the CIM system which ultimately replaces UADPS-SP. The overall program concept is described in a Mission Need Statement (MNS) approved by the Assistance Secretary of the Navy (ASN(RD&A)) and milestone decision authority was delegated to the Naval Supply Systems Command (NAVSUP). The program consists of a number of individual and independent Abbreviated System Decision Papers (ASDPs) which conform to the overall concept described in the approved MNS. The ASDPs include the justification and economic analysis associated with the work at each individual site.

During FY96 and FY97 (transferred to SM) we will continue equipment installations at Fleet and Industrial Supply Centers (FISCs) which began in FY94 and FY95 and will begin work at other smaller activities. The ultimate goal is to build an architecture which will support a three tier computing and information system plan. If executed in accordance with the overall plan described in the MNS, the BLC Program will, over time, significantly improve ashore supply processing for the fleet.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						04 ITEM DESCRIPTION AUTOMATED IDENTIFICATION TECHNOLOGY						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 AIT (EQUIPMENT)			2,377									

Narrative Justification:

AIT - AIT is an automated data capture technology. The Logistics Applications of Automated Marking and Reading Symbols (LOGMARS) is a major initiative under the AIT umbrella. LOGMARS funds provide ships and stock points with capability to "read" bar coded information for entry into existing computer systems. LOGMARS has generated significant cost avoidance savings in the functional area of physical inventory, inventory location survey, material receiving and issue, and government property accounting as documented in the final report of the OSD-sponsored LOGMARS Steering Group. In order to utilize bar coded data, the funding will provide the necessary equipment and programs to interface with existing computer systems. With greater emphasis on acquisition of commercial products and the associated bar codes, this will place greater emphasis on automated source data entry initiatives. Increased productivity, data accuracy, and visibility and control of inventories will be realized with LOGMARS technology.

Funding continues to equip Navy activities ashore and afloat with bar code equipment and programs. As equipment ages and technology advances, there will continue to be a need to replace obsolete equipment and old equipment that breaks down as the cost for repair approaches the cost of replacement. Also, replacement equipment is required when equipment is no longer being manufactured. DMRD 987 Inventory Reduction Plan Improvement (IRP) specifically cites LOGMARS as a new technology that the services must continue to implement to enhance readiness, responsiveness, productivity inventory control and the overall quality of support.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						04 ITEM DESCRIPTION UADPS-SP/U2						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
04 UADPS-SP/U2 (EQUIPMENT)			1,000									

Narrative Justification:

UADPS-SP - The Uniform Automated Data Processing System for Stock Points (UADPS-SP) is the standard Navy-wide automated supply and financial management application system designed to support Navy operating forces. An enhancement of UADPS-SP, called UADPS-SP/U2, expands the current UADPS-SP functionality to incorporate the concept of "regionalization" of inventory management within the Department of Defense. These capital investment requirements support peripheral and telecommunications infrastructure required to support implementationof UADPS-SP/U2 at all potential Fleet and Industrial Supply Centers (FISCs) and partner sites (the FISCs become the Navy's primary provider of regional logistics support services). All expenditures of these funds are supported by business case analyses. These investments fully support both the Defense Information Infrastructure (DII) initiative and the Regional Maintenance plan endorsed by the Chief of Naval Operations.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						05 ITEM DESCRIPTION APADE						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
05 APADE (CDA)												

Narrative Justification:

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						06 ITEM DESCRIPTION COMPACT DISC-READ ONLY MEMORY (CD-ROM)						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
06 CD-ROM (CDA)	1	79	95									

Narrative Justification:

CD-ROM - The Compact Disc-Read Only Memory (CD-ROM) provides information digitally for direct use with personal computers replacing both paper and microfiche as a means to distribute manuals, publications, and data bases. CD-ROM is one of the technologies whose primary importance is increasing the currency, consistency, security and accessibility of information. This product provides massive storage capacity, saves money on warehousing and mailing costs, and increases productivity by providing data in a rapid lookup and retrieval mode. A single CD-ROM can hold 300,000 pages of text which equates to 2,500 pounds of paper, takes up 120 feet of shelf space and costs $958 to mail. A single CD-ROM weighs 0.7 ounces, takes less than an inch of space and cost $0.75 to mail. CD-ROM is the most practical and economical media for the multiple distribution of digital data. Real savings are to be achieved from the reduction of printing, decreased mailings, less necessary manpower for the handling of documents, and the diminished need for warehouse space.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						07 ITEM DESCRIPTION E-MAIL						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
07 E-MAIL (CDA)												

Narrative Justification:

0053454

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						08 ITEM DESCRIPTION ITIMP EDI UADPS-ICP (CDA)						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
08 ITIMP EDI UADPS-ICP (CDA)	3	79	262									

Narrative Justif cation:

ITIMP - These Central Design Agency (CDA) resources will be modifying ADP programs for enhancements to Integrated Technical, Item Management and Procurement (ITIMP) to acccmmodate Inventory Control Point (ICP) procurement Electronic Data Interchange (EDI) including expanding upon baseline transactions to incorporate the 841 transac tion set for commercial and organic manufacturing solicitations

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						09 ITEM DESCRIPTION LAN						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
09 LAN (CDA)												

Narrative Justification:

C03956

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						10 ITEM DESCRIPTION AUTOMATED IDENTIFICATION TECHNOLOGY						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
10 AIT (CDA)	6	79	477									

Narrative Justification:

AIT - AIT is an automated data capture technology. Major initiatives include the Logistics Applications of Automated Marking and Reading Symbols (LOGMARS) and the electronic Point of Sale (EPOS) projects. LOGMARS provides ships and stock points with the capability to "read" bar coded information for entry into existing computer systems. Increased productivity, data accuracy, and visibility and control of inventories will be realized with LOGMARS technology, and these benefits contribute to improved Fleet support and readiness.

The CDA efforts reflected here also support software modification required to implement Electronic Point of Sale (EPOS) initiatives within the AIT technology. EPOS is an automated retail program designed to provide accurate material and financial accountability to all DON activities. EPOS is currently being run as a propriety system. Both hardware and some of the software are available only from Dataflow Technologies, Inc. The software coming out of the design process would break that proprietary lock. This is important because the hardware currently being used is nearing the end of its life cycle. Replacement of it through Dataflow would be expensive. The new software runs on commercial-off-the-shelf (COTS) hardware. Replacement of the old hardware with COTS hardware would be much less expensive. In addition, the new software is being developed with Year 2000 processing capabilities. Should we not support implementation of this software, we'll have to invest in incorporating Year 2000 processing into our current system.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION

($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						11 ITEM DESCRIPTION UADPS-SP/UADPS-2						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
11 UADPS-SP/U2 (CDA)	52	79	4,135									

Narrative Justification:

UADPS-SP - The Uniform Automated Data Processing System for Stock Points (UADPS-SP) is the Navy-wide automated supply, financial and resources management application system designed to support Navy operating forces. It is a Navy legacy system operated at over 35 Naval Commands including Fleet and Industrial Supply Centers (FISCs), Naval Air Stations, Naval Shipyards and Training Centers. The UADPS-SP system provides uniform logistics data support to the Chief of Naval Operations, Commander in Chief Atlantic Fleet (CINCLANTFLT), Commander in Chief Pacific Fleet (CINCPACFLT), Chief of Naval Education and Training, Chief of Naval Reserves, Comptroller of the Navy, and Commandant of the Marine Corps. This system is operated primarily at Defense Information Systems Agency (DISA) ADP installations and at several remote activities. The Central Design Agency (CDA) efforts reflected herein are directed toward complying with OSD/Congressionally-mandated changes, and corrective software maintenance efforts. An additional CDA effort for this AIS has been directed toward incorporating the FISC facts of CNO Management Review Initiative #20 which provides the necessary functionality to complement Corporate Information Management (CIM) enterprise-wide systems. Specifically, these efforts provide the necessary management tools:

To reduce inventory and infrastructure costs through centralized inventory management and expanded regional asset visibility.
To supply centralized management of separate consumer inventories to the "wrench-turner" level.
To consolidate geographic "stovepipe" inventories under a single ADP system to achieve personnel and inventory.
To expand consumer level asset visibility and sharing.
To achieve cost avoidance as legacy systems are eliminated.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						12 ITEM DESCRIPTION TRANSPORTATION						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
12 TRANSPORTATION (CDA)	11	79	874									

Narrative Justification:

Transportation - The funds provide for development of the Navy Material Transportation Office Management Information System's Budget Management System and integration of the Transportation Operations Management System.

SUPPLY OPERATIONS CAPITAL PURCHASES JUSTIFICATION
($ IN THOUSANDS)

BUDGET SUBMISSION
FY 1998/99 BIENNIAL BUDGET

COMPONENT/BUSINESS AREA/DATE NAVY/LOGISTICS SUPPORT/JAN 1997						13 ITEM DESCRIPTION MINOR CONSTRUCTION						
ELEMENTS OF COST	QTY	FY 1996 UNIT COST	TOTAL COST	QTY	FY 1997 UNIT COST	TOTAL COST	QTY	FY 1998 UNIT COST	TOTAL COST	QTY	FY 1999 UNIT COST	TOTAL COST
13 MINOR CONSTRUCTION		VAR	1,000									

Narrative Justification:

Minor Construction - Minor construction is the erection, installation, or assembly of new real property, or the addition, expansion, extension, alteration or replacement of existing real property to meet ever changing requirements. For example, construct main gates and construct new water meter building.

CAPITAL BUDGET EXECUTION
DEPARTMENT OF THE NAVY
SUPPLY MANAGEMENT
FY 1998/99 BIENNIAL BUDGET

FY 1997

Title/Description	Approved ($000)	Reprogs	Revised Request ($M)	Asset/ Deficiency	Explanation/Reason for Change#
Non-ADP Equipment	9.949	.000	9.949	.000	
ADP Equipment	15.999	2.500	7.799	-10.700	*JLSC Hardware funding moved to other business areas *UICP Modernization - hardware
Software Developmer	6.861	.610	8.718	1.247	*UICP Modernization- Requirement to re-engineer legacy UICP COBOL system into logical three tiered client server environment
Minor Construction	4.000	-2.800	1.200	.000	
Reliability & Maintaine	.310	-.310	.000	.000	
Total Capital Investme	37.119	.000	27.666	-9.453	

Figures reflect proposed capital project reprogramming actions which have been submitted to the Office of the Under Secretary of Defense (Comptroller) for approval.

Exhibit Fund 9d
Capital Budget Execution

Navy Working Capital Fund
Marine Corps Supply Management
FY 1998/FY 1999 Budget Estimates
Overview

BACKGROUND

The Marine Corps Supply Management Sub-Activity Group of the Navy Working Capital Fund (NWCF) procures consumable and reparable items for resale to Department of Defense (DOD) and non-DOD customers. Reimbursement provided at the time material is issued provides the resources with which this business area replaces items in the inventory and funds the cost of operations. This inventory, in turn, is sold and the acquired funding is used to replenish stock. The revolving fund concept, in concert with unit cost authority, allow managers to stock and sell material to meet customer demands and maintain inventory at appropriate levels.

Marine Corps Supply Management consists of both retail and wholesale operations. Retail operations perform primarily under the Direct Support Stock Control concept. Under this concept, fast-moving items in support of base/station functions are stocked at issue points close to the customer. Currently, the Marine Corps operates at twelve such DSSC activities. However, upon completion of the transition to Direct Vendor Delivery (DVD) procedures in Marine Corps messhalls, scheduled to occur in FY 1997, the number of DSSCs at which we operate will be reduced to nine. In addition to the DSSCs, the Marine Corps manages one Inventory Control Point (ICP). As the wholesale component of the supply management activity group, the ICP supplies Marine Corps managed consumable and reparable items to Fleet Marine Force (FMF) and other customers.

BUDGET HIGHLIGHTS

WORKLOAD

Note: Actual FY 1996 data depicted below and on the budget exhibits which accompany this submission are consistent with information contained in official accounting records for the period 30 September 1996. However, as noted in footnote #31 to the Principal Statements of the FY 1996 Chief Financial Officer's Report, the Marine Corps is unable to certify the accuracy of all data therein. Inaccuracies appear to be the result of problems arising from the implementation of the new automated Stock Control System (SCS).

Workload in Supply Management is wholesale and retail net sales. This submission reflects a net sales decline of $124.7 million or 45% between FY 1996 and FY 1999. The following chart depicts wholesale and retail net sales for each fiscal year of this submission.

Wholesale and Retail Net Sales: **$MILLIONS**

Description	FY 1996	FY 1997	FY 1998	FY 1999
Wholesale	$86.9	$59.9	$53.5	$43.8
Retail	$192.8	$113.8	$108.3	$111.2
Total Net Sales	$279.7	$173.7	$161.8	$155.0

Retail Sales / Obligations / Unit Cost:

The following chart illustrates FY 1996 through FY 1999 retail sales, obligations and unit costs

$MILLIONS

Description	FY 1996	FY 1997	FY 1998	FY 1999
Retail:				
Gross Sales	$194.5	$114.0	$108.5	$111.4
Creditable Returns	$1.7	$0.2	$0.2	$0.2
Net Sales	$192.8	$113.8	$108.3	$111.2
Obligations	$154.4	$108.0	$106.3	$108.8
Unit Cost	0.80	0.95	0.98	0.98

Variations in requested retail unit cost authority are due to several factors. Whereas DSSC obligations to sales ratios are normally one-for-one, the relationship between obligations and sales in the Retail Centrally Managed program varies between fiscal years. The nature of the RCM function, a special program area, may require the procurement of long-lead time items, where the buy-in of assets will occur in one fiscal year while the sale may not happen until eighteen to twenty-four months later. Further, transfer of rations management to DLA in FY 1996 and the FY 1996/FY 1997 draw down of mess hall inventory in conjunction with Direct Vendor Delivery implementation, are factors behind the unit cost in these fiscal years. With the balance of DSSC inventory levels approximating two months on hand in any given year, receipt of unit cost goals outlined in this submission is essential if the Marine Corps is to sustain minimum essential operating levels at our bases and stations.

Wholesale Sales / Obligations / Unit Cost:

The following chart illustrates FY 1996 through FY 1999 wholesale sales, obligations and unit costs.

$MILLIONS

Description	Actual FY 1996	Estimated FY 1997	Estimated FY 1998	Estimated FY 1999
Wholesale:				
Gross Sales	$94.2	$60.6	$54.6	$45.0
Creditable Returns	$7.3	$0.7	$1.1	$1.2
Net Sales	$86.9	$59.9	$53.5	$43.8
Obligations	$25.2	$36.9	$37.1	$41.7
Unit Cost	0.35	0.62	0.70	0.95

Variations in requested unit cost are due to several factors. The FY 1996 ratio of 0.35 is abnormally low due to a one time credit obligation of $8.7 million which has been recorded in the consumable area of the program. The amphibious supply credit results from the deobligation of prior year Military Interdepartmental Purchase Requests (MIPRs). In addition to the FY 1996 amphibious supply obligation credit and suspected FY 1996 sales errors, the decapitalization of Marine Corps managed consumables combined with the capitalization of Critical Low Density (CLD) reparables change the program base. Estimated FY 1998 and FY 1999 obligations include the required procurement dollars needed to stock fund CLD reparables. Since the Marine Corps plan includes a two year transition period from the current "free issue" method to the
proposed "cash based" method, sale of CLDs will commence in FY 2000. This transition period is based on lead times for the material involved.

ECONOMIC ASSUMPTIONS / PERFORMANCE INDICATORS

Supply Material Availability

Since the primary function of the Marine Corps Supply Management Activity Group is to sell material to customers, success is measured by how well and how quickly customer demands are satisfied. A key indicator is the Fill Rate or Supply Availability Rate. Fill Rate is the percentage of demands processed by the supply system without interruption at initial processing. Data are extracted from the Military Supply and Transportation and Evaluation Procedures System. While there is no established supply effectiveness standard for the Marine Corps wholesale system, 85 percent supply availability is currently considered the goal. The following chart displays the actual fill rate for FY 1996 and the goals for FY 1997 through FY 1999:

Fill Rates (%):

Description	FY 1996	FY 1997	FY 1998	FY 1999
Consumables*	NA	NA	NA	NA
Reparables	.85	.85	.85	.85

*Amphibious supply data not available due to the decapitalization of the majority of these items effective with the end of FY 1996.

Number Of Items Managed:

Description	FY 1996	FY 1997	FY 1998	FY 1999
Consumable	1,466	0	0	0
Reparables				
CLD	0	0	2,999	2,999
Non-CLD	890	890	890	890

Number Of Issues and Receipts:

Description	FY 1996	FY 1997	FY 1998	FY 1999
Issue	51,988	31,430	31,430	31,430
Receipts	22,237	13,444	13,444	13,444

Customer Rate (%)

Description	FY 1996	FY 1997	FY 1998	FY 1999
Consumables	43.7	22.2	0	0
Reparables	39.5	24.6	43.8	41.7
Composite	37.8	24.2	43.8	41.7

Customer Rate Change

Description	FY 1996	FY 1997	FY 1998	FY 1999
Consumables	-7.9	-14.9	0	0
Reparables	-10.6	-10.7	18.1	.7
Composite	-9.1	-11.4	18.1	.7

Requisitions Received:

Description	FY 1996	FY 1997	FY 1998	FY 1999
Requisitions Received ($ Millions)	$93.9	$71.6	$55.6	$43.7

Contracts Executed:

Description	FY 1996	FY 1997	FY 1998	FY 1999
# Of Contracts Executed	96	73	98	98

Personnel (End Strength):

Description	FY 1996	FY 1997	FY 1998	FY 1999
Civilians	76	63	62	62
Military	0	0	0	0

Personnel (end strength) decreases between FY 1996 and FY 1999. This decline is due to the refinement of costs associated with this activity group and to the decapitalization and transfer of Marine Corps managed consumables.

Purchase Inflation (%):

Description	FY 1996	FY 1997	FY 1998	FY 1999
Rate (%)	2.1	2.1	2.1	2.1

Material Replacement Factors (%):

Description	FY 1996	FY 1997	FY 1998	FY 1999
Retail Operations	80	95	98	98
Wholesale Operations	5	6	27	29

Inventories

Inventories in this submission include both Peacetime Operating Stocks (POS) and war reserve material and consist of both consumable and reparable items. Currently, peacetime stocks include messhall items, rations, clothing, hardgoods, fuel, provisioning and replenishment spares, and special project assets such as bulk fuel component parts. Likewise, at the present time, mobilization stocks include rations on Maritime Prepositioned Ships (MPS) and in Norway, uniform clothing items for recruits and reservists, and consumable items for Fleet Marine Force (FMF) units. As noted elsewhere, restructuring of the subsistence, amphibious supply, and depot level reparable programs will change the composition of current stockage levels beginning in FY 1997. The impact of these changes is reflected in the following display of peacetime inventory. Data are at standard unit price.

Peacetime Operating Stock (POS) Inventory: **$MILLIONS**

Description	FY 1996	FY 1997	FY 1998	FY 1999
Retail	$105.5	$77.2	$71.5	$66.6
Wholesale	$265.5	$176.5	$285.1	$246.4
Total	$371.0	$253.7	$356.6	$313.0

Projected retail inventory reductions are primarily the result of the buy-out of special project, bulk-fuel, and initial issue provisioning assets from the Retail Centrally Managed (RCM) program; draw down of mess hall inventory, decapitalization of rations to DLA, and aggressive plans to eliminate excess inventory. Wholesale inventory growth between FY 1997 and FY 1998 is due the capitalization of Critical Low Density (CLD) reparables.

Net Operating Result (NOR)/Annual Operating Result (AOR)

Net Operating Result (NOR) is the net result of operations in a given fiscal year. The positive NOR portrayed in each fiscal year of this submission is the primary result of Marine

Corps retail operations. As directed by OSD budget guidance, retail obligations are included in the cost of material sold from inventory. The effect of using retail obligations as expenses and retail net sales as revenue have resulted in a positive NOR each fiscal year.

Accumulated Operating Result (AOR) is based on current and prior year operating results, AOR redistribution and cash factors. The positive AOR in FY 1996 and FY 1997 is the result of Marine Corps retail operations. A cash factor of $65.5M in FY 1998 and $4.4M in FY 1999 were included to bring the AOR to zero.

NOR/AOR **$MILLIONS**

Description	FY 1996	FY 1997	FY 1998	FY 1999
Revenue	$279.7	$173.7	$161.8	$155.0
Expenses	$233.7	$155.2	$144.3	$150.1
Cash Recovery	--	--	-$1.6	-$0.5
Net Operating Result	+$46.0	+$18.5	+$15.9	+$4.4
Prior Year AOR	+$34.8	+$31.1	+$49.6	+$0
AOR Redistribution	-$49.7	--	--	--
Less Cash Factor	--	--	-$65.5	-$4.4
Accumulated Operating Result	+$31.1	+$49.6	$0	$0

Cash: **$MILLIONS**

Description	FY 1996	FY 1997	FY 1998	FY 1999
Collections	$235.7	$173.7	$161.8	$155.0
Disbursements	$233.7	$178.7	$141.0	$145.8
Net Outlay	-$2.0	+$5.0	-$20.8	-$9.2

In Marine Corps Supply Management, as in other components of the fund, available cash is determined by the net sum effect of actual collections and disbursements. Collections are primarily a reflection of sales, while disbursements are primarily based on spend out rates of material obligations. Annual sales and obligations programs, as outlined elsewhere in this submission are the principal factors in determining cash availability.

NAVY WORKING CAPITAL FUND
SUPPLY MANAGEMENT - MARINE CORPS
REVENUE AND EXPENSES
(Dollars in Millions)
Fund 14

January 1997	FY 1996	FY 1997	FY 1998	FY 1999
Revenue:				
Net Sales:				
Operations	279.7	173.7	161.8	155.0
Capital Surcharge	0.0	0.0	0.0	0.0
Depreciation except Maj Const	0.0	0.0	0.0	0.0
Major Construction Depreciation	0.0	0.0	0.0	0.0
Other Income	0.0	0.0	0.0	0.0
Refunds/Discounts	0.0	0.0	0.0	0.0
Total Income	279.7	173.7	161.8	155.0
Expenses:				
Cost of Materiel Sold from Inventory	219.2	148.1	137.0	142.6
Salaries and Wages:				
Military Personnel Compensation & Benefits	0.0	0.0	0.0	0.0
Civilian Personnel & Compensation & Benefits	3.6	3.0	3.0	3.0
Travel & Transportation of Personnel	0.1	0.1	0.1	0.1
Materials & Supplies (For internal Operations)	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0
Other Purchases from Resolving Funds	0.0	0.0	0.0	0.0
Transportation of Things	0.1	0.1	0.2	0.2
Depreciation - Capital	0.0	0.0	0.0	0.0
Printing and Reproduction	0.0	0.0	0.0	0.0
Advisory and Assistance Services	0.0	0.0	0.0	0.0
Rent, Communication, Utilities, & Misc. Charges	0.1	0.2	0.3	0.3
Other Purchased Services	10.6	3.7	3.7	3.9
Total Expenses	233.7	155.2	144.3	150.1
Operating Result	46.0	18.5	17.5	4.9
Less Capital Surchg Reservation	0.0	0.0	0.0	0.0
Plus Appropriations Affecting NOR/AOR	0.0	0.0	0.0	0.0
Other Changes Affecting NOR/AOR	0.0	0.0	0.0	0.0
Navy Cash Recovery	0.0	0.0	1.6	0.5
Net Operating Result	46.0	18.5	15.9	4.4
Other Changes Affecting AOR				
Prior Year AOR	34.8	31.1	49.6	0.0
AOR Redistribution	-49.7	0.0	0.0	0.0
Cash Factor	0.0	0.0	-65.5	-4.4
Accumulated Operating Result	31.1	49.6	0.0	0.0

The amount on the line entitled Other Changes Affecting NOR/AOR represents the difference between retail operations net sales and obligations.

FUND 11

JANUARY 1997

Source of Revenue
Summary
(Dollars in Millions)

Marine Corps/Supply Management

	FY 1996	FY 1997	FY 1998	FY 1999
1a. New Orders from DoD Components:				
Own Component				
Military Personnel, M.C.	36.8	44.9	33.3	35.1
O & M, M.C.	193.4	67.2	73.0	70.9
O & M, M.C. Reserve	0.9	0.9	0.9	0.9
Reserve Personnel, M.C.	4.4	4.6	4.6	4.8
Procurement, M.C.	31.3	38.4	32.6	25.6
Other Service (O&M)				
Army	1.1	1.0	1.0	1.0
Air Force	0.9	1.0	1.0	1.0
Navy	1.1	1.2	1.2	1.2
All Other DOD	2.1	2.9	2.9	3.0
Subtotal	272.0	162.1	150.5	143.5
1b. Orders from other Fund Business Areas:				
Navy Supply Management	0.3	0.3	0.3	0.3
M.C. Depot Maintenance	9.3	6.7	6.8	6.9
Subtotal	9.6	7.0	7.1	7.2
1c. Total DoD	281.6	169.1	157.6	150.7
1d. Other Orders:				
Other Federal Agencies	0.1	0.1	0.1	0.1
Foreign Military Sales	1.6	0.7	0.7	0.7
Non Federal Agencies	5.3	4.7	4.7	4.9
Subtotal	7.0	5.5	5.5	5.7
2. Carry-In Orders	0.0	0.0	0.0	0.0
3. Total Gross Orders:	288.6	174.6	163.1	156.4
4. Funded Carry-over:	0.0	0.0	0.0	0.0
5. Total Gross Sales:	288.6	174.6	163.1	156.4

FUND-2

Changes in the Costs of Operations
Component: Marine Corps
Activity Group: Supply Management
(S IN MILLIONS)

JANUARY 1997

	Obligations
FY 1996 Estimated Actual	179.6
FY 1997 Estimate in the President's Budget	162.8
Estimated Impact in FY 1997 of Actual FY 1996 Experience:	
Material Procurement	
Pricing Adjustments:	
Program Changes:	
Retail Operations	
Subsistence	-18.6
Retail Supplies	-0.6
Fuel	
Wholesale Operations	
Amphibious Supplies	-3.4
Depot Level Reparables	4.9
Cost of Operations	
Civilian Personnel Compensation	-0.2
Reimbursement to Distribution Depots	0.0
Transportation	0.1
Other Costs	-0.1
FY 1997 Current Estimate:	144.9
Pricing Adjustment:	
Material Procurement	
Retail Operations	
Subsistence	
Retail Supplies	1.1
Fuel	2.7
Program Changes:	
Material Procurement	
Retail Operations	
Subsistence	-9.5
Retail Supplies	4.0
Wholesale Operations	
Amphibious Supplies	
Depot Level Reparables	
Cost of Operations	
Civilian Personnel Compensation	
Reimbursement to Distribution Depots	
Transportation	0.1
Other Costs	0.1
FY 1998 Estimate:	-1.5
Pricing Adjustment:	
Material Procurement	
Retail Operations	
Subsistence	
Retail Supplies	2.9
Fuel	-0.8
Program Changes:	
Material Procurement	
Retail Operations	
Subsistence	
Retail Supplies	0.4
Wholesale Operations	
Amphibious Supplies	
Depot Level Reparables	4.4
Cost of Operations	
Civilian Personnel Compensation	
Reimbursement to Distribution Depots	0.2
Transportation	
Other Costs	
FY 1999 Estimate:	5.6

JANUARY 1997

NAVY WORKING CAPITAL FUND
INVENTORY STATUS
SUMMARY
(DOLLARS IN MILLIONS)
FISCAL YEAR 1996

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	769.3	164.7	452.8	151.8
2. BOP INVENTORY ADJUSTMENTS	(45.4)	(2.9)	(31.8)	(10.7)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	(45.4)	(2.9)	(31.8)	(10.7)
C. INVENTORY RECLASSIFIED AND REPRICED	723.9	161.8	421.0	141.1
3. RECEIPTS AT STANDARD	238.5	14.2	224.3	0.0
4. SALES AT STANDARD	288.7	0.0	288.7	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(5.3)	(1.0)	(3.7)	(0.6)
B. RETURNS FROM CUSTOMERS FOR CREDIT +	9.0	0.0	9.0	0.0
C. RETURNS FROM CUSTOMERS W/O CREDIT	44.6	0.0	1.9	42.7
D. RETURNS TO SUPPLIERS (-)	(207.8)	0.0	(0.5)	(207.3)
E. TRANSFERS TO PROP. DISPOSAL (-)	(61.0)	(0.1)	0.0	(60.9)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(30.1)	8.1	(118.7)	80.5
G. OTHER (list/explain)	104.1	(26.8)	55.2	75.7
H. TOTAL ADJUSTMENTS	(146.5)	(19.8)	(56.8)	(69.9)
6. INVENTORY EOP	527.2	156.2	299.8	71.2
7. INVENTORY EOP, REVALUED	340.9	127.2	187.1	26.6
A. ECONOMIC RETENTION (memo)				25.2
B. CONTINGENCY RETENTION (memo)				0.6
C. POTENTIAL DOD EXCESS (memo)				0.8
8. INVENTORY ON ORDER EOP (memo)	72.6	1.1	64.8	6.7

9. NARRATIVE:

Other adjustments (line 5g):

	Total	Mobilization	Operating	Other
Other Gains/Losses	104.1	(26.8)	55.2	75.7
K3 Adjust	0.0	0.0	0.0	0.0
SIT Change	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	104.1	(26.8)	55.2	75.7

JANUARY 1997

NAVY WORKING CAPITAL FUND
INVENTORY STATUS
SUMMARY
(DOLLARS IN MILLIONS)
FISCAL YEAR 1997

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	527.2	156.2	299.8	71.2
2. BOP INVENTORY ADJUSTMENTS	7.5	6.6	1.1	(0.2)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	7.5	6.6	1.1	(0.2)
C. INVENTORY RECLASSIFIED AND REPRICED	534.7	162.8	300.9	71.0
3. RECEIPTS AT STANDARD	147.9	4.0	142.9	1.0
4. SALES AT STANDARD	174.6	0.0	174.6	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(78.7)	(29.9)	(37.1)	(11.7)
B. RETURNS FROM CUSTOMERS FOR CREDIT +	0.9	0.0	0.9	0.0
C. RETURNS FROM CUSTOMERS W/O CREDIT	97.8	0.0	3.6	94.2
D. RETURNS TO SUPPLIERS (-)	(14.7)	0.0	(5.0)	(9.7)
E. TRANSFERS TO PROP. DISPOSAL (-)	(12.5)	0.0	0.0	(12.5)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(92.4)	(0.9)	(12.3)	(79.2)
G. OTHER (list/explain)	(18.7)	0.0	(18.7)	0.0
H. TOTAL ADJUSTMENTS	(118.3)	(30.8)	(68.6)	(18.9)
6. INVENTORY EOP	389.7	136.0	200.6	53.1
7. INVENTORY EOP, REVALUED	283.4	97.1	156.8	29.5
A. ECONOMIC RETENTION (memo)				8.8
B. CONTINGENCY RETENTION (memo)				20.3
C. POTENTIAL DOD EXCESS (memo)				0.4
8. INVENTORY ON ORDER EOP (memo)	65.3	0.5	59.0	5.8

9. NARRATIVE:

Other adjustments (line 5g):

	Total	Mobilization	Operating	Other
Other Gains/Losses	(18.7)	0.0	(18.7)	0.0
K3 Adjust	0.0	0.0	0.0	0.0
SIT Change	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(18.7)	0.0	(18.7)	0.0

JANUARY 1997

NAVY WORKING CAPITAL FUND
INVENTORY STATUS
SUMMARY
(DOLLARS IN MILLIONS)
FISCAL YEAR 1998

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	389.7	136.0	200.6	53.1
2. BOP INVENTORY ADJUSTMENTS	21.0	2.9	15.7	2.4
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	21.0	2.9	15.7	2.4
C. INVENTORY RECLASSIFIED AND REPRICED	410.7	138.9	216.3	55.5
3. RECEIPTS AT STANDARD	131.8	0.0	131.6	0.2
4. SALES AT STANDARD	163.1	0.0	163.1	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	206.0	40.0	136.1	29.9
B. RETURNS FROM CUSTOMERS FOR CREDIT +	1.3	0.0	1.3	0.0
C. RETURNS FROM CUSTOMERS W/O CREDIT	134.5	0.0	4.7	129.8
D. RETURNS TO SUPPLIERS (-)	(40.9)	0.0	0.0	(40.9)
E. TRANSFERS TO PROP. DISPOSAL (-)	(9.2)	0.0	0.0	(9.2)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(123.2)	0.0	(23.2)	(100.0)
G. OTHER (list/explain)	(12.4)	0.0	(12.4)	0.0
H. TOTAL ADJUSTMENTS	156.1	40.0	106.5	9.6
6. INVENTORY EOP	535.5	178.9	291.3	65.3
7. INVENTORY EOP, REVALUED	363.5	127.1	204.4	32.0
A. ECONOMIC RETENTION (memo)				9.8
B. CONTINGENCY RETENTION (memo)				21.7
C. POTENTIAL DOD EXCESS (memo)				0.5
8. INVENTORY ON ORDER EOP (memo)	71.9	0.0	66.3	5.6

9. NARRATIVE:

Other adjustments (line 5f):

	Total	Mobilization	Operating	Other
Other Gains/Losses	(12.4)	0.0	(12.4)	0.0
K3 Adjust	0.0	0.0	0.0	0.0
SIT Change	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(12.4)	0.0	(12.4)	0.0

JANUARY 1997

NAVY WORKING CAPITAL FUND
INVENTORY STATUS
SUMMARY
(DOLLARS IN MILLIONS)
FISCAL YEAR 1999

	Total	Mobilization	---- Peacetime ---- Operating	Other
1. INVENTORY BOP	535.5	178.9	291.3	65.3
2. BOP INVENTORY ADJUSTMENTS	10.6	3.9	5.8	0.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	10.6	3.9	5.8	0.9
C. INVENTORY RECLASSIFIED AND REPRICED	546.1	182.8	297.1	66.2
3. RECEIPTS AT STANDARD	141.9	0.0	141.6	0.3
4. SALES AT STANDARD	156.4	0.0	156.4	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	0.0	0.0	0.0	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT +	1.4	0.0	1.4	0.0
C. RETURNS FROM CUSTOMERS W/O CREDIT	133.4	0.0	3.3	130.1
D. RETURNS TO SUPPLIERS (-)	(16.0)	0.0	0.0	(16.0)
E. TRANSFERS TO PROP. DISPOSAL (-)	(4.7)	0.0	0.0	(4.7)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(137.2)	0.0	(23.5)	(113.7)
G. OTHER (list/explain)	(12.7)	0.0	(12.7)	0.0
H. TOTAL ADJUSTMENTS	(35.8)	0.0	(31.5)	(4.3)
6. INVENTORY EOP	495.8	182.8	250.8	62.2
7. INVENTORY EOP, REVALUED	339.4	130.2	178.4	30.7
A. ECONOMIC RETENTION (memo)				9.6
B. CONTINGENCY RETENTION (memo)				20.6
C. POTENTIAL DOD EXCESS (memo)				0.5
8. INVENTORY ON ORDER EOP (memo)	72.5	0.0	67.2	5.3

9. NARRATIVE:

Other adjustments (line 5f):

	Total	Mobilization	Operating	Other
Other Gains/Losses	(12.7)	0.0	(12.7)	0.0
K3 Adjust	0.0	0.0	0.0	0.0
SIT Change	0.0	0.0	0.0	0.0
Strata Transfers	0.0	0.0	0.0	0.0
Total	(12.7)	0.0	(12.7)	0.0

FUND-15

JANUARY 1997

MARINE CORPS
BUDGET PROJECT 38
(DOLLARS IN MILLIONS)
FY 1996

PRODUCT	-----PROCURED FROM DFSC----- Barrels	U/P	Ext Cost	-----PROCURED BY SERVICE---- Barrels	U/P	Ext Cost	STABILIZED PRICE
JP5	0.0	$32.76	0.1		$0.00	0.0	$32.76
JP4		$0.00	0.0		$0.00	0.0	$0.00
Propane		$0.00	0.0	0.0	$1.04	0.0	$0.00
Distillates	0.1	$30.66	3.6		$0.00	0.0	$30.66
MOGAS Lead	0.0	$37.80	0.1		$0.00	0.0	$37.80
MOGAS Unlead	0.1	$30.66	2.5		$0.00	0.0	$30.66
Residual	0.1	$18.48	2.6		$0.00	0.0	$18.48
Kerosene	0.0	$30.66	0.0		$76.44	0.0	$30.66
Lube Oil		$0.00	0.0		$0.00	0.0	$0.00
Coal	0.0	$51.95	1.9		$0.00	0.0	$51.95
Diesel	0.2	$28.56	6.7		$0.00	0.0	$28.56
TOTAL	0.6		17.4	0.0		0.0	

17.4

FUND-15

JANUARY 1997

MARINE CORPS
BUDGET PROJECT 38
(DOLLARS IN MILLIONS)
FY 1997

PRODUCT	-----PROCURED FROM DFSC----- Barrels	U/P	Ext Cost	-----PROCURED BY SERVICE---- Barrels	U/P	Ext Cost	STABILIZED PRICE
JP5	0.0	$33.18	0.1		$0.00	0.0	$33.18
JP4		$0.00	0.0		$0.00	0.0	$0.00
Propane		$0.00	0.0	0.0	$0.78	0.0	$0.00
Distillates	0.1	$31.08	3.3		$0.00	0.0	$31.08
MOGAS Lead		$38.22	0.0		$0.00	0.0	$38.22
MOGAS Unlead	0.1	$31.08	2.2		$0.00	0.0	$31.08
Residual	0.1	$18.90	2.2		$0.00	0.0	$18.90
Kerosene	0.0	$31.08	0.0	0.0	$76.44	0.0	$31.08
Lube Oil		$0.00	0.0		$0.00	0.0	$0.00
Coal	0.0	$51.23	1.8		$0.00	0.0	$51.23
Diesel	0.2	$28.98	5.8		$0.00	0.0	$28.98
TOTAL	0.5		15.4	0.0		0.0	

15.5

FUND-15

JANUARY 1997

MARINE CORPS
BUDGET PROJECT 38
(DOLLARS IN MILLIONS)
FY 1998

PRODUCT	-----PROCURED FROM DFSC----- Barrels	U/P	Ext Cost	-----PROCURED BY SERVICE---- Barrels	U/P	Ext Cost	STABILIZE PRICE
JP5	0.0	$39.06	0.1		$0.00	0.0	$39.06
JP4		$0.00	0.0		$0.00	0.0	$0.00
Propane		$0.00	0.0	0.0	$0.78	0.0	$0.00
Distillates	0.1	$36.96	3.9		$0.00	0.0	$36.96
MOGAS Lead		$44.94	0.0		$0.00	0.0	$44.94
MOGAS Unlead	0.1	$36.96	2.7		$0.00	0.0	$36.96
Residual	0.1	$23.10	2.7		$0.00	0.0	$23.10
Kerosene	0.0	$0.00	0.0	0.0	$76.44	0.0	$0.00
Lube Oil		$0.00	0.0		$0.00	0.0	$0.00
Coal	0.0	$51.23	1.8		$0.00	0.0	$51.23
Diesel	0.2	$34.86	7.0		$0.00	0.0	$34.86
TOTAL	0.5		18.2	0.0		0.0	

18.2

FUND-15

JANUARY 1997

MARINE CORPS
BUDGET PROJECT 38
(DOLLARS IN MILLIONS)
FY 1999

PRODUCT	-----PROCURED FROM DFSC----- Barrels	U/P	Ext Cost	-----PROCURED BY SERVICE---- Barrels	U/P	Ext Cost	STABILIZE PRICE
JP5	0.0	$37.38	0.1		$0.00	0.0	$37.38
JP4		$0.00	0.0		$0.00	0.0	$0.00
Propane		$0.00	0.0	0.0	$0.78	0.0	$0.00
Distillates	0.1	$35.28	3.7		$0.00	0.0	$35.28
MOGAS Lead		$42.84	0.0		$0.00	0.0	$42.84
MOGAS Unlead	0.1	$35.28	2.5		$0.00	0.0	$35.28
Residual	0.1	$22.26	2.6		$0.00	0.0	$22.26
Kerosene	0.0	$0.00	0.0	0.0	$76.44	0.0	$0.00
Lube Oil		$0.00	0.0		$0.00	0.0	$0.00
Coal	0.0	$51.23	1.8		$0.00	0.0	$51.23
Diesel	0.2	$33.18	6.7		$0.00	0.0	$33.18
TOTAL	0.5		17.4	0.0		0.0	

17.4

JANUARY 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUMMARY
FY 1996
(Dollars in Millions)

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATION	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	OTHER				
BP 21										
Approved	23.3	55.0	55.0	48.6	0.0	0.0	48.6	0.0	48.6	0.0
Actual	11.1	67.0	67.0	46.6	0.0	0.0	46.6	0.0	46.6	0.9
Delta	(12.2)	12.0	12.0	(2.0)	0.0	0.0	(2.0)	0.0	(2.0)	0.9
BP 28										
Approved	113.0	86.0	86.3	80.0	0.0	0.0	80.0	0.0	80.0	0.2
Actual*	93.7	106.6	109.4	90.4	0.0	0.0	90.4	0.0	90.4	0.7
Delta	(19.3)	22.6	23.1	10.4	0.0	0.0	10.4	0.0	10.4	0.5
BP 38										
Approved	1.0	15.3	15.3	15.3	0.0	0.0	15.3	0.0	15.3	0.0
Actual	0.7	16.4	16.4	17.4	0.0	0.0	17.4	0.0	17.4	0.0
Delta	(0.3)	1.1	1.1	2.1	0.0	0.0	2.1	0.0	2.1	0.0
BP 54										
Approved	25.6	11.0	10.4	3.9	0.0	0.0	3.9	0.0	3.9	0.1
Actual*	39.4	12.8	13.9	(6.1)	0.0	0.0	(6.1)	0.0	(6.1)	(0.2)
Delta	13.8	1.8	3.5	(10.0)	0.0	0.0	(10.0)	0.0	(10.0)	(0.3)
BP 84										
Approved	288.0	48.9	54.5	33.3	0.0	0.0	33.3	0.0	33.3	0.8
Actual*	226.1	74.2	73.0	25.3	0.0	0.0	25.3	0.0	25.3	7.5
Delta	(61.9)	25.3	18.5	(8.0)	0.0	0.0	(8.0)	0.0	(8.0)	6.7
			*REPAIR ----->	10.1						
BP 91										
Approved	0.0	0.0	0.0	6.6	0.0	0.0	6.6	0.0	6.6	0.0
Actual	0.0	0.0	0.0	6.0	0.0	0.0	6.0	0.0	6.0	0.0
Delta	0.0	0.0	0.0	(0.6)	0.0	0.0	(0.6)	0.0	(0.6)	0.0
TOTAL										
Approved	450.9	216.2	221.5	187.7	0.0	0.0	187.7	0.0	187.7	1.1
Request	371.0	279.0	279.7	179.6	0.0	0.0	179.6	0.0	179.6	8.9
Delta	(79.9)	62.8	58.2	(8.1)	0.0	0.0	(8.1)	0.0	(8.1)	7.8

JANUARY 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUMMARY
FY 1997
(Dollars in Millions)

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATION	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	OTHER				
BP 21										
Approved	23.0	28.1	28.1	28.1	0.0	0.0	28.1	0.0	28.1	0.0
Request	0.0	11.5	11.5	9.5	0.0	0.0	9.5	0.0	9.5	0.0
Delta	(23.0)	(16.6)	(16.6)	(18.6)	0.0	0.0	(18.6)	0.0	(18.6)	0.0
BP 28										
Approved	102.9	88.1	88.1	83.6	0.0	0.0	83.6	0.0	83.6	0.2
Request	76.4	86.8	86.8	83.0	0.0	0.0	83.0	0.0	83.0	0.2
Delta	(26.5)	(1.3)	(1.3)	(0.6)	0.0	0.0	(0.6)	0.0	(0.6)	0.0
BP 38										
Approved	1.0	15.5	15.5	15.5	0.0	0.0	15.5	0.0	15.5	0.0
Request	0.8	15.5	15.5	15.5	0.0	0.0	15.5	0.0	15.5	0.0
Delta	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BP 54										
Approved	21.9	4.5	4.4	3.4	0.0	0.0	3.4	0.0	3.4	0.1
Request	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	(21.9)	(4.5)	(4.4)	(3.4)	0.0	0.0	(3.4)	0.0	(3.4)	(0.1)
BP 84										
Approved	255.5	58.5	54.2	26.1	0.0	0.0	26.1	0.0	26.1	0.8
Request	176.5	70.8	59.9	31.0	0.0	0.0	31.0	3.9	34.9	0.7
Delta	(79.0)	12.3	5.7	4.9	0.0	0.0	4.9	3.9	8.8	(0.1)
			*REPAIR ---->	12.2						
BP 91										
Approved	0.0	0.0	0.0	6.1	0.0	0.0	6.1	0.0	6.1	0.0
Request	0.0	0.0	0.0	5.9	0.0	0.0	5.9	0.0	5.9	0.0
Delta	0.0	0.0	0.0	(0.2)	0.0	0.0	(0.2)	0.0	(0.2)	0.0
TOTAL										
Approved	404.3	194.7	190.3	162.8	0.0	0.0	162.8	0.0	162.8	1.1
Request	253.7	184.6	173.7	144.9	0.0	0.0	144.9	3.9	148.8	0.9
Delta	(150.6)	(10.1)	(16.6)	(17.9)	0.0	0.0	(17.9)	3.9	(14.0)	(0.2)

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JANUARY 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUMMARY
FY 1998
(Dollars in Millions)

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATION	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	OTHER				
BP 21										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BP 28										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	70.5	90.1	90.1	88.1	0.0	0.0	88.1	0.0	88.1	0.2
Delta	70.5	90.1	90.1	88.1	0.0	0.0	88.1	0.0	88.1	0.2
BP 38										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	1.0	18.2	18.2	18.2	0.0	0.0	18.2	0.0	18.2	0.0
Delta	1.0	18.2	18.2	18.2	0.0	0.0	18.2	0.0	18.2	0.0
BP 54										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BP 84										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	285.1	54.4	53.5	31.0	0.0	0.0	31.0	3.9	34.9	1.1
Delta	285.1	54.4	53.5	31.0	0.0	0.0	31.0	3.9	34.9	1.1
			*REPAIR ----->	13.7						
BP 91										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	6.1	0.0	0.0	6.1	0.0	6.1	0.0
Delta	0.0	0.0	0.0	6.1	0.0	0.0	6.1	0.0	6.1	0.0
TOTAL										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	356.6	162.7	161.8	143.4	0.0	0.0	143.4	3.9	147.3	1.3
Delta	356.6	162.7	161.8	143.4	0.0	0.0	143.4	3.9	147.3	1.3

JANUARY 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUMMARY
FY 1999
(Dollars in Millions)

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATION	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	OTHER				
BP 21										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BP 28										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	65.7	93.8	93.8	91.4	0.0	0.0	91.4	0.0	91.4	0.2
Delta	65.7	93.8	93.8	91.4	0.0	0.0	91.4	0.0	91.4	0.2
BP 38										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.9	17.4	17.4	17.4	0.0	0.0	17.4	0.0	17.4	0.0
Delta	0.9	17.4	17.4	17.4	0.0	0.0	17.4	0.0	17.4	0.0
BP 54										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BP 84										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	246.4	42.6	43.8	35.4	0.0	0.0	35.4	3.9	39.3	1.2
Delta	246.4	42.6	43.8	35.4	0.0	0.0	35.4	3.9	39.3	1.2
			*REPAIR ----->	13.7						
BP 91										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.0	0.0	6.3	0.0	0.0	6.3	0.0	6.3	0.0
Delta	0.0	0.0	0.0	6.3	0.0	0.0	6.3	0.0	6.3	0.0
TOTAL										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	313.0	153.8	155.0	150.5	0.0	0.0	150.5	3.9	154.4	1.4
Delta	313.0	153.8	155.0	150.5	0.0	0.0	150.5	3.9	154.4	1.4

000682

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPON SYSTEM/CATEGORY
AMPHIBIOUS SUPPLIES
FY 1996
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
RECURRING DEMANDS	1.9				1.9
PRIOR YEAR MIPR DEOBLIGATION		-9.0			-9.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ORDNANCE TANK AUTOMOTIVE	1.9	-9.0	0.0	0.0	-7.1
DEOBLIGATIONS		-0.1			-0.1
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL COMMUNICATION AND ELECTRONICS	0.0	-0.1	0.0	0.0	-0.1
RECURRING DEMANDS	-0.6				-0.6
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	-0.6	0.0	0.0	0.0	-0.6
RECURRING DEMANDS	1.7				1.7
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL GENERAL PROPERTY	1.7	0.0	0.0	0.0	1.7
TOTAL PROCUREMENT	3.0	-9.1	0.0	0.0	-6.1
TRANSPORTATION					0.0
TOTAL COST	3.0	-9.1	0.0	0.0	-6.1

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPON SYSTEM/CATEGORY
AMPHIBIOUS SUPPLIES
FY 1997
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ORDNANCE TANK AUTOMOTIVE	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL COMMUNICATION AND ELECTRONICS	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL GENERAL PROPERTY	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT	0.0	0.0	0.0	0.0	0.0
TRANSPORTATION					0.0
TOTAL COST	0.0	0.0	0.0	0.0	0.0

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPONS SYSTEM/CATEGORY
AMPHIBIOUS SUPPLIES
FY 1998
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ORDNANCE TANK AUTOMOTIVE	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL COMMUNICATION AND ELECTRONICS	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL GENERAL PROPERTY	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT	0.0	0.0	0.0	0.0	0.0
TRANSPORTATION	0.0				0.0
TOTAL COST	0.0	0.0	0.0	0.0	0.0

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPONS SYSTEM/CATEGORY
AMPHIBIOUS SUPPLIES
FY 1999
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ORDNANCE TANK AUTOMOTIVE	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL COMMUNICATION AND ELECTRONICS	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL GENERAL PROPERTY	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT	0.0	0.0	0.0	0.0	0.0
TRANSPORTATION	0.0				0.0
TOTAL COST	0.0	0.0	0.0	0.0	0.0

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPON SYSTEM/CATEGORY
DEPOT LEVEL REPARABLES
FY 1996
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
TANK		1.3			1.3
LAV AIR DEFENSE		2.4			2.4
RETZ SYSTEM		0.1			0.1
BASIC REPLEN/REWORK	-1.4			4.7	3.3
					0.0
					0.0
					0.0
TOTAL ORDNANCE TANK AUTOMOTIVE	-1.4	3.8	0.0	4.7	7.1
TOW VEH POWER SUPPLY		1.1			1.1
TEAM PORT COMM SYS		0.2			0.2
JOINT TATICAL INFORMATION DIST SYSTEM		3.2			3.2
SINCGARS RADIO SYSTEM		1.1			1.1
ADPE		0.4			0.4
NAVMACSII		0.1			0.1
LTWT COMPUTER		0.1			0.1
INTEL AYS SYS		0.3			0.3
TROJAN SPIRIT		1.2			1.2
NIGHT VISION EQ		0.1			0.1
IFF, TEST SET RADAR		1.3			1.3
BASIC REPLEN REWORK	-5.2			2.9	-2.3
TACT COMBAT OPER SYS		0.4			0.4
TOTAL COMMUNICATION AND ELECTRONICS	-5.2	9.5	0.0	2.9	7.2
EMI COMPLEX		0.1			0.1
ARMOR COMBAT EXCAVATOR		0.4			0.4
THERMAL SITE		1.4			1.4
MUZZLE VELOCITY SYS		0.7			0.7
BASIC REPLEN/REWORK	0.2				0.2
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.2	2.6	0.0	0.0	2.8
HAWK		0.3			0.3
AVENGER		5.7			5.7
BASIC REPLEN/REWORK	-0.3			2.5	2.2
					0.0
					0.0
					0.0
					0.0
TOTAL GUIDED MISSILES AND EQUIPMENT	-0.3	6.0	0.0	2.5	8.2
TOTAL PROCUREMENT	-6.7	21.9	0.0	10.1	25.3

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPON SYSTEM/CATEGORY
DEPOT LEVEL REPARABLES
FY 1997
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
LAV PIP		0.4			0.4
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	0.8			3.5	4.3
TOTAL ORDNANCE TANK AUTOMOTIVE	0.8	0.4	0.0	3.5	4.7
JAVELIN		0.1			0.1
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK				2.6	2.6
TOTAL GUIDED MISSILES AND EQUIPMENT	0.0	0.1	0.0	2.6	2.7
MANPACK RADIOS & EQUIPMENT		0.7			0.7
TSC-96 PIP FLEET SATELLITE COMM TERM		1.1			1.1
COMMAND POST SYS		2.8			2.8
MANEUVER C2 SYS		1.4			1.4
RADIO SYS		3.1			3.1
COMMUNICATIONS SWITCHING & CONTROL SYS		0.4			0.4
AN/TPQ-36 FIREFINDER RADAR UPGRADES		0.4			0.4
INTELLIGENCE SUPPORT EQUIPMENT		3.4			3.4
MODIFICATION KITS (INTEL)		2.0			2.0
NIGHT VISION EQUIPMENT		1.3			1.3
ITEMS LESS THAN $2MILLION (NONTEL)		0.5			0.5
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	0.1			4.5	4.6
TOTAL COMMUNICATION AND ELECTRONICS	0.1	17.1	0.0	4.5	21.7
MODIFICATION KITS		0.1			0.1
					0.0
BASIC REPLEN/REWORK				1.6	1.6
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.0	0.1	0.0	1.6	1.7
TRAINING DEVICES		0.1			0.1
BASIC REPLEN/REWORK	0.1				0.1
TOTAL GENERAL PROPERTY	0.1	0.1	0.0	0.0	0.2
TOTAL PROCUREMENT	1.0	17.8	0.0	12.2	31.0
TRANSPORTATION					0.0
TOTAL COST	1.0	17.8	0.0	12.2	31.0

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPON SYSTEM/CATEGORY
DEPOT LEVEL REPARABLES
FY 1998
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
LAV PIP		0.3			0.3
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	1.1			4.4	5.5
TOTAL ORDNANCE TANK AUTOMOTIVE	1.1	0.3	0.0	4.4	5.8
JAVELIN		0.1			0.1
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	0.2			2.6	2.8
TOTAL GUIDED MISSILES AND EQUIPMENT	0.2	0.1	0.0	2.6	2.9
MANPACK RADIOS & EQUIPMENT		0.6			0.6
TSC-96 PIP FLEET SATELLITE COMM TERM		0.6			0.6
POSITION LOCATION REPORTING SYS (PLRS)		0.3			0.3
MANEUVER C2 SYS		0.2			0.2
COMMUNICATIONS SWITCHING & CONTDROL SYS		3.2			3.2
TATICAL AIR OPERATIONS MODULE		0.3			0.3
AN/TQP-36 FIREFINDER RADAR UPGRADES		0.1			0.1
INTELLIGENCE SUPPORT EQUIPMENT		1.6			1.6
MODIFICATION KITS (INTEL)		2.8			2.8
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	3.5			5.0	8.5
TOTAL COMMUNICATION AND ELECTRONICS	3.5	9.7	0.0	5.0	18.2
HIGH MOBILITY MULTI-WHEEL VEHICLE (HMMVW)		0.1			0.1
MODIFICATION KITS		0.1			0.1
MAGNETIC COUNTERMINE SYS		0.1			0.1
BASIC REPLEN/REWORK	2.1			1.7	3.8
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	2.1	0.3	0.0	1.7	4.1
					0.0
BASIC REPLEN/REWORK					0.0
TOTAL GENERAL PROPERTY	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT	6.9	10.4	0.0	13.7	31.0
TRANSPORTATION					0.0
TOTAL COST	6.9	10.4	0.0	13.7	31.0

January 1997

NAVY WORKING CAPITAL FUND
MARINE CORPS SUPPLY MANAGEMENT
BY WEAPON SYSTEM/CATEGORY
DEPOT LEVEL REPARABLES
FY 1999
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	1.9			4.3	6.2
TOTAL ORDNANCE TANK AUTOMOTIVE	1.9	0.0	0.0	4.3	6.2
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK		0.2		2.6	2.8
TOTAL GUIDED MISSILES AND EQUIPMENT	0.0	0.2	0.0	2.6	2.8
TSC-96 PIP FLEET SATELLITE COMM TERM		0.7			0.7
MANEUVER C2 SYS		0.2			0.2
RADIO SYS		2.2			2.2
COMMUNICATIONS SWITCHING & CONTROL SYS		5.6			5.6
TACTICAL AIR OPERATIONS MODULE (TAOM)		0.1			0.1
INTELLIGENCE SUPPORT EQUIPMENT		2.6			2.6
MODIFICATION KITS (INTEL)		2.4			2.4
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/REWORK	3.7			5.1	8.8
TOTAL COMMUNICATION AND ELECTRONICS	3.7	13.8	0.0	5.1	22.6
HIGH MOBILITY MULTI-WHEELED VEHICLE		0.1			0.1
LOGISTICS VEHICLE SYS		0.5			0.5
BASIC REPLEN/REWORK	1.5			1.7	3.2
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	1.5	0.6	0.0	1.7	3.8
					0.0
BASIC REPLEN/REWORK					0.0
TOTAL GENERAL PROPERTY	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT	7.1	14.6	0.0	13.7	35.4
TRANSPORTATION					0.0
TOTAL COST	7.1	14.6	0.0	13.7	35.4

FUND 9A

Business Area Capital Budget Summary
Component: Marine Corps
Business Area: Supply Management
Date: JANUARY 1997
($ IN MILLIONS)

Line Number	Item Description	FY 1996 Quantity	FY 1996 Total Cost	FY 1997 Quantity	FY 1997 Total Cost	FY 1998 Quantity	FY 1998 Total Cost	FY 1999 Quantity	FY 1999 Total Cost
1a	Non-ADP Equipment (>500,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal Equipment (>500,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
1b	Non-ADP Equipment (>15,000<500,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal Equipment (>15,000<500,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
2a	Minor Construction (>15,000<300,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal Minor Const (>15,000<300,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
3a	ADP Equipment (>100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal ADP Equipment (>100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
3b	ADP Equipment (>15,000<100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal ADP Equipment (>15,000<100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
4a	Telecommunications Equip (>15,000<100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal Telecomm Equip (>15,000<100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
4b	Off the Shelf Software (>15,000<100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal Off the Shelf (>15,000<100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
6c	Central Design Activity (Software>100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Subtotal CDA (Software>100,000)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	GRAND TOTAL CAPITAL PURCHASE PROGRAM	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
7	Major Construction (MILCON)	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0
	Major Construction (MILCON) Total - Non Add	N/A	0.0	N/A	0.0	N/A	0.0	N/A	0.0