

DEPARTMENT OF THE NAVY  
FISCAL YEAR (FY) 2002  
AMENDED BUDGET SUBMISSION



JUSTIFICATION OF ESTIMATES  
JUNE 2001

NAVY WORKING CAPITAL FUND

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Navy Working Capital Fund  
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DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND (NWCF)  
FY 2002 AMENDED PRESIDENT'S BUDGET

The total cost of goods and services to be sold by the NWCF is projected to exceed \$21 billion in FY 2002. NWCF activities perform a wide variety of functions including Supply Management, Depot Maintenance, Research & Development, Transportation, Base Support and Information Services. The NWCF continues to pursue some important efforts to improve efficiency and maximize effectiveness. Success in these endeavors is critical to ensuring that the Department can afford both the ongoing support costs of fleet operations and the necessary reinvestment in new platforms and weapons systems.

NWCF activities are heavily involved in the Department of the Navy's Strategic Sourcing initiatives and expect to produce savings through actions such as A-76 competitions and functionality reviews. Activities within the Depot Maintenance, Research & Development, and Supply Management areas also initiated Enterprise Resource Planning (ERP) pilot projects in FY 2000. ERP is projected to continue through the budget period and is a high priority for the Department. It will be used to reengineer and standardize business processes, integrate operations and optimize management of resources.

Information Services is no longer a separate activity group beginning in FY 2002. The Fleet Material Support Office (FMSO), which primarily provides programming support to Navy Supply Management, is merged with the Supply Management activity group in FY 2002. Additionally, the Naval Reserve Information Systems Office (NAVRISO) becomes direct mission funded effective in FY 2002.

The budget submission reflects imposition of surcharges to FY 2001 rates for Naval Aviation Depots (\$35 million) and for Marine Corps Depots (\$11 million) to mitigate projected operating losses, in accordance with the policy established by the Deputy Secretary of Defense in December 1997.

The NWCF cash balance for the FY 2000 through FY 2002 period remains at levels sufficient to ensure the viability of the Fund. The strong cash performance during this period is primarily attributed to continued Supply Management sales above plan and the conservative nature of the DoN's initial cash estimates for FY 2000 and 2001. The initial cash projections indicated that resources were available for "rebate" back to customers. Therefore, in FY 2002, \$400 million was passed back to customers in the form of reduced Supply Management rates. The cash projections in our NWCF budget submission reflect this redistribution of resources.

Department of the Navy NWCF activity groups are:

Supply Operations: Provides inventory management functions for shipboard and aviation repairable and consumable items, management of overseas Fleet Industrial Supply Centers and miscellaneous support functions for ashore and Fleet commanders.

Depot Maintenance:

Shipyards: Consists of three active shipyards. Another four have closed as a result of Base Realignment and Closure Decisions. Following a two-year test, wherein Pearl Harbor Naval Shipyard was consolidated with the Intermediate Maintenance Facility, the arrangement has been made permanent. The Department of the Navy provided a report to the congress on the test in May 2001.

Aviation Depots: Consists of three active aviation depots, while another three have closed.

Marine Corps Depots: Consists of one east coast and one west coast depot facility which perform inspection, repair, rebuild and modification of all types of ground combat and combat support equipment used by the Marine Corps and other DoD services.

Transportation: Military Sealift Command (MSC) operates service-unique Naval Fleet Auxiliary Force (NFAF) vessels, primarily civilian manned, which provide material support to the Fleet, Special Mission Ships (SMS) which provide unique seagoing platforms and Afloat Prepositioning Force (APF) ships which deploy advance material for strategic lifts. MSC manages these vessels from five area and three sub-area commands around the world.

Research and Development: Consists of the Naval Research Laboratory, the Naval Air Warfare Center, the Naval Surface Warfare Center, the Naval Undersea Warfare Center and the Space and Naval Warfare Systems Centers. These activities perform a wide range of research, development, test, evaluation, and engineering support functions.

Information Services: This group includes the Naval Computer and Telecommunications Command in FY 2000 only and the Fleet Material Support Office and the Naval Reserve Information Systems Office in New Orleans, Louisiana through FY 2001.

Base Support:

Public Works Centers: Consists of nine Public Works Centers, which provide utilities services, facilities maintenance, transportation support, engineering services and shore facilities planning support required by operating forces and other activities.

Naval Facilities Engineering Service Center: The activity, located in Port Hueneme, California, provides the Navy with specialized facilities engineering and technology support.

**Cost:** (Operating)

Total obligations for Supply functions and cost of goods and services sold for industrial functions are as follows:

	(dollars in millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	5,322.7	6,807.9	6,971.3
Supply - Marine Corps	126.8	219.5	147.9
Depot Maintenance – Ships	2,148.3	1,996.5	2,238.6
Depot Maintenance – Aircraft	1,772.5	2,101.3	1,870.8
Depot Maintenance - Marine Corps	193.0	200.8	190.2
Ordnance	28.4	8.1	0
R&D - Air Warfare Center	2,160.3	2,155.0	2,084.9
R&D - Surface Warfare Center	2,869.1	2,451.3	2,414.0
R&D - Undersea Warfare Center	786.7	706.8	694.2
R&D – SPAWAR Systems Center	1,482.5	1,282.8	1,287.0
R&D - Naval Research Laboratory	539.6	562.2	568.4
Transportation - MSC	1,304.9	1,313.2	1,421.8
Information Services – NCTC	119.3	0	0
Information Services – FMSO	77.2	78.8	0
Information Services – NRISO	13.9	12.1	0
Base Support – PWC	1,714.4	1,616.0	1,546.2
Base Support – NFESC	<u>91.0</u>	<u>74.8</u>	<u>68.9</u>
Totals	20,750.6	21,587.3	21,504.1

**Net Operating Results:**

Revenue, excluding surcharge collections and extraordinary expenses, less the cost of goods and services sold to customers is as follows:

	(dollars in millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	-141.3	-91.6	4.6
Supply - Marine Corps	33.4	-4.1	-5.6
Depot Maintenance - Ships	5.1	-10.3	-7.2
Depot Maintenance – Aircraft	-8.8	36.0	-9.6
Depot Maintenance - Marine Corps	19.7	19.1	-.3
Ordnance	-.4	0	0
R&D - Air Warfare Center	.2	19.1	-3.7
R&D - Surface Warfare Center	5.4	13.0	-14.4
R&D - Undersea Warfare Center	-3.5	8.6	1.6
R&D – SPAWAR Systems Center	11.2	1.5	-14.6
R&D - Naval Research Laboratory	-3.5	-22.3	-8.1
Transportation - MSC	-9.0	-31.8	-3.2

Information Services - NCTC	2.4	0	0
Information Services - FMISO	-1.2	3.1	0
Information Services – NRISO	-.2	.2	0
Base Support - PWC	-37.4	-17.8	72.6
Base Support - NFESC	<u>1.3</u>	<u>-.2</u>	<u>-1.3</u>
Totals	-126.5	-77.7	11.0

**Accumulated Operating Results (recoverable):**

	(dollars in millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	32.5	-4.6	0
Supply - Marine Corps	81.2	5.6	0
Depot Maintenance - Ships	15.0	7.2	0
Depot Maintenance – Aircraft	-26.4	9.6	0
Depot Maintenance - Marine Corps	-18.3	.3	0
Ordnance	.2	-.4	0
R&D - Air Warfare Center	-15.4	3.7	0
R&D - Surface Warfare Center	1.4	14.4	0
R&D - Undersea Warfare Center	-10.2	-1.6	0
R&D – SPAWAR Systems Center	24.9	14.6	0
R&D - Naval Research Laboratory	30.4	8.1	0
Transportation – MSC	35.1	3.2	0
Information Services – NCTC	-11.8	.0	0
Information Services - FMISO	-1.6	1.5	0
Information Services – NRISO	.1	.3	0
Base Support – PWC	-54.8	-72.6	0
Base Support – NFESC	<u>1.5</u>	<u>1.3</u>	<u>0</u>
Totals	83.8	-9.7	0

**Workload:**

Workload projections for NWCF activities generally reflect the decline in Navy force structure and attendant support levels as well as those factors unique to each group. The table below displays year-to-year percentage changes in direct labor hours and transportation ship days for the industrial business areas. For supply, workload changes are indicated by gross sales.

	(percent change)	
	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	9.6%	-3.1%
Supply - Marine Corps	.5%	-26.2
Depot Maintenance – Ships	-2.5%	.7%
Depot Maintenance - Aircraft	-4.0%	1.4%

Depot Maintenance - Marine Corps	-6.0%	-14.7%
R&D - Air Warfare Center	-3.2%	-1.9%
R&D - Surface Warfare Center	-3.8%	-.8%
R&D - Undersea Warfare Center	-4.6%	-.7%
R&D - SPAWAR Systems Center	14.5%	-.8%
R&D - Naval Research Laboratory	1.2%	.4%
Transportation - MSC	3.9%	8.7%
Base Support - PWC	-5.8%	-7.5%
Base Support - NFESC	10.6%	4.0%

### **Customer Rate Changes**

Composite rate changes previously approved from FY 2000 to FY 2001 and proposed rated changes from FY 2001 to FY 2002 designed to achieve an accumulated operating result of zero at the end of FY 2002 are as follows:

	(percent change)	
	<u>FY 2001</u>	<u>FY 2002</u>
Supply:		
Navy - Aviation Consumables	18.5%	-11.5%
Navy - Shipboard Consumables	19.2%	-10.9%
Navy - Aviation Repairables	14.3%	-3.8%
Navy - Shipboard Repairables	18.8%	-3.6%
Navy - Other	1.5 %	1.5%
MARCORPS Repairables	5.7%	.9%
Depot Maintenance - Ships	2.4%	5.7%
Depot Maintenance - Aircraft:		
Airframes	9.1 %	-2.2%
Engines	1.0%	-1.6%
Modifications	21.7%	-3.6%
Product Support/Engineering	18.2%	-.3%
Other	12.4%	-6.4%
Supply Components	5.6%	-1.9%
Other Components	14.1%	.3%
Depot Maintenance - Marine Corps	18.6%	7.0%
R&D - Air Warfare Center	3.0%	.5%
R&D - Surface Warfare Center	2.8%	-.4%
R&D - Undersea Warfare Center	5.6%	-.3%
R&D - SPAWAR Systems Center	.4%	1.6%
R&D - Naval Research Laboratory	-.3%	6.1%
Transportation - MSC		
Fleet Auxiliary	4.8%	4.6%
Special Mission Ships	16.7%	8.4%
Afloat Prepositioning Ships	-2.0%	19.4%
Information Services - NCTC	4.2%	NA

Information Services - FMISO	8.4%	NA
Information Services - NRISO	-.2%	NA
Base Support – PWC:		
East Coast Utilities	2.4%	2.9%
East Coast – Other	2.2%	.8%
West Coast Utilities	.3%	37.3%
West Coast - Other	1.2%	.8%
Base Support - NFESC	-2.1%	-2.5%

**Unit Costs:**

Unit Cost is the method established to authorize and control costs. Unit cost goals allow activities to respond to workload changes in execution by encouraging reduced costs when workload declines and allowing appropriate increases in costs when their customers request additional services.

	<u>Unit Cost</u> <u>FY 2001</u>	<u>Unit Cost</u> <u>FY 2002</u>
Supply - Navy (cost per unit of sales):		
Wholesale	1.06	1.04
Retail	1.02	1.01
Supply - Marine Corps (cost per unit of sales):		
Wholesale	1.04	.78
Retail	1.00	.99
Depot Maintenance-Ships (\$/Direct Labor Hour)	87.64	97.61
Depot Maintenance - Aircraft (\$/Direct Labor Hour)	151.19	154.76
Depot Maintenance - Marine Corps (\$/Dir Labor Hr)	100.23	111.57
R&D-Air Warfare Center (\$/Direct Labor Hour*)	93.49	95.22
R&D-Surface Warfare Center (\$/Direct Labor Hour*)	72.46	73.68
R&D-Undersea Warfare Center (\$/Direct Labor Hour*)	78.78	79.79
R&D-SPAWAR SYSCEN (\$/Direct Labor Hour*)	76.72	78.97
R&D-Naval Research Lab (\$/ Direct Labor Hour*)	94.99	97.76
Transportation – MSC		
NFAF (\$/day)	29,582	30,115
SMS (\$/day)	20,247	18,826
APF (\$/day)	72,150	74,762
Base Support - PWC Cost of services	various	various
Base Support - NFESC (\$/Direct Labor Hour*)	73.17	70.77

\* includes direct labor plus overhead \$

**Treasury Cash Balance:**

Cash balances necessary to meet operating and capital outlay requirements (7 to 10 days of cash) are achieved in this budget through 3<sup>rd</sup> quarter FY 02. The cash position remains strong due to Supply Management sales above plan, and conservative cash estimates in fiscal years 1999 and 2000.

In FY 2002, \$400 million will be passed back to customers in the form of reduced supply rates. The NWCF budget submission reflects this redistribution of resources. Cash projections by fiscal year are as follows:

	(\$ millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Beginning Cash Balance	\$1,164	1,474	1,245
Collections	\$21,308	20,746	20,470
Disbursements	\$20,987	20,941	20,843
Transfers	11	34	135
<b>Ending Cash Balance</b>	1,474	1,245	735
Advance Billing Liability	22	0	0

**Staffing:** Total civilian and military personnel employed at NWCF activities are as follows:

(strength in thousands)

<u>Civilian End Strength</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	5.6	5.5	5.9
Supply - Marine Corps	*	*	*
Depot Maintenance - Ships	17.7	18.7	18.4
Depot Maintenance – Aircraft	10.6	10.2	10.0
Depot Maintenance - Marine Corps	1.8	1.6	1.3
R&D - Air Warfare Center	10.7	10.3	10.0
R&D - Surface Warfare Center	15.9	15.4	14.9
R&D - Undersea Warfare Center	3.9	3.8	3.7
R&D – SPAWAR Systems Center	4.9	5.7	5.6
R&D - Naval Research Laboratory	2.7	2.7	2.7
Transportation – MSC	4.3	4.3	4.6
Information Services – NCTC	.8	na	na
Information Services - FMSO	.9	.9	na
Information Services - NRISO	.1	.1	na
Base Support – PWC	8.7	7.2	6.4
Base Support – NFESC	.3	.3	.3
Totals	89.1	86.7	83.9

\* less than fifty

(strength in thousands)

<u>Civilian Workyears (regular time)</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
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Supply – Navy	5.6	5.5	5.9
Supply - Marine Corps	*	*	*
Depot Maintenance – Ships	17.3	18.1	17.9
Depot Maintenance – Aircraft	10.4	10.2	10.0
Depot Maintenance - Marine Corps	1.7	1.7	1.5
R&D - Air Warfare Center	10.7	10.2	10.0
R&D - Surface Warfare Center	16.0	15.4	14.9
R&D - Undersea Warfare Center	4.0	3.8	3.7
R&D – SPAWAR Systems Center	4.9	5.7	5.6
R&D - Naval Research Laboratory	2.7	2.7	2.7
Transportation – MSC	5.6	5.7	5.9
Information Services – NCTC	.9	0	0
Information Services – FMSO	.9	.9	0
Information Services - NRISO	.1	.1	0
Base Support – PWC	9.2	7.4	6.4
Base Support – NFESC	<u>.3</u>	<u>.3</u>	<u>.3</u>
Totals	90.4	87.7	84.8

\* less than fifty

(strength in thousands)

<u>Military Personnel End Strength</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	.4	.4	.4
Supply - Marine Corps	0	0	0
Depot Maintenance – Ships	.1	.1	.1
Depot Maintenance – Aircraft	.1	.1	.1
Depot Maintenance - Marine Corps	*	*	*
R&D - Air Warfare Center	.3	.3	.3
R&D - Surface Warfare Center	.3	.3	.3
R&D - Undersea Warfare Center	*	.1	.1
R&D – SPAWAR Systems Center	.1	.1	.1
R&D - Naval Research Laboratory	.1	.1	.1
Transportation – MSC	1.0	.8	.6
Information Services – FMSO	*	*	*
Base Support – PWC	.1	.1	.1
Base Support - NFESC	<u>*</u>	<u>*</u>	<u>*</u>
Totals	2.5	2.4	2.2

\*less than fifty

(strength in thousands)

<u>Military Workyears</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply – Navy	.5	.4	.4
Supply - Marine Corps	*	*	*
Depot Maintenance – Ships	.1	.1	.1
Depot Maintenance – Aircraft	.1	.1	.1

Depot Maintenance - Marine Corps	*	*	*
R&D - Air Warfare Center	.2	.2	.2
R&D - Surface Warfare Center	.3	.3	.3
R&D - Undersea Warfare Center	*	*	*
R&D - SPAWAR Systems Center	.1	.1	.1
R&D - Naval Research Laboratory	.1	.1	.1
Transportation - MSC	1.1	.8	.7
Information Services - FMSO	*	*	*
Information Services - NRISO	.0	.0	.0
Base Support - PWC	.1	.1	.1
Base Support - NFESC	*	*	*
Totals	2.5	2.3	2.2

\* less than fifty

**Capital Purchase Program:**

	(dollars in millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Supply - Navy	40.6	48.6	58.0
Supply - Marine Corps	0	0	0
Depot Maintenance - Ships	58.2	61.0	113.2
Depot Maintenance - Aircraft	41.4	50.0	51.3
Depot Maintenance - Marine Corps	2.3	3.5	3.1
R&D - Air Warfare Center	32.7	41.6	39.4
R&D - Surface Warfare Center	35.2	33.2	33.7
R&D - Undersea Warfare Center	17.6	19.6	20.0
R&D - SPAWAR Systems Center	25.3	16.3	9.6
R&D - Naval Research Laboratory	15.0	18.3	17.3
Transportation - MSC	8.8	7.3	10.0
Information Services - NCTC	0	0	na
Information Services - FMSO	.5	.5	0
Information Services - NRISO	.1	0	0
Base Support - PWC	18.4	18.6	17.2
Base Support - NFESC	.5	.7	.1
Totals *	296.6	319.2	372.9

The above capital investment program by major category is as follows:

Equipment (Non-ADPE/Telecom)	102.6	101.3	105.4
ADPE and Telecommunications Equip	57.2	49.1	59.4
Software Development	111.7	141.4	177.6
Minor Construction	25.1	27.4	30.5
Totals *	296.6	319.2	372.9

\* Includes actual FY 2001 obligations and FY 2001 program authorized to be obligated in FY 2002.

Note: details reflected in charts above may not add to totals shown due to rounding.

**FY 2002 PRESIDENT'S BUDGET  
DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
DEPOT MAINTENANCE - NAVAL SHIPYARDS**

**ACTIVITY GROUP FUNCTION:**

Naval Shipyards provide logistics support for assigned ships and service craft; perform authorized work in connection with construction, overhaul, repair, alteration, drydocking and outfitting; perform design, manufacturing, refit and restoration, research, development and test work, and provide services and material to other activities and units as assigned.

**ACTIVITY GROUP COMPOSITION:**

This budget reflects three naval shipyards operating under the Navy Working Capital Fund (NWCF) and residual accounting for five naval shipyards. The four yards that closed completed their customer work prior to FY 1997 and only Base Realignment and Closure (BRAC) cost and residual NWCF charges are being reported. The Pearl Harbor Pilot, which combined the Shipyard with the CINCPACFLT Intermediate Maintenance Facility and removed the Shipyard from the NWCF in FY1999, reports their residual costs, which are reflected in this submission for FY 2000 and FY 2001. The three active Shipyards and their locations are:

Portsmouth Naval Shipyard	Kittery, ME
Norfolk Naval Shipyard	Portsmouth, VA
Puget Sound Naval Shipyard	Bremerton, WA

**OVERVIEW FOR NAVAL SHIPYARDS:**

<b>Financial Profile:</b>	(\$ Millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Cost of Goods Sold	\$2,148.3	\$1,996.5	\$2,238.6
Net Operating Results	5.1	-10.3	-7.2
Accumulated Operating Results	15.0	7.2	0

Operating results are consistent with the changes in workload and also reflect efforts to improve work processes to accomplish planned levels of performance and productivity.

**NET OPERATING RESULTS (NOR):**

The shipyards ended FY 2000 with an NOR gain of \$5.1 million which was \$14.4 million better than estimated in FY 2001 President's Budget. All three NWCF shipyards exceeded their estimate. Positive NOR performance as a result of increased workload and fixed price gains allowed the shipyards to return \$32.1 million to the Fleet in accordance with DoD policy.

The projected FY 2001 NOR loss of \$10.3 million is \$13.8 million below the FY 2001 President's Budget because rates have been reduced to return accumulated profits to customers. The projected Accumulated Operating Result for FY 2001 is still \$7.2 million better than projected in the FY 2001 President's Budget.

<b><u>Workload:</u></b>	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
Direct Labor Hours	23,357,807	22,779,894	22,939,099

Workload changes are consistent with Fleet requirements and also reflect shipyard process improvements. The FY 2001 and FY 2002 workload estimates reflect a slightly declining workload from FY 2000. Workload decreases 1.0 percent and 0.2 percent respectively in FY 2001 and FY 2002 from FY 2000. We have developed a cost efficient approach to accomplish this workload through the use of temporary and seasonal employees. The use of temporary and seasonal employees gives the shipyards more flexibility to adjust to changes in workload and will ultimately result in lower costs to our customers by avoiding involuntary separations via Reductions in Force (RIF).

**Performance Indicators**

	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
<b><u>Unit Costs:</u></b>	\$88.65	\$87.61	\$97.58

The unit cost represents total costs per direct labor hour incurred by Naval Shipyards in the applicable fiscal year.

### **Customer Rate Changes**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<u>Percent Change from Prior Year</u>	8.3%	2.4%	5.7%

The FY 2002 customer rate change exceeds general inflation levels primarily due to the inclusion of a capital surcharge factor in the rate to finance the Shipyard investment in the Navy Enterprise Maintenance Automated Information System (NEMAIS) which is one of four Navy Enterprise Resource Planning (ERP) pilot projects.

### **Staffing:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian End Strength	17,707	18,686	18,419
Civilian Work Years-(regular time)	17,344	18,079	17,866
Military End Strength	82	140	140
Military Work Years	98	136	136

End strength and workyear estimates are matched to workload and reflect continued streamlining of shipyard processes and increased productivity. FY 2001 civilian end strength increases by nearly 1,000 above FY 2000 due to an increase in seasonal employees, primarily at Norfolk NSY. The FY 2001 regular time work year estimate also reflects reduced reliance on overtime.

### **Capital Budget Authority**(Dollars in Millions)

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Equipment-Non-ADPE/TELECOM	\$41.925	\$27.828	\$34.164
ADPE/Telecommunications Equip	\$2.200	\$4.250	\$11.341
Software Development	\$12.813	\$28.094	\$64.820
Minor Construction	<u>\$1.313</u>	<u>\$ .828</u>	<u>\$2.775</u>
TOTAL	\$58.251	\$61.000	\$113.100

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.

Included in the Capital Purchases Program (CPP) budget is the Navy Enterprise Maintenance AIS (NEMAIS) which is one of four Navy Enterprise Resource Planning (ERP) pilots. NAVSEA is managing this Regional

Maintenance Pilot. It is intended that the ERP software selected for the pilot be capable of expansion, as required, for eventual use at all Navy ship maintenance activities. The Naval Shipyard CPP budget includes \$3 million in FY 2000, \$16 million in FY 2001 and \$67.1M million in FY 2002 for NEMAIS.

**Strategic Sourcing and Other Economies and Efficiencies:**

This submission includes substantial savings resulting from efficiencies. These efficiencies reflect actual improvements executed in FY 2000. Continuous efforts are underway to improve and streamline work processes in order to accomplish the planned levels of performance and productivity in the future. The program is divided into three parts: (1) A-76 Studies under the Commercial Activities (CA) Program; (2) Functional Assessments accomplished using Business Process Reengineering (BPR) techniques; and (3) Acquisition Reform initiatives to achieve efficiencies in Contracts (Material and Services) purchased to support shipyard operations. Savings for the CA Program and the Contract Efficiencies are incorporated into this submission.

**Other specific examples of our productivity savings.**

(1) Excellence in Engineering and Planning. Some of initiatives undertaken Puget Sound NSY in this area have been:

- Standardization of work processes
- Cross training of technicians and planners
- Document reuse
- Utilization of planning teams
- Management focus on cost drivers
- Increased focus on the appropriate level of project support

Efficiencies gained from these initiatives include lower planning costs and lower execution support costs in trouble desk, testing, and work control.

(2) Safe Acid Cleaning Process. The Shipyard has taken the lead in vigorously promoting the use of safe acid cleaning within PSNS, other Public Shipyards and the remainder of the Naval community. It involves a liquid organic, salt solution used widely in the private sector for cleaning air conditioning units for buildings, boiler, and sterilization units for bottling companies. The product is designed to remove unwanted calcium based scale and sea growth from machinery components as well as piping used in circulating water.

(3) Trident D5 Process Improvement Projects. The FY 2000 and FY 2001 PSNS workload includes conversion of the USS ALASKA and USS NEVADA to support D5 missiles. Some of initiatives undertaken in this area include:

- Construction of four box frame hoists and railways to facilitate material movement. Estimated savings \$.7 million in FY 2000 and \$1.4 million in FY 2002.
- Installed mechanical blanking and plugs replacing the need for welding. Estimates savings of \$.7 million in both FY 2000 and FY 2001.

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	2,114.4	1,941.7	2,185.7
Surcharges	.3	.0	56.2
Depreciation excluding Major Constructio	39.0	44.6	45.7
Other Income			
Total Income	2,153.7	1,986.3	2,287.6
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	11.1	11.4	11.8
Civilian Personnel	1,180.8	1,212.7	1,260.8
Travel and Transportation of Personnel	38.7	24.5	26.7
Material & Supplies (Internal Operations	188.3	250.3	239.3
Equipment	8.4	11.3	17.8
Other Purchases from NWCF	18.6	35.3	35.2
Transportation of Things	4.4	5.2	5.4
Depreciation - Capital	39.0	44.6	45.7
Printing and Reproduction	2.1	2.0	2.1
Advisory and Assistance Services	.0	1.7	1.7
Rent, Communication & Utilities	51.5	43.0	41.6
Other Purchased Services	529.7	354.4	550.9
Total Expenses	2,072.6	1,996.4	2,239.0
Work in Process Adjustment	79.9	.5	.0
Comp Work for Activity Reten Adjustment	-4.2	-.4	-.4
Cost of Goods Sold	2,148.3	1,996.5	2,238.6
Operating Result	5.4	-10.3	49.0
Less Surcharges	-.3	.0	-56.2
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	5.1	-10.3	-7.2
Other Changes Affecting AOR	3.5	2.5	.0
Accumulated Operating Result	15.0	7.2	.0

INDUSTRIAL BUDGET INFORMATION SYSTEM (NIFRPT)  
Source of Revenue  
AMOUNT IN MILLIONS  
SHIPYARD / TOTAL

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	2,231.9	1,878.4	2,164.1
a. Orders from DoD Components	2,102.0	1,791.1	2,083.2
Department of the Navy	2,091.8	1,782.0	2,072.4
O & M, Navy	1,705.5	1,156.2	1,464.1
O & M, Marine Corps	.2	.0	.0
O & M, Navy Reserve	5.7	2.5	2.6
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Porcurement, Navy	4.1	3.2	2.9
Weapons Procurement, Navy	.6	.5	.6
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	22.1	307.6	275.4
Other Procurement, Navy	294.6	258.8	296.8
Procurement, Marine Corps	.8	.0	.0
Family Housing, Navy/MC	-.6	.1	.0
Research, Dev., Test, & Eval., Navy	55.2	51.8	29.1
Military Construction, Navy	3.5	1.1	.8
Other Navy Appropriations	.1	.2	.1
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	5.0	4.5	5.5
Army Operation & Maintenance	.2	.1	.1
Army Res, Dev, Test, Eval	.0	.0	.0
Army Procurement	.0	.0	.0
Army Other	4.8	4.4	5.4
Department of the Air Force	2.2	1.1	2.4
Air Force Operation & Maintenance	2.1	.9	2.3
Air Force Res, Dev, Test, Eval	.0	.0	.0
Air Force Procurement	.0	.0	.0
Air Force Other	.1	.1	.1
DOD Appropriation Accounts	3.0	3.6	2.8
Base Closure & Realignment	-3.3	.0	.0
Operation & Maintence Accounts	3.2	2.3	1.5
Res, Dev, Test & Eval Accounts	.7	.1	.1
Procurement Accounts	1.7	1.0	1.1
DOD Other	.8	.2	.1
b. Orders from NWCF Business Area	105.6	74.6	67.8
c. Total DoD	2,207.7	1,865.8	2,151.0
d. Other Orders	24.3	12.6	13.1
Other Federal Agencies	7.9	1.3	1.2
Foreign Military Sales	.7	.8	.7
Non Federal Agencies	15.6	10.6	11.1

INDUSTRIAL BUDGET INFORMATION SYSTEM (NIFRPT)  
 Source of Revenue  
 AMOUNT IN MILLIONS  
 SHIPYARD / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	808.0	886.3	778.4
3. Total Gross Orders	3,040.0	2,764.7	2,942.5
4. Funded Carry-Over **	886.3	778.4	654.9
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	2,153.7	1,986.3	2,287.6
Adjusted Carry-Over	580.1	561.1	452.2
Adjusted Carryover in Months of Workload	3.2	3.3	2.3

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

**CHANGES IN COSTS OF OPERATION  
NAVY WORKING CAPITAL FUND  
DEPOT MAINTENANCE - NAVAL SHIPYARDS  
FUND 2  
FY02 AFMB PRESIDENT BUDGET SUBMISSION  
(Dollars in Millions)**

	<b>EXPENSE</b>
<b>1. FY 2000 ACTUAL EXECUTION</b>	<b>2,072.6</b>
<b>2. FY 2001 IN FY 2001 PRESIDENT'S BUDGET</b>	<b>1,896.1</b>
<b>3. PRODUCTIVITY INITIATIVES</b>	<b>(4.9)</b>
a. Management Efficiencies	(4.9)
<b>4. PROGRAM CHANGES</b>	<b>86.1</b>
a. Workload Changes	86.1
1. Direct Workyears	52.5
2. Direct Non-labor	24.7
3. Overhead Costs to support Workload	8.9
<b>5. OTHER CHANGES</b>	<b>19.0</b>
a. Change in Average Salary	20.2
b. Change in Separation Costs	(5.9)
c. Change in FECA Costs	1.0
d. Change in Maintenance of Real Property	2.1
e. Increase in Submarine Support	1.2
f. Increase for SYMIS	0.5
<b>6. FY 2001 CURRENT ESTIMATE</b>	<b>1,996.4</b>

**CHANGES IN COSTS OF OPERATION  
NAVY WORKING CAPITAL FUND  
DEPOT MAINTENANCE - NAVAL SHIPYARDS  
FUND 2  
FY02 AFMB PRESIDENT BUDGET SUBMISSION  
(Dollars in Millions)**

	<b>EXPENSE</b>
<b>6. FY 2001 CURRENT ESTIMATE</b>	<b>1,996.4</b>
<b>7. PRICING ADJUSTMENTS</b>	<b>50.6</b>
a. Pay Raise	45.6
1. FY 02 Pay Raise	31.5
2. Annualization	14.1
b. Material & Supplies Purchases	(1.7)
c. Industrial Fund Purchases	0.2
d. General Inflation	6.0
e. Military pay raise	0.5
<b>8. PRODUCTIVITY INITIATIVES</b>	<b>(11.7)</b>
a. Management Efficiencies	(9.1)
b. NMCI adjustment	(2.6)
<b>9. PROGRAM CHANGES</b>	<b>195.2</b>
a. Workload Changes	195.2
1. Direct Workyears	16.6
2. Direct Non-labor	177.0
3. Overhead Costs to support Workload	1.6
<b>10. OTHER CHANGES</b>	<b>8.5</b>
a. Increase for SYMIS	0.4
b. Increase for depreciation	1.1
c. Increase for Real Property and Equip maint	3.2
d. Increase for Other Contracts	3.9
<b>11. FY 2002 CURRENT ESTIMATE</b>	<b>2,239.0</b>

**DEFENSE BUSINESS OPERATIONS FUND  
COMPONENT/BUSINESS AREA: NAVAL SHIPYARDS  
(Dollars in Millions)**

**MATERIAL INVENTORY DATA  
FY 2000**

	<u>Total</u>	<u>Mobilization</u>	-----Peacetime-----	
			<u>Operating</u>	<u>Other</u>
Material Inventory BOP	172.865		172.865	
<u>Purchases</u>				
A. Purchases to Support Customer Orders (+)	231.295		231.295	
B. Purchase of long lead items in advance of customer orders (+)				
C. Other Purchases (list) (+)				
D. Total Purchases	231.295		231.295	
<u>Material Inventory Adjustments</u>				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	256.098		256.098	
B. Disposals, theft, losses due to damages (-)				
C. Other reductions (list) (-)				
D. Total Inventory adjustments	256.098		256.098	
Material Inventory EOP	148.062		148.062	

**FY 2001**

	<u>Total</u>	<u>Mobilization</u>	-----Peacetime-----	
			<u>Operating</u>	<u>Other</u>
Material Inventory BOP	148.062		148.062	
<u>Purchases</u>				
A. Purchases to Support Customer Orders (+)	211.087		211.087	
B. Purchase of long lead items in advance of customer orders (+)				
C. Other Purchases (list) (+)				
D. Total Purchases	211.087		211.087	
<u>Material Inventory Adjustments</u>				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	196.659		196.659	
B. Disposals, theft, losses due to damages (-)				
C. Other reductions (list) (-)				
D. Total Inventory adjustments	196.659		196.659	
Material Inventory EOP	162.490		162.490	

**FY 2002**

	<u>Total</u>	<u>Mobilization</u>	-----Peacetime-----	
			<u>Operating</u>	<u>Other</u>
Material Inventory BOP	162.490		162.490	
<u>Purchases</u>				
A. Purchases to Support Customer Orders (+)	263.114		263.114	
B. Purchase of long lead items in advance of customer orders (+)				
C. Other Purchases (list) (+)				
D. Total Purchases	263.114		263.114	
<u>Material Inventory Adjustments</u>				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	261.665		261.665	
B. Disposals, theft, losses due to damages (-)				
C. Other reductions (list) (-)				
D. Total Inventory adjustments	261.665		261.665	
Material Inventory EOP	163.939		163.939	

**Business Area: Capital Budget Summary**  
**Component: NAVAL SHIPYARDS**  
**Business Area: DEPOT MAINTENANCE - SHIPYARDS**  
**FY02 PRESIDENT'S BUDGET**  
**(\$ in Millions)**

Line Num	Description	FY 2000		FY 2001		FY 2002			
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost		
	<b>Non ADP</b>								
1	CRAFT CRANE SETTLEMENT (Replacement)	22	15.400						
2	135 LONG TON PORTAL CRANE (Replacement)	1	14.650						
3	CRANE, PORTAL, 60 TON (REPLACE #76) (Replacement)	1	.335	1	10.000				
4	60 TON PORTAL CRANE #34 (Replacement)					1	9.912		
5	CVN CAMELS (Replacement)			2	3.822				
6	NFPC, REBUILD 16' PROPELLER PROFILER (SU-11) (Replacement)			1	3.300				
7	NEW FUEL INSPECTION AND STORAGE ENCLOSURE (New Mission)			1	2.800				
8	DRYDOCK #4 SKID MOUNTED VENT UNITS (Replacement)	6	2.780						
9	UHF TRUNKED RADIO SYSTEM (Replacement)	1	1.910						
10	800 TON FORGING PRESS (Replacement)					1	1.704		
11	PRWC TANK, 7,000 GALLON (Replacement)			2	.070	2	1.580		

**Business Area: Capital Budget Summary**  
**Component: NAVAL SHIPYARDS**  
**Business Area: DEPOT MAINTENANCE - SHIPYARDS**  
**FY02 PRESIDENT'S BUDGET**  
**(\$ in Millions)**

Line Num	Description	FY 2000		FY 2001		FY 2002			
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost		
12	NFPC, 5-AXIS MACHINING CENTER (Productivity)					1	1.500		
13	DRYDOCK WATER PROCESSING SYSTEM (Environmental)					6	1.248		
14	ABRASIVE TUMBLER BLASTER (Replacement)			1	1.117				
15	CRANE, BRIDGE, 30T, B174 (Replacement)			1	.106	1	.970		
16	HEAD REFURBISHMENT ENCLOSURE (New Mission)			1	.161	1	.888		
17	Miscellaneous (Non ADP <= \$999K; >= \$500K)		3.470		2.142		6.560		
18	Miscellaneous (Non ADP < \$500K)		3.380		4.310		9.802		
	<b>Non ADP Total:</b>		<b>41.925</b>		<b>27.828</b>		<b>34.164</b>		
	<b>ADP</b>								
19	NSY COMPUTER REPLACEMENT (Hardware)			1	3.825	1	3.850		
20	ENTERPRISE RESOURCE PLANNING (Hardware)					1	6.000		
21	NAVAL SHIPYARD INFRASTRUCTURE INTEGRATION (Hardware)	1	1.500						

**Business Area: Capital Budget Summary**  
**Component: NAVAL SHIPYARDS**  
**Business Area: DEPOT MAINTENANCE - SHIPYARDS**  
**FY02 PRESIDENT'S BUDGET**  
**(\$ in Millions)**

Line Num	Description	FY 2000		FY 2001		FY 2002			
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost		
22	Miscellaneous (ADP <= \$999K; >= \$500K)		.700				.886		
23	Miscellaneous (ADP < \$500K)				.425		.605		
	<b>ADP Total:</b>		<b>2.200</b>		<b>4.250</b>		<b>11.341</b>		
	<b>Software</b>								
24	ENTERPRISE RESOURCE PLANNING	1	3.000	1	16.000	1	61.100		
25	DEPOT MAINTENANCE STD SYSTEM	1	9.813	1	9.094	1	3.720		
26	DEPOT MAINTENANCE ACCOUNTING SYSTEMS, DIFMS			1	3.000				
	<b>Software Total:</b>		<b>12.813</b>		<b>28.094</b>		<b>64.820</b>		
	<b>Minor Construction</b>								
27	Miscellaneous (Minor Construction <= \$999K; >= \$500K)		.918		.165		.680		
28	Miscellaneous (Minor Construction < \$500K)		.395		.663		2.095		
	<b>Minor Construction Total:</b>		<b>1.313</b>		<b>.828</b>		<b>2.775</b>		
	<b>Grand Total:</b>		<b>58.251</b>		<b>61.000</b>		<b>113.100</b>		

(Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET								
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification								
DEPOT MAINTENANCE - SHIPYARDS				4/60 TON PORTAL CRANE #34 (Replacement)			PNSY Portsmouth, NH								
FY 2000				FY 2001			FY 2002								
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP										1	9912	9912			

**Narrative Justification:**

**Description**

This project will provide a new 60-ton portal crane to replace two portal cranes which are 58 years old and require repair/upgrading of obsolete equipment. This will significantly enhance the Shipyard's ability to meet portal crane operation requirements in support of Depot Modernization (DMP) and Engineering Overhaul (EOH) of submarines, while reducing equipment maintenance costs.

**Justification**

The Shipyard's workload forecast indicates the DMP and EOH programs will be a major portion of work in the foreseeable future. Safe and reliable portal cranes are imperative in the execution of this work, which includes movement of massive, one-of-a-kind submarine components. The cranes to be replaced are 25-Ton, Brownhoist, portal cranes manufactured in 1942 (USN 400375 & 400383. Due to their age, worn condition, obsolete and unreliable components, these cranes offer limited support to the Shipyard's main objectives. This results in delays and lost production time, waiting for repair of a downed crane. Also, these cranes run on 15' gauge rail. The new cranes and the other cranes currently in use at this circuit run on 20' gauge rail. Upon replacement of these cranes, the 15' gauge rail need not be maintained and is scheduled to be removed. Two options have been investigated and individual cost benefits have been weighed. Option 1: Upgrade of obsolete components and replacement of worn components to improve the reliability of two existing cranes. Keep existing cranes in service. Option 2: Replace cranes with one, new 60-Ton crane. Option 2, replacement of the cranes with a new, 60-Ton portal crane, proves to be the most cost-effective option and has a 5.75 year payback.

**Impact**

Delay in funding for this project will result in the existing cranes being either taken out of service for an extended upgrading period or possibly removed from service permanently due to reliability concerns. In either case, the Shipyard's mission will be adversely impacted with increased costs due to production delays for lack of strategic equipment.

(Dollars in Thousands)	A. Budget Submission FY 2002 PRESIDENT'S BUDGET
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B. Component/Business Area/Date  DEPOT MAINTENANCE - SHIPYARDS				C. Line# and Description 10/800 TON FORGING PRESS (Replacement)			D. Site Identification  NNSY Norfolk, VA					
			FY 2000	FY 2001			FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP							1	1314	1704			

**Narrative Justification:**

**Description**  
This is a replacement project for an 82 year old 800 Ton Forging Press (NID 181-015561).

**Justification**  
This equipment is necessary for the forge shop to perform its primary mission. Due to BRAC the navy's forging capacity has been reduced. Nation wide capacity in the forge industry has been shrinking and consolidating for the last decade creating commercial contractor backlogs from 1 year to 18 months on all deliveries. The majority of the workload of 1,664 piece parts per year for this equipment consists of emergent work and emergency work which is discovered during the ship overhaul process and is unforeseen. Present equipment was installed in 1918 and is beyond expected service life. The forging press is currently running at reduced capacity due to it's deteriorated condition. Spare parts are difficult or impossible to obtain and for the most part must be custom made in the shipyard.. Annual savings is \$128,188 are expected by reduced operating labor manhours to forge parts and reduction in maintenance and utility costs .

**Impact**  
This equipment has a direct effect on the shipyards ability to perform forging operations. The present pres is worn out and a catastrophic failure could occur at any time.

(Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S BUDGET					
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification				
DEPOT MAINTENANCE - SHIPYARDS				11/PRWC TANK, 7,000 GALLON (Replacement)			PSNSY Bremerton, WA				
			FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP						2	0	70	2	655	1580

**Narrative Justification:**

**Description**

This project procures two 7,000 gallon Portable Radioactive Waste Collection (PRWC) tanks, procures two flatbed trailers for tank transport, and disposes of six old PRWC tanks of various sizes.

**Justification**

The two 7,000 gallon PRWC tanks are required to replace three 5,000 gallon PRWC tanks which were fabricated in 1973. The old tanks are in need of frame refurbishment, and are not designed to allow cleaning and inspection of tank internals from the tank exterior. The three remaining tanks were used to store primary shield water and are no longer required since the shipyard does not store PSW for reuse. The shipyard must dispose of these tanks to minimize the amount of solid radioactive waste stored in the shipyard. The new 7,000 gallon PRWC tanks will be designed to eliminate the need for workers to enter the tank for routine triennial cleaning and inspection. This will reduce the potential for personnel contamination and spreading contamination outside the tanks. Also, personnel will not have to enter a potential high airborne area or wear air fed hoods. The two flatbed trailers will be dedicated to transport PRWC tanks and will be sized to fit in the Tank Receiving Area, which is too short for the existing four nuclear certified trailers at the Shipyard. The economic analysis projects a one time cost avoidance of \$45,713 and annual savings of \$29,626.

**Impact**

This project is considered mandatory to comply with NAVSEA Radiological Control requirements.

(Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET								
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification								
DEPOT MAINTENANCE - SHIPYARDS				12/NFPC, 5-AXIS MACHINING CENTER (Productivity)			NNSY Norfolk, VA								
			FY 2000			FY 2001			FY 2002						
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP										1	1300	1500			

**Narrative Justification:**

**Description**

The proposed 5-axis machining center is a high speed vertical spindle traveling column with a fixed table. The spindle head is a two axis turret type head with a 40 HP spindle rotating at 16,000 RPM. The linear axes have 600 IPM speeds and the machine is controlled by a high performance CNC controller with over a hundred block look ahead capability and other features that will optimize the machine for the high speed environment.

**Justification**

NFPC requires a small high speed machining center to machine VIRGINIA class propulsor components. Presently, the center uses one dual spindle profiler for this work. With the projected workload and the large number of these components, NFPC will not be able to deliver these critical components to the submarine fleet on time and within cost. The proposed machine with its high speed capability and accuracy will double NFPC's production rate and produce higher quality components faster with reduced final finishing work. Estimated annual savings of \$310,926 and a payback of 5.23 years.

**Impact**

NFPC's is the only manufacturer of submarine propulsors. Because of work envelope constraints, the only dedicated 5-axis machine to the production of VIRGINIA class propulsor components will not be able to meet demand from the projected workload. If the existing assets are not augmented with machines capable of higher production rates, it would seriously impact the VIRGINIA class proposed schedules.

(Dollars in Thousands)				A. Budget Submission FY 2002 PRESIDENT'S BUDGET										
B. Component/Business Area/Date				C. Line# and Description				D. Site Identification						
DEPOT MAINTENANCE - SHIPYARDS				13/DRYDOCK WATER PROCESSING SYSTEM (Environmental)				NNSY Norfolk, VA						
			FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP									6	208	1248			

**Narrative Justification:**

**Description**

The new systems will consist of a 6" and a 4" centrifugal pump constructed of a hard stainless steel alloy. The system will also have a 6" and a 4" cyclone separator, also made out of stainless steel. The pumps and separator along with the associated piping and valves will be mounted on a 8' X 16' skid that can be lifted by crane or forklift. The system will be designed to operate if one of the pumps or separators needs to be taken off line for repair, it can be by passed and the system can still be used.

**Justification**

Water discharges from drydocks must meet water quality standards for dissolved metals and other industrial pollutants specified by the State of Virginia in the shipyard's Virginia Pollution Discharge Elimination System (VPDES) permit. This permit controls the stormwater and drydock water discharges from the shipyard under the Clean Water Act (CWA). On 5 August 1992, the Virginia State Water Control Board issued an enforcement action to NNSY based on the shipyard failure to consistently comply with its permit water quality limits at drydock outfalls. The state's Special Order directed the shipyard to improve its water pollution controls method to achieve compliance. The best method of compliance was found to be capturing and treating the water through a Dissolved Air Flootation (DAF) system.

**Impact**

The inability to rapidly remove standing water from drydocks historically impedes scheduled work resulting in several undesirable conditions. These include water backing up into the drydock which creates unsafe working conditions, production delays or a condition allowing untreated water to bypass the processing system; thus releasing industrial contaminated water into the Elizabeth river. These pumping systems will provide an acceptable means of adherence to the Compliance Order. If the equipment is not obtained NNSY would have to revert back to the more costly method of maintaining environmental compliance while conducting drydock operations i.e. the blasting and painting operations of ships.

(Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification					
DEPOT MAINTENANCE - SHIPYARDS				15/CRANE, BRIDGE, 30T, B174 (Replacement)			PNSY Portsmouth, NH					
			FY 2000			FY 2001			FY 2002			
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP				1	0	106	1	970	970			

**Narrative Justification:**

**Description**

This project will procure a new 30 ton capacity general purpose service bridge crane to provide service in Building 174. This crane will replace an existing 30 ton crane (USN# 406205) which will be 40 years old in 2002.

**Justification**

The crane to be replaced is currently the largest capacity, highest lift capable crane available for general storage use at the shipyard. The crane will be utilized to handle crane and rigging gear test weights, for handling submarine periscopes, and handling large capacity items that are stored in this area. This crane will also support overhaul of reactor coolant pumps and services a coolant pump changeout training mock-up, where it is used to simulate portal crane operations.

The replacement crane will offer significant improvements over the current crane configuration. First, the present crane has two 15 ton capacity hoists on two separate trolleys. The replacement crane will have one 30 ton capacity main hoist and 5 ton capacity auxiliary hoist on one trolley. The two-hook arrangement of the existing crane results in higher labor costs when making capacity lifts, which now occur more frequently.

A second improvement is that the new crane will have the latest in AC variable-frequency controls which offer tremendous precision. The current DC controls are obsolete and lack the precision called for in many lifts this crane is now required to perform, especially in servicing the reactor coolant pumps.

**Impact**

The importance of crane support in this building has increased with the change of function for this facility. This area becomes the premier multi function high bay for handling general purpose lifts and specialized functions where height is the major factor. It becomes the primary facility supporting drydock no. 1 & 3 and repair berths no. 11 & 13.

(Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification					
DEPOT MAINTENANCE - SHIPYARDS				16/HEAD REFURBISHMENT ENCLOSURE (New Mission)			NNSY Norfolk, VA					
			FY 2000			FY 2001			FY 2002			
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP				1	0	161	1	888	888			

**Narrative Justification:**

**Description**

This project adds a head refurbishment enclosure (HRE) to the existing Dry-dock #4 Refueling Complex. The HRE is a prefabricated work enclosure that provides a controlled work environment to support the refurbishment of the component. The HRE will be installed within the existing storage enclosure at NNSY. The existing storage enclosure foundation will be reinforced to support the weight of the component and its special support stand.

**Justification**

The refueling work process for SSBN 726 submarines requires the refurbishment of the pressure vessel (PV) closure head. The component is removed from the ship and placed on a special support stand and then refurbished. This refurbishment must be performed in a clean area of significant size and must address environmental and personnel safety concerns. High efficiency ventilation and waste collection systems are required for the HRE to address environmental and personnel safety concerns. [The size of the clean area; environmental and personnel safety concerns along with the need to be within crane reach of the ship preclude the possibility of using existing shipyard facilities. Placing the HRE within the storage enclosure allows the use of existing security, crane and utility services.]

**Impact**

NNSY cannot accomplish SSBN 726 Class submarine refuelings without the Head Refurbishment Enclosure.

(Dollars in Thousands)		A. Budget Submission FY 2002 PRESIDENT'S BUDGET		
B. Component/Business Area/Date	C. Line# and Description	D. Site Identification		
DEPOT MAINTENANCE - SHIPYARDS	17/Miscellaneous (Non ADP <= \$999K; >= \$500K)	NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST			6560	
PIPE BENDER, 6 INCH, RH & LH (Replacement) (PSNSY Bremerton, WA)				492
CRANE UPGRADE, BRIDGE (B-856 #035402) (Replacement) (PSNSY Bremerton, WA)				485
ACOUSTIC EMISSION TEST SYSTEM (Productivity) (PSNSY Bremerton, WA)				555
CRANE, BRIDGE (REPLACE #103008 B-450-W) (Replacement) (PSNSY Bremerton, WA)				550
CNC LATHE (Replacement) (PNSY Portsmouth, NH)				600
UHP WATER JET CRAWLERS (Productivity) (PSNSY Bremerton, WA)				653
VERTICAL RECIPROCATING CONVEYOR (DD-2) (Productivity) (PSNSY Bremerton, WA)				700
CAD/CAM LASER CUTTER FOR MOLD LOFT (Productivity) (NNSY Norfolk, VA)				772
SUBMARINE BERTHING SYSTEM (Replacement) (PNSY Portsmouth, NH)				800
CNC DRILLING/MILLING CENTER (8' X 33') (Replacement) (PSNSY Bremerton, WA)				953

(Dollars in Thousands)		A. Budget Submission FY 2002 PRESIDENT'S BUDGET		
B. Component/Business Area/Date DEPOT MAINTENANCE - SHIPYARDS	C. Line# and Description 18/Miscellaneous (Non ADP < \$500K)		D. Site Identification NA	
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST			9802	

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(Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET							
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification							
DEPOT MAINTENANCE - SHIPYARDS				19/NSY COMPUTER REPLACEMENT (Hardware)			NSY Arlington, VA							
			FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost				
ADP								1	3850	3850				

**Narrative Justification:**

**Description**

This project supports the replacement and technological refreshment of the standard configuration IT applications servers supporting the corporate standard information systems in the naval shipyards. There are 27 corporate standard applications that support depot maintenance operations in the shipyards including Baseline AIM, Performance Monitoring, SYMIS Material and Financial Management, Laboratory Analysis, and Hazardous Substance Management and Monitoring, as well as specialty applications for Facilities and Radiological Controls Monitoring. Much of this equipment was installed three or more years ago.

**Justification**

This equipment is required to replace aging and obsolete equipment. This equipment is also required to ensure compatibility with Enterprise Resource Planning (ERP) platforms planned for the regional maintenance consolidation functions. All equipment is acquired centrally for configuration control and management, economy of scale and maximum discount. In addition, equipment will be consolidated, where feasible, for greater economy and resource savings. This equipment is required to replace currently outdated equipment that will remain in the shipyards for the next 4-5 years.

**Impact**

If not replaced, the shipyards will be left with obsolete equipment for which there is no vendor maintenance, thus jeopardizing the shipyard's ability to assure uninterrupted, seamless communications capability for depot maintenance progress reporting. Shipyards will experience high levels of downtime and lost productivity.

(Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET								
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification								
DEPOT MAINTENANCE - SHIPYARDS				20/ ENTERPRISE RESOURCE PLANNING (Hardware)			NSY Arlington, VA								
			FY 2000			FY 2001			FY 2002						
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP										1	6000	6000			

**Narrative Justification:**

**Description**

The purpose of this project is to acquire a comprehensive commercial off the shelf (COTS) software package Enterprise Resource Planning (ERP) to replace legacy systems currently operating in the shipyards. This ERP package will provide a single, end to end information system. This initiative encompasses both depot and intermediate maintenance activities. It is envisioned that ERP software can eventually replace up to 50% of existing legacy systems. This project addresses ERP acquisition and implementation at Naval Shipyards only.

**Justification**

This project is chartered by the Department of Navy's Revolution in Business Affairs (RBA) initiative, Commercial Business Practices (CBP) Working Group chaired by COMNAVAIR. It is the objective of the group that the Navy capitalize on technology to achieve gains in productivity through a disciplined approach to effect business process change utilizing best practices. This initiative is sponsored by CLF, as an initiative to consolidate depot/intermediate level maintenance.

**Impact**

The Navy has a diverse, complex array of maintenance related information systems supporting all levels of maintenance. They are not interconnected nor do they generally pass information from one to the other. This restricts data visibility and sharing between depot/intermediate and regional commands. These individual systems are also founded on different technical standards, differing work processes and organization alignments. Further, there is no ability to link maintenance systems to logistics, financial and procurement systems. The Navy has the opportunity to consolidate and eliminate various duplicative maintenance, financial and procurement systems, and implement fewer, standard systems across the maintenance community by either consolidating or eliminating cumbersome and duplicative work processes, streamlining organizational alignments and implementing a new IT system to support these new processes.

(Dollars in Thousands)		A. Budget Submission		
		FY 2002 PRESIDENT'S BUDGET		
B. Component/Business Area/Date	C. Line# and Description	D. Site Identification		
DEPOT MAINTENANCE - SHIPYARDS	22/Miscellaneous (ADP <= \$999K; >= \$500K)	NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST		0		
CASCON COMMUNICATIONS SYSTEMS (Hardware) (NNSY Norfolk, VA)			886	

(Dollars in Thousands)		A. Budget Submission		
		FY 2002 PRESIDENT'S BUDGET		
B. Component/Business Area/Date	C. Line# and Description	D. Site Identification		
DEPOT MAINTENANCE - SHIPYARDS	23/Miscellaneous (ADP < \$500K)	NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST			605	

(Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET					
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification					
DEPOT MAINTENANCE - SHIPYARDS				24/ENTERPRISE RESOURCE PLANNING			NSY Arlington, VA					
			FY 2000		FY 2001		FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Software							1	61100	61100			

**Narrative Justification:**

**Description**

The purpose of this project is to acquire a comprehensive commercial off the shelf (COTS) software package Enterprise Resource Planning (ERP) to replace legacy systems currently operating in the shipyards. This ERP package will provide a single, end to end information system. This initiative encompasses both depot and intermediate maintenance activities. It is envisioned that ERP software can eventually replace up to 50% of existing legacy systems. This project addresses ERP acquisition and implementation at Naval Shipyards only.

**Justification**

This project is chartered by the Department of Navy's Revolution in Business Affairs (RBA) initiative, Commercial Business Practices (CBP) Working Group chaired by COMNAVAIR. It is the objective of the group that the Navy capitalize on technology to achieve gains in productivity through a disciplined approach to effect business process change utilizing best practices. This initiative is sponsored by CLF, as an initiative to consolidate depot/intermediate level maintenance.

**Impact**

The Navy has a diverse, complex array of maintenance related information systems supporting all levels of maintenance. They are not interconnected nor do they generally pass information from one to the other. This restricts data visibility and sharing between depot/intermediate and regional commands. These individual systems are also founded on different technical standards, differing work processes and organization alignments. Further, there is no ability to link maintenance systems to logistics, financial and procurement systems. The Navy has the opportunity to consolidate and eliminate various duplicative maintenance, financial and procurement systems, and implement fewer, standard systems across the maintenance community by either consolidating or eliminating cumbersome and duplicative work processes, streamlining organizational alignments and implementing a new IT system to support these new processes.

(Dollars in Thousands)	A. Budget Submission FY 2002 PRESIDENT'S BUDGET
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B. Component/Business Area/Date  DEPOT MAINTENANCE - SHIPYARDS				C. Line# and Description 25/DEPOT MAINTENANCE STD SYSTEM				D. Site Identification  NSY Arlington, VA				
			FY 2000			FY 2001			FY 2002			
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Software							1	3720	3720			

**Narrative Justification:**

**Description**  
 The naval shipyards require continued upgrades and enhancements to their standard ship/fleet maintenance core business systems supporting the high visibility 688 submarine/carrier availabilities. Further, the systems utilized support the continued requirement for business process improvements to achieve higher efficiencies in the workplace. These systems include: Baseline AIM, AIMXpress, Performance Measurement, Material Requirements, Financial/Material Management, Workload Forecasting, Radiological Controls and Hazardous Substance Management and Monitoring, among others. The priority software upgrades have been selected based on calculated return on investment of less than one year, direct support of 688 class submarine factory program, and/or potential contribution on the initiative to the strategic sourcing wedge.

**Justification**  
 These projects will contribute to enhanced business performance, improved business processes, and contribute to strategic sourcing wedge.

**Impact**  
 If this project is not funded, Navy will lose the opportunity to continue with BPR and its contribution to depot/regional maintenance cost reduction initiatives. Since these applications are not expected to be replaced by the emerging ERP initiative, it is considered reasonable to continue with these projects.

(Dollars in Thousands)		A. Budget Submission FY 2002 PRESIDENT'S BUDGET		
B. Component/Business Area/Date	C. Line# and Description	D. Site Identification		
DEPOT MAINTENANCE - SHIPYARDS	27/Miscellaneous (Minor Construction <= \$999K; >= \$500K)	NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST	918	75	475	
RELOCATE OUTSIDE PLATE YARD (PNSY Portsmouth, NH)		75	475	

(Dollars in Thousands)		A. Budget Submission FY 2002 PRESIDENT'S BUDGET		
B. Component/Business Area/Date DEPOT MAINTENANCE - SHIPYARDS	C. Line# and Description 28/Miscellaneous (Minor Construction < \$500K)		D. Site Identification NA	
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST			2300	

**Navy Working Capital Fund Capital Investment Summary**

**Business Area:** DON/Depot Maintenance

**Component:** NAVAL SHIPYARDS

**FY 2002 PRESIDENT'S BUDGET SUBMISSION**

**April 2001**

(\$ in Millions)

<b>FY</b>	<b>PROJECT TITLE</b>	<b>FY 2001 PRESIDENT'S</b>	<b>ASSET / DEFICIENCY</b>	<b>FY 2002 PRESIDENT'S</b>	<b>EXPLANATION</b>
<b>Non-ADP Equipment</b>					
00	CRAFT CRANE SETTLEMENT	15.400	0.000	15.400	No change
00	135 LONG TON PORTAL CRANE	14.650	0.000	14.650	No change
		3.000	(0.220)	2.780	Realignment for emergent below project authority requirement.
00	DRYDOCK #4 SKID MOUNTED VENT UNITS				No change
00	UHF TRUNKED RADIO SYSTEM	1.910	0.000	1.910	No change
00	CRANE, PORTAL, 60 TON (REPLACE #76), DESIGN	0.335	0.000	0.335	No change
00	MISCELLANEOUS NON-ADP >\$500K, <\$1,000K	3.252	0.218	3.470	Below threshold project authority realignments.
00	MISCELLANEOUS NON-ADP <\$500K	3.756	(0.376)	3.380	Below threshold project authority realignments.
<b>Total Non-ADP Equipment</b>		42.303	<b>(0.378)</b>	41.925	
<b>ADP &amp; TELECOMMUNICATIONS EQUIPMENT</b>					
00	NAVAL SHIPYARD INFRASTRUCTURE INTEGRATION	1.500	0.000	1.500	No change
00	MISCELLANEOUS ADP >\$500K; <\$1,000K)	0.700	0.000	0.700	No change
<b>Total ADP &amp; Telecommunications Equipment</b>		2.200	0.000	2.200	

**Navy Working Capital Fund Capital Investment Summary**

**Business Area:** DON/Depot Maintenance

**Component:** NAVAL SHIPYARDS

**FY 2002 PRESIDENT'S BUDGET SUBMISSION**

**April 2001**

(\$ in Millions)

FY	PROJECT TITLE	FY 2001 PRESIDENT'S	ASSET / DEFICIENCY	FY 2002 PRESIDENT'S	EXPLANATION
<b>ADP SOFTWARE DEVELOPMENT</b>					
		0.500	(0.500)	0.000	Authority was realigned as part of reprogramming action for emergent Minor Construction project.
00	DIFMS IMPLEMENTATION				
00	DEFENSE MAINTENANCE STANDARD SYSTEM	9.813	0.000	9.813	No change
00	ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM	3.000	0.000	3.000	No change
<b>Total Software Development</b>		<b>13.313</b>	<b>(0.500)</b>	<b>12.813</b>	
<b>MINOR CONSTRUCTION</b>					
	MINOR CONSTRUCTION	0.435	0.878	1.313	Authority was realigned from Non-ADPE and ADP categories as part of reprogramming action for emergent Minor Construction project.
00					
<b>Total Minor Construction</b>		<b>0.435</b>	<b>0.878</b>	<b>1.313</b>	
<b>FY00 GRAND TOTAL</b>		<b>58.251</b>	<b>0.000</b>	<b>58.251</b>	

**Navy Working Capital Fund Capital Investment Summary**  
**Business Area: DON/Depot Maintenance**  
**Component: NAVAL SHIPYARDS**  
**FY 2002 PRESIDENT'S BUDGET SUBMISSION**  
 (\$ in Millions)

FY	PROJECT TITLE	FY 2001 PRESIDENT'S	ASSET / DEFICIENCY	FY 2002 PRESIDENT'S	EXPLANATION
<b>Non-ADP Equipment</b>					
01	CRANE, PORTAL, 60 TON (REPLACE #76)	10.000	0.000	10.000	No change
		5.000	(5.000)	0.000	Project deferred to outyear in order to accomodate emergent project requirements.
01	MOLTEN SALT OXIDATION UNIT				
01	CVN CAMELS	3.822	0.000	3.822	No change
01	NFPC, REBUILD 16' PROPELLER PROFILER (SU-10)	3.300	0.000	3.300	No change
01	NEW FUEL INSPECTION INSPECTION AND STORAGE ENCLOSUR	0.000	2.800	2.800	Emergent equipment project required for support of Norfolk NSY submarine workload.
01	PRWC TANK, 7,000 GALLON	0.000	0.070	0.070	Advance design authority for FY02 project.
01	ABRASIVE TUMBLER BLASTER	1.117	0.000	1.117	No change
01	CRANE, BRIDGE, 30T, B174	0.000	0.106	0.106	Advance design authority for FY02 project.
01	HEAD REFURBISHMENT ENCLOSURE	0.000	0.161	0.161	Advance design authority for FY02 project.
01	MISCELLANEOUS NON-ADP >\$500K,<\$1,000K	1.880	0.262	2.142	Below threshold project changes/realignments.
01	MISCELLANEOUS NON-ADP <\$500K	2.709	1.601	4.310	Below threshold project changes/realignments.
<b>Total Non-ADP Equipment</b>		27.828	0.000	27.828	

**Navy Working Capital Fund Capital Investment Summary**  
**Business Area: DON/Depot Maintenance**  
**Component: NAVAL SHIPYARDS**  
**FY 2002 PRESIDENT'S BUDGET SUBMISSION**  
 (\$ in Millions)

FY	PROJECT TITLE	FY 2001 PRESIDENT'S	ASSET / DEFICIENCY	FY 2002 PRESIDENT'S	EXPLANATION
<b>ADP &amp; TELECOMMUNICATIONS EQUIPMENT</b>					
01	NSY COMPUTER REPLACEMENT	3.825	0.000	3.825	Project title change. Formerly called "Naval Shipyard Infrastructure Integration". No change to required funding authority.
01	MISCELLANEOUS ADP >\$500K; <\$1,000K)	0.425	0.000	0.425	No change
<b>Total ADP &amp; Telecommunications Equipment</b>		<b>4.250</b>	<b>0.000</b>	<b>4.250</b>	
<b>ADP SOFTWARE DEVELOPMENT</b>					
01	DIFMS IMPLEMENTATION	3.000	0.000	3.000	No change
01	DEFENSE MAINTENANCE STANDARD SYSTEM	9.094	0.000	9.094	No change
01	ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM	16.000	0.000	16.000	No change
<b>Total Software Development</b>		<b>28.094</b>	<b>0.000</b>	<b>28.094</b>	
<b>MINOR CONSTRUCTION</b>					
01	MINOR CONSTRUCTION <\$500K	0.828	0.000	0.828	No change
<b>Total Minor Construction</b>		<b>0.828</b>	<b>0.000</b>	<b>0.828</b>	
<b>FY01 GRAND TOTAL</b>		<b>61.000</b>	<b>0.000</b>	<b>61.000</b>	

**FY 2002 President's Budget  
Navy Working Capital Fund  
Narrative Summary of Operation  
Activity Group: Depot Maintenance/NADEPs**

**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**

<u>Activities</u>	<u>Location</u>
NAVAVNDEPOT, Cherry Point	Cherry Point, NC
NAVAVNDEPOT, Jacksonville	Jacksonville, FL
NAVAVNDEPOT, North Island	San Diego, CA

**BUDGET HIGHLIGHTS**

**General**

The budget for the Naval Aviation Depots (NADEPs) reflects operations of the three remaining Depots and residual accounts for the closed depots. At the remaining depots contractor personnel usage and overtime rates are higher than anticipated in the FY 2001 President's Budget. These increases are the result of a decision to stabilize the civilian personnel workforce at a sustainable level, with workload fluctuations being handled by fluctuating contractor personnel and overtime levels. Additionally, the budget reflects a significant decrease in revenue from the FY 2001 President's Budget due to the inability to fully implement revenue recognition based on the percentage of completion method for the Component program in FY 2000. The current budget submit assumes full implementation of percentage of completion revenue recognition during FY 2001.

The FY 2001 revenue estimate includes a \$35 million surcharge to FY 2001 rates to mitigate projected operating losses, in accordance with the policy established by Deputy Secretary of Defense in December 1997.

**FY 2002 President's Budget  
Navy Working Capital Fund  
Narrative Summary of Operation  
Activity Group: Depot Maintenance/NADEPs**

**Summary of Operations**

		(\$ in Millions)	
	FY 2000	FY 2001	FY 2002
Revenue	1772.4	2,145.6	1,866.2
Cost of Goods Sold	1772.5	2,101.3	1,870.8
Revenue less Costs	-1.1	44.3	-4.6
Surcharges	-13.4	-8.3	-5.0
Extraordinary Expenses	2.4	0	0
Net Operating Result (NOR)	-1.4	36.0	-9.6
Prior Year Adjustments	7.4	0	0
Accumulated Operating Result (AOR)	-26.4	9.6	0

**Revenue.** Revenue is \$1.8 billion in FY 2000, \$2.1 billion in FY 2001, \$1.8 billion in FY 2002. The increase from FY 2000 to FY 2001 (\$0.3 billion) which exceeds the FY 2001 President's Budget (\$0.4 billion) in FY 2001 is due to the full implementation of revenue recognition based on percentage of completion for the component program and the implementation of a surcharge to recover anticipated FY 2001 losses. The FY 2001 President's Budget assumed full implementation of revenue recognition in FY 2000. However, system deficiencies hindered the implementation of revenue recognition for the component program. This budget assumes full implementation of revenue recognition based on percentage of completion in FY 2001. The FY 2001 revenue estimate also includes a \$35 million surcharge to the FY 2001 rates to mitigate projected operating losses, in accordance with the policy established by the Deputy Secretary of Defense in December 1997.

**Costs.** Cost of Operations is \$1.8 billion for FY 2000, \$2.1 billion for FY 2001, \$1.9 billion for FY 2002. The increase between FY 2000 and FY 2001 and from the FY 2001 President's Budget in FY 2001, as well as the decrease from FY 2001 to FY 2002, is attributed to the same factors that influence revenue as explained above. Further, the FY 2001 Cost of Operations includes \$35 million of cost increases over the FY 2001 President's Budget for the financial completion and associated loss on components, airframes, engines and other work.

Through various initiatives, such as BPRs and AVDLR tiger teams, great strides have been made in identifying material deficiencies, which have been causing components to remain in Work-in-Process (WIP) for extensive lengths. Through a combined effort, NAVAIR and NAVICP have tackled this issue and begun to implement process improvements that have increased material availability required for component repair. The success of these initiatives will result in increased production components in FY 2001.

**FY 2002 President's Budget  
Navy Working Capital Fund  
Narrative Summary of Operation  
Activity Group: Depot Maintenance/NADEPs**

**Operating Results.** Revenue less cost for FY 2000- FY 2002 is  $-\$1$  million,  $\$44.3$  million and  $-\$4.6$  million respectively. FY 2001 revenue less cost is  $\$7.0$  million above the FY2001 Presidents Budget due to additional NSF Component workload of  $\$40$  million for Program Decision Memorandum (PDM) Readiness Enhancements. FY 2002 operating results are  $-\$4.6$  million to return accumulated profits to customers.

**Stabilized Customer Rates.**

	<u>FY 2001</u>	<u>FY 2002</u>
Composite Hourly Rate	\$146.91	151.61
Percent Year to Year Change		3.2%

The composite rate change reflects both the impact of workload mix changes and pricing changes. The change in the rate attributable to pricing changes alone is negative 1.98%. The FY 2002 stabilized rate also includes a Capital Purchase Program surcharge of  $\$5$  million.

**Unit Cost Goals.** The budget reflects the following FY 2000-2002 unit cost goals:

(\$ and DLHs in Millions)

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Total Operating Cost	\$1,671.5	1,714.7	1,807.6
Direct Labor Hours (DLH)	11.838	11.341	11.680
Unit Cost	\$141.20	\$151.19	\$154.76
% Change Workload/DLHs	-	-4.2%	+3.0%
% Change Unit Cost	-	+7.1%	2.0%

\* DLH includes direct labor hours worked by contractors.

**Strategic Sourcing and Efficiency Savings.** Savings and associated investment costs for strategic sourcing for FY 2000 through FY 2002 have been incorporated in this budget. Savings will be generated from Business Process Reengineering (BPR) to include improvements in material management and planning and scheduling processes, as well as competition of information technology and data processing, administrative and material equipment, plant maintenance, program management, and computer and engineering functions. FY 2001 savings, as well as assumptions and goals, associated with Strategic Sourcing and Efficiencies have not changed from the FY 2001 President's Budget.

**FY 2002 President's Budget  
Navy Working Capital Fund  
Narrative Summary of Operation  
Activity Group: Depot Maintenance/NADEPs**

**SUMMARY OF PERSONNEL RESOURCES.**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian Personnel:			
End Strength	10,574	10,163	9,987
FTE Workyears	10,442	10,177	10,040
Military Personnel:			
End Strength	100	122	120
Workyears	94	122	120
Contractor Personnel:			
Workyears	598	947	934

The decrease in Civilian End Strength from FY 2000 to FY 2001 reflects the reduced workload and personnel savings associated with Strategic Sourcing and efficiencies. Also, reductions reflect a conscientious decision to concentrate on a sustainable civilian workforce and reliance on contractor labor to accommodate workload fluctuations.

**SUMMARY OF WORKLOAD INDICATORS:**

	(Inducted Units)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<b>AIRFRAMES</b>	<b><u>321</u></b>	<b><u>460</u></b>	<b><u>543</u></b>
O&M,N	280	426	488
O&M,NR	20	18	33
RDT&E	3	0	6
Other	18	16	16
	(Inducted Units)		
<b>ENGINES</b>	<b><u>917</u></b>	<b><u>681</u></b>	<b><u>648</u></b>
O&M,N	665	419	420
O&M,NR	101	58	46
RDT&E	10	2	7
Other	141	202	175

**FY 2002 President's Budget  
Navy Working Capital Fund  
Narrative Summary of Operation  
Activity Group: Depot Maintenance/NADEPs**

**SUMMARY OF CAPITAL PURCHASES PROGRAM (CPP):**

The CPP budget reflects significant investments in Consolidated Automated Support Systems, Depot Maintenance System (DMS), and Enterprise Resource Planning (ERP) requirements. Amounts included in the budget for CPP are as follows:

	(\$ in Millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Equipment-non ADPE &TELECOM	14.440	20.032	21.006
Minor Construction:	4.929	4.724	3.100
Equipment-ADPE &TELECOM	1.732	1.225	5.331
Software Development	20.314	24.006	21.867
Total	\$41.415	\$49.987	\$51.304

A Capital Asset Surcharge of \$5.0 million in FY 2002 has been reflected in customer billing rates to provide for capital expenditures in excess of depreciation expense levels.

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	1,723.6	2,095.5	1,814.9
Surcharges	13.4	8.3	5.0
Depreciation excluding Major Constructio	35.5	41.8	46.3
Other Income			
Total Income	1,772.4	2,145.6	1,866.2
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	7.1	7.6	7.5
Civilian Personnel	648.6	658.7	683.4
Travel and Transportation of Personnel	17.7	22.3	21.9
Material & Supplies (Internal Operations	626.5	632.2	666.2
Equipment	111.8	122.1	122.5
Other Purchases from NWCF	38.0	44.0	40.6
Transportation of Things	.9	.9	1.0
Depreciation - Capital	35.4	41.8	46.3
Printing and Reproduction	2.4	3.3	3.4
Advisory and Assistance Services	.4	7.2	13.6
Rent, Communication & Utilities	33.4	36.4	42.0
Other Purchased Services	149.2	138.2	159.2
Total Expenses	1,671.5	1,714.7	1,807.6
Work in Process Adjustment	122.2	409.7	63.1
Comp Work for Activity Reten Adjustment	-21.2	-23.1	.0
Cost of Goods Sold	1,772.5	2,101.3	1,870.8
Operating Result	-.1	44.3	-4.6
Less Surcharges	-13.4	-8.3	-5.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	2.3	.0	.0
Extraordinary Expenses Unmatched	2.4	.0	.0
Net Operating Result	-8.8	36.0	-9.6
Other Changes Affecting AOR	7.4	.0	.0
Accumulated Operating Result	-26.4	9.6	.0

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	1,660.5	1,750.8	1,834.4
a. Orders from DoD Components	788.7	733.6	839.9
Department of the Navy	785.9	703.1	818.7
O & M, Navy	569.3	512.1	631.8
O & M, Marine Corps	.2	.1	.1
O & M, Navy Reserve	28.6	31.4	32.9
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Procurement, Navy	159.0	142.1	139.3
Weapons Procurement, Navy	.2	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	.0	.0	.0
Other Procurement, Navy	.2	.5	.6
Procurement, Marine Corps	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0
Research, Dev., Test, & Eval., Navy	28.5	16.9	14.0
Military Construction, Navy	.0	.0	.0
Other Navy Appropriations	-.1	.0	.0
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	.8	2.5	2.6
Army Operation & Maintenance	.7	2.4	2.5
Army Res, Dev, Test, Eval	.1	.1	.1
Army Procurement	.0	.0	.0
Army Other	.0	.0	.0
Department of the Air Force	2.0	27.7	18.3
Air Force Operation & Maintenance	2.2	27.7	18.3
Air Force Res, Dev, Test, Eval	.0	.0	.0
Air Force Procurement	-.2	.0	.0
Air Force Other	.0	.0	.0
DOD Appropriation Accounts	.0	.3	.3
Base Closure & Realignment	-.7	.1	.0
Operation & Maintenance Accounts	.3	.2	.2
Res, Dev, Test & Eval Accounts	.3	.0	.0
Procurement Accounts	.1	.0	.0
DOD Other	.0	.0	.1
b. Orders from NWCF Business Area	820.9	986.1	961.9
c. Total DoD	1,609.6	1,719.7	1,801.8
d. Other Orders	51.0	31.1	32.6
Other Federal Agencies	20.9	1.9	1.5
Foreign Military Sales	22.4	29.0	30.8
Non Federal Agencies	7.6	.2	.3

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

(NIFRPT)

PAGE 2

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	1,283.8	1,171.9	777.1
3. Total Gross Orders	2,944.4	2,922.7	2,611.6
4. Funded Carry-Over **	1,171.9	777.1	745.4
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	1,772.4	2,145.6	1,866.2
Adjusted Carry-Over	332.4	375.3	467.3
Adjusted Carry-Over in months	2.2	2.1	2.5

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

**FY 2002/2003 President's Budget  
Navy Working Capital Fund  
Changes in the Costs of Operations  
Activity Group: Depot Maintenance/NADEP  
June 2001**

(\$ in Millions)

	<b>Total Costs</b>
FY 2000 Actual	<b>1,671.5</b>
FY 2001 President's Budget	<b>1,703.2</b>
Pricing Adjustments:	<b>0.0</b>
Annualization of Pay Raises	<b>0.0</b>
Civilian Personnel	0.0
Military Personnel	0.0
Pay Raise	<b>0.0</b>
Civilian Personnel	0.0
Military Personnel	0.0
Fund Price Changes	0.0
General Purchase Inflation	0.0
Other Price Changes	0.0
Productivity Initiatives	<b>0.0</b>
Program Changes:	<b>11.5</b>
Airframes work	5.7
Engines work	3.0
Components work	2.8
Other Support work	0.0
Modification work	0.0
Logistics/Engineering work	0.0
Other Changes (incl Depreciation):	<b>0.0</b>
Depreciation	0.0
FY 2001 Estimate:	<b>1,714.7</b>

**FY 2002/2003 President's Budget  
Navy Working Capital Fund  
Changes in the Costs of Operations  
Activity Group: Depot Maintenance/NADEP  
June 2001**

(\$ in Millions)

FY 2001 Estimates:	<b>1,714.7</b>
Pricing Adjustments:	<b>11.6</b>
Annualization of Pay Raises	<b>5.1</b>
Civilian Personnel	5.0
Military Personnel	0.1
Pay Raise	<b>20.0</b>
Civilian Personnel	19.8
Military Personnel	0.2
Fund Price Changes	4.5
General Purchase Inflation	-20.4
Other Price Changes	2.4
Productivity Initiatives	<b>-17.5</b>
Strategic Sourcing	<b>-16.3</b>
Competition	-11.0
Efficiencies	-5.3
CPP	-1.2
Other Productivity Initiatives	<b>0.0</b>
Program Changes:	<b>94.3</b>
Airframes work	46.9
Engines work	17.2
Components work	25.5
Other Support work	0.2
Modification work	0.2
Logistics/Engineering work	4.3
Other Changes (incl Depreciation):	<b>4.5</b>
Depreciation	4.5
FY 2002 Estimate:	<b>1,807.6</b>

**FY 2002/2003 President's Budget**  
**Navy Working Capital Fund**  
**Material Inventory Data**  
**Activity Group: Depot Maintenance/NADEP**  
**May 2001**

(\$ in Millions)

**FY 2001**

		<u>Total</u>		<u>Mobilization</u>		----- Peacetime -----	
						<u>Operating</u>	<u>Other</u>
Material Inventory BOP	\$	179.4	\$	-	\$	179.4	-
<u>Purchases</u>							
A. Purchases to Support Customer Orders	\$	718.2	\$	-	\$	718.2	-
B. Purchase of long lead items in advance of customer orders		-		-		-	-
C. Other Purchases		-		-		-	-
D. Total Purchases	\$	718.2	\$	-	\$	718.2	-
<u>Material Inventory Adjustments</u>							
A. Material Used in Maintenance	\$	754.3	\$	-	\$	754.3	-
B. Disposals, theft, losses due to damages		-		-		-	-
C. Other reductions		-		-		-	-
D. Total inventory adjustments	\$	754.3	\$	-	\$	754.3	-
Material Inventory EOP	\$	143.3	\$	-	\$	143.3	-

**FY 2002/2003 President's Budget**  
**Navy Working Capital Fund**  
**Material Inventory Data**  
**Activity Group: Depot Maintenance/NADEP**  
**May 2001**

(\$ in Millions)

**FY 2002**

		<u>Total</u>		<u>Mobilization</u>		----- Peacetime -----	
						<u>Operating</u>	<u>Other</u>
Material Inventory BOP	\$	143.3	\$	-	\$	143.3	\$ -
<u>Purchases</u>							
A. Purchases to Support Customer Orders	\$	785.5	\$	-	\$	785.5	\$ -
B. Purchase of long lead items in advance of customer orders		-		-		-	-
C. Other Purchases		-		-		-	-
D. Total Purchases	\$	785.5	\$	-	\$	785.5	\$ -
<u>Material Inventory Adjustments</u>							
A. Material Used in Maintenance	\$	788.7	\$	-	\$	788.7	\$ -
B. Disposals, theft, losses due to damages		-		-		-	-
C. Other reductions		-		-		-	-
D. Total inventory adjustments	\$	788.7	\$	-	\$	788.7	\$ -
Material Inventory EOP	\$	140.1	\$	-	\$	140.1	\$ -

FY 2002 PRESIDENT'S BUDGET  
 CAPITAL INVESTMENT SUMMARY  
 DEPARTMENT OF THE NAVY  
 DEPOT MAINTENANCE - AVIATION DEPOTS  
 (\$ In Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 2000		FY 2001		FY 2002	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	<b>1a. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>						
	Replacement						
6 DF 0 EL 0009 P R	AIR TURBINE STARTER TEST STAND UPRGRADE	1	1.493				
6 DF 0 EL 0088 P R	WHIRLTOWER DC MOTOR REPLACEMENT	1	1.000				
6 DE 0 EL 0259 P R	VERTICAL TURNING CENTER	1	1.360				
6 DE 0 EL 0273 P R	F404 MFC TEST STAND UPGRADE	1	1.203				
6 DE 1 EL 0279 P R	JIG GRINDERS (2)			2	1.800		
6 DC 0 EL 0445 P R	DEPOT ATE TPS OFFLOAD TO CASS	1	1.500	1	1.500	1	1.555
6 DF 1 EL 0042 P R	PLASTIC MEDIA BLAST REPLACEMENT			1	1.500		
6 DE 1 EL 0280 P R	CNC VERTICAL LATHES (3)			3	1.000		
6 DC 2 EL 0446 P R	CASS STATION EQUIPMENT (3)					3	6.000
	Productivity						
6 DF 2 EL 0150 P P	COORDINATE MEASUREMENT MACHINE					1	1.500
6 DF 2 EL 0090 P P	MATERIAL HANDLING SYSTEM, B133					1	1.250
6 DE 2 EL 0320 P P	WATER JET ROUTER					1	1.330
	Environmental Compliance						
6 DE 1 EL 0246 P E	ADVANCED PAINT STRIPPING SYSTEM			1	2.505		
	<b>SUBTOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>	<b>5</b>	<b>6.556</b>	<b>8</b>	<b>8.305</b>	<b>7</b>	<b>11.635</b>
DN EL 0000	<b>1b. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&lt;\$1M)</b>	<b>22</b>	<b>7.884</b>	<b>26</b>	<b>11.727</b>	<b>25</b>	<b>9.371</b>
	<b>2. TOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM</b>	<b>27</b>	<b>14.440</b>	<b>34</b>	<b>20.032</b>	<b>32</b>	<b>21.006</b>
DN MC 0000	<b>3. MINOR CONSTRUCTION</b>	<b>14</b>	<b>4.929</b>	<b>16</b>	<b>4.724</b>	<b>13</b>	<b>3.100</b>
	<b>TOTAL NON-ADP CAPITAL PURCHASES PROGRAM</b>	<b>41</b>	<b>19.369</b>	<b>50</b>	<b>24.756</b>	<b>45</b>	<b>24.106</b>

FY 2002 PRESIDENT'S BUDGET  
 CAPITAL INVESTMENT SUMMARY  
 DEPARTMENT OF THE NAVY  
 DEPOT MAINTENANCE - AVIATION DEPOTS  
 (\$ In Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 2000		FY 2001		FY 2002	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	<b>1a. ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>						
	Computer Hardware (Production)						
7 DN 2 KL 0003 G R	DEPOT MAINTENANCE SYSTEMS HARDWARE REPLACEMENT					2	3.970
	<b>SUBTOTAL ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>	0	0.000	0	0.000	2	3.970
DN KU	<b>1b. ADPE &amp; TELECOMMUNICATIONS (&lt;\$1M)</b>	7	1.732	3	1.225	2	1.361
	<b>2. TOTAL ADPE &amp; TELECOMMUNICATIONS</b>	7	1.732	3	1.225	4	5.331
	<b>3a. SOFTWARE DEVELOPMENT (&gt;\$1M)</b>						
	Internally Developed						
7 DN 0 DL 0JT2 G P	NAVAIR DEPOT MAINTENANCE SYSTEM (NDMS)	3	11.314	3	11.006	3	6.300
7 DN 0 DL 0001 G R	ENTERPRISE RESOURCE PLANNING	3	9.000	3	13.000	3	13.467
7 DN DL 0002 G R	NIMMS					3	2.100
	<b>SUBTOTAL SOFTWARE DEVELOPMENT (&gt;\$1M)</b>	6	20.314	6	24.006	9	21.867
DN DU	<b>3b. SOFTWARE DEVELOPMENT (&lt;\$1M)</b>	0	0.000	0	0.000	0	0.000
	<b>3. TOTAL SOFTWARE DEVELOPMENT</b>	6	20.314	6	24.006	9	21.867
	<b>TOTAL ADP CAPITAL PURCHASES PROGRAM</b>	13	22.046	9	25.231	13	27.198
	<b>GRAND TOTAL CAPITAL PURCHASES PROGRAM</b>		41.415		49.987		51.304

<b>CAPITAL PURCHASES JUSTIFICATION</b> (Dollars in Thousands)	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. JIG GRINDERS (2)	D. Jacksonville
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6DE1EL0279PR

Element of Cost	2000			2001			2002					
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>				1	1800	1800						

**OPERATIONAL DATE** 1-Apr-02

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$0	\$52,880	\$52,880
AVERAGE ANNUAL SAVINGS (Discounted)	\$0	\$30,026	\$30,026
PAYBACK PERIOD	#DIV/0!	NA	NA
RATE OF RETURN (ROR)	0%	2%	2%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

**1. DESCRIPTION & PURPOSE OF PROJECT.**

Replace two (2) conventional Jig Grinders built in 1981, with new CNC Jig Grinders. The CNC type grinder will provide added capability such as grinding a square hole or grinding a sphere. These complex shapes are found on various Landing Gear components. These machine tools are the most precise equipment utilized within this command.

**2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?**

The existing Grinders are experiencing electronic failures. Replacement parts are not stocked due to the age of the machines, which were manufactured in Switzerland. The mechanical portion of each Grinder is showing moderate wear and corrosion damage and cannot be expected to hold required tolerances. New Jig Grinders will be factory supported with parts for approximately 10 years and be capable of holding extremely close tolerances.

**3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?**

Utilize the Grinders until they become inoperable, at which time the NADEP will have a work stoppage and have to disestablish capability. When the requirement for grinding landing gear spheres or square holes arises, the NADEP will have to request an alternate source for this particular operation.

**4. IMPACT IF NOT ACQUIRED.**

Extensive turn around time and or loss of Jig grinding capability.

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. DEPOT ATE TPS OFFLOAD TO CASS 6DC2EL0445PR	D. North Island
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Element of Cost	2000			2001			2002					
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>	1	1500	1500	1	1500	1500	1	1555	1555			

**OPERATIONAL DATE** 1-Nov-02

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$635,000	\$315,500	\$950,500
AVERAGE ANNUAL SAVINGS (Discounted)	\$390,180	\$193,861	\$584,041
PAYBACK PERIOD	8.6	NA	4.9
RATE OF RETURN (ROR)	11.0%	5.5%	16.4%

**PROJECT INFORMATION NARRATIVE:** (If more space required, continue on separate sheet.)

1. **DESCRIPTION & PURPOSE OF PROJECT.** This is Phase 3 of an ongoing Depot avionics Automatic Test Equipment/Test Program Set (ATE/TPS) modernization effort. The first two phases focused on the offloading of aging commercial ATE to Consolidated Automated Support System (CASS). At this point the engineering offload team has successfully transferred 57 TPSs from several legacy ATE systems. The end result will be the elimination of several old ATE systems. This project will reduce future operating cost.
  
2. **WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?** There are current deficiencies in the following systems:
  - a. WJ1540: This is an aging system with obsolete system components that have not been manufactured for 15 years or more. The uniqueness of the system requires special training, maintenance and engineering support.
  
  - b. J1103: This system was transferred to NADEP as part of the BRAC and has never functioned since being installed in the production shop. The production shop has resorted to a hot bench approach using I-level manual test system and labor intensive manual fault isolation techniques to accomplish the workload.
  
  - c. IATS: This system supports a high number of workload items from the F/A-18 aircraft and the depot is having difficulty meeting workload commitments with only one system.
  
  - d. HATS: This is an aging system requiring considerable maintenance and engineering support what will be retired from the inventory.
  
3. **WHAT ALTERNATIVES HAVE BEEN CONSIDERED?**
  - a. **DO NOTHING:** In the case of the WJ1540 and HATS this would result in increasing maintenance and engineering support cost. There is also the possibility of extended down times that would seriously affect the Depot's ability to provide timely fleet support. In the case of the J1103 and IATS, the issue is a very limited workload capacity. The impact of extended down time would be even more serious.
  
  - b. **REPLACE THESE SYSTEMS WITH NEW MODELS:** \$2,100,000 to replace/refurbish exiting ATE. This would be a very difficult process. Current versions of the above test system are not available as COTS. To directly replace would require an expensive reengineering effort. These systems would require unique logistical and engineering support for their life cycle. TPSs would then have to be developed for the new testers at an estimated cost of \$4,000,000
  
  - c. **OFFLOAD TPSs TO EXITING AND LOGISTICALLY SUPPORTABLE ATE:** NADEP has already made a substantial investment in the acquisition and installation of CASS stations. By moving depot support from aging systems to CASS we will avoid the increasing operating cost of these old systems. By reducing the total number of different ATE system we would we would avoid the recurring support cost associated with maintenance, logistics, training and engineering.
  
4. **IMPACT IF NOT ACQUIRED.** Support to the Fleet will be at a higher cost.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. PLASTIC MEDIA BLAST REPLACEMENT				D. Cherry Point		
						6DF1EL0042PR						
Element of Cost	2000			2001			2002					
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>				1	1500	1500						
<b>OPERATIONAL DATE</b>	1-Jun-02											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$261,653	\$0	\$261,653									
AVERAGE ANNUAL SAVINGS (Discounted)	\$148,569	\$0	\$148,569									
PAYBACK PERIOD	8.9	#DIV/0!	8.9									
RATE OF RETURN (ROR)	10%	0%	10%									
<u>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</u>												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT.</p> <p>This project replaces one Plastic Media Blasting System used for paint removal on assigned airframes and associated parts. The replacement system will provide more efficient removal of paint on aircraft exteriors and interiors. A floor reclamation system will be provided as part of a MILCON project (P-979) that will replace the existing Plastic Media Blast (PMB) facility in which the existing equipment is housed. The floor reclamation/recovery system will reduce costs associated with reclamation and disposal of plastic media, allowing for automatic recycling of the media versus existing method of sweeping media into the reclamation system.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/ PROBLEM?</p> <p>The existing PMB system EIN 036068 has been in operation since 1990. A MILCON project requires moving PMB depaint operations into a new facility. The new MILCON facility will be equipped with a floor recovery/reclamation system that will require the blast system to be equipped with appropriate media reclaimer and dust collector units. Therefore, a new PMB system with: blast unit subsystem, floor recovery equipment, media cleaner, reclamation subsystem, dust collector, and control unit subsystem; designed for the new facility, will be required.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? The following alternatives have been considered;</p> <p>The following alternatives have been considered:</p> <ol style="list-style-type: none"> <li>1. Continue to use existing PMB system in its current facility and perform glass bead blasting operations in the new facility.</li> <li>2. Replace existing plastic media blast system with a new system designed for the new MILCON facility.</li> </ol> <p>Alternative #1 was not chosen because the vast majority (75%) of depaint/corrosion control blasting performed is PMB as opposed to glass bead blasting. It is more cost effective to perform the higher volume operation in the new facility.</p> <p>Alternative #2 was chosen as explained for the reasons provided in paragraph #1 and #2 above.</p> <p>4. IMPACT IF NOT ACQUIRED. Will be unable to utilize the new MILCON Facility.</p>												

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. CNC VERTICAL LATHES (3) 6DE1EL0280PR	D. Jacksonville
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Element of Cost	2000			2001			2002					
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>				1	1000	1000						

**OPERATIONAL DATE** 1-Apr-02

<b>METRICS:</b>	<b><u>AVOIDANCE</u></b>	<b><u>SAVINGS</u></b>	<b><u>TOTAL</u></b>
PROJECTED ANNUAL SAVINGS	\$0	\$84,579	\$84,579
AVERAGE ANNUAL SAVINGS (Discounted)	\$0	\$48,025	\$48,025
PAYBACK PERIOD	#DIV/0!	NA	NA
RATE OF RETURN (ROR)	0%	5%	5%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT.  
 Replace three Engine Lathes and one Vertical Turret Lathe which are worn beyond repair, with three new CNC lathes. The lathes to be replaced are as follows: , PA# 002207, manufactured in 1970, PA# 033562, manufactured in 1972, PA# 004358, manufactured in 1980, PA# 224693, manufactured in 1985.
  
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?  
 All four lathes are worn beyond repair. These lathes are used to turn hard face plasma coatings that are applied to engine components. These coatings are very abrasive, and during the course of operation, the abrasive particles cut into (wear) the way surfaces of all four lathes. This wear on the precision way surfaces creates excess tolerance on the tool cutting portion of the lathe. Holding the critical part dimensions will become increasingly difficult, if not impossible to obtain. Three new CNC Lathes will replace four older lathes. Also, the new CNC Lathes will be vertical positioned, thereby allowing easier part set-up and fixture change.
  
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?  
 Utilize the existing Lathes until they become inoperable, at which time the NADEP will have to disestablish capability causing a work stoppage and will have to request an alternate source for this particular Engine component rework.
  
4. IMPACT IF NOT ACQUIRED.  
 Extensive turn around time and missed Engine Program schedule.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot							C. CASS STATION EQUIPMENT (3)			D. North Island 6DC2EL0446PR		
	2000			2001			2002					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>							3	2,000	6,000			
<b>OPERATIONAL DATE</b>	1-Apr-03											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$3,150,000	\$168,861	\$3,318,861									
AVERAGE ANNUAL SAVINGS (Discounted)	\$1,935,539	\$103,758	\$2,039,296									
PAYBACK PERIOD	2.2	NA	2.1									
RATE OF RETURN (ROR)	32.3%	1.7%	34.0%									
<u>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</u>												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. three Consolidated Automated Support System (CASS), AN/USM-636(V)6, RF configured stations will be purchased to support the Depots Engineering and Production departments.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY /PROBLEM? Engineering Department - Operational Test Program Set (OTPS) Development and In-Service Engineering competencies require CASS stations on which to perform these support functions CASS assets currently in Engineering custody will be inadequate for the projected FY 2002 workload. The procurement of one RF configured CASS station will satisfy the projected requirements for the support of F/A-18 and S-3 avionics systems.</p> <p>Engineering Department workload includes development of Depot level Operational Test Program Set (OTPS) for CASS test stations and performing "In-Service Engineering" for Intermediate level OTPS utilized on fleet CASS stations. These engineering workloads are increasing as new "I" level OTPSs are delivered to the fleet. CASS test stations currently in Engineering custody will be inadequate for the projected FY-2002 workload. The procurement of one RF configured CASS station will satisfy the projected requirements for the support of F/A-18 and S-3 avionics systems.</p> <p>Production Department - NAVICP level schedule component workload commitments supported by existing CASS stations continue to increase every quarter. Four production shops currently operate 9 CASS stations at 53% of capacity based on full three shift operation. The Depot continues to receive PMA-260 offload (OTPSs) and develop in-house OTPSs to replace aging Automatic Test Equipment systems. This system alone constitutes 12,000 hours per year of potential production workload. The procurement of two RF configured CASS stations will satisfy all of the projected capacity requirements.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? Engineering Department - Do Nothing - Status Quo: Operate an additional shift on existing assets. Raise operating expenses for premium pay; increase risk of failure or project delays for equipment downtime; risk of delays across multiple projects (F/A-18, E-2C, S-3B) sharing limited assets. Rebuild Existing Machine: N/A for expanded capacity. Production Department - Do Nothing - Allow the existing CASS stations to reach 100% of their capacity and turn away all requests to increase workload commitments. Increase Asset Utilization - Train additional artisans to operate CASS stations and run around the clock operation.</p> <p>4. IMPACT IF NOT ACQUIRED. Engineering Department - TPS Engineering organizations will be unable to execute the development and in-service (engineering investigations, software updates, ECP validation, etc.) in a timely manner if the number of CASS stations is inadequate. Projects will be delayed and overrun their budgets. Production Department - Implementing the use of many of the CASS OTPSs will not be possible when the station capacity is reached. NAVICP will have to rely on other sources (contractors) for component workload support as the Depot will be unable to satisfy the core workload demands. This will drive up costs to the fleet customer as competition for workload does not exist.</p>												

<b>CAPITAL PURCHASES JUSTIFICATION</b> (Dollars in Thousands)	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. COORDINATE MEASUREMENT MACHINE 6DF2EL0150PP	Cherry Point
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Element of Cost	2000			2001			2002		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>							1	1500	1500

**OPERATIONAL DATE** 30-Jun-03

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$31,205	\$0	\$31,205
AVERAGE ANNUAL SAVINGS (Discounted)	\$19,174	\$0	\$19,174
PAYBACK PERIOD	NA	#DIV/0!	NA
RATE OF RETURN (ROR)	1%	0%	1%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

**1. DESCRIPTION & PURPOSE OF PROJECT.**

The project proposes to procure a coordinate measurement machine for the Precision Measurement Center (PMC) located at the Naval Engine Airfoil Center (NEAC). The PMC is requesting that a new high precision Gantry style design coordinate measurement machine with a large volumetric measurement envelope be procured.

**2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?**

The Precision Measurement Center (PMC) presently utilizes two coordinate measurement machines (CMMs) in performing geometrical inspection and calibration requirements involving the following programs: First Article Inspection, Product Verification Inspection, Surplus Inspection, Engineering Investigations, Production Support, Calibration Support and Reverse Engineering Processes. The scheduled workload for the PMC has both CMMs being utilized full-time. The shop is experiencing high turn-around time due to the backlog at the two machines. The new proposed machine would eliminate the current backlog, reduce turn-around-time, and provide for new workload capabilities such as airframe and dynamic component fixtures and alignment jigs, large gear measurement, airfoil wings, propellers and rotor blades. The new CMM would also allow for safer handling of large components due to the gantry design. A large percentage of the components being inspected within the PMC are very heavy and take up a large volumetric measurement area of the CMM. Only one of the CMMs is capable of handling these large and heavy components and this CMM is being utilized on two shifts. To load these large and heavy components onto the CMM a Jib Crane must be utilized. This creates not only a safety issue to the technician loading the component onto the CMM but also possible damage to the CMM or the component if the component were to bump into or drop onto the CMM. Overall operational cost would increase as a result of adding a third machine to the process. However, the increase would be well justified by the expected gains in productivity. In essence, for every additional dollar spent on operating expenses, the PMC's productivity would increase by a factor of 1.45. Financially speaking, for every additional \$1 spent on operating expenses relative to the project, the PMC would gain \$1.45 in revenues.

**3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?**

Maintain Status Quo - Based on current capacity, the PMC's has an annual processing deficiency of 1,920 hours. The ideal situation would be to increase the PMCs capacity so that all planned workload could be processed.

Procure a new coordinate measurement machine - Eliminates safety concerns relative to loading heavy parts onto the existing coordinate measurement machine and reduces backlog and turn-around-time by adding a third machine to an already fully burdened process. By adding a third machine to the process, the PMC would have sufficient capacity to eliminate it's current processing deficiency.

**4. IMPACT IF NOT ACQUIRED.**

Because of insufficient capacity, the Precision Measurement Center has an annual processing deficiency of 1,920 hours. Per the Naval Engine Airfoil Center's Business Operations Division Director, NEAC incurs lost revenues in the amount of \$130 for every hour of backlog.  
Lost Revenues: 1,920 Hrs / Yr x \$130 / Hr = \$249,600 / Yr

**5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.**

**CAPITAL PURCHASES JUSTIFICATION**  
(Dollars in Thousands)

A. FY 2002 PRESIDENT'S  
BUDGET

B. Department of the Navy/Depot Maintenance/Aviation Depot						C. MATERIAL HANDLING SYSTEM, BUILDING 133 6DF2EL0090PN				Cherry Point
	2000			2001			2002			
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
<b>INVESTMENT COST</b>							1	1250	1250	

**OPERATIONAL DATE** 1-Jun-03

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$250,990	\$150,000	\$400,990
AVERAGE ANNUAL SAVINGS (Discounted)	\$154,222	\$92,169	\$246,391
PAYBACK PERIOD	7.2	18.8	3.9
RATE OF RETURN (ROR)	12%	7%	20%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT.

This project proposes to procure a storage and retrieval system for engines and components workload in Building 133 of the Naval Aviation Depot Cherry Point. The system will reduce indirect labor of Production Controllers by providing better control of the kitting process. It will also reduce non-production space requirements, and reduce the risk of damage, loss, or pilfering of parts in storage. Further, it will give Production Control the ability to keep track of work in process.

2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?

After an engine or component is disassembled and cleaned, the parts are examined to determine if they require repair or replacement. Those parts that require no work are routed to material storage, where they remain while awaiting the rest of the parts of the kit. A kit is the set of all parts or assemblies that make up an engine or component. Since lead times for the repair or replacement of parts differ, at any given time the different kits will be in varying stages of completion. The Production Controller (PC) is responsible to ensure that kits are complete before they are sent to be reassembled. In order to maintain schedules, the PC must continually evaluate the locations of the parts of the kits to adjust priorities. Currently, the PC keeps manual logs and must physically locate kits. To get to the kits, which are stored on various types of conveyors, he must move the conveyors around until the correct one is found. With the new system, the PC will be able to locate parts of a kit quickly, via computer.

Aside from the time consuming task of locating specific parts on conveyors, the current storage method also makes poor use of space. Many of the parts are stored in an open area formerly used by Production but now cleared out. The area is always full, and PCs continually move parts around trying to fit more in. Consequently, parts "spill over" into aisles, hindering flow of people and materials, and increasing risk of damage from collision with trucks or fork lifts. Also, the fact that conveyors are moved around so often to locate parts or squeeze in more parts means that each part is handled more often, increasing labor cost and risk of damage. By installing a racking system, vertical space can be used, increasing the overall capacity and minimizing handling moves.

Another problem with an open storage system is the lack of security. PCs offer anecdotal evidence of "backrobbing" of parts by artisans. Backrobbing, or diverting, is the practice of removing a part from one assembly and placing it on another. For example, suppose an engine kit is being assembled, and it lacks one part. Suppose another kit with a later due date has that part. By putting the part from the second kit onto the first, the first can be completed and sold. The part that the first kit was waiting for could then be installed on the second, when it is completed. Backrobbing can be a useful tool to help PCs maintain control of the schedule, but accurate accounting of parts is vital. When artisans, rather than PCs perform the divertings, control is lost, and PCs must then try to figure out where parts are. It quickly becomes an administrative and logistical nightmare. The new storage system would not only provide needed security of the parts, but also would allow the controllers to make accounting changes for divertings automatically, providing the necessary configuration control.

Finally, the lack of control results in excess inventory. Because of accounting problems with the current method, parts are "lost" in the system. That is, if accounting is not correctly performed following divertings, PCs have no way of knowing where substitute parts are. Since engines are sometimes inducted missing parts, and since it is often quicker to order parts from supply than locating lost parts in the shops (which may or may not even be there), PC sometimes orders parts from supply that are in duplication of parts out in the shops. This results in excess inventory.

**CAPITAL PURCHASES JUSTIFICATION**  
**(Dollars in Thousands)**

A. FY 2002 PRESIDENT'S  
BUDGET

B. Department of the Navy/Depot Maintenance/Aviation Depot

C. MATERIAL HANDLING SYSTEM,  
BUILDING 133

6DF2EL0090PN

Cherry Point

3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?

The following alternatives have been considered;

1. Status Quo - Continue to process storage, kitting, and retrieval of parts completely manually.

2. Procure a fully automated Storage, Kitting, and Retrieval System that would automatically store and retrieve parts while allowing Production Control to maintain inventory and accounting of parts and kits electronically.

3. Procure a manual Storage, Kitting, and Retrieval System that would still allow electronic inventory and accounting of parts and kits.

Alternative # 1 was not chosen. Business as usual will not result in any substantial process savings, nor would it increase capacity and efficiency of storage space.

Alternative # 2 was not chosen. Due to vertical space constraints in Building 133, there would not be sufficient number of bins to justify on an economic basis automated lift trucks and powered conveyors.

Alternative #3 was chosen. By using manual lift trucks and an electronic control system for large parts in conjunction with vertically-revolving small parts storage systems, security and control can be maintained while increasing overall storage capacity. The problems described above are self-perpetuating. As the storage area becomes more crowded, parts are moved around more, lost more, and damaged more. Excess inventory increases, which further consumes available space.

4. IMPACT IF NOT ACQUIRED.

Production control would continue to be inefficient. Work-in-process would increase and eventually take over space that production uses to stage work. Parts would be damaged and require reprocessing, which would increase costs and turnaround time. It would reduce competitiveness and, ultimately, the Depot's ability to support its customers.

5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. WATER JET ROUTER	6DE2EL0320PP	Jacksonville
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Element of Cost	2000			2001			2002					
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>							1	1330	1330			

**OPERATIONAL DATE** 1-Jun-03

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$0	\$1,007,403	\$1,007,403
AVERAGE ANNUAL SAVINGS (Discounted)	\$0	\$619,005	\$619,005
PAYBACK PERIOD	#DIV/0!	1.5	1.5
RATE OF RETURN (ROR)	0%	47%	47%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT. Project shall provide for the purchase and installation of an additional water jet routing system to expand the current capacity of the existing installation.
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?  
The current system is unable to meet the current component processing demand because of operational capacity. The equipment is currently being run during two shifts along with 2 additional hours of post shift labor for each period or a combined 20 labor hours per day. Although the equipment has scheduled maintenance performed the current workload is prematurely wearing the machine out.
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? The water jet routing process has proved to be a valuable tool to remove plasma and plated surface materials with great accuracy and speed without adversely affecting the constituent nature of the component. The blasting and grind methods have proved inefficient and time consuming and are not as consistent in removal as the water jet system.
4. IMPACT IF NOT ACQUIRED. Immediate impact of project is that the current machine will wear out and we will lose the established capability to process parts with the use of the current equipment and will not have the capacity for future planned F-414 workload.
5. IDENTIFY LOCAL, STATE, and FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. ADVANCED PAINT STRIPPING SYSTEM	6DE1EL0246PE	Jacksonville
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Element of Cost	2000			2001			2002		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost

<b>INVESTMENT COST</b>				1	2505	2505			
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**OPERATIONAL DATE** 1-Jun-02

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$0	\$218,757	\$218,757
AVERAGE ANNUAL SAVINGS (Discounted)	\$0	\$134,417	\$134,417
PAYBACK PERIOD	#DIV/0!	NA	NA
RATE OF RETURN (ROR)	0%	5%	5%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT. Relocate to Hangar 101S the existing temporary Plastic Media Blasting (PMB) operations in Hangar 122 by replacing the Vinyl covered moveable enclosure booth and portable Aerolyte blasters with a new state-of-the-art permanent metal PMB Booth , capable of housing all small aircraft ( F/A-18, F-14, EA-6, S-3, H-60), except P-3 Aircraft. ( P-3 Aircraft are expected to be chemically stripped in Hangar 101S without the need for additional Plastic Media Blasting.)
  
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? Environmental requirements have prohibited the further use of Methylene Chloride (a Hazardous Air Pollutant or "HAP" chemical paint stripper). The replacement NON-HAP chemical strippers are not as effective in removing paint. Plastic Media Blasting has to be employed to remove the paint that the NON-HAPS chemicals can't remove. Both chemical paint stripping and PMB blasting were being performed in Hangar 101S. This Hangar is not equipped with the required ventilation and filtration equipment mandated by NESHAP and OSHA to reduce personnel exposures to Cadmium and other hazardous metal dusts generated during blast operations. The costs associated with a complete renovation of the ventilation system in Hangar 101S was cost prohibitive and therefore not pursued. NADEPJAX was given until 9/1/99 to comply with the mandate , or face a complete shutdown of PMB operations. The only area equipped with a NESHAP/OSHA compliant filtered ventilation system and capable of supporting the PMB operations was Hangar 122. Hangar 122 was being used primarily for painting and priming of aircraft. In order to keep most of the PMB dusts from contaminating the painting/priming operations, and to comply with NESHAP/OSHA regulations, a temporary portable Enclosure was procured and installed as a "stop gap" measure. With four aging portable blasters, this temporary set-up is the ONLY operational system that allows NADEPJAX to fulfill its mission and obligations to the Fleet. The purchase and installation in Hangar 101S of this state-of-the-art, stand alone permanent new metal PMB System will ensure compliance with OSHA/NESHAP Regulations for Environment and personnel protection and will maximize the chances for NADEPJAX to meet its Production obligations to the Fleet.
  
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? A FlashJet Coatings Removal System was considered , along with a Fluidized Bed, Sodium Bicarbonate Blasting and Vibratory System . Investigations found that each system was unsatisfactory for reasons of cost, limited application, reliability, corrosion, temperature constraints and lengthy stripping time. Due to the size of the items being stripped, the use of smaller walk-in booths and glove boxes is impractical, since it will require massive dismantling of the Aircraft. Risk avoidance by way of contracting out the stripping functions is not viewed as a realistic solution . A Contractor's ability to process parts, components or whole Aircrafts could ultimately determine the NADEP's ability to meet Fleet Aircraft schedules and Programs , specially in times of crisis (Middle East and Balkans Regions). The procurement and installation of this new permanent system with improved ventilation, air filtration and reliability (along with the available HAPS chemical strippers) is considered the best combination to comply with existing regulations and to ensure adequate support for present and projected workloads.
  
4. IMPACT IF NOT ACQUIRED. If the temporary PMB System in Hangar 122 is unable to meet production needs and/or maintain compliance with NESHAP/OSHA requirements, the COMPLETE paint stripping, painting and priming operations could be subject to a shutdown.
  
5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT  
As previously indicated, this project is a combination of Production, Replacement and Environmental/Safety needs. For Cadmium, compliance is mandated under 29 CFR 1910.1027 (g) and (f)(1)(iv), which has been law since 1992.  
Environmental compliance is mandated under the National Emissions Standards for Hazardous Air Pollutants -Aerospace (NESHAP).

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. DEPOT MAINTENANCE SYSTEMS HARDWARE REPLACEMENT				Jacksonville		
						7DNKL0003GR (7DE2KL0347GR)						
2000			2001			2002						
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>			0			0	1	970	970			
<b>OPERATIONAL DATE</b>	1-Oct-02											
<b>METRICS:</b>	<u>AVOIDANCE</u>	<u>SAVINGS</u>	<u>TOTAL</u>									
PROJECTED ANNUAL SAVINGS	\$487,842	\$0	\$487,842									
AVERAGE ANNUAL SAVINGS (Discounted)	\$369,861	\$0	\$369,861									
PAYBACK PERIOD	2.3	#DIV/0!	2.3									
RATE OF RETURN (ROR)	38%	0%	38%									
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. This project is required to update and provide needed capability for the facility's MRP and other DM programs automated resources. The DM systems are in such a high rate of growth and change, that by FY2002, the technological changes in server technology will be a critical item for this command.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The present problem stems from the requirements that in spite of the latest efforts in Oracle development and disk drive technology base operations, key portions of MRP batch runs such as Anticipated Supply are taking an inordinate amount of time to complete. The completion time, which in some cases last as long as 36 hours, infringes on backup time which puts the entire system and project at risk. The new technology upgrade will be twice as fast and will run under a 64-bit platform. This will speed up all points of data throughput and provide redundant system capability in all areas. Additionally, the following cost-avoidance efforts need to be considered:</p> <p><u>a. Time-savings:</u> The present method runs NADEP DM applications on either T520 or T600 computer systems. The T520's are 32-bit operating systems which run at around 180MHZ per system. Although the T600 can operate in a 64-bit environment, it still runs at only 180MHZ speed. The new V-class system runs at 2.5 times the present system plus the fact that the differences in internal bus architecture on the V-class machines should add another .5 times to the speed. If it's assumed that applications software takes full advantage of the new system, reports and programs should run between 2 and 3 times faster than at present. This in essence reduces man-hours compared to what they are now. (This includes both general user man-hours and man-hours expended by 7.2.4 personnel in backups/restores.)</p> <p><u>b. Electrical costs:</u> Under the present method, there are 4 30-amp systems running in the computer room. Under the new system, these will be replaced by 1 30-amp computer system. This reduces electrical power used by DM systems to ¼ of what it is presently plus the fact that air-conditioning costs will decrease due to only 1 system being used.</p> <p><u>c. Square footage:</u> Under the present system, 48 square feet is being used by 4 independent systems. This figure is conservative, because it doesn't count provision of air space between these systems. Under the new system, only 12 square feet of floor space would be consumed. At \$55 per square foot which is a conservative construction/reconstruction figure, there is a one-time savings of \$1,980 in square footage usage.</p> <p><u>d. Maintenance costs:</u> Under the present method, contract maintenance costs are \$309K for the present year. It is estimated that this figure will rise by a minimum of 10% per year for the next 3 years for a total of \$411,280. This figure is conservative because as systems age, maintenance costs escalate. Estimates for maintenance on the new system range between \$100 and \$120K with a maximum of \$150K. The new system will begin saving more than \$250K for each year these servers are on maintenance.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? The status quo is not acceptable and all alternatives known or planned by Information Management Division (7.2.4) or Hewlett Packard have been tested and implemented. As more requirements for DM Systems and MRP data is required, batch processing time will become more unreasonable to support.</p> <p>4. IMPACT IF NOT ACQUIRED. If this solution is not implemented, the facility's entire scheduling program is put at risk because of proper backup strategies cannot be implemented because of excessive program run times. Additionally, if this project is not planned and procured the current maintenance budget will increase from \$309,000 to \$411,280 in 2002.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Depot Maintenance/Aviation Depot							C. DEPOT MAINTENANCE SYSTEMS HARDWARE REPLACEMENT				Cherry Point	
							7DNKL0003GR (6DF2KL0151GR)					
2000			2001			2002						
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>			0			0	1	3000	3000			
<b>OPERATIONAL DATE</b>	30-Sep-03											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$1,152,747	\$0	\$1,152,747									
AVERAGE ANNUAL SAVINGS (Discounter	\$873,964	\$0	\$873,964									
PAYBACK PERIOD	3.2	#DIV/0!	3.2									
RATE OF RETURN (ROR)	29%	0%	29%									
<b>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</b>												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT The Naval Aviation Depot, Cherry Point, NC, is implementing Defense Maintenance (DM) system applications, which are crucial to the efficient operation of our Depot-Level maintenance mission. The Depot's requirements for readiness and to produce quality products in a timely manner dictate a great dependency upon our computer systems. This requires our computer systems to be highly available, functional, fast, and redundant. Many of the DM applications have been implemented and are growing or need modifications. Some DM applications are still being implemented. The computer system requirements for the DM applications are growing daily, well beyond the planned bounds that were estimated 5 years ago. Because of this, our current HP Unix-based servers are insufficient and do not meet the requirements of the DM applications. The purpose of this project is to phase the replacement of aging servers systems with modern, high capacity server systems to meet our current and future application requirements.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVES THE DEFICIENCY/ PROBLEM. The deficiency is based on three issues: the current and near future computer system requirements of the DM system applications; the lack of expandability of the current equipment to meet the DM system application requirements; and the age of the current computer systems. Four HP T520 computer systems currently house the following applications: a) Manufacturing Resource Planning (MRPII) (production scheduling tool which chooses work based upon resources available – orders parts as required) which primarily supports these personnel: Procurement, Production Control, Production Support, Production Supervisors, Master Scheduler, b) Open Plan- (Interfaces with MRPII) (manages aircraft deck storage based upon engineering requirements for aircraft repair or remanufacture) - 660 (Industrial Engineers), Production Supervisors, Master Scheduler, c) Dekker Tracker- (Interfaces with MRPII) Master Scheduler, Department Heads, Production Division Directors, Production Supervisors, Front Office personnel, d) Facilities and Equipment Maintenance (FEM) - Primarily used by 610, 650, Master Scheduler, Production Control, Productions Supervisors (Interfaces with MRPII), e) Time and Attendance (TAA)- Depot Wide (Interfaces with MRPII), f) Data Warehouse (houses information concurrently from WCS/MRPII/TAA applications; reports from all DM systems and archive of data) - Production Supervisors, Planning and Estimating, Master Scheduler, Production Control, Production. MRPII is the primary application that will be used to schedule and control production activities. In six months, MRPII will have 1500 users with 600 concurrent users. Each concurrent user will use, according to the standards set by the vendor of our MRPII application, 2 MB of Random Access Memory (RAM). According to the application's database managers (DBAs), the Oracle database has to reserve a minimum of 750MB of RAM for minimally acceptable performance for this type of application. However, to operate efficiently for this type of application, Oracle needs to reserve 1.5GB RAM. The computer server system has overhead of about 500MB of RAM. The total RAM minimally required is 2.45GB RAM, while the efficient total is 3.2GB RAM. Because of the mission criticality of MRPII and the other DM applications, the NADEP has already invested in High Availability (HA) software for HP systems which allows an application to fail-over, or move applications from a failing computer server to a server that is still running. The HA software creates system redundancies within the server, while the disk arrays are redundant inherently based upon their configuration as Redundant Arrays of Inexpensive Drives (RAID). Data storage will soon become an issue. Anticipated growth of the applications, expected over the next six months, will exacerbate the problem. Currently, our HP systems have enough disk space for the immediate future. However, disk space estimates have grown 5 fold since the initial estimates and they are still climbing. By 2002, we will need to increase capacity from the current 600GB to at least 4000GB. The current computer systems don't have the capacity to increase much above 1000GB without buying more system infrastructure. These computer server systems need to be replaced because even at their highest capacity, there will not be enough computer resources to run the DM applications with redundancy (HA).</p>												

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>		A. FY 2002 PRESIDENT'S BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot	C. DEPOT MAINTENANCE SYSTEMS HARDWARE	7DNKL0003GR (6DF2KL0151GR) Cherry Point

PROJECT INFORMATION NARRATIVE:

A solution to this computer system capacity problem must be found for the depot to efficiently meet its mission of quality and timely aircraft repair. Another problem with the current hardware is its age. These systems were bought in 1996. By FY2002, they will be six years old. HP declared these systems to be at their "end of life" in 1999. This means that no new components are being made for this system. All parts particular to this system can no longer be bought or replaced (when the parts fail) as new parts. Only refurbished and used parts are available for replacement for failed components or for upgrades. This introduces more chance for failure for the system. With greater system demand, the refurbished parts will fail more often. This situation is made worse since HA redundancies may not be able to keep the applications from crashing because of the lack of system resources on the "running" server at fail-over time. Also, the cost of HP system maintenance contracts will rise significantly over the next few years. And, maybe worse of all, HP has stated that they may no longer give support for our current equipment by 2002 or 2003. According to the industry standard, a typical outage of a business critical system is estimated to cost \$10,000 or more per hour. Additionally, we can anticipate that the current cost for support and maintenance, at approximately \$125,087 a year, will only increase. It is very likely that by the year 2002, the costs will meet or exceed \$155,490. Production and production support use this data for all phases of aircraft and engine repair, procurement, delivery of parts and scheduling, as well as for information requests and information reporting. System failure results in the loss of critical data. This data cannot readily be corrected. The data will require handwritten records of all transactions that took place from the first minute of downtime. Additionally, all data must then be manually keyed into the system database in order to correct the data as this system has no "return to paper system".

3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?

Status Quo. Modify the systems as deficiencies dictate. Add as much memory as allowed by the system until the system eventually quits. As stated in 2, memory will be bought for these systems to bring them to 3.75GB. The problem is that even 3.75GB won't be enough and would consist of refurbished equipment.

Alternative 1: Another alternative is to upgrade the already obsolete T520 systems to T600 systems which are also obsolete, but they are 64 bit, 180MHz. With that upgrade, the RAM can be upgraded to 7 GB addressable. The alternative system will run slightly faster; however, it is estimated that we will out grow it, especially with redundancy issues, before the middle of year 2001. This system does not have access to newly manufactured components either; all components obtained for this system are remanufactured. The cost estimate for this alternative is over one million dollars for refurbished equipment that might not be supported by HP by 2002/2003. This alternative is therefore not recommended.

Recommended is the phased replacement of the increasingly overburdened systems with newer, more expandable systems that would provide expansion capability, lesser possibility of failure, increased reliability, decreased support cost, and stable, fast DM system applications for the successful achievement of the mission of the Depot.

4. IMPACT IF NOT ACQUIRED. Downtime will increase due to higher failure rates of the increasingly overburdened equipment, thus impacting production negatively. Eventually, the overloaded systems will reach critical capacity that will render them unable to handle the volume of data from the MRPII and other DM applications. System crashes will become more likely. Support cost will increase. With the conversion of our business rules to match the MRPII way of doing business, a significant MRPII system crash would significantly damage the timely repair of aircraft as there will be no paper or other methods of doing business while MRPII is down. Expansion of the current system to support ever-evolving requirements will not be possible.

5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET									
B. Department of the Navy/Depot Maintenance/Aviation Depot							C. NAVAIR DEPOT MAINTENANCE SYSTEM - NDMS			D. NADEP									
							7DNDL0JT2GP												
2000			2001			2002													
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost										
CHERRY POINT	1	VAR	3,513	1	VAR	2,625	1	VAR	1,953										
JACKSONVILLE	1	VAR	3,834	1	VAR	2,953	1	VAR	2,142										
NORTH ISLAND	1	VAR	3,967	1	VAR	5,428	1	VAR	2,205										
<b>TOTAL INVESTMENT COST</b>	<b>3</b>	<b>VAR</b>	<b>11,314</b>	<b>3</b>	<b>VAR</b>	<b>11,006</b>	<b>3</b>	<b>VAR</b>	<b>6,300</b>										
<b>OPERATIONAL DATE:</b>																			
<table border="0"> <tr> <td></td> <td colspan="2"><b>FOC 2004</b></td> <td></td> </tr> <tr> <td></td> <td><b>AVOIDANCE</b></td> <td><b>SAVINGS</b></td> <td><b>TOTAL</b></td> </tr> </table>													<b>FOC 2004</b>				<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
	<b>FOC 2004</b>																		
	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>																
<b>METRICS:</b>																			
AVERAGE ANNUAL SAVINGS (FY99 Dollars)	\$20,640		\$289,000																
PAYBACK PERIOD	FY04-12																		
RETURN ON INVESTMENT (ROI)	3.7 to 1																		
<b>PROJECT INFORMATION NARRATIVE:</b>																			
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT.</p> <p>The NAVAIR Depot Maintenance System (NDMS) consists of acquiring (in specific cases), developing, implementing, and/or interfacing selected migration and legacy systems. Migration systems include a selected Production Management application, an Earned Value Management application, a Facilities Maintenance application and a Manufacturing Re-manufacturing , and Overhaul (MR0) solution, consisting of a Manufacturing Resource Planning application, and Advanced Planning and Scheduling application and several workbenches. NDMS also includes the necessary interfaces that integrated migration systems with select legacy systems and external applications. NDMS integration is a phased process. Phase I consists of NDMS implementation utilizing point-to-point interfaces integrating migration systems and NDMS workbenches. Phase II consists of final system integration utilizing a data warehouse architecture and the implementation of an Advanced Planning and Scheduling application. Phase II supports current NADEP decision support needs and provides the foundation for the ERP business model by establishing both technical commonality (combined data sets, integrated application databases) and streamlined business procedures. FY02-03 investments are primarily associated with continued Phase II (Integrated Data Environment) rollout to all sites, and required integration with the ERP initiatives. NDMS will provide the NADEPs the capability to exchange data between selected systems, facilitating the following functionality: Forecast and manage availability of depot materials, skills, and facility equipment; Review and negotiate workload and establish budgeted costs for forecasted workloads; Plan, design, develop work packages and schedule all production efforts; Collect data against plan - both labor hours and material usages (direct and indirect) by operation/activity as defined by production management; Cost account and financially track status of workload; and Standardize and synchronize the processes and information that cut across business areas within the sites.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?</p> <p>The NAVAIR depot maintenance community is driven to improve business performance in the depots while reducing depot unit repair costs, increase depot response times to increase weapon and system availability, and standardize data and information systems to reduce the cost to improve information accuracy. The NAVAIR NDMS is using an evolutionary program strategy to deliver the enterprise functionality to support improved business processes 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.</p> <p>NAVAIR DMS will provide the Command 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 costs. 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 mission planning, reducing expenses and inventory to lower the cost to the war fighter, improving readiness, sustainment, and interoperability for the war fighter, reducing labor through better resource and work planning, reducing overhead through elimination of non value-added activity, and improving schedule performance through more complete asset visibility; once implementation is complete and legacy applications are reduced or eliminated, ADP costs will come down markedly.</p>																			

<b>CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)</b>		A. FY 2002 PRESIDENT'S BUDGET
B. Department of the Navy/Depot Maintenance/Aviation Depot	C. NAVAIR DEPOT MAINTENANCE SYSTEM - NDMS	D. NADEP
	DNDL0JT1GP	

PROJECT INFORMATION NARRATIVE:

3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?

Maintain Status Quo- NAVAIR has not significantly invested in legacy system technology in six years. If selected, the NAVAIR budget for legacy system enhancement would need to be significantly increased without the benefit of improved business processes and standardized information systems.

4. IMPACT IF NOT ACQUIRED.

Without this investment, needed improvements to the depot business process and infrastructure will not be achieved. Implementation of repair and overhaul capabilities is critical toward improving mission readiness. As the DoD weapon systems continue to age, reductions to the workforce continue and the number of depots are reduced, efficient and effective organic repair capability is of increasingly growing importance to DoD in maintaining weapon systems combat readiness. In order to meet this demand, the depot community needs to dramatically strengthen its business processes and the associated information systems. NDMS is the enabler to achieving budgeted BPR savings, and is the foundation for the migration to ERP.

5. IDENTIFY LOCAL STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not applicable.

Justification of Funding Requirements

NAVAIR accepted many of the JLSC Program estimates and assumptions at PMRT (1 October 98).

(1) The JLSC believed that the MRP II COTS solution would be able to be deployed into a government aviation depot community with little to no modification. This assumption has been proven to be incorrect and numerous development projects (i.e. workbenches) are needed to fit the application into the Maintenance, Repair and Overhaul (MRO) environment that exists at the depots. The MRO workbench allows the MRP II application to operate in the depot environment as opposed to a purely manufacturing environment. The initial MRO workbench that was provided with the COTS product needed extensive redesign to address replacement factors in a re-manufacturing environment.

- The Master Production Scheduling workbench provided by with the COTS application proved to be dysfunctional and must be replaced by an Advanced Planning and Scheduling (APS) application.
- The Integrated Support System (ISS) workbench addresses the functionality of interchangeability and substitutability of parts. This required functionality is not addressed in the COTS product.
- The Depot Maintenance Data System workbench enhances the ability of the COTS product to report maintenance defects.
- The Router workbench facilitates the development of the Bills of Material (BOM) and Routers. BOMs and routes are required to operate the MRP II application.

(2) JLSC instructed all of the Services that BAIM was the approved system for all product management functionality needs. The BAIM application proved insufficient to satisfy the requirements of the NADEP community after numerous failed attempts to fit the application into the NADEP business environment. After conducting a business process and alternative application review, NAVAIR selected a product management application and is currently defining interface requirements, testing in a Conference Room Pilot (CRP) and addressing the capabilities and detailed functionality needs of the NADEPs.

(3) Specialized support applications that were approved by the JLSC have since been proven insufficient to the NAVAIR NADEP community. These systems include:

- Facilities and Equipment Maintenance (FEM) is being "upgraded" as FEMA
- Hazardous Substance Management System (HSMS) has been discarded for an alternative Hazardous Material Management System (HMMS)

The FY01 priority is to complete Phase II development at NADEP North Island and begin migration of the data warehouse environment to NADEPs JAX and Cherry Point. NDMS Phase II supports current NADEP decision support needs and provides the foundation for the ERP business model by establishing both technical commonality (combined data sets, integrated application databases) and streamlined business procedures. The rollout to other sites will continue through FY02.

Additionally, FY02/03 funding supports the upgrade of CompassContract Version 6.3 to Version 8.0. CompassContract 8.0 provides a major improvement in maintenance functionality and allows NAVAIR to access NADEP maintenance and operations from remote locations. This software upgrade will require NAVAIR to revise established training and process guides.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET	
B. Department of the Navy/Depot Maintenance/Aviation Depot						C. ENTERPRISE RESOURCE PLANNING (ERP) 7DNDL0001GR				D. NADEP	
2000			2001			2002					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
CHERRY POINT	1	VAR	3,000	1	VAR	4,333	1	VAR	4,489		
JACKSONVILLE	1	VAR	3,000	1	VAR	4,333	1	VAR	4,489		
NORTH ISLAND	1	VAR	3,000	1	VAR	4,334	1	VAR	4,489		
<b>TOTAL NADEP</b>	<b>3</b>	<b>VAR</b>	<b>9,000</b>	<b>3</b>	<b>VAR</b>	<b>13,000</b>	<b>3</b>	<b>VAR</b>	<b>13,467</b>		

**PROJECT INFORMATION NARRATIVE:** (If more space required, continue on separate sheet.)

1. **DESCRIPTION & PURPOSE OF PROJECT:** As the Navy embarks on the Revolution in Business Affairs initiatives, Enterprise Resource Planning (ERP) is the strategic initiative chosen by the Department of Navy's Working Group (WG) on Commercial Business Practices (CBP). As a result of the decisions of the CBP WG the Naval Aviation Systems TEAM (TEAM) will reengineer and standardize processes, integrate operations and data to increase productivity, and optimize supply chain management. The Naval Air Systems TEAM (TEAM) intends to manage ERP as a corporate project with constituent parts. Proposed allocations are based on an evolving program plan. This submission is for a multi-year, externally developed software project that will integrate business processes and tools in the areas of financial accounting, materials management, plant maintenance, project systems, controlling and human resources. Functionality will encompass the following:

- Financial accounting: general ledger, accounts receivable/payable, financial reports, special purpose ledger, and legal consolidations;
- Materials management: procurement, inventory management, vendor evaluation, invoices verification and warehouse management;
- Plant maintenance: maintenance notifications/orders, resource/maintenance planning, historical information, and service management;
- Project systems project tracking, work breakdown structure, budget management, cost and revenue planning;
- Controlling cost center accounting, activity based costing, and internal orders; and
- Human resources personnel administration, payroll, time management, planning and development, and organization management

2. **WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM:** There are numerous, independent, stand-alone information systems supporting multiple, inconsistent processes. Data is not timely and is difficult to consolidate. Many systems track similar data without a common data format. No single system does it all (i.e., planning, procurement, and inventory management). System interfaces are inconsistent, non-standard, and rely upon manual intervention. At the core of an ERP system is a central database that draws data from and feeds data into a series of applications supporting diverse functions. ERP will automate manual processes, drastically reduce data reconciliation, and improve the quality of information available to decision-makers. ERP will assist in providing end-to-end capability, in enabling consistent and reliable information on cost and performance, and in integrating business processes to optimize results.

3. **WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED:** The CBP WG under the auspices of Department of Navy's (DON's) Revolution in Business Affairs was tasked to focus on Commercial Financial Practices and best of breed business solutions. The CBP WG received in-depth briefings from industry, fleet representatives, defense agencies, and other government agencies. Of all the alternatives briefed and considering all the data provided, the members were unanimous in concluding that the best solution to business practices would be realized through ERP solution. As a result of the recommendation of the CBP WG, NAVAIR issued a request for proposal. Several companies bid, integrator and COTS solutions were evaluated through the source selection process and a contract was awarded for the NAVAIR ERP program management (PM) pilot.

4. **IMPACT IF NOT ACQUIRED:** The TEAM would have to continue business as usual and could not achieve gains in productivity through reengineered processes and an integrated information system. Non-standard, costly maintenance, and duplicative legacy systems would persevere. The ERP will assist other systems in becoming compliant with statutory requirements, the Government Management Reform Act (GMRA), the Government Performance and Results Act (GPRA), and the Chief Financial Officer (CFO) Act.

5. **IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT.** Not Applicable.

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY 2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Depot Maintenance/Aviation Depot	C. NIMMS	7DNDL0002GR	D. NADEP
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Element of Cost	2000			2001			2002					
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
CHERRY POINT							1	700	700			
JACKSONVILLE							1	700	700			
NORTH ISLAND							1	700	700			
<b>TOTAL NADEP</b>							<b>3</b>	<b>2,100</b>	<b>2,100</b>			

**PROJECT INFORMATION NARRATIVE:** (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT: NIMMS is a non-financial feeder system application to DIFMS. This project is the Depot's fair share of the DFAS initiative to bring NIMMS into compliance with the Federal Financial Management Regulations.
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVES THE DEFICIENCY/PROBLEM: NIMMS is non-compliant based on the the Release 99C operating version of the software. Deficiencies identified are in 5 areas, such as the USSGL, Inventory, Funds Control and Budgetary Accounting, Accounts Payable, and System Controls and Audit.
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED: NIMMS Release 00 will fix some of NIMMS USSGL deficiencies.
4. IMPACT IF NOT ACQUIRED: Will be non-compliant with Federal Financial Management Regulations.
5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET					
B. Department of the Navy/Depot Maintenance/Aviation Depot				C. EQUIPMENT, OTHER THAN ADPE & TELECOM (<1M)						D. NADEP					
				DNEU0000											
				2000			2001			2002					
Element of Cost				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>TOTAL INVESTMENT COST</b>				<b>22</b>	<b>VAR</b>	<b>7,884</b>	<b>26</b>	<b>VAR</b>	<b>11,727</b>	<b>25</b>	<b>VAR</b>	<b>9,371</b>			
ITEM	ITEM														
LINE #	DESCRIPTION			FY 2000		FY 2001				FY 2002					
6 DF 0 EM 0099 P P	Automated Cleaning Line		1	897											
6 DF 0 EM 0046 P R	K&T 4-Axis MM600 Replacement		2	827		1	850								
6 DF 0 EM 0086 P R	Hydraulic Sys Replacement HGR1 B137		3	500											
6 DF 1 EM 0050 P R	Laser Punch Replacement					2	860								
6 DF 1 EM 0081 P R	Automated Water Jet Coating Removal System (E)					3	850								
6 DF 1 EM 0140 P R	Rotorblade X-Ray System Replacement					4	700								
6 DF 1 EM 0073 P R	Material Handling System Upgrade B4225					5	650								
6 DF 1 EM 0087 P R	Hydraulic Sys Replacement HGR3 B137					6	500								
6 DN 1 EM 1000 P P	Plant Maintenance Reliability Product					7	200			1		171			
6 DF 2 EM 00167 P N	CA-PVD Coating System									2		950			
6 DF 2 EM 0132 P R	Cooling Turbine Test Cell Upgrade									3		600			
6 DE 1 EM 0339 P R	CNC Tube Benders (2)					1	750								
6 DE 1 EM 0336 P R	Real Time X-Ray System					2	750								
6 DN 1 EM 1000 P P	Plant Maintenance Reliability Product					3	274			1		221			
6 DC 1 EM 0463 P R	5-Axis Machining Center					1	855								
6 DN 1 EM 1000 P P	Plant Maintenance Reliability Product					2	274			2		220			
DE ES 0000	Equip-other than ADPE & TELECOM (<\$.5M)		19	5,660		14	4,214			20		7,209			
<b>TOTAL NADEP EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&lt;1M)</b>				<b>22</b>		<b>7,884</b>	<b>26</b>	<b>11,727</b>		<b>25</b>		<b>9,371</b>			

CAPITAL PURCHASES JUSTIFICATION										A. FY 2002 PRESIDENT'S BUDGET		
(Dollars in Thousands)												
B. Department of the Navy/Depot Maintenance/Aviation Depot				C. MINOR CONSTRUCTION						D. NADEP		
				DNMC0000								
				2000		2001		2002				
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>TOTAL INVESTMENT COST</b>	<b>14</b>	<b>VAR</b>	<b>4,929</b>	<b>16</b>	<b>VAR</b>	<b>4,724</b>	<b>13</b>	<b>VAR</b>	<b>3,100</b>			
ITEM	ITEM		FY 2000		FY 2001		FY 2002					
LINE #	DESCRIPTION											
6DF0MCC106-94C	Construct Addition to B4034	1	500									
6DF0MCC41-97C	Construct Material Storage Addition B137	2	500									
6DF0MCC26-97C	Construct Heat Treat Addition B 4225	3	428									
6DF0MCCR20-93C	Alts/Reps to Telephone Cabling/Duct Systems	4	500									
6DF0MCC09-99C	Construct Hydraulic Shop B133	5	450									
6DF0MCC0000C	PY Change Orders	6	313		1	161		1	126			
6DF0MCC36-96C	Construct Shelters, S93448, B4224	7	160									
6DF1MCC19-99C	Construct Cleaning & Blasting Addition, B4224				2	500						
6DF1MCC45-97C	Construct Parts Repair Shop Addition B133				3	415						
6DF1MCC55-94C	Construct Maintenance Shop Addition B137				4	400						
6DF1MCC40-97C	Construct Utility Trenches Hangar B188				5	400						
6DF1MCC000C	Planning and Design Costs				6	350		2	200			
6DF1MCRC29-97C	Repairs/Alterations to NADEP Parking Lots				7	300						
6DF1MCRC19-96C	Reps/Alts to Communications System to NADEP Bldgs				8	230						
6DF1MCC74-95C	Air Condition Prep Area B4188				9	210						
6DF1MCCR36-97C	Alterations/Repairs to Lighting NADEP Parking Lots				10	150						
6DF1MCC40-95C	Construct Joiner Shelter B84				11	150						
6DF2MCC08-00C	Construct Coordinate Measurement Facility								3	499		
6DF2MCC04-98C	Alts to Install Electrical Metering								4	350		
6DF2MCRC38-97C	Reps/Alts to Underground Electrical Feeders								5	160		
6DE0MCC1-98C	Rehab Electrical Components Shop	1	418									
6DE0MC0323PC	Office Mezzanine	2	205									
6DE1MCCR3-98E	Blast Booth Bldg				1	227						
6DE1MC0233C	Repair/Alter Fiberglass Shop				2	125						
6DE2MC0343C	Extension to Hangar 101S								1	440		
6DE2MC0243C	Packaging Annex								2	400		
6DC0MC0429C	Construct Addition To B460	1	450									
6DC0MC00441C	Hydraulic Test Clean Room B-379	2	400									
6DC0MC0419C	Add Heat/Vent B65	3	300									
6DC0MC0402C	Construct IVD Environmental Room B472	4	200									
6DC0MC0421C	Convert B384 to VRT Storage	5	105									
6DC1MC0443C	Construct Multi-Purpose Addition B-460				1	450						
6DC1MC0442C	Air Condition BLDG 317 Engineering Areas				2	450						
6DC1MC0370C	Upgrade Administrative Spaces B5				3	206						
6DC2MC0451C	Air Condition Training and Conference Center B-5								1	350		
6DC2MC0454C	Air Condition Third Floor Offices B-334								2	150		
6DC0MC0462C	Planning and Design								3	125		
6DC0MC9483C	Prior Year Change Orders								4	100		
6DC2MC0456C	Construct Fuel Tank Facility for VRT B-458								5	100		
6DC2MC0457C	Air Condition Admin & Engineering Offices B-249								6	100		
<b>TOTAL NADEP MINOR CONSTRUCTION</b>			<b>14</b>	<b>4,929</b>	<b>16</b>	<b>4,724</b>	<b>13</b>	<b>3,100</b>				

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY 2002 PRESIDENT'S BUDGET					
B. Department of the Navy/Depot Maintenance/Aviation Depot				C. ADPE & TELECOMMUNICATIONS (<1M)						D. NADEP					
				DNKU0000											
				2000			2001			2002					
Element of Cost				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>TOTAL INVESTMENT COST</b>				<b>7</b>	<b>VAR</b>	<b>1,732</b>	<b>3</b>	<b>VAR</b>	<b>1,225</b>	<b>2</b>	<b>VAR</b>	<b>1,361</b>			
ITEM	ITEM			FY 2000			FY 2001			FY 2002					
LINE #															
6 DF 0 KM 0050 G R	Office Automation Refresh		1	482											
6 DF 1 KM 0152 G R	Industrial Business Operations System					1	750								
6DF 2 KM 0062 G N	Workflow Process Management									1	861				
6 DF 3 KM 0059 G N	Electronic Storage/Retrieval System									2	500				
DKS0000	Equip - ADPE & TELECOM (<\$.5M)		6	1,250		2	475			0	0				
<b>TOTAL NADEP ADPE &amp; TELECOMMUNICATIONS (&lt;1M)</b>				<b>7</b>		<b>1,732</b>	<b>3</b>		<b>1,225</b>	<b>2</b>		<b>1,361</b>			

FY 2002 PRESIDENT'S BUDGET  
 DEPARTMENT OF THE NAVY - NAVY WORKING CAPITAL FUND  
 DEPOT MAINTENANCE - AVIATION DEPOTS  
 CAPITAL BUDGET EXECUTION  
 (DOLLARS IN MILLIONS)  
 FY 2001

ITEM LINE #	ITEM DESCRIPTION	Original Request	Change	Revised Request	Classification of Change	Explanation/Reason for Change
<b>1a. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>						
Replacement						
6 DF 1 EL 0042 P R	PLASTIC MEDIA BLAST REPLACEMENT (3)	1.500	0.000	1.500		
6 DC 0 EL 0405 P R	DEPOT ATE TPS OFFLOAD TO CASS (1)	1.500	0.000	1.500		
6 DE 1 EL 0279 P R	JIG GRINDERS (2)	1.800	0.000	1.800		
6 DE 1 EL 0280 P R	CNC VERTICAL LATHES (3)	1.000	0.000	1.000		
Environmental Compliance						
6 DE 1 EL 0246 P E	ADVANCED PAINTING STRIPPING SYSTEM	2.505	0.000	2.505		
6 DF 1 EL 0041 P E	FLASHJET ROBOTIC DEPAINTING SYSTEM	1.425	(1.425)	0.000	Deferral	Deferred to outyears due to ongoing engineering effort to develop and approve this technology as a viable, comparable alternative to rotor blade depainting technology (.630 to 6DF1EM0112, .425 to 6DF1ES0153, .370 to 6DF1EM0050).
<b>SUBTOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>		9.730	(1.425)	8.305		
DN EU 0000	<b>1b. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&lt;\$1M)</b>	10.178	1.549	11.727		
<b>2. TOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM</b>		19.908	0.124	20.032		
DN MC 0000	<b>3. MINOR CONSTRUCTION</b>	4.848	(0.124)	4.724		
<b>TOTAL NON-ADP CAPITAL PURCHASES PROGRAM</b>		24.756	(0.000)	24.756		
<b>1a. ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>						
<b>SUBTOTAL ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>		0.000	0.000	0.000		
DN KU 0000	<b>1b. ADPE &amp; TELECOMMUNICATIONS (&lt;\$1M)</b>	1.225	0.000	1.225		
<b>2. TOTAL ADPE &amp; TELECOMMUNICATIONS</b>		1.225	0.000	1.225		
7 DN 1 DL 0JT1 G P	DEPOT MAINTENANCE SYSTEM (DMS) - NDMS	11.006	0.000	11.006		
7 DN 1 DL 0001 G R	ENTERPRISE RESOURCE PLANNING	13.000	0.000	13.000		
<b>3a. SUBTOTAL SOFTWARE DEVELOPMENT (&gt;\$1M)</b>		24.006	0.000	24.006		
DN DU 0000	<b>3b. SUBTOTAL SOFTWARE DEVELOPMENT (&lt;\$1M)</b>	0.000	0.000	0.000		
<b>3. TOTAL SOFTWARE DEVELOPMENT</b>		24.006	0.000	24.006		
<b>TOTAL ADP CAPITAL PURCHASES PROGRAM</b>		25.231	0.000	25.231		
<b>GRAND TOTAL CAPITAL PURCHASES PROGRAM</b>		49.987	(0.000)	49.987		

**DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
DEPOT MAINTENANCE – MARINE CORPS DEPOTS  
FY 2002 PRESIDENTS BUDGET**

**Activity Group Functions:**

The mission of the Marine Corps Depot Maintenance Activity Group (DMAG) is to provide the quality products and responsive maintenance support services required to maintain a core industrial base in support of mobilization and surge requirements. The maintenance functions performed by the DMAG include repair, rebuild, modification, and Inspect and Repair Only as Necessary (IROAN) for all types of ground combat and combat support equipment. DMAG maintenance services are used by the Marine Corps and various Department of Defense (DoD) activities. Other functions performed include performance of maintenance related services such as preservation, testing, technical evaluation, calibration, and fabrication of automated test equipment.

**Activity Group Composition:**

The DMAG is comprised of two Multi-Commodity Maintenance Centers, one located in Albany, Georgia, and the other in Barstow, California. The Maintenance Centers are part of the Marine Corps Logistics Bases and a component of Marine Corps Materiel Command (MATCOM). The Marine Corps Maintenance Centers maintain virtually identical capabilities in order to provide support for Marine Corps operational units regardless of unit location.

**Significant Changes in Activity Group:**

The DMAG has seen some decline in workload since the preparation of the FY 2001 President's Budget. Attempts to offset the workload reduction through marketing resulted in securing \$3.9 million in other agency workload. However, this workload has high material cost with a minimum number of direct labor hours. An intensive review of all cost has been performed and reductions made to minimize the impact of the lost workload. Based on current workload and cost projections, a customer rate surcharge of \$10.9 million will be imposed in FY 2001, in accordance with the policy established by the Deputy Secretary of Defense in December 1997, to preclude operating losses.

Based on current workload trends, action is being taken now to reduce the current permanent workforce using the Voluntary Separation Incentive Program. The resulting workforce represents a downsized permanent workforce augmented by temporary personnel to perform current workload. FY 2001 and FY 2002 include costs for separation incentives, contributions to the retirement fund, and lump sum leave payments for 49 people at each Maintenance Center.

**Financial Profile:**

	(Dollars in Millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Revenue	215.6	219.9	181.0
Cost of Goods Sold	193.0	200.8	181.3
Net Operating Results	19.7	19.1	-0.3
Prior Year Adjustment	10.0	0.5	0.0
Accumulated Operating Results	-18.3	0.3	0.0

**Revenue:**

The FY 2000 revenue included a surcharge of \$28.6 million collected from the Operation and Maintenance, Marine Corps appropriation, in accordance with DoD policy, to offset unbudgeted operating losses. The FY 2001 revenue estimate includes a similar surcharge of \$10.9 million to offset projected operating losses.

**Cost of Goods Sold:**

	(Dollars in Millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Cost of Goods Sold	193.0	200.8	181.3

FY 2001 costs exceed the FY 2001 President's Budget by \$6.2 million. The increase is driven by additional direct material costs of \$13.6 million, partially offset by reduced labor and overhead costs. The current estimates include Voluntary Separation Incentive Payments (VSIP) of \$3.1 million in FY 2001 (not reflected in the FY 2001 President's Budget) and \$3.3 million in FY 2002.

**Orders:**

	(Dollars in Millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Anticipated Orders	222.7	200.6	183.4

FY 2001 Orders include an execution rate surcharge of \$10.9 million, while reduced customer program funding is anticipated in FY 2002.

**Workload:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Direct Labor Hours (000s)	2,123	1,996	1,702

Direct Labor Hours are 7.5% below the FY 2001 President's Budget and are anticipated to decline an additional 15% in FY 2002 based upon projected customer orders.

**Staffing:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian End Strength	1,755	1,621	1,349
Civilian Work Years – regular time	1,670	1,686	1,485
Military End Strength	12	12	12
Military Work Years	12	12	12

Staffing levels in FY 2001 are 124 below the FY 2001 President's Budget, commensurate with the declining new orders profile.

**Performance Indicators:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Schedule Conformance	94.9%	99.5%	99.3%
Quality Deficiency Reports	.06%	.02%	.02%

**Customer Rate Changes:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Stabilized Customer Rate	\$ 83.37	\$ 98.88	\$ 105.82
Year to Year Percent Change		18.6%	7.0%

**Unit Costs:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Cost per Direct Labor Hour	\$ 90.77	\$ 100.23	\$ 106.34

**Capital Budget Authority:**

	(Dollars in Millions)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Equipment/Non-ADPE/TELE	1.8	3.5	0.9
ADPE/TELECOM Equipment	0.0	0.0	0.0
Software Development	0.0	0.0	0.9
Minor Construction	0.5	0.0	1.3
TOTAL	2.3	3.5	3.1

**Productivity Initiatives:**

The Better Business Practices (BBP) focus in the budget years will be on International Organization for Standardization (ISO) 9002, EVM, and Material Resource Planning (MRP II) (Compass Contract). A brief overview of each is provided below.

The Maintenance Centers will continue to utilize formal Earned Value Management data collection, principles, and reporting for the Amphibious Assault Vehicle, Reliability, Availability and Maintainability, Rebuild to Standard (AAV RAM R/S) Program (FY 1999 – 2002). Formal EVM will also occur on the LAV IROAN (in conjunction w/ the Service Life Extension Program (SLEP) beginning in FY 2001. The Maintenance Centers are incorporating EVM principles into the management of all major programs. Based upon the EVM output, the Maintenance Centers will have improved projections that permit them to become more proactive than in the past and gives the customer advance notification of potential overruns.

Enhancing our quality management system via ISO 9002 certification is planned for FY 2001. The concepts of ISO will add discipline to the organization and document procedures and instructions. The audit process will ensure compliance with these instructions leading to conformance to the work requirement. Implementation and day-to-day management of ISO 9002 continues to impact direct and indirect employees. For example, ISO basic training to all employees, internal auditor training, lead auditor training, and audits impact/interrupt the basic work requirement. Certification has begun for supervisors and work leaders as Certified Process Inspectors (CPIs) and certification for mechanics will follow.

The backbone to managing the Maintenance Centers and more specifically, shop floor control, is Compass Contract, a MRPII System. The methodology builds the discipline that is essential in our environment.

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
Revenue:			
Gross Sales			
Operations	210.9	216.1	185.4
Surcharges	1.5	.0	.0
Depreciation excluding Major Constructio	3.2	3.8	4.5
Other Income			
Total Income	215.6	219.9	189.9
Expenses			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	.3	.7	.7
Civilian Personnel	96.7	102.7	91.7
Travel and Transportation of Personnel	.8	1.2	1.2
Material & Supplies (Internal Operations	55.1	58.3	60.3
Equipment	3.0	3.6	2.9
Other Purchases from NWCF	3.3	3.9	4.0
Transportation of Things	.0	.0	.0
Depreciation - Capital	3.2	3.8	4.5
Printing and Reproduction	.1	.1	.1
Advisory and Assistance Services	.4	2.0	1.1
Rent, Communication & Utilities	5.6	5.6	5.9
Other Purchased Services	24.2	18.2	17.5
Total Expenses	192.7	200.0	189.8
Work in Process Adjustment	.3	.8	.3
Comp Work for Activity Reten Adjustment	.0	.0	.0
Cost of Goods Sold	193.0	200.8	190.2
Operating Result	22.6	19.1	-.3
Less Surcharges	-1.5	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	-1.3	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	19.7	19.1	-.3
Other Changes Affecting AOR	-10.0	-.5	.0
Accumulated Operating Result	-18.3	.3	.0

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	222.7	200.6	192.3
a. Orders from DoD Components	200.1	181.6	170.9
Department of the Navy	188.2	175.6	166.7
O & M, Navy	.1	1.6	3.4
O & M, Marine Corps	131.7	113.6	102.9
O & M, Navy Reserve	.0	.0	.0
O & M, Marine Corp Reserve	10.1	11.6	4.8
Aircraft Porcurement, Navy	.0	.0	.0
Weapons Procurement, Navy	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	.0	.0	.0
Other Procurement, Navy	.0	.0	.0
Procurement, Marine Corps	45.9	44.7	51.5
Family Housing, Navy/MC	.0	.0	.0
Research, Dev., Test, & Eval., Navy	.2	.4	.6
Military Construction, Navy	.0	.0	.0
Other Navy Appropriations	.0	.0	.0
Other Marine Corps Appropriations	.1	3.7	3.5
Department of the Army	5.0	.0	.0
Army Operation & Maintenance	3.3	.0	.0
Army Res, Dev, Test, Eval	.1	.0	.0
Army Procurement	.0	.0	.0
Army Other	1.6	.0	.0
Department of the Air Force	.6	5.1	3.2
Air Force Operation & Maintenance	.0	5.1	3.2
Air Force Res, Dev, Test, Eval	.0	.0	.0
Air Force Procurement	.5	.0	.0
Air Force Other	.0	.0	.0
DOD Appropriation Accounts	6.4	.9	1.0
Base Closure & Realignment	.0	.0	.0
Operation & Maintence Accounts	1.5	.0	.0
Res, Dev, Test & Eval Accounts	.0	.0	.0
Procurement Accounts	.0	.0	.0
DOD Other	4.9	.9	1.0
b. Orders from NWCF Business Area	19.8	15.4	18.6
c. Total DoD	219.9	197.1	189.5
d. Other Orders	2.8	3.5	2.8
Other Federal Agencies	.0	2.7	2.3
Foreign Military Sales	2.2	.0	.0
Non Federal Agencies	.6	.8	.5

## INDUSTRIAL BUDGET INFORMATION SYSTEM

PAGE 2

Source of Revenue  
AMOUNT IN MILLIONS  
MCIF / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	63.8	70.9	51.6
3. Total Gross Orders	286.5	271.5	243.8
4. Funded Carry-Over **	70.9	51.6	53.9
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	215.6	219.9	189.9
Adjusted Carry-Over	55.1	41.8	45.8
Adjusted Carry-Over in Months	3.0	2.2	2.8

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

**CHANGES IN THE COSTS OF OPERATION  
NAVY WORKING CAPITAL FUND  
Marine Corps Depot Maintenance  
FY 2002 Presidents Budget**

(Dollars in Millions)

	<b>Total Cost</b>
1. <b>FY2000 Actual:</b>	<b>192.7</b>
2. <b>FY 2001 President's Budget:</b>	<b>194.1</b>
3. <b>Pricing Adjustments:</b>	
a. FY 2001 pay raise	
(1) Civilian Personnel	
(2) Military Personnel	
b. Annualization of FY00 pay raise	
(1) Civilian Personnel	
(2) Military Personnel	
c. General Inflation	
4. <b>Productivity Initiatives</b>	
a. CPP Savings	<b>-1.3</b>
b. Better Business Practices Savings	<b>-1.8</b>
5. <b>Program Changes:</b>	
a. Workload Changes	
(1) Direct Labor	<b>-2.0</b>
(2) Direct Materiel & Supplies	<b>13.6</b>
(3) Other Purchases	<b>0.3</b>
6. <b>Other Changes</b>	
a. Indirect Labor	<b>-3.5</b>
b. Indirect Materiel	<b>-2.0</b>
c. Depreciation	<b>0.2</b>
d. Contract Services	<b>-0.3</b>
e. VERA/VSIP	<b>3.1</b>
f. Other	<b>-0.3</b>
7. <b>FY 2001 Current Estimate:</b>	<b>200.0</b>
8. <b>Pricing Adjustments:</b>	
a. FY 2002 Pay Raise	
(1) Civilian Personnel	<b>2.4</b>
(2) Military Personnel	<b>0.0</b>
b. Annualization of Prior Year Pay Raise	<b>0.0</b>
(1) Civilian Personnel	<b>0.9</b>
(2) Military Personnel	<b>0.0</b>
c. General Inflation	<b>0.6</b>

9.	<b>Productivity Initiatives</b>	
	a. Capital Purchase Program Savings	-0.3
	b. Better Business Practices Savings	-3.6
10.	<b>Program Changes:</b>	
	a. Workload Changes	
	(1) Direct Labor	-7.9
	(2) Direct Material & Supplies	0.3
	(3) Contract Services	-1.4
	(4) Other Purchases	0.0
11.	<b>Other Changes</b>	
	a. Indirect Labor	-2.7
	b. Indirect Material	0.6
	c. Depreciation	0.7
	d. Contract Services	-0.3
	e. VERA/VSIP	0.2
	f. Other	
	Real Property Maintenance	0.3
	Travel/Training	0.1
	Miscellaneous	-0.2
12.	<b>FY 2002 Current Estimate</b>	<b>189.8</b>

**NAVY WORKING CAPITAL FUND**  
**Marine Corps Depot Maintenance**  
**MATERIAL INVENTORY DATA**  
**FY 2002 Presidents Budget**  
**(Dollars in Millions)**

**Fiscal Year 2000**

	Total	Mobilization	Peacetime	
			Operating	Other
<b>Material Inventory BOP*</b>	42.8	0.0	42.8	0.0
<u>Purchases</u>				
A. Purchases to Support Customer Orders	43.6	0.0	43.6	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (list) (+) Materials & Supplies	0.0	0.0	0.0	0.0
D. Total Purchases	43.6	0.0	43.6	0.0
<u>Material Inventory Adjustment</u>				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	50.3	0.0	50.3	0.0
B. Disposals, theft, losses due to damage (-)*	0.0	0.0	0.0	0.0
C. Other reductions (list) (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	50.3	0.0	50.3	0.0
<b>Material Inventory EOP*</b>	36.1	0.0	36.1	0.0

\*Inventory (DBC 1400) less Work In Process ( DBC 1414)

**NAVY WORKING CAPITAL FUND**  
**Marine Corps Depot Maintenance**  
**MATERIAL INVENTORY DATA**  
**FY 2002 Presidents Budget**  
**(Dollars in Millions)**

**Fiscal Year 2001**

	Total	Mobilization	Peacetime	
			Operating	Other
<b>Material Inventory BOP*</b>	36.1	0.0	36.1	0.0
<u>Purchases</u>				
A. Purchases to Support Customer Orders	51.8	0.0	51.8	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (list) (+) Materials & Supplies	0.0	0.0	0.0	0.0
D. Total Purchases	51.8	0.0	51.8	0.0
<u>Material Inventory Adjustment</u>				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	55.6	0.0	55.6	0.0
B. Disposals, theft, losses due to damage (-)*	0.0	0.0	0.0	0.0
C. Other reductions (list) (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	55.6	0.0	55.6	0.0
<b>Material Inventory EOP*</b>	32.2	0.0	32.2	0.0

\*Inventory (DBC 1400) less Work In Process ( DBC 1414)

**NAVY WORKING CAPITAL FUND**  
**Marine Corps Depot Maintenance**  
**MATERIAL INVENTORY DATA**  
**FY 2002 Presidents Budget**  
**(Dollars in Millions)**

**Fiscal Year 2002**

	Total	Mobilization	Peacetime	
			Operating	Other
<b>Material Inventory BOP*</b>	32.2	0.0	32.2	0.0
<u>Purchases</u>				
A. Purchases to Support Customer Orders	44.6	0.0	44.6	0.0
B. Purchases of long lead times in advance of customer orders (+)	0.0	0.0	0.0	0.0
C. Other Purchases (list) (+) Materials & Supplies	0.0	0.0	0.0	0.0
D. Total Purchases	44.6	0.0	44.6	0.0
<u>Material Inventory Adjustment</u>				
A. Material Used in Maintenance (and billed/charged to customer orders) (-)	47.4	0.0	47.4	0.0
B. Disposals, theft, losses due to damage (-)*	0.0	0.0	0.0	0.0
C. Other reductions (list) (-)	0.0	0.0	0.0	0.0
D. Total inventory adjustment	47.4	0.0	47.4	0.0
<b>Material Inventory EOP*</b>	29.4	0.0	29.4	0.0

\*Inventory (DBC 1400) less Work In Process ( DBC 1414)

**WORKING CAPITAL FUND INVESTMENT SUMMARY**  
**Marine Corps Depot Maintenance**  
**FY 2002 President's Budget Submission**

Dollars in Millions

Line Number	Item Description	FY 2000 Actuals		FY 2001 Estimate		FY 2002 Estimate	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	<b>Equipment</b>						
1	Asset Tracking System (Productivity)	2	0.876	0	0.000	0	0.000
2	Warehouse Retrieval System (Productivity)	0	0.000	1	1.320	0	0.000
3	Automatic Washing Booth (Productivity)	1	0.532	1	0.500	0	0.000
5	Equipment - items less than \$0.5M each		0.396		1.727		0.913
	<i>Replacement</i>	<i>1</i>	<i>0.135</i>	<i>4</i>	<i>0.700</i>	<i>1</i>	<i>0.450</i>
	<i>Productivity</i>	<i>2</i>	<i>0.261</i>	<i>3</i>	<i>0.888</i>	<i>2</i>	<i>0.463</i>
	<i>New Mission</i>	<i>0</i>	<i>0.000</i>	<i>1</i>	<i>0.139</i>	<i>0</i>	<i>0.000</i>
	<i>Environmental Compliance</i>	<i>0</i>	<i>0.000</i>	<i>0</i>	<i>0.000</i>	<i>0</i>	<i>0.000</i>
	Total Equipment (Non-ADPE & Telecom)		1.804		3.547		0.913
6	<b>ADPE &amp; Telecom</b>	0	0.000	0	0.000	0	0.000
7	<b>Minor Construction</b>	3	0.507	0	0.000	3	1.340
8	<b>Software Development</b>	0	0.000	0	0.000	1	0.889
	<b>TOTAL</b>		2.311		3.547		3.142

FY 2002 PRESIDENT'S BUDGET SUBMISSION (Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S Budget Submission			
B. Component/Business Area/Date Marine Corps Depot Maintenance/				C. Line# and Description 1/ Asset Tracking System			D. Site Identification MC Depots Albany, GA and Barstow, CA		
FY 2000				FY 2001			FY 2002		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP	2		0.876						
<b>Narrative Justification:</b>									
<p><b>Asset Tracking System.</b> The Asset Tracking System consists of bar coding equipment (readers, scanners and printers), radio transmitters for hand scanners, receiving antennas and associated equipment, and interface software. The revised system will provide for direct interface with existing Marine Corps Information Technology assets such as Manufacturing Resource Planning (MRP) II, Essex Replacement Program (ERP), and NAVAIR Industrial Material Management System (NIMMS). These systems manage the production and material resources of the Maintenance Centers. The ATS will dovetail into the process by providing near real time inventory location and tracing of hulls and other items. All expeditors and material handlers will utilize bar code scanners equipped with radio transmission which direct a pseudo terminal (receiver directly connected to the network). The material handlers will scan bar code directly into the system identifying its location. The operations cost for purchasing vs status quo results in a benefit of \$5.291M with a NPV of \$4.823 and an inflated benefit of \$6.397M. This project is intended to enhance productivity.</p>									

FY 2002 PRESIDENT'S BUDGET SUBMISSION (Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S Budget Submission			
B. Component/Business Area/Date Marine Corps Depot Maintenance/				C. Line# and Description 2/ Warehouse Retrieval System (productivity)			D. Site Identification MC Depots Albany, GA and Barstow, CA		
FY 2000				FY 2001			FY 2002		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP				1		1.320			
<b>Narrative Justification:</b>									
<p><b>Warehouse Storage and Retrieval System.</b> The system is a computer controlled storage and retrieval system which consists of an enclosed storage carousel rack with an automated pickup system. Pa can accommodate parts/equipment kitting for specific depot maintenance lines and applications and also store new or rebuilt parts to be retrieved upon demand. The operations cost for purchasing vs status quo results in a benefit of \$14.180M with a NPV of \$6.333 and an inflated benefit of \$21.225M. This project is intended to enhance productivity.</p>									

FY 2002 PRESIDENT'S BUDGET SUBMISSION (Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S Budget Submissio			
B. Component/Business Area/Date Marine Corps Depot Maintenance/			C. Line# and Description 3/ Automatic Washing Booth (productivity)			D. Site Identification MC Depots Albany, GA and Barstow, CA			
ELEMENTS OF COST	FY 2000			FY 2001			FY 2002		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP	1		0.532	1		0.500			
<b>Narrative Justification:</b>									
<p><b>Automatic Washing System.</b> The Automatic Washing System consists of three automatic wash arms plus associated equipment such as hoses, soap supply hoses, control system, engineering, testing, training, and documentation. The system washes vehicles before entering the disassembly area and after final assembly to remove any excess dirt or paint. Present production schedule includes AAV's - 8/month, LAV - 6/month, M88 - 1/month, HMMV - 20/month, and MK48 - 16/month. The operations cost for purchasing vs status quo results in a benefit of \$0.916M with a NPV of \$0.758M and an inflated benefit of \$1.197M. This project is intended to enhance productivity.</p>									

FY 2002 PRESIDENT'S BUDGET SUBMISSION (Dollars in Thousands)						A. Budget Submission FY 2002 PRESIDENT'S Budget Submissio			
B. Component/Business Area/Date Marine Corps Depot Maintenance/				C. Line# and Description 5/ Equipment less than \$0.5M			D. Site Identification MC Depots Albany, GA and Barstow, CA		
ELEMENTS OF COST	FY 2000			FY 2001			FY 2002		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP	3		0.396	8		1.727			
<b>Narrative Justification:</b>									
<b>FY 2000 Projects:</b>									
Fall Protection - \$0.152M									
Non-Destructive Testing Enhancement - \$0.109M									
Hydraulic Squaring Shears - \$0.135M									
<b>FY 2001 Presidents Budget Projects:</b>									
Asset Delivery System - \$0.450M									
Paint Booths (Two) - \$0.300M									
Fall Prevention -\$0.200M									
Chicago Press Brake \$0.200M									
Strippet Punch Press - \$0.225M									
Husky Model S200 VHP Pump - \$0.213M									
HP-853001C ACS Measurement System - \$0.139M									

FY 2002 PRESIDENT'S BUDGET SUBMISSION						A. Budget Submission			
(Dollars in Thousands)						FY 2002 PRESIDENT'S Budget Submissio			
B. Component/Business Area/Date				C. Line# and Description			D. Site Identification		
Marine Corps Depot Maintenance/				5/ Equipment less than \$0.5M			MC Depots Albany, GA and Barstow, CA		
FY 2000				FY 2001			FY 2002		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							3		0.913

**Narrative Justification:**

**Plural Mixing System.** The Plural Mixing System will be used to meter and mix two and three component paints. The Plural Mixing System consists of controllers, fluid panels, meter kits, booth controls for color changes, gun flush boxes, alarms for expired potlife and off ratio mixes. The system will be used to apply Type I CARC, Type II CARC paints and other type paints to military vehicles and equipment. The operations cost for purchasing vs status quo results in a benefit of \$0.655M with a NPV of \$0.542M and an inflated benefit of \$0.920M. Investment Cost: \$0.150M.

**Hicklin 300 HP Transmission Test Stand.** The Electric Drive, Eddy-Current Transmission Dynamometer, (EDECT dyno) will be used to test a variety of heavy duty drive train transmissions for military vehicles such as the MK-48, Light Armored Vehicles (LAV) and others. The Model EDECT-300 is a heavy-duty system consisting of three main components; Input Drive, Dyno Test Bed, and Operator Console. The Input Drive includes a 300 Hp variable speed motor with vector drive and associated components. The Dyno Test Bed will include the front upright support frame, the base frame with integral transmission oil reservoir and eddy-current load units. The dyno's 300 Hp system allows all the necessary test parameters to be exercised to insure quality control. The system utilizes a direct electric drive and is air cooled not water-cooled. Efficiency is improved by a minimum of 25% with this type of drive system versus the present hydrostatic drives this equipment will replace. This drive is based upon new improved technology and eliminates hydrostatic pumps, motors, hoses, filters, and heat exchangers, which are extremely difficult to repair or replace. The operations cost for purchasing vs status quo results in a benefit of \$0.0645M, an inflated benefit of \$0.846M. Investment Cost: \$0.450M.

**Rough Terrain Crane.** The 60-ton rough terrain crane replaces a more expensive 80 ton leased crane that performs heavy lift capability in the work and storage areas. It is required that the crane be able to access production work areas on the hard stand and to access and traverse on unimproved roads and dirt storage areas where items are loaded/offloaded from semi trucks. The operations cost for purchasing vs status quo results in a benefit of \$0.633M with a NPV of \$0.624M and an inflated benefit of \$0.889M. Investment Cost: \$0.313M.

FY 2002 PRESIDENT'S BUDGET SUBMISSION						A. Budget Submission			
(Dollars in Thousands)						FY 2002 PRESIDENT'S Budget Submission			
B. Component/Business Area/Date			C. Line# and Description			D. Site Identification			
Marine Corps Depot Maintenance/			7/ Minor Construction			MC Depots Albany, GA and Barstow, CA			
FY 2000			FY 2001			FY 2002			
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP	3		0.507				3		1.340

**Narrative Justification:**

**FY00 Execution**

Lube & Oil Facility - \$0.443M  
SIOH for Lube & Oil Facility - \$0.036  
Construct 8000 Sq Ft Bldg - \$0.028

**FY 02 Budget**

**Clear Span Roof (Bldg 2200&2222).** The Clear Span Roof consists of a covered area without sides that allows vehicles and equipment to be staged out of inclement weather. The 34,000 sq. ft. area provides for storing and staging material processed in and out of the coatings branch. The area will be completely open on the sides providing easy access to all personnel and equipment. The operations cost for purchasing vs status quo results in a benefit of \$0.865M with a NPV of \$0.594M and an inflated benefit of \$1.726M. Investment Cost: \$0.425M. This project is intended to enhance productivity.

**Conversion Coating Facility.** The conversion coating process is used to apply a corrosion resistant coating to aluminum components of the Amphibious Assault Vehicles and other military vehicles and equipment. The process includes a closed loop rinse system series of vats, cleaning vats, bright dip, and actual conversion coating vats. The system will utilize an orderly process flow allowing improved production time, environmental hazardous waste reduction, and potable water use reduction. It will include the latest environmental and OSHA safety recommendations for containment and personnel safety. In addition, a system of vats for phosphate coating will be included to coat steel metals. The system will be installed in a containment sump and berm meeting all EPA/EPD regulations. The operations cost for purchasing vs status quo results in a benefit of \$0.678M with a NPV of \$0.573M and an inflated benefit of \$1.000M. Investment Cost: \$0.499M. This project will replace the current 40 year old system of vats, pits, and Industrial Waste Treatment System.

**Fiberglass Facility.** This facility will provide space to accomplish repair and modification to various military vehicles comprised of fiberglass components and parts. Examples of plastic vehicle accessories are fuel cells, reservoirs, hoods, body panels, and battery boxes. The new facility will increase capability for fibrous repairs in a controlled and environmentally compliant fiberglass repair area incorporating the use of roof ventilators, filtered exhaust chambers, sealed circuits and explosion proof electrical equipment for Class 1, Division 2 Hazardous Areas. The facility will include safety and environmental systems as required for fiberglass repair work in compliance with California standards. The operations cost for purchasing vs status quo results in a net benefit of \$1.318M with a NPV of \$0.905M and inflated benefit of \$2.630M. Investment cost: \$0.416M. This project is intended to enhance productivity.

FY 2002 PRESIDENT'S BUDGET SUBMISSION						A. Budget Submission			
(Dollars in Thousands)						FY 2002 PRESIDENT'S Budget Submission			
B. Component/Business Area/Date			C. Line# and Description			D. Site Identification			
Marine Corps Depot Maintenance/			8/ Software Development			MC Depots Albany, GA and Barstow, CA			
FY 2000			FY 2001			FY 2002			
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
		-	-		-	-	1		0.889
<b>Narrative Justification:</b>									
<p><b>Advanced Planning System.</b> The Advanced Planning System is Commercial Off-The-Shelf (COTS) Software. It accesses existing MRP II system data currently in operation. It will provide constraint-based planning, optimization of resources, simulations or what-if scenarios based on linear solution time. The implementation of this module enables mass updates to production schedules detailed in Compass Contract based upon acceptable simulations or what-if results. The operations cost for purchasing vs status quo results in a net benefit of \$5.032M with a NPV of \$4.473M. Investment Cost: \$0.889M.</p>									

**Navy Working Capital Fund  
Marine Corps Depot Maintenance  
FY 2002 President's Budget**

(Dollars in Millions)  
FY 2000

<u>Project</u>	<u>Original</u>	<u>Change</u>	<u>Current</u>	<u>Explanation</u>
	Estimate	Change	Proj Cost	
<b>Equipment except ADPE and TELECOM</b>				
Asset Tracking System	1.000	-0.124	0.876	Productivity Enhancement
Fall Protection	0.000	0.152	0.152	Productivity Project
Auto Washing System	0.000	0.532	0.532	FY01 Approved Project, accelerated to FY00.
Non-Destructive Testing Enhancement	0.000	0.109	0.109	Productivity Project
Hydraulic Squaring Shears	0.000	0.135	0.135	Replacement Project
VMC 75 CNC Mill	0.250	-0.250	0.000	Executed in FY 99
IC-200-2B Broderson 15 Ton Crane	0.130	-0.130	0.000	Executed in FY 99
OMAX Water Jet Cutting Machine	0.150	-0.150	0.000	Deferred to FY 03
<b>Subtotal Equipment</b>	<b>1.530</b>	<b>0.274</b>	<b>1.804</b>	
<b>Equipment - ADPE and TELECOM</b>	<b>0.006</b>	<b>(0.006)</b>	<b>0.000</b>	Did not execute
<b>Software Development</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	No Projects
<b>Minor Construction</b>				
Storage Building	0.250	(0.250)	0.000	Cancelled
Lube and Oil Facility	0.345	0.098	0.443	Contractor estimate increase
Lube and Oil Facility SIOH	0.000		0.036	Contractor estimate increase
Metrology Addition w/Clean Room	0.297	(0.297)	0.000	Not executed
MCC Kitting Facility	0.425	(0.425)	0.000	Executed in FY 99
Construct 8000 sqft Building (FY 98 Prog)	0.000	0.028	0.028	Within scope increase to FY 98 project
<b>Sub-total Minor Construction</b>	<b>1.317</b>	<b>(0.810)</b>	<b>0.507</b>	
<b>FY 2000</b>	<b>2.853</b>	<b>(0.542)</b>	<b>2.311</b>	

**Navy Working Capital Fund  
Marine Corps Depot Maintenance  
FY 2002 President's Budget**

(Dollars in Millions)  
FY 2001

<u>Project</u>	<u>Original</u>	<u>Change</u>	<u>Current</u>	<u>Explanation</u>
	<u>Estimate</u>		<u>Proj Cost</u>	
<b>Equipment except ADPE and TELECOM</b>				
Warehouse Stg & Retrieval System	1.320	0.000	1.320	
Asset Delivery System	0.450	0.000	0.450	
Paint Booths	0.300	0.000	0.300	
Fall Protection	0.200	0.000	0.200	
Chicago Press Brake	0.200	0.000	0.200	
Strippet Punch Press	0.225	0.000	0.225	
Husky Model S200 VHP Pump	0.213	0.000	0.213	
Auto Wash System	0.500	0.000	0.500	
HP-85301C ACS Measurement System	0.139	0.000	0.139	
Subtotal Equipment	<b>3.547</b>	<b>0.000</b>	<b>3.547</b>	
<b>Equipment - ADPE and TELECOM</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	
<b>Software Development</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	
<b>Minor Construction</b>				
	0.000	0.000	0.000	
	0.000	0.000	0.000	
	0.000	0.000	0.000	
	0.000	0.000	0.000	
Sub-total Minor Construction	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	
<b>FY 2001</b>	<b>3.547</b>	<b>0.000</b>	<b>3.547</b>	

**DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
NAVAL AIR WARFARE CENTER (NAWC)  
FY 2002 PRESIDENT'S BUDGET**

**ACTIVITY GROUP FUNCTION**

The Naval Air Warfare Center (NAWC) includes the Aircraft Division (NAWCAD) and the Weapons Division (NAWCWD). The NAWC mission is to be the Navy's full spectrum research, test and evaluation, in-service engineering, and Fleet support activity for naval aircraft engines, avionics, and aircraft support systems, ship/shore/air operations, weapons systems associated with air warfare, missiles, and missile subsystems, aircraft weapons integration, airborne electronic warfare systems and air, land, and sea test ranges. The scope of our mission includes supporting the acquisition and in-service support of both manned and unmanned air vehicles and air operations from both ship and shore.

**ACTIVITY GROUP COMPOSITION**

<b><u>Activity Name</u></b>	<b><u>Location</u></b>
Naval Air Warfare Center, Aircraft Division	Lakehurst, NJ
Naval Air Warfare Center, Aircraft Division	Patuxent River, MD
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

**BUDGET HIGHLIGHTS**

**Workload.** Approximately 77% of the products and services provided by the NAWC are to Department of the Navy customers, with the remaining 23% split between other DOD Appropriation Accounts and Other Federal and Non-Federal Customers. Workload estimates decrease slightly from FY 2001 to FY2002.

**Direct Labor Hours.** Direct labor hours reflect a reduction of 3.2% from FY 2000 to FY 2001 and 1.8% from FY 2001 into FY 2002. The reduction is consistent with changes in workload and efficiencies related to Strategic Sourcing. Reductions also reflect a shift from in-house labor to contractor personnel.

**Stabilized Rates.** The FY 2002 composite stabilized rate of \$86.12 represents a decrease of 1.4% over the FY 2001 rate of \$87.32. Included in the FY 2002 rate is a \$8.0 million Capital Purchase Program surcharge.

**Revenue.** FY 2000 and FY 2001 revenue are approximately \$2.2 billion and is projected to decrease slightly in FY 2002 to \$2.1 billion.

**Cost of Goods Sold.** Cost of goods sold for FY 2000 was approximately \$2.2 billion. FY 2001 and FY 2002 reflect only a slight change overall consistent with workload reduction and impact of Strategic Sourcing.

**Unit Cost Goals.** The budget reflects the following FY 2000-2002 unit cost goals.

	(\$ and DLHs in Millions)		
	FY 2000	FY 2001	FY 2002
Direct Labor Costs + Overhead	\$1,136.0	\$1,116.9	\$1,116.5
Direct Labor Hours (DLHs)	12.339	11.947	11.725
Unit Costs	92.07	93.49	95.22

**DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
NAVAL AIR WARFARE CENTER (NAWC)  
FY 2002 PRESIDENT'S BUDGET**

Reduction in direct labor hours (DLHs) is consistent with changes in workload and shift from in-house labor to contractor personnel.

**Net Operating Results (NOR)/Accumulated Operating Results (AOR)**

	(\$ In Millions)		
	FY 2000	FY 2001	FY 2002
NOR (\$M)	\$.2	\$31.1	\$4.3
AOR (\$M)	\$-15.4	\$3.7	\$0

FY 2002 rates were planned to recoup prior year losses and achieve zero (0) AOR. FY 2001 NOR includes a \$12.0 million Capital Purchase Program (CPP) surcharge, while FY 2002 NOR includes a \$8 million CPP surcharge.

**Summary of Capital Purchases Program (CPP).** Amounts included in the budget for CPP are:

	(\$ In Millions)		
	FY 2000	FY 2001	FY 2002
Equipment Other than ADPE	\$9.9	\$10.8	\$7.3
Minor Construction	\$2.2	\$3.0	\$1.6
Equipment – ADPE & TELECOM	\$10.3	\$9.5	\$9.6
Software Development	\$10.3	\$18.3	\$20.9
Total	\$32.7	\$41.6	\$39.4

FY 2000 includes obligations and FY 2000 program authorized to be obligated in FY 2001.

**Summary of Personnel Resources.**

	FY 2000	FY 2001	FY 2002
Civilian Personnel:			
End Strength	10,699	10,259	9,955
Workyears	10,667	10,233	9,952
Military Personnel			
End Strength	256	269	262
Workyears	232	222	213

The decrease in Civilian End Strength from FY 2000 to FY 2002 reflects increased use of contractor personnel, and personnel savings associated with Strategic Sourcing. The increased use of contractors allows management more flexibility associated with workload fluctuation. The decrease in Military Personnel for FY 2001 and FY 2002 reflects a reduction in the requirement for NWCF military billets.

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	2,134.6	2,143.2	2,049.8
Surcharges	.0	12.0	8.0
Depreciation excluding Major Constructio	25.9	30.9	31.4
Other Income			
Total Income	2,160.5	2,186.1	2,089.2
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	12.6	11.2	11.1
Civilian Personnel	832.0	819.0	829.8
Travel and Transportation of Personnel	63.4	68.3	67.6
Material & Supplies (Internal Operations	204.1	204.9	202.9
Equipment	55.9	61.3	63.9
Other Purchases from NWCFC	66.5	49.5	50.1
Transportation of Things	2.7	3.3	3.4
Depreciation - Capital	25.9	30.9	31.4
Printing and Reproduction	10.6	8.8	8.9
Advisory and Assistance Services	5.1	7.1	7.5
Rent, Communication & Utilities	44.0	59.9	58.1
Other Purchased Sevices	876.2	823.0	750.4
Total Expenses	2,199.0	2,147.1	2,084.9
Work in Process Adjustment	-38.7	7.9	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0
Cost of Goods Sold	2,160.3	2,155.0	2,084.9
Operating Result	.2	31.1	4.3
Less Surcharges	.0	-12.0	-8.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	.2	19.1	-3.7
Other Changes Affecting AOR	.0	.0	.0
Accumulated Operating Result	-15.4	3.7	.0

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

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	2,267.2	2,163.9	2,078.2
a. Orders from DoD Components	2,055.2	1,914.5	1,852.8
Department of the Navy	1,858.2	1,667.0	1,610.4
O & M, Navy	497.5	417.7	425.7
O & M, Marine Corps	17.6	17.1	16.5
O & M, Navy Reserve	15.6	12.4	12.4
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Procurement, Navy	362.4	279.3	241.0
Weapons Procurement, Navy	52.9	40.0	41.1
Ammunition Procurement, Navy/MC	12.4	15.2	12.6
Shipbuilding & Conversion, Navy	66.4	88.4	87.5
Other Procurement, Navy	67.8	72.8	71.8
Procurement, Marine Corps	2.5	2.6	4.3
Family Housing, Navy/MC	8.4	14.5	14.3
Research, Dev., Test, & Eval., Navy	743.6	706.9	683.0
Military Construction, Navy	.0	.0	.0
Other Navy Appropriations	11.1	.0	.0
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	25.9	22.3	21.2
Army Operation & Maintenance	9.8	9.6	6.2
Army Res, Dev, Test, Eval	6.2	5.8	6.7
Army Procurement	7.5	6.5	7.9
Army Other	2.4	.4	.5
Department of the Air Force	40.3	51.5	50.7
Air Force Operation & Maintenance	6.1	5.5	5.7
Air Force Res, Dev, Test, Eval	20.7	28.9	29.3
Air Force Procurement	11.3	16.3	14.8
Air Force Other	2.2	.9	.9
DOD Appropriation Accounts	130.8	173.7	170.5
Base Closure & Realignment	.2	.0	.0
Operation & Maintenance Accounts	23.2	20.6	23.7
Res, Dev, Test & Eval Accounts	48.8	62.8	62.5
Procurement Accounts	58.3	89.9	82.4
DOD Other	.3	.4	1.8
b. Orders from NWC F Business Area	95.8	113.3	111.8
c. Total DoD	2,151.0	2,027.8	1,964.6
d. Other Orders	116.2	136.1	113.6
Other Federal Agencies	14.7	18.5	17.2
Foreign Military Sales	65.3	85.0	76.7
Non Federal Agencies	36.2	32.6	19.7

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	612.2	718.9	696.7
3. Total Gross Orders	2,879.4	2,882.8	2,774.9
4. Funded Carry-Over **	718.9	696.7	685.7
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	2,160.5	2,186.1	2,089.2
Adjusted Carry-Over	390.8	357.1	343.7
Adjusted Carry-Over in months	2.1	1.9	1.9

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

**FY 2002 PRESIDENTS BUDGET**  
**Changes in Cost of Operations**  
**Navy Working Capital Fund**  
**Activity Group: Naval Air Warfare Center**  
**(Dollars in Millions)**

1.	FY 2000 Actuals	2199.0
2.	FY 2001 President's Budget	2068.5
3.	Pricing Adjustments	1.1
a.	Annualization of Prior Year Pay Raises	0.0
b.	FY 2000 Pay Raise	0.0
	(1) Civilian Personnel	0.0
	(2) Military Personnel	0.0
c.	Working Capital Fund - Fuel	0.0
d.	Working Capital Fund - Nonfuel	0.0
e.	Industrial Fund Purchases	0.0
f.	General Purchases Inflation	1.1
4.	Productivity Initiatives & Other Efficiencies	0.0
5.	Program Changes (Workload Changes)	84.5
a.	Life Safety Deficiencies	31.4
b.	F/A-18 E/F	34.6
c.	Catapults & Arresting Gear	13.3
d.	DDG-51 (FF)	13.1
e.	F/A-18 Squadrons	13.1
f.	CVX Survivability/Dev/Engrg/Tech Support	9.3
g.	V-22	7.0
h.	LAMPS III	6.3
i.	Common Avionics Changes	5.4
j.	F18C Reese Sharp	4.6
k.	EA-6 Series Mod	4.4
l.	Combat Operations/Support USACOM	4.1
m.	KC-130J	4.0
n.	Navigation/ID System	3.4
o.	Expeditionary Airfields	3.1
p.	F-18 Series	3.0
q.	JSF	-6.9
r.	Auto Carrier Landing Systems	-5.4
s.	AV-8B	-4.5
t.	Aviation Improvements	-3.4
u.	Undersea Warfare Advanced Tech	-4.1
v.	Aircraft Industrial Facilities	-3.8
w.	Shipboard Aviation Systems	-3.6
x.	Standards Development	-3.1
y.	Common Systems Program	-2.4
z.	Various Program Increases/Decreases	-38.5
aa.	MRTFB Institutional Funding	-4.0
bb.	EP-3 Mods	2.0
cc.	Sidewinder Mods	2.0
6.	Other Changes in:	-7.0
a.	DIFMS	1.6
b.	DISA	0.7
c.	Increased Acceleration	3.7
d.	CIVPERS Underexecution	-14.0
e.	Utilities increase	1.0
7.	FY 2001 Current Estimate	2147.1

**FY 2002 PRESIDENTS BUDGET**  
**Changes in Cost of Operations**  
**Navy Working Capital Fund**  
**Activity Group: Naval Air Warfare Center**  
**(Dollars in Millions)**

7.	FY 2001 Current Estimate	2147.1
8.	Pricing Adjustments	45.2
	a. Annualization of Prior Year Pay Raises	8.1
	b. FY 2002 Pay Raise	22.7
	(1) Civilian Personnel	22.4
	(2) Military Personnel	0.3
	c. Working Capital Fund - Fuel	0.0
	d. Working Capital Fund - Nonfuel	-2.0
	e. Industrial Fund Purchases	-0.2
	f. General Purchases Inflation	16.6
9.	Productivity Initiatives & Other Efficiencies	-33.1
	a. CPP Productivity Savings, A-76, BPR & Other	-33.1
10.	Program Changes (Workload Changes)	-73.6
	a. Air Systems Support	10.5
	b. JSF	5.8
	c. Navigation/ID System	4.0
	d. Air Control	3.5
	e. EW Development	3.4
	f. Standards Development	3.4
	g. RDT&E Ship & Aircraft Support	3.1
	h. USMC H-1 Upgrades	2.3
	i. V-22	2.1
	j. F/A-18 Squadrons	-23.2
	k. Lamps III Imp	-12.7
	l. V-22	-10.7
	m. F/A-18 E/F	-9.2
	n. KC-130J	-6.6
	o. Common Ground Equipment	-6.5
	p. Common Avionics Changes	-6.0
	q. Catapults & Arresting Gear	-5.8
	r. S-3 Series	-3.2
	s. Various Program Increases/Decreases	-2.2
	t. Sidewinder	-4.7
	u. AV-8B	-3.8
	v. Logistics Support	-3.2
	w. Harm	-2.9
	x. Standard Missile	-2.9
	y. Ammunition	-3.1
	z. Misc Research & Tech	-4.9
11.	Other Changes in: Overhead Reductions	-0.6 -0.6
12.	FY 2002 Current Estimate	2084.9

**FY 2002 PRESIDENT'S BUDGET**  
**CAPITAL INVESTMENT SUMMARY**  
**DEPARTMENT OF THE NAVY**  
**RESEARCH AND DEVELOPMENT - AIR WARFARE CENTER**  
 (\$ in Millions)

	ITEM DESCRIPTION	FY 2000		FY 2001		FY 2002	
			TOTAL COST		TOTAL COST		TOTAL COST
	TOTAL NON-ADP CAPITAL PURCHASES PROGRAM		12.104		13.850		8.875
	TOTAL ADP CAPITAL PURCHASES PROGRAM		20.557		27.750		30.530
	GRAND TOTAL CAPITAL PURCHASES PROGRAM		32.661		41.600		39.405

**FY 2002 PRESIDENT'S BUDGET**  
**CAPITAL INVESTMENT SUMMARY**  
**NON-ADP PROGRAM - SUBMIT**  
**DEPARTMENT OF THE NAVY**  
**RESEARCH AND DEVELOPMENT - AIR WARFARE CENTER**  
 (\$ in Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 2000		FY 2001		FY 2002	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	<b>1a. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>						
	<b>Replacement</b>						
8 AA 1 EL 8017 G R	LAND MOBILE COMMUNICATION TRUNKING SYSTEM			1	.800	1	.800
	<b>Productivity</b>						
4 WD 8 EL 0108 P P	MISSION PLANNING II	1	.989	1	1.000	1	.850
	<b>New Mission</b>						
4 AB 0 EL 4813 P N	ELECTRICAL POWER SOURCE	1	1.028				
4 AA 1 EL 4117 P N	SHIP/AIR MISSION SYSTEM SUPPORT			1	1.120		
8 AA 2 EL 8410 G N	P-420 SECURITY EQUIPMENT					1	.299
	<b>Environmental Compliance</b>						
4 AA 1 EL 4440 P E	ELEC. POWER SYS CLOSED LOOP COOLING WATER			1	1.200		
	<b>SUBTOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>	2	2.017	4	4.120	3	1.949
NN EU 0000	<b>1b. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&lt;\$1M)</b>	24	7.868	20	6.707	16	5.329
	<b>2. TOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM</b>	26	9.885	24	10.827	19	7.278
NN MC 0000	<b>3. MINOR CONSTRUCTION</b>	7	2.219	6	3.023	5	1.597
	<b>TOTAL NON-ADP CAPITAL PURCHASES PROGRAM</b>		12.104		13.850		8.875

**FY 2002 PRESIDENT'S BUDGET**  
**CAPITAL INVESTMENT SUMMARY**  
**ADP PROGRAM - SUBMIT**  
**DEPARTMENT OF THE NAVY**  
**RESEARCH AND DEVELOPMENT - AIR WARFARE CENTEI**  
 (\$ in Millions)

ITEM LINE #	ITEM DESCRIPTION	FY 2000		FY 2001		FY 2002	
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	<b>1a. ADP &amp; TELECOMMUNICATIONS EQUIPMENT (&gt;\$1M)</b>						
	<b>Computer Hardware (Production)</b>						
7 AA 0 KL 7222 G R	DATA WAREHOUSE	1	2.090				
7 AA 9 KL 7211 G R	DESKTOP SYSTEMS TECHNOLOGY REPLACEMENT	1	.300				
4 AB 1 KL 4820 P P	IMMERSIVE DESIGN OPTIMIZATION SYSTEM			1	1.350	1	.525
7 AA 2 KL 723C G P	CORPORATE COMPUTING TECHNOLOGY INSERTION					1	1.078
	<b>Telecommunication</b>						
7 AB 0 TL 7240 G N	EXTENSION OF FIBER OPTIC/UTP INFRASTRUCTURE	1	1.679			1	.577
7 WD 3 TL 0084 G R	COMMUNICATION SYSTEM UPGRADE	1	1.400	1	1.250	1	2.000
7 AA 8 TL 0723 G R	FIBER OPTIC TRANSMISSION EQUIPMENT	1	.718	1	.450		
7 AA 1 TL 7231 G R	OPTICAL REMOTE PHONE SWITCH MODULE			1	1.450		
4 WD 1 TL 9106 P R	INTEGRATED BATTLESPACE ARENA IMPROVEMENTS (IBAR) PHASE 1 AND 2			1	.400	1	1.075
8 WD 2 TL 6152 G R	RADIO COMMUNICATIONS NETWORK UPGRADE					1	1.250
	<b>SUBTOTAL ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>	5	6.187	5	4.900	6	6.505
NN KU 0000	<b>1b. ADPE &amp; TELECOMMUNICATIONS (&lt;\$1M)</b>	12	4.070	13	4.580	11	3.110
	<b>2. TOTAL ADPE &amp; TELECOMMUNICATIONS</b>	17	10.257	18	9.480	17	9.615
	<b>3a. SOFTWARE DEVELOPMENT (&gt;\$1M)</b>						
	Internally Developed						
A DL 0002	NETWORK CENTRIC WARFARE IMPLEMENTATION (BPR)	2	5.600	2	5.750	2	2.700
A DL 0000	DIFMS/NIMMS IMPLEMENTATION	2	4.700	1	.520		
A DL 0000	DIFMS/NIMMS OSE REENGINEERING					2	1.826
	Externally Developed						
A SL 0001	ENTERPRISE RESOURCE PLANNING (ERP)			2	12.000	2	16.389
	<b>SUBTOTAL SOFTWARE DEVELOPMENT (&gt;\$1M)</b>	4	10.300	5	18.270	6	20.915
NN DU 0000	<b>3b. SOFTWARE DEVELOPMENT (&lt;\$1M)</b>	0	.000	0	.000	0	.000
	<b>3. TOTAL SOFTWARE DEVELOPMENT</b>	4	10.300	5	18.270	6	20.915
	<b>TOTAL ADP CAPITAL PURCHASES PROGRAM</b>		20.557		27.750		30.530

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. LAND MOBILE COMMUNICATION TRUNKING SYSTEM					D. Patuxent River	
						8AA1EL8017GR						
2000			2001			2002						
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>			0	1	800	800	1	800	800			
<b>OPERATIONAL DATE</b>	31-May-02											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$371,800	\$0	\$371,800									
AVERAGE ANNUAL SAVINGS (Discounted)	\$228,455	\$0	\$228,455									
PAYBACK PERIOD	5.9	#DIV/0!	5.9									
RATE OF RETURN (ROR)	14%	0%	14%									
PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. Replacement of current land mobile communication trunking system.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?  All public safety and project communications on board Naval Air Station (NAS), Patuxent River, are handled by the trunked communications system that was installed in 1989. The Department of Commerce's National Telecommunications and Information Administration (NTIA) proposed and are currently implementing the digital and narrowband standard. This standard doubles the number of available frequencies by using digital signal processing which requires half of the bandwidth formally allocated per radio frequency channel. All federal agencies are required to comply with this standard by 01 January 2008. In order to bridge the gap by avoiding a large cost in the year 2007 to cover this requirement, we are recommending a phased-in approach, with the largest cost incurred in the year 2001. The Naval Air Warfare Center Aircraft Division (NAWCAD) has over 300 customers currently using this older system. Much of the customer based (portable/mobile) equipment is nearing the end of its expected life cycle, which coincides well with the implementation of our phased-in approach. This results in adherence to the new standard. Compliance with this standard can only be obtained through replacements or upgrades. This project involves replacing 180 units owned by the NAS and total system replacement.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? Upgrading existing system components and replacing NAS customer units was considered. This would not provide the communications available with the digital and narrowband standard.</p> <p>4. IMPACT IF NOT ACQUIRED. Failure to comply with this ruling by the deadline could result in communications being shut down at NAWCAD Patuxent River.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. MISSION PLANNING II				D. China Lake		
						4WD8EL0108PP						
Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>	1	989	989	1	1,000	1,000	1	850	850			
<b>OPERATIONAL DATE</b>	1-Dec-07											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$7,271,422	\$0	\$7,271,422									
AVERAGE ANNUAL SAVINGS (Discounted)	\$4,467,974	\$0	\$4,467,974									
PAYBACK PERIOD	1.2	#DIV/0!	1.2									
RATE OF RETURN (ROR)	57%	0%	57%									
<b>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</b>												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. The purpose of the Mission Planning Facilities CPP is to provide NAWCWD with a broad spectrum of capabilities responsive to current and future mission planning requirements of aircraft and weapons systems programs. The effort is proceeding in four phases: 1) provide basic Tactical Aircraft Mission Planning System (TAMPS) and mission planning science and technology facilities (FY 92/3), 2) provide collaborative project capability between China Lake and Point Mugu (FY 94/5), 3) provide sensor to shooter connectivity (FY 96/01), and 4) provide for custom weapon tailoring (FY 02/06). The 02-06 phase has two modules: FY 02/03 - will include tools for real time allocation and utilization of weapons systems, building a rapid operation support capability and providing a mobile cell phone repeater for weapon connectivity; FY04/06 - will focus on system engineering tools for web based weapon integration, mission planning for real operations and variable acuity display for data immersion.</p> <p>The current phase of sensor to shooter connectivity has two remaining modules: FY 98/99 - Distributed Data Base (including Dynamic Knowledge Management and Real-time Interpretation System) and simulation integration for constructive many on many simulation; and FY00/07 the focus will be towards the direct control of assets for research and development prototyping, with space sensor control capability in FY 2000 and tools for real time allocation and utilization of weapons systems in FY2001. Weapons tailoring capabilities will be the focus in FY02 through FY07.</p> <p>From FY98 to FY2007, the Mission Planning project will focus on database, fusion and communications integration ( \$1M per year invested in FY98/99); this includes a Responsive Targeting Operations Center for fleet support, an image archive, organic targeting assets, and uplink capability. These capabilities will be exercised in a network across the southwestern region, linking numerous sites, facilities, platforms and weapons. By the end of FY00/001 (\$1M invested per year),the Rapid Targeting Infrastructure will provide custom targeting support to the tactical Warfighter via the dynamic allocation of operational assets. This capability will encompass mission aspects of hard kill, soft kill and deception. The final Phase of the Mission Planning investment, the capability for custom weapon tailoring, will become operational in the FY2006/07 timeframe.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The increasing sophistication of aircraft and weapon systems utilizing the Global Positioning System, automatic target recognition systems and knowledge of both the threats and terrain masking to survive are becoming dependent on mission planning systems to be operationally useful. Our ability to rapidly utilize tactical and national intelligence, and coordinate across unit, service and national barriers will enhance our operational capabilities. This CPP provides basic mission planning facilities, facilitates collaboration across NAWC sites to maximize program synergism and contributions from appropriate experts, and is building the connectivity, data base utilities and simulation support for minimizing travel and flight test in exchange for simulation and distributed interaction of supporting facilities. Projects affected include F/A-18 mission planning, Airborne Tactical Information Management System, Tactical Tomahawk, Joint Stand Off Weapon, Joint Direct Attack Munitions, and Arid Hunter.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? Other alternatives considered have included 1) various contract options with industry, 2) going commercial, outsourcing the functional area along with the current workforce and using commercial applications, 3) going to universities that have similar capabilities.</p> <p>4. IMPACT IF NOT ACQUIRED. Failure to support the Mission Planning Initiative will seriously compromise our efforts to build a consensus and future vision in the mission planning arena. Coordination and capabilities to support military operations with tactical air weapons and cruise missiles will be significantly diminished. Mission planning response times will remain in the time frame of two days, as opposed to thirty minutes or less. The facilities and capabilities developed here support multiple programs sponsored by the National Reconnaissance Office, Navy Command &amp; Control, the Program Executive Office for Cruise Missiles and Unmanned Aerial Vehicles, and the Program Manager for Tactical Aircraft Mission Planning. Specific requirements include mission planning response times of thirty minutes or less, direct access to National space sensors, rapid exploitation and transmission of weapon targeting materials to in-flight aircraft and missiles, and rapid weapon tailoring to optimize first pass kill potential.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

<b>CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)</b>	A. FY2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Research & Development	C. SHIP/AIR MISSION SYSTEM SUPPORT	D. Patuxent River
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4AA1EL4117PN

Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>			0	1	1,120	1,120				0		

**OPERATIONAL DATE** 30-Sep-02

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$485,280	\$0	\$485,280
AVERAGE ANNUAL SAVINGS (Discounted)	\$298,184	\$0	\$298,184
PAYBACK PERIOD	2.8	#DIV/0!	2.8
RATE OF RETURN (ROR)	27%	0%	27%

**PROJECT INFORMATION NARRATIVE:** (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT. This funding request is for acquisition of an AEGIS Baseline 7 weapons control system for installation at the NAWCAD Patuxent River Ship Ground Station (SGS). Baseline 7 is network based commercial off the shelf (COTS) system and is the backbone of post-2000 AEGIS and SC-21 ship combat systems. The acquisition will include the minimal configuration necessary to support LAMPS MK III Block II integrated mission systems test and evaluation (T&E). Baseline 7 provides an open, expandable architecture system to permit integration of additional ship/air mission systems at low cost (e.g., Cooperative Engagement Capability (CEC), Common High Bandwidth Data Link (CHBDL), Link 16) and permit integrated ship/air mission systems T&E support for all NAWCAD Patuxent River platforms. The SGS is the only facility of its kind in the Navy. It is dedicated to T&E of integrated ship/air mission systems. The actual FFG7 and DD963 shipboard systems required for end-to-end test of LAMPS MK III interfaced ship/air weapons, surveillance and sensor systems are resident. Tests are performed with FFG7 or DD963 combat direction system configurations integrated with LAMPS shipboard electronics using system cables duplicating target installation requirements. The facility is collocated with Fleet configured helo's. The majority of tests requiring use of the LAMPS data link are performed with helo's on the deck. For example, in FY97, with no major T&E program in progress, the SGS provided LAMPS MK III integrated mission systems support for test events totaling 183 flight hours and 317 ground hours (25% of SGS utilization). Minimal flight hours are expended for each test program. Further, tests are not restricted due to aircraft endurance. Test programs are shortened and substantial flight costs avoided.

2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? LAMPS operations are transitioning to a littoral environment. New mission areas are evolving and ship/air mission systems interface requirements are being redefined. Contemporary operations are emphasizing joint interoperability. Equipment is transitioning to network based COTS mission systems. The Navy has placed FFG-7 and DD-963 class ships in caretaker status. Their combat systems, resident in the SGS, use point-to-point interfaces that are not compatible with network based systems. Legacy platforms and systems are being maintained at the status quo. They will be retired as post-2000 era ships and air platforms are introduced. As a result, integrated ship/air mission systems interface requirements and corresponding support requirements are evolving and changing rapidly. Their T&E needs must be accommodated. In order to accommodate T&E of new, network based COTS integrated ship/air mission systems and their associated interfaces planned for FY02 and beyond, a combat system upgrade is required at the SGS. Baseline 7 is the backbone of post-2000 AEGIS and SC-21 ships combat systems. A Baseline 7 acquisition provides the SGS an open, expandable architecture system that permits integration of additional ship/air mission systems at low Cooperative Engagement Capability (CEC), Common High Bandwidth Data Link (CHBDL), Link 16). With Baseline 7, integrated ship/air mission systems T&E support can be provided for all NAWCAD Patuxent River platforms. Besides meeting immediate needs, selection of the 7 system positions the SGS for continuing upgrades at minimum cost and impact.

3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? There is only one alternative - conduct tests elsewhere. The Present Method reflects costs based on the fact that not upgrading the SGS would require deploying the technical test team members and essential equipment to other sites to perform required flight tests; e.g., Wallops Island, VA or Moorestown, NJ. It is a very conservative estimate based on support requirements for ship/air mission systems in life cycle maintenance. Only 25% SGS usage is reflected and major T&E programs are not addressed. When testing at other sites, scientific control of ship/air mission systems equipment is difficult to maintain and test periods require lengthening to ensure adequate system grooming with assets provided from disparate activities. Tests that would normally be conducted using the SGS and a collocated NAWCAD helo in the hangar necessitate use of an airborne helo at any other test site. A requirement for redundant systems would be established. Scheduling would always require coordination between at least two (2) geographically displaced parties involved in multiple programs. Canceled events would be very difficult to reschedule. The risk of delaying multiple sponsors programs milestones and costs to the Navy would increase.

4. HAS THE CUSTOMER(S) BEEN INVOLVED IN THE SOLUTION AND DO THEY AGREE WITH IT? Yes.

5. IMPACT IF NOT ACQUIRED. All program planning has been predicated on testing on site at the SGS (Proposed Method). The increased costs associated with the Present Method assessed in question 3) represent additional unplanned costs to the Navy that are avoided with the Proposed Method for programs in life cycle maintenance. But, failure to upgrade will result in the rapid, technical obsolescence of the SGS because the Navy is phasing out the legacy systems resident in the facility. Those systems are not compatible with the network based COTS equipment on the horizon. The programs addressed in paragraph 4 above can not be supported adequately without the upgrade. Miscellaneous minor projects with anticipated revenue of \$0.5M and the current annual revenue of \$1.8 M, of which approximately 80% is funded by NAVSEA will be also lost.  
There will be a major detrimental impact to NAWCAD's ability to continue marketing technical services to customers desiring access to a modern ship combat system collocated with air assets for integrated ship/air mission systems support.

6. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Research & Development	C. P-420 SECURITY EQUIPMENT	D. Patuxent River
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	<b>2000</b>			<b>2001</b>			<b>2002</b>					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost

<b>INVESTMENT COST</b>			0			0	1	299	299			
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**OPERATIONAL DATE** 1-Apr-03

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$643,973	\$0	\$643,973
AVERAGE ANNUAL SAVINGS (Discounted)	\$395,694	\$0	\$395,694
PAYBACK PERIOD	3.5	#DIV/0!	3.5
RATE OF RETURN (ROR)	22%	0%	22%

**PROJECT INFORMATION NARRATIVE:** (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT. This submission allows for the module 1 and 2 of the procurement/installation of the P-420 Security Equipment project. This project is expected to complete the first two phases in FY02 and FY03. The P-420 Security Equipment includes the procurement of fence sensors, access control, perimeter sensors, and CCTV (Closed Circuit Television) slated for installation at existing sites. The fence sensors will identify if the fences are cut or climbed, access control (card readers) will monitor gates and turnstiles, perimeter sensors for areas that could not be covered by fencing, and CCTV to cover the access control points when manpower is not available.
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? NAWCAD has a non-compliance issue with regard to the protection of aviation assets. The P-420 Equipment will give the protection necessary to meet Navy security standards.
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? Contracting out the cost to accommodate an increase in the protection of base assets is estimated at \$1,345,000.
4. IMPACT IF NOT ACQUIRED. If the project is not funded, the Patuxent River complex will not meet security requirements.
5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. ELEC. POWER SYS CLOSED LOOP COOLING WATER 4AA1EL4440PE					D. Patuxent River	
	2000			2001			2002					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>			0	1	1,200	1,200			0			
<b>OPERATIONAL DATE</b>	1-Sep-02											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$1,200,000	\$0	\$1,200,000									
AVERAGE ANNUAL SAVINGS (Discounted)	\$737,348	\$0	\$737,348									
PAYBACK PERIOD	1.1	#DIV/0!	1.1									
RATE OF RETURN (ROR)	61%	0%	61%									
PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. Cooling Water System and Additional Electrical Power to support Drivestand and Environmental Test capabilities are required to meet our present and future customer needs. Presently we have a cooling water requirement of 750 gallons per minute (gpm). NAWCAD now has available 200 gpm. The Utilities Office of Public Works (PW) says that any sustained use of water above 200 gpm would seriously impact the entire water system for this area of the Base. According to the Environmental Office at Public Works our present cooling water system is in non-compliance with the State of Maryland Environmental Regulations because our cooling water is being dumped into the storm drain which empties into the Bay. If our storm drains were connected to the sewer system then millions of gallons of water would be dumped into the already stressed sewer system. The solution to these problems is a closed-loop cooling water system. Building 1461 is now over the 100% electrical power capability for the building and by 1999 we will be over 170%. Building 1461 will need an additional 5000 amps. to meet these demands.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? Cooling Water System- The present Cooling Water System does not have the capability to provide the amount of cooling water required to cool our present Drivestand and Environmental test equipment. Electrical Power Systems Division in recent years have made substantial improvements in our testing capability to meet our customers present and future needs. These improvements have increased our cooling water and power requirements. The Federal and State of Maryland Environmental Regulations have changed governing the disposal of chlorinated water. The new regulations prohibits dumping chlorinated water into the Chesapeake Bay. A closed loop cooling water system would solve all three of our cooling water problems (1) eliminate our need for large quantities of water from potable water system, (2) insure we are in compliance with Federal and State Regulations, and (3) enable us to meet our customers present and future testing needs.</p> <p><u>Additional Electrical Power:</u> The present electrical power supplied to Building 1461, based on recent PW survey, is exceeding 100% of total capability and by 1999 will be over 170%. An additional 5000 amps will meet these demands including the Closed Loop Cooling Water System.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? 1) NAWCAD could apply for a Federal and State of Maryland Regulations wavier and continue to violate Environmental Regulations listed in Section 6 of this CPP request. 2) NAWCAD could operate the facilities, which would be limited by the current utilities available today. This would represent a reduced facilities utilization rate of existing and projected capabilities.</p> <p>4. IMPACT IF NOT ACQUIRED. The Electrical Power Systems Division according to the PW Environmental Office, could be forced to cease all testing requiring cooling water or be fined a maximum of \$25,000 per day of operation for non compliance. The very least that would happen if we are allowed to continue in our present mode is we would be unable to continue to support our customers in a timely manner. Due to the increased cooling water and electrical power requirements NAWCAD will be forced to schedule testing based on cooling water and electrical power availability. This would seriously reduce the number of customers we could support and increase our testing turn around time.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT.</p> <p><u>Federal Environmental Regulations:</u> Clean Water Act, Section 402 National Pollutant Discharge Elimination Systems. EPA Administration Permit Program 40CFR Part 122.</p> <p><u>Maryland Environmental Regulations:</u> Code of Maryland 26.08.01</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development							C. DATA WAREHOUSE				D. Patuxent River	
							7AA0KL7222GR					
Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>	1	2,090	2,090			0			0			
<b>OPERATIONAL DATE</b>	30-Jun-00											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$2,824,238	\$0	\$2,824,238									
AVERAGE ANNUAL SAVINGS (Discounted)	\$2,141,217	\$0	\$2,141,217									
PAYBACK PERIOD	0.8	#DIV/0!	0.8									
RATE OF RETURN (ROR)	102%	0%	102%									
<b>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</b>												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. The Data Warehouse project is the restructuring, integration and capturing of summary level management information from a multitude of diverse transactional systems across functional business areas (i.e., planning, finance, personnel). This data repository will allow managers to obtain such data to develop corporate decisions and strategy based on the current environment, as well as, past historical trends. The Data Warehouse allows the organization to exploit information already captured in transactional systems and use the data for forecasting, trend analysis, and analytical processing. Currently, management information is provided by the transactional systems and manually manipulated to provide the corporate view required by management. This process is labor intensive and does not provide timely, integrated data.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The current environment requires that data be captured from a multitude of information systems across a variety of hardware platforms to obtain an overall picture of the current status of resources. The data from the multitude of systems is manually manipulated to obtain a common data level, common data time frames, and consistent data definitions. The data warehouse project will extract data from existing transactional data sources, manipulate the data to ensure data leveling, data consistency, data timeliness. It will provide a single source for management/summary level data from which to make corporate decisions.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? Consideration has been given an alternative to develop summary tables within each transaction application. These summary tables would then be accessed to provide summary information systems. This alternative still requires many information systems and hardware platforms in order to obtain the data. The data would require manual manipulation to provide consistent time frames across the many information systems.</p> <p>4. IMPACT IF NOT ACQUIRED. Manual manipulation of data will continue which is labor intensive for the business execution managers. Information systems will expand their scope to provide management information without the data being properly organized across functional areas. This information needs to be properly architect to provide the consistent, accurately, and timely management information. The impact will become greater as more mandated systems (e.g., Standard Procurement System) are implemented at our site. The need for cross functional related data which is contained in multiple sources and has not adhered to our corporate business language and terms will be vital.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. IMMERSIVE DESIGN OPTIMIZATION SYSTEM 4AB1KL4820PP					D. Lakehurst	
	2000			2001			2002					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>			0	1	1,350	1,350	1	525	525			
<b>OPERATIONAL DATE</b>	1-Mar-02											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$634,855	\$165,000	\$799,855									
AVERAGE ANNUAL SAVINGS (Discounted)	\$481,320	\$125,096	\$606,416									
PAYBACK PERIOD	3.7	NA	2.8									
RATE OF RETURN (ROR)	26%	7%	32%									
PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. The goal of this project is to optimize the design-to-manufacturing cycle of support equipment (SE) and aircraft launch and recovery equipment (ALRE) created at NAWCAD through the implementation of a dedicated interactive immerse design optimization system (IDOS) and subordinate processes. The purpose of this project is to provide an electronic environment that allows engineers to identify and test perceived critical parameters involved in the design-through-manufacturing processes to assess their impacts on the efficiency of component and assembly SE and ALRE production systems and to develop a cause and effect knowledge through the use of simulation modeling, prior to expending time and procuring raw materials. Immerse as used in this context involves all technologies and practices commonly associated with the term virtual reality (VR). The development of this project will address requirements to design, build and simulate projects and/or system designs, "virtually", under the most realistic conditions possible while reducing the necessity for manufactured prototypes.</p> <p>The critical nature of SE and ALRE products in Navy weapon systems challenges NAWCAD to apply automation technology to manufacturing processes. System modeling and simulation can pay large dividends in the engineering and manufacturing phases through the use of mathematical modeling and virtual control systems, and save money on prototype experiments. In manufacturing situations, NAWCAD engineers must make allowances for large numbers of contending facts. An expert system, such as IDOS, can help automatically navigate through the mass of facts and alternatives to a practical and efficient solution. The modeling and simulation of real events, rather than the manufacturing and testing of real materials, parts, and assemblies will help to devise improved processes and products that will benefit the fleet, while reducing overall production costs.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? In the current environment, NAWCAD engineers are unable to subject large system designs to various environmental and application conditions prior to an actual prototype being manufactured. Through the use of a robust IDOS, this method can be streamlined to provide cost reductions in manufacturing and critical time savings in the design through product implementation phases. This system will allow NAWCAD to deliver a more fully tested and reliable quality product to the fleet in a shorter time frame.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? An alternative to this proposal is to maintain the status quo, where design, manufacturing and testing are done in a physical realm. Such an alternative does not support the underlying foundation which ultimately satisfies the imperative requirement of reducing design cycle time while maintaining design precision and accuracy, minimizing overall project costs and overall product to market scenarios to which all NAWCAD projects are subject.</p> <p>4. IMPACT IF NOT ACQUIRED. If not funded, the capabilities for Lakehurst to produce quality SE and ALRE products to the fleet through the use of available technology will be compromised. Engineering, prototyping, and manufacturing costs will maintain their current level and not be reduced through the benefits derived from IDOS. Both R&amp;D programs and NAWCAD manufacturing capabilities risk short and long term reduction in their sustaining business base in their cognizant product areas.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. CORPORATE COMPUTING TECHNOLOGY INSERTION					D. Patuxent River	
						7AA2KL723CGP						
2000			2001			2002						
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>			0			0	1	1,078	1,078			
<b>OPERATIONAL DATE</b>	30-Mar-02											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$730,427	\$0	\$730,427									
AVERAGE ANNUAL SAVINGS (Discounted)	\$553,779	\$0	\$553,779									
PAYBACK PERIOD	1.7	#DIV/0!	1.7									
RATE OF RETURN (ROR)	51%	0%	51%									
<b>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</b>												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. The purpose of this project is to upgrade and consolidate selected Naval Air Warfare Center Aircraft Division (NAWCAD) servers into one server, as well as upgrade the current NT servers that support NAWCAD corporate applications. This solution will allow processors, memory, and input/output (I/O) to be expanded seamlessly and transparently, with linear increases in overall system, user, and application performance. Mainframe like partition capabilities permit extremely flexible processor and memory configurations that improve resource management and availability. Currently NAWCAD has a 30+ NT server that services web sites, imaging services, workflow, and databases. These mid-tier NT servers will be at the end of their useful life and require upgrading and/or replacement in order to support current and future NAWCAD corporate database requirements.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The current system consists of four servers that interact with each other. This causes increased network traffic and slower processing times for the end-user. The goal of this project is to manage resources at an optimal service level for the lowest possible cost to the organization thereby improving efficiencies. In addition, the distributed systems cause many users to perform double duties as System Administrators. When systems are consolidated, an experienced System Administrator can do a much better job of bringing together multiple, disparate platforms and run them as a single, seamless environment. The System Administration staff can be decreased, as the amount of servers decrease. Historically, 7.2 has purchased two servers per year to cover the expanding user requirements. The new server will reduce the number of hardware and software platforms that are required and can apply standardized procedures and disciplines to a streamlined, re-centralized environment. Furthermore, the current space for servers is limited. If NAWCAD had one system, it would decrease the amount of floor space needed to house the equipment. Last, the corporate NT servers will need to be upgraded and/or replaced due to performance requirements and the increased customer's usage of the servers. This will cause the labor and hardware maintenance to cost more than the new system by FY02.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? The only alternative would be to purchase a new server for every new application required for NAWCAD. This is not a cost effective solution to the issue.</p> <p>4. IMPACT IF NOT ACQUIRED. The impact if not required is that the network traffic will increase, leading to slower data processing. In addition, if another application is created more servers would have to be bought to house them and would thereby increase material, maintenance, and System Administration costs. Last, the current floor space is limited. If NAWCAD is forced to add more servers, we would have space problems.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. EXTENSION OF FIBER OPTIC/UTP INFRASTRUCTURE					D. NAWCAD Lakehurst	
						7AB0TL7240GN						
Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>	1	1,679	1,679				1	577	577			
<b>OPERATIONAL DATE</b>	1-Apr-01											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$788,000	\$0	\$788,000									
AVERAGE ANNUAL SAVINGS (Discounted)	\$484,192	\$0	\$484,192									
PAYBACK PERIOD	3.5	#DIV/0!	3.5									
RATE OF RETURN (ROR)	21%	0%	21%									
PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. The purpose of this project is to procure and install Fiber Optic Media from nodes on the existing network to critical sites within the Naval Air Warfare Center Aircraft Division (NAWCAD). In addition, this project will procure and install 100 base-TX media and switch hubs within buildings at NAWCAD. Currently, the buildings do not have the capability to access Corporate Automated Data Processing (ADP) applications or have access to user specific ADP resources within the Navy Wide Area Network (NAWWAN).</p> <p>The Fiber Optic media will be extended to the following buildings: Test tracks 1,2,3,4 and 5, near far end (Test Dept); Cryogenics Lab (MTD); Hazardous Material Facility (Safety); Ground Electronics, Bldg. 46 (Air Dept); Prototype Shop, Bldg. 33, (Engineering/MTD/Concurrent Eng Network); Research Approach Landing System (RALS) Tower (Test); Bldgs 33, 480, 481, 485 (Command); 10 Base-TX Media will be installed in offices and work spaces in: Bldg. 551; Cryogenics Lab; Hazardous Material Facility; Bldgs 33, 480, 481, 485; Building 8009 to south end of St. Inigoes.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The current problem is that the Dial-up Networking does not support Infolink or Corporate Applications, and database applications required at the sites listed above. In addition, the performance of other Network applications are inadequate via dial-up networking. These problems are becoming critical as new requirements for automated processes are implemented. This project will extend the NAWCAD Network to test sites and other remote sites. The project will solve the problem because data collection and retrieval at the test tracks and RALS Tower will be done more efficiently and remotely. In addition, the project will provide a direct connection between Computer Aided Design (CAD) and the Computer Aided Manufacturing (CAM) facility known as the Prototype Shop, Bldg. 331.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? One alternative is the Microwave and T3 communications. The cost of the Microwave and the required maintenance would be prohibitive for the quantity of Microwave links required. Microwave is also less reliable and offers less capability for expansion and implementation of new technologies. The existing copper cable plant to the remote sites is inadequate to support the quantity of T3 links required. The cost of T3 end equipment, upgrading the existing copper cable plant, and maintenance is not cost effective and offers no capability for expansion or for implementation of new technologies.</p> <p>4. HAS THE CUSTOMER(S) BEEN INVOLVED IN THE SOLUTION AND DO THEY AGREE WITH IT? The following customers in the user community have been involved in the planning and concur with this proposal:  Fiber to test tracks - Test Department concurs  Fiber to Cryogenics - Manufacturing Technologies Department (MTD) concurs  Fiber to Hazardous Material facility - Safety Department concurs  Fiber to Ground Electronics Maintenance Branch - Air Department concurs  Fiber to Prototype Shop - MTD concurs, Engineering Code 4.8 concurs  Fiber to RALS Tower - Test Department concurs  Fiber to Bldg. 33, 480, 481, 485 - Command/Admin concur  Fiber from Building 8009 to the south end of St. Inigoes - St. Inigoes concurs</p> <p>5. IMPACT IF NOT ACQUIRED. If this project is not acquired, users in remote sites will not be able to access Local Area Network (LAN) resources from their work spaces. In addition, those resources that can be accessed via dial-up networking will not function efficiently. Furthermore, users will have to travel to buildings that are on the Network and find an available work station to access network resources. Lastly, automated data collection and real-time data functions cannot be performed at test tracks 1, 2, 3, 4, 5, or the RALS Tower.</p> <p>6. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

**CAPITAL PURCHASES JUSTIFICATION**  
(Dollars in Thousands)

A. FY2002 PRESIDENT'S BUDGET

B. Department of the Navy/Research & Development						C. COMMUNICATION SYSTEM UPGRADE				D. China Lake		
										7WD3TL0084GR		

Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>	1	1,400	1,400	1	1,250	1,250	1	2,000	2,000			

**OPERATIONAL DATE** 30-Sep-02

<u>METRICS:</u>	<u>AVOIDANCE</u>	<u>SAVINGS</u>	<u>TOTAL</u>
PROJECTED ANNUAL SAVINGS	\$558,383	\$0	\$558,383
AVERAGE ANNUAL SAVINGS (Discounted)	\$343,102	\$0	\$343,102
PAYBACK PERIOD	4.7	#DIV/0!	4.7
RATE OF RETURN (ROR)	17%	0%	17%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT.

This project encompasses the corporate backbone data communications system for NAWCWPNS at the China Lake and Point Mugu sites. The purpose of the project is to upgrade the data carrying capacity and reliability of the system at specifically targeted segments which have either a rapidly growing demand or have particularly low capacity for their users. The introduction of current end equipment and infrastructure technology will modernize these segments enabling them to carry the high capacity application programs users are requiring to perform in the multi-site, Competency Aligned Organization (CAO). The data communication efforts identified for improvement include the integration of the WD net architecture with Western Test Range Complex network, Campus upgrades, some large building Local Area Network (LAN) upgrades, Consolidation of Long Haul Circuits, NAVAIR Wide Area Network (NAVWAN). All of these segments interrelate to create a single communications system.

FY02: Upgrade remote campus switches from Ethernet to OC-3 ATM which will increase the network speed from 10Mbps to 155Mbps and provide increased capability to transmit additional data streams over the network.

2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?

Many of the segments are running on technology that is many years old. This results in inefficient use of the fiber optic infrastructure currently in place and increased operations labor necessary to maintain and troubleshoot the system. The introduction of new, bandwidth intensive applications running over the communications system has also stretched the current system to its limits creating errors and delays in service. These delays and errors reduce the productivity of the majority of the workforce at NAWCWPNS.

3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?

The other alternatives are:

- 1) Do nothing and live with the continuing reduction in capabilities and operations labor costs as new applications are added to the network.
- 2) Do nothing and limit the introduction of new applications on the network thus slowing the degradation of data communications performance.
- 3) Choose a different mix of segments to upgrade.

Numbers 1 & 2 were eliminated due to the increased pressure on IT systems in today's CAO and business environment. Number 3 was eliminated since the selection of those segments funded by this project were arrived at through a customer prioritization process.

4. IMPACT IF NOT ACQUIRED.

Without replacement equipment the existing network will begin failing piece by piece. Without new equipment many new requests for network connectivity due to consolidation, moves, new construction or new performance requirements will not be accomplished. Network bottlenecks will be created due to higher levels of usage saturating the existing network capacity causing severe throughput degradation. This network has become a critical communications tool not only for China Lake/Point Mugu personnel, but also in their communication and data transfer with other NAWC/NAVAIR sites.

5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT

Not applicable.

<b>CAPITAL PURCHASES JUSTIFICATION</b> <b>(Dollars in Thousands)</b>	A. FY2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Research & Development	C. FIBER OPTIC TRANSMISSION EQUIPMENT	7AA8TL0723GR	D. Patuxent River
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Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>	1	718	718	1	450	450			0			

**OPERATIONAL DATE** 30-Nov-01

<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>
PROJECTED ANNUAL SAVINGS	\$1,500,000	\$0	\$1,500,000
AVERAGE ANNUAL SAVINGS (Discounted)	\$921,685	\$0	\$921,685
PAYBACK PERIOD	6.0	#DIV/0!	6.0
RATE OF RETURN (ROR)	14%	0%	14%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT. This submission is for a multi-year project to provide a fiber optic system throughout NAWCAD 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 Naval Air Warfare Center, Aircraft Division (NAWCAD) at a competitive advantage in terms of attracting declining Department Of Defense (DOD) and Research and Development, Test & Evaluation (RDT&E) project dollars.
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The requirement exists at the NAWCAD to support the real-time availability of scientific and laboratory simulation data such as acoustics, flight, weapons systems, and ordnance testing. To effectively share this volume of information, as well as, other general engineering and business information (generated by the 150+ local area networks spread throughout the NAS), a modern, high speed, and expandable communications infrastructure is required.
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? Several alternatives have been examined for satisfying the mission needs. These include (1) maintaining the existing voice and data cable plants; (2) replacing the existing voice and data cable plants; or (3) install a high-speed outside fiber optic cable distribution system.
4. IMPACT IF NOT ACQUIRED. 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.
5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. OPTICAL REMOTE PHONE SWITCH MODULE 7AA1TL7231GR					D. Patuxent River	
	2000			2001			2002					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>			0	1	1,450	1,450			0			
<b>OPERATIONAL DATE</b>	1-Feb-01											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$1,283,512	\$0	\$1,283,512									
AVERAGE ANNUAL SAVINGS (Discounted)	\$788,663	\$0	\$788,663									
PAYBACK PERIOD	1.3	#DIV/0!	1.3									
RATE OF RETURN (ROR)	54%	0%	54%									
PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT. This is a 3200 line optical remote module that will support integrated services digital networking and analog service to NAWCAD St. Inigoes. This optical remote module is needed to support the mission of the personnel located in St. Inigoes for voice and data services and to achieve continuity between Patuxent River and St. Inigoes.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The existing St. Inigoes switch is not monitored 24 hours a day seven days a week. With an ORM installation, 24 hour coverage would be achieved, additionally, the personnel of St. Inigoes would benefit by having remote maintenance capability to ensure minimal down time. With the constant growth at St. Inigoes and demands placed on the technicians the ORM would be monitored along with the Patuxent River switch and this would allow additional time for the technicians to provide more customer service. By installing an optical remote module at St. Inigoes, voice mail services, Integrated Services Digital Network (ISDN) and network management services would be provided through the existing Patuxent River switch.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?</p> <p>1. Status quo - Telephony services are limited today and offer limited future growth. 2. An upgrade to, or replacement, of the existing switch would incur major expenses.</p> <p>4. HAS THE CUSTOMER(S) BEEN INVOLVED IN THE SOLUTION AND DO THEY AGREE WITH IT? The customer involvement has been through numerous request for additional services and features.</p> <p>5. IMPACT IF NOT ACQUIRED. Limited voice and data services to customers in St. Inigoes with minimal future growth. Life cycle with the existing switch would be met in the immediate future. Escalating cost would be experienced with future maintenance requirements. Additionally, a lack of continuity with Patuxent River and St. Inigoes switches would be present.</p> <p>6. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.</p>												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development						C. INTEGRATED BATTLESPACE ARENA IMPROVEMENTS (IBAR) PHASE 2 4WD1TM9106PR				D. China Lake		
Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>INVESTMENT COST</b>			0	1	400	400	1	1,075	1,075			
<b>OPERATIONAL DATE</b>	30-Sep-03											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$2,310,500	\$0	\$2,310,500									
AVERAGE ANNUAL SAVINGS (Discounted)	\$1,419,702	\$0	\$1,419,702									
PAYBACK PERIOD	1.0	#DIV/0!	1.0									
RATE OF RETURN (ROR)	65%	0%	65%									
<b>PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)</b>												
1. DESCRIPTION & PURPOSE OF PROJECT. The Integrated Battlespace Arena (IBAR) is a collection of nine (9) laboratories and facilities at the China Lake site dedicated to battlespace engineering at all levels. RDT&E from the sub-component level all the way up to the integrated "system of systems" level is routinely supported. This is the second of a multi-phased approach to continue to make the IBAR a world class, state of the art capability, which will continue to enable the scientists, engineers and technicians to deliver weapons and weapon systems to the warfighter. This phase 2 will upgrade, or replace several components in the various integrated laboratories and facilities. The areas targeted for this phase are the, Global Positioning System/Inertial Systems (GPS/INS) Laboratory, IR Target Presentation, Data Link, Signal Processing Development Laboratory, Virtual Prototype Facility and the upgrade of several infrastructure elements in the IBAR, the general laboratory's high pressure gas system, network. In addition to the facilities mentioned above, this Phase will begin the upgrade for the Cockpit Dome Simulator and will continue the upgrade of the IBAR network.												
2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM? The current simulation requirements from the broad IBAR customer base are beginning to tax the capability of the various IBAR components. Additionally, as program dollars become increasingly scarce and the need to reduce the number of in-flight and live-fire tests increases, reliance on the IBAR is also increasing. In the GPS/INS Laboratory, the two Contraves rate tables originally procured in the early-mid 80's are damaged. Upgrading the 3-axis table from a "low-medium accuracy" (30 mins of arc) to a "medium-high accuracy" (30 sec. of arc) will increase testing significantly. In the Data Link facility, a gateway is needed to allow data to be shared and distributed with the IBAR components. With a gateway, the IBAR would be able to fuse a number of external (radio) data sources and provide the data for use by any of the simulation and/or hardware in the loop laboratories. A gateway will enable IBAR customers to demonstrate subsets of larger systems, connect external (ground and airborne) systems to the lab network (9 facilities), and realize connectivity to both simulated and real systems in the IBAR. In addition, as a result of the NCW BPR 2-1, integration of the data link systems can be shared with any of the other networked facilities being linked by that activity. In the Virtual Prototype Facility (VPF), the original video projectors, 9 X 12 foot screens and ancillary equipment were purchased in 1996. The screens display high-resolution computer generated views of terrain and targets during cockpit simulations. Since that time, technology has advanced to provide digital video equipment that offers improved brightness, and resolution that will enable the sharpness and resolution required during cockpit simulations for key target detection and recognition issues. The current Cockpit Dome Simulator lacks a field of view and prohibits many air-to-air scenarios that require a larger field-of-view, particularly above the aircraft. The addition of a 12-foot diameter hemispherical dome, with projection system and re-configurable cockpit would provide for multi-ship scenarios when linked with the VPF. A key thrust in the IBAR involves operation and evaluation of infrared missile guidance systems, as well as the simulated target presentation systems for them, which require cooling with high-pressure gas. The gas system for the IBAR currently utilizes a bank of very heavy pressurized gas cylinders, which is both costly and dangerous because of the weight of the cylinders and the change out frequency. An integrated high-pressure gas system utilizing nitrogen is needed to run throughout the IBAR, to the GPS/INS navigation Laboratory and to the Geodesic Dome providing high-pressure gas in the 3000 psi to 6000 psi range. The development, fabrication, hardware characterization, and test and evaluation processes for Advanced Digital Signal Processing and I/R sensor development is becoming more difficult to accomplish due to outdated development and test equipment. The upgrades are vital to replace older analog devices and slower test equipment to sustain in-house development capability. The IR Scene Presentation Laboratory provides infrared scene generation and projection assets to support indoor weapon test efforts. The current fastest array operates at 200 Hz and is still too slow for some sensors currently in development for delivery to the fleet. Our compute and projection requirements need to be upgraded to meet the emerging need of our customers.												
3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED? The alternative is to maintain the status quo and not meet the requirements for real-time simulations for missile and weapons system designers. As a result, the weapons programs may require more in-flight testing that would increase the overall cost of the weapon system.												
4. IMPACT IF NOT ACQUIRED. The impact will be additional in-flight tests, captive carry and live-fire testing required by the programs which will significantly increase the cost of weapon system development and life cycle costs of the weapons. The Sidewinder missile program simulations lowered the number of required flight tests by 50% at considerable savings to the missile program.												
5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.												

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Research & Development							C. RADIO COMMUNICATIONS NETWORK UPGRADE				D. China Lake	
							8WD2TL6152GR					
2000			2001			2002						
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
<b>INVESTMENT COST</b>			0			0	1	1,250	1,250			
<b>OPERATIONAL DATE</b>	1-Oct-05											
<b>METRICS:</b>	<b>AVOIDANCE</b>	<b>SAVINGS</b>	<b>TOTAL</b>									
PROJECTED ANNUAL SAVINGS	\$200,000	\$0	\$200,000									
AVERAGE ANNUAL SAVINGS (Discounted)	\$122,891	\$0	\$122,891									
PAYBACK PERIOD	NA	#DIV/0!	NA									
RATE OF RETURN (ROR)	2%	0%	2%									
<b>PROJECT INFORMATION NARRATIVE:</b> (If more space required, continue on separate sheet.)												
<p>1. DESCRIPTION &amp; PURPOSE OF PROJECT.  This is a base-wide replacement to upgrade our many existing radio communication systems into a single consolidated network. The Department of Commerce's National Telecommunications and Information Administration (NTIA) proposed and are currently implementing the digital and narrowband standard. This standard doubles the number of available frequencies by using digital signal processing which requires half of the bandwidth formally allocated per radio frequency channel. All federal agencies are required to comply with this standard by 01 January 2008. This system will allow us to be compliant with current and imminent regulations for narrow-band frequency usage and the Project-25 Digital Standards for Common Air Interface of two-way radio systems used by the Federal Government. This system will provide clear digital two-way radio communications for public safety, base operations, range operations, airfield operations, P. W. operations and base activities at China Lake, Point Mugu and San Nicolas Island (SNI). This system will accommodate the communications security needs of these radio users through digital encryption. This system will provide levels of communications interoperability never before possible at China Lake, Point Mugu and SNI. This system will greatly enhance our radio capabilities for mutual aid and disaster preparedness by giving us a fully managed and controlled two-way radio communications system. This system will improve two-way radio coverage by allowing all nets access to all transceiver sites, providing communications between sites as desired. Radio Systems administered by the U.S. Army at Fort Monmouth will be providing a Site Survey and Plan of Action for the installation of the new radio system which will have to be phased in over a period of 5 years.</p> <p>2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?  The existing equipment will not meet the Federal Government requirement for 12.5 kHz narrow-band operation and will have to be replaced in the next few years to meet that mandatory requirement. Our existing infrastructure is old and the equipment is no longer in production making repairs and maintenance unreliable, and the existing equipment cannot be upgraded to meet the new standards. Putting this new system in place will immediately solve these problems with equipment that is software upgradeable so that any new requirements for the future can be accomplished without replacing the Radio equipment.</p> <p>3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?  Our existing infrastructure is old and the equipment is no longer in production making repairs and maintenance unreliable, and the existing equipment cannot be upgraded to meet the new standards. This is a mandated project from NTIA and the Naval Electromagnetic Spectrum center (NAVEMSCEN)</p> <p>4. IMPACT IF NOT ACQUIRED.  Disapproval of this request will impact China Lake, Point Mugu, and SNI due to: If the radios are not replaced by the year 2005 the existing Radio Communications will no longer be approved by the FCC, the frequencies will be lost, and radio communications will cease.</p> <p>5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT  Not applicable.</p>												

<b>CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)</b>	A. FY2002 PRESIDENT'S BUDGET
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B. Department of the Navy/Research & Development	C. NETWORK CENTRIC WARFARE IMPLEMENTATION	D. NAWC 400DL0002PR
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Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
NAWC-AD INVESTMENT COST			2,828			2,843			1,350			
NAWC-WD INVESTMENT COST			2,772			2,907			1,350			
<b>INVESTMENT COST TOTAL</b>	1	5,600	5,600	1	5,750	5,750	1	2,700	2,700			

**OPERATIONAL DATE** 1-Sep-03

<u>METRICS:</u>	<u>NAWC-AD</u>	<u>NAWC-WD</u>	<u>AVOIDANCE</u>	<u>SAVINGS</u>	<u>TOTAL</u>
PROJECTED ANNUAL SAVINGS	\$6,412,500	\$6,412,500	\$12,825,000	\$0	\$12,825,000
AVERAGE ANNUAL SAVINGS (Discounted)	\$3,940,204	\$3,940,204	\$7,880,407	\$0	\$7,880,407
PAYBACK PERIOD			1.5	#DIV/0!	1.5
RATE OF RETURN (ROR)			47%	0%	47%

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. **DESCRIPTION & PURPOSE OF PROJECT.** The Network Centric Warfare (NCW) Research, Development, Test, and Evaluation (RDT&E) program will develop an Enterprise Federation of interconnected facilities that will utilize the following: a common scheduling tool, interoperable models, and a common network that will support effected RDT&E programs. The federation will consist of nine facilities. NWC facilities include the P-3 Software Support Laboratory, the E-2C Laboratory, the Integrated Battlespace Arena Improvements (IBAR), F-14 WSSA ( Weapons System Support Activity ) and F/A-18 WSSA. MRTFB ( Major Range and Test Facility Base ) facilities include the Atlantic Test Range, the Aircombat Environmental Test and Evaluation Facility (ACETEF), Land Range and the BMIC Facility. MRTFB facilities implementation is funded by MRTFB Investment Account. The NAVAIR NCW facility integration project will provide a capability that can only be replicated by expensive operations with live forces operating in their intended operational scenarios. This type of testing continues not only to be expensive, but also does not provide the necessary data to adequately develop and trouble shoot interoperable systems. The NAVAIR NCW facility integration will complement efforts at NAVSEA and other joint efforts to provide a true joint interoperability test and RDT&E capability. Estimates of utilization will run about 30 days per year. This is a conservative estimate because this technology is relatively new. However, the utilization is expected to increase. Even with the relatively low initial utilization the potential positive impacts to programs that must interoperate with the Battle Group and other joint forces is significant.
  
2. **WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVE THE DEFICIENCY/PROBLEM?** The fleet is experiencing interoperability problems that are preventing the battle groups from deploying on schedule. The NAVAIR assets contributing to interoperability include more than 15 platforms and more than 12 independent communications/data link systems. Today's RDT&E infrastructure and processes do not support the current interoperability requirements of the fleet, creating a need for more efficient RDT&E processes, i.e., cost, schedule, productivity, quality and performance capabilities.
  
3. **WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED?** The only alternative considered was the status quo of continuing complex interoperability testing through the use of large force deployments. This will result in the testing being three times more expensive as compared to using the NCW RDT&E Network.
  
4. **IMPACT IF NOT ACQUIRED.** Interoperable solutions will not be provided to the fleet at IOC. Significant costs will be accrued due to engineering fixes late in the development and into the deployment cycle. Fleet experimentation will not experience the ability to use advanced technologies available at the NAVAIR Facilities.
  
5. **IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT.** Not Applicable.

**CAPITAL PURCHASES JUSTIFICATION**  
(Dollars in Thousands)

A. FY2002 PRESIDENT'S BUDGET

B. Department of the Navy/Research & Development/Air Warfare Center				C. DIFMS/NIMMS IMPLEMENTATION /OSE REENGINEERING						D. NAWC	
										NNDL0000	
Element of Cost	2000			2001			2002				
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
AIRCRAFT DIVISION-Implementation Costs			1,184								
AIRCRAFT DIVISION-OSE Reengineering Costs									1,108		
<b>SUBTOTAL AIRCRAFT DIVISION</b>			<b>1,184</b>			<b>0</b>			<b>1,108</b>		
WEAPONS DIVISION-Implementation Costs			3,516			520					
WEAPONS DIVISION-OSE Reengineering Costs									718		
<b>SUBTOTAL WEAPONS DIVISION</b>			<b>3,516</b>			<b>520</b>			<b>718</b>		
<b>TOTAL NAWC -Implementation Costs</b>			<b>4,700</b>			<b>520</b>			<b>0</b>		
<b>TOTAL NAWC-OSE Reengineering Costs</b>			<b>0</b>			<b>0</b>			<b>1,826</b>		
<b>TOTAL INVESTMENT COST</b>			<b>4,700</b>			<b>520</b>			<b>1,826</b>		

**PROJECT INFORMATION NARRATIVE:**

The current version of DIFMS is a ten year old DMS-1100 hierarchical data base management application hosted on UNISYS mainframe computers at the Defense Megacenters. The reengineering of DIFMS to a relational database technology, using modern programming language in a client-server architecture, will reduce software coding by 30 percent, which will simplify future system changes. This will reduce maintenance costs, improve system flexibility, improve data accessibility, enhance ad hoc reporting capability, increase system performance, consolidate systems, add increased functionality/capabilities, and improve overall reliability. Additionally, the reengineered DIFMS will maximize user-friendliness, as well as functionality/capabilities across multi-vendor platforms.

DFAS, Air Force, and Navy have agreed to share the cost of reengineering DIFMS equally. The NAVAIR Industrial Material Management System (NIMMS) and the DIFMS Time and Attendance module will also be reengineered due to the integration of both of these modules within DIFMS. This request contains only the Navy's portion of the DIFMS, NIMMS, and DIFMS T&A reengineering efforts.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET	
B. Department of the Navy/Research & Development							C. ENTERPRISE RESOURCE PLANNING (ERP)			D. NAWC	
							NNSL0001				
2000			2001			2002					
Element of Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
NAWC-AD				1	10,000	10,000	1	10,210	10,210		
NAWC-WD				1	2,000	2,000	1	6,179	6,179		
<b>TOTAL NAWC</b>				<b>2</b>	<b>12,000</b>	<b>12,000</b>	<b>2</b>	<b>16,389</b>	<b>16,389</b>		

PROJECT INFORMATION NARRATIVE: (If more space required, continue on separate sheet.)

1. DESCRIPTION & PURPOSE OF PROJECT: As the Navy embarks on the Revolution in Business Affairs initiatives, Enterprise Resource Planning (ERP) is the strategic initiative chosen by the Department of Navy's Working Group (WG) on Commercial Business Practices (CBP). As a result of the decisions of the CBP WG the Naval Aviation Systems TEAM (TEAM) will reengineer and standardize processes, integrate operations and data to increase productivity, and optimize supply chain management. The Naval Air Systems TEAM (TEAM) intends to manage ERP as a corporate project with constituent parts. Proposed allocations are based on an evolving program plan. Multiple ERP pilots are planned throughout the Navy with functionality determined by the scope of each pilot. Per the CBP WG each ERP pilot will be funded by that WG member's organization. This submission is for a multi-year, Externally Developed Software (EDS) project that will integrate business processes and tools in the areas of financial accounting, materials management, plant maintenance, project systems, controlling and human resources. Functionality will encompass the following:

- Financial accounting: general ledger, accounts receivable/payable, financial reports, special purpose ledger, and legal consolidations;
- Materials management: procurement, inventory management, vendor evaluation, invoices verification and warehouse management;
- Plant maintenance: maintenance notifications/orders, resource/maintenance planning, historical information, and service management;
- Project systems project tracking, work breakdown structure, budget management, cost and revenue planning;
- Controlling cost center accounting, activity based costing, and internal orders; and
- Human resources personnel administration, payroll, time management, planning and development, and organization management

2. WHAT IS THE CURRENT DEFICIENCY/PROBLEM AND HOW WILL THE PROJECT SOLVES THE DEFICIENCY/PROBLEM: Throughout the TEAM there are numerous, independent, stand-alone information systems supporting multiple, inconsistent processes. Data is not timely and is difficult to consolidate. Many systems track similar data without a common data format. No single system does it all (i.e., planning, procurement, and inventory management). System interfaces are inconsistent, non-standard, and rely upon manual intervention. At the core of an ERP system is a central database that draws data from and feeds data into a series of applications supporting diverse functions. ERP will automate manual processes, drastically reduce data reconciliation, and improve the quality of information available to decision-makers. ERP will assist in providing end-to-end capability, in enabling consistent and reliable information on cost and performance, and in integrating business processes to optimize results across the TEAM.

3. WHAT PROJECT ALTERNATIVES HAVE BEEN CONSIDERED: The CBP WG under the auspices of Department of Navy's (DON's) Revolution in Business Affairs was tasked to focus on Commercial Financial Practices and best of breed business solutions. The CBP WG received in-depth briefings from industry, fleet representatives, defense agencies, and other government agencies. Of all the alternatives briefed and considering all the data provided, the members were unanimous in concluding that the best solution to business practices would be realized through ERP solution. As a result of the recommendation of the CBP WG, NAVAIR issued a request for proposal. Several companies bid, integrator and COTS solutions were evaluated through the source selection process and a contract was awarded for the NAVAIR ERP program management (PM) pilot.

4. IMPACT IF NOT ACQUIRED: The TEAM would have to continue business as usual and could not achieve gains in productivity through reengineered processes and an integrated information system. Non-standard, costly maintenance, and duplicative legacy systems would persevere. The TEAM would be unable to manage costs for maximum reallocation of savings for the recapitalization and modernization of naval aviation. ERP is required for NAVAIR to achieve portions of the Navy wedge savings. As the business case analysis demonstrates current anticipated quantitative and qualitative benefits would not be realized. If ERP is funded, the ERP will assist other systems in becoming compliant with statutory requirements, the Government Management Reform Act (GMRA), the Government Performance and Results Act (GPRA), and the Chief Financial Officer (CFO) Act.

5. IDENTIFY LOCAL, STATE, FEDERAL REGULATION IF ENVIRONMENTAL PROJECT. Not Applicable.

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Research & Development/Air Warfare Center										C. EQUIPMENT, OTHER THAN ADPE & TELECOM (<\$1M)			D. NAWC
										NNEU0000			
Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost	
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost				
<b>TOTAL INVESTMENT COST</b>	<b>24</b>	<b>VAR</b>	<b>7,868</b>	<b>20</b>	<b>VAR</b>	<b>6,707</b>	<b>16</b>	<b>VAR</b>	<b>5,329</b>				
ITEM	ITEM												
LINE #	DESCRIPTION	FY 2000		FY 2001		FY 2002							
4AA0EM4554PP	Advanced Acoustics Processing System	1	907										
4AA1EM4555PN	High Speed Data Acquisition System			1	729								
8AA1EM8360GR	Firefighting Equipment			2	660	1	816						
4AA2EM455BPP	Airlab #1 Upgrade					2	600						
4WD0EM0104PR	Chemical Analysis Recapitalization	1	582	1	400								
4WD0EM9104PR	Energetic Materials Equipment Modernization	2	391	2	500	1	500						
4WD1EM0106PP	P-407 Collateral Equipment WSL			3	850								
4WD2EM2204PR	Polymer Materials Testing					2	520						
ES0000	Subtotal Equip-other than ADPE & TELECOM (<\$.5M)	21	5,988	15	3,568	12	2,893						
<b>TOTAL NAWC EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&lt;\$1M)</b>		<b>24</b>	<b>7,868</b>	<b>20</b>	<b>6,707</b>	<b>16</b>	<b>5,329</b>						

CAPITAL PURCHASES JUSTIFICATION (Dollars in Thousands)										A. FY2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Research & Development/Air Warfare Center										C. MINOR CONSTRUCTION			D. NAWC
										NNMC0000			
Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost	
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost				
<b>TOTAL INVESTMENT COST</b>	<b>7</b>	<b>VAR</b>	<b>2,219</b>	<b>6</b>	<b>VAR</b>	<b>3,023</b>	<b>5</b>	<b>VAR</b>	<b>1,597</b>				
ITEM LINE #	ITEM DESCRIPTION	FY 2000	FY 2001	FY 2002									
8AA0MC0000GC	A/C Refueler Admin./Maint. Facility	1 431											
8AA0MC0000GS	Shaw/Tate Road Intersection Improvements	2 439											
4AA0MC0000PC	Addition to Building 2060	3 281											
8AA1MC0000GS	Buse Road Widening to Four Lanes		1 450										
8AB1MC0001GS	Building 572 Warehouse		2 440										
4AB2MC480APC	Photometrics Facility Upgrade				1 385								
8AB2MC0000GC	Sodium Bicarbonate Blasting Facility				2 330								
7AB2MC724BGS	Primary Computing Facility Electrical Generator				3 193								
8WD8MCSY0HGC	PY Project's SIOH & Design Costs	1 78	1 133										
8WD0MC3100GC	Jet Engine Shop Weapons Survivability Lab	2 450											
8WD0MC0488GC	Secure Machine Materials Fabrication Facility	3 300											
8WD0MC3169GC	Water Line WSL	4 240											
8WD1MC0231GC	Addition to Michelson Lab		2 1,000										
8WD1MC0011GC	Advanced Weapons Laboratory Modification		3 750										
8WD1MC0012GC	Water to Randsburg Site		4 250										
8WD2MC0267GC	Loop Natural Gas Line				1 400								
8WD2MC0379GC	Police Building Expansion				2 289								
<b>TOTAL NAWC MINOR CONSTRUCTION</b>		<b>7</b>	<b>2,219</b>	<b>6</b>	<b>3,023</b>	<b>5</b>	<b>1,597</b>						

**CAPITAL PURCHASES JUSTIFICATION**  
(Dollars in Thousands)

A. FY2002 PRESIDENT'S  
BUDGET

B. Department of the Navy/Research & Development/Air Warfare Center

C. ADPE &  
TELECOMMUNICATIONS (<\$1M)

D. NAWC

NNKU0000

Element of Cost	2000			2001			2002			Qty	Unit Cost	Total Cost
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
<b>TOTAL INVESTMENT COST</b>	<b>12</b>	<b>VAR</b>	<b>4,070</b>	<b>13</b>	<b>VAR</b>	<b>4,580</b>	<b>11</b>	<b>VAR</b>	<b>3,110</b>			

ITEM LINE #	ITEM DESCRIPTION	FY 2000 Qty	FY 2000 Unit Cost	FY 2000 Total Cost	FY 2001 Qty	FY 2001 Unit Cost	FY 2001 Total Cost	FY 2002 Qty	FY 2002 Unit Cost	FY 2002 Total Cost
7AA0TM7231GR	Telecommunications Management Sys for the 5ESS	1	517							
4AB0TM4820PR	OC-12 High Speed Data Simulation Network Backbone	2	500							
8AA8TM81D0GR	Premises Distribution	3	375		1	375				
8AA1KM8026GN	E-911 Emergency Response Enhancements				2	648				
4AA1KM4130PN	Mission Platform Adaptable Simulation				3	574				
4AA2KM4K93PR	Multi-Channel Acoustic Signal Generation System							1	690	
4AA2KM4551PN	Wave Division Multiplexing Network Components							2	350	
4WD0TM9108PR	Avionics Department Virtual Network (V-NET)	1	494		1	630				
7WD8TM8006GR	Fiber Optic Branching				2	500				
ES0000	Subtotal ADPE & TELECOMMUNICATIONS (<\$5M)	8	2,184		8	1,853		9	2,070	
<b>TOTAL NAWC ADPE &amp; TELECOMMUNICATIONS (&lt;\$1M)</b>		<b>12</b>	<b>4,070</b>		<b>13</b>	<b>4,580</b>		<b>11</b>	<b>3,110</b>	

FY 2002 President's Budget Submission - May 2001  
 DEPARTMENT OF THE NAVY - NAVY WORKING CAPITAL FUNI  
 RESEARCH AND DEVELOPMENT - AIR WARFARE CENTEJ  
 CAPITAL BUDGET EXECUTIOJ  
 (DOLLARS IN MILLIONS)  
 FY 2001

ITEM LINE #	ITEM DESCRIPTION						Original Request	Change	Revised Request	Classification of Change	Explanation/Reason for Change
<b>1a. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>											
4	AA	1	EL	4440	P E	ELEC. POWER SYS. CLOSED LOOP COOLING WATER	1.200	.000	1.200		
4	AA	1	EL	4117	P N	SHIP/AIR MISSION SYSTEM SUPPORT	1.120	.000	1.120		
4	WD	8	EL	0108	P P	MISSION PLANNING II	1.100	(.100)	1.000	Price Decrease	Decreased scope of work to accommodate the Addition to Michelson Lab Minor Construction project and Airframe Division Computer System Replacement. (.060 to 8WD1MC023, .040 to 4WD1KS0011).
8	AA	1	EL	8017	G R	LAND MOBILE COMMUNICATION TRUNKING SYSTEM	.800	.000	.800		
<b>SUBTOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&gt;\$1M)</b>						4.220	(.100)	4.120			
<b>1b. EQUIPMENT, OTHER THAN ADPE &amp; TELECOM (&lt;=\$1M)</b>						5.997	.710	6.707			
<b>2. TOTAL EQUIPMENT, OTHER THAN ADPE &amp; TELECOM</b>						10.217	.610	10.827			
<b>3. MINOR CONSTRUCTION</b>						2.110	.913	3.023			
<b>TOTAL NON-ADP CAPITAL PURCHASES PROGRAM</b>						12.327	1.523	13.850			

FY 2002 President's Budget Submission - May 2001  
DEPARTMENT OF THE NAVY - NAVY WORKING CAPITAL FUND  
RESEARCH AND DEVELOPMENT - AIR WARFARE CENTER  
CAPITAL BUDGET EXECUTION  
(DOLLARS IN MILLIONS)  
FY 2001

ITEM LINE #	ITEM DESCRIPTION	Original Request	Change	Revised Request	Classification of Change	Explanation/Reason for Change
<b>1a. ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>						
<b>Computer Hardware (Production)</b>						
7 AA 1 TL 7231 G R	OPTICAL REMOTE PHONE SWITCH MODULI	1.450	.000	1.450	Price Increase	Increased networking requirements for the corporate infrastructure (.207 from 7WD1TM8006).
4 AB 1 KL 4820 P P	IMMERSIVE DESIGN OPTIMIZATION SYSTEM	1.350	.000	1.350		
7 WD 3 TL 0084 G R	COMMUNICATION SYSTEM UPGRADE	1.043	.207	1.250		
7 AA 7 TL 0723 G R	FIBER OPTIC TRANSMISSION EQUIPMEN'	.450	.000	.450	Transfer	Increased funding requirements change the project category to the greater than \$1M category from the less than .500 category (.400 from 4WD1TS9106).
4 WD 1 TL 9106 P R	INTEGRATED BATTLESPACE ARENA IMPROVEMENTS (IBAR) PHASE 1 AND 2	.000	.400	.400		
<b>SUBTOTAL ADPE &amp; TELECOMMUNICATIONS (&gt;\$1M)</b>		4.293	.607	4.900		
NN KU 0000	<b>1b. ADPE &amp; TELECOMMUNICATIONS (&lt;\$1M)</b>	4.930	(.350)	4.580		
<b>2. TOTAL ADPE &amp; TELECOMMUNICATIONS</b>		9.223	.257	9.480		
<b>3a. SUBTOTAL SOFTWARE DEVELOPMENT (&gt;\$1M)</b>						
A DL 0001	ENTERPRISE RESOURCE PLANNING (ERP	12.000	.000	12.000	Transfer	Project deferred to FY02/03 due to scheduling delays.
A DL 0002	NETWORK CENTRIC WARFARE IMPLEMENTATION (BPR	5.750	.000	5.750		
A DL 0000	DIFMS/NIMMS IMPLEMENTATION	1.200	(.680)	.520		
A DL 0000	DIFMS/NIMMS OSE REENGINEERINC	1.100	(1.100)	.000		
<b>3a. SUBTOTAL SOFTWARE DEVELOPMENT (&gt;\$1M)</b>		20.050	(1.780)	18.270		
NN DU 0000	<b>3b. SUBTOTAL SOFTWARE DEVELOPMENT (&lt;\$1M)</b>	.000	.000	.000		
<b>3. TOTAL SOFTWARE DEVELOPMENT</b>		20.050	(1.780)	18.270		
<b>TOTAL ADP CAPITAL PURCHASES PROGRAM</b>		29.273	(1.523)	27.750		
<b>GRAND TOTAL CAPITAL PURCHASES PROGRAM</b>		41.600	.000	41.600		

FY 2002 PRESIDENT'S BUDGET  
NAVY WORKING CAPITAL FUND  
RESEARCH AND DEVELOPMENT  
NAVAL SURFACE WARFARE CENTER

INTRODUCTION

The Naval Surface Warfare Center (NSWC) 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 six 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 and Philadelphia, PA with smaller operating sites at Ft. Lauderdale, FL, Memphis, TN, Norfolk, VA, Bremerton, WA, and Bayview, ID. Operations at Annapolis, MD terminated in FY 1999 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 has one primary operating site, Crane, IN, with a small engineering site at Fallbrook, CA.

**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 two primary operating sites, Dahlgren, VA, and Panama City, FL.

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 and MacAlester, OK, Earle, NJ, and Seal Beach and Concord, CA.

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 equipment's, and related expendable ordnance of the surface fleet. The primary operating sites are Port Hueneme, CA; San Diego, CA; and Dam Neck, VA. The division also operates a small detachment in Louisville, KY.

CORONA STATION. The mission of this station is to gauge the war fighting capability of ships and aircraft, from unit to battle group level, by assessing the suitability of design, the performance of equipment and weapons, and the adequacy of training.

### BUDGET HIGHLIGHTS

#### Revenue, Expense, and Operating Results

Current Estimate (\$ in Millions)	FY 2000	FY 2001	FY 2002
Revenue	\$2,874	\$2,464	\$2,400
Cost of Goods/Services	\$2,869	\$2,451	\$2,414
Net Operating Results	\$5	\$13	-\$14
Accumulated Operating Results	\$1	\$14	\$0

The trend in revenue and expense from year-to-year noted above reflects the Center's efforts to size itself to meet customer demand. Factors contributing to FY 2001 operating results include projected

savings from productivity initiatives and benefits from an anticipated increase in direct labor hours.

The current FY 2002 estimate reflects a negative recoupment factor of \$14 million to return cumulative FY 2001 gains and achieve a zero Accumulated Operating Result balance.

### Cost of Operations

#### Unit Cost

(Cost Per DLH)	FY 2000	FY 2001	FY 2002
Unit Cost	\$70.26	\$72.46	\$73.68

The Center's unit cost shows a gradual increase over the budget period, primarily due to increased employee compensation costs and inflation. Nonetheless, the Center remains committed to reducing overhead and improving the value of the services we provide our customers.

#### Billing Rates

	FY 2000	FY 2001	FY 2002
Stabilized Rate (Average)	\$72.65	\$75.21	\$73.95
Rate Change	+4.9%	+3.5%	-1.7%

The FY 2002 average stabilized rate, like unit cost, is impacted by employee compensation costs and inflation. Offsetting these positive cost factors is the negative recoupment factor required to achieve zero AOR in FY 2002.

### Capital Purchases Program (CPP)

\$ in Millions	FY 2000	FY 2001	FY 2002
Non-ADPE	\$11.5	\$14.7	\$11.4
ADPE	\$14.8	\$8.4	\$8.9
Software	\$3.9	\$3.8	\$3.9
Minor Construction	\$5.0	\$6.3	\$9.5
Total	\$35.2	\$33.2	\$33.7

The NSWC CPP program procures mission essential equipment to support a wide customer base.

### Workload and Manpower Trends

#### Civilian Manpower

Civilian Manpower	FY 2000	FY 2001	FY 2002
End Strength	15,940	15,395	14,936
Straight Time FTE	16,044	15,433	14,872

Civilian manpower levels continue to drop in response to workload reductions, consolidations, and efficiencies.

SIP/VERA/RIF	FY 2000	FY 2001	FY 2002
Current Estimate	270	365	287

#### Productive Ratio

Productive Ratio	FY 2000	FY 2001	FY 2002
Current Estimate	74%	74%	76%

The productive ratio, a measure of direct labor effort to total labor, continues to increase throughout the budget period.

#### Military Manpower

	FY 2000	FY 2001	FY 2002
End Strength	252	259	260
Workyears	253	260	260

Projections reflect implementation of guidance to base estimates on the average fill rate.

#### Workload - Direct Labor Hours (DLH)

	FY2000	FY2001	FY2002
DLHs (000)	21,130	20,326	20,166

#### PERFORMANCE INDICATORS

The primary performance indicator is unit cost discussed in the Unit Cost Rate paragraph above. Unit cost represents the cost of delivering goods and services and reflects favorably on NSWC.

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

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	2,844.2	2,430.1	2,365.7
Surcharges	.0	.0	.0
Depreciation excluding Major Constructio	30.4	34.2	33.9
Other Income			
Total Income	2,874.6	2,464.3	2,399.6
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	15.8	14.3	14.9
Civilian Personnel	1,214.8	1,221.8	1,227.5
Travel and Transportation of Personnel	76.3	70.1	71.6
Material & Supplies (Internal Operations	241.2	241.4	239.5
Equipment	67.0	76.4	74.0
Other Purchases from NWCF	83.1	84.4	84.0
Transportation of Things	6.4	5.5	5.7
Depreciation - Capital	30.4	34.2	33.9
Printing and Reproduction	8.0	9.5	9.7
Advisory and Assistance Services	4.2	2.5	1.9
Rent, Communication & Utilities	40.2	45.5	44.7
Other Purchased Sevices	1,094.1	634.3	606.7
Total Expenses	2,881.4	2,439.8	2,414.0
Work in Process Adjustment	-11.0	11.5	.0
Comp Work for Activity Reten Adjustment	-1.3	.0	.0
Cost of Goods Sold	2,869.1	2,451.3	2,414.0
Operating Result	5.4	13.0	-14.4
Less Surcharges	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	5.4	13.0	-14.4
Other Changes Affecting AOR	.0	.0	.0
Accumulated Operating Result	1.4	14.4	.0

## INDUSTRIAL BUDGET INFORMATION SYSTEM

PAGE 1

Source of Revenue  
AMOUNT IN MILLIONS  
NSWC / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	2,981.5	2,266.6	2,348.6
a. Orders from DoD Components	2,617.8	1,997.4	2,097.1
Department of the Navy	2,323.3	1,703.4	1,816.9
O & M, Navy	638.9	608.6	663.6
O & M, Marine Corps	25.6	16.9	18.3
O & M, Navy Reserve	8.0	6.1	5.9
O & M, Marine Corp Reserve	.1	.0	.0
Aircraft Procurement, Navy	68.9	16.7	19.5
Weapons Procurement, Navy	78.6	57.8	53.9
Ammunition Procurement, Navy/MC	92.6	86.5	83.8
Shipbuilding & Conversion, Navy	299.5	242.8	273.3
Other Procurement, Navy	344.8	135.5	207.2
Procurement, Marine Corps	4.6	3.6	2.8
Family Housing, Navy/MC	7.9	4.3	4.4
Research, Dev., Test, & Eval., Navy	738.4	509.8	473.0
Military Construction, Navy	1.1	.0	.0
Other Navy Appropriations	14.4	6.7	11.1
Other Marine Corps Appropriations	-.2	8.3	.1
Department of the Army	47.0	31.2	26.1
Army Operation & Maintenance	7.7	6.6	5.5
Army Res, Dev, Test, Eval	9.3	7.8	4.2
Army Procurement	27.8	3.5	2.7
Army Other	2.3	13.3	13.7
Department of the Air Force	19.2	30.5	25.4
Air Force Operation & Maintenance	7.0	2.1	1.5
Air Force Res, Dev, Test, Eval	3.8	5.1	3.3
Air Force Procurement	8.5	3.1	3.7
Air Force Other	-.2	20.3	16.9
DOD Appropriation Accounts	228.3	232.2	228.7
Base Closure & Realignment	1.1	.2	.2
Operation & Maintenance Accounts	32.5	12.8	15.7
Res, Dev, Test & Eval Accounts	141.4	138.3	131.9
Procurement Accounts	47.4	46.2	45.0
DOD Other	5.8	34.8	35.9
b. Orders from NWCF Business Area	208.8	130.2	126.4
c. Total DoD	2,826.5	2,127.7	2,223.5
d. Other Orders	155.0	138.9	125.0
Other Federal Agencies	17.7	19.0	12.9
Foreign Military Sales	91.7	88.6	84.7
Non Federal Agencies	45.6	31.3	27.5

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders*	1,386.1	1,493.0	1,295.3
3. Total Gross Orders	4,367.6	3,759.6	3,643.8
4. Funded Carry-Over **	1,493.0	1,295.3	1,244.2
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	2,874.6	2,464.3	2,399.6
Adjusted Carry-Over	720.2	558.8	521.7
Adjusted Carry-Over in months	3.0	2.7	2.6

\* FY 2000 carry-in orders adjusted by \$0.5 million to correct error in FY 1998 ending unbilled balance at Indian Head Division.

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

FY 2002 President's Budget  
 Component: Department of Navy  
 Activity Group: Research and Development  
 Sub-Activity Group: Naval Surface Warfare Center  
 Changes in Cost of Operations  
 (Dollars in Millions)

	TOTAL
1. FY 2000 Actual Execution	2881.4
2. FY 2001 Estimate in FY 2001 President's Budget	2266.3
3. Est. Impact in FY 2001 of Actual FY 2000 Experience	-0.9
4. Pricing Adjustments	0.0
a. FY 2001 pay raise	0.0
1. Civilian personnel	0.0
2. Military personnel	0.0
b. Annualization of FY 2000 pay raise	0.0
1. Civilian personnel	0.0
2. Military personnel	0.0
c. Supply management - fuel	0.0
d. Supply management - non-fuel	0.0
e. WCF price changes	0.0
f. General purchase inflation	0.9
5. Productivity Initiatives	
a. A-76, BPR & Other	-14.2
6. Program Changes	
a. Workload (see FUND 24 for details)	197.1
b. BRAC	0.0
c. Tech Center Explosive Safety (TCES) / Ordnance Environmental Spt Ofc (OESO) Trans	-3.2
7. Other Changes	
a. Labor Repricing	3.0
b. SIP/VERA/RIF	1.8
c. SIP Incentive (15% Tax)	0.4
d. Change in Paid Days	0.0
e. Military	0.0
f. Accounting Adjustments	0.0
g. IT Budget Changes	-0.2
h. Depreciation	0.6
I. Transfers	0.0
j. Other (Specify)	
Change in DFAS Costs	0.4
Change in FECA Costs	-0.6
Training	0.0
Awards	-0.3
MRP	-12.3
PCS	0.5
Public Transportation Benefit Program	0.4

FY 2002 President's Budget  
 Component: Department of Navy  
 Activity Group: Research and Development  
 Sub-Activity Group: Naval Surface Warfare Center  
 Changes in Cost of Operations  
 (Dollars in Millions)

	TOTAL
8. FY 2001 Current Estimate	2439.7
9. Pricing Adjustments	
a. FY 2002 Pay Raise	
1. Civilian Personnel	32.9
2. Military Personnel	0.4
b. Annualization of FY 2001 pay raise	
1. Civilian Personnel	12.4
2. Military Personnel	0.1
c. Supply management - fuel	0.5
d. Supply management - non-fuel	-4.7
e. WCF price changes	0.9
f. General purchase inflation	13.7
10. Productivity Initiatives	
a. A-76,BPR & Other	-31.7
11. Program Changes	
a. Workload (see FUND 24 for details)	-52.2
b. BRAC	0.0
c. Other	0.0
12. Other Changes	
a. SIP/VERA/RIF	-2.1
b. SIP Incentive (15% Tax)	-0.6
c. Change in Paid Days	4.8
d. Military	0.0
e. Accounting Adjustments	0.0
f. IT Budget Changes	-1.8
g. Depreciation	-0.3
h. Transfers	0.4
I. Other (Specify)	
Change in DFAS Costs	-2.5
Change in FECA Costs	-0.2
Training	1.7
Awards	1.0
Assessments/Taxes	0.1
Personnel Demo	1.0
MRP	0.5
PCS	-0.3
Public Transportation Benefit Program	0.2
13. FY 2002 Current Estimate	2413.9

**Business Area: CAPITAL BUDGET SUMMARY**

**Activity Group/Sub-Activity Group: RESEARCH AND DEVELOPMENT/NAVAL SURFACE WARFARE CENTER  
FY 2002 PRESIDENT'S BUDGET**

(\$ in Millions)

Line Num	Description	FY 2000		FY 2001		FY 2002			
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost		
	<b>Non ADP</b>								
1	Continuous Energetics Processing (Replacement)			1	4.670				
2	Nitramine Drying System (Replacement)			1	3.900				
3	Nitramine Precipitation System (Replacement)	1	3.410						
4	Dynamic Infrared Scene Projector (DISP) (Productivity)					1	.951		
5	Miscellaneous (Non ADP <= \$999K; >= \$500K)		2.656		1.295		.850		
6	Miscellaneous (Non ADP < \$500K)		5.418		4.857		9.578		
	<b>Non ADP Total:</b>		<b>11.484</b>		<b>14.722</b>		<b>11.379</b>		
	<b>ADP</b>								
7	Theatre Warfare Systems (Hardware)	1	.776	1	1.059	1	1.015		
8	CDNET Modernization (Hardware)	1	1.851	1	1.520				
9	Collaborative Engineering Environment (Hardware)					1	.950		
10	Littoral Battlespace Laboratory Support (Hardware)	1	.262	1	1.171				

**Business Area: CAPITAL BUDGET SUMMARY**

**Activity Group/Sub-Activity Group: RESEARCH AND DEVELOPMENT/NAVAL SURFACE WARFARE CENTER  
FY 2002 PRESIDENT'S BUDGET**

(\$ in Millions)

Line Num	Description	FY 2000		FY 2001		FY 2002			
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost		
11	CSACT (Combat Systems Adv Concepts & Tech) Lab (Hardware)	1	.554			1	.507		
12	Strike Warfare Systems Integration Laborotory (Hardware)	1	.832	1	.300	1	.150		
13	Standard Systems Hardware	1	1.450						
14	Surface Ship Integrated Topside Tech Center (Hardware)			1	.500	1	.300		
15	Integrated Programming Environment (Hardware)	1	.307			1	.400		
16	Remote ISEA Support Capability (Software)					1	.225		
17	Massively Parallel Processing Machine (Hardware)					1	.500		
18	Lethality & Weapons Effectiveness Comp Physics Cap (Hardware)					1	.500		
19	Miscellaneous (ADP <= \$999K; >= \$500K)		4.261		1.420		2.322		
20	Miscellaneous (ADP < \$500K)		4.544		2.460		2.055		
	<b>ADP Total:</b>		<b>14.837</b>		<b>8.430</b>		<b>8.924</b>		
	<b>Software</b>								
21	DIFMS (Internally Developed)	1	2.369	1	.837	1	2.650		
22	Standard Systems Software (Internally Developed)	1	1.300		1.300		1.300		

**Business Area: CAPITAL BUDGET SUMMARY**

**Activity Group/Sub-Activity Group: RESEARCH AND DEVELOPMENT/NAVAL SURFACE WARFARE CENTER  
FY 2002 PRESIDENT'S BUDGET**

(\$ in Millions)

Line Num	Description	FY 2000		FY 2001		FY 2002			
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost		
23	Business Process Re-Engineering (BPR) Support System (Internally Developed)			1	1.682				
24	Miscellaneous (Software < \$500K)		.188						
	<b>Software Total:</b>		<b>3.857</b>		<b>3.819</b>		<b>3.950</b>		
	<b>Minor Construction</b>								
25	Miscellaneous (Minor Construction <= \$999K; >= \$500K)		3.633		3.570		4.525		
26	Miscellaneous (Minor Construction < \$500K)		1.382		2.691		4.927		
	<b>Minor Construction Total:</b>		<b>5.015</b>		<b>6.261</b>		<b>9.452</b>		
	<b>Grand Total:</b>		<b>35.193</b>		<b>33.232</b>		<b>33.705</b>		

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 1/Continuous Energetics Processing (Replacement)			D. Site Identification NSWC Indian Head, MD					
				FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							1	4670	4670			

**Narrative Justification:**

**Description**

This project provides the necessary processing equipment for the Indian Head Division, Naval Surface Warfare Center (IHDIV) FY99 MILCON P-158 Continuous Processing Scale-up facility.

**Justification**

FY99 MILCON funds were appropriated for a facility to be used to scale-up continuous processing technology. This facility is to be used to develop the technology and demonstrate the benefits of a safer, lower cost, more environmental friendly process for the manufacture of energetics. The initial work for this facility will be the scale-up and transition of the process to manufacture nitramine gun propellant for the Extended Range Guided Munition (ERGM) program. The facility is a R&D capability with tremendous flexibility and will be used to develop advanced manufacturing processes for a very wide variety of advanced propellants and explosives. The processing equipment needed to make this facility operational was proposed in the FY00 CPP budget submittal. FMB moved this authority to FY01.

**Impact**

Continuous processing is the only technology on the horizon that has the potential to improve the reproducibility of the products while reducing the safety risk, reducing waste generation and lowering the cost to operate and maintain the manufacturing capability. Next generation materials currently in R&D need this process technology. Batch processes cannot handle the demands of the new materials. Development of advanced, lower cost, safer manufacturing processes for energetics such as continuous processing is core to the mission of IHDIV-NSWC. Development of this technology to reduce the cost of next generation gun propellants for Extended Range Guided Munition (ERGM) and other Navy gun system requirements are the initial beneficiaries of this technology. The acquisition of the P-158 MILCON is proceeding as planned. The project will be acquired as a design/build/turnkey facility. This acquisition approach integrates the facility and process design, construction, and startup to minimize costs and shorten the acquisition time. The contract is structured around an FY01 availability of equipment funding.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 2/Nitramine Drying System (Replacement)			D. Site Identification NSWC Indian Head, MD								
				FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Non ADP							1		3900						

**Narrative Justification:**

**Description**

The nitramine drying system provides an efficient, safe and environmentally compliant capability to remove moisture and residual solvents from nitramine propellant feedstocks for a continuous processor used to develop and produce a family of nitramine based gun propellants and gas generants.

**Justification**

This equipment supports the scale-up of continuous processing technology. Currently, nitramine feedstocks for the continuous process are dried in large ovens on trays. This manufacturing method produces large quantities of volatile organic compounds (VOC's) and is labor intensive. The proposed closed loop process produces a free-flowing feedstock for continuous processing. The process reduces solvent emissions by 95% and also eliminates the safety risk in the current process of grinding and mixing dry nitramines.

**Impact**

Continuous processing is the only technology on the horizon that has the potential to improve the reproducibility of the products while reducing the safety risk, reducing waste generation and lowering the cost to operate and maintain the manufacturing capability. Next generation materials currently in R&D need this process technology. Batch processes cannot handle the demands of the new materials. Development of advanced lower cost, safer manufacturing processes for energetics such as continuous processing is core to the mission of IHDIV-NSWC. Development of this technology to reduce the cost of next generation gun propellants for Extended Range Guided Munition (ERGM) and other Navy gun system requirements are the initial beneficiaries of this technology. This project is needed to develop manufacturing processes that assure a high quality, efficiently manufactured feedstock for the continuous process is available.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 4/Dynamic Infrared Scene Projector (DISP) (Productivity)			D. Site Identification NSWC Crane, IN		
FY 2000				FY 2001			FY 2002		
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Non ADP							1	951	951

**Narrative Justification:**

**Description**

The Dynamic Infrared Scene Projector (DISP) is a two-phased project. The first phase will provide a basic Mirage infrared projector along with Mid-Wave Infrared (MWIR) collimating optics mounted on a commercial optical table. The Mirage will provide full 512 x 512 image projection directly into the entrance aperture of a "strapped down" infrared seeker at frame rates up to 200 Hz. This phase of this project is acquisition of the array hardware and integration with existing optical hardware and missile seekers.

**Justification**

The DISP system is the next generation of modeling and simulation tools required in the development and testing of infrared countermeasures. The DISP has capabilities not found in any simulation, including captive flight missile seeker simulation. The system is capable of presenting a scene of missile targets, which, is "real" to the missile. The user will have the capability of controlling all aspects of the "infrared world", i.e., the target aircraft, the countermeasures, the background. This type of simulation does not, however, require simulation of any aspect of the missile guidance section, a major limitation of digital simulations today. It also provides a capability captive seeker testing does not--missile closure. The ability to manipulate and present controllable, realistic scenes to the actual missile seeker hardware is the most cost-effective technique in testing infrared missiles and countermeasures, and multitudes of other infrared sensors.

**Impact**

A DISP system has the potential to revolutionize the development and testing of all infrared sensor systems. The potential savings to the government by means of reduced flight hours on operational and test aircraft, reduced load on test ranges, and more robust engineering models before hardware development would more than offset the investment in this system in a very short time.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001	C. Line# and Description 5/Miscellaneous (Non ADP <= \$999K; >= \$500K)	D. Site Identification NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST	2656	1295	850	

ELECTRODYNAMIC VIBRATION SYSTEM (Replacement) (NSWC Crane, IN)	553			
MEMS Modular Clean Room (Replacement) (NSWC Indian Head, MD)	156		325	
Rapid Prototyping System (Productivity) (NSWC Carderock Bethesda, MD)	639			
Advanced HM&E Connectivity Facility (Productivity) (NSWC Eng. Sta. Philadelphia, E		495	200	
Littoral Warfare C4I/Decision Support System (Environmental) (NSWC Panama City, FL)				
Range Instrumentation and Equipment Improvement (Replacement) (NSWC Panama City, FL)			325	
Enhanced Dynamometer Power Supply (New Mission) (NSWC Carderock Bethe	751			
LCC Test Top Upgrade (Productivity) (NSWC Carderock Bethesda, MD)				
RADAR TRACKING SYSTEM (Replacement) (NSWC Crane, IN)		800		
LCC Twin Strut Support System (New Mission) (NSWC Carderock Bethesda, MD)				
Replace 480KV Breakers	557			

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001	C. Line# and Description 6/Miscellaneous (Non ADP < \$500K)	D. Site Identification NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST	5418	4857	9578	

Examples of FY 2002 projects include:

- Real Time X-Ray Static Firing System (Replacement)
- Paint Booth and Conveyor System (Replacement)
- Consolidation of Mixer Systems (Productivity)

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 7/Theatre Warfare Systems (Hardware)			D. Site Identification NSWC Dahlgren, VA					
				FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	776	776	1	1059	1059	1	1015	1015

**Narrative Justification:**

**Description**

This capability explores new ways to provide information to the decision -maker, whether for engineering, management, or warrior requirements, using innovative yet commercially feasible solutions. Theatre Warfare Systems visually depicts dynamic engineering concepts in battleforce interoperability, warfare analysis, total ship, and combat systems development. It enables decision-makers to explore various system/procurement options to evaluate the relative benefits and affordability of each in a unit/force/theater context. Theatre Warfare Systems consists of display engines networked by video switching to panel display arrays. It includes high-power computing engines with sophisticated graphical and animation capabilities as well as interactive decision-support hardware and software.

**Justification**

Theatre Warfare Systems provide a cohesive environment to visualize and analyze the performance of systems and their cost effectiveness in a unit/force/theater context. The immediate benefit is a 50% decrease in the time required to determine and document complex engineering decisions when compared to traditional methods. It supports multiple users, especially those associated with warfare analysis and system engineering, new ship and system designs. 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**

This investment supports NAVSEA, PEO TSC, PEO SC21, PEO EXW, Marine Corps, and SPAWAR. Without this capability, much more costly and disjointed methods of evaluation must continue to be used in efforts such as Battleforce Interoperability, 21st Century Surface Combatant, and Land Attack Warfare. Decision-making will be less comprehensive, and the full impact of decisions will not be known.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date				C. Line# and Description			D. Site Identification					
NSWC/MAY 2001				8/CDNET Modernization (Hardware)			NSWC Carderock Bethesda, MD					
				FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP				1	1851	1851	1	1520	1520			

**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.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 9/Collaborative Engineering Environment (Hardware)			D. Site Identification NSWC Port Hueneme, CA					
				FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP										1		950

**Narrative Justification:**

**Description**

This project enables collaboration among geographically disbursed Battleforce IPTs (Integrated Product Teams), engineers, and logisticians. It extends to the interoperability of such systems across the Battle Force. It will link together data resources so, while each resides with subject matter experts, all are tied logically together and can be accessed from a single location. It will install data storage, data management and data sharing equipment and software. It will develop processes, procedures and protocols to 1) logically link existing data and information sets, 2) maintain a "knowledge map" of the linked information structure, 3) ensure that as new projects and programs are established, they integrate into the knowledge structure, 4) ensure that the structure itself can evolve over time.

**Justification**

Future Fleet Support will require availability and access to critical technical and logistical technical and logistical facets of higher level In-Service Engineering Agent (ISEA) requirements. Current method of accessing total Battleforce data must be modified if we are to meet the challenge of higher level system support and BPR (Business Process Reengineering) objectives. This project links and relates existing data and disbursed information sources. Without it, Battleforce Interoperability engineers and those addressing higher level systems cannot efficiently or cost effectively pull together the information required to support the Fleet. This project will ensure a data set is held at only one place under the control of subject matter experts. This eliminates redundancy, ensures the data is accurate, enhances collaboration, and reduces both maintenance and costs; supporting our business plan of growth to higher level efforts without transferring cost to the fleet.

**Impact**

Future Fleet Support will be severely impacted without this effort. Existing disparate sources will remain hard to access, with data sets duplicated, collaboration hindered, and maintenance costs high. Without this effort, there will be collaborative structure into which programs, new or old, can fit, potentially adversely affecting planned wedge savings.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 10/Littoral Battlespace Laboratory Support (Hardware)			D. Site Identification NSWC Panama City, FL								
				FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP				1	262	262	1	1171	1171						

**Narrative Justification:**

**Description**

These funds will be used to establish the Coastal Systems Station's (CSS) Littoral Battlespace Laboratory (LBL). The equipment purchased will include training visualization systems, real-time processors, an inertial measurement system, and a very shallow water/surf zone tracking system. Primary sponsors are the Office of Naval Research, NAVSEA, the Marine Corps, and SOCOMM.

**Justification**

Littoral warfare is a critical mission of CSS. The LBL will integrate our ranges, laboratories, and expertise, increasing their availability to the Fleet and saving money, manpower, and time. The goals of the LBL are to enhance Fleet capability through remote real-time consultation and training, enhanced modeling, simulation, and analysis, and enhanced demonstration of advanced systems in Fleet exercises. The LBL will include the development and fielding of virtual training for organic Mine Countermeasures (MCM) elements, allowing simulated Fleet operations at CSS to be output in real-time to the individual Fleet combatants for display and action. It also will include a real-time link between the MCM Fleet elements and CSS engineers. The LBL will support new computationally demanding areas of research that include remote and virtual training, broadband acoustics and processing, computer-aided detection and classification, sensor motion compensation, visualization, surf-zone and shallow water explosion modeling, and total ship wake dynamics. The LBL will utilize the resources of the DoD's High Performance Computing Modernization Office (HPCMO) when possible.

**Impact**

The move toward organic MCM requires that ship officers and personnel be trained in operational use and tactics. Without the LBL, available training will be reduced. Costs to bring personnel (and ships) to a training site for initial and refresher training will be prohibitive because of the numbers of personnel and ships involved. The effect will be a loss of efficiency and effectiveness.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001				C. Line# and Description 11/CSACT (Combat Systems Advance Concepts & Tech) Lab (Hardware)			D. Site Identification  NSWC Dahlgren, VA							
			FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP			1	554	554				1	507	507			

**Narrative Justification:**

**Description**

Establishment of the Combat Systems Advanced Concepts and Technology (CSACT) Laboratory has combined several related yet independent thrusts into one cohesive whole, providing 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 a high-performance graphics processors, associated peripherals, high performance displays, and TAC workstations.

**Justification**

The Dahlgren Division lead in exploring concepts, technologies, and configurations (including manning and associated duties) with a focus on Surface Combatant 21st Century (SC21) has made the requirement for a high resolution graphics capability more urgent. This capability is required to host CIC display technology already developed, further develop and demonstrate additional concepts on information presentation and man machine interaction, and be an active participant in Simulation Based Design (SBD). 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**

NSWC has lead responsibilities in guiding and developing the appropriate technologies required in the construction of all ship combat systems, such as SC21. Advanced feasibility demonstration through analysis and prototyping are critical in the pursuit of suitable technologies. Without these equipments, the core technical competency will not be developed and worse yet, will not be maintained as required for NSWC to be the leader for surface ship.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 12/Strike Warfare Systems Integration Lab (Hardware)			D. Site Identification NSWC Dahlgren, VA							
			FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP			1	832	832	1	300	300	1	150	150			

**Narrative Justification:**

**Description**

The Strike Warfare Systems Integration Laboratory (SWSIL) supports the development and evaluation of strike systems through system engineering of requirements and top level system designs for future concepts using simulations and models. Strike mission planning is supported by analysis of both missile systems and advanced technology applications. Strike models are developed to be applied in end-to-end strike system analysis. These efforts support future evolutions of strike systems, including development of prototypes and supporting simulation and modeling for concept demonstration. These investments will enhance effectiveness and extend the capability of existing equipment to handle new capabilities of future systems. These investments continue the efforts begun under the Strike Warfare Prototyping Laboratory.

**Justification**

Upgrading the connectivity infrastructure of this high performance computing configuration will allow personnel to participate in distributed simulation exercises, advanced Strike Warfare technology and architecture studies, future system prototyping, demonstrations and high-fidelity analysis of the effectiveness of present and future strike systems such as cruise missiles and UAVs. Automation of the control suite switches used to reconfigure the laboratory equipment will be much faster and accurate than the current manual method. This equipment supports advanced system concept development and technology demonstration projects in advanced mission planning, imagery-based targeting for Strike Warfare and Naval Surface Fire support, and automated object/target recognition.

**Impact**

Use of existing computer assets does not provide the processing capabilities required for effective prototyping and simulation work inherent with Strike Warfare technology and architecture studies. Implementation of an automated control suite between the existing and future strike laboratories will enable automated configuration, data recording, reconfiguration and connectivity analysis which is currently accomplished manually. The new equipment will provide faster process and added capabilities, thus reducing the overall hours needed to perform a given task.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 13/Standard Systems Hardware			D. Site Identification Arlington, VA							
			FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP			1	1450	1450	0	0	0						

**Narrative Justification:**

**Description**

NSWC has placed emphasis on consolidating the operation of its corporate hardware to run the standard functionality applications. We procured initial hardware to support the Open Systems Environment (OSE) as part of the NAVSEA Information Management Improvement Program. By the year 2000, we are planning for the natural replacement of this hardware. We will consolidate the procurement of this hardware at the Surface/NAVSEA level.

**Justification**

**Impact**

Impact of not retaining the CPP authority would be increased maintenance costs and inability to retain a standard surface architecture.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 14/Surface Ship Integrated Topside Tech Center (Hardware)			D. Site Identification NSWC Carderock Bethesda, MD								
				FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP							1	500	500	1	300	300			

**Narrative Justification:**

**Description**

The Surface Ship Integrated Topside Technology Center (SSITTC) will support the computationally intensive design and analysis of surface ship designers by providing expertise, tools, and an appropriate atmosphere to foster research and development that will result in the integrated design of topsides for new generation surface ships. Through the implementation of an Integrated Computational Design Environment (ICDE) using advanced computational and telecommunications resources, the SSITTC will act as an enabling node linking a geographically distributed network of scientists and engineers highly skilled in a variety of ship analysis and design disciplines. Item to be procured include engineering workstations, communications and data encryption equipment to network these workstations and commercial design and analysis software.

**Justification**

The Navy currently has several large programs dedicated to identifying and developing optimum methods for surface ship deck operations and surface ship topside designs to reduce signatures, manning levels, and total ownership costs. As a surface ship analog to the Submarine Hydrodynamic/Hydroacoustic Technology Center (H/HTIC) the SSITTC will provide a distributed, collaborative design environment with a repository of appropriate computer-aided tools and technologies including computational and experimental data to efficiently develop and evaluate innovative designs for the Navy's surface ships of the 21st century.

**Impact**

Timely development and deployment of responsive warships in today's cost-constrained Navy is no longer possible without the use of an advanced computational tool kit integrated into an effective design environment such as the SSITTC.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 15/Integrated Programming Environment (Hardware)			D. Site Identification NSWC Dahlgren, VA								
				FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP				1	307	307				1	400	400			

**Narrative Justification:**

**Description**

This is a continuing effort to support technical software development by integrating the capabilities of graphics desktop computers with existing computer systems. These efforts are directed toward the development and life cycle support of the fire control software and graphic user interfaces for all test flight and operations applications. The strategy that promotes the use of a computer environment that allows flexibility and efficiency in applying and utilizing resources allows for continuous improvement of the current computer environment to take advantage of project and center resources without the expense of conversion costs.

**Justification**

This investment will acquire file servers. This effort provides continuing enhancements to the production computing environment that supports right sizing of tasks in a classified desktop processing environment. It serves as a model of a classified distributed desktop environment supported by open systems from which lessons learned continues to be shared with other programs. Additionally, the investment provides for the replacement of aging equipment, supports changes driven by process improvement efforts and supports the exploitation of advances in computer systems derived from open standards to offset impacts of increased requirements.

**Impact**

The cost of doing business would increase as operating costs increase due to an inability to meet process improvement goals and right size tasks on more economical platforms. Additionally, maintenance costs would increase on the aging equipment. The productivity of the work force would be reduced as program requirements drive us to provide capabilities to the fleet that exceed shore development facilities. This productivity decrease would result in a decrease in the quality of the products being developed.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 16/Remote ISEA Support Capability (Software)			D. Site Identification NSWC Port Hueneme, CA								
				FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP										1	225	225			

**Narrative Justification:**

**Description**

This project adapts private sector e-business techniques to the remote delivery of In-Service Engineering Agent (ISEA) products and services. It is essential to our future Battleforce Interoperability and ISEA function, and is a critical element of the Integrated Call Center. It will install data storage, data management and e-business hardware and software, remote sensing, and communication systems. It will adapt those systems and will establish processes and procedures allowing ISEA engineers and logisticians to remotely provide products and services.

**Justification**

Once in place, these distance support technologies will allow shore-based personnel to monitor, trouble shoot and improve the performance of deployed systems without having to travel to the ship. They will allow logisticians to deliver the right technical manual or maintenance card matching the right equipment to the right ship, on demand, and keep a permanent record of exactly what was delivered and when. Reduced manning, reduce support funding, and increased system complexity necessitate the ability to provide products and services in a more efficient manner. Our business plan and core equity sustainment requires higher level and more effective combat systems ISEA support without transferring cost to the fleet.

**Impact**

Future fleet support would be severely impacted without this effort. We will not be able to meet the requirements imposed by increased system complexity and reduced manning without lowering the level of support or transferring significant cost to the fleet.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 17/Massively Parallel Processing Machine (Hardware)			D. Site Identification NSWC Indian Head, MD								
				FY 2000			FY 2001			FY 2002					
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADP										1	500	500			

**Narrative Justification:**

**Description**

This will acquire additional processors for the SGI Origin 2000, a massively parallel processing machine (MPP), located in the Underwater Warheads Analysis Facility (UWAF). This is the first phase of a project will provide the capability to conduct scientific computations in a multi-user environment. The plant account ID number of the current system is 942170.

**Justification**

An extensive parallel computing capability is required to conduct the scientific computations needed to predict the performance of warheads, explosives, and explosive MCM systems. The department has adopted a multi-asset approach to scientific computing. These assets include the SGI Origin 2000 and the PC Cluster, both currently in the UWAF, and the high performance computers accessed via Defense Research Engineering Network (DREN). The use of the High Performance Computing sites accessible via DREN is free. This project will enhance the computational resources within the UWAF by expanding the number of processors on the SGI Origin 2000. An initial effort has been started to develop a computational vulnerability model for the Advanced Amphibious Assault Vehicle (AAAV) as part of the Mine Warfare (MIW) Spike. This initial effort will be followed with another to exercise the model in conducting parametric studies to address vehicle vulnerability in FY01 and FY02. The results of these studies will help to support the AAAV Program Office. The department will also need to conduct 3-dimensional calculations of the Torpedo Counter-Weapon in FY02 as part of the Platform Protection Spike. These examples are consistent with the overall direction of the Services to make modeling and simulation an integral part of the RDT&E process. This increase in workload is expected to continue as modeling and simulation gains acceptance within the acquisition community.

**Impact**

IHDIV will rely on the 16 bit processors it currently owns and on the off-site resources accessed via DREN. This will adversely impact the department's ability to respond to the increasing workload and the type of problems the department can address. The capability to conduct state-of-the-art scientific computing in a multi-user environment is essential if IHDIV/NSWC is to maintain a leadership role for underwater explosion

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001				C. Line# and Description  18/Lethality & Weapons Effectiveness Comp Physics Cap (Hardware)			D. Site Identification  NSWC Dahlgren, VA					
				FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST				Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
ADP										1	500	500

**Narrative Justification:**

**Description**

This investment will acquire a high-end parallel computing facility using Year 2000+ technology that will vastly improve high-performance computing applications requiring large numbers of high-performance processors working together to support both shared-memory and message passing programming environments. This capability is required for the very large data sets and problems requiring access to a single large memory space necessary for complex missile performance test, evaluation, and problem-solving by application of shock physics analysis and computational fluid dynamics.

**Justification**

The Lethality and Weapons Effectiveness Computational Physics Capability provides the capability to simulate missile flight for development, test, and evaluation purposes, thus producing very significant savings when compared to live flights. The acquisition of this new technology is estimated to reduce time and cost of current operations by a minimum of \$3M on existing tasks. Existing equipment will be physically and technologically obsolete by FY2002.

**Impact**

Test support for all major missile systems is provided by the Dahlgren Division, including STANDARD MISSILE (SM), Theater Ballistic Missile Defense (TBMD), Overland Cruise Missile Defense (OCMD), Land Attack Standard Missile (LASM), SIDEWINDER, NATO Seasparrow, and Extended SeaSparrow Missile (ESSM). The procurement of this equipment will enable Dahlgren Division to continue to meet existing requirements and reducing costs to the Fleet by simulating missile performance instead of relying on live tests of actual Fleet resources to acquire data for complex problem-solving and analyses.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001	C. Line# and Description 19/Miscellaneous (ADP <= \$999K; >= \$500K)	D. Site Identification NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST	4261	1420	2322	

High Speed Videographic System (Hardware) (NSWC Carderock Bethesda, MD)			255	
State-of-the-Art Audio/Visual Centers (Telecommunications Equip.) (NSWC Port Hueneme, CA)	175		175	
NETWORKS (Telecommunications Equip.) (NSWC Dahlgren, VA)	465			
JOINT FORCE REAL-TIME ANALYSIS FACILITY (Hardware) (NSWC Dahlgren, VA)				
CLASSIFIED NETWORKS (Telecommunications Equip.) (NSWC Dahlgren, VA)	693			
Littoral Warfare C4I/Decision Support System (Hardware) (NSWC Panama City, FL)			620	
LINK 16 EQUIPMENT (Hardware) (NSWC Dahlgren, VA)				
Classified Organizational Defense Messaging System (Telecommunications Equip.) (NSWC Port Hueneme, CA)	290	200		
Secure Networking (Telecommunications Equip.) (NSWC Port Hueneme, CA)	717			
Technical CDB (Hardware) (NSWC Carderock Bethesda, MD)				
Switched Network Infrastructure (Telecommunications Equip.) (NSWC Port Hueneme, CA)	994			
Warfare Assessment Lab Display System (Hardware) (NSWC Panama City, FL)	200	200	200	
Network Operations Center (Hardware) (NSWC Dam Neck, VA)	580	420		
Modeling and Simulation/Visualization Technology (Hardware) (NSWC Panama City, FL)			326	
JEDMICS UPGRADE (Hardware) (NSWC Port Hueneme, CA)		400	350	
ADVANCED COMPUTING SYSTEMS (Hardware) (NSWC Dahlgren, VA)	147	200	396	

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001	C. Line# and Description 20/Miscellaneous (ADP < \$500K)	D. Site Identification NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST	4544	2460	2055	

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FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 21/DIFMS (Internally Developed)			D. Site Identification Arlington, VA				
			FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software			1	2369	2369	1	837	837	1	2650	2650

**Narrative Justification:**

**Description**

NSWC continues to implement DIFMS, the interim migratory financial system for Navy Working Capital Fund Research and Development activities, at its six divisions. Implementing DIFMS is a labor intensive effort on the part of both the CDA and functional experts and IT personnel at the division involving data mapping and conversion of existing data and creating interfaces with local systems.

**Justification**

The FY00 authority is to fund conversions at Carderock and Crane. The FY01 and FY02 authority is to fund conversions at NWAS and Port Hueneme, respectively.

**Impact**

The impact of reducing this CPP authority would be the inability to continue implementing DIFMS.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001				C. Line# and Description 22/Standard Systems Software (Internally Developed)			D. Site Identification Arlington, VA				
			FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Software				1300	1300		1300	1300		1300	1300

**Narrative Justification:**

**Description**

Over the last several years, NSWC has emphasized standardization of business systems and consolidating computer operations for these systems to reduce costly, specialized information technology (IT) management and labor and to improve fixed asset tracking and travel. NSWC continues to standardize within the command as part of Business Process Reengineering.

**Justification**

Currently, we are involved with the implementation of designated DoD functional applications for financial (DIFMS), contracting (standard procurement system SPS), fixed assets (DPS) and travel (DTS). This funding allows NSWC to continue implementation of these standard systems in common, integrated fashion.

**Impact**

The impact of reducing this CPP authority would be the inability to continue implementation of Dod standard systems in a common, integrated fashion.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001				C. Line# and Description 23/Business Process Re-engineering (BPR) Support System (Internally Developed)			D. Site Identification  Arlington, VA							
			FY 2000		FY 2001		FY 2002							
ELEMENTS OF COST			Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Software						1	1682	1682						

**Narrative Justification:**

**Description**

NSWC is in the midst of a broad business process reengineering (BPR) program geared toward process improvement and cost reduction across all technical and support functions. An important aspect of process improvement is the development of Information Management (IM)/Information Technology (IT) tools which streamline the process and reduce the work hours necessary to complete the task. NSWC expects to develop and deploy common (IM/IT tools in functional areas such as civilian personnel, financial management, planning, procurement, material management, and public works to normalize information across the warfare center, using existing web enabled decision support tools to the maximum extent possible.

**Justification**

Virtually all business processes are within the scope of the current BPR initiative. Although all specific changes and savings have not yet been identified by functional area, investments have been incorporated in this budget to finance expected process changes. The majority of the resultant savings will occur beyond FY02. The functional areas for this investment include civilian personnel, financial management, planning, procurement, material management and public works.

**Impact**

Without the required investment in IM/IT tools, the ability to leverage NSWC's BPR program across the warfare center will be limited and will inhibit the Center's ability to achieve savings.

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date NSWC/MAY 2001	C. Line# and Description 25/Miscellaneous (Minor Construction <= \$999K; >= \$500K)	D. Site Identification NA		
		FY 2000	FY 2001	FY 2002
ELEMENTS OF COST		Total Cost	Total Cost	Total Cost
TOTAL COST		3633	3570	4525

Laser Laboratory Addition to Building 16 (NSWC Carderock Bethesda, MD)				
WATER TREATMENT FACILITY (NSWC Carderock Bethesda, MD)				500
TEST CONTROL & OPERATIONS ANALYSIS BLDG FOR EEA (NSWC Dahlgren, VA)	568			
FLEET T&E LAYOUT & ASSEMBLY BUILDING (NSWC Carderock Bethesda, MD)	521			
EARTH-COVERED MAGAZINE MODERNIZATION (NSWC Crane, IN)	438			
RECONFIGURE INTERSECTION (NSWC Crane, IN)				
BUILDING 41 EGRESS/STAIRWAYS (NSWC Crane, IN)				
MINCON Design (NSWC Carderock Bethesda, MD)	211			275
Fire Station (NSWC Panama City, FL)	995			
Control System Data Analysis Center (NSWC Eng. Sta. Philadelphia, PA)			850	
JP5 Refueling System (NSWC Panama City, FL)				900
Nitramine Precipitation Tank House (NSWC Indian Head, MD)			900	
SHOP CONSOLIDATION TO BUILDING 9 (NSWC Carderock Bethesda, MD)	900			
SYSTEMS SAFETY ADDITION (B218) (NSWC Dahlgren, VA)			900	
OFFICE SPACE, BUILDING 1 (NSWC Carderock Bethesda, MD)			920	
TEAMS CX ENGINEERING CENTER (NSWC Dahlgren, VA)				
CONTROL SYS ADV CONCEPT & TECH (CSACT) FACILITY (NSWC Dahlgren, VA)				950
CTIDES (NSWC Dahlgren, VA)				950
HEAVY EQUIPMENT MAINTENANCE SHOP (NSWC Crane, IN)				950

FY 2002 PRESIDENT'S BUDGET  
(Dollars in Thousands)

A. Budget Submission  
FY 2002 PRESIDENT'S BUDGET

B. Component/Business Area/Date  NSWC/MAY 2001	C. Line# and Description 26/Miscellaneous (Minor Construction < \$500K)	D. Site Identification NA		
	FY 2000	FY 2001	FY 2002	
ELEMENTS OF COST	Total Cost	Total Cost	Total Cost	
TOTAL COST	1382	2691	4927	

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Department of the Navy  
Activity Group: Research and Development  
Sub-Activity Group: NSWC  
FY 2002 President's Budget

FY 2001 Project Title	FY 2001 President's Budget	+/-	FY 2002 President's Budget	Explanator
Continuous Energetics Processing (Replacemen	4.670	0.000	4.670	No change
Nitramine Drying System (Replacement)	3.900	0.000	3.900	No change
Modular Shock Motion Simulator (New Mission)	0.475	-0.475	0.000	Realigned to Misc Non ADP < \$500K
Miscellaneous (Non ADP<=\$900K;>=\$500K)	0.800	0.495	1.295	Advanced HM&E Connectivity facility added. Modular Shock Motion Simulator, +\$475 adder (see Line Item #4 above ). Other miscellaneous projects <\$500 thousand deferred to fund higher priority initiatives
Miscellaneous (Non ADP<\$500K)	5.532	-0.675	4.857	
<b>Non ADP Total</b>	<b>15.377</b>	<b>-0.655</b>	<b>14.722</b>	

**ADP**

CDNET Modernization (Hardware)	1.900	-0.380	1.520	Projected cost reduction.
Theater Warfare Systems (Hardware)	1.059	0.000	1.059	No change.
Networks (Telecommunications Equip.)	0.676	-0.676	0.000	Deleted to fund higher priority project.
Littoral Battlespace Laboratory Support (Hardware)	1.171	0.000	1.171	No change.
Classified Networks (Telecommunications Equip.)	0.456	-0.456	0.000	Deleted to fund emergent higher priority project.
Switched Network Infrastructure (Telecommunications Equi	0.800	-0.800	0.000	Deleted to fund emergent higher priority project.
Secure Network (Telecommunications Equip.)	0.500	-0.500	0.000	Deleted to fund emergent higher priority project.
Strike Warfare Systems Integration Lab (Hardware)	0.300	0.000	0.300	No change.
Miscellaneous (ADP<=\$999K;,>=\$500K)	1.370	0.550	1.920	JCAL Server Upgrade -\$150 (project complete). LAN Cabling -\$400 (cancelled). Advanced Computing Sys +\$200 (realigned from Misc ADP < \$500). JEDMICS Upgrade
Miscellaneous (ADP<\$500K)	3.325	-0.865	2.460	Advanced Computing Sys -\$200 (realigned to Misc ADP < \$999 > \$500). JEDMICS Upgrade - \$400 (realigned to Misc ADP < \$999 > \$500). Other miscellaneous projects <\$500K deferrec
<b>ADP Total</b>	<b>11.557</b>	<b>-3.127</b>	<b>8.430</b>	

**Software**

DIFMS (Internally Developed)	0.837	0.000	0.837	No change.
Standard Systems Software	0.000	1.300	1.300	Emergent high priority project.

Department of the Navy  
 Activity Group: Research and Development  
 Sub-Activity Group: NSWC  
 FY 2002 President's Budget

Business Process Re-Engineering (BPR) Support System	0.000	1.682	1.682	Emergent high priority project.
Miscellaneous (Software<\$500K)				

<b>Software Total</b>	<b>0.837</b>	<b>2.982</b>	<b>3.819</b>	
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**Minor Construction**

				Control System Data Analysis Center +\$850. Earth Covered Magazine Modernization -\$600 (accelerated into FY 2000)
Miscellaneous (Minor Construction<=\$999K;>=\$500K)	3.320	0.250	3.570	
Miscellaneous (Minor Construction<\$500K)	2.141	0.550	2.691	Emergent projects

<b>Minor Construction Total:</b>	<b>5.461</b>	<b>0.800</b>	<b>6.261</b>	
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<b>Grand Total</b>	<b>33.232</b>	<b>0.000</b>	<b>33.232</b>	
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**Department of the Navy  
Naval Undersea Warfare Center  
FY 2002 President's Budget  
Navy Working Capital Fund**

**A. 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.

**B. ACTIVITY GROUP COMPOSITION**

The Naval Undersea Warfare Center was established in January 1992, and is composed of two divisions, located in Newport, RI and Keyport, WA, and several detachments. The Center Management Headquarters organization is located at Newport RI.

**C. BUDGET HIGHLIGHTS**

(\$ in thousands)

<b>Summary</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
New Orders	\$811,601	\$664,037	\$664,253
Revenue	\$783,244	\$715,383	\$695,829
Cost of Goods/ Services	\$786,746	\$706,819	\$694,207
Operating Results	(\$3,502)	\$8,564	\$1,622
Accumulated Operating Results	(\$10,187)	(\$1,622)	\$0
Civilian End Strength	3,940	3,797	3,737
Civilian Workyears (Straight time)	3,950	3,774	3,694
Military End Strength	32	50	51
Military Workyears	34	36	38
Capital Program	\$17,564	\$19,609	\$20,000

**Naval Undersea Warfare Center  
FY 2002 President's Budget**

**1. Management Statement**

The Center's FY 2000 reimbursable funding levels were higher than those reflected in the FY 2001 President's budget. As in previous years, our actual funding exceeds the initial estimates provided by our customers.

NUWC expects to meet its FY 2001 budgeted Net Operating Results (NOR) of \$8,564 thousand. Our Direct Labor Hour performance in FY 2000 resulted in higher than expected NOR, and we have adjusted our FY 2002 NOR to reflect the impact of the DLH performance on Revenue and NOR.

**2. Workload**

<b>Workload</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
New Orders	\$811,601	\$664,037	\$664,253

The Center's budget has been balanced to customer workload. The Center has experienced an increase in actual FY 2000 reimbursable funding over amounts reported in the FY 2001 President's Budget.

**3. Financial Profile**

<b>\$K</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Revenue	\$783,244	\$715,383	\$695,829
Cost of Goods/ Services	\$786,746	\$706,819	\$694,207
Operating Results	(\$3,502)	\$8,564	\$1,622
Accumulated Operating Results	(\$10,187)	(\$1,622)	\$0

**Revenue and Cost of Goods/Services**

Revenue and cost decline from year to year. This reflects the Center's efforts to size itself to meet anticipated customer workload.

**Naval Undersea Warfare Center  
FY 2002 President's Budget**

Operating Results

As noted above, NUWC expects to achieve the FY 2001 NOR goal established in this budget. FY 2002 rates are set based on the \$1.6 million Accumulated Operating Results loss projected for the end of FY 2001.

**4. Manpower**

<b>Manpower</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Civilian End Strength	3,940	3,797	3,737
Civilian Workyears (Straight time)	3,950	3,774	3,694
Military End Strength	32	50	51
Military Workyears	34	36	38

Civilian End Strength/Workyears

The civilian end strength and workyear decline reflects management efforts to balance workforce to workload.

Military End Strength/Workyears

Military End Strength and workyears remain fairly stable over the budget period.

**5. Capital Purchase Program (CPP)**

<b>CPP \$K</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Equipment	\$ 3,974	\$ 3,639	\$ 8,351
ADP	\$11,612	\$12,827	\$10,174
Minor Construction	\$ 1,377	\$1,297	\$ 1,475
Software Development	\$ 601	\$1,846	\$ 0

**Naval Undersea Warfare Center  
FY 2002 President's Budget**

CPP

For FY 2001, NUWC's capital purchase program is increased to provide funding for conversion of Keyport' Division's financial system from NOMIS to DIFMS.

**6. Billing Rates**

	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Stabilized Rate	\$75.39	\$81.95	\$80.43
Billing Rate Change %	5.0%	8.7%	(1.9)%

Stabilized Rate

The Center's stabilized billing rate for FY 2002 decreases by 1.9%. The Center will continue to pursue cost saving initiatives to keep future rate increases to a minimum. The FY 2002 rate also includes an AOR recoupment of \$1,622 thousand.

**7. Unit Cost**

<b>Unit Cost</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Stabilized Cost (\$M)	\$385.2	\$386.0	\$388.3
Direct Labor Hours (000)	5,138	4,900	4,866
Unit Cost	\$74.97	\$78.78	\$79.79

Unit Cost

Declining direct labor hours combined with increased fixed overhead cost impact the Center's unit cost trend over the budget period.

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	764.6	696.4	676.0
Surcharges	.0	.0	.0
Depreciation excluding Major Constructio	18.6	19.0	19.8
Other Income			
Total Income	783.2	715.4	695.8
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	2.4	2.2	2.1
Civilian Personnel	312.4	316.0	321.9
Travel and Transportation of Personnel	19.7	19.5	18.4
Material & Supplies (Internal Operations	63.5	59.5	54.4
Equipment	20.0	17.9	16.1
Other Purchases from NWCF	44.0	39.6	38.1
Transportation of Things	2.1	.9	.9
Depreciation - Capital	18.6	19.0	19.8
Printing and Reproduction	1.8	1.7	1.7
Advisory and Assistance Services	.0	.0	.0
Rent, Communication & Utilities	16.5	16.8	16.2
Other Purchased Sevices	270.4	212.0	203.8
Total Expenses	771.4	705.0	693.3
Work in Process Adjustment	15.2	1.8	.9
Comp Work for Activity Reten Adjustment	.2	.0	.0
Cost of Goods Sold	786.7	706.8	694.2
Operating Result	-3.5	8.6	1.6
Less Surcharges	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	-3.5	8.6	1.6
Other Changes Affecting AOR	.0	.0	.0
Accumulated Operating Result	-10.2	-1.6	.0

## INDUSTRIAL BUDGET INFORMATION SYSTEM

(NIFRPT)

PAGE 1

Source of Revenue  
AMOUNT IN MILLIONS  
NUWC / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	811.6	664.0	664.3
a. Orders from DoD Components	722.7	614.7	614.7
Department of the Navy	704.7	602.4	602.5
O & M, Navy	165.9	150.1	154.1
O & M, Marine Corps	.0	.0	.0
O & M, Navy Reserve	3.3	3.4	3.5
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Procurement, Navy	3.5	2.2	1.9
Weapons Procurement, Navy	54.8	56.1	59.5
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	80.6	88.7	82.8
Other Procurement, Navy	165.7	104.7	120.9
Procurement, Marine Corps	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0
Research, Dev., Test, & Eval., Navy	230.2	196.6	179.3
Military Construction, Navy	.0	.0	.0
Other Navy Appropriations	.0	.6	.4
Other Marine Corps Appropriations	.5	.0	.0
Department of the Army	2.2	2.3	2.3
Army Operation & Maintenance	.1	.1	.1
Army Res, Dev, Test, Eval	2.0	2.2	2.2
Army Procurement	.0	.0	.0
Army Other	.0	.0	.0
Department of the Air Force	.6	.1	.1
Air Force Operation & Maintenance	.1	.1	.1
Air Force Res, Dev, Test, Eval	.3	.0	.0
Air Force Procurement	.3	.0	.0
Air Force Other	.0	.0	.0
DOD Appropriation Accounts	15.2	9.9	9.9
Base Closure & Realignment	.0	.0	.0
Operation & Maintenance Accounts	.3	.2	.2
Res, Dev, Test & Eval Accounts	14.8	9.7	9.7
Procurement Accounts	.1	.0	.0
DOD Other	.0	.0	.0
b. Orders from NWC Business Area	39.1	22.6	21.4
c. Total DoD	761.8	637.3	636.1
d. Other Orders	49.8	26.7	28.1
Other Federal Agencies	.4	.5	.4
Foreign Military Sales	33.4	20.4	21.2
Non Federal Agencies	16.0	5.9	6.5

INDUSTRIAL BUDGET INFORMATION SYSTEM  
 Source of Revenue  
 AMOUNT IN MILLIONS  
 NUWC / T OTAL

(NIFRPT)

PAGE 2

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	273.7	302.1	250.7
3. Total Gross Orders	1,085.3	966.1	915.0
4. Funded Carry-Over **	302.1	250.7	219.2
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	783.2	715.4	695.8
Adjusted Carry-Over	171.1	132.5	134.0
Adjusted Carryover in Months of Workload	2.6	2.2	2.3

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

FY 2002 PRESIDENT'S BUDGET  
NAVY WORKING CAPITAL FUND  
R&D: NAVAL UNDERSEA WARFARE CENTER  
CHANGES IN THE COSTS OF OPERATION  
(DOLLARS IN THOUSANDS)

	<u>TOTAL EXPENSES</u>
<b>FY 2000 Actual</b>	<b>771,396</b>
<b>FY 2001 President's Budget</b>	<b>660,222</b>
Price Adjustments	
FY 2001 Pay Raise	
Civilian Personnel	7,500
NWCF price changes	217
General Purchase Inflation	388
Productivity Initiatives	
Consolidation/Efficiencies	(2,913)
Other	(106)
Program Changes	
Workload	42,279
Other Changes	
SIP/VERA/RIF	(900)
SIP Incentive / Retirement Offset	(287)
FECA	(138)
Depreciation	(1,244)
 <b>FY 2001 Current Estimate</b>	 <b>705,018</b>
Price Adjustments	
FY 2002 Pay Raise	
Civilian Personnel	6,509
Military Personnel	41
Annualization of FY 2001 pay raise	
Civilian Personnel	2,427
Military Personnel	14
Supply Management - fuel	112
Supply Management - non-fuel	84
NWCF price changes	630
General purchase inflation	4,884
Productivity Initiatives	
Consolidation/Efficiencies	(2,337)
Savings from CPP	(10,565)
Other	(4,016)
Program Changes	
Workload	(10,235)
Other Changes	
FECA	162
Military	(200)
Depreciation	778
 <b>FY 2002 Current Estimate</b>	 <b>693,306</b>

**Working Capital Fund Capital Investment Summary**  
**Department of the Navy**  
**Research & Development**  
**Naval Undersea Warfare Center**  
**FY2002 President's Budget**  
**(\$ in Millions)**

LINE #	ITEM DESCRIPTION	FY 00		FY 01		FY 02	
		QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST
	<b>1. Non ADP Equipment</b>						
	<b>a. Productivity (Major)</b>						
L265	Undersea Weapons Consolidation					1	.350
L266	UUV Testing					1	.435
L267	COTS Systems Support					1	.650
L268	Environment Test & Evaluation					1	.675
	<b>Productivity Non-ADP (Major) (\$500 - \$999K)</b>					3	1.905
	<b>Productivity Non ADP Equipment (Minor)</b>	2	.585	1	.270	2	.350
	<b>b. Replacement (Major)</b>						
	<b>Replacement Non ADP Equipment (Minor)</b>	1	.399	1	.380	4	.863
	<b>c. Environmental (Major)</b>						
L259	Fac for Analysis & Characterization of Transducers & Materials	1	.380	1	.663	1	.200
	<b>Environmental Non-ADP (Major) (\$500 - \$999K)</b>	1	.250				
	<b>Environmental Non ADP Equipment (Minor)</b>	2	.235	1	.115	3	.815
	<b>d. New Mission (Major)</b>						
L225	Shallow Water Syn Env Eval Facility	1	.800	1	.926		
L260	Telemetry & Fiber Optic Sensor Dev Lab	1	.469	1	.615		
L261	Littoral USW Facility					1	.662
L262	USW Testing and Support Facility					1	.874
	<b>New Mission Non-ADP (Major) (\$500 - \$999K)</b>	1	.150			1	.440

EXHIBIT 9A

**Working Capital Fund Capital Investment Summary**  
**Department of the Navy**  
**Research & Development**  
**Naval Undersea Warfare Center**  
**FY2002 President's Budget**  
**(\$ in Millions)**

LINE #	ITEM DESCRIPTION	FY 00		FY 01		FY 02	
		QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST
	<b>New Mission Non ADP Equipment (Minor)</b>	3	.706	3	.670	1	.132
	<b>Total Non ADP Equipment</b>	<b>13</b>	<b>3.974</b>	<b>9</b>	<b>3.639</b>	<b>21</b>	<b>8.351</b>
	<b>2. ADP &amp; Telecommunications Equipment</b>						
	<b>a. Other Computer &amp; Telecommunications Support Equip (Major)</b>						
L186	Simulation Based Design (Productivity)	1	1.470	1	2.000		
L187	Sub Sonar Dev. & Evaluation (Productivity)	1	.300				
L193	Advanced Attack Center Test Bed (Productivity)	1	.225				
L231	Virtual Systems Design (New Mission)	1	.800	1	1.300	1	1.674
L238	Scientific & Management Computer Sys Upgrade (Replacement)	1	.765				
L247	Integrated Display Center Upgrade (Productivity)	1	.900	1	.250	1	.125
L248	Undersea Battlespace Facility (Productivity)	1	.567	1	.756		
L249	Undersea Warfare Syn Env Design System (Productivity)			1	.500		
L250	WAF New Architecture (Replacement)	1	.750	1	.315		
L253	Secure Wideband Communications	1	.800	1	.725		
L258	Real-Time Information Transfer Network (RITN) (New Mission)	1	.500	1	.500	1	.250
L263	Scientific Computational Resources Upgrade (Replacement)					1	1.149
L264	USW Testbed for Decision Support (New Mission)					1	1.247
L269	Common Product Development (Productivity)					1	1.165
	<b>ADP Projects (Major) (\$500 - 999K)</b>	9	2.414	8	3.040	5	1.475
	<b>a. Other Computer &amp; Telecomm Support Equip Total (Minor)</b>	6	2.121	9	3.441	12	3.089
	<b>Total ADP &amp; Telecommunication Equipment</b>	<b>25</b>	<b>11.612</b>	<b>25</b>	<b>12.827</b>	<b>23</b>	<b>10.174</b>

EXHIBIT 9A

<b>3. Software</b>							
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**Working Capital Fund Capital Investment Summary**  
**Department of the Navy**  
**Research & Development**  
**Naval Undersea Warfare Center**  
**FY2002 President's Budget**  
**(\$ in Millions)**

LINE #	ITEM DESCRIPTION	FY 00		FY 01		FY 02	
		QUANT	TOTAL COST	QUANT	TOTAL COST	QUANT	TOTAL COST
	<b>a. Software (Major)</b>						
L241	DIFMS - Newport Division			1	.200		
L242	DIFMS - Keyport Division	1	.451	1	1.500		
	<b>b. Software (Minor)</b>	1	.150	1	.146		
	<b>Total Software</b>	<b>2</b>	<b>.601</b>	<b>3</b>	<b>1.846</b>		
	<b>4. Minor Construction</b>						
	<b>Minor Construction</b>		1.377		1.297		1.475
	<b>Total Minor Construction</b>		<b>1.377</b>		<b>1.297</b>		<b>1.475</b>
	<b>Grand Total Capital Purchase Program</b>		<b>17.564</b>		<b>19.609</b>		<b>20.000</b>

EXHIBIT 9A

RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L265 Undersea Weapons Consolidation

D. Activity Identification  
NUWC Division, KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Undersea Weapons Consolidation							1	350	350

**Narrative Justification:**

Improve and update shop process flow technology to maximize production processes for future Undersea Vehicle Maintenance. The project builds on the Undersea Vehicles Group Fleet Material Readiness vision of successful consolidation efforts by integrating new Industry technologies into increasingly complex maintenance and process workflow. The Undersea Vehicles process improvement documentation and performance recognized in their National ISO 9001 certification continue to identify parallel and redundant operations that can be decreased. This documented process increases productivity and efficiency, reducing low-tech support, and manual processing with the use of automated and robotic systems for both future weapon systems and legacy hardware. The changes for shop flow equipment support are required to meet future workload requirements in Fleet Material Readiness for legacy and new weapons systems to reduce total ownership costs and provide real time, interactive system results.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L266 UUV Testing

D. Activity Identification  
NUWC Division, KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
UUV Testing							1	435	435

**Narrative Justification:**

Consolidate and procure equipment to test unmanned undersea vehicles (UUV) in complex multi-vehicle and platform scenarios. Equipment will improve technical productivity, reduce operation and maintenance costs, and improve data interoperability with UUV sensors and systems. The fleet is developing and implementing net centric systems, sensors and platforms, which are interoperable and interdependent and require complete scenario testing.

This project provides portable measurement, stimulation and connectivity systems for test interoperability that allow injection of stimulus for UUV sensor evaluation and also provides stealth initiatives that provide the ability to measure low level acoustic and non-acoustic signatures.

<b>RESEARCH &amp; DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION</b> (\$ in Thousands)	<b>A. Budget Submission</b> FY 2002 President's Budget
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<b>B. Component/Business Area/Date</b> DON/R&D/NUWC	<b>C. Line No. &amp; Item Description</b> <u>L267</u> COTS Systems Support	<b>D. Activity Identification</b> NUWC Division, KPT
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ELEMENTS OF COST	FY 2000			FY 2001			FY 2002		
	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
COTS Systems Support							1	650	650

**Narrative Justification:**

This project is to procure equipment and system components to establish a state-of-the-art COTS equipment supportability capability for various combat systems and platforms. The new equipment will provide the capability to integrate, test and provide support such as tech refresh and tech insertion for new and existing combat systems. The need for this project is driven by the increasing reliance on COTS equipment in Navy combat systems deployed in the fleet, and the rapid pace of technology change inherent in those systems. This project will allow us to establish a common hardware and software architecture that will reduce system maintenance and reconfiguration costs and improve flexibility for supporting a wider variety of COTS systems. It should be noted that the economic analysis for this project was very conservative and the payback period is considered to be a maximum payback period.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY2002 Biennial Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L268 Environmental Test & Evaluation

D. Activity Identification  
NUWC Division, KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Environmental Test & Evaluation							1	675	675

**Narrative Justification:**

Procure and install vibration and thermal conditioning systems to achieve state of the art environmental test, periodics test and stress screening. The technology and test methodology to assess end item reliability and the validation of weapons and weapons systems reliability has progressed from sequential conditioning and testing, thermal then vibration, to highly accelerated life cycle and to highly accelerated screening methods. These new methods precipitate and discover component failures and thus verify system reliability with more cost effectiveness and with more accuracy. The new methods and systems reduce test time and maintenance time by up to a forty to one ratio over current practices.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Productivity Non ADP Consolidated  
Projects (\$500K - \$999K)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Productivity Non ADP (500K-999K)							3		1,905

**Narrative Justification:**

	<u>Location</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>
System Suitability Validation	Keyport			490
Laser Processing Equipment	Keyport			925
Fleet Readiness Support	Keyport			490

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Productivity Non ADP Equipment (Minor)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Productivity Non ADP Minor	2		585	1		270	2		350

**Narrative Justification:**

Projects between \$100K - \$499K

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Replacement Non ADP Equipment (Minor)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Replacement Non ADP Minor	1		399	1		380	4		863

**Narrative Justification:**

Projects between \$100K - \$499K

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L259 Fac for Analysis & Characterization of  
Transducers & Materials

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Fac for Anal / Char of Transducers & Materials	1	380	380	1	663	663	1	200	200

**Narrative Justification:**

The Naval Undersea Warfare Center, Division Newport (NUWC DIV NPT) is responsible for work under its leadership areas of submarine and surface ship sonar systems including acoustic sensors, transducers and arrays.

NUWC DIV NPT is the Navy's only fully integrated transducer design operation. The Facilities for the Analysis and Characterization of Transducers and Materials it 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. The transducer design operation is "cradle-to-grave; from basic research of materials, to prototype design and evaluation, to production and fleet support.

In order for NUWC DIV NPT to maintain its transducer technology expertise to provide the most advanced, compatible, efficient, and cost effective sensors for submarine systems of the future, this laboratory must be updated. With the rapid evolution of new computer capabilities as well as instrumentation, it is imperative that existing outdated equipment be upgraded to maintain the superior products developed for the Fleet.

Following year funding will provide additional upgrades to synthesize / characterize ceramic transduction materials. This will foster a means for testing new ideas for improving existing materials and producing novel materials.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Environmental Non ADP Consolidated  
Projects (\$500K - \$999K)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Environ Non ADP (500K-999K)	1		250						

**Narrative Justification:**

	<u>Location</u>	<u>FY00</u>
Retrofit/Replacement of AC&R Equip	Newport	250

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Environmental Non ADP Equipment (Minor)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Envir Non ADP Minor	2		235	1		115	3		815

**Narrative Justification:**

Projects between \$100K - \$499K

<b>RESEARCH &amp; DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION</b> (\$ in Thousands)	<b>A. Budget Submission</b> FY 2002 President's Budget
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<b>B. Component/Business Area/Date</b> DON/R&D/NUWC	<b>C. Line No. &amp; Item Description</b> <u>L225</u> Shallow Water Synthetic Environment Evaluation Facility	<b>D. Activity Identification</b> NUWC Division, NPT
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ELEMENTS OF COST	FY 2000			FY 2001			FY 2002		
	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
S/W Syn Env Eval Fac	1	800	800	1	926	926			

**Narrative Justification:**

The Naval Undersea Warfare Center, Division Newport (NUWC DIV NPT) 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 Synthetic 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.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L260 Telemetry & Fiber Optic Sensor Dev Lab

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Telemetry & Fiber Optic Lab	1	469	469	1	615	615			

**Narrative Justification:**

As the Navy's lead laboratory in the successful development of the first generation All Optical Towed Array (AOTA), the Telemetry and Fiber Optic Sensor Development Laboratory will expand the existing facility to support the Navy in optical array development through exploratory development efforts to advance fiber optic technology into very low cost, high channel count, small diameter arrays. Development of the optical interrogation and receiver subsystems requires extensive optical and electronic laboratory test and measurement equipment. This investment will also contribute to enhancement of NUWC DIVNPT's handling system facility which will enable NUWC DIVNPT as the Technical Design Agent/In-Service Engineering Agent (TDA/ISEA) for current submarine towed arrays and handling systems to solidify its role on current systems and enhance its expertise to support future handling systems for the Fleet. The development of very low cost, expendable small diameter towed array technology is essential to provide the Navy with an affordable towed array detection capability for use in littoral shallow water environments. Lack of funding for these optical facility improvements will severely restrict NUWC DIVNPT's ability to develop unique fiber optic technology having significant cost and size advantages over conventional array technology.

In addition, the integration of towed arrays and handling systems is required to provide the Fleet with the performance and reliability mandated under submarine superiority. Lack of funding for these handling facility improvements will severely restrict NUWC DIVNPT's ability of maintaining a leadership position with respect to future handling system developments for the Navy. Lack of investment will also restrict NUWC DIVNPT in providing engineering and training services to the Fleet on existing handling systems. The incremental upgrades made during each fiscal year will provide for continuously improved capabilities in support of optical array systems development for thin-line and multi-line towed arrays. Investments also include expansion of the towed array handling system equipment resulting in consolidation and improved engineering, test and training for the Fleet. Each stage of this project will enhance the capabilities for acoustic array research and development with a fully integrated laboratory to be realized in FY 02.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L261 Littoral USW Facility

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Littoral USW Facility							1	662	662

**Narrative Justification:**

The Naval Undersea Warfare Center (NUWC) is one of the lead navy activities dedicated 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. Undersea Warfare is the conduct of battle beneath the surface of the oceans with the principal objective of achieving battlespace dominance, to fully neutralize enemy offensive and defensive weapons. Two decades from now, US submarines will conduct a multitude of diverse operations in littoral areas. The Littoral USW Facility is composed of systems to provide detection, classification and localization of threats encountered in a shallow water environment, including improved sensors, processing and communications to support multi-statics, data fusion and netcentric ASW applications. These systems are critical components needed to maintain undersea superiority against future undersea warfare threats.

If this equipment is not acquired, NUWC will be unable to provide the Navy with the capabilities to combat and neutralize the technological advancements of non-allied nations which pose threats beyond the scope of traditional acoustic stealth. Consequently, NUWC will be unable to protect the fleet, and make the necessary contributions to prepare for future threats.

RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget			
B. Component/Business Area/Date DON/R&D/NUWC			C. Line No. & Item Description <u>L262</u> USW Testing and Support Facility				D. Activity Identification NUWC Division, NPT			
		FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST		Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
USW Testing & Support Fac								1	874	874
<b>Narrative Justification:</b>										
<p>The Naval Undersea Warfare Center (NUWC) is one of the lead Navy activities dedicated 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. Constrained budgets necessitate the development of affordable, innovative, evolving systems for applications in undersea warfare. The USW Testing and Support Facility will develop and test innovative concepts and approaches for critical undersea warfare components, subsystems and systems. The USW Testing and Support Facility will act as a focus for high risk/high pay-off concepts, technologies and products by providing an environment in which to integrate, demonstrate and evaluate advanced concepts and technologies. The Facility will support the transition from existing to advanced next-generation designs.</p> <p>If this equipment is not acquired, NUWC will be unable to support and test critical undersea warfare components and provide the Navy with affordable, innovative capabilities to meet future fleet needs. Not being able to test and evaluate systems early in the development phase will increase the cost to the Navy by increasing development time and at-sea testing. Consequently, NUWC will be unable to protect the fleet, and make the necessary contributions to prepare for the future.</p>										

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A New Mission Non ADP Consolidated Projects  
(\$500K - \$999K)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
New Mission Non ADP (500K-999K)	1		150				1		440

**Narrative Justification:**

	<u>Location</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>
Multiplatform Active Sonar Testbed		150		
Advanced Hull Array Testbed				440

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A New Mission Non ADP Equipment (Minor)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
New Mission Non ADP Minor	3		706	3		670	1		132

**Narrative Justification:**

Project between \$100K - \$499K

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L186 Simulation Based Design

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Sim Based Design	1	1,470	1,470	1	2,000	2,000			

**Narrative Justification:**

The Simulation Based Design (SBD) project will provide the optimum architecture to support the Navy-wide mandate for enhanced modeling and simulation capabilities. The Naval Undersea Warfare Center, Division Newport (NUWC DIVNPT) will enhance its systems design and development efforts through SBD. The capabilities which will be achieved by this project include the standardization and centralization of SBD multi-tasking to improve product development with minimal labor costs. It will also standardize design parameters to optimize performance of submarine systems. SBD will also ensure NUWC DIVNPT's has the capability to stay current with the latest simulation technology needed to meet increasing demands for new applications by providing higher fidelity and increased speed.

The capabilities which will be achieved by this project will accelerate the design process and assist with identification of optimum solutions. Initially this project will standardize input/output generation of SBD tools for submarine weapon systems and Unmanned Undersea Vehicles (UUVs) 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 DIVNPT mission areas. This includes torpedoes, UUVs, sonar, combat control, communications and launchers.

A SDB capability will be achieved through a phased approach initially in the weapons, UUV, and counter measure systems. Eventually, SBD will be applied in a comprehensive total submarine system approach. Following each phase of the project, a SBD capability will be achieved, with an enhanced design proficiency achieved for various submarine systems in each fiscal year.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L231 Virtual Systems Design

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Virtual Sys Design	1	800	800	1	1,300	1,300	1	1,674	1,674

**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, Division Newport (NUWC DIVNPT). The NUWC DIVNPT will enhance its 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 and 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 DIVNPT 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.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L247 Integrated Display Center Upgrade

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Integrated Display Ctn Upgrade	1	900	900	1	250	250	1	125	125

**Narrative Justification**

The Integrated Display Center will be a unique facility which supports Naval Undersea Warfare Center, Division Newport (NUWC DIVNPT) simulation display requirements as well as management functions. This center will be a multi-use facility that will provide world-class visualization capabilities for review of at sea and virtual system test and evaluations as well as support various management decision processes.

This capability will help NUWC DIVNPT and the Navy by linking NUWC DIVNPT to the Fleet test and training community with live, visual capabilities thus allowing warfighters to evaluate next generation undersea warfare systems such as torpedoes, sonar, and combat control early in the lifecycle; thereby reducing training, test, evaluation, and acquisition costs. The technology employed by the display center will be a significant contributor to enhancement of NUWC DIVNPT's modeling and simulation (M&S) efforts as well as offer a state-of-the-art facility to support various technical working groups, program reviews with sponsors, and forums with industry and academia. Currently, NUWC Division Newport does not have a dedicated simulation Presentation Facility. Some existing facilities can accomplish subsets of the proposed capabilities of the IDC. By funding this project, Division Newport will establish a unique facility, providing all departments with state of the art visualization capability that will enhance development, testing, and integration efforts. It will also provide the Division with the ability to showcase all department products and capabilities from a single location. The installation of the presentation theater will provide world-class visualization capabilities to a large audience forum in the areas of modeling and simulation, design, development, testing, training and management decision support. The facility will include access to the NUWC Intranet; the VTC network; NUWC facilities housing real, virtual and constructive models; T&E and training ranges; Tri-services; other Warfare centers; and link to DSI and DREN networks. This project will give warfighters the ability to evaluate next generation weapons early in the lifecycle, while reducing training, T&E and acquisition process costs.

The impact of not funding this project - visualization is an essential and critical component of modeling and simulation, physics based modeling, simulation based design, and the undersea battlespace which are all key division Newport initiatives and integral to the NUWC vision and its future systems. Without this project, NUWC Division Newport would not be able to maintain its' leadership role in the area of visualization.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L248 Undersea Battlespace Facility

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Undersea Battlespace Facility	1	567	567	1	756	756			

**Narrative Justification:**

The Undersea Battlespace (USB) Facility will provide a cohesively, integrated undersea warfare environment for the design and development of Naval Undersea Warfare Center, Division Newport (NUWC DIVNPT) products including weapons, combat systems, and sensors. The USB Facility design will leverage from and expand upon existing modeling and simulation (M&S) capabilities by integrating live range facilities and participants with various Division simulation resources. The USB Facility will promote connectivity of NUWC DIVNPT modeling, simulation, and range facilities internally and externally. The facility will also function as a management and coordination resource for M&S development with live range integration.

The USB Facility will provide an integrated world-class test bed and development environment for advanced technology sensors, combat systems and weapons users. Use of the facility will reduce expenses and increase training value by minimizing logistics costs while providing a realistic threat environment in which to train. The facility will also become a focal point for secure, distributed Research, Development, Test and Evaluation (RDT&E) planning and administration, thus eliminating redundant systems and/or functions. USB will also support the Navy in significantly reducing T&E acquisition expenses by introducing new systems earlier in the development cycle to the war fighter.

Failure to fund the USB facility will unnecessarily increase the cost of doing business for NUWC DIVNPT and its customers. Increased costs in the form of non integrated systems will result in development of redundant systems and facilities. Not being able to evaluate systems with the Fleet early in the development phase will also increase cost to the Navy by increasing development time and at sea testing. The USB represents an investment in the future via cost-effective development, testing, and training technology in response to reduced resources with ever increasing technology requirements.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L249 Undersea Warfare Synthetic Environment  
Design System

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
USW Syn Envir Design Sys				1	500	500			

**Narrative Justification:**

The Undersea Warfare Synthetic Environment System (USES) project provides synthetic environment augmentation and manages connectivity to the Undersea Synthetic Battlespace (USB) live assets. USES integrates distributed architecture systems to perform complex testing and development test and training exercises. The system uses simulation based design networking and 4AC application management. USES will provide the core modeling and simulation (M&S) architecture for the Naval Undersea Warfare Center, Division Newport (NUWC DIVNPT) through cross-department application to reduce the cost of doing business. The system retains NUWC DIVNPT's leadership posture in Undersea Warfare (USW) M&S. USES provides USW / Submarine Fleet representatives with the tools to develop submarine and USW roles in the evaluating battleforce and tri-service simulation environments. Not funding USES technology, will results in the loss of an established USW M&S leadership role for NUWC DIVNPT and the Navy. Without this project, increased program burdens for development of individual, specialized simulation capabilities will lead to higher costs paid by the customer. Failure to fund the USES efforts will perpetuate limited representation in the USW multiservice simulation arena.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L250 WAF New Architecture

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
WAF New Architecture	1	750	750	1	315	315			

**Narrative Justification:**

This investment will incorporate a new state-of-the-art hardware-in-the-loop architecture in the Naval Undersea Warfare Center, Division Newport (NUWC DIVNPT) Weapons Analysis Facility (WAF) to increase operational capacity and throughput, computational speed, flexibility and utility maximizing simulation capability of the WAF to evaluate current and future underwater weapons in tactical scenarios with a very high degree of fidelity and realism.

The architectural requirements mandate employment of cutting-edge parallel processing computer technology linked to a large suite of high speed inter-connected array processors, digital signal processors, and single board computers to handle increased bandwidths and data transfer rates of multi-system (e.g. salvo, in stride training, Distributed Interactive Simulation) operations, required for real-time weapons simulator facility. In addition, integration of WAF to the Defense Simulation Internet (DSI) using DSI industry standard data protocols will enable WAF to interoperate with other Navy and Industrial simulators or in exercises encompassing the entire joint-force theater of operation or interlab communications connectivity with other Division simulation facilities to support major program efforts.

The incorporation of this new architecture in WAF increases its capability, functionality and support to a variety of Modeling and Simulation (M&S) functional areas including Simulation Based Design (SBD), virtual torpedoes, Unmanned Undersea Vehicles, networked simulation and training. Without the increased operational capacity and throughput, computational speed, and flexibility the WAF will not be capable of supporting these areas which yield a significant cost savings mostly associated with the elimination of at sea testing.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L253 Secure Wideband Communications

D. Activity Identification  
NUWC Division, KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Secure Wideband Communications	1	800	800	1	725	725			

**Narrative Justification:**

Consolidate and upgrade existing test data communication platforms to improve technical productivity, reduce operation and maintenance costs, and improve data interconnectivity. Existing data linking mechanisms for ASW weapon system performance, acoustic and magnetic measurement, and ASW exercise reconstruction information distribution will be enhanced. Project will entail procurement and implementation of network centric workstations and integration of information transfer capability. Need driven by a combination of increasing technical complexity of weapon system performance assessments and decreasing numbers of units tested. Productivity must be increased and parallel operations with any redundancy consolidated. Common hardware and software systems are needed to improve technical compatibility and achieve reduced manual processing.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L258 Real-Time Information Transfer

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Real-Time Info Transfer	1	500	500	1	500	500	1	250	250

**Narrative Justification:**

The Real-Time Information Transfer Network will develop a network architecture to meet Research Development Test and Evaluation (RDT&E) requirements with modeling and simulation (M&S) augmentation. Available network technologies, such as Asynchronous Transfer Mode (ATM), are robust enough to support a real-time synthetic environment in Local Area Network (LAN) and Wide Area Network (WAN) configurations.

RITN supports the Division's Near-Term Goals/Investment areas. ATM networking hardware and protocols will provide a robust and flexible network architecture to support all NUWC distributed Modeling and Simulation (M&S) efforts. RITN maintains NUWC's presence as a state-of-the-art valued player within the global M&S community. This network is being developed in consonance with Navy efforts to comply with DoD networking initiatives. The establishment of a secure network backbone for the Division will enable partnering among the various technical Codes as well as create the foundation for the establishment of an Undersea Battlespace (USB) Facility. With the RITN, NUWC will be well postured to support all aspects of distributed Modeling and Simulation and Simulation Based Development initiatives. A NUWC DIVNPT investment in network technology will enable future incorporation into DoD master plans.

NUWC DIVNPT investment in RITN technology is required for full-spectrum support of the undersea community. NUWC DIVNPT will not have a significant role in distributed M&S programs without ATM networked facilities.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L263 Scientific Computational Resources Upgrade

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Sci Comp Resources Upgrade							1	1,149	1,149

**Narrative Justification:**

In order to provide the necessary scientific computer resources at the Naval Undersea Warfare Center, Division Newport, adequate systems must be acquired to meet the Research, Development, Test and Evaluation (RDT&E) needs. The Scientific Computational Resources Upgrade project enhances existing scientific computational engines or replaces systems that are no longer cost effective to operate. This project provides the visualization engines and repositories of DoD high performance computer systems for engineers and scientists to develop innovative undersea warfare solutions. These computational engines are a key component and requirement for many of the existing and proposed projects to be fully functional. Replacement of the obsolete computer equipment and the additional of these visualization engines will provide Division Newport with more reliable and more cost effective resources which will ensure that the technical areas have the capabilities they need to meet their requirements. Increased reliability will reduce maintenance costs, increase overall efficiency, and enhance compatibility internally and externally to the Division.

If this equipment is not acquired, NUWC can expect to incur loss of personnel productivity, decreased customer satisfaction, rapidly escalating maintenance costs, reduced services to the technical community, and technical obsolescence. Consequently, NUWC will be unable to provide the necessary corporate computer resources necessary to meet the current and future computational and display requirements of the RDT&E and business populations.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

B. Line No. & Item Description  
L264 USW Testbed for Decision Support

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
USW Testbed for Dec Support							1	1,247	1,247

**Narrative Justification:**

The Naval Undersea Warfare Center is responsible for the 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. The ongoing evolution of submarine platforms, driven by changes in technology and mission, influence the command decision support functions.

The USW Testbed for Decision Support will consist of systems focused on providing the necessary tools for the development of innovative decision support applications that encompass decision aids, data fusion and analysis, human computer interaction and automation of human functions, along with the associated display elements that support these systems. These systems are critical components in developing situational awareness and information assurance in the future undersea warfare battlespace and stated in the Navy future requirements guidance.

By integrating and demonstrating advanced technology-based concepts which leverage high risk hardware, software, display, communication, and automation technologies, the USW Testbed for Decision Support will serve as the place to create a vision of the future than can serve to support and validate long-term evolution goals for undersea warfare applications. It will also 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. Initial development will be followed by required improvements that reflect the changing technology, advanced concept designs and operational requirements.

If this equipment is not acquired, NUWC will be unable to provide the Navy with the advanced capabilities to overcome the oversight confusion and inertia presently constraining undersea warfare operations across the total battlespace. Consequently, NUWC will be unable to protect the fleet, and make the necessary contributions to prepare for the warfighting capabilities needed in the future.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L269 Common Product Development

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Common Product Dev							1	1,165	1,165

**Narrative Justification:**

The emphasis of this initiative will be directed toward the development of cost effective processes and methods that facilitate the utilization of state-of-art tools that are essential for a credible and validated approach for application of Simulation Based Design / Simulation Based Acquisition to Undersea Warfare Systems. This project is focused on the provision of "high-end" tools that permit the design and analysis of undersea warfare systems as virtual products containing all the attributes of actual systems such as performance, vulnerability, reliability, maintainability, and total ownership cost. The affordability of these tools and processes is addressed by common utilization across all product lines. These tools will be applied to undersea system problems, including the development of models that predict sonar performance metrics, mechanical performance (shock, thermal, hydrodynamic, etc.), geometries of systems, structural characteristics and how these properties relate to each other in producing the loads and stresses experienced by the combined system. These tools also address affordability in terms of total ownership costs. This investment is needed to enhance NUWC's capabilities and efficiency in integrated design, modeling, and simulation as it pertains to SBD/SBA. This investment is also leveraged to encourage teamwork across the division and to assure the maximum sharing of resources.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A ADP Projects Major  
(\$500K - \$999K)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
ADP Projects Major (500K-999K)	9		2,414	8		3,040	5		1,475

**Narrative Justification:**

	<u>Location</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>
Tactical Active Sonar Acoustic Database	Newport	255		
Strategic Management Information Center	Newport	69	160	75
Undersea Warfare Modeling & Simulation Support	Newport	245	135	150
Electromagnetic Range Improvement	Newport	200	400	
Vehicle Emulation Initiative	Newport			515
Ocean Lab Range Architecture	Keyport	300	400	
COTS Support and Integration Capability	Keyport	475	400	
Server Upgrade	Keyport	250	375	
Fleet Integrated Data Environment	Keyport	150	700	
Technical Data Systems Upgrade	Keyport	470	470	
Fleet Test Data Analysis & Feedback	Keyport			385
Fleet Maint. & Logistics Information Integration	Keyport			350

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Other Computer & Telecomm Support  
Equipment Total (Minor)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Other Computer/Telecomm Support Eqpt (Minor)	6		2,121	9		3,441	12		3,089

**Narrative Justification:**

Projects between \$100K - \$499K

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
L241 DIFMS - Newport Division

D. Activity Identification  
NUWC Division, NPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
DIFMS - Newport Division				1		200			

**Narrative Justification:**

Defense Industrial Financial Management (DIFMS) requirements.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

**B. Budget Submission**  
FY 2002 President's Budget

**B. Component/Business Area/Date**  
DON/R&D/NUWC

**C. Line No. & Item Description**  
L242 DIFMS - Keyport Division

**D. Activity Identification**  
NUWC Division, KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
DIFMS - Keyport Division	1		451	1		1,500			

**Narrative Justification:**

Defense Industrial Financial Management (DIFMS) requirements.

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Software (Minor)

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Software Minor	1		150	1		146			

**Narrative Justification:**

Projects less than \$500K

**RESEARCH & DEVELOPMENT CAPITAL PURCHASES JUSTIFICATION**  
(\$ in Thousands)

A. Budget Submission  
FY 2002 President's Budget

B. Component/Business Area/Date  
DON/R&D/NUWC

C. Line No. & Item Description  
N/A Minor Construction

D. Activity Identification  
NUWC Division, NPT/KPT

	FY 2000			FY 2001			FY 2002		
ELEMENTS OF COST	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Minor Construction			1,377			1,297			1,475

**Narrative Justification:**

FY01

- OSD Compliance (Environment)
- K/B Dock Environmental Upgrades (Environment)
- Americans for Disabilities Act (Replacement)
- Improve handicap access to buildings (Replacement)
- B990/B106 Addition (Productivity)
- Cable Carrying Plant (Productivity)
- B1246 Addition (Productivity)
- Demolition (Replacement)

FY02

- Waterfront Operations (Productivity)
- Correct Vehicular/Roadway Traffic Intersections (Productivity)
- Cable Carrying plant (Productivity)
- B128 Addition (Productivity)
- Demolition (Replacement)

**Working Capital Fund Investment Summary**  
**Department of the Navy**  
**Research & Development**  
**Naval Undersea Warfare Center**  
**FY 2002 President's Budget**  
**FY 2001**  
**(\$ in Millions)**

<u>Item #</u>	<u>Approved Project</u>	<u>Original Request</u>	<u>Change</u>	<u>Revised Request</u>	<u>Explanation</u>
<b>ADP and TELCOM</b>					
L186	Simulation Based Design	2.000	0.000	2.000	
L231	Virtual Systems Design	1.300	0.000	1.300	
L247	Integrated Display Center Upgrade	0.250	0.000	0.250	
L248	Undersea Battlespace Facility	0.756	0.000	0.756	
L249	Undersea Warfare Synthetic Environment Design System	0.500	0.000	0.500	
L250	WAF New Architecture	0.315	0.000	0.315	
L253	Secure Wideband Communications	0.725	0.000	0.725	
L258	Real-Time Information Transfer Network (RITN)	0.500	0.000	0.500	
	ADP and TELCOM Major (\$500 - 999K)	3.040	0.000	3.040	
	ADP and TELCOM Minor (>\$100K <\$500K)	3.441	0.000	3.441	
	<b>ADP and TELCOM Subtotal</b>	<b>12.827</b>	<b>0.000</b>	<b>12.827</b>	
<b>Non-ADP Equipment</b>					
L225	Shallow Water Syn Env Eval Complex (SWSEEC)	0.926	0.000	0.926	
L259	Fac for Analysis & Characterization of Transducers & Materials	0.663	0.000	0.663	
L260	Telemetry & Fiber Optic Sensor Dev Lab	0.615	0.000	0.615	
	Misc Non-ADP Equipment (>\$100K<\$500K)	1.435	0.000	1.435	
	<b>Non-ADP Equipment Subtotal</b>	<b>3.639</b>	<b>0.000</b>	<b>3.639</b>	
<b>Software</b>					
L241	DIFMS -Newport Division	0.000	0.200	0.200	Emergent Requirement
L242	DIFMS -Keyport Division	0.000	1.500	1.500	Emergent Requirement
	Software (Minor)	0.146	0.000	0.146	
	<b>Software Subtotal</b>	<b>0.146</b>	<b>1.700</b>	<b>1.846</b>	
<b>Minor Construction</b>					
	Misc Minor Construction	1.297	0.000	1.297	
	<b>Minor Construction Subtotal</b>	<b>1.297</b>	<b>0.000</b>	<b>1.297</b>	
<b>Total NUWC FY01</b>		<b>17.909</b>	<b>1.700</b>	<b>19.609</b>	

**DEPARTMENT OF THE NAVY  
SPAWAR SYSTEMS CENTERS  
FY 2002 PRESIDENT'S BUDGET  
NAVY WORKING CAPITAL FUND**

**Activity Group Highlights:**

The Space and Naval Warfare Systems Centers (SSC's) are the Navy's full spectrum research, development, test and evaluation, engineering, and fleet support centers for command, control, and communication systems and ocean surveillance and the integration of those systems which overarch multiplatforms. The SSC's support the Fleet in mission and capability by providing the most capable and ready command and control systems for the Navy. The SSC's provide 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. The SSC's also provide engineering and fleet support for assigned systems to maintain the Fleet's warfighting capability. The SSC's:

1. Provide warfare systems analysis.
2. Plan and conduct effective technology programs.
3. Provide cost conscious systems engineering and technical support to program managers in all phases of systems development and acquisition.
4. Provide test and evaluation support including RDT&E and measurement facilities.
5. Provide technical input to the development of operational tactics.
6. Provide electronics material support (technical and management) for systems and equipment under SPAWAR's cognizance.
7. Provide specialized technical support to the Fleet for quick-reaction requirements.

The SSC's primary locations are in San Diego, CA and Charleston, SC. This organizational structure best facilitates the entire cycle of systems engineering from research and development through waterfront support. SSC San Diego is headquartered in San Diego, CA with detachments in: Philadelphia, PA; Pearl Harbor, HI; Guam; and Japan. SSC Charleston is headquartered in Charleston, SC with detachments in: Norfolk, VA; Washington, DC; Pensacola, FL; and Jacksonville, FL.

SSC San Diego was selected as a pilot for the Enterprise Resource Planning (ERP) solution in the area of NWCF Financial Management. The pilot is in the final stages of testing and is anticipated to reach operation by late FY 2001.

**Financial Profile:**

	(Millions \$)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Revenue	1,502.3	1,284.3	1,272.4
Costs of Goods Sold	1,482.5	1,282.8	1,287.0
Operating Results	19.8	1.5	-14.6
Capital Purchases Surcharge/Other Adj	-8.6	0.0	0.0
Net Operating Results	11.2	1.5	-14.6
Accumulated Operating Results (SSCs)	24.8	26.4	0.0
- Adjust for NCTC FY 2000 AOR	0.0	-11.8	0.0
Accumulated Operating Results (Combined)	24.8	14.6	0.0

### Revenue

The revenue decrease from FY 2000 to FY 2001 represents pricing adjustments and workload decrease to match customer reported workload, savings from Commercial Activities studies and Capital Purchases Program (CPP) acquisitions, and other efforts to reduce overhead costs. The slight decrease from FY 2001 to FY 2002 represents a small workload decrease, savings from Commercial Activities studies and Capital Purchases Program (CPP) acquisitions, and other efforts to reduce overhead costs, offset by pricing adjustments.

### Cost of Goods Sold

The cost trends from FY 2000 to FY 2001 parallel that of revenue; and the reason for the change between fiscal years are the same as those outlined above. The increase in costs between FY 2001 and FY 2002 reflects the impact of increased West Coast utility rates being charged by PWC San Diego as a result of the California electric deregulation.

### 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 2002 rates are set based on the \$14.6 million AOR profit projected for the end of FY 2001.

### **Workload:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Direct Labor Hours	5,846,818	6,695,531	6,643,659

	(Millions \$)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Reimbursable Orders	1,533.3	1,289.7	1,258.7

### Direct Labor Hours

The increased direct labor hours (DLHs) from FY 2000 to FY 2001 is due to the functional transfer of the former Naval Computers and Telecommunications Command (NCTC) NWCF activities. Decreases are caused by minor workload reductions, offering of Separation Incentive Payments and Voluntary Early Retirements at some of the former NCTC NWCF activities and the re-engineering of the Installation function.

The decrease in DLHs from FY 2001 to FY 2002 is primarily due to Commercial Activities (A-76) studies at some of the former NCTC NWCF activities.

### Orders Received

Approximately two-thirds of the products and services provided by the SSC's are to Navy customers, with the balance provided almost totally to other DoD and Federal customers. SSC's Navy customers include SPAWAR, Naval Sea Systems Command, Naval Air Systems Command, Office of the Chief of Naval Research, and the Pacific and Atlantic Fleet Commanders. Significant other DoD customers include Defense Advanced Research Projects Agency and Air Force and Army C4I organizations. The projected funding levels in FY 2001-2002 are based on SSC's program managers' discussions and planning efforts with major customers.

### Performance Indicators:

The SSC's outputs are scientific and engineering designs, developments, tests, evaluations, analyses, installations and fleet support for systems in the SSC's assigned mission areas. The measure for these outputs is the direct labor hour 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 the SSC's, both general base operating support as well as 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 SSC's stabilized pricing structure. The SSC's use total stabilized cost per direct labor hour as their performance criterion. The composite stabilized rate and the average total stabilized cost per direct labor hour (DLH) (unit cost) for the SSC's are discussed below.

### Customer Rate Changes:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Stabilized Rate	\$78.71	\$75.81	\$77.05

Change from Prior Year	6.5%	-3.7%	1.6%
Composite Rate Change	3.7%	-0.5%	1.6%

### Stabilized Rate

Changes in stabilized rates between fiscal years are the result of changes in DLHs, stabilized (rather than total) costs, and AOR recovery factors in the budgets on which each year's rates are set.

From FY 2001 to FY 2002, the stabilized rate increases by \$1.24 due to the NCTC activities' negative AOR, the direct labor cost per hour increase due to standard pay raise guidance, general inflation, and the West Coast PWC utility rate increase. These increases are offset by a small decrease in overhead costs.

### Unit Costs:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Total Stabilized Cost (\$M)	443.2	513.7	524.6
Workload (DLH)	5,846,818	6,695,531	6,643,659
Unit Cost (per DLH)	\$75.80	\$76.72	\$78.97

### Total Stabilized Costs

The changes in stabilized costs from FY 2000 to FY 2001 and from FY 2001 to FY 2002 represent pricing adjustments offset by changes in direct labor hours, CPP and other savings.

### Unit Cost

The changes in unit cost (total stabilized cost per direct labor hour) from year to year are due to changes in total stabilized costs relative to changes in DLHs

### Staffing:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian End Strength	4,978	5,742	5,629
Civilian Work Years	4,883	5,706	5,585
Military End Strength	84	101	111
Military Work Years	85	87	94

### Civilian Personnel

Civilian workyear increases between FY 2000 and FY 2001 reflect the transfer of the former NCTC personnel, the full-year impact of FY 2000 new professional hires and other workload increases, partially offset by personnel efficiencies from capital

investments, Commercial Activities studies, re-engineering of the Installation process, and other Business Process Re-engineering (BPR) efforts.

Civilian workyear reductions between FY 2001 and FY 2002 reflect further personnel efficiencies from ERP, other capital investments, Commercial Activities studies, offering of SIP/VERA's, and other overhead reductions.

**Military Personnel**

FY 2000 military end strength and work year levels reflect actual levels. The FY 2001 and FY 2002 end strengths represent projected on-board levels. Military labor costs reimbursements have been reflected in the budget based on civilian equivalent rates. The FY 2002 reimbursement is fixed based on the FY 2002 President's Budget. Workyears are phased to reflect the timing of expected accessions and separations during the year.

**Headquarters Cost:**

	(Millions \$)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Cost of Management Headquarters	0.5	0.6	0.5

This reflects only the costs of SPAWAR headquarters elements directly supporting the SSC's.

**Capital Budget Authority:**

	(Millions \$)		
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Equipment-Non ADPE/Telecom	1.455	0.000	0.000
ADPE/Telecom Equipment	3.284	1.507	1.978
Software Development	18.328	14.309	6.127
<u>Minor Construction</u>	<u>2.184</u>	<u>0.505</u>	<u>1.490</u>
Total	25.251	16.321	9.595

The SSC's Capital Purchases Program represents a modest investment to maintain technically efficient capabilities to support the Fleet and other Navy and Defense customers in their requirements. These CPP investments also allow SSC's 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 the SSC's to have the ability to meet their technical customer requirements.

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	1,488.2	1,276.6	1,263.3
Surcharges	7.1	.0	.0
Depreciation excluding Major Constructio	7.0	7.7	9.1
Other Income			
Total Income	1,502.3	1,284.3	1,272.4
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	5.2	5.0	7.1
Civilian Personnel	388.8	469.7	481.8
Travel and Transportation of Personnel	27.1	36.7	36.9
Material & Supplies (Internal Operations	95.4	96.4	94.7
Equipment	32.9	33.1	32.2
Other Purchases from NWCF	68.0	72.1	69.9
Transportation of Things	6.1	5.4	5.5
Depreciation - Capital	7.0	7.7	9.1
Printing and Reproduction	1.8	1.5	1.6
Advisory and Assistance Services	5.7	6.4	6.5
Rent, Communication & Utilities	17.9	20.5	23.8
Other Purchased Sevices	808.1	525.6	515.8
Total Expenses	1,464.1	1,280.2	1,284.7
Work in Process Adjustment	18.9	3.8	2.4
Comp Work for Activity Reten Adjustment	-.4	-1.2	-.1
Cost of Goods Sold	1,482.5	1,282.8	1,287.0
Operating Result	19.8	1.5	-14.6
Less Surcharges	-7.1	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	-1.5	.0	.0
Net Operating Result	11.2	1.5	-14.6
Other Changes Affecting AOR	.0	-11.8	.0
Accumulated Operating Result	24.9	14.6	.0

## INDUSTRIAL BUDGET INFORMATION SYSTEM

(NIFRPT)

PAGE 1

Source of Revenue  
AMOUNT IN MILLIONS  
SPAWAR / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	1,533.3	1,289.7	1,258.7
a. Orders from DoD Components	1,322.2	1,119.2	1,068.8
Department of the Navy	1,089.9	872.2	804.7
O & M, Navy	260.8	218.2	221.0
O & M, Marine Corps	13.9	.0	.0
O & M, Navy Reserve	1.6	.6	.2
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Procurement, Navy	10.9	4.9	4.6
Weapons Procurement, Navy	8.6	8.2	4.4
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	71.2	51.7	52.3
Other Procurement, Navy	523.1	438.3	379.0
Procurement, Marine Corps	10.2	.0	.0
Family Housing, Navy/MC	.0	.0	.0
Research, Dev., Test, & Eval., Navy	188.7	150.5	143.2
Military Construction, Navy	.3	.0	.0
Other Navy Appropriations	.5	.0	.1
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	22.3	23.6	24.7
Army Operation & Maintenance	14.9	13.6	14.7
Army Res, Dev, Test, Eval	5.9	8.1	7.4
Army Procurement	1.6	1.9	2.7
Army Other	.0	.0	.0
Department of the Air Force	65.6	67.2	61.8
Air Force Operation & Maintenance	27.4	36.8	34.2
Air Force Res, Dev, Test, Eval	28.2	23.6	21.2
Air Force Procurement	10.0	6.8	6.5
Air Force Other	.1	.0	.0
DOD Appropriation Accounts	144.3	156.1	177.4
Base Closure & Realignment	-.5	.0	.0
Operation & Maintenance Accounts	24.5	39.4	38.0
Res, Dev, Test & Eval Accounts	85.1	83.5	100.7
Procurement Accounts	29.3	31.6	36.8
DOD Other	5.9	1.6	2.0
b. Orders from NWCF Business Area	113.7	79.9	86.0
c. Total DoD	1,435.9	1,199.1	1,154.8
d. Other Orders	97.4	90.6	103.9
Other Federal Agencies	62.8	56.6	59.1
Foreign Military Sales	29.7	25.2	33.3
Non Federal Agencies	4.9	8.8	11.5

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

(NIFRPT)

PAGE 2

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	598.3	629.2	634.6
3. Total Gross Orders	2,131.6	1,918.9	1,893.3
4. Funded Carry-Over **	629.2	634.6	620.9
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	1,502.3	1,284.3	1,272.4
Adjusted Carry-Over	242.9	256.6	246.3
Adjusted Carryover in Months of Workload	1.9	2.4	2.3

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

CHANGES IN THE COST OF OPERATIONS  
 SUB-ACTIVITY GROUP: SPAWAR/SPAWAR SYSTEMS CENTERS (SSC'S)  
 (Dollars in Millions)

	<u>EXPENSES</u> (DBC 4900)
<b>FY 2000 Actual</b>	<b>1,464.1</b>
<b>FY 2001 Estimate in President's Budget:</b>	<b>1,242.9</b>
<u>Price Changes:</u>	
Labor Repricing (locality increases higher than budgeted)	3.6
<u>Productivity Initiatives and Other Efficiencies:</u>	
Realization of Strategic Sourcing savings earlier than planned at former NCTC activities	-3.4
Other Adjustments	-0.1
<u>Program Changes:</u>	
Addition of Fleet Installations Service Centers	169.3
Direct contract reduction	-113.6
Workload decrease at former NCTC activities	-19.2
Depreciation decrease	-0.7
Utility, maintenance, janitorial, and security guard contract costs increasing above rate of inflation	1.4
<b>FY 2001 Current Estimate</b>	<b>1,280.2</b>
<u>Pricing Adjustments:</u>	
Civilian Personnel	19.2
Military Personnel	0.2
Materials and Supplies	
Fuel	0.0
All other	1.3
WCF Price Changes	4.0
Other Purchases	8.6
<u>Productivity Initiatives and Other Efficiencies:</u>	
CPP Savings (including those to achieve BPR savings)	-8.9
CA Savings (including those at former NCTC activities)	-3.9
Installation Contract Re-engineering Savings	-2.3
BPR Savings	-0.5
Other Adjustments	-3.7

Program Changes:

Separation Pay (VERA/VSIPs)	-0.1
Depreciation Increase	1.4
San Diego utility rate increase	1.8
Direct Contract reduction	-12.6
<b>FY 2002 Current Estimate</b>	<b>1,284.7</b>

**Activity Group Capital Budget Summary  
Department of the Navy  
SPAWAR System Centers**

Line #	Item Description	FY 2000		FY 2001		FY 2002	
		Quant	Total Cost	Quant	Total Cost	Quant	Total Cost
	<b>1. Non-ADP Equipment</b>		<b>1.455</b>		<b>0.000</b>		<b>0.000</b>
<b>L0001</b>	Polysilicon / Oxide Etcher		1.300		0.000		0.000
<b>L0002</b>	Misc >\$100K, <\$500K		0.155				
	<b>2. ADPE and telecommunications resources</b>		<b>3.284</b>		<b>1.507</b>		<b>1.978</b>
	(a). Computer Hardware (Production)		0.000		0.000		0.000
	(b). Computer Software (Operating System)		0.000		0.000		0.000
	(c). Other ADPE and telecommunications resources						
<b>L0003</b>	Misc >\$100K, <\$1.000K		3.284		1.507		1.978
			0.000		0.000		0.000
	<b>3. Software Development &gt;= \$.100M</b>		<b>18.328</b>		<b>14.309</b>		<b>6.127</b>
<b>L0005</b>	Enterprise Resource Planning (ERP) San Diego		18.328		14.309		5.677
<b>L0006</b>	Misc >\$100K, <\$500K						0.450
	<b>4. Minor Construction (&gt;= \$.100M and &lt; \$.500M)</b>		<b>2.184</b>		<b>0.505</b>		<b>1.490</b>
<b>L0007</b>	Misc >\$100K, <\$500K		2.184		0.505		1.490
	Grand Total		<b>25.251</b>		<b>16.321</b>		<b>9.595</b>

Exhibit Fund-9A Capital Investment Summary

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET					
B. Navy/Research and Development/Space and Naval Warfare Systems Centers (SSC's)				C. L0001 - Polysilicon/Oxide Etcher System			D. SSC San Diego (SSC SD)					
FY 2000				FY 2001			FY 2002					
Element of Cost	Quan	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost			
Equipment	1	1,250	1,250									
Installation		50	50									
Testing												
Design												
Other												
<b>TOTAL</b>		<b>1,300</b>	<b>1,300</b>									
<p><b>Justification:</b>  The Solid State Electronics Service Center needs a new polysilicon/oxide plasma etch tool to replace the aging system that is no longer supportable in terms of spare parts and is a limiting factor in state-of-the-art processing capability. The system planned for purchase is required to support contingency plans for production of radiation-hardened integrated circuits (ICs), and supports plans to move to the finer geometry required to keep pace with industry. With the declining industrial base devoted to DoD-specific integrated circuits, SPAWARSYSCEN San Diego (SSC SD) must continue to keep pace with advances in the commercial IC sector to provide the improvements in performance that our military customers' demand, while maintaining the high tolerance to adverse environments required by military systems.</p> <p>SSC SD operates the only full-service integrated circuit fabrication facility (ICFF) in the DoD. New clean rooms, air handling systems, and state-of-the-art processing tools and equipment represent a facility that can competitively serve customers for the next decade. One of the only pieces of equipment that has not been replaced in this upgraded facility is the polysilicon/oxide etch system. The current system to be replaced is an 1987 plasma etch system that is beyond its useful life in terms of supportability and state-of-the-art processing capability. This system must be replaced in order for the ICFF to maintain its state-of-the-art integrated circuit production capability.</p>												

The ICFE fabricates integrated circuits through a sequential series of complex processing steps such as photolithography, ion implantation, etch, and metalization processes. This sequence forms a chain in which failure of the weakest link limits the entire process. This failure can come not only from a physical breakdown of a piece of equipment, but also from technical limitations imposed by an individual tool. The current polysilicon/oxide etch tool suffers from both of these failure modes. This creates a weak link in two of the most important steps in the semiconductor fabrication process: definition of the polysilicon gate and oxide sidewall formation. These two steps form the basis of state-of-the-art complementary metal oxide semiconductor (CMOS) devices. In order to serve its customers, the ICFE must replace the existing polysilicon/oxide etch capability by acquiring a new polysilicon/oxide etch tool. Current customers include the Strategic Systems Programs Office (SSPO), Defense Advance Research Projects Agency (DARPA), Office of Naval Research (ONR), and Air Force.

Possible alternatives for solving the existing limitation include (a) outsourcing, and (b) purchase of a new system. Outsourcing is not feasible since all processing must be done in clean room conditions; it is also not practical because this process must be closely controlled in coordination with other tools. Finally, outsourcing is not an option with classified circuits and sensors. Therefore, purchasing a new tool is the only option available.

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET					
B. Navy/Research and Development/Space and Naval Warfare Systems Centers (SSC's)				C. L0002 - Miscellaneous Non-ADP Equipment (>= \$100,000, < \$500,000)			D. SSC's					
FY 2000				FY 2001			FY 2002					
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost			
Equipment Installation Testing	VAR		155									
TOTAL			155									
<p>Justification:</p> <p>This category provides the SPAWAR Systems Centers the means to procure technical items used for multiple projects. All items in this category are research equipment for research divisions.</p>												

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET													
B. Navy/Research and Development/Space and Naval Warfare Systems Centers (SSC's)				C. L0003 - Miscellaneous ADP Equipment (>= \$100,000, < \$1,000,000)			D. SSC's													
FY 2000				FY 2001			FY 2002													
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost											
Equipment Installation Testing	VAR		3,284	VAR		1,507	VAR		1,978											
TOTAL			3,284			1,507			1,978											
<p>Justification:</p> <p>This investment provides the largest impact to the greatest number of people and projects supported by the SPAWAR Systems Centers (SSC's). At the core of all the highly technical and sophisticated research and development (R&amp;D) conducted at the SSC's are equally technical and sophisticated computer systems. The SSC's make use of a wide variety of computers to accomplish the objectives of the R&amp;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&amp;D mission operating requirements, effectively manage R&amp;D resources, and meet customer's C4ISR R&amp;D requirements. Examples of items to be purchased costing less than \$500,000 include a Database License for Cluster, High Performance Computing, Database Engine Upgrade, VHF Radar Components, and Firewalls. This category provides the SSC's the means to procure ADP items used for multiple projects.</p> <p>ADP equipment items costing over \$500,000 includes the following:</p> <table> <tr> <td>Supercomputer</td> <td>FY 00 - \$500 K</td> </tr> <tr> <td>Data/Video/Voice &amp; Access Control System for MILCON P030</td> <td>FY 01 - \$853 K</td> </tr> <tr> <td>Analog/Digital Test Equipment</td> <td>FY 02 - \$600 K</td> </tr> <tr> <td>Integrated Circuit Computer Aided Design Tools</td> <td>FY 02 - \$500 K</td> </tr> </table>													Supercomputer	FY 00 - \$500 K	Data/Video/Voice & Access Control System for MILCON P030	FY 01 - \$853 K	Analog/Digital Test Equipment	FY 02 - \$600 K	Integrated Circuit Computer Aided Design Tools	FY 02 - \$500 K
Supercomputer	FY 00 - \$500 K																			
Data/Video/Voice & Access Control System for MILCON P030	FY 01 - \$853 K																			
Analog/Digital Test Equipment	FY 02 - \$600 K																			
Integrated Circuit Computer Aided Design Tools	FY 02 - \$500 K																			

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET					
B. Navy/Research and Development/Space and Naval Warfare Systems Centers (SSC's).				C. L0006 - Miscellaneous Software Development ( $\geq$ \$100,000, $<$ \$500,000)				D. SSC Charleston (SSC-CH)				
	FY 2000			FY 2001			FY 2002					
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost			
Software									250			
Hardware									150			
Installation									50			
TOTAL									450			
<p>Justification:</p> <p>This investment provides for minor software development projects to comply with Department of Defense and Department of the Navy mandates to migrate to standard systems such as the Defense Travel System and the Defense Procurement System. The items scheduled for development are the minimum necessary to meet these requirements.</p>												

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET					
B. Navy/Research and Development/Space and Naval Warfare Systems Centers (SSC's)				C. L0007 - Miscellaneous Minor Construction (>=\$100,000 & < \$500,000)			D. SSC's					
FY 2000				FY 2001			FY 2002					
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost			
Equipment Construction Design			2,094 90			445 60			1,440 50			
TOTAL			2,184			505			1,490			
<p>Justification:</p> <p>Minor Construction is used by the SPAWAR Systems Centers (SSC's) to replace obsolete facilities. The centers are located in 10 sites throughout the nation with millions of square feet of laboratory and office space. Minor construction is used at the SSC's to:</p> <ul style="list-style-type: none"> <li>- modify existing spaces to provide suitable space to test and design new equipment (often in a protected environment) for the forces afloat</li> <li>- construct new facilities to provide suitable space to test and design new equipment, frequently in physically secure areas</li> <li>- upgrade hazardous waste facilities to ensure compliance with applicable laws/regulations</li> <li>- improve existing security measures</li> <li>- reduce operating expenses by building government-owned space so that leased space may be vacated</li> </ul> <p>In FY 2000, 7 projects (less than \$500,000) are planned for a total cost of \$2,184,000.  In FY 2002, 4 projects (less than \$500,000) are planned for a total cost of \$1,490,000.</p> <p>In FY 2001, one project over \$500,000 is planned:  Parking Gate 1 - \$505,000</p>												

ACTIVITY GROUP CAPITAL PURCHASES JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET					
B. Navy/Research and Development/Space and Naval Warfare Systems Centers (SSC's).				C. L005 - Enterprise Resource Planning (ERP) Systems Software			D. SSC San Diego (SSC-SD)					
		FY 2000		FY 2001			FY 2002					
Element of Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost	Quant	Unit Cost	Total Cost
Software			7,000			2,000						
Installation			11,328			12,309			5,677			
TOTAL			18,328			14,309			5,677			
<p>Justification: An Enterprise Resource Planning (ERP) Software System is required to reduce the number of business software applications and systems currently in use, with their associated high operating costs. SSC-SD has been tasked by the Commercial Business Practice (CBP) Executive Steering Group (ESG), chaired by the Commander, Naval Air Systems Command to perform the Warfare Center Management Business Case Study for feasibility of implementing best commercial practice for Navy Working Capital Fund (NWCF) activities. The intent is to implement the program at SSC-SD and to evaluate its potential for application at other NWCF activities.</p>												

CAPITAL BUDGET EXECUTION  
BSO: SPAWAR  
ACTIVITY GROUP: SPAWAR SYSTEMS CENTERS  
FY 2002 PRESIDENT'S BUDGET

PROJECTS IN THE FY 2001 PRESIDENT'S BUDGET  
(Dollars in Millions)

FY 2001	Approved Project	Reprogs	Approved Proj Cost	Current Proj Cost	Asset/ Deficiency	Explanation
Equip. (Non-ADPE)	0.000	0.000	0.000	0.000	0.000	
Equip. (ADPE)	3.791	0.000	3.791	1.507	(2.284)	
Software Development	12.025	0.000	12.025	14.309	2.284	
Minor Construction	0.505	0.000	0.505	0.505	0.000	
Total FY 2001	16.321	0.000	16.321	16.321	(0.000)	
<b>Equip. (non-ADPE)</b>						
<b>Total Equip. (non-ADPE)</b>			0.000	0.000	0.000	
<b>Equip. (ADP)</b>						
Miscellaneous ADP Equipment			3.791	1.507	(2.284)	Re-prioritization, reduced requirements & project cancellations
<b>Total Equip. (ADP)</b>			3.791	1.507	(2.284)	
<b>Software Development</b>						
Enterprise Resource Planning			10.025	14.309	4.284	Increased costs due to higher than expected System Integrator (SI) costs per workyear, more SI's required to complete the project, and increased SI travel costs.
Corporate Business System			2.000	0.000	(2.000)	Realigned to ERP due to re-prioritization of requirements.
<b>Total Software Development</b>			12.025	14.309	2.284	
<b>Minor Construction</b>						
Miscellaneous Minor Construction			0.505	0.505	0.000	No Change
<b>Total Minor Construction</b>			0.505	0.505	0.000	

**NAVY WORKING CAPITAL FUND NARRATIVE  
DEPARTMENT OF THE NAVY  
RESEARCH AND DEVELOPMENT/NAVAL RESEARCH LABORATORY  
FY 2002 PRESIDENT'S BUDGET SUBMISSION**

**Activity Group Function**

The Naval Research Laboratory (NRL) operates as the Navy's full-spectrum corporate laboratory, conducting a broadly based multidisciplinary 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. In fulfillment of this mission, NRL:

- a. Initiates and conducts broad scientific research of a basic and long-range nature in scientific areas of interest to the Navy.
- b. Conducts exploratory and advanced technological development deriving from or appropriate to the scientific program areas.
- c. Within areas of technological expertise, develops prototype systems applicable to specific projects.
- d. Assumes responsibility as the Navy's principal R&D activity in areas of unique professional competence upon designation from appropriate Navy or DoD authority.
- e. Performs scientific research and development for other Navy activities and, where specifically qualified, for other agencies of the Department of Defense and, in defense-related efforts, for other Government agencies.
- f. Serves as the lead Navy activity for space technology and space systems development and support.
- g. Serves as the lead Navy activity for mapping, charting, and geodesy (MC&G) research and development for the National Imagery and Mapping Agency.

NRL, the Navy's single, integrated corporate laboratory, provides the Navy with a broad foundation of in-house expertise from scientific through advanced development activity. Specific leadership responsibilities are assigned in the following areas:

- a. Primary in-house research in the physical, engineering, space, and environmental sciences.
- b. Broadly based exploratory and advanced development program in response to identified and anticipated Navy and Marine Corps needs.

- c. Broad multidisciplinary support to the Naval Warfare Centers.
- d. Space and space systems technology development and support.

### **Activity Group Composition**

In addition to its Washington, D.C. campus of about 131 acres and 100 main buildings, NRL maintains 14 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 Support Activity, Monterey Bay 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 157-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 the Tilghman Island site 16 km across the bay.

The NRL Stennis Space Center (NRL-SSC) 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 Oceanographic Office, who are major operational users of the oceanographic and atmospheric research and development performed by the NRL. This unique concentration of operational and research oceanographies makes NRL-SSC 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 Support Activity, Monterey Bay, is collocated with the Fleet Numerical Meteorology and Oceanography Center to support development of numerical atmospheric prediction systems and related user products. This collocation allows easy access to a large vector classified supercomputer mainframe, providing real time as well as archived global atmospheric and oceanographic databases for research at Monterey and at other NRL locations.

<b><u>Accumulated Operating Results</u></b>	<b>(Dollars in Millions)</b>		
	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
Revenue	534.2	539.9	560.4
Cost of Goods Sold	<u>539.6</u>	<u>562.2</u>	<u>568.4</u>
Net Operating Results	-5.4	-22.3	-8.1
Previous Year AOR Balance	<u>33.9</u>	<u>30.4</u>	<u>8.1</u>
Accumulated Operating Results	30.4	8.1	0.0

The favorable Accumulated Operating Results (AOR) reflect additional economies and efficiencies effected throughout NRL. FY 2002 rates will be established to achieve an end-of-year AOR of zero in FY 2002.

<b><u>Funding</u></b>	<b>(Dollars in Millions)</b>		
	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
Reimbursable Orders	529.7	527.6	535.1

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 Defense 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.

<b><u>Costs</u></b>	<b>(Dollars in Millions)</b>		
	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
Direct Costs	415.8	424.1	427.5
Indirect Costs	<u>123.8</u>	<u>138.1</u>	<u>140.9</u>
Total Costs	539.6	562.2	568.4

Direct costs are relatively steady through the budget years. FY 2001 estimate reflects \$3.4M of potential savings associated with A-76 competition and Business Process Reengineering (BPR) as part of the Strategic Sourcing Plan. Additional savings of \$3.2M are included in FY 2002.

<b><u>Capital Purchase Program (CPP)</u></b>	<b>(Dollars in Millions)</b>		
	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
Equipment-Non ADPE/ TELECOM	9.1	10.4	12.2
ADPE/Telecommunications Equipment/Software	4.8	4.9	3.5
Software Development	0.0	0.7	0.0
Minor Construction	1.1	2.3	1.6
<b>TOTAL</b>	<b><u>15.0</u></b>	<b><u>18.3</u></b>	<b><u>17.3</u></b>

This CPP plan provides a modest investment level that allows NRL to acquire needed technology to maintain a state-of-the-art facility to fulfill science and technology mission areas supporting the DoN, DoD, and related customer programs.

### **Civilian Personnel**

<b><u>FTEs</u></b>	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
FY 2001 President's Budget	2,894	2,884	
Current Submission	<u>2,664</u>	<u>2,710</u>	2,675
Change	-230	-174	

<b><u>End-Strength</u></b>	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
FY 2001 President's Budget	2,950	2,926	
Current Submission	<u>2,719</u>	<u>2,726</u>	2,687
Change	-231	-200	

Civilian strength levels, measured by both end strength and full-time equivalents, are reduced from the FY 2001 President's Budget levels primarily reflecting overhead efficiencies resulting from Strategic Sourcing.

### **Military Personnel**

Military personnel levels will remain constant at 14 officers and 69 enlisted for a total of 83 billets.

### **Workload, Direct Labor Hours**

	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
FY 2001 President's Budget	3,365,040	3,351,400	
Current Submission	<u>3,169,259</u>	<u>3,208,195</u>	3,221,393
Change	-195,781	-143,205	

Consistent with the Civilian Personnel adjustments, direct labor hours are reduced from the FY 2001 President's Budget levels. A steady workforce profile is projected for FY 2001 and FY 2002 given the relatively consistent customer funding plans.

**Customer Rate Changes**

	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
Stabilized Customer Rate	\$89.65	\$87.85	\$96.52
Stabilized Rate Change	3.70%	-2.01%	+9.87%
Composite Customer Rate Change	2.65%	-0.27%	+6.05%

The Stabilized Customer Billing Rate consists of direct labor and applied overhead. Unique direct non-labor costs are billed on a reimbursable basis to the benefitting/requiring customer. The Composite Customer Rate Change incorporates both the stabilized costs and the reimbursable costs. The FY 2002 rate change reflects an increase from the previous year due to the fact that the FY 2001 rates were unusually low. Those rates contained a negative AOR factor established to bring accumulated profit to zero.

**Unit Costs**

	<b><u>FY 2000</u></b>	<b><u>FY 2001</u></b>	<b><u>FY 2002</u></b>
FY 2001 President's Budget	\$89.26	\$92.47	
Current Submission	<u>\$88.66</u>	<u>\$94.99</u>	\$97.76
Change	-\$\$.60	\$2.52	

The Unit Cost is a measurement of total direct labor and overhead costs per direct labor hour. The change in cost per direct labor hour for FY 2001 and FY 2002 primarily reflects increases for annual inflation/price changes from year to year. The Unit Costs for FY 2001 and FY 2002 are partially offset by overhead cost reductions and efficiencies.

INDUSTRIAL BUDGET INFORMATION SYSTEM (NIFRPT)  
 REVENUE and EXPENSES  
 AMOUNT IN MILLIONS  
 RES LABS / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	523.8	524.4	543.9
Surcharges	.0	.0	.0
Depreciation excluding Major Constructio	10.4	15.5	16.5
Other Income			
Total Income	534.2	539.9	560.4
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	3.3	3.5	3.7
Civilian Personnel	221.9	235.4	243.3
Travel and Transportation of Personnel	8.1	10.1	10.1
Material & Supplies (Internal Operations	48.8	50.5	50.0
Equipment	28.9	26.5	26.1
Other Purchases from NWCF	14.3	14.1	14.8
Transportation of Things	.2	1.1	1.2
Depreciation - Capital	10.4	15.5	16.5
Printing and Reproduction	.4	.5	.5
Advisory and Assistance Services	.0	.0	.0
Rent, Communication & Utilities	18.7	16.5	16.4
Other Purchased Sevices	185.8	188.4	185.8
Total Expenses	540.9	562.2	568.4
Work in Process Adjustment	-1.3	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0
Cost of Goods Sold	539.6	562.2	568.4
Operating Result	-5.4	-22.3	-8.1
Less Surcharges	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	1.9	.0	.0
Net Operating Result	-3.5	-22.3	-8.1
Other Changes Affecting AOR	.0	.0	.0
Accumulated Operating Result	30.4	8.1	.0

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	529.7	527.6	535.1
a. Orders from DoD Components	433.5	447.3	463.5
Department of the Navy	326.1	313.0	318.8
O & M, Navy	16.7	14.2	14.7
O & M, Marine Corps	.0	.0	.0
O & M, Navy Reserve	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Procurement, Navy	3.9	1.0	.2
Weapons Procurement, Navy	.1	.1	.1
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	1.8	2.3	2.4
Other Procurement, Navy	3.0	4.2	4.5
Procurement, Marine Corps	.4	.4	.5
Family Housing, Navy/MC	.0	.0	.0
Research, Dev., Test, & Eval., Navy	300.2	290.7	296.3
Military Construction, Navy	.1	.1	.1
Other Navy Appropriations	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	3.3	6.4	6.8
Army Operation & Maintenance	.4	.8	.8
Army Res, Dev, Test, Eval	2.7	5.3	5.6
Army Procurement	.2	.2	.2
Army Other	.0	.1	.1
Department of the Air Force	52.0	69.3	75.4
Air Force Operation & Maintenance	.7	1.3	1.4
Air Force Res, Dev, Test, Eval	34.0	48.9	53.7
Air Force Procurement	17.3	19.0	20.3
Air Force Other	.0	.0	.0
DOD Appropriation Accounts	52.0	58.7	62.6
Base Closure & Realignment	.0	.0	.0
Operation & Maintenance Accounts	.7	1.8	1.9
Res, Dev, Test & Eval Accounts	51.4	53.4	57.0
Procurement Accounts	.0	3.4	3.6
DOD Other	.0	.0	.0
b. Orders from NWCF Business Area	9.4	14.2	15.1
c. Total DoD	442.9	461.5	478.6
d. Other Orders	86.8	66.1	56.5
Other Federal Agencies	81.1	61.3	51.4
Foreign Military Sales	1.9	1.0	1.1
Non Federal Agencies	3.8	3.8	4.0

INDUSTRIAL BUDGET INFORMATION SYSTEM (NIFRPT)  
 Source of Revenue  
 AMOUNT IN MILLIONS  
 RES LABS / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	129.8	125.3	113.0
3. Total Gross Orders	659.6	652.9	648.1
4. Funded Carry-Over **	125.3	113.0	87.8
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	534.2	539.9	560.4
Adjusted Carry-Over	44.0	36.1	26.5
Adjusted Carryover in Months of Workload	0.9	0.8	0.5

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

**Changes in the Cost of Operation**  
 Activity Group: Research & Development  
 Sub-Activity Group: Naval Research Laboratory  
 FY 2002 President's Budget  
 (Dollars in Millions)

	Expenses
FY 2000 Actual:	540.9
FY 2001 Estimate in President's Budget:	564.6
Pricing Adjustments:	
Civilian Personnel	11.2
General Inflation	0.2
Program Changes:	
In-house Workforce Reduction	-14.3
Revised Direct Reimbursable Cost	2.6
Reduced Overhead	-2.7
Transportation Subsidy	0.6
FY 2001 Estimate:	562.2
Pricing Adjustments:	
FY 2002 Pay Raise	
Civilian Personnel	6.4
Military Personnel	0.2
Annualization of Prior Year Pay Raise	2.3
General Purchase Inflation	4.4
Program Changes:	
DFAS Billable Hours Adjustment	0.5
Reduced Direct Reimbursable Contract Cost	-5.4
Additional Depreciation Costs	1.0
Other Reductions	-0.3
Transportation Subsidy	0.3
Productivity Initiatives and Other Efficiencies:	
Strategic Sourcing Savings	-3.2
FY 2002 Estimate:	568.4

**Activity Group: Research & Development**  
**Sub Activity Group: Naval Research Laboratory**

FY 2002 President's Budget

(Dollars in Millions)

Line No.	Item Description	FY 2000		FY 2001		FY 2002	
		Quant	Total Cost	Quant	Total Cost	Quant	Total Cost
	<b>Non-ADP Equipment (&gt;\$1M)</b>						
1001	RCS Cleaning System			1	1.050		
1002	Ultra High Resolution E-Beam Lithography System			1	1.064		
	<b>Total Non-ADP Equipment (&gt;\$1M)</b>	<b>0</b>	<b>0.000</b>	<b>2</b>	<b>2.114</b>	<b>0</b>	<b>0.000</b>
<b>2001</b>	<b>Total Non-ADP Equipment (\$500K-\$999K)</b>	<b>4</b>	<b>2.547</b>	<b>2</b>	<b>1.150</b>	<b>4</b>	<b>3.100</b>
<b>3001</b>	<b>Total Non-ADP Equipment (&lt;\$500K)</b>	<b>31</b>	<b>6.569</b>	<b>38</b>	<b>7.111</b>	<b>33</b>	<b>9.116</b>
	<b>ADP Equipment (&gt;\$1M)</b>						
4001	High Performance Processor Upgrade					1	1.500
	<b>Total ADP Equipment (&gt;\$1M)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>1</b>	<b>1.500</b>
<b>5001</b>	<b>Total ADP Equipment (\$500K-\$999K)</b>	<b>2</b>	<b>1.650</b>	<b>1</b>	<b>0.510</b>	<b>0</b>	<b>0.000</b>
<b>6001</b>	<b>Total ADP Equipment (&lt;\$500K)</b>	<b>11</b>	<b>3.176</b>	<b>17</b>	<b>4.379</b>	<b>9</b>	<b>1.984</b>
7001	Software Development (<\$500K)			1	0.200		
7002	Defense Industrial Financial Management System (DIFMS)			1	0.537		
	<b>Total Software Development</b>	<b>0</b>	<b>0.000</b>	<b>2</b>	<b>0.737</b>	<b>0</b>	<b>0.000</b>
<b>8001</b>	<b>Total Minor Construction (&lt;\$500K)</b>	<b>3</b>	<b>1.058</b>	<b>3</b>	<b>2.300</b>	<b>3</b>	<b>1.600</b>
	<b>TOTAL CAPITAL PURCHASE PROGRAM</b>	<b>51</b>	<b>15.000</b>	<b>65</b>	<b>18.301</b>	<b>50</b>	<b>17.300</b>

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Activity Group/Date  Department of the Navy Research and Development		C. Line No. & Item Description  1001. RCS Cleaning System					D. Activity Identification  Naval Research Laboratory Washington, DC 20375						
		FY 2000			FY 2001			FY 2002					
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) > \$1,000,000				1	1,050	1,050							
<p><b>Narrative Justification :</b></p> <p>The Spacecraft Engineering Department is the Naval Center for Space Technology's (NCST) focal point for component, subassembly and assembly-level cleaning of spacecraft related items.</p> <p>The Capital Equipment being procured is the design, procurement, and installation of a state-of-the-art Spacecraft Component Precision Cleaning System.</p> <p>Spacecraft and piecepart precision cleaning is vital to the success of the NCST mission. The primary failure mode of the majority of space missions in industry has been directly linked to inadequate particulate removal at the piecepart level. The NCST has maintained a leadership role in the space community by performing in-house component and piecepart cleaning of nearly all propulsion-related hardware. One of the major reasons the NCST has maintained a 100% success record of its spacecraft propulsion systems is because of the in-house control of its cleaning processes for spacecraft components. In fact, the NCST routinely brings the pieceparts to the NRL facility, precision cleans and dries the parts, and ships them back to the vendors for component build-up.</p> <p>The current NCST cleaning system is obsolete and utilizes Freon F-113 that has now been categorized as an Ozone Depleting Substance (ODS). It must be replaced to meet current environmental regulations. The system being procured utilizes alternative environmentally acceptable fluids and will allow the NCST to maintain this necessary state of the art capability, thereby continuing mission success.</p> <p>Future Programs such as NEMO, WINDSAT, FAME and the proposed DARPA and NASA Propulsion Module efforts will all depend on the precision cleaning efforts of the Spacecraft Engineer Department. Without this Precision Cleaning System, the NCST will not be able to prosecute these programs as planned.</p>													

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET							
B. Component/Activity Group/Date  Department of the Navy Research and Development			C. Line No. & Item Description  1002. Ultra High Resolution E-Beam Lithography System				D. Activity Identification  Naval Research Laboratory Washington, DC 20375							
			FY 2000			FY 2001			FY 2002					
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 > \$1,000,000						1	1,064	1,064						
<p>Narrative Justification:</p> <p>This equipment is needed as the principal fabrication system and centerpiece for the new NRL Institute of Nanoscience established at the Naval Research Laboratory to address the tasks directed by the Department of Defense National Science Initiative (NNI). The equipment will provide NRL with cost-effective state-of-the-art technology to fabricate devices with combined electronic/biological/chemical functionality at the nanometer (<math>10^{-9}</math> m) scale.</p> <p>NRL is committed in this new area to provide DOD with cutting-edge technology in this new regime of ultra-small devices with the combined functionality of electronic, biology, and chemistry. Central to the mission is the ability to fabricate prototype devices for below the wavelength limitations of optical lithography. For this reason, electron lithography is an absolute requirement in order to provide a DOD response to NNI. The research results on electronic devices at this small scale will represent the cutting-edge of modern technology development for DOD electronics applications in sensors, computer memory, and chemical/biological warfare.</p> <p>This new system will constitute the centerpiece of the new Institute for Nanoscience at the NRL. Without it, the Institute cannot meet its mission.</p>														

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET							
B. Component/Activity Group/Date			C. Line No. & Item Description				D. Activity Identification							
Department of the Navy Research and Development			2001. Various Non-ADP >\$500,000 <\$999,000				Naval Research Laboratory Washington, DC 20375							
			FY 2000			FY 2001			FY 2002					
Element of Cost			Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Various Non-ADP >\$500,000 <\$999,000			4		2,547	2		1,150	4		3,100			
Narrative Justification:														
<u>FY 2000</u> EMI Test Facility \$745,869 Multi-Frequency Imaging System \$615,000 Airborne Surface Salinity Mapper \$540,050 Molecular Beam Epitaxy (MBE) System \$645,904  <u>FY 2001</u> SAR Control and Acquisition Unit \$550,000 Robotics Laboratory Enhancements \$600,000  <u>FY 2002</u> Programmable Radio Test Bed \$990,000 Ka Band Test Bed \$990,000 40 Gb/s Communications Equipment \$600,000 Tower Based Scanning Lidar System \$520,000														

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET							
B. Component/Activity Group/Date			C. Line No. & Item Description				D. Activity Identification							
Department of the Navy Research and Development			3001. Various Non-ADP >\$100,000 <\$500,000				Naval Research Laboratory Washington, DC 20375							
			FY 2000			FY 2001			FY 2002					
Element of Cost		Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	
Various Non-ADP >\$100,000 <\$500,000		31		6,569	38		7,111	33		9,116				
Narrative Justification:														

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Activity Group/Date		C. Line No. & Item Description					D. Activity Identification						
Department of the Navy Research and Development		4001. High Performance Processor Upgrade					Naval Research Laboratory Washington, DC 20375						
		FY 2000			FY 2001			FY 2002					
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 > \$1,000,000								1	1,500	1,500			
<p><b>Justification:</b> NRL's Silicon Graphics SN-1 supercomputer supports numerous high-end computer users within Navy and DoD. This machine is a massively-parallel computer designed to scale in performance with the addition of processors, memory and internal networks up to a maximum of 512 processors. Expansion is carried out by adding processor "bricks", each containing four processors, 4 Gbytes of memory and the necessary interconnect and control circuitry. In order to meet the continually expanding need for computing power for leading-edge researchers in the technical disciplines supported by NRL it is necessary to add "bricks" periodically. This procurement will acquire the additional 16 "bricks" (64 processors, 64 Gbytes of memory and interconnects) that will allow this machine to maintain its scientific utility.</p> <p>High-end computing assets are critical to advances in almost every scientific discipline. Users' needs far exceed the current capacity of DoD systems. To meet these requirements it is necessary to continually upgrade the highest-end systems to extend their useful life and provided needed capacity.</p> <p>This procurement will maintain NRL's shared computing assets at the leading edge to meet users' needs. This system serves more than 500 high-performance computer users in ONR/NRL conducting research in virtually every scientific discipline but with special emphasis on meteorology and oceanographics applications. The NRL R&amp;D efforts in High Performance Computing are part of the broader DoD initiatives in networking, archiving, and distributed computing sponsored by DoD Research and Engineering.</p> <p>This super computer capability will be used by researchers from Navy, DARPA, and other DoD agencies, along with support staff from NRL.</p> <p>Other alternatives are not feasible.</p> <p>-Status Quo: Current computing assets are reaching the end of their life as leading-edge components. They do not meet the criteria for advancing the state-of-the-art or providing the underlying platform needed for R&amp;D in this area.</p> <p>-Sharing: These assets will be shared among NRL and HPCMP users. Other assets are available in the HPCMP but are not at the leading edge. To fulfill our mission, these assets must be integrated into our existing high-end computing environment.</p> <p>-Leasing: Since these are leading-edge assets, the lease market is very small. Any lease that we enter will expect to cover the entire costs within a very short period of time. Further, to execute our long-range upgrade plans, manufacturer trade-ins are leveraged extensively. This would not be possible under a lease.</p>													

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Activity Group/Date		C. Line No. & Item Description					D. Activity Identification						
Department of the Navy Research and Development		5001. Various ADP >\$500,000 <\$999,000					Naval Research Laboratory Washington, DC 20375						
		FY 2000			FY 2001			FY 2002					
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	
Various ADP >\$500,000 <\$999,000	2		1,650	1	510	510							
<p>Narrative Justification:</p> <p><u>FY 2000</u>  Dense Wave Division Multiplexed Optical Transmission System \$899,591  Advanced Operations Validation Center \$750,621</p> <p><u>FY 2001</u>  Geo-spatial Analysis Workstation Environment \$510,000</p>													

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Activity Group/Date		C. Line No. & Item Description					D. Activity Identification						
Department of the Navy Research and Development		6001. Various ADP >\$100,000 <\$500,000					Naval Research Laboratory Washington, DC 20375						
		FY 2000			FY 2001			FY 2002					
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	
Various ADP >\$100,000 <\$500,000	11		3,176	17		4,379	9		1,984				
Narrative Justification:													

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Activity Group/Date		C. Line No. & Item Description					D. Activity Identification						
Department of the Navy Research and Development		7001. Software Development					Naval Research Laboratory Washington, DC 20375						
		FY 2000			FY 2001			FY 2002					
Element of Cost		Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost
Software Development					1	200	200						
<p>Narrative Justification:</p> <p><u>FY 2001</u> Oracle Network License Upgrade \$200,000</p>													

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET						
B. Component/Activity Group/Date		C. Line No. & Item Description					D. Activity Identification						
Department of the Navy Research and Development		7002. Defense Industrial Financial Management System (DIFMS)					Naval Research Laboratory Washington, DC 20375						
		FY 2000			FY 2001			FY 2002					
Element of Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	Quan	Unit Cost	Total Cost	
Software Development				1	537	537							
<p><b>Narrative Justification:</b></p> <p>The Under Secretary of Defense, Comptroller designated the Defense Industrial Financial Management System (DIFMS) as the interim migratory system for the working capital fund Reserarch and Development business area. Due to a delayed implementation date at NRL, the DIFMS CPP originally budgeted for FY 2000 has been deferred until 1 Oct 2001.</p>													

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 PRESIDENT'S BUDGET							
B. Component/Activity Group/Date			C. Line No. & Item Description				D. Activity Identification							
Department of the Navy Research and Development			8001. Minor Construction >\$100,000 <\$500,000				Naval Research Laboratory Washington, DC 20375							
			FY 2000			FY 2001			FY 2002					
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 <\$500,000			3		1,058	3		2,300	3		1,600			
Narrative Justification:														

**CAPITAL BUDGET EXECUTION**  
**Department of the Navy - Navy Working Capital Fund**  
**Activity Group: RESEARCH AND DEVELOPMENT/Sub Activity Group: NAVAL RESEARCH LABORATORY**  
**FY 2001**

**FY 2002 President's Budget**

**PROJECTS ON THE FY 2001 PRESIDENT'S BUDGET**

<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>(Dollars in Millions)</u>			<u>Explanation/ Reason for Change</u>
			<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/ Deficiency</u>	
	Equipment except ADPE and TELECOM					
2001	Equipment except ADPE and TELECOM <\$500K		7.277	7.111	(0.166)	1/
2001	Equipment except ADPE and TELECOM \$500K - 999K		1.650	1.150	(0.500)	1/
2001	RCS Cleaning System			1.050	1.050	1/
2001	Ultra High Resolution E-Beam Lithography System			1.064	1.064	2/
	Total Equipment except ADPE and TELECOM	0.000	8.927	10.375	1.448	
	Equipment - ADPE and TELECOM					
2001	Equipment - ADPE <\$500K		4.763	4.379	(0.384)	1/
2001	Equipment - ADPE \$500K - \$999K		0.510	0.510	0.000	
	Total Equipment - ADPE and TELECOM	0.000	5.273	4.889	(0.384)	
	Software Development					
2001	Software Development < \$500K		0.200	0.200	0.000	
2001	Defense Industrial Financial Management System (DIFMS)		0.537	0.537	0.000	
	Total - Software Development	0.000	0.737	0.737	0.000	
2001	Minor Construction					
	Total - Minor Construction <\$500K	0.000	2.300	2.300	0.000	
	Total FY 2001 Capital Purchase Program	0.000	17.237	18.301	1.064	

1/ Various projects cancelled/deferred in order to fund high priority RCS Cleaning System.

2/ Additional authority of 1.1 M granted by OSD in order to fund Ultra High Resolution E-Beam Lithography System.

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**General Descriptions of Business Area:** The Military Sealift Command (MSC) acts as the single manager-operating agency for sealift services. MSC operates under the Working Capital Fund (WCF) in two separate capacities, supporting the Navy mission and providing sealift support for DoD in peacetime. MSC provides support to the Fleet Commanders-in-Chief and other DOD activities by servicing unique vessels and programs. Sealift support for DoD cargoes in peacetime is funded through the TWCF under the auspices of USTRANSCOM. This submission addresses MSC's Navy mission funded by the NWCF.

**Outputs and Customers through the NWCF:** MSC supports CINCPACFLT, CINCLANTFLT, NAVSEA, COMNAVMETOCCOM, SPAWAR, DIRSSP, NAVO, Air Force and NDSF service requests with unique vessels and programs. The three programs budgeted through the Navy Working Capital Fund are:

1. Naval Fleet Auxiliary Force (NFAF), which provides support utilizing civilian mariner manned non-combatant ships for material support.
2. Special Mission Ships (SMS), which provide unique seagoing platforms.
3. Afloat Propositioning Force - Navy (APF-N), which deploys advance material for strategic lifts.

**Changes by Program:**

**NFAF:**

Changes from the President's Budget estimate for FY 2001:  
The revised estimate includes the transfer of the first of the T-AOE 6 class vessels (oiler/ammo supply ships) from active Navy to MSC. A total of four ships will transfer, one each year over the next four fiscal years.

Changes from FY 2001 to FY 2002: The second of four T-AOE ships will be turned over to MSC for operation.

**SMS:**

Changes from the President's Budget estimate for FY 2001:  
The number of full operating status (FOS) per diem days increases for the USNS Prevail from 92 days to 365 days. Scheduled maintenance increases for the USNS Zeus and T-AGS class ships.

Changes from FY 2001 to FY 2002:

The number of per diem ship days increases as funding for the operation of two Coast Guard ships change from "reimbursable cost basis" to daily per diem rates".

FY2002 President's Budget  
 Navy Working Capital Fund  
 Military Sealift Command  
 Congressional Submission

**APF-N:**

Changes from the President's Budget estimate for FY 2001:  
 The USNS Stockham and USNS Wheat are delivered and operate in FOS status for six months.

Changes from FY 2001 to FY 2002:  
 Contract costs increase by approximately \$30 million. This FY 2002 increase was scheduled in the original lease agreement. The number of per diem days increases because the USNS Stockham and Wheat each are FOS for a full year.

**ANALYSIS OF COST OF OPERATIONS:** FY 2001 reflects price growth of about \$45M for fuel and the transfer of the first T-AOE 6 class to MSC. FY 2002 costs reflect full year operation of the first T-AOE 6 and the transfer of the second T-AOE.

**Table One: COST** (\$ in Millions)

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
DIRECT COST	1,150.7	1,169.0	1,269.6
COST OF G&A	154.2	144.2	152.2
TOTAL COST	1,304.9	1,313.2	1,421.8

**REVENUE ANALYSIS:** FY 2001 revenue is higher than approved due primarily to increased ship per diem days. FY 2002 revenue numbers are based on budgeted per diem rates.

**Table Two: REVENUE**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
REVENUE	1,296.0	1,281.4	1,418.6

**ANALYSIS OF AOR/NOR:** The FY 2001 rates were computed to achieve a loss of \$29.4 million, however, current estimates reflect a slightly larger loss of \$31.8 million. The net change over the two fiscal years is a negative \$2.4 million. The FY 2002 rates were computed to result in an AOR of zero.

**Table Three: AOR/NOR** (\$ in Millions)

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
BEGINNING AOR	28.6	35.0	3.2
NET OPERATING RESULTS	(9.0)	(31.8)	(3.2)
PASSTHROUGH	15.4	0.0	0.0
ENDING AOR	35.0	3.2	0.0

**UNIT COST ANALYSIS:** MSC operates under three distinct unit cost goals - one for each of the programs. All programs have cost/per day as their unit cost base. The overall increase in unit costs from FY 2000 to FY 2001 is due to increases

FY2002 President's Budget  
Navy Working Capital Fund  
Military Sealift Command  
Congressional Submission

associated with fuel prices, M&R, capital hire, and charter hire costs. FY 2001 to FY 2002 reduction stems from reduced fuel prices, number of overhauls, and increased number of harbor tugs.

**Table Four: UNIT COST**

	FY 2000	FY 2001	FY 2002
NFAF	27,813	29,582	30,115
SMS	19,926	20,247	18,826
APF-N	69,648	72,150	74,762

**WORKLOAD INDICATORS:** The NFAF program increases in the outyears due to the transfer of three T-AOE 6s each year for the next three years starting in late FY 2001. With a few exceptions, the SMS Program is relatively stable for FY 2001 and FY 2002: The USNS Impeccable delivers in FY 2001, the USNS Kane will be deactivated prior to FY 2002, and the T-AGS 65 (Mary Sears) will come aboard in FY 2002. The APF-N increased in FY 2000 with the beginning of the MPF-E program, which increased the fleet to sixteen ships.

**Table Five - WORKLOAD**

	FY 2000	FY 2001	FY 2002
PER DIEM SHIP DAYS			
NFAF	21,329	22,020	24,091
SMS	9,445	9,942	10,799
APF-N	5,605	5,842	6,205

**HOW WORKLOAD LEVELS ARE OBTAINED:** Budgeted workload estimates are provided directly by each funding sponsor. Since these are all dedicated ships, the programs receive their operational requirements directly from the sponsor by message or other direct communication.

**CUSTOMER RATE PERCENTAGE CHANGES:** The FY 2001 rates reflect the President's budget approved program. Rates for FY 2002 were developed to attain the required zero AOR. Increases in rates are primarily a function of recouping FY 2001 negative AOR and increases in fuel prices.

**Table Six - CUSTOMER RATE CHANGES**

	FY 2000	FY 2001	FY 2002
NFAF	0.0%	4.8%	4.6%
SMS	17.9%	16.7%	8.4%
APF-N	(1.9%)	(2.0%)	19.4%

**MANPOWER TRENDS:** *Afloat:* The major change is due to transfer of T-AOEs and transfer of Military billets to CIVMARS.

FY2002 President's Budget  
Navy Working Capital Fund  
Military Sealift Command  
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Ashore: FY 2001 to FY 2002 reflects adjustments for strategic sourcing initiatives.

**Table Seven: FTEs/Workyears for Military and Civilian**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian E/S	4,314	4,282	4,630
Military E/S	1,034	820	580
Total	5,348	5,102	5,213
Civilian FTE	5,570	5,678	5,850
Military FTE	1,062	820	737
Total	6,632	6,498	6,587

**ANALYSIS OF FINANCIAL CONDITIONS:** The FY 2001 NOR reflects a loss of \$31.8M vice a loss of \$29.4M contained in the President's Budget. FY 2002 rates have been established to recoup the negative AOR.

**Table Eight: Financial Condition**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
REVENUE	\$1,296.0	\$1,281.4	\$1,418.6
EXPENSE	1,304.9	1,313.2	1,421.8
<b>NOR</b>	<b>(8.9)</b>	<b>(31.8)</b>	<b>(3.2)</b>
PASSTHROUGH	15.4	0.0	0.0
AOR	35.0	\$3.2	\$0.0

**OVERHEAD TRENDS/ANALYSIS:** This relates to all costs incurred by the ashore staff. Excluding inflation and depreciation costs, there is no overall program growth for FY 2001. Excluding inflation and depreciation costs, program growth of \$3.3M in FY 2002 is due primarily to an increase in manpower FTE due to fewer personnel turnovers and increases in financial and information technology costs.

**Table Nine: Manpower and Overhead Costs (\$ in millions)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<u>End strength</u>			
Civilians	961	953	955
Military	176	182	183
Ashore Costs	\$154.2	\$144.2	\$152.2

**Capital Purchase Program (CPP):** Predominant CPP costs relate to Information Technology (IT/ADP) efforts. These efforts

FY2002 President's Budget  
Navy Working Capital Fund  
Military Sealift Command  
Congressional Submission

include migration to a paperless environment, secure storage of engineering materials, ADPE for Shipboard LANs and systems development efforts- e.g. mandated travel system, financial management(FMS), etc. Additionally, FY 2001 reflects a minor construction project at MSC, Bahrain.

**Table Ten: CPP Costs (\$ in millions)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<u>Capital Investment</u>			
ADPE hardware	4.3	3.6	4.0
ADPE software	4.5	3.2	6.0
Minor Construction	0.0	0.5	0.0
Total	8.8	7.3	10.0

**PRODUCTIVITY INITIATIVES/COST REDUCTIONS:** Prior year submissions reflected savings associated with productivity initiatives such as vibration analysis, the hull/propeller polishing program, and reduced manning on oilers. Once implemented, in the outyears these initiatives result in "cost avoidance" vice savings as savings were recognized in prior year submissions. Accordingly, while MSC continues to utilize/maintain these programs/efforts, the productivity "savings" become embedded in all future submissions. As other opportunities become available/viable they will be incorporated into MSC submissions.

## INDUSTRIAL BUDGET INFORMATION SYSTEM

PAGE 1

REVENUE and EXPENSES  
AMOUNT IN THOUSANDS  
COMSC / COMSC

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	1,287,420	1,276,743	1,412,184
Surcharges	0	0	0
Depreciation excluding Major Constructio	8,550	4,627	6,380
Other Income			
Total Income	1,295,970	1,281,370	1,418,564
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	31,774	35,440	32,706
Civilian Personnel	291,985	302,154	323,454
Travel and Transportation of Personnel	16,513	13,474	13,811
Material & Supplies (Internal Operations	98,903	146,775	155,107
Equipment	38,155	28,605	31,031
Other Purchases from NWCF	11,021	10,558	10,778
Transportation of Things	3,511	3,707	3,266
Depreciation - Capital	8,550	4,627	6,380
Printing and Reproduction	518	427	433
Advisory and Assistance Services	376	331	326
Rent, Communication & Utilities	450,810	456,201	505,215
Other Purchased Services	352,819	310,911	339,268
Total Expenses	1,304,936	1,313,210	1,421,775
Work in Process Adjustment	0	0	0
Comp Work for Activity Reten Adjustment	0	0	0
Cost of Goods Sold	1,304,936	1,313,210	1,421,775
Operating Result	-8,966	-31,840	-3,211
Less Surcharges	0	0	0
Plus Appropriations Affecting NOR/AOR	0	0	0
Other Changes Affecting NOR/AOR	0	0	0
Extraordinary Expenses Unmatched	0	0	0
Net Operating Result	-8,966	-31,840	-3,211
Other Changes Affecting AOR	15,423	0	0
Accumulated Operating Result	35,050	3,211	0

Exhibit Fund-14

## INDUSTRIAL BUDGET INFORMATION SYSTEM

PAGE 1

Source of Revenue  
AMOUNT IN THOUSANDS  
COMSC / COMSC

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	1,254,702	1,281,370	1,418,564
a. Orders from DoD Components	1,241,253	1,273,431	1,401,676
Department of the Navy	1,220,297	1,243,857	1,366,187
O & M, Navy	1,217,634	1,190,225	1,305,893
O & M, Marine Corps	0	0	0
O & M, Navy Reserve	0	0	0
O & M, Marine Corp Reserve	0	0	0
Aircraft Procurement, Navy	0	0	0
Weapons Procurement, Navy	0	0	0
Ammunition Procurement, Navy/MC	0	0	0
Shipbuilding & Conversion, Navy	-2,427	2,381	5,887
Other Procurement, Navy	1,399	0	0
Procurement, Marine Corps	0	0	0
Family Housing, Navy/MC	0	0	0
Research, Dev., Test, & Eval., Navy	223	0	0
Military Construction, Navy	0	0	0
Other Navy Appropriations	3,468	51,251	54,407
Other Marine Corps Appropriations	0	0	0
Department of the Army	92	0	0
Army Operation & Maintenance	92	0	0
Army Res, Dev, Test, Eval	0	0	0
Army Procurement	0	0	0
Army Other	0	0	0
Department of the Air Force	21,012	29,574	19,489
Air Force Operation & Maintenance	21,012	29,574	19,489
Air Force Res, Dev, Test, Eval	0	0	0
Air Force Procurement	0	0	0
Air Force Other	0	0	0
DOD Appropriation Accounts	-148	0	16,000
Base Closure & Realignment	-148	0	0
Operation & Maintenance Accounts	0	0	16,000
Res, Dev, Test & Eval Accounts	0	0	0
Procurement Accounts	0	0	0
DOD Other	0	0	0
b. Orders from NWCF Business Area	11,188	716	4,328
c. Total DoD	1,252,441	1,274,147	1,406,004
d. Other Orders	2,261	7,223	12,560
Other Federal Agencies	2,682	7,223	12,560
Foreign Military Sales	-421	0	0
Non Federal Agencies	0	0	0

INDUSTRIAL BUDGET INFORMATION SYSTEM  
Source of Revenue  
AMOUNT IN THOUSANDS  
COMSC / COMSC

PAGE 2

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	76,239	34,971	34,970
3. Total Gross Orders	1,330,941	1,316,341	1,453,534
4. Funded Carry-Over **	34,971	34,970	34,970
5. Less Passthrough	0	0	0
6. Total Gross Sales	1,295,970	1,281,371	1,418,564
Adjusted Carry-Over	\$31,099	\$31,099	\$31,099

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

FY 2002 President's Budget  
 Changes in the Costs of Operation  
 Military Sealift Command/Transportation  
 (Dollars in Millions)  
 Congressional Submission

	Total <u>Expenses</u>
FY 2001 Estimate in President's Budget:	1,304.8
Pricing Adjustments:	
a. FY 2001 Pay Raise	
(1) Civilian Personnel	0.0
(2) Military Personnel	0.0
b. Annualization of Prior Year Pay Raises	
(1) Civilian Personnel	0.0
(2) Military Personnel	0.0
c. Fuel	0.0
d. Supplies	0.0
e. General Purchase Inflation	0.0
Productivity Initiatives & Other Efficiencies:	
a.	
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. Rent/Utilities	0.0
g. Supplies	0.0
t. Travel	0.0
i. Depreciation	0.0
j. Communication	0.0
k. ADP Services	0.0
l. Other	0.0
Reduced Reimbursables for NFAF	-9.4
Reduced Reimbursables for SMS	-3.8
Reduced Reimbursables - Other	-2.3
Delivery of USNS Stockham	9.6
Turnover of T-AOE 6 Class Vessels	14.3
FY 2001 Current Estimate:	1,313.2

FY 2002 President's Budget  
 Changes in the Costs of Operation  
 Military Sealift Command/Transportation  
 (Dollars in Millions)  
 Congressional Submission

Pricing Adjustments:

a. FY 2002 Pay Raise	
(1) Civilian Personnel	4.1
(2) Military Personnel	0.9
b. Annualization of Prior Year Pay Raises	
(1) Civilian Personnel	7.6
(2) Military Personnel	0.0
c. Fuel	-3.7
d. Supplies	-1.3
e. DLRs	0.0
f. General Purchase Inflation	11.1

Productivity Initiatives & Other Efficiencies:

a.

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
g. Other	
Turnover of T-AOE 6 Class Vessels	40.0
Increase maintenance and repair	14.3
Full year FOS OPS of USNS Impeccable	1.0
Mary Sears T-AGS 65	2.1
MPS Capital Hire Increase	29.8
MPS Charter Hire Increase	4.9
Wheat/Stockham Full year Ops	3.6
T-AE ROS vice FOS	-9.0

Other Changes:

a. Depreciation	1.8
b. General & Administrative	1.4

FY 2002 Estimate:	1,421.8
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**FY 2002 President's Budget**  
**Business Area Capital Investment Summary**  
Component: Military Sealift Command  
Business Area: Transportation  
Date: Congressional Submission  
(\$ in Millions)

Line Number	Item Description	FY 2000		FY 2001		FY 2002	
		Qty	Total Cost	Qty	Total Cost	Qty	Total Cost
	<u>Equipment</u>						
	Replacement						
	Productivity						
	New Mission						
	Environmental Compliance						
	Sub-total	0	0.0	0	0.0	0	0.0
	<u>ADPE &amp; Telecomm</u>						
	Computer Hardware (Production)						
C001	APM						0.0
C002	TDMS		0.2		0.2		0.3
C003	LAN		4.1		3.4		3.7
	Computer Software (Operating)						
	Telecommunications						
	Other Communications and						
	Telecommunications Support						
	Equipment						
	Sub-total	0	4.3	0	3.6	0	4.0
	<u>Software Development</u>						
	Systems		4.5		3.2		6.0
C004			1.7		2.1		2.0
C005	LAN						0.0
C006	TDMS		0.4		0.4		0.1
C007	APM		1.8		0.7		2.5
C008	COTS Initiative		0.6				1.4
C009	Minor Construction				0.5		0.0
	Total	0	8.8	0	7.3	0	10.0

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 President's Budget						
B. Component/Business Area/Date				C. Line No. & Item Description				D. Activity Identification					
Military Sealift Command/Transportation/ April 2001				C006 TDMS									
			FY 2000			FY 2001			FY 2002				
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost				
Software Development		Varies	400		Varies	400		Varies	100				
Total	0		400	0		400	0		100				
<b>Narrative Justification:</b>													
<p>The Technical Data and Management System (TDMS) provides access to technical information - e.g. drawings, manuals, test reports, etc - on line or electronically in CALS and industry compatibility. TDMS eventually will enable MSC to migrate a paperless environment of engineering documents.</p>													

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 President's Budget					
B. Component/Business Area/Date				C. Line No. & Item Description					D. Activity Identification			
Military Sealift Command/Transportation/ April 2001				C002 TDMS								
		FY 2000		FY 2001			FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADPE		Varies	250		Varies	250		Varies	350			
Total	0		250	0		250	0		350			
<b>Narrative Justification:</b>												
<p>TDMS equipment provides a secure physical archive and replaces the existing manual labor and intensive paper based system that has a high risk of loss of critical material due to age and handling.</p>												

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 President's Budget					
B. Component/Business Area/Date				C. Line No. & Item Description					D. Activity Identification			
Military Sealift Command/Transportation/ April 2001				C003 LAN								
		FY 2000		FY 2001			FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
ADPE - Afloat		Varies	4,037		Varies	3,403		Varies	3,646			
Total	0		4,037	0		3,403	0		3,646			
<b>Narrative Justification:</b>												
<p>The above represents MSC requirements to implement unclassified and classified LANS at all ships, offices, area command, and headquarters world-wide. Equipment includes servers, routers, modem pools, printers, firewall, etc. This funding will help create a performance and capacity test platform to plan the future and make cost effectiveness decisions for the Unclass Network Command Center. This equipment also will support Standard Procurement System (SPS) and Paperless Acquisition.</p>												

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 President's Budget					
B. Component/Business Area/Date				C. Line No. & Item Description					D. Activity Identification			
Military Sealift Command/Transportation/ April 2001				C004 Systems								
		FY 2000		FY 2001			FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Software Development			1,750			2,050			2,050			
Total	0		1,750	0		2,050	0		2,050			
<b>Narrative Justification:</b>												
<p><u>Systems</u> All systems operate on existing MSC or NCTS computers. All funds are for system design, test, implementation, documentation, and user training.</p> <p>Certain systems providing ship schedule/voyage management and storage/archiving/distribution of ship technical data (drawings/technical manuals) are mission critical.</p> <p>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.</p> <p>Includes funding required to implement DOD mandated travel system and integrate it with the Command financial management system as well as the paperless environment.</p>												

**BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION**  
(Dollars in Thousands)

**A. Budget Submission**  
FY 2002 President's Budget

<b>B. Component/Business Area/Date</b> Military Sealift Command/Transportation/ April 2001	<b>C. Line No. &amp; Item Description</b> C007                      APMC	<b>D. Activity Identification</b>
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ELEMENTS OF COST	Qty	FY 2000		FY 2001			FY 2002					
		Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Development			1,800			700			2,486			
Total	0		1,800	0		700	0		2,486			

***Narrative Justification:***

MSC has consolidated its civmar personnel functions at the Afloat Personnel Management Center (APMC.) This funding will satisfy the requirement to migrate to a paperless environment - i.e. total automation of the AP process, automated workflow and documentation management utilizing a Commercial Off the Shelf (COTS) solution(Oracle Human Resource (HR) and Payroll.) Increase in FY 2002 and FY 2003 due to requirement to implement a fully integrated COTS, HR, and Payroll product rather than simply implementing workflow. The implementation also will provide the ability to integrate with MSC's Financial Management System (FMS.)

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 President's Budget					
B. Component/Business Area/Date				C. Line No. & Item Description					D. Activity Identification			
Military Sealift Command/Transportation/ April 2001				C008 COTS Initiative/FMSS								
		FY 2000		FY 2001			FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Software Development		Varies	600						1,368			
Total	0		600	0		0	0		1,368			
<b>Narrative Justification:</b>												
<p><u>Financial Management Systems (FMS)</u>  The above funding is required to meet the requirement of the CFO and has been addressed in various meetings with representatives from DFAS and the Department of the Navy. This requirement was generated as a result of the DODIG's review of MSC's financial practices in September 1997. If funding is not provided, MSC will not be compliant with the CFO Act and will not have an acceptable financial module to use as a core system upon which SPS would operate.</p> <p>As implemented, FMS now has become the basis for MSC's Enterprise Resource Planning (ERP) environment. Outyear funding will support modules necessary to provide the total ERP solution to include interfaces with additional operational and logistics modules, shipboard access, budget preparation, inventory, etc.</p>												

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (Dollars in Thousands)							A. Budget Submission FY 2002 President's Budget					
B. Component/Business Area/Date				C. Line No. & Item Description				D. Activity Identification				
Military Sealift Command/Transportation/ April 2001				C009 Building at SWA								
		FY 2000		FY 2001			FY 2002					
ELEMENTS OF COST	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Minor Construction						470						
Total	0		0	0		470	0		0			
<b>Narrative Justification:</b>												
<p>MSC is in non-compliance with respect to force protection building. The defined threat, as per CENTCOM for this AOR, is a perimeter truck bomb. The personnel in this building are at risk for both the MSC chain of command and the host command, NSA Bahrain. Current options are as follows:</p> <ol style="list-style-type: none"> <li>1/ Status Quo: Personnel remain at risk and costs for current facility remain high</li> <li>2/ MILCON: This has been requested by NSA Bahrain, however, if approved, project would not be completed until FY 2008</li> <li>3/ CPP: Personnel would not be at risk. Further, this option would provide colocation with MTMC</li> </ol>												

CAPITAL BUDGET EXECUTION  
Component: Military Sealift Command  
Activity Group: Transportation  
FY 2002 President's Budget  
(\$ in Millions)

FY 2000/2001 PROJECTS IN THE FY 2001 PRESIDENT'S BUDGET

<u>FY</u>	<u>Approved Projects</u>	<u>PB Amount</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/Deficiency</u>	<u>Explanation</u>
00	Equipment except ADPE & Telcomm	\$0.0		\$0.0	\$0.0	\$0.0	
	ADPE & Telecomm						
	APM	\$0.0		\$0.0	\$0.0	\$0.0	
	TDMS	\$0.2		\$0.2	\$0.2	\$0.0	
	LAN	\$4.1		\$4.1	\$4.1	\$0.0	
	Software Development						
	TDMS/Systems/Lan	\$3.9	\$0.0	\$3.9	\$3.9	\$0.0	
	FMS	\$0.6		\$0.6	\$0.6	\$0.0	
	Minor Construction	\$0.0				\$0.0	
	<b>TOTAL FY 2000</b>	<b>\$8.8</b>	<b>\$0.0</b>	<b>\$8.8</b>	<b>\$8.8</b>	<b>\$0.0</b>	
<hr/>							
01	Equipment except ADPE & Telcomm	\$0.0		\$0.0	\$0.0	\$0.0	
	ADPE & Telecomm						
	APM	\$0.0		\$0.0	\$0.0	\$0.0	
	TDMS	\$0.2		\$0.2	\$0.2	\$0.0	
	LAN	\$3.9	-\$0.5	\$3.4	\$3.4	\$0.0	Realigned to cover Force Protection Requirement
	Software Development						
	TDMS/Systems/Lan	\$3.2		\$3.2	\$3.2	\$0.0	
	FMS	\$0.0		\$0.0	\$0.0	\$0.0	
	Minor Construction	\$0.0	\$0.5	\$0.5	\$0.5	\$0.0	Emergent Force Protection Requirement
	<b>TOTAL FY 2001</b>	<b>\$7.3</b>	<b>\$0.0</b>	<b>\$7.3</b>	<b>\$7.3</b>	<b>\$0.0</b>	

DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
NAVY/INFORMATION SERVICES/FMSO  
FY 2002 PRESIDENT'S BUDGET

**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 has operated as a Navy Working Capital Fund activity within the Information Services Activity Group. In FY 2002, FMSO will transfer operations as a separate Information Services activity to operations as a cost center of the Navy Supply activity group. All FMSO assets will be transferred to Supply effective 1 October 2001 and all costs incurred in support of Navy Supply operations become a part of Supply's Budget Project 91. FMSO is responsible for the development, implementation and maintenance of Automated Information Systems (AIS) for several 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 (DFAS) Cleveland Center, 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 IV rating. The CMM rating certifies that FMSO is in a select group of software agencies, since fewer than three percent of all activities assessed have a rating of IV or higher.

Activity Group Composition:  
Navy Fleet Material Support Office  
Mechanicsburg, PA 17055

Financial Profile	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Revenue	75.9	81.9	na
Cost of Goods Sold (\$ Millions)	77.2	78.8	na
Net Operating Results	-1.2	+3.1	na
Accumulated Operating Results	-1.6	+1.5	na

**Cost of goods sold:**

Cost of goods sold between FY2000 and FY2001 increases by \$1.6M, the result of pricing increases and the addition of 17 civilian workyears (a result of understaffing in FY2000), partially offset by a decrease in DFAS charges and reduced direct reimbursable costs.

**Net Operating Result/Accumulated Operating Result:**

The projected Net Operating Result (NOR) and Accumulated Operating Result (AOR) in FY 2000 are slightly better than the estimates in the FY 2001 President's Budget. The positive NOR/AOR in FY 2001 is attributed to a planned increase in FY 2001 revenue to recover significantly higher DFAS charges.

**Workload:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Direct Labor Hours	1,205,048	1,289,796	na

Direct Labor hours at FMSO reflect the hours worked against a customer's project. The increase in direct hours from FY 2000 to FY 2001 is due to an increase of 54 billable workyears to support NAVSUP.

**Performance Indicators:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Timeliness	95%	95%	na
Customer Satisfaction	85%	85%	na
Quantity	98%	98%	na

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 98% means that we delivered the product 98% 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:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Percent Change in Composite Customer Rate	4.18%	8.83%	na

The increase in the customer rate is primarily due to pricing changes.

**Unit Costs:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Direct Labor Hour	54.88	57.28	na

Unit Cost represents total operating costs per direct billable labor hours. The unit cost increase between FY 2000 and FY 2001 is attributable to labor pay raises and non labor inflation rates.

**Stabilized Rate:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Direct Labor Hour	55.37	60.26	na

Stabilized Rate: The change between FY 2000 and FY 2001 is primarily due to approved pay raises and non labor inflation.

**Staffing:**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian End Strength	880	891	na
Civilian Work Years	874	891	na
Military End Strength	17	19	na
Military Work Years	17	19	na

FY 2001 strength levels increase slightly over FY 2000 to accomplish projected customer funded workload.

**Capital Budget Authority:**

	<u>FY 2000</u>	<u>FY2001</u>	<u>FY 2002</u>
ADP and Telecom (Millions)	0.500	0.500	na

The requested funding supports continuous update/upgrade of hardware and software used at FMSO to stay on the leading edge of ADP technology.

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	75.4	81.3	.0
Surcharges	.0	.0	.0
Depreciation excluding Major Constructio	.5	.6	.0
Other Income			
Total Income	75.9	81.9	.0
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	1.7	1.7	.0
Civilian Personnel	59.5	62.5	.0
Travel and Transportation of Personnel	.3	.9	.0
Material & Supplies (Internal Operations	.7	.9	.0
Equipment	.9	1.5	.0
Other Purchases from NWCF	1.0	.8	.0
Transportation of Things	.0	.1	.0
Depreciation - Capital	.5	.6	.0
Printing and Reproduction	.1	.2	.0
Advisory and Assistance Services	.0	.0	.0
Rent, Communication & Utilities	.9	.4	.0
Other Purchased Services	11.5	9.2	.0
Total Expenses	77.2	78.8	.0
Work in Process Adjustment	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0
Cost of Goods Sold	77.2	78.8	.0
Operating Result	-1.2	3.1	.0
Less Surcharges	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	-1.2	3.1	.0
Other Changes Affecting AOR	.0	.0	-1.5
Accumulated Operating Result	-1.6	1.5	.0

## INDUSTRIAL BUDGET INFORMATION SYSTEM

Source of Revenue  
AMOUNT IN MILLIONS  
FMSO / TOTAL

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	71.2	74.0	-8.0
a. Orders from DoD Components	7.4	9.5	.0
Department of the Navy	6.9	9.5	.0
O & M, Navy	6.9	9.5	.0
O & M, Marine Corps	.0	.0	.0
O & M, Navy Reserve	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Porcurement, Navy	.0	.0	.0
Weapons Procurement, Navy	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	.0	.0	.0
Other Procurement, Navy	.0	.0	.0
Procurement, Marine Corps	.0	.0	.0
Family Housing, Navy/MC	.0	.0	.0
Research, Dev., Test, & Eval., Navy	.0	.0	.0
Military Construction, Navy	.0	.0	.0
Other Navy Appropriations	.0	.0	.0
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	.0	.0	.0
Army Operation & Maintenance	.0	.0	.0
Army Res, Dev, Test, Eval	.0	.0	.0
Army Procurement	.0	.0	.0
Army Other	.0	.0	.0
Department of the Air Force	.5	.0	.0
Air Force Operation & Maintenance	.0	.0	.0
Air Force Res, Dev, Test, Eval	.0	.0	.0
Air Force Procurement	.0	.0	.0
Air Force Other	.5	.0	.0
DOD Appropriation Accounts	.0	.0	.0
Base Closure & Realignment	.0	.0	.0
Operation & Maintence Accounts	.0	.0	.0
Res, Dev, Test & Eval Accounts	.0	.0	.0
Procurement Accounts	.0	.0	.0
DOD Other	.0	.0	.0
b. Orders from NWCF Business Area	60.2	60.1	-7.8
c. Total DoD	67.6	69.6	-7.8
d. Other Orders	3.6	4.3	-.2
Other Federal Agencies	.1	.0	.0
Foreign Military Sales	3.5	4.3	-.2
Non Federal Agencies	.0	.0	.0

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

(NIFRPT)

PAGE 2

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	20.6	15.9	8.0
3. Total Gross Orders	91.8	89.9	.0
4. Funded Carry-Over **	15.9	8.0	.0
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	75.9	81.9	.0
Adjusted Carry-Over	9.1	2.1	na
Adjusted Carry-Over in Months of Workload	1.4	0.3	na

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

CHANGES IN COST OF OPERATIONS  
NAVY/INFORMATION SERVICES/FMSO  
FY 2002 PRESIDENT'S BUDGET

(DOLLARS IN MILLIONS)

1.	FY 2000 Actual	77.157
2.	FY 2001 Estimate in PY President's Budge	79.576
3.	Pricing Adjustments	-0.791
a.	DFAS Support	-0.736
b.	2001 Civilian Pay Adjustment	-0.053
c.	Civilian Awards	-0.002
4.	Program Changes	0.026
a.	Other Contracts	0.026
5.	FY 2001 Current Estimate	78.811

**BUSINESS AREA CAPITAL INVESTMENT**  
**NAVY/INFORMATION SERVICES/FMSO**  
**FY 2002 PRESIDENT'S BUDGET**  
**(\$ in Millions)**

Line Number	Item Description	FY 00		FY 01		FY 02	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	Equipment						
	- Replacement						
	- Productivity						
	- New Mission						
	- Environmental						
	- Compliance						
	ADP & Telecom		0.500		0.500		0.000
	Software Development						
	Minor Construction						
	TOTAL		\$0.500		\$0.500		\$0.000

**NAVY/INFORMATION SERVICES/FMSO  
FY 2002 PRESIDENT'S BUDGET**

(\$ in Thousands)							A. Budget Submission PRESIDENT'S		
B. Component/Business Area/Date Navy/Information Services/FMSO MAY 2001			C. Line No. & Item Description ADP & Telecom				D. Activity Identification		
Element of Cost	FY 00			FY 01			FY 02		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
<b>1. LAN UPGRADE</b>			<b>\$500</b>			<b>\$500</b>			<b>\$0</b>
<b>TOTAL</b>			<b>\$500</b>			<b>\$500</b>			<b>\$0</b>

Narrative Justification:

1. UPGRADE LOCAL AREA NETWORK (LAN): The purpose of this initiative is to upgrade the hardware/software for the FMSO LAN. This project is required to keep FMSO current with technology in order to operate efficiently.

**CAPITAL BUDGET EXECUTION**  
**NAVY/INFORMATION SERVICES/FMSO**  
**FY 2002 PRESIDENT'S BUDGET**

(\$ in Millions)

<u>Title/Description</u>	<u>Original Request</u>	<u>FY 2001 Change</u>	<u>Revised Request</u>	<u>Explanation/Reason for Change</u>
LAN UPGRADE	0.500	0.000	0.500	
Total Capital Investment	0.500	0.000	0.500	

**FY 2002 President's Budget Submission**  
**Navy Working Capital Fund**  
**BASE SUPPORT/Navy Public Works Centers**

**ACTIVITY GROUP FUNCTION:** The Navy Public Works Centers (PWCs) provide utilities services, facilities maintenance, family housing services, transportation support, engineering services and shore facilities planning support required by afloat and ashore operating forces and other activities.

PWCs have a unique Command and Control structure. They operate under the command of the regional commander who serves as Immediate Superior in Command (ISIC), and also under the technical direction of the Naval Facilities Engineering Command as management command.

The PWCs provide base support to military, federal, state and local activities located within ten regional areas. Currently, PWCs provide support and services to Navy, Marine Corps, Army, Air Force, DoD, Coast Guard, National Aeronautics and Space Administration, state, and other federal and nonfederal activities.

The mission of the PWCs is to provide clients with the best public works support and services to meet their diverse needs, thereby becoming the provider of choice.

**ACTIVITY GROUP COMPOSITION:**

<u>ACTIVITY</u>	<u>LOCATION</u>
PWC Great Lakes	Great Lakes, Illinois
PWC Guam	Agana, Guam, Marianas Islands
PWC Jacksonville	Jacksonville, Florida
PWC Norfolk*	Norfolk, Virginia
PWC Pearl Harbor	Pearl Harbor, Hawaii
PWC Pensacola	Pensacola, Florida
PWC San Diego	San Diego, California
PWC Washington	Washington, D.C.
PWC Yokosuka	Yokosuka, Japan

\* PWC Detachment Philadelphia was consolidated with PWC Norfolk effective 1 October 2000.

**TABLE ONE - Financial Profile  
(\$M)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Revenue	1,677.7	1,598.2	1,618.8
Cost of Goods Sold	1,714.4	1,616.0	1,546.2
Net Operating Results	-36.6	-17.8	72.6
Accum. Operating Results	-54.8	-72.6	0

Revenue is on a downward trend between FY 2000 and FY 2001 due primarily to measures being taken to gain efficiencies and lower costs. Measures implemented by the PWCs to gain efficiencies and lower costs include: (1) Commercial Activity (CA) study savings, (2) additional efficiency savings from Business Process Reengineering (BPR) and Functional Assessment (FA) initiatives, (3) Utilities Privatization studies, and (4) Regionalization.

**WORKLOAD CHANGES:**

The PWC Detachment in Philadelphia was consolidated with PWC Norfolk on 1 October 2000. This consolidation will provide economies of scale and reduce Defense Finance and Accounting Services (DFAS) costs.

Workload at PWC Jacksonville decreased beginning in FY 2000 due to the BRAC closure of Cecil Field at the end of FY 1999. Also, Strategic Weapons Facilities Atlantic (SWIFTLANT) Detachment Charleston was disestablished in FY 2000 reducing rail and material handling equipment support requirements.

On 9 April 2000, PWC Guam implemented a regional Base Operating Support (BOS) contract, transitioning from an all in-house government work force to a contracted work force, Raytheon Technical Services Guam (RTSG). The impact to PWC Guam is evidenced in significant workload reductions along with costly personnel actions including Voluntary Early Retirement, Voluntary Separation Incentive, and Reduction-in-Force. PWC Guam will continue to manage six commodities: electricity, water, sewage, steam, equipment rental, and technical services.

**TABLE TWO - Workload**

	<u>MEASURE</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<b>UTILITY SERVICES</b>				
ELECTRICITY	MWH	4,211,455	4,279,398	4,211,855
POTABLE WATER	KGAL	22,475,858	22,385,461	21,246,461
SALT WATER	KGAL	8,013,790	6,929,988	7,343,287
STEAM	MBTU	7,902,843	8,317,599	8,126,919
SEWAGE	KGAL	12,760,665	13,071,112	12,888,555
NATURAL GAS	MBTU	1,433,411	1,941,693	1,928,916
COMPRESSED AIR	KCF	6,551,304	6,700,694	6,866,865
<b>SANITATION SERVICES</b>				
REFUSE COLL & DISPOSAL	CUYD	3,336,927	3,057,584	3,279,827
PEST CONTROL	HOURS	67,075	69,419	62,902
HAZ WASTE I	GAL	381,749	430,826	306,012
HAZ WASTE II***	LBS	12,598,202	63,263,685	10,150,539
INDUST WASTE	KGAL	47,741	41,585	29,119
ENVIRONMENTAL ENG	HOURL	136,258	221,250	222,770
ENVIRONMENTAL LAB	TEST	115,810	143,660	103,868
<b>TRANSPORTATION SERVICES</b>				
EQUIP RENTAL	HOURS	22,923,711	22,380,890	22,251,768
VEHICLE OPS	HOURS	521,285	832,290	785,103
		<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
<b>MAINTENANCE &amp; REPAIR</b>				
SPECIFICS	JOBS	4,943	5,601	5,317
MINORS	ITEMS	16,485	14,444	11,939
EMERGENCY	CHITS	245,818	71,874	81,664
SERVICE	CHITS	190,210	201,270	177,281
RECURRING	ITEMS	247,498	232,311	201,311
VEHICLE MAINTENANCE	SRO	151,538	146,670	142,087
ENGINEERING SUPPORT		126,167	182,234	188,775

\*\*\*HAZ Waste II increased due to addition at PWC Pearl Harbor.

#### **CHANGES FROM THE FY 2001 PRESIDENT'S BUDGET:**

The FY 2001 decrease in cost of \$58.3 million for PWC Guam reflects the financial impact of contract conversion to Raytheon Technical Services Guam.

The California electric utility industry was restructured in 1998, to allow the wholesale price of electricity to float with supply and demand, but held the retail prices capped until stranded assets were paid off by the utilities. San Diego Gas & Electric (SDG&E) paid off their stranded assets in July 1999, while Pacific Gas & Electric (PG&E) and Southern California Edison (SCE) prices remain capped. In June 2000, the price of electricity began climbing to unprecedented levels. As a result, PWC San Diego experienced a significant loss in FY 2000.

In an effort to mitigate the impact of continued price volatility, PWC San Diego in partnership with Naval Facilities Engineering Command Southwest Division entered into a contract through Western Area Power Administration for the procurement of electricity. The contract is for a period of four years beginning 1 April 2001.

#### **COMMERCIAL ACTIVITY STUDIES:**

NAVFACENGCOM continues its leadership position in Navy Strategic Sourcing. A-76 studies are progressing well and the PWCs anticipate announcing a total of 8,579 positions by the end of FY 2003. This constitutes 100% of those planned for study. PWCs have also undertaken aggressive measures through prudent management during the course of studies to reduce the size and cost of organizations earlier than would have been anticipated as a result of A-76 initiatives.

With the DoD-wide requirement to review all utility systems for privatization by the end of FY 2003, the execution of A-76 competitions for utility related positions has been deferred pending the outcome of ongoing privatization analysis. This will not dramatically affect the ability to achieve anticipated cost reductions as Functional Assessment (FA) methods are being employed to develop most efficient utility organizations during the privatization analysis.

#### **COST SAVING EFFICIENCIES:**

To remain competitive and provide products and services at lower costs, the PWCs are actively pursuing ways to cut costs and improve efficiencies. These initiatives include: demand side energy

management projects; regional base operating support contracts; disposal of excess vehicles resulting in maintenance and replacement cost avoidance; non-excess vehicle sales; privatizing a fuel derived from steam plant refuse; savings from A-76 studies and reengineering efforts; reduction in purchased electricity costs; dumpster pick-up process improvements; and electrical and steam distribution re-engineering process improvements.

**RATE CHANGES/UNIT COST:**

**TABLE THREE - Rate Changes**

	<u>FY 2001</u>	<u>FY 2002</u>
East Coast and Great Lakes:		
Utilities and Sanitation	2.4	2.9
Other services	2.2	0.8
Composite	2.3	1.7
West Coast and Pacific		
Utilities and Sanitation	0.3	37.3
Other services	1.2	0.8
Composite	0.9	22.7

**TABLE FOUR - Unit Cost**

	<b>UNIT OF MEASURE</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
<b>UTILITY SERVICES</b>				
ELECTRICITY	MWH	90.37	90.96	87.70
POTABLE WATER	KGAL	3.12	3.24	3.41
SALT/RIVER WATER	KGAL	0.51	0.74	0.71
STEAM	MBTU	15.39	16.16	17.30
SEWAGE	KGAL	4.67	4.70	4.66
NATURAL GAS	MBTU	6.73	7.27	7.01
COMPRESSED AIR	KCF	1.38	1.44	1.45
<b>SANITATION SERVICES</b>				
REFUSE COLL & DISPOSAL	CUYD	4.84	5.99	5.80
PEST CONTROL	HOURS	38.16	42.11	40.43
HAZ WASTE I	GAL	8.47	6.87	8.28
HAZ WASTE II	LBS	.75	0.17	1.01
INDUST WASTE	KGAL	124.19	112.62	145.06
ENVIRONMENTAL ENG	HOUR	77.5	63.40	64.73
ENVIRONMENTAL LAB	TEST	42.88	37.12	55.78
<b>TRANSPORTATION SERVICES</b>				
EQUIP RENTAL	HOURS	2.78	3.26	3.45
VEHICLE OPS	HOURS	71.66	45.30	47.62
<b>MAINTENANCE &amp; REPAIR</b>				

SPECIFICS	JOBS	47,866.62	37,021.56	35,199.86
MINORS	ITEMS	4,967.89	4,634.12	4,863.61
EMERGENCY	CHITS	70.83	221.34	238.25
SERVICE	CHITS	276.02	229.92	225.30
RECURRING	ITEMS	954.17	758.61	801.18
VEHICLE MAINTENANCE	SRO	72.59	85.91	87.64
ENGINEERING SUPPORT	VARIOUS	318.47	250.88	246.77

**PERFORMANCE INDICATORS:**

**EFFICIENCY** - The PWCs have thirty-six established key corporate performance indicators that measure products/services to gauge effectiveness, assist in the management of products/services, assure accountability, and assist in making sound budget and management decisions. Although unit cost remains the primary efficiency measure, the PWCs also track Net Operating Results, Timeliness, Quality and Client Satisfaction. The metrics, goals and definitions are reviewed periodically to ensure that they are appropriate in the rapidly changing public works environment.

**TIMELINESS** - Timeliness indicators are most important in the area of maintenance of real property. PWCs have established common standard definitions and performance targets for emergency, service, minor and specific work. Mechanisms for tracking job completion have been installed at each PWC and are reported quarterly. Significant improvements have been made both in response and completion for all categories of maintenance work. Since FY 1995, emergency work response has improved by 72%, service work turnaround has improved by 45%, minor work turnaround has improved by 62%, and specific work turnaround has improved by 54%. These improvements have resulted in cost savings to PWC clients.

**QUALITY** - Although client satisfaction remains the best indicator of overall value, other indicators have been established which have an immense impact on the productivity of our PWC client base. These indicators include lost time accident rate, and the comparison of business volume to utility and total workyears.

**CLIENT SATISFACTION** - Client Satisfaction is considered to be the most important PWC product/service indicator since cost, quality, quantity and timeliness affect the outcome. PWCs use a standard client survey that is administered annually. PWC business areas are measured using a five-point scale with a goal to increase client satisfaction by a tenth of a percent each year.

**CIVILIAN AND MILITARY PERSONNEL** - PWC civilian manpower is declining in response to CA study results.

**TABLE FIVE - Personnel**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian End Strength	8,715	7,240	6,372
Civilian Work Years	9,181	7,406	6,448
Military End Strength	107	103	104
Military Work Years	107	104	104

**TABLE SIX - Capital Budget Authority  
(\$M)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Equipment-Non ADPE/TELECOM >500K	640	2,221	3,527
Equipment-Non ADPE/TELECOM <500K	6,557	5,004	3,560
ADPE/TELECOM Equip.	836	360	600
Software Development	4,445	4,867	3,838
Minor Construction	<u>5,967</u>	<u>6,130</u>	<u>5,703</u>
Total	18,445	18,582	17,228

**SUMMARY**

The PWCs strive to reduce costs to Fleet and ashore-based naval activities and provide them with the highest quality products and services. To accomplish these goals, the PWCs are partnering with Regional Commanders, conducting A-76 studies, implementing efficiencies through process improvements and reengineering, upgrading information technology systems, and monitoring overall execution through long-established performance measurement metrics. Since FY 1998, the PWC workforce has declined by over 3,000 positions (25%) while increasing its regional responsibilities. With declining budgets and increased missions, PWCs, now operating as Regional Engineers, have developed a strong, cohesive business operation designed to optimize service to their Fleet clients and ashore commands.

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
<b>Revenue:</b>			
Gross Sales			
Operations	1,662.1	1,580.0	1,599.9
Surcharges	.0	.0	.0
Depreciation excluding Major Constructio	15.6	18.2	18.9
Other Income			
Total Income	1,677.7	1,598.2	1,618.8
<b>Expenses</b>			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	8.4	8.4	8.9
Civilian Personnel	505.8	411.0	364.7
Travel and Transportation of Personnel	5.1	4.4	3.2
Material & Supplies (Internal Operations	149.8	149.0	151.4
Equipment	28.0	27.6	29.8
Other Purchases from NWCF	11.1	9.9	9.2
Transportation of Things	8.6	4.0	3.9
Depreciation - Capital	15.6	18.2	18.9
Printing and Reproduction	1.0	1.5	1.5
Advisory and Assistance Services	5.4	4.0	3.6
Rent, Communication & Utilities	401.8	432.3	410.9
Other Purchased Services	569.2	508.3	540.2
Total Expenses	1,709.9	1,578.6	1,546.2
Work in Process Adjustment	4.5	37.4	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0
Cost of Goods Sold	1,714.4	1,616.0	1,546.2
Operating Result	-36.6	-17.8	72.6
Less Surcharges	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	-.8	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	-37.4	-17.8	72.6
Other Changes Affecting AOR	-14.2	.0	.0
Accumulated Operating Result	-54.8	-72.6	.0

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

(NIFRPT)

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	1,574.2	1,604.4	1,606.6
a. Orders from DoD Components	1,201.3	1,281.7	1,259.0
Department of the Navy	1,015.9	1,029.1	979.1
O & M, Navy	882.5	917.7	860.0
O & M, Marine Corps	45.9	43.7	52.2
O & M, Navy Reserve	4.1	5.6	5.7
O & M, Marine Corp Reserve	1.1	1.5	1.6
Aircraft Procurement, Navy	6.2	2.4	2.9
Weapons Procurement, Navy	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	1.3	1.2	1.4
Other Procurement, Navy	8.4	.7	.7
Procurement, Marine Corps	9.9	.0	.0
Family Housing, Navy/MC	39.2	45.3	43.3
Research, Dev., Test, & Eval., Navy	2.8	.0	.0
Military Construction, Navy	1.4	2.7	3.1
Other Navy Appropriations	13.1	8.3	8.1
Other Marine Corps Appropriations	.0	.1	.1
Department of the Army	29.9	30.7	32.5
Army Operation & Maintenance	16.8	22.1	24.1
Army Res, Dev, Test, Eval	.1	.2	.2
Army Procurement	.0	.0	.0
Army Other	12.9	8.5	8.3
Department of the Air Force	29.6	29.2	39.7
Air Force Operation & Maintenance	24.7	25.1	35.6
Air Force Res, Dev, Test, Eval	.0	.0	.0
Air Force Procurement	.0	.0	.0
Air Force Other	4.9	4.2	4.1
DOD Appropriation Accounts	126.0	192.7	207.6
Base Closure & Realignment	3.3	3.7	4.0
Operation & Maintenance Accounts	96.9	75.6	75.4
Res, Dev, Test & Eval Accounts	5.8	21.8	28.7
Procurement Accounts	4.3	6.6	6.7
DOD Other	15.6	85.1	92.9
b. Orders from NWCF Business Area	283.8	241.0	260.9
c. Total DoD	1,485.1	1,522.7	1,519.9
d. Other Orders	89.0	81.7	86.7
Other Federal Agencies	11.3	10.0	10.5
Foreign Military Sales	1.0	.4	.5
Non Federal Agencies	76.7	71.3	75.8

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

(NIFRPT)

PAGE 2

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	469.9	366.3	372.5
3. Total Gross Orders	2,044.0	1,970.7	1,979.1
4. Funded Carry-Over **	366.3	372.5	360.3
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	1,677.7	1,598.2	1,618.8
Adjusted Carry-Over	124.4	167.5	166.5
Adjusted Carry-Over in months	0.8	1.2	1.2

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

**FY 2002 President's Budget  
Navy Working Capital Fund  
Activity Group: Base Support/ PUBLIC WORKS CENTERS**

**Changes in the Costs of Operations  
(\$ in Millions)**

1.	FY 2000 Execution	1,714.4
2.	FY 2001 Estimate in President's Budget:	1,576.6
3.	Estimated Impact in FY 2001 of Actual FY 2000 Experience:	
	Increased purchased electricity cost at PWC San Diego.	40.3
	Reduced labor costs associated with core staffing and reduced operating status at Concord (CASTS).	(5.2)
	Less regionalization workload at PWC San Diego.	(1.1)
	Decreased WIP from FY 99 to FY00 due to aggressive collection actions at PWC San Diego.	(7.0)
	Yen conversion rate change from \$123.45 to \$102.67 at PWC Yokosuka.	12.0
	Increased sales due to regionalization at PWC Yokosuka.	1.8
	Decreased costs at PWC Guam as a result of BOS contract conversion.	(58.3)
	Personnel transition cost at PWC Guam's as result of BOS conversion.	3.5
	Alternative Fuel Vehicles.	3.1
	Increased Maintenance and Repair workload at PWC Norfolk.	24.7
4.	Pricing Adjustments:	
	General Inflation	1.0
	Reduction to Work In Process	27.5
5.	Productivity Initiatives and Other Efficiencies:	
	Increased strategic sourcing cost savings	(8.7)
	Other	(0.9)
6.	Program Changes:	
	Increased Separation Costs at PWC Pearl Harbor	3.6
	Workload reductions at PWC Norfolk.	(3.0)
	Decrease in workload at PWC Great Lakes.	(3.1)
	Increased workload at PWC Washington.	2.5
	Transfer of CNRMA Facilities Program from CINCLANTFLT to PWC Norfolk.	13.3
	National Capital Region Transportation Subsidy for PWC Washington.	0.1
	Reduced CIVPERS costs	(6.7)
7.	FY 2001 Current Estimate:	1,616.0

**FY 2002 President's Budget  
Navy Working Capital Fund  
Activity Group: Base Support/ PUBLIC WORKS CENTERS**

**Changes in the Costs of Operations  
(\$ in Millions)**

7.	FY 2001 Current Estimate:	1,616.0
8.	Pricing Adjustments:	
	Pay Raise:	
	FY 2002 CIVPERS Pay Raise	10.9
	Annualization of FY 2001 Pay Raise	3.0
	Fuel	2.4
	Material and Supplies	2.0
	General Purchases	14.1
	Reduction to Work In Process	(2.6)
	DFAS reduced billing rate	(1.0)
9.	Productivity Initiatives and Other Efficiencies:	
	Strategic Sourcing savings and other	(33.1)
10.	Program Changes:	
	Reduced CIVPERS costs	(12.3)
	Transfer of CNRMA Facilities Program from CINCLANTFLT to PWC Norfolk.	0.5
	Decreased purchased utility costs	(41.0)
	Workload decreases at PWCs Pensacola, Great Lakes and Pearl Harbor.	(16.9)
	Increase Transportation work at PWC Yokosuka due to regionalization.	1.8
	PWC Guam's final cost for the Priority Placement Program.	(2.3)
	PWC Washington additional workload for arrival of NAVSEA at the WNY.	3.8
	CA/MEO implementation cost in the maintenance area at PWC Norfolk.	(5.3)
	Alternative Fuel Vehicles.	4.0
	Increase in major maintenance for water and wastewater at PWC Jacksonville.	2.2
11.	FY 2002 Current Estimate:	1,546.2

**FY 2002 President's Budget Submission**  
**Navy Working Capital Fund**  
**Activity Group: Base Support - PWC**

**Navy Working Capital Fund Capital Investment Summary**  
(Dollars in Thousands)

Line No.	Item Description	FY 2000		FY 2001		FY 2002	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
	<u>Non-ADP Equipment (&gt;\$500K)</u> Replacement (List)						
L01	ECC 8219 Crane Truck MTD 2-Eng Prt	0	0.000	0	0.000	1	0.824
L02	ECC 8249 Crane Truck MTD HYD Ded 51 Ton & Up	1	0.640	3	2.221	1	0.703
L03	ECC 8253 Crane WHL MTD Swing Cab 4 X 4 15 Ton & Up	0	0.000	0	0.000	2	2.000
	Productivity (List)						
	New Mission (List)						
	Environmental Compliance (List)						
	<b>Total Non-ADP Equipment (&gt;\$500K)</b>	<b>1</b>	<b>0.640</b>	<b>3</b>	<b>2.221</b>	<b>4</b>	<b>3.527</b>
L04	<b>Total Non-ADP Equipment (&gt;\$100K&lt;\$500K)</b>	<b>28</b>	<b>6.557</b>	<b>25</b>	<b>5.004</b>	<b>22</b>	<b>3.560</b>
	<b>Grand Total Non-ADP Equipment</b>	<b>29</b>	<b>7.197</b>	<b>28</b>	<b>7.225</b>	<b>26</b>	<b>7.087</b>
	<u>ADP Equipment &amp; Telecommunications (&gt;\$500K)</u> (List)						
	<b>Total ADP Equipment &amp; Telecommunications (&gt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
L05	<b>Total ADP Equipment &amp; Telecommunications (&gt;\$100K&lt;\$500K)</b>	<b>4</b>	<b>0.836</b>	<b>2</b>	<b>0.360</b>	<b>2</b>	<b>0.600</b>
	<b>Grand Total ADP Equipment &amp; Telecommunications</b>	<b>4</b>	<b>0.836</b>	<b>2</b>	<b>0.360</b>	<b>2</b>	<b>0.600</b>
	<u>Software Development (&gt;\$500K)</u> (List)						
L06	DWAS	9	2.575	9	2.943	9	2.650
L07	BIMS	0	0.000	9	0.608	9	0.608
L08	MAXIMO	4	1.869	3	1.316	1	0.200
	<b>Total Software Development (&gt;\$500K)</b>	<b>13</b>	<b>4.445</b>	<b>21</b>	<b>4.867</b>	<b>19</b>	<b>3.458</b>
L09	<b>Total Software Development (&gt;\$100K&lt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>2</b>	<b>0.380</b>
	<b>Grand Total Software Development</b>	<b>13</b>	<b>4.445</b>	<b>21</b>	<b>4.867</b>	<b>21</b>	<b>3.838</b>
L10	<b>Total Minor Construction (&gt;\$100K&lt;\$500K)</b>	<b>23</b>	<b>5.967</b>	<b>23</b>	<b>6.130</b>	<b>18</b>	<b>5.703</b>
	<b>Total Capital Purchase Program</b>	<b>69</b>	<b>18.445</b>	<b>74</b>	<b>18.582</b>	<b>67</b>	<b>17.228</b>

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support			C. L01 ECC 8219 Crane Truck MTD 2-Eng Prt			D. Public Works Centers			
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
<b>Non-ADP Equipment (&gt;\$500K) Replacement</b>	0	0.00	0	0	0.00	0	1	824.00	824
<b>Narrative Justification:</b>									
<p>The cranes are used by PWC Norfolk primarily for waterfront support operations at the Naval Station Norfolk and Naval Amphibious Base at Little Creek. Currently there are 33 cranes in the inventory which is down from 48 in FY 1993. The crane being replaced has an age of 13 years, with a life expectancy of 10 years. To maintain a level of reliability and safety, it needs to be replaced. Maintenance costs will be reduced by 50% if the crane is replaced with a new Navy owned asset. Lease cost for the required cranes with this capacity is over \$7M on an annual basis.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. FY 2002 PRESIDENT'S BUDGET		
B. Department of the Navy/Base Support				C. L02 ECC 8249 Crane Truck MTD HYD Ded 51 Ton & UP.			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Non-ADP Equipment (>\$500K) Replacement	1	640.00	640	3	740.33	2,221	1	703.00	703
<b>Narrative Justification:</b>									
<p>In FY 2001 at PWC Pearl Harbor the crane will replace a 1986 All Terrain 60 Ton Crane. Total downtime hours of 2,393 in only five months, 203 rental hours, and over \$200K in maintenance costs will continue to increase. In FY 2002, the crane will replace a 1987 All Terrain 60 Ton Crane. If not replaced, maintenance costs of over \$100K will continue to increase for this equipment, with longer downtime due to obsolete repair parts as most equipment manufacturers are only required to maintain an inventory of support parts for ten years. In only five months, downtime hours were 3,021. Additional loss of approximately 744 hours of income will be due to excessive downtime hours.</p> <p>The cranes are used by PWC Norfolk primarily for waterfront support operations at the Naval Station Norfolk and Naval Amphibious Base at Little Creek. Currently there are 33 cranes in the inventory which is down from 48 in FY 1993. The crane being replaced has an age of 13 years, with a life expectancy of 10 years. To maintain a level of reliability and safety, it needs to be replaced. Maintenance costs will be reduced by 50% if the crane is replaced with a new Navy owned asset. Lease cost for the required cranes with this capacity is over \$7M on an annual basis.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L03		ECC 8253 Crane WHL MTD Swing Cab 4 X 4 15 Ton & UP.		D. Public Works Centers	
		FY 2000		FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Non-ADP Equipment (>\$500K) Productivity	0	0.00	0	0	0.00	0	2	1000.00	2,000
<b>Narrative Justification:</b>									
<p>This replacement of an overage unit that is very costly to maintain and has high downtime hours. Prior to the procurement, commercial rental units are required at a very high cost to the Fleet. The crane is used on a class "C" rental for NAVSHIPREPFAC and various other Commands at Yokosuka. They are used to load/unload various types of cargo for ashore and afloat commands. Status quo would require commercial rental of 120ton crane to support our customers. Current rental cost for a 120ton crane is \$1,877 per day. PWC customers cannot afford this high cost and will begin seeking other avenues for their crane support. The purchase of this replacement unit is imperative for the continuation of PWC's crane support being provided to Fleet. If this purchase is not approved, PWC Yokosuka will need to do a serious evaluation of their ability to continue performing crane operations. Furthermore, this purchase will enhance the level of safety and current-available technology being provided to the operators of type of this equipment.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L04 Non-ADP Equipment (>\$100K<\$500K)			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Non-ADP Equipment (>\$100K<\$500K)	28	239.00	6,557	25	200.16	5,004	22	161.82	3,560

**Narrative Justification:**

In FY 2001, PWC Jacksonville has a need for ECC 5460 (Platform Maintenance) due to increase use by the USS Kennedy and to replace an overage fuel truck. In FY 2002, they require a crane truck due to the increase use by the fleet at Mayport as a result of regionalization. In FY 2001, PWC Great Lakes will purchase a Flush Truck (ECC 5409) - The new truck will replace a truck purchased in 1990 which has a life expectancy of 6 years. This truck will be used to flush the sanitary system to prevent/fix flow problems/backups. The CESE items at PWC Guam are used by the local NCTS to maintain their antennae and telephone/communications wires. It is part of the rental fleet at PWC Guam in-which Raytheon has no obligation to replace.

\*Non-ADP equipment at PWC Norfolk includes environmental lab equipment, reel handling trucks, fuel tanks, and maintenance platforms. Spectrometer is required for laboratory work on testing water in the Environmental Division. This equipment is replaced on a two year cycle as required. CESE equipment includes reel handling trucks which are used to connect and disconnect ship to shore utilities at the piers for NNSY, Norfolk Naval Station and Little Creek Amphibious Base. Maintenance platforms are used for maintenance of overhead utilities (electricity and steam), facilities repair and maintenance and shipboard maintenance and repair. Fuel trucks and refuse equipment are needed to replace over-aged equipment. Preinvestment analysis shows an average savings of 35% of the maintenance costs over the current overaged equipment. Local lease costs for the equipment, which would be borne by the customer activities, would more than pay for the equipment in two years. This equipment is required by both PWC and customer activities to ensure continued operation of utilities and provide operational readiness. If PWC owned assets are not available, the alternative of leasing equipment locally would be significantly more expensive.

The following equipment is required by PWC Pearl Harbor: Rag Washer - Per Executive Order 12783 and OPNAV 5090.1B, by implementing a rag-washing program, the rags could be recycled, reducing annual costs to the Navy by 25-40%; Crawler/ Crusher: The Crawler/Crusher are part of the Center's ongoing efforts to effectively implement the President Executive Order 12783 with regards to reduction of solid waste disposal; Replace 100 BHP Portable Boiler: Due to on-going energy conservation initiatives, large portions of the distribution piping are being deactivated. Portable boilers are necessary to meet the intermittent demands for service; Crane Carrier Torpedo DED: To replace two Cranes Carrier 15 Ton, and one Crane Carrier 18 Ton. The increased capacity of the new crane will benefit the customer as higher capacity lifts will be performed eliminating the additional costs to rent larger capacity cranes. The new crane will be more versatile, multiple usage, and advanced technology design than these three cranes. This crane can be used for all lifts under its certified maximum capacity. Inception to date, the maintenance costs over \$200K for the three cranes with downtime of 1,729 hours and only 409 rental hours for the first four months of FY98; Tub Grinder: The State of Hawaii Department of Health letter of 19 Apr 95 stated that the present methods of simply drying the sludge and monofilling the dried material in an unlined landfill are inadequate. They followed with a letter dated 4 Jun 96 that the landfill had to be lined and closure plans in place for the operation to continue. A tub grinder is required to co-compost the sludge; High Performance Liquid Chromatograph ; Atomic Absorption Spectrometer/HGA; Liquid Chromatograph/MS: With new EPA regulations, the regulatory threshold for chemical contaminates continues to be reduced and the number of required analyses increased. Per Executive Order 12783 and OPNAV 5090.1B, new, more sensitive analytical equipment are required; Replace 100 BHP Portable Boiler: Replacing Boiler 2306 because it is beyond its service life and unable to provide clean steam because it was fired on potable water while servicing shore facilities.

PWC San Diego's CESE and Industrial Plant Equipment supports customer repair, construction, maintenance, utilities, transportation and environmental requirements. CESE equipment is composed primarily of specialized vehicles such as pole maintenance trucks, platform maintenance trucks, self-propelled vacuum vehicles, reel handling trucks, wreckers and cranes (20-50 ton capacity). IPE consists of specialized equipment used to support the environmental lab, hazardous waste commodity and utilities. These equipment purchases will replace equipment that is overaged or beyond economical repair. This will reduce workload delays and equipment downtime. Replacement will provide safer, more efficient work use, better response time and less maintenance.

Likewise, the CESE purchases at PWC Yokosuka will replace overaged, uneconomical equipment.

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L05 ADP Equipment & Telecommunications (>\$100K<\$500K)			D. Public Works Centers		
FY 2000			FY 2001			FY 2002			
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
ADP Equipment & Telecommunications (>\$100K<\$500K)	4	209.00	836	2	180.00	360	2	300.00	600
<b>Narrative Justification:</b>									
<p>In FY 2002, PWC Great Lakes requires the Network Clustering Station. The existing client server base currently provides access to mission-critical applications, databases, and data files via several multi-functional servers working independent of one another with digital tape back-up as its main source of recovery. It is necessary to replace the current server based methodology by incorporating a clustering technology that will provide a seamless and instantaneous failure "failover" response in the event of catastrophic system loss. The objective is to deploy the most effective enterprise solution that will maximize system integrity and availability, while minimizing system interruptions and downtime.</p> <p>PWC Pearl Harbor requires MAXIMO Phase VII, Field Worker Automation to utilize portable digital assistant computers to automate the assignment, execution, and tracking of MAXIMO work orders.</p> <p>The equipment at PWC San Diego is composed of GEMS 2 analysis servers, and ATM NIPRNET system switch This equipment provides management with the necessary tools to meet their requirements in all areas of business. The GEMS2 is used to model for the utilities systems including life cycle management, what if scenarios, and specifications for repairs. The ADP purchase program incorporates replacement of obsolete equipment within established guidelines. Reduced authority will result in higher unit costs to the customer and reduced response times, especially in the distribution of financial data.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L06 DWAS			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Software Development (>\$500K)	9	286.11	2,575	9	327.00	2,943	9	294.44	2,650
<p><b>Narrative Justification:</b></p> <p>The Defense Working Capital Accounting System (DWAS) is a data entry accounting system that satisfies the Chief Financial Officers' Act by producing a transaction-driven Standard General Ledger. It was intended for low transaction, on line input, but has been modified to accept PWC data through various batch interfaces.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L07 BIMS			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Software Development (>\$500K)	0	0.00	0	9	67.56	608	9	67.56	608
<b>Narrative Justification:</b>									
Business Information Management System (BIMS) is a data storage and retrieval system providing PWC customers and managers with business information.									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L08 MAXIMO			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Software Development (>\$500K)	4	467.25	1,869	3	438.67	1,316	1	200.00	200
<b>Narrative Justification:</b>									
<p>There are a myriad of financial system feeders at the PWCs to support production lines, material, contracts, labor and assets. The PWCs have agreed on a corporate suite of standard systems in order to reduce the total number of diverse feeders, and thereby reduce the support maintenance costs. PWCs are migrating to the standard systems. The largest and most comprehensive of the feeders is MAXIMO, which supports production and material and is compatible with the DWAS.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L09 Software Development (>\$100K<\$500K)			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Software Development (>\$100K<\$500K)	0	0.00	0	0	0.00	0	2	190.00	380
<b>Narrative Justification:</b>									
<p>PWC Pearl Harbor has a need for the Meta Data Repository, Phase II to enhance the Meta Data Repository Browser to handle additional decision support system data and develop automated performance metrics. The Imaging Document Management, Phase II is needed to utilize imaging and electronic document management system to automate workflow of business process.</p>									

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L10 Minor Construction (>\$100K<\$500K)			D. Public Works Centers		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Minor Construction (>\$100K<\$500K)	23	259.43	5,967	23	266.52	6,130	18	316.83	5,703

**Narrative Justification:**

In FY 2001, the construction of new domestic headworks at NAVSTA Mayport is a critical environmental project. New headworks are needed to pre-treat all wastewater from the domestic side of Mayport. The new headworks will remove large solids, grit, and oil from the wastewater. The headworks will be housed inside a building and shall have positive ventilation to eliminate it as an odor source. Odors from the headworks contribute to the odor problems at Bldg. 1966 and is the source of on-going issues concerning worker safety. Since the investigation relating to worker health in Bldg. 1966 is continuing, the amount of health effects directly caused by the headworks is uncertain. In addition, the existing headworks do not function as well as new technology. Only 5% of the total large solids and grit are removed. About one 55 gallon barrel is filled each month. Typical wastewater plants of this size should fill 1-2 small dumpsters per month. These materials pass through the treatment plant and cause clogging of pipes and excessive wear on pumps and treatment equipment. The problem with oil is that oil passes through the plant and is discharged in the plant effluent to the river. A study completed by OMI Inc. in 1999 reported that the odors from the treatment plant headworks are one of the three major treatment plant contributors of odors to neighboring buildings. Alternatives to eliminate odors such as scent blocks, covering open equipment and lime addition to the storage barrels has reduced, but not eliminated the odors because of the nature of the headworks process. The existing headworks could be housed with positive ventilation. However, it is senseless to house headworks that are ineffective in the pre-treatment of wastewater. Odors and ineffective pre-treatment will continue with the existing headworks.

The minor construction projects at PWC Guam are to improve the maintenance and repair of the electrical power distribution system and to replace water distribution lines that are too small to provide sufficient pressure for fire protection.

Minor construction projects include upgrades to the electrical systems owned by PWC Norfolk at various sites, additions and/or modifications to currently occupied buildings, and projects to facilitate consolidation of transportation functions on the Peninsula. Utility projects will upgrade utilities distribution systems on the Naval Air Station, Oceana and at the Norfolk Naval Shipyard. Facility projects will improve the work environment, provide safety and security and increase the effectiveness of our transportation functions.

The following projects are needed at PWC Pearl Harbor in FY 2001: Construct Emergency Generator WW-095; Construct Emergency Generator BI-033; Install SCADA Equipment, Various Lift Stations (for remote monitoring): Emergency power is required for compliance with Public Law 92-500 as amended by Public Law 92-217 and Hawaii State Department of Health Chapter 11-55 in order to prevent raw sewage from overflowing from the Navy's wastewater collection systems during power blackouts; Install New Radial Feeder E-10 & I-1: Providing a dedicated feeder to the substations supplying the submarine berths will increase the reliability and capacity of the electrical supply to some of the fleet's most critical facilities while also increasing the reliability and capacity to the non-critical facilities, decreasing response time to unscheduled outages, and facilitating the scheduling of outages for preventative maintenance; Alteration to Conforming Storage Facility: 40 CFR Part 260-265 requires proper storage and handling of

BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)						A. FY 2002 PRESIDENT'S BUDGET			
B. Department of the Navy/Base Support				C. L10 Minor Construction (>\$100K<\$500K)			D. Public Works Centers		
		FY 2000		FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
Minor Construction (>\$100K<\$500K)	23	259.43	5,967	23	266.52	6,130	18	316.83	5,703

**Narrative Justification:**

hazardous and toxic waste. Alterations to the Conforming Storage Facility are necessary to avoid noncompliance with environmental laws and regulations that could result in fines and penalties; Bldg. 1342 Modifications at Wastewater Treatment Plant at Fort Kamehameha: Since initial construction in 1970, the plant has undergone many upgrades to nearly double the plant size from 7.5 million gallons per day to the current capacity of 13 million gallons per day. Additionally, the National Pollutant Discharge Elimination System (NPDES) permit issued by the State of Hawaii Department of Health (DOH) continues to make the requirements more stringent with each renewed permit. New treatment processes and further DOH testing requirements results in more in-plant lab work for process control. The current lab can no longer support all of the necessary testing due to inadequate space for equipment and tests. Also, staffing has increased through the years and Bldg. 1342 does not have adequate space for personnel, equipment, and files; Bldg. 1618/1356 Modifications at Wastewater Treatment Plant at Fort Kamehameha: To modify the existing adjacent Bldg. 1618 and 1356 into one maintenance facility to support maintenance and repair operations at the plant. Currently, Bldg. 1618 is utilized as a maintenance shop that has inadequate space for equipment, materials, and personnel. The modification includes extending the roof to cover a concrete slab fronting the bldg. to protect materials and equipment from the weather. Bldg. 1356 is a decommissioned disinfection facility that utilized chlorine and sulfur dioxide gases. Bldg. 1356 modifications will include maintenance workshops, office, and expansion of the present restroom facilities to include showers and lockers. Maintenance personnel currently have to share one shower with plant operators in Bldg. 1342 Main Administration Bldg. on the opposite side of the plant. The work leader of the maintenance staff shares a space in Bldg. 1342 and is not in the vicinity of his workers; and Inert Mat'l Reclamation / Recycle Facility (IMRF): To meet Executive Order 12783 and OPNAV 5090.1B, construction and demolition debris currently being disposed of in a landfill must be reutilized. Construction of an IMRF at Barbers Point Naval Air Station will serve this purpose.

In FY 2002, PWC requires the following projects: Construct Emergency Generator FI-044; FI-043; MR-020; FI-045; FI-047; SC-016: Emergency power is required for compliance with Public Law 92-500 as amended by Public Law 92-217 and Hawaii State Department of Health Chapter 11-55 in order to prevent raw sewage from overflowing from the Navy's wastewater collection systems during power blackouts; Construct Oil Recycling Facility: Currently, the recyclable oil that is obtained from ship and shore activities that fails FISC requirements is disposed of through a used oil recycling contractor. The purchase and installation of an oil collection tank facility will eliminate the cost of used oil disposal via this process; and Install Remote Meters, Pearl Harbor (C620): To eliminate the costs of physically reading each meter and to improve the accuracy of our electricity consumption data at the rest of the berths as well as eliminate human error as a source of bad readings.

The minor construction projects at PWC San Diego include projects to construct facilities for the utilities (EMS/DDC, Steam Expansion) that will improve working conditions, increase efficiency and meet safety, environmental compliance standards. Installation of the various EMS/DDC systems will facilitate in meeting the goals as outlined in the Energy Policy Act of 1992 and Executive Order 12902 mandating the reduction of energy

**DEPARTMENT OF THE NAVY**  
**NAVY WORKING CAPITAL FUND**  
**BASE SUPPORT**  
**NAVY PUBLIC WORKS CENTERS**  
**FY 2001 BUDGET ESTIMATE**

**PROJECTS ON THE FY 2002 PRESIDENT'S BUDGET**  
**(Dollars in Millions)**

FY	Approved Project	PRESIDENT'S BUDGET	REPROGS	OSD/OMB PROJ COST	CURRENT PROJ COST	ASSET/ DEFICIENCY
2001	Equipment except ADPE and TELCOM	8.323	0.000	7.225	7.225	0.000
	Equipment - ADPE and TELCOM	0.360	0.000	0.360	0.360	0.000
	Software Development	3.668	0.000	4.867	4.867	0.000
	Minor Construction	5.490	0.000	6.130	6.130	0.000
	<b>TOTAL FY 2001</b>	17.841	0.000	18.582	18.582	0.000

**FY 2002 PRESIDENTS BUDGET  
NAVY WORKING CAPITAL FUND  
BASE SUPPORT/NFESC**

**MISSION**

The Naval Facilities Engineering Service Center (NFESC) is the Navy's Center for specialized facilities engineering and technology. Through engineering, design, construction, consultation, test and evaluation, technology demonstration and implementation, and program management support, NFESC provides solutions to problems. NFESC uses existing technology where we can, identify and adapt breakthrough technology when appropriate, and perform technology development when required. In partnership with our customers, NFESC delivery quality products and services in the areas of Shore, Ocean, and Waterfront Facilities; Environment; Amphibious and Expeditionary Operations; and Energy and Utilities in worldwide support to Navy, Marine Corps, and other DOD Agencies.

**ACTIVITY GROUP FUNCTION AND TECHNICAL CAPABILITIES**

The Naval Facilities Engineering Service Center is the principal Navy provider of specialized engineering services and products for shore and offshore facilities, energy and utilities, environmental support and amphibious and expeditionary systems. The work performed by NFESC is accomplished by mobilizing the proper expertise mix from these technology areas to address customer requirements.

NFESC provides a synergism of its expertise and practical field experience for the solution of field activity and fleet needs. We support a very broad range of Navy and Marine Corps customers and focus on delivering quality products and services to them. Programs are funded by many appropriations, primarily WCF, O&MN, R&D and DoD Appropriated Accounts.

The Shore Facilities area of expertise is responsible for providing innovative engineering solutions, designs, technological tools and field services to best support a viable Naval Shore Establishment. Efforts focus on waterfront facilities, aviation facilities, physical security, ordnance facilities, materials and coatings, computer aided design, facilities life cycle management, base survivability electronics thermal and power plant engineering.

The Energy and Utilities area of expertise is responsible for the Navy's shore Establishment's Energy program. Efforts focus on energy conservation systems, energy data management, energy technology transfer, energy and utilities management, utilities control systems, utility systems engineering, and thermal and power plant engineering.

The Amphibious and Expeditionary area of expertise is responsible for developing and providing support and enhancement of Naval Construction Battalion and Marine Corps advanced base construction and operations, amphibious force operations, and Marine Corps combat engineer operations. Efforts focus on amphibious systems, combat engineer system, expedient facilities, and logistics engineering.

The Environmental area of expertise is responsible for planning, reviewing, and analyzing Navy wide functions, and assembling and deploying customized technology to meet the environmental requirements of the Naval Shore Establishment. Efforts focus on environmental restoration, waste management, environmental compliance, environmental data management, environmental technology transfer, pollution prevention, indoor air management, and oil spill program.

The Ocean facilities department area of expertise is responsible for developing, implementing, and improving the Navy's capabilities for the design, construction, maintenance, and repair of fixed ocean facilities. Efforts focus on marine geotechniques, anchor systems, ocean structures, ocean construction, undersea warfare, underwater cable facilities, hyperbaric facilities, mooring systems, magnetic silencing facilities, underwater inspection, ocean construction equipment inventory, coastal facilities, and pipeline integrity assessment.

**FINANCIAL PROFILE**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
		(\$ Millions)	
Revenue	92.3	74.5	67.6
Cost of Goods Sold	91.0	74.8	68.9
Net Operating Results	1.3	-0.2	-1.3
Accumulated Operating Results (AOR)	1.5	1.3	0

The decline in Revenue and Cost of Goods Sold is consistent with the budgeted decline in direct contractual services associated with the DOD Lock Program and the addition of work on three new programs in FY 2001 and FY 2002. New workload is in the areas of Joint Modular Lighter Systems (JMLS), the Logistics Information Systems (LIS), the Anti-Terrorism Force Protection (ATFP), Un-interruptible Power Supplies (UPS), and the Integrated Undersea Surveillance Program (IUSP). Additionally, NFESC will be the new program center of expertise in Critical Shore Facilities Systems.

**WORKLOAD (Direct Labor Hours)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
		(Thousands)	
Direct Labor Hours	407.9	451.0	469.0

The increase in direct labor hours is associated with the ability to recruit engineers for the Ocean, Amphibious & Expeditionary Department and the Energy Department and the increased direct labor hours associated with the work on new programs that require more organic labor.

**Performance Indicators**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Productivity Ratio	67.5%	74.7%	80.6%

As new programs are added to the NFESC workload and the automation of manual processes continues, coupled with completion of the CA study, indirect work years required to support direct work is projected to decline.

**Stabilized Rates/Unit Cost**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Stabilized Rates	\$74.84	\$73.05	\$67.86
Percent Stabilized Rate Change			-7.1%
Unit Cost	\$76.98	\$73.17	\$70.77

The decline in the stabilized rate and unit cost in FY 2002 is due to increased direct labor hours on new workload, reduced overhead costs, and AOR adjustment.

**Civilian and Military Manpower**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
Civilian End Strength	326	339	325
Civilian Work Years	327	337	325
Military End Strength	3	3	3
Military Work Years	3	3	3

The increase in civilian end strength in FY 2001 results from new programs. The decline in FY 2002 is due to expected CA study results.

**Capital Budget Authority**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
	(\$ Millions)		
Equipment – Non ADPE/TELECOM	.450	.650	.100
ADP/TELECOM		0	0
Software Development	0	0	0
Minor Construction	0	0	0
TOTAL	.450	.650	.100

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

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
Revenue:			
Gross Sales			
Operations	92.0	74.2	67.3
Surcharges	.0	.0	.0
Depreciation excluding Major Constructio	.4	.4	.4
Other Income			
Total Income	92.3	74.5	67.6
Expenses			
Cost of Materiel Sold from Inventory			
Salaries and Wages:			
Military Personnel	.3	.3	.3
Civilian Personnel	27.1	28.8	29.0
Travel and Transportation of Personnel	3.3	3.1	3.2
Material & Supplies (Internal Operations	11.0	4.7	3.8
Equipment	.8	1.2	1.2
Other Purchases from NWCF	3.5	5.7	5.3
Transportation of Things	.5	.2	.2
Depreciation - Capital	.4	.4	.4
Printing and Reproduction	.1	.2	.2
Advisory and Assistance Services	.0	.0	.0
Rent, Communication & Utilities	.6	.6	.6
Other Purchased Sevices	43.6	29.6	24.9
Total Expenses	91.0	74.8	68.9
Work in Process Adjustment	.0	.0	.0
Comp Work for Activity Reten Adjustment	.0	.0	.0
Cost of Goods Sold	91.0	74.8	68.9
Operating Result	1.3	-.2	-1.3
Less Surcharges	.0	.0	.0
Plus Appropriations Affecting NOR/AOR	.0	.0	.0
Other Changes Affecting NOR/AOR	.0	.0	.0
Extraordinary Expenses Unmatched	.0	.0	.0
Net Operating Result	1.3	-.2	-1.3
Other Changes Affecting AOR	.0	.0	.0
Accumulated Operating Result	1.5	1.3	.0

Exhibit Fund-14

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

PAGE 1

	FY 2000 CON	FY 2001 CON	FY 2002 CON
1. New Orders	81.8	71.1	65.2
a. Orders from DoD Components	63.9	54.3	51.9
Department of the Navy	41.4	31.8	30.7
O & M, Navy	14.2	13.5	9.1
O & M, Marine Corps	1.6	2.0	2.8
O & M, Navy Reserve	.0	.0	.0
O & M, Marine Corp Reserve	.0	.0	.0
Aircraft Porcurement, Navy	.3	.4	.3
Weapons Procurement, Navy	.0	.0	.0
Ammunition Procurement, Navy/MC	.0	.0	.0
Shipbuilding & Conversion, Navy	.2	.0	.0
Other Procurement, Navy	1.3	3.4	4.3
Procurement, Marine Corps	.0	.0	.0
Family Housing, Navy/MC	.7	1.3	1.0
Research, Dev., Test, & Eval., Navy	21.8	10.6	12.6
Military Construction, Navy	1.2	.6	.6
Other Navy Appropriations	.2	.0	.0
Other Marine Corps Appropriations	.0	.0	.0
Department of the Army	2.2	1.6	1.8
Army Operation & Maintenance	.9	.6	.8
Army Res, Dev, Test, Eval	.1	.3	.3
Army Procurement	.1	.3	.4
Army Other	1.0	.5	.5
Department of the Air Force	1.1	1.1	1.1
Air Force Operation & Maintenance	.2	.2	.2
Air Force Res, Dev, Test, Eval	.0	.1	.1
Air Force Procurement	.8	.9	.9
Air Force Other	.0	.0	.0
DOD Appropriation Accounts	19.3	19.9	18.3
Base Closure & Realignment	4.8	4.6	4.6
Operation & Maintence Accounts	6.2	6.2	4.8
Res, Dev, Test & Eval Accounts	7.5	8.0	7.8
Procurement Accounts	.0	.0	1.1
DOD Other	.8	1.1	.0
b. Orders from NWCF Business Area	12.7	10.9	8.8
c. Total DoD	76.6	65.2	60.7
d. Other Orders	5.2	5.9	4.5
Other Federal Agencies	4.9	4.5	3.0
Foreign Military Sales	.0	1.1	1.1
Non Federal Agencies	.4	.3	.3

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

	FY 2000 CON	FY 2001 CON	FY 2002 CON
2. Carry-In Orders	39.2	28.6	25.2
3. Total Gross Orders	121.0	99.7	90.4
4. Funded Carry-Over **	28.6	25.2	22.7
5. Less Passthrough	.0	.0	.0
6. Total Gross Sales	92.3	74.5	67.6
Adjusted Carry-Over	2.8	0.1	0.0
Adjusted Carry-Over in months	0.3	0.0	0.0

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

**FY 2002 PRESIDENT'S BUDGET  
NAVY WORKING CAPITAL FUND  
BASE SUPPORT/NFESC**

**CHANGES IN THE COSTS OF OPERATIONS  
(\$ in Millions)**

	<u>Expenses</u>
1. FY 2000 Estimate	<b>91.0</b>
2. FY 2001 Estimate in President's Budget:	32.5
3. Estimated Impact in FY 2001 of actual FY 2000 experience:	
Increase in civilian pay raise	1.1
Engineering vacancies filled	1.2
Increase in Direct Materials	1.5
Increase in Direct Travel	1.0
Increase in Direct Contracts	15.0
Other	0.6
4. Program Changes:	
New program Joint Modular Light System (JMLS) labor	1.2
New program Logistics Information System (LIS) labor	0.2
New program Undersea Surveillance Program labor	0.3
Increase in Direct Materials new program	2.8
Increase in Direct Travel new program	1.4
Increase in Direct Contracts new program	15.5
Increase in Production overhead due to increased workload	0.6
Decrease in G&A personnel due Productivity Initiatives	-0.1
5. FY 2001 Current Estimate:	<b>74.8</b>
6. Pricing Adjustments:	
Pay Raise:	
FY 2002 CIVPERS pay raise	0.9
Annualization of FY 2001 Pay Raise	0.3
Fuel	
Material & Supplies	0.1
General Purchase Inflation	0.5
7. Productivity Initiatives and other efficiencies:	
Strategic Sourcing Savings	-2.8
8. Program Changes:	
Continuation of New Program Undersea Surveillance Program labor	0.1
New program growth Anti-terrorism Force Protection (ATFP) labor	0.2
New program growth Uninterruptable Power Supplies (UPS) for Shore Facilities labor	0.2
New program Center of Expertise in Critical Shore Facilities Systems labor	0.5
Decrease workload	-4.9
Other	-0.5
Decrease in DFAS support	-0.5
9. FY 2002 Current Estimate:	<b>68.9</b>

**FY 2002 President's Budget  
Navy Working Capital Fund  
Activity Group: Base Support/NFESC**

(Dollars in Millions)

Line No.	Item Description	FY 2000		FY 2001		FY 2002	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
L01	<u>Non-ADP Equipment (&gt;\$500K)</u> Replacement (List)						
	Productivity (List)						
	New Mission (List)						
	Environmental Compliance (List)						
	<b>Total Non-ADP Equipment (&gt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
<b>Total Non-ADP Equipment (&gt;\$100K&lt;\$500K)</b>	<b>1</b>	<b>0.450</b>	<b>2</b>	<b>0.650</b>	<b>1</b>	<b>0.100</b>	
	<b>Grand Total Non-ADP Equipment</b>	<b>1</b>	<b>0.450</b>	<b>2</b>	<b>0.650</b>	<b>1</b>	<b>0.100</b>
L02	<u>ADP Equipment &amp; Telecommunications (&gt;\$500K)</u> (List)	0	0.000	0	0.000	0	0.000
		0	0.000	0	0.000	0	0.000
	<b>Total ADP Equipment &amp; Telecommunications (&gt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
	<b>Total ADP Equipment &amp; Telecommunications (&gt;\$100K&lt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
	<b>Grand Total ADP Equipment &amp; Telecommunications</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
	<u>Software Development (&gt;\$500K)</u> (List)	0	0.000	0	0.000	0	0.000
		0	0.000	0	0.000	0	0.000
	<b>Total Software Development (&gt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
	<b>Total Software Development (&gt;\$100K&lt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
	<b>Grand Total Software Development</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>
<b>Total Minor Construction (&gt;\$100K&lt;\$500K)</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	<b>0</b>	<b>0.000</b>	
<b>Total Capital Purchase Program</b>	<b>1</b>	<b>0.450</b>	<b>2</b>	<b>0.650</b>	<b>1</b>	<b>0.100</b>	

**BUSINESS AREA CAPITAL INVESTMENT JUSTIFICATION**  
(\$ in Thousands)

A. FY2002 PRESIDENT'S BUDGET

<b>B. Department of the Navy/Base Support</b>				<b>C. L01 Non-ADP Equipment (&gt;\$100K&lt;\$500K)</b>			<b>D. NFESC</b>		
	<b>FY 2000</b>			<b>FY 2001</b>			<b>FY 2002</b>		
<b>Element of Cost</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>
<b>Non-ADP Equipment (&gt;\$100K&lt;\$500K)</b>	1	450.00	450	2	325.00	650	1	100.00	100

**Narrative Justification:**

The Naval Facilities Engineering Service Center (NFESC) plans to purchase a Seafloor Geotechnical Survey and Analysis System, Deck Hardware (Double Drum Winch/Capstans) and Dynamic Load System For AWTTs. This equipment is essential to eliminate uneconomical repairs to support RDT&E and engineering support services to include high technology components for precision machinery, instrumentation and measurement on site and in the field. Equipment purchases will support environmental quality, energy efficiency, ocean construction, electronic projects and facilities life management products and services.

**FY 2002 President's Budget**  
**Navy Working Capital Fund**  
**Activity Group: Base Support/NFESC**

**PROJECTS ON THE FY 2001 PRESIDENT'S BUDGET**  
**(Dollars in Millions)**

FY	Approved Project	PRESIDENT'S BUDGET	REPROGS	APPROVED PROJ COST	CURRENT PROJ COST	ASSET/ DEFICIENCY
2001	Equipment except ADPE and TELCOM	0.650	0.000	0.650	0.650	0.000
	Equipment - ADPE and TELCOM	0.000	0.000	0.000	0.000	0.000
	Software Development	0.000	0.000	0.000	0.000	0.000
	Minor Construction	0.000	0.000	0.000	0.000	0.000
	<b>TOTAL FY 2001</b>	0.650	0.000	0.650	0.650	0.000
	<b>Equipment</b>					
	<b>Total Equipment</b>				<b>0</b>	<b>0</b>
	<b>ADP</b>					
	<b>Total ADP</b>				<b>0</b>	<b>0</b>
	<b>Software</b>					
	<b>Total Software</b>				<b>0</b>	<b>0</b>
	<b>Minor Construction</b>					
	<b>Total Minor Construction</b>				<b>0</b>	<b>0</b>
	<b>Grand Total</b>				<b>0</b>	<b>0</b>

**DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
ACTIVITY GROUP: SUPPLY MANAGEMENT – NAVY  
FY 2002 PRESIDENT’S BUDGET**

**Activity Group Functions:**

The Supply Management Activity Group performs inventory management functions that result in the sale of aviation and shipboard components, fuel, ships store stock, and general use consumables 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, other government agencies, and foreign governments. All costs related to supplying this material to the customer are recouped through stabilized prices which include cost recovery elements to cover costs such as inventory management, receipt and issue of Department managed material and Department owned retail material at distribution depots, and the depreciation of capital assets.

**Activity Group Composition:**

Operations costs for the following activities are funded in this Activity Group:  
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, JP  
Fitting Out and Supply Support Assistance Center, Norfolk, VA  
Fleet Material Support Office, Mechanicsburg, PA\*  
\* beginning FY 2002

**Executive Summary / Significant Changes in Activity Group:**

This Budget Submission is a balance of requirements, cash, cost recovery, and NOR. Additionally, it incorporates the results of the Inventory Control Point’s review of its requirements model.

**Budget Overview:**

Wholesale Material: Prior to this submission, the Naval Inventory Control Point initiated a zero based requirements review that validated both variable and fixed allowance requirements. Having accomplished this, the requirements put forth in this submission are necessary for ensuring the warfighting's anticipated needs are satisfied accordingly.

Of interest, this submission addresses the demands of aging aircraft and ship components. Often referred to as "tired iron" concerns, the Department, and in particular, the aviation community is finding more and more instances of shortened life spans of critical components. This submission reflects the recent emphasis placed on Naval readiness as noted in the Navy IG report on Naval Aviation as well as the salient points brought forth by the Navy's Aviation Maintenance Supply Readiness (AMSR) study.

Additionally, this budget submission reflects a significant requirement associated with new systems and reintroduces the Inventory Augmentation concept developed and employed during the force-building era of the 1980's.

The primary purpose of the augmentation is to procure wholesale inventory in time to support new program readiness while not creating a Cost Recovery Rate (CRR) burden or negative impact to NWCF cash balances. The augmentation clearly identifies and specifically funds the wholesale stock associated with new weapon systems. Furthermore, it supports the direction upon which the 1980's concept was developed--the Total Ownership Cost (TOC) doctrine of full cost visibility.

#### Retail Program:

This budget submission ensures sufficient retail resources are available to support both deployed and non-deployed readiness goals with regard to consumable requirements. It should be noted that the impact the retail unit cost has on the wholesale CRR is not taken lightly. The Department continues to investigate all avenues of minimizing this cost. Alternative logistics solutions are incorporated where practical and substantiated by business case analyses. However, as those segments continue to be eliminated, the composition of the retail accounts continue to shift towards slower moving, insurance based stock. This will require a continual investment stream until an alternative is found that positions DLA owned stocks near the Department's customer base, both afloat and ashore.

#### Operations:

The BP-91 historical composition of the operations budget reflects an overall decline across this budget horizon. However, several issues combine to mask the overall trend. The following are just a few:

- an increase to the Enterprise Resourcing Planning (ERP) project, recently termed "Supply Maintenance Aviation Reengineering Team" (SMART),
- a transfer of the FMSO activity group into the Supply Management business area,
- a transfer of three transportation issues from material costs to operations.

Additionally, the Navy Supply Management business area is participating in the implementation of the Navy Marine Corps Intranet (NMCI). The NMCI is a strategic IT

capability the DoN will use to meet the challenges of executing our warfare doctrine in support of Joint Vision 2010. NMCI will replace numerous shore-based networks and equip them with access, interoperability, and security for information and communications provided via voice, video and data services to all Navy and Marine Corps personnel.

FY02 Annual Price Change (APC): This submission reflects a reduction in prices to the warfighting customer. This is primarily a result of garnering the benefits associated with a healthy cash position. The composite APC for FY 2002 is -4.7 percent with an overall cost recovery rate (CRR) of 15.5 percent.

#### Performance Indicators

	FY2000	FY 2001	FY2002
Items Managed	311,368	313,000	314,000
Receipts	1,025,850	1,030,000	1,035,000
Issues	1,138,377	1,100,000	1,050,000
Requisitions Received	588,355	593,000	595,000
Contracts Executed	26,759	27,500	26,500
Supply Material Availability	81.1%	81.1%	82.0%
Purchase Inflation	1.0%	1.5%	1.5%
Customer Rate Changes	-4.3%	16.1%	-4.7%
Composite Cost Recovery Rate	12.3%	24.2%	15.5%
Cost of Material Sold (\$M)	2906.3	2589.2	3147.7

#### Financial Profile:

(Dollars in Millions)	FY 2000	FY 2001	FY 2002
Revenue	5,148.2	5,593.9	5,486.4
Expenses	5,301.0	5,686.5	5,819.0
Operating Result	-152.8	-92.6	-332.6
Capital Surcharge		19.0	12.2
Other Changes Affecting NOR	11.5	20.0	349.4
Net Operating Result	-141.3	-91.6	4.6
Other Changes Affecting AOR	346.3	54.5	0.0
Accumulated Operating Result	32.5	-4.6	0.0

#### Discussion of Changes:

Revenue: Corporate revenue increases in FY 2001 prodominantly due to increasing fuel prices. In FY 2002, the revenue decline incorporates the Department's desire to return \$349.4M (the benefit of Navy's healthy cash position) to the customer.

Expenses: Corporate expenses increase in FY 2001 and stay relatively steady in FY 2002. In FY 2001, the increase is a result of increasing fuel prices. FY 2002 is the first year the fuel operations are being turned over to DESC, however COGS, based on wholesale sales, is offsetting the decrease in FY 2002.

Other Changes Affecting NOR: In FY 2000, an adjustment of \$11.5M is included to preclude recovery in FY 2002 pricing for BP38 obligations associated with the Presidential Draw-Down in support of Columbian Anti-Narcotics operations. In FY 2002 the \$349.4M cash rebate is reflected.

Obligation Authority:

(Dollars in Millions)	FY 2000	FY 2001	FY 2002
Wholesale	2770.1	2970.4	2962.6
Retail	1433.1	1976.1	1641.2
Operating	1160.1	1168.4	1318.3
Total	5363.3	6114.9	5922.1

Discussion of Changes:

Wholesale: As discussed earlier, the growth in wholesale requirements represents the need to procure inventory related to aging weapon systems and new system introductions.

Retail: Retail obligation authority is adjusted significantly upward from FY 2000. The principal driver for this increase is rising fuel prices, which increases obligation requirements by \$495.9M in BP38. The remaining increase is associated with BP28 (consumable) range additions necessary to support readiness objectives. In FY2002, the Retail obligation authority requested decreases considerably from the previous year. Obligations for BP38 decrease by \$337.9 due to a one percent decline in fuel prices and the continuing fuel transition to DESC. This reduction is slightly offset by a small increase in BP28 obligations.

Workload:

<b>Gross Sales</b> (Dollars in Millions)	FY 2000	FY 2001	FY 2002
Wholesale	3553.2	3491.60	3636.9
Retail	1424.6	1963.3	1653.7
Total	4977.8	5454.9	5290.6

Discussion of Changes:

Wholesale:

While the FY 2001 sales base reflects a \$61.6M decline from FY 2000, it should be noted that this trend, when normalized for several planned and unplanned occurrences, is relatively constant. Instances that account for the high FY2000 sales base include the Kosovo supplemental as well as the Aviation Outfitting and NWCF conversion from end-use. The increase in FY2002 sales reflects the Department's continued commitment of improving overall Navy readiness.

Retail:

The increase in FY 2001 Retail sales is primarily attributed to the rise in fuel (BP38) prices. The FY 2002 decrease reflects a downturn in fuel prices and the loss of ashore sales due to the transition of fuel to DESC.

Staffing:

	FY 2000	FY 2001	FY 2002
Civilian End Strength	5634	5463	5893
Civilian Work Years	5690	5454	5884
Military End Strength	447	405	430
Military Work Years	462	426	427

Discussion of Changes:

Civilian Personnel: The reduction in FY 2001 is attributed to higher than expected personnel actions (SIP/VERAs) and attrition. The increase in FY 2002 represents the Department's realignment of FMSO into the Supply Management Business Area. A portion of the FY 2002 increase is offset by strategic sourcing initiatives.

Military Personnel: Military end strength decreases by 42 from FY 2000 to FY 2001 due to DLA Physical Distribution transfer. The change from FY 2001 to FY 2002 reflects FMSO military end strength included in the Supply Management business area.

Unit Cost:

	FY2000	FY2001	FY2002
Wholesale	.999	1.064	1.036
Retail	1.015	1.020	1.007

Headquarters Cost:

(Dollars in Millions)	FY 2000	FY 2001	FY 2002
Cost of Management	4.691	4.766	4.842

Capital Budget Authority:

(Dollars in Millions)	FY 2000	FY 2001	FY2002
Equipment Non-ADPE/Telecom	0.850	2.457	2.915
ADPE/Telecom Equipment	2.826	1.940	3.925
Software Development	35.900	42.348	49.200
Minor Construction	1.000	1.900	1.976
Total	40.576	48.645	58.016

Discussion of Changes:

Capital Budget Authority (CPP):

CPP authority in the Supply Management Activity Group reflects an overall net decrease in FY 2001 below the President's Budget by \$4.512M. This change in FY 2001 is driven by: elimination of the AIT requirement from ADPE Equipment as this program moves to appropriated funding; CDA work year adjustments to support UADPS –ICP/SP; discontinuation of the Software Services and the Distribution Standard System efforts; and reductions in the Total Asset Visibility and Residual Asset Management programs. These decreases were marginally offset by small increases in the Commercial Asset Visibility and Paper Free Initiative efforts.

FY 2002 reflects program development completion in the Total Asset Visibility effort, plus decreases in Residual Asset Management, Inform-21 and Paper-Free Initiatives programs to a steady state level. These decreases are offset by minor increases in Non-ADPE Equipment and Base Level Computing efforts. These adjustments drive an overall decrease in the FY 2002 requirement below the FY 2001 requirement of \$5.629M exclusive of all Enterprise Resource Planning efforts described below.

Enterprise Resource Planning (ERP):

The funding profile for ERP shows an increase of \$15M between FY 2001 and FY 2002 (FY 2001 \$19M FY 2002 \$34M). The Aviation Supply Chain/Maintenance Management (AvSCM/MM) ERP Pilot, SMART, effort has completed Phase 0 and Phase I. A Business Case Analysis has been completed and an ERP vendor has been selected. This pilot effort will demonstrate the feasibility and applicability of ERP programs within the Department's aviation supply chain and maintenance areas. NAVSUP has the lead in the pilot. Initial plans are to procure hardware and software licenses for NAVSUP with a team of contractors and government employees implementing the ERP pilot.

Improving the efficiency/effectiveness of the Department's logistics chain is dependent upon replacement of legacy ADP systems. ERP is envisioned as a means to transition from the current, inventory based, constant-flow system to a velocity-based, variable-flow system using more efficient programming, scheduling and repair processes; total asset visibility technologies; and integrated logistics information and decision support tools.

## Economies and Efficiencies

### Competition and Outsourcing:

Beginning in FY 2000, the budget reflects benefits associated with Navy's commitment to maximize the use of competitively sourced, long term, total life-cycle logistics support for both new and legacy systems. Navy sponsored A-76 outsourcing initiatives are focusing on utilizing best commercial practices and eliminating large-scale duplication with industry. Similarly, Direct Vendor Delivery initiatives capitalize on commercial material management expertise and include material requirements determination, expediting, transportation and warehousing.

### Budget Initiative Breakout:

In FY 2001/2002, the budget continues to reflect methodology applied in previous years for recovering costs associated with transportation, depot washout and obsolescence. In addition, costs associated with LECP management and Performance Based Logistics (PBL) testing are now included. These costs, which are directly associated with material, are now being recovered through the material cost of goods. The breakout for FY 2001/2002, as recovered through pricing, is as follows:

Transportation (\$M)	FY 2001	FY 2002
BP 14	5.0	6.0
BP 34	7.0	11.3
BP 81P	17.1	9.0
BP 81R	11.9	10.6
BP 85P	27.7	39.5
BP 85R	64.0	64.6
Total	132.7	141.1

FY 2001	Obsolescence	Depot Washout
BP 14	1.0	
BP 34	20.8	
BP 81P	5.4	
BP 81R		12.3
BP 85P	10.3	
BP 85R		156.7
Total	37.5	169.0

FY 2002	Obsolescence	Depot Washout	LECP NRE	PBL TESTING
BP 14	1.0			
BP 34	20.8			6.6
BP 81P	5.4			
BP 81R		13.1	1.0	
BP 85P	10.3			
BP 85R		215.8	8.3	2.6
Total	37.5	229.0	9.3	9.2

In conclusion, this budget submission presents a solid cornerstone to a well thought out plan that enables NWCF-SM to step up and meet the Department's readiness requirements over the budget horizon.

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
REVENUE AND EXPENSE SUMMARY  
FY2002 PRESIDENT'S BUDGET SUBMISSION  
(Dollars in Millions)**

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY2002</u>
<b>REVENUE:</b>			
Net Sales			
Operations	4813.0	5274.1	5107.2
Capital Surcharge	0.0	19.0	12.2
Depreciation except Maj Const	31.5	34.2	45.8
Major Construction Dep	0.0	0.0	0.0
Other Income	303.7	266.6	321.2
Refunds/Discounts (-)			
Total Income:	5148.2	5593.9	5486.4
<b>EXPENSES:</b>			
Cost of Materiel Sold from Inventory	4443.0	4680.1	4687.9
Salaries and Wages:			
Military Personnel	22.4	22.0	26.5
Civilian Personnel	303.7	298.1	356.8
Travel & Transportation of Personnel	10.7	12.1	12.6
Materials & Supplies	30.5	29.6	60.2
Equipment	15.0	12.5	17.3
Other Purchases from Revolving Funds	273.6	320.8	364.8
Transportation of Things	0.0	0.0	0.0
Depreciation - Capital	31.5	34.2	45.8
Printing and Reproduction	0.0	0.0	0.2
Advisory and Assistance Services	42.8	38.6	39.2
Rent, Communication, Utilities & Misc	18.2	17.6	18.0
Other Purchased Services	33.6	105.5	83.8
Inventory Gains and Losses	76.0	115.4	105.9
<b>TOTAL EXPENSES</b>	<b>5301.0</b>	<b>5686.5</b>	<b>5819.0</b>
Operating Result	-152.8	-92.6	-332.6
Less Capital Surcharge reservation	0.0	19.0	12.2
Plus Appro Affecting NOR/AOR	0.0	0.0	0.0
Other Changes Affecting NOR	11.5	20.0	349.4
Net Operating Result	-141.3	-91.6	4.6
Other Changes Affecting AOR	346.3	54.5	
<b>Accumulated Operating Result</b>	<b>32.5</b>	<b>-4.6</b>	<b>0.0</b>

**NAVY WORKING CAPITAL FUND**  
**Supply Management Activity Group**  
**SOURCES OF REVENUE**  
**FY2002 PRESIDENT'S BUDGET SUBMISSION**  
(\$ in millions)

FUND 11  
JUNE 2001

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
1a. Orders from DoD Components:			
Own Component			
1105 Military Personnel, M.C.	0.6	0.7	0.7
1106 O&M Marine Corps	12.8	15.4	14.3
1108 Reserve Personnel, M.C.	0.0	0.0	0.0
1109 Procurement, M.C.	3.9	4.8	4.4
1319 RDT & E, Navy	1.0	1.2	1.1
1405 Reserve Personnel, Navy	0.0	0.0	0.0
1453 Military Personnel, Navy	28.2	33.9	31.5
1506 Aircraft Procurement, Navy	515.8	414.4	624.7
1711 Shipbuilding & Conv. Navy	28.6	25.5	38.2
1804 O&M, Navy	3,092.9	3,945.2	3,456.1
1806 O&M, Navy Reserve	156.8	200.0	175.3
1810 Other Procurement, Navy	78.7	45.5	37.0
4930 Navy Working Capital Fund	458.6	585.0	512.4
	4,378.0	5,271.7	4,895.7
Orders from other DoD Components			
2100 Army	15.7	19.0	17.6
5700 Air Force	116.9	140.7	130.7
9700 Other DoD	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>
	132.8	159.9	148.5
b. Orders from other Fund Business Areas:			
Distribution Depots, Navy			
Logistics Support, Navy	0.0	0.0	0.0
c. Total DoD	4,510.8	5,431.7	5,044.3
d. Other Orders:			
Other Federal Agencies	16.7	20.1	18.6
Trust Fund	0.0	0.0	0.0
Non-Federal Agencies	0.0	0.0	0.0
Foreign Military Sales (FMS)	<u>112.5</u>	<u>135.4</u>	<u>125.8</u>
	129.2	155.5	144.4
2. Carry-In Orders	1,280.9	943.1	1,075.4
3. Total Gross Orders	5,920.9	6,530.3	6,264.1
4. Change to Backlog	943.1	1,075.4	973.5
5. Total Gross Sales*	4,977.8	5,454.9	5,290.6
Reimbursable Orders (BP 91)	303.7	266.6	321.2

\*Revenue and Expense Statement reflects Net Sales

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
FUEL DATA  
FY 2002 PRESIDENT'S BUDGET SUBMIT**

**Fund 15  
JUN 2001**

<b>FY00 Product</b>	<b>Procured from DFSC</b>			<b>Procured Locally</b>		
	Barrels	U/P	Ext Cost	Barrels	U/P	Ext Cost
JP5	13.773	\$26.46	\$364.4	0.000	\$21.36	\$0.0
JP8	2.371	\$26.04	\$61.7	0.000	\$19.22	\$0.0
AVGAS	0.001	\$102.06	\$0.1	0.000	\$55.28	\$0.0
Distillates (DFM)	10.873	\$25.20	\$274.0	0.000	\$21.15	\$0.0
MOGAS Leaded	0.026	\$34.02	\$0.9	0.000	\$28.32	\$0.0
MOGAS Unleaded	0.511	\$28.56	\$14.6	0.020	\$21.57	\$0.4
Residual ( Heat, oil)	1.075	\$15.96	\$17.2	0.053	\$9.75	\$0.5
Lube Oil	0.000	\$71.71	\$0.0	0.000	\$76.41	\$0.0
Reclaimed	0.014	\$15.54	\$0.2	0.000	\$15.17	\$0.0
<b>TOTAL</b>	<b>28.644</b>		<b>\$733.1</b>	<b>0.073</b>		<b>\$0.9</b>

**Total Obligations**

**\$734.0**

<b>FY01 Product</b>	<b>Procured from DFSC</b>			<b>Procured Locally</b>		
	Barrels	U/P	Ext Cost	Barrels	U/P	Ext Cost
JP5	14.113	\$43.26	\$610.5	0.000	\$24.55	\$0.0
JP8	2.438	\$42.42	\$103.4	0.000	\$22.09	\$0.0
AVGAS	0.001	\$157.92	\$0.2	0.000	\$63.51	\$0.0
Distillates (DFM)	11.155	\$41.16	\$459.1	0.000	\$24.31	\$0.0
MOGAS Leaded	0.028	\$53.34	\$1.5	0.000	\$32.54	\$0.0
MOGAS Unleaded	0.535	\$45.78	\$24.5	0.030	\$24.78	\$0.7
Residual (Heating Oil)	1.054	\$27.30	\$28.8	0.077	\$11.21	\$0.9
Lube Oil	0.000	\$83.70	\$0.0	0.000	\$87.79	\$0.0
Reclaimed	0.025	\$14.70	\$0.3	0.000	\$17.43	\$0.0
<b>TOTAL</b>	<b>29.349</b>		<b>\$1,228.3</b>	<b>0.107</b>		<b>\$1.6</b>

**Total Obligations**

**\$1,229.9**

<b>FY02 Product</b>	<b>Procured from DFSC</b>			<b>Procured Locally</b>		
	Barrels	U/P	Ext Cost	Barrels	U/P	Ext Cost
JP5	10.336	\$42.84	\$442.9	0.000	\$25.33	\$0.0
JP8	1.786	\$42.00	\$75.0	0.000	\$22.79	\$0.0
AVGAS	0.000	\$194.46	\$0.1	0.000	\$65.52	\$0.0
Distillates (DFM)	8.259	\$40.32	\$333.0	0.000	\$25.08	\$0.0
MOGAS Leaded	0.022	\$49.14	\$1.1	0.000	\$33.57	\$0.0
MOGAS Unleaded	0.333	\$52.92	\$17.7	0.021	\$25.56	\$0.5
Residual (Heating Oil)	0.706	\$29.40	\$20.8	0.054	\$11.56	\$0.6
Lube Oil	0.000	\$71.23	\$0.0	0.000	\$90.56	\$0.0
Reclaimed	0.021	\$12.51	\$0.3	0.000	\$17.98	\$0.0
<b>TOTAL</b>	<b>21.464</b>		<b>\$890.9</b>	<b>0.075</b>		<b>\$1.1</b>

**Total Obligations**

**\$892.0**

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP - NAVY**  
**SUPPLY MANAGEMENT SUMMARY- FY00**

**SM 1**  
 May 2001

**FY 2002 PRESIDENT'S BUDGET**

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATIONS	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	AUGMENT				
<b>BP 14</b>										
Approved	808.6	119.7	119.7	106.5	0.0	0.0	106.5	8.4	114.9	4.4
Request	839.0	118.5	118.9	101.9	0.0	0.0	101.9	8.4	110.3	1.5
Delta	30.4	(1.2)	(0.8)	(4.6)	0.0	0.0	(4.6)	0.0	(4.6)	(2.9)
<b>BP 15</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	0.0	0.6	0.6	(0.2)	0.0	0.0	(0.2)	0.0	(0.2)	0.0
Delta	0.0	0.6	0.6	(0.2)	0.0	0.0	(0.2)	0.0	(0.2)	0.0
<b>BP 21</b>										
Approved	20.8	85.3	85.3	85.3	0.0	0.0	85.3	6.5	91.8	0.0
Request	16.9	82.3	90.4	82.3	0.0	0.0	82.3	6.5	88.8	0.0
Delta	(3.9)	(3.0)	5.1	(3.0)	0.0	0.0	(3.0)	0.0	(3.0)	0.0
<b>BP 23</b>										
Approved	29.0	21.8	21.8	0.3	0.0	0.0	0.3	0.0	0.3	0.0
Request	21.8	12.7	12.7	(6.7)	0.0	0.0	(6.7)	0.0	(6.7)	0.0
Delta	(7.2)	(9.1)	(9.1)	(7.0)	0.0	0.0	(7.0)	0.0	(7.0)	0.0
<b>BP 25</b>										
Approved	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	0.0
Request	0.0	0.0	(4.8)	0.4	0.0	0.0	0.4	0.1	0.5	0.0
Delta	0.0	0.0	(5.8)	(0.6)	0.0	0.0	(0.6)	0.0	(0.6)	0.0
<b>BP 28</b>										
Approved	1,396.3	635.2	635.2	625.0	0.0	0.0	625.0	50.8	675.8	21.3
Request	1,378.2	600.0	600.0	623.3	0.0	0.0	623.3	48.0	671.3	11.7
Delta	(18.1)	(35.2)	(35.2)	(1.7)	0.0	0.0	(1.7)	(2.8)	(4.5)	(9.6)
<b>BP 34</b>										
Approved	406.5	248.6	255.7	221.8	0.0	0.0	221.8	50.8	272.6	4.2
Request	391.9	282.4	280.0	293.8	0.0	0.0	293.8	19.9	313.7	2.2
Delta	(14.6)	33.8	24.3	72.0	0.0	0.0	72.0	(30.9)	41.1	(2.0)
<b>BP 38</b>										
Approved	172.0	818.7	818.7	822.6	0.0	0.0	822.6	207.8	1,030.4	2.7
Request	236.5	712.9	712.9	734.0	0.0	0.0	734.0	207.8	941.8	1.1
Delta	64.5	(105.8)	(105.8)	(88.6)	0.0	0.0	(88.6)	0.0	(88.6)	(1.6)
<b>BP 81</b>										
Approved	5,205.2	422.5	422.5	333.9	0.0	0.0	333.9	38.5	372.4	42.1
Request	5,351.8	423.5	422.3	342.0	0.0	0.0	342.0	38.5	380.5	30.2
Delta	146.6	1.0	(0.2)	8.1	0.0	0.0	8.1	0.0	8.1	(11.9)
<b>BP85</b>										
Approved	22,278.3	2,026.9	2,200.5	1,859.8	0.0	0.0	1,859.8	332.9	2,192.7	79.6
Request	23,727.8	2,264.1	2,611.5	2,032.4	0.0	0.0	2,032.4	333.0	2,365.4	86.6
Delta	1,449.5	237.2	411.0	172.6	0.0	0.0	172.6	0.1	172.7	7.0
<b>BP 91</b>										
Approved	0.0	0.0	0.0	1,152.6	0.0	0.0	1,152.6	0.0	1,152.6	0.0
Request	0.0	0.0	0.0	1,160.1	0.0	0.0	1,160.1	0.0	1,160.1	0.0
Delta	0.0	0.0	0.0	7.5	0.0	0.0	7.5	0.0	7.5	0.0
<b>TOTAL</b>										
Approved	30,316.7	4,378.7	4,560.4	5,208.8	0.0	0.0	5,208.8	695.8	5,904.6	154.3
Request	31,963.9	4,497.0	4,844.5	5,363.3	0.0	0.0	5,363.3	662.2	6,025.5	133.3
Delta	1,647.2	118.3	284.1	154.5	0.0	0.0	154.5	(33.6)	120.9	(21.0)

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP - NAVY**  
**SUPPLY MANAGEMENT SUMMARY- FY01**

**SM 1**  
 May 2001

**FY 2002 PRESIDENT'S BUDGET**

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATIONS	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	INVENTORY				
						AUGMENT				
<b>BP 14</b>										
Approved	842.8	141.9	141.9	104.6	0.0	0.0	104.6	8.4	113.0	4.1
Request	992.3	149.3	149.3	115.4	0.0	0.0	115.4	8.4	123.8	4.1
Delta	149.5	7.4	7.4	10.8	0.0	0.0	10.8	0.0	10.8	0.0
<b>BP 15</b>										
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
<b>BP 21</b>										
Approved	21.9	85.0	85.0	85.0	0.0	0.0	85.0	6.5	91.5	0.0
Request	18.0	84.9	84.9	84.9	0.0	0.0	84.9	6.5	91.4	0.0
Delta	(3.9)	(0.1)	(0.1)	(0.1)	0.0	0.0	(0.1)	0.0	(0.1)	0.0
<b>BP 23</b>										
Approved	26.3	2.7	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	20.0	1.9	1.9	0.1	0.0	0.0	0.1	0.0	0.1	0.0
Delta	(6.3)	(0.8)	(0.8)	0.1	0.0	0.0	0.1	0.0	0.1	0.0
<b>BP 25</b>										
Approved	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.1	1.1	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	0.0	0.0	0.0
<b>BP 28</b>										
Approved	1,410.1	661.2	661.2	661.2	0.0	0.0	661.2	51.6	712.8	22.2
Request	1,388.6	642.5	642.5	660.2	0.0	0.0	660.2	51.4	711.6	22.2
Delta	(21.5)	(18.7)	(18.7)	(1.0)	0.0	0.0	(1.0)	(0.2)	(1.2)	0.0
<b>BP 34</b>										
Approved	419.6	251.7	253.7	209.0	0.0	0.0	209.0	50.7	259.7	3.4
Request	395.4	320.5	321.8	246.8	0.0	0.0	246.8	79.2	326.0	3.4
Delta	(24.2)	68.8	68.1	37.8	0.0	0.0	37.8	28.5	66.3	0.0
<b>BP 38</b>										
Approved	205.4	1,337.0	1,337.0	1,352.1	0.0	0.0	1,352.1	133.5	1,485.6	4.4
Request	299.6	1,206.6	1,206.6	1,229.9	0.0	0.0	1,229.9	153.2	1,383.1	4.2
Delta	94.2	(130.4)	(130.4)	(122.2)	0.0	0.0	(122.2)	19.7	(102.5)	(0.2)
<b>BP 81</b>										
Approved	5,850.8	426.2	426.2	337.1	0.0	0.0	337.1	38.5	375.6	43.2
Request	5,907.8	459.0	459.0	346.2	0.0	0.0	346.2	38.5	384.7	35.0
Delta	57.0	32.8	32.8	9.1	0.0	0.0	9.1	0.0	9.1	(8.2)
<b>BP85</b>										
Approved	22,580.8	2,243.4	2,251.9	1,799.4	0.0	0.0	1,799.4	223.9	2,023.3	72.0
Request	25,377.8	2,594.9	2,460.3	2,262.0	0.0	0.0	2,262.0	404.3	2,666.3	58.7
Delta	2,797.0	351.5	208.4	462.6	0.0	0.0	462.6	180.4	643.0	(13.3)
<b>BP 91</b>										
Approved	0.0	0.0	0.0	1,155.0	0.0	0.0	1,155.0	0.0	1,155.0	0.0
Request	0.0	0.0	0.0	1,168.4	0.0	0.0	1,168.4	0.0	1,168.4	0.0
Delta	0.0	0.0	0.0	13.4	0.0	0.0	13.4	0.0	13.4	0.0
<b>TOTAL</b>										
Approved	31,357.7	5,149.1	5,160.6	5,704.4	0.0	0.0	5,704.4	513.2	6,217.6	149.3
Request	34,399.5	5,459.6	5,327.3	6,114.9	0.0	0.0	6,114.9	741.6	6,856.5	127.6
Delta	3,041.8	310.5	166.7	410.5	0.0	0.0	410.5	228.4	638.9	(21.7)

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP - NAVY**  
**SUPPLY MANAGEMENT SUMMARY- FY02**  
**FY 2002 PRESIDENT'S BUDGET**

**SM 1**  
 May 2001

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATIONS	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	INVENTORY AUGMENT				
<b>BP 14</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	903.5	123.9	123.9	111.5	0.0	6.0	117.5	12.0	129.5	4.1
Delta	903.5	123.9	123.9	111.5	0.0	6.0	117.5	12.0	129.5	4.1
<b>BP 15</b>										
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
<b>BP 21</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	19.1	84.5	84.5	84.5	0.0	0.0	84.5	6.5	91.0	0.0
Delta	19.1	84.5	84.5	84.5	0.0	0.0	84.5	6.5	91.0	0.0
<b>BP 23</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	18.9	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delta	18.9	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>BP 25</b>										
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
<b>BP 28</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	1,295.4	652.8	645.5	663.7	0.0	0.0	663.7	50.9	714.6	22.4
Delta	1,295.4	652.8	645.5	663.7	0.0	0.0	663.7	50.9	714.6	22.4
<b>BP 34</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	389.9	257.5	267.9	268.7	0.0	33.7	302.4	114.6	417.0	3.4
Delta	389.9	257.5	267.9	268.7	0.0	33.7	302.4	114.6	417.0	3.4
<b>BP 38</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	235.8	897.4	897.4	892.0	0.0	0.0	892.0	373.9	1,265.9	1.8
Delta	235.8	897.4	897.4	892.0	0.0	0.0	892.0	373.9	1,265.9	1.8
<b>BP 81</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	5,301.2	428.9	428.9	338.4	0.0	20.5	358.9	53.5	412.4	35.0
Delta	5,301.2	428.9	428.9	338.4	0.0	20.5	358.9	53.5	412.4	35.0
<b>BP85</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	23,088.2	2,617.2	2,715.0	2,118.9	0.0	64.9	2,183.8	495.7	2,679.5	58.7
Delta	23,088.2	2,617.2	2,715.0	2,118.9	0.0	64.9	2,183.8	495.7	2,679.5	58.7
<b>BP 91</b>										
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	1,318.3	0.0	0.0	1,318.3	0.0	1,318.3	0.0
Delta	0.0	0.0	0.0	1,318.3	0.0	0.0	1,318.3	0.0	1,318.3	0.0
<b>TOTAL</b>										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	31,252.0	5,063.3	5,165.2	5,797.0	0.0	125.1	5,922.1	1,107.2	7,029.3	125.4
Delta	31,252.0	5,063.3	5,165.2	5,797.0	0.0	125.1	5,922.1	1,107.2	7,029.3	125.4

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)**  
 FY02 PRESIDENT'S BUDGET - JUNE 2001  
 BUDGET PROJECT 14  
 FY2000

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>TOTAL SM-3B</u>
AEGIS	0.3				0.3
AUXILIARY & VALVES	2.6				2.6
CIWS	1.0			0.9	1.9
DC & DECK	7.8			21.2	29.0
DSSP	0.1	0.1	0.9		1.1
DVD				0.7	0.7
END ITEM MANAGEMENT	0.5				0.5
EOD	1.5		0.1		1.6
GAS TURBINES	0.2				0.2
GPETE/CAL STD				1.1	1.1
GUNS/HANDLING EQUIP	1.5				1.5
INTERNAL/SHORE COMM	0.2				0.2
LOAD LIST				0.1	0.1
MINE WARFARE	0.2				0.2
MISC FIRE CONTROL	0.4				0.4
MISC TEST EQUIP	0.1				0.1
MSC	0.1				0.1
NDI	2.8				2.8
NSO				1.2	1.2
NUCLEAR	12.1	3.0	4.4	4.6	24.1
OSI MAINTENANCE				1.4	1.4
OSM	0.1				0.1
OTHER PROPULSION	0.5				0.5
PREMIUM SERVICE PROGRAM				0.3	0.3
RADARS	0.6				0.6
SEA LAUNCHERS I			0.2		0.2
SEOC				1.1	1.1
SHIPALT (REPLEN)				0.3	0.3
SIDEWINDER/HARPOON	0.2				0.2
SMART SHIP	0.1				0.1
SPEC WARFARE	0.3			0.4	0.7
SQQ-89	0.1				0.1
SSPL				0.2	0.2
SUB ACOUSTIC SONAR	0.1		0.1		0.2
SUB ARMAMENT/DEFENSE	2.7			1.5	4.2
SUB ATMOS CONTROL	0.4				0.4
SUB AUX/MISC	4.4				4.4
SUB COMM/MONITOR	0.1				0.1
SUB CONTROL NAVIG SYS	1.1	0.2			1.3
SUB ENGINEER/DIESEL SYSTEM	1.5				1.5
SUB MISC SONAR/ADF	0.1				0.1
SUB SURVEILLANCE	0.4				0.4
SUBSAFE/LEVEL 1	9.4		0.1	0.1	9.6
SWS	0.1				0.1
TAC COMPUTERS I	0.1				0.1
TLL ADVANCED PPRS				0.3	0.3
TORPEDOES	1.3				1.3
TOWED ARRAY/ANT/BST-1	6.7				6.7
TRF LOADLIST				0.3	0.3
GROSS REQUIREMENTS	61.7	3.3	5.8	35.7	106.5
CONTRACT TERMS	-1.4	-0.1	-0.1	-1.0	-2.6
CREDIT MODS	-0.6			-0.4	-1.0
ASSET APPLICATIONS		-0.9	-0.1		-1.0

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)**  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 14  
FY2000

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>TOTAL SM-3B</u>
TOTAL	59.7	2.3	5.6	34.3	101.9
PROVISIONING SELLDOWN	0.0	1.8	-1.8	0.0	0.0
NET REQUIREMENTS	59.7	4.1	3.8	34.3	101.9

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 14  
FY2001**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>TOTAL SM-3B</u>
AEGIS	0.1			3.5	3.6
AUXILIARY & VALVES	2.2				2.2
CIWS	0.8			0.1	0.9
DC & DECK	6.7			30.6	37.3
DSSP	0.1	0.1	0.2		0.4
END ITEM MANAGEMENT	0.4				0.4
EOD	1.2		0.1		1.3
GAS TURBINES	0.1				0.1
GPETE/CAL STD				1.1	1.1
GUNS/HANDLING EQUIP	1.2				1.2
SEA LAUNCHERS I			0.2		0.2
INTERNAL/SHORE COMM	0.1				0.1
LOAD LIST				0.1	0.1
MINE WARFARE	0.1				0.1
MISC FIRE CONTROL	0.3				0.3
MISC TEST EQUIP	0.1				0.1
MSC	0.1				0.1
NDI	2.8				2.8
NSO				0.5	0.5
NUCLEAR	12.4	3.0	4.5	3.9	23.8
OSI MAINTENANCE				1.8	1.8
OSM	0.1				0.1
OTHER PROPULSION	0.4				0.4
PBL				5.2	5.2
PREMIUM SERVICE PROGRAM				0.1	0.1
RADARS	0.4				0.4
SEOC				1.5	1.5
SHIPALT (REPLEN)				0.5	0.5
SIDEWINDER/HARPOON	0.1				0.1
SMART SHIP	0.1				0.1
SPEC WARFARE	0.2			0.4	0.6
SQQ-89	0.1				0.1
SSPL				0.3	0.3
SSR				0.9	0.9
SUB ACOUSTIC SONAR	0.1		0.1		0.2
SUB ARMAMENT/DEFENSE	2.3			1.5	3.8
SUB ATMOS CONTROL	0.3				0.3
SUB AUX/MISC	3.8				3.8
SUB COMM/MONITOR	0.1		0.1		0.2
SUB CONTROL NAVIG SYS	0.9				0.9
SUB ENGINEER/DIESEL SYSTEM	1.3				1.3
SUB MISC SONAR/ADF	0.1				0.1
SUB SURVEILLANCE	0.3				0.3
SUBSAFE/LEVEL I	9.2		0.1	0.3	9.6
SWS	0.1				0.1
TAC COMPUTERS I	0.1				0.1
TLL ADVANCED PPRS				0.4	0.4
TORPEDOES	1.0				1.0
TOWED ARRAY/ANT/BST-1	5.8				5.8
TRF LOADLIST				0.9	0.9
GROSS REQUIREMENTS	55.5	3.1	5.3	53.6	117.5
CONTRACT TERMS	-0.4			-0.6	-1.0
CREDIT MODS	-0.4			-0.6	-1.0
PREMIUM TRANS				-0.1	-0.1

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)**  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 14  
FY2001

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>TOTAL SM-3B</u>
TOTAL	54.7	3.1	5.3	52.3	115.4
PROVISIONING SELLDOWN	0.0	1.7	-1.7	0.0	0.0
NET REQUIREMENTS	54.7	4.8	3.6	52.3	115.4

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 14  
FY2002**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>TOTAL SM-3B</u>
AEGIS	0.1				0.1
AUXILIARY & VALVES	2.9				2.9
CIWS	0.8			0.1	0.9
DC & DECK	7.4			24.6	32.0
DSSP	0.3				0.3
ELECTRICAL		0.1	0.2		0.3
END ITEM MANAGEMENT	0.6				0.6
EOD	1.4				1.4
EXCOMM	0.1				0.1
GAS TURBINES	0.2				0.2
GPETE/CAL STD				1.1	1.1
GUNS/HANDLING EQUIP	2.0				2.0
HELO LAND SYS	0.1				0.1
INTERNAL/SHORE COMM	0.1				0.1
LOAD LIST				0.3	0.3
MSC	0.1				0.1
MINE WARFARE	0.2				0.2
MISC FIRE CONTROL	0.4				0.4
MISC TEST EQUIP	0.1				0.1
NAVIGATION	0.1				0.1
NDI	2.8				2.8
NSO				0.5	0.5
NUCLEAR	12.4	3.0	4.5	1.3	21.2
OSI MAINTENANCE				1.8	1.8
OSM	0.1				0.1
OTHER PROPULSION	0.6				0.6
PBL				8.0	8.0
RADARS	0.6				0.6
SEOC				2.3	2.3
SHIPALT (REPLEN)				0.5	0.5
SIDEWINDER/HARPOON	0.3				0.3
SMART SHIP	0.2				0.2
SPEC WARFARE	0.4			0.5	0.9
SQQ-89	0.1				0.1
SSPL				0.3	0.3
SSR				5.9	5.9
SUB ACOUSTIC SONAR	0.2				0.2
SUB ARMAMENT/DEFENSE	2.5			1.7	4.2
SUB ATMOS CONTROL	0.4				0.4
SUB AUX/MISC	4.9				4.9
SUB CONTROL NAVIG SYS	1.0				1.0
SUB ENGINEER/DIESEL SYSTEM	1.7				1.7
SUB MISC SONAR/ADF	0.1				0.1
SUB SURVEILLANCE	0.4				0.4
SUBSAFE/LEVEL I	10.0		0.1	0.4	10.5
SURVEILLANCE	0.1				0.1
SWS	0.1				0.1
TAC COMPUTERS I	0.1				0.1
TLL ADVANCED PPRS				0.1	0.1
TORPEDOES	1.2				1.2
TOWED ARRAY/ANT/BST-1	6.3				6.3
TRF LOADLIST				0.9	0.9
GROSS REQUIREMENTS	63.4	3.1	4.8	50.3	121.6
CONTRACT TERMS	-0.6			-0.4	-1.0
CREDIT MODS	-0.6			-0.4	-1.0

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)**  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 14  
FY2002

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>TOTAL SM-3B</u>
PREMIUM TRANS INVENTORY EXPENSE	-1.9			-0.2	-0.2 -1.9
TOTAL	60.3	3.1	4.8	49.3	117.5
PROVISIONING SELLDOWN	0.0	1.5	-1.5	0.0	0.0
NET REQUIREMENTS	60.3	4.6	3.3	49.3	117.5

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 81  
FY2000**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>REWORK</u>	<u>TOTAL SM-3B</u>
.5 FLSIP+ COSAL				3.8		3.8
ACDS					0.1	0.1
AEGIS	3.3			0.1	16.0	19.4
AIR TRAFFIC CONTROL	1.7	0.7	0.3		9.5	12.2
AIR/AIR & AIR/GROUND MISSILES	0.1				0.2	0.3
AUXILIARY & VALVES	1.4		0.1	0.3	8.3	10.1
BOSS III				6.3		6.3
CEC		0.9				0.9
CIWS	2.2	0.3	0.5	1.4	8.5	12.9
COSIS				0.5		0.5
DC & DECK	0.2			2.9	0.7	3.8
DSSP		0.3	4.0		0.8	5.1
DVD				14.8	6.4	21.2
END ITEM MANAGEMENT	1.0			3.9	0.4	5.3
EOD	0.1		0.4		0.3	0.8
EW AND COUNTERMEASURES	0.6				3.3	3.9
EXCOMM	1.0	2.9	1.7		5.1	10.7
GAS TURBINES	2.1	0.1	0.7		17.9	20.8
GPETE/CAL STD				21.0	0.5	21.5
GUNS/HANDLING EQUIP	1.1	1.2	1.2		4.7	8.2
HELO LAND SYSTEM	0.6	0.2			2.6	3.4
INTERNAL/SHORE COMM	1.6	0.2			1.7	3.5
LM 2500				0.3		0.3
LOADLIST				0.1		0.1
MINE WARFARE	1.2	0.2	1.2		2.8	5.4
MISC FIRE CONTROL	0.5	0.5	0.0		3.5	4.5
MISC SEA MISSILES		0.5	0.4			0.9
MISC TEST EQUIP	0.3				0.6	0.9
MSC	0.2			0.4	0.1	0.7
NAVIGATION	0.5	0.4	0.1		5.3	6.3
NDI	2.8				1.7	4.5
NSO				6.6		6.6
NUCLEAR	2.7	1.1	1.5	0.4	1.7	7.4
OSI MAINTENANCE				8.0		8.0
OSM	0.2				0.2	0.4
OTHER DETECTION SYSTEMS					0.3	0.3
OTHER PROPULSION	2.1				9.0	11.1
PERIPHERAL COMPUTERS I	0.2				1.8	2.0
PERIPHERAL COMPUTERS II					1.9	1.9
PREMIUM SERVICE PROGRAM				0.1		0.1
RADARS	0.9	0.3			6.4	7.6
RADDS	0.1				0.6	0.7
RADIAC					0.6	0.6
REUSABLE BULK CONTAINER				0.5		0.5
SATCOM/CFEE	1.8	1.3	1.0	0.2	4.3	8.6
SEA LAUNCHER I	0.1	4.9	1.2		1.7	7.9
SEA LAUNCHER II	0.3				4.8	5.1
SEOC MSP				0.1		0.1
SHIPALT				1.9		1.9
SIDEWINDER/HARPOON	0.7				1.4	2.1
SMART SHIP	1.1	0.3	0.7		2.7	4.8
SONARS	0.2				0.7	0.9
SPEC WAR	1.6		0.2		2.6	4.4
SQQ-32	1.1				2.2	3.3
SQQ-89	0.5	1.0			3.2	4.7

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 81  
FY2000**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>REWORK</u>	<u>TOTAL SM-3B</u>
SSDMS	0.3				3.6	3.9
SSPL				0.5		0.5
SUB ACOUSTIC SONAR	0.2		0.2		6.1	6.5
SUB ARMAMENT/DEFENSE	0.5				2.1	2.6
SUB ATMOS CONTROL	0.6	0.9	0.8		7.0	9.3
SUB AUX/MISC	0.3				0.3	0.6
SUB COMM/MONITOR	0.1	2.6	1.9		3.5	8.1
SUB CONTROL NAVIG SYS	0.9	0.8	0.7	0.2	11.2	13.8
SUB ENGINEER/DIESEL SYSTEM	2.7			0.6	1.3	4.6
SUB MISC SONAR/ADF	1.4		0.2		1.5	3.1
SUB SURVEILLANCE	0.5	0.1	0.3		5.0	5.9
SUBSAFE/LEVEL I	2.0		0.2	2.4	2.2	6.8
SURVEILLANCE	0.7	0.5	2.3		3.1	6.6
TAC COMPUTERS I	0.3	0.5	0.3		2.4	3.5
TAC COMPUTERS II	0.1				1.8	1.9
TACTICAL DISPLAYS	0.2	0.9	0.3		2.7	4.1
TECH REFERRALS				1.8		1.8
TERRIER, TARTAR, NATO, MISC FC	0.4					0.4
TLL ADVANCED PPRS				2.4		2.4
TOMAHAWK						0.0
TORPEDOES	1.1				4.3	5.4
TOWED ARRAY/ANT/BST-1	1.2			0.1	0.8	2.1
TRF LOADLIST				1.6		1.6
TRAINING DEVICES	0.1	0.5	0.1		0.4	1.1
USC-38	2.1	0.5	3.2		1.5	7.3
GROSS REQUIREMENTS	51.8	24.6	25.7	83.2	207.9	393.2
CREDIT MOD	-3.4	-1.6	-1.8	-3.2	-18.0	-28.0
CONT TERM	-1.5	-1.0	-0.7	-1.8		-5.0
ASSET APPLICATIONS		-8.8	-4.9			-13.7
DVD SAVINGS				-4.5		-4.5
<b>TOTAL</b>	<b>46.9</b>	<b>13.2</b>	<b>18.3</b>	<b>73.7</b>	<b>189.9</b>	<b>342.0</b>
PROVISIONING SELLDOWN	0	5.6	-5.6	0.0	0.0	0.0
<b>NET REQUIREMENTS</b>	<b>46.9</b>	<b>18.8</b>	<b>12.7</b>	<b>73.7</b>	<b>189.9</b>	<b>342.0</b>

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 81  
FY2001**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>REWORK</u>	<u>TOTAL SM-3B</u>
.5 FLSIP+ COSAL				3.8		3.8
ACDS					0.1	0.1
AEGIS	3.3	0.1			15.2	18.6
AIR TRAFFIC CONTROL	1.7	1.2	0.9		8.9	12.7
AIR/AIR & AIR/GROUND MISSILES	0.1				0.2	0.3
AUXILIARY & VALVES	1.4		0.1		7.8	9.3
BOSS III				6.0		6.0
CEC		2.6	0.7			3.3
CIWS	2.2	0.4	0.4	0.9	8.0	11.9
COSIS				0.5		0.5
DC & DECK	0.2	0.1	0.1	5.9	0.7	7.0
DSSP		0.3	0.6		0.7	1.6
DVD				-5.5	9.3	3.8
END ITEM MANAGEMENT	1.0			6.9	0.4	8.3
EOD	0.1		0.4		0.3	0.8
EW AND COUNTERMEASURES	0.6				3.1	3.7
EXCOMM	1.0	2.5	1.2		4.8	9.5
GAS TURBINES	2.1	0.2	0.7		17.0	20.0
GPETE/CAL STD				15.5	0.6	16.1
GUNS/HANDLING EQUIP	1.1	2.8	1.8		4.4	10.1
HELO LAND SYS	0.6	0.2			2.4	3.2
INTERNAL/SHORE COMM	1.6	0.2	0.3		1.6	3.7
LM 2500				0.3		0.3
LOADLIST				0.2		0.2
MINE WARFARE	1.2	0.3	3.2		2.6	7.3
MISC FIRE CONTROL	0.5	0.2			3.3	4.0
MISC SEA MISSILES		0.9	0.2			1.1
MISC TEST EQUIP	0.3				0.5	0.8
MSC	0.2				0.1	0.3
NAVIGATION	0.5	0.3	0.2		5.0	6.0
NDI	2.4				1.6	4.0
NSO				4.9		4.9
NUCLEAR	2.8	1.1	1.5	0.6	1.6	7.6
OSI MAINTENANCE				14.0		14.0
OSM	0.2				0.2	0.4
OTHER PROPULSION	2.1				8.5	10.6
PBL				16.5		16.5
PERIPHERAL COMPUTERS I	0.2				1.7	1.9
PERIPHERAL COMPUTERS II					1.8	1.8
RADARS	0.9	0.3	0.1		6.0	7.3
RADDS	0.1				0.3	0.4
RADIAC					0.5	0.5
SATCOM/CFEE	1.8	1.4	0.8		4.0	8.0
SEA LAUNCHERS I	0.1	7.6	3.6		1.6	12.9
SEA LAUNCHERS II	0.3				4.5	4.8
SEOC MSP				0.1		0.1
SHIPALT				9.7		9.7
SIDEWINDER/HARPOON	0.7				1.3	2.0
SMART SHIP	1.1	0.2	0.5		2.5	4.3
SONARS	0.2	0.3			0.6	1.1
SPEC WARFARE	1.6		0.1		2.4	4.1
SQQ-32	1.1				2.1	3.2
SQQ-89	0.5	1.3			3.0	4.8
SSDMS	0.3				3.4	3.7
SSPL				1.0		1.0

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 81  
FY2001**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>REWORK</u>	<u>TOTAL SM-3B</u>
SUB ACOUSTIC SONAR	0.2	0.1	0.2		5.7	6.2
SUB ARMAMENT/DEFENSE	0.5	0.1		0.1	2.0	2.7
SUB ATMOS CONTROL	0.6	1.2			6.6	8.4
SUB AUX/MISC	0.3				0.3	0.6
SUB COMM/MONITOR	0.1	2.3	1.8		3.3	7.5
SUB CONTROL NAVIG SYS	0.9	0.1			10.7	11.7
SUB ENGINEER/DIESEL SYSTEM	2.6			0.3	1.2	4.1
SUB MISC SONAR/ADF	1.4				1.4	2.8
SUB SURVEILLANCE	0.5	1.1	0.2		4.7	6.5
SUBSAFE/LEVEL I	2.0		0.1	0.5	2.1	4.7
SURVEILLANCE	0.7	3.7	2.5		2.8	9.7
TAC COMPUTERS I	0.3	0.4	0.4		2.3	3.4
TAC COMPUTERS II	0.1				1.7	1.8
TACTICAL DISPLAYS	0.2	1.5	0.6		2.5	4.8
TECH REFERRALS				1.5		1.5
TERRIER, TARTAR, NATO, MISC FC	0.4					0.4
TLL ADVANCED PPRS				3.3		3.3
TORPEDOES	1.1	0.3			4.0	5.4
TOWED ARRAY/ANT/BST-1	1.2			0.4	0.7	2.3
TRF LOADLIST				2.0		2.0
TRAINING DEVICES	0.1	1.6	0.2		0.4	2.3
UNASSIGNED					0.4	0.4
USC-38	2.1	5.7	3.1		1.4	12.3
GROSS REQUIREMENTS	51.4	42.6	26.5	89.4	198.8	408.7
CREDIT MOD	-4	-3.3	-2.3	-5.4	-10.0	-25.0
CONT TERM	-1.3	-1.1	-0.7	-1.9		-5.0
ASSET APPLICATIONS		-5.9	-3.0			-8.9
OPN-8 REDUCTION		-16.9				-16.9
PREMIUM TRANS				-0.1		-0.1
CONTRACT EFFICIENCY				-1.3		-1.3
SELF FINANCE				-4.0		-4.0
REVERSE AUCTION				-1.3		-1.3
<b>TOTAL</b>	<b>46.1</b>	<b>15.4</b>	<b>20.5</b>	<b>75.4</b>	<b>188.8</b>	<b>346.2</b>
PROVISIONING SELLDOWN	0	6.3	-6.3	0.0	0.0	0.0
NET REQUIREMENTS	46.1	21.7	14.2	75.4	188.8	346.2

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 81  
FY2002**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>REWORK</u>	<u>TOTAL SM-3B</u>
.5 FLSIP+ COSAL				6.7		6.7
ACDS					0.1	0.1
AEGIS	3.3	0.2			15.8	19.3
AIR TRAFFIC CONTROL	1.7	1.8	0.6		8.4	12.5
AIR/AIR & AIR/GROUND MISSILES	0.1				0.2	0.3
AUXILIARY & VALVES	1.4		0.1		7.6	9.1
BOSS III				6.0		6.0
CEC		3.9	1.2			5.1
CIWS	2.2		0.1	0.5	9.3	12.1
COSIS				0.5		0.5
DC & DECK	0.2	0.1	0.1	1.5	0.9	2.8
DSSP		0.3	0.5		0.8	1.6
DVD				-5.6	8.8	3.2
END ITEM MANAGEMENT	1.0			4.8	0.5	6.3
EOD	0.1		0.1		0.4	0.6
EW AND COUNTERMEASURES	0.6				3.6	4.2
EXCOMM	1.0	2.4	0.1		5.6	9.1
GAS TURBINES	2.1	0.2	0.7		17.7	20.7
GPETE/CAL STD				15.2	0.7	15.9
GUNS/HANDLING EQUIP	1.1	2.4	0.1		4.8	8.4
HELO LAND SYS	0.6	0.3			2.8	3.7
INTERNAL/SHORE COMM	1.6	0.9	0.1		1.9	4.5
LM 2500				0.3		0.3
LOADLIST				0.9		0.9
MINE WARFARE	1.2	0.5	1.2		3.0	5.9
MISC FIRE CONTROL	0.5	0.4	0.5		3.9	5.3
MISC TEST EQUIP	0.3				0.6	0.9
MSC	0.2				0.2	0.4
NAVIGATION	0.5	0.1	0.1		5.7	6.4
NDI	3.0				1.9	4.9
NSO				3.2		3.2
NUCLEAR	2.9	1.1	1.5	0.6	1.9	8.0
OSI MAINTENANCE				12.7		12.7
OSM	0.2				0.2	0.4
OTHER DETECTION SYSTEMS					0.1	0.1
OTHER PROPULSION	2.2				7.9	10.1
PBL				14.5		14.5
PERIPHERAL COMPUTERS I	0.2				2.0	2.2
PERIPHERAL COMPUTERS II					2.1	2.1
RADARS	0.9	0.5			5.0	6.4
RADDS	0.1				0.4	0.5
RADIAC					0.6	0.6
SATCOM/CFEE	1.8	1.3	1.0		4.7	8.8
SEA LAUNCHERS I	0.1	7.8	2.1		1.9	11.9
SEA LAUNCHERS II	0.3				5.3	5.6
SEOC MSP				0.1		0.1
SHIPALT				8.5		8.5
SIDEWINDER/HARPOON	0.7	0.1	0.2		1.5	2.5
SMART SHIP	1.1	0.2	0.5		2.9	4.7
SONARS	0.2	0.3			0.7	1.2
SPEC WARFARE	1.5		0.1		2.8	4.4
SQQ-32	1.1				2.5	3.6
SQQ-89	0.5	3.7	4.3		3.6	12.1
SSDMS	0.3				4.0	4.3
SSPL				1.0		1.0

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING OBLIGATIONS BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 81  
FY2002**

<u>WEAPON SYSTEM NAME</u>	<u>BASIC REPLEN</u>	<u>OUTFITTING</u>	<u>STOCK</u>	<u>SPECIAL PROGRAMS</u>	<u>REWORK</u>	<u>TOTAL SM-3B</u>
SUB ACOUSTIC SONAR	0.2	0.2	0.6		6.6	7.6
SUB ARMAMENT/DEFENSE	0.5	0.1		0.1	2.3	3.0
SUB ATMOS CONTROL	0.6	0.9			5.7	7.2
SUB AUX/MISC	0.3				0.4	0.7
SUB COMM/MONITOR	0.1				3.7	3.8
SUB CONTROL NAVIG SYS	0.9	0.1			10.5	11.5
SUB ENGINEER/DIESEL SYSTEM	2.6			0.4	1.4	4.4
SUB MISC SONAR/ADF	1.4	0.2	0.1		1.6	3.3
SUB SURVEILLANCE	0.5	3.6	0.5		3.5	8.1
SUBSAFE/LEVEL I	2.0		0.1	0.5	2.5	5.1
SURVEILLANCE	0.7	4.0	1.2		3.3	9.2
TAC COMPUTERS I	0.3	0.3	0.2		2.7	3.5
TAC COMPUTERS II	0.1				2.0	2.1
TACTICAL DISPLAYS	0.2	2.3	0.2		2.9	5.6
TERRIER, TARTAR, NATO, MISC FC	0.4	1.1	1.1			2.6
TECH REFERRALS				1.5		1.5
TLL ADVANCED PPRS				0.5		0.5
TORPEDOES	1.1				4.7	5.8
TOWED ARRAY/ANT/BST-1	1.2			0.1	0.9	2.2
TRF LOADLIST				2.0		2.0
TRAINING DEVICES	0.1	2.2	0.1		0.5	2.9
USC-38	2.1	2.7	0.3		1.6	6.7
GROSS REQUIREMENTS	52.1	46.2	19.6	76.5	212.1	406.5
CREDIT MOD	-4.6	-3.8	-1.8	-4.8	-10.0	-25.0
CONT TERM	-1.5	-1.0	-0.7	-1.8		-5.0
ASSET APPLICATIONS		-7.9	-2.1			-10.0
INVENTORY EXPENSE		-1.8	-0.2			-2.0
PREMIUM TRANS				-0.1		-0.1
REVERSE AUCTION				-3.6		-3.6
INVENTORY EXPENSE	-1.9					-1.9
<b>TOTAL</b>	<b>44.1</b>	<b>31.7</b>	<b>14.8</b>	<b>66.2</b>	<b>202.1</b>	<b>358.9</b>
PROVISIONING SELLDOWN	0	4.6	-4.6	0.0	0.0	0.0
<b>NET REQUIREMENTS</b>	<b>44.1</b>	<b>36.3</b>	<b>10.2</b>	<b>66.2</b>	<b>202.1</b>	<b>358.9</b>

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING REQUIREMENT BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 34  
FY2000**

<u>WEAPON SYSTEM NAME</u>	<u>OPERATING OUTFITTING</u>	<u>SPECIAL PROGRAMS</u>	<u>BASIC REPLEN</u>	<u>TOTAL</u>
SUP EQUIP		0.0	13.2	13.2
HELOS		27.6	15.6	43.2
F14		0.0	20.9	20.9
P3		1.1	5.1	6.2
S3		0.0	11.0	11.0
A6/EA6		14.8	3.0	17.8
E2/C2		0.0	9.0	9.0
AV8		5.9	21.3	27.2
F/A18A		78.1	18.5	96.6
OTHER		12.0	1.2	13.2
TERM/CR MO				-6.2
SSR				0.0
LONG TERM CONTRACTS				6.7
		-----	-----	-----
TOTAL		139.5	118.8	258.8
SYSTEM STOCK : INITIAL FOLLOW-ON				35.0
OPERATING REQUIREMENT				293.8

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
OPERATING REQUIREMENT BY WEAPON SYSTEM (\$M)  
FY02 PRESIDENT'S BUDGET - JUNE 2001  
BUDGET PROJECT 34  
FY2001**

<u>WEAPON SYSTEM NAME</u>	<u>OPERATING OUTFITTING</u>	<u>SPECIAL PROGRAMS</u>	<u>BASIC REPLEN</u>	<u>TOTAL</u>
SUP EQUIP		0.0	8.8	8.8
HELOS		12.1	10.4	22.5
F14		0.0	14.0	14.0
P3		2.8	3.4	6.2
S3		0.0	7.3	7.3
A6/EA6		14.3	2.0	16.3
E2/C2		0.0	6.0	6.0
AV8		17.8	14.3	32.1
F/A18A		76.2	12.3	88.5
OTHER		20.4	0.8	21.2
TERM/CR MO				-8.0
SSR				0.0
LONG TERM CONTRACTS				0.0
		-----	-----	-----
TOTAL		143.6	79.3	214.9
SYSTEM STOCK : INITIAL FOLLOW-ON				31.9
OPERATING REQUIREMENT				246.8

**NAVY WORKING CAPITAL FUND  
 SUPPLY MANAGEMENT ACTIVITY GROUP  
 OPERATING REQUIREMENT BY WEAPON SYSTEM (\$M)  
 FY02 PRESIDENT'S BUDGET - JUNE 2001  
 BUDGET PROJECT 34  
 FY2002**

<u>WEAPON SYSTEM NAME</u>	<u>OPERATING OUTFITTING</u>	<u>SPECIAL PROGRAMS</u>	<u>BASIC REPLEN</u>	<u>TOTAL</u>
SUP EQUIP		0.0	11.7	11.7
HELOS		2.7	13.8	16.5
F14		0.0	18.6	18.6
P3		2.7	4.5	7.2
S3		0.0	9.8	9.8
A6/EA6		8.9	2.7	11.6
E2/C2		0.0	8.0	8.0
AV8		22.2	19.0	41.2
F/A18A		77.5	16.4	93.9
OTHER		24.4	1.1	25.5
TERM/CR MO				-8.0
SSR				11.7
LONG TERM CONTRACTS				0.0
		-----	-----	-----
TOTAL		138.4	105.6	247.7
SYSTEM STOCK : INITIAL FOLLOW-ON				54.7
OPERATING REQUIREMENT				302.4

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING REQUIREMENT BY WEAPON SYSTEM (\$M)**  
 FY02 PRESIDENT'S BUDGET - JUNE 2001  
**BUDGET PROJECT 85**  
 FY 2000

<u>WEAPON SYSTEM NAME</u>	<u>BUY IN OUTFITTING</u>	<u>SPECIAL PROGRAMS</u>	<u>BASIC REPLEN</u>	<u>REPAIR</u>	<u>TOTAL</u>
A-4	0.0	0.0	1.0	3.0	4.0
SUPPT EQUIPMT	9.4	0.0	3.0	30.5	42.9
HELOS	67.8	75.9	40.2	438.4	622.3
F-14	0.0	1.8	28.0	104.2	134.0
P-3	16.4	1.5	10.4	97.5	125.8
S-3	14.3	0.0	11.9	78.9	105.1
A-6/EA-6	8.6	0.9	7.7	41.7	58.9
E2/C2	2.3	0.0	7.3	54.2	63.8
AV8	0.4	0.0	4.5	38.8	43.7
F/A18	199.8	67.6	37.8	367.7	672.9
COMMON A/C & AVIONICS	42.8	2.6	12.7	86.7	144.8
TERM/CR MODS	0.0		-8.5		-8.5
NAVAUD MARKS/CDB Adj			-3.1	11.0	7.9
REDUCTIONS FOR EFFICIENCIES	-38.6				-38.6
LECP'S INVESTMENT/SAVINGS			35.6	-30.9	4.7
	-----	-----	-----	-----	-----
<b>TOTAL</b>	<b>323.2</b>	<b>150.3</b>	<b>188.5</b>	<b>1321.7</b>	<b>1983.7</b>
<b>SYSTEM STOCK : INITIAL/FOLLOW-ON</b>					<b>48.7</b>
<b>OPERATING REQUIREMENT</b>					<b>2032.4</b>

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING REQUIREMENT BY WEAPON SYSTEM (\$M)**  
 FY02 PRESIDENT'S BUDGET - JUNE 2001  
**BUDGET PROJECT 85**  
 FY 2001

<u>WEAPON SYSTEM NAME</u>	<u>BUY IN OUTFITTING</u>	<u>SPECIAL PROGRAMS</u>	<u>BASIC REPLEN</u>	<u>REPAIR</u>	<u>TOTAL</u>
A-4	0.0	0.0	1.3	10.6	11.9
SUPPT EQUIPMT	9.5	0.8	3.7	44.1	58.1
HELOS	78.8	33.3	49.7	453.0	614.8
F-14	0.0	0.0	35.6	134.2	169.8
P-3	1.6	1.3	12.1	139.1	154.1
S-3	5.0	0.5	14.3	103.3	123.1
A-6/EA-6	22.6	6.2	9.8	58.4	97.0
E2/C2	2.1	0.2	7.9	59.4	69.6
AV8	1.4	0.1	5.5	58.4	65.4
F/A18	164.2	99.5	47.6	440.7	752.0
COMMON A/C & AVIONICS	5.6	3.8	14.1	113.5	137.0
TERM/CR MODS	-5.0		-3.5		-8.5
NAVAUD Marks/PBD 437			-3.1	25.0	21.9
REDUCTIONS FOR EFFICIENCIES	-64.1				-64.1
Reverse Auctions/ Contracting Efficiencies			-5.3		-5.3
LECP'S INVESTMENT/SAVINGS			26.5	-42.3	-15.8
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<b>TOTAL</b>	<b>221.7</b>	<b>145.7</b>	<b>216.2</b>	<b>1597.4</b>	<b>2181.0</b>
<b>SYSTEM STOCK : INITIAL/FOLLOW-ON</b>					<b>81.0</b>
<b>OPERATING REQUIREMENT</b>					<b>2262.0</b>

**NAVY WORKING CAPITAL FUND**  
**SUPPLY MANAGEMENT ACTIVITY GROUP**  
**OPERATING REQUIREMENT BY WEAPON SYSTEM (\$M)**  
 FY02 PRESIDENT'S BUDGET - JUNE 2001  
**BUDGET PROJECT 85**  
 FY 2002

<u>WEAPON SYSTEM NAME</u>	<u>BUY IN OUTFITTING</u>	<u>SPECIAL PROGRAMS</u>	<u>BASIC REPLEN</u>	<u>REPAIR</u>	<u>TOTAL</u>
A-4	0.0	0.0	1.4	10.8	12.2
SUPPT EQUIPMT	6.9	0.8	3.8	43.6	55.1
HELOS	197.8	27.9	50.6	434.0	710.3
F-14	0.0	0.0	35.4	128.4	163.8
P-3	12.2	2.5	12.4	133.6	160.7
S-3	7.0	0.8	14.7	98.4	120.9
A-6/EA-6	8.2	0.9	10.2	57.3	76.6
E2/C2	8.2	1.0	8.1	57.1	74.4
AV8	0.3	0.0	5.8	58.6	64.7
F/A18	93.3	115.9	49.4	402.4	661.0
COMMON A/C & AVIONICS	8.9	1.8	15.9	109.6	136.2
TERM/CR MODS	-5.1		-3.4		-8.5
NAVAUD Marks/Inv Expense			-39.4		-39.4
REDUCTIONS FOR EFFICIENCIES	-77.0	0.0			-77.0
LECP'S INVESTMENT/SAVINGS			36.4	-26.8	9.6
Reverse Auctions/ Contracting Efficiencies			-9.8		-9.8
	-----	-----	-----	-----	-----
<b>TOTAL</b>	<b>260.7</b>	<b>151.6</b>	<b>191.5</b>	<b>1507.0</b>	<b>2110.8</b>
<b>SYSTEM STOCK : INITIAL/FOLLOW-ON</b>					<b>73.0</b>
<b>OPERATING REQUIREMENT</b>					<b>2183.8</b>

**DEPARTMENT OF NAVY, SUPPLY MANAGEMENT**  
**INVENTORY STATUS**  
**BUDGET PROJECT SUMMARY**  
**FY2002 PRESIDENT'S BUDGET SUBMISSION**  
**(Dollars in Millions)**  
**FY2000**

	Total	Mobilization	---Peacetime---	
			Operating	Other
1. INVENTORY BOP	31,974.4	237.0	13,363.2	18,374.2
2. BOP INVENTORY ADJUSTMENTS	(1,357.2)	(3.6)	1,978.7	(3,332.3)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	2,520.3	(2,520.3)
B. PRICE CHANGE AMOUNT (memo)	(1,357.2)	(3.6)	(541.6)	(812.0)
C. INVENTORY RECLASSIFIED AND REPRICED	30,617.2	233.4	15,341.9	15,041.9
3. RECEIPTS AT STANDARD	3,185.0	3.6	3,191.4	(10.0)
4. SALES AT STANDARD	4,977.8	0.0	4,977.8	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	2,795.9	0.0	2,835.7	(39.8)
B. RETURNS FROM CUSTOMERS FOR CREDIT	133.3	0.0	106.1	27.2
C. RETURNS FROM CUSTOMERS, NO CREDIT	13,890.2	0.0	5,586.4	8,303.8
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(2,865.8)	0.0	8.0	(2,873.8)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(367.6)	0.0	(72.2)	(295.4)
G. OTHER (listed in Section 9)	(10,212.1)	(2.6)	(8,213.1)	(1,996.4)
H. TOTAL ADJUSTMENTS	3,373.9	(2.6)	250.9	3,125.6
6. INVENTORY EOP	32,198.3	234.4	13,806.4	18,157.5
7. INVENTORY EOP (REVALUED)	16,950.2	216.9	9,319.7	7,413.6
A. APPROVED ACQUISITION OBJECTIVE (memo)				6,276.3
B. ECONOMIC RETENTION (memo)				611.8
C. CONTINGENCY RETENTION (memo)				502.4
D. POTENTIAL DOD REUTILIZATION (memo)				23.1
8. INVENTORY ON ORDER EOP (memo)	1,563.6	0.0	1,473.8	89.8
9. NARRATIVE:				
Other adjustments (Total posted to line 5g):				
Other Gains/Losses	(3,531.6)	0.0	(3,228.3)	(303.3)
Strata Transfers	0.0	(9.5)	1,718.8	(1,709.3)
Net/Standard Difference	(6,680.5)	6.9	(6,703.6)	16.2
Total	(10,212.1)	(2.6)	(8,213.1)	(1,996.4)

**DEPARTMENT OF NAVY, SUPPLY MANAGEMENT  
INVENTORY STATUS  
BUDGET PROJECT SUMMARY  
FY2002 PRESIDENT'S BUDGET SUBMISSION  
(Dollars in Millions)  
FY2001**

	Total	Mobilization	---Peacetime---	
			Operating	Other
1. INVENTORY BOP	32,198.3	234.4	13,806.4	18,157.5
2. BOP INVENTORY ADJUSTMENTS	3,651.8	4.0	5,537.3	(1,889.5)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	4,082.9	(4,082.9)
B. PRICE CHANGE AMOUNT (memo)	3,651.8	4.0	1,454.4	2,193.4
C. INVENTORY RECLASSIFIED AND REPRICED	35,850.1	238.4	19,343.7	16,268.0
3. RECEIPTS AT STANDARD	3,559.7	0.4	3,611.9	(52.6)
4. SALES AT STANDARD	5,454.9	0.0	5,454.9	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	669.1	0.0	629.3	39.8
B. RETURNS FROM CUSTOMERS FOR CREDIT	127.6	0.1	78.8	48.7
C. RETURNS FROM CUSTOMERS, NO CREDIT	10,190.2	0.0	3,739.0	6,451.2
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(3,837.8)	0.0	(0.2)	(3,837.6)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(153.8)	0.0	(118.7)	(35.1)
G. OTHER (listed in Section 9)	(6,303.7)	8.1	(5,569.0)	(742.8)
H. TOTAL ADJUSTMENTS	691.6	8.2	(1,240.8)	1,924.2
6. INVENTORY EOP	34,646.5	247.0	16,259.9	18,139.6
7. INVENTORY EOP (REVALUED)	12,219.0	218.8	6,507.2	5,493.0
A. APPROVED ACQUISITION OBJECTIVE (memo)				4,687.8
B. ECONOMIC RETENTION (memo)				412.6
C. CONTINGENCY RETENTION (memo)				374.5
D. POTENTIAL DOD REUTILIZATION (memo)				18.1
8. INVENTORY ON ORDER EOP (memo)	1,611.7	0.0	1,599.7	12.0
<b>9. NARRATIVE:</b>				
Other adjustments (Total posted to line 5g):				
Other Gains/Losses	(239.4)	0.0	(232.0)	(7.4)
Strata Transfers	0.0	0.0	737.9	(737.9)
Net/Standard Difference	(6,064.3)	8.1	(6,074.9)	2.5
Total	(6,303.7)	8.1	(5,569.0)	(742.8)

**DEPARTMENT OF NAVY, SUPPLY MANAGEMENT**  
**INVENTORY STATUS**  
**BUDGET PROJECT SUMMARY**  
**FY2002 PRESIDENT'S BUDGET SUBMISSION**  
**(Dollars in Millions)**  
**FY2002**

	Total	Mobilization	---Peacetime---	
			Operating	Other
1. INVENTORY BOP	34,646.5	247.0	16,259.9	18,139.6
2. BOP INVENTORY ADJUSTMENTS	(1,044.8)	(1.5)	3,350.3	(4,393.6)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	3,889.2	(3,889.2)
B. PRICE CHANGE AMOUNT (memo)	(1,044.8)	(1.5)	(538.9)	(504.4)
C. INVENTORY RECLASSIFIED AND REPRICED	33,601.7	245.5	19,610.2	13,746.0
3. RECEIPTS AT STANDARD	3,272.1	0.2	3,326.3	(54.4)
4. SALES AT STANDARD	5,290.6	0.0	5,290.6	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	15.8	0.0	(7.8)	23.6
B. RETURNS FROM CUSTOMERS FOR CREDIT	125.4	0.0	75.5	49.9
C. RETURNS FROM CUSTOMERS, NO CREDIT	10,369.7	0.0	4,445.7	5,924.0
D. RETURNS TO SUPPLIERS (-)	0.0	0.0	0.0	0.0
E. TRANSFERS TO PROP. DISPOSAL (-)	(3,714.3)	0.0	(0.2)	(3,714.1)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(141.1)	0.0	(116.1)	(25.0)
G. OTHER (listed in Section 9)	(6,740.9)	0.1	(6,238.4)	(502.6)
H. TOTAL ADJUSTMENTS	(85.4)	0.1	(1,841.3)	1,755.8
6. INVENTORY EOP	31,497.8	245.8	15,804.6	15,447.4
7. INVENTORY EOP (REVALUED)	16,050.8	226.9	9,045.2	6,778.7
A. APPROVED ACQUISITION OBJECTIVE (memo)				5,731.4
B. ECONOMIC RETENTION (memo)				554.4
C. CONTINGENCY RETENTION (memo)				471.3
D. POTENTIAL DOD REUTILIZATION (memo)				21.6
8. INVENTORY ON ORDER EOP (memo)	1,851.1	0.0	1,851.1	0.0
9. NARRATIVE:				
Other adjustments (Total posted to line 5g):				
Other Gains/Losses	(279.2)	0.0	(170.3)	(108.9)
Strata Transfers	0.0	0.0	393.9	(393.9)
Net/Standard Difference	(6,461.7)	0.1	(6,462.0)	0.2
Total	(6,740.9)	0.1	(6,238.4)	(502.6)

NAVY WORKING CAPITAL FUND  
 SUPPLY MANAGEMENT ACTIVITY GROUP  
 WHOLESALE COST RECOVERY RATE CALCULATION  
 FY02 PRESIDENT'S BUDGET  
 (DOLLARS IN MILLIONS)

JUN 2001  
 SM-5B

SHIPS/AVIATION	FY 00	FY 01	FY02
1. Net sales at Cost	2906.3	2589.2	3147.7
2. Less: Material Inflation Adj	543.5	125.5	85.6
3. Revised Net Sales at Cost	2362.9	2463.7	3062.1
4. Surcharge (\$)	358.3	626.5	489.1
5. Change to Customers			
a. Previous Year's Surcharge (%)	0.443	0.123	0.246
b. This year's Surcharge and material inflation divided by line 3 above (\$)	0.382	0.305	0.188
c. Percent change to customer	-4.3%	16.1%	-4.7%

NAVY WORKING CAPITAL FUND  
 SUPPLY MANAGEMENT ACTIVITY GROUP  
 WHOLESALE COST RECOVERY RATE CALCULATION  
 FY02 PRESIDENT'S BUDGET  
 (DOLLARS IN MILLIONS)

JUN 2001  
 SM-5B

BP14-SHIPS CONSUMABLES	FY 00	FY 01	FY02
1. Net sales at Cost	113.2	109.9	113.6
2. Less: Material Inflation Adj	16.0	5.2	5.3
3. Revised Net Sales at Cost	97.2	104.7	108.3
4. Surcharge (\$)	19.2	36.0	14.4
5. Change to Customers			
a. Previous Year's Surcharge (%)	0.472	0.169	0.328
b. This year's Surcharge and material inflation divided by line 3 above (\$)	0.362	0.394	0.182
c. Percent change to customer	-7.5%	19.2%	-10.9%

NAVY WORKING CAPITAL FUND  
 SUPPLY MANAGEMENT ACTIVITY GROUP  
 WHOLESALE COST RECOVERY RATE CALCULATION  
 FY02 PRESIDENT'S BUDGET  
 (DOLLARS IN MILLIONS)

JUN 2001  
 SM-5B

BP34-AVIATION CONSUMABLES	FY 00	FY 01	FY02
1. Net sales at Cost	220.6	203.4	250.9
2. Less: Material Inflation Adj	34.0	4.2	8.5
3. Revised Net Sales at Cost	186.6	199.2	242.4
4. Surcharge (\$)	19.6	53.7	20.3
5. Change to Customers			
a. Previous Year's Surcharge (%)	0.436	0.089	0.264
b. This year's Surcharge and material inflation divided by line 3 above (\$)	0.287	0.291	0.119
c. Percent change to customer	-10.4%	18.5%	-11.5%

NAVY WORKING CAPITAL FUND  
 SUPPLY MANAGEMENT ACTIVITY GROUP  
 WHOLESALE COST RECOVERY RATE CALCULATION  
 FY02 PRESIDENT'S BUDGET  
 (DOLLARS IN MILLIONS)

JUN 2001  
 SM-5B

BP81-SHIPS REPAIRABLES	FY 00	FY 01	FY02
1. Net sales at Cost	408.7	369.6	380.7
2. Less: Material Inflation Adj	69.9	13.9	1.4
3. Revised Net Sales at Cost	338.8	355.7	379.3
4. Surcharge (\$)	47.1	99.6	83.2
5. Change to Customers			
a. Previous Year's Surcharge (%)	0.437	0.115	0.269
b. This year's Surcharge and material inflation divided by line 3 above (\$)	0.345	0.319	0.223
c. Percent change to customer	-6.1%	18.8%	-3.6%

NAVY WORKING CAPITAL FUND  
 SUPPLY MANAGEMENT ACTIVITY GROUP  
 WHOLESALE COST RECOVERY RATE CALCULATION  
 FY02 PRESIDENT'S BUDGET  
 (DOLLARS IN MILLIONS)

JUN 2001  
 SM-5B

BP85-AVIATION REPAIRABLES	FY 00	FY 01	FY02
1. Net sales at Cost	2163.8	1906.1	2402.4
2. Less: Material Inflation Adj	423.6	102.0	70.1
3. Revised Net Sales at Cost	1740.2	1804.1	2332.3
4. Surcharge (\$)	272.5	437.1	371.1
5. Change to Customers			
a. Previous Year's Surcharge (%)	0.444	0.126	0.237
b. This year's Surcharge and material inflation divided by line 3 above (\$)	0.400	0.299	0.189
c. Percent change to customer	-2.9%	15.2%	-3.8%

**FY 2002 President's Budget**  
**Activity Group Capital Investment Summary**  
**Component: Navy**  
**Activity Group: Supply Management**  
(\$ IN MILLIONS)

**MAY 2001**  
**FUND 9A**

LINE NUMBER	ITEM DESCRIPTION	FY 2000		FY 2001		FY 2002	
		QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
	Equipment		0.850		2.457		2.915
	Replacement		0.850		2.457		2.915
	\$1,000,000 and over						
0001	Forklifts	VAR	0.490	VAR	1.793	VAR	2.228
0002	\$500,000 to \$999,999		0.000		0.000		0.000
0003	\$100,000 to \$499,999	VAR	0.360	VAR	0.664		0.687
0004	Productivity		0.000		0.000		0.000
0005	New Mission		0.000		0.000		0.000
0006	Environmental		0.000		0.000		0.000
	ADPE & Telecommunications Equipment		2.826		1.940		3.925
	\$1,000,000 and over						
0007	Base Level Computing	VAR	1.938	VAR	1.940	VAR	3.425
0008	Automated Identification Technology	VAR	0.888	VAR	0.000		0.000
0009	\$500,000 to \$999,999		0.000		0.000		0.500
0010	\$100,000 to \$499,999		0.000		0.000		0.000
	Software Development		35.900		42.348		49.200
	Internally Developed		9.699		8.422		8.338
	\$1,000,000 and over		0.000				
0011	UADPS-ICP	38.7	3.532	35.5	3.525	28.3	2.862
0012	UADPS-SP/U2	60.3	5.509	49.3	4.897	54.1	5.476
0013	\$500,000 to \$999,999	7.2	0.658	-	0.000		0.000
0014	\$100,000 to \$499,999		0.000		0.000		0.000
	Externally Development		26.201		33.927		40.862
	\$1,000,000 and over						
0015	Financial Initiatives	VAR	5.703	VAR	2.954	VAR	2.809
0016	Commercial Asset Visibility	VAR	0.950	VAR	1.797	VAR	1.808
0017	Distribution Standard System	VAR	0.811		0.000		0.000
0018	Total Asset Visibility	VAR	3.750	VAR	3.554		0.000
0019	Paper-Free Initiatives	VAR	0.987	VAR	3.142	VAR	0.945
0020	Enterprise Resource Planning	VAR	14.000	VAR	19.000	VAR	34.000
0021	Inform-21		0.000	VAR	1.700	VAR	0.350
0022	Residual Asset Management		0.000	VAR	1.100		0.950
0023	\$500,000 to \$999,999		0.000	VAR	0.680		0.000
0024	Minor Construction	VAR	1.000	VAR	1.900	VAR	1.976
	TOTAL		40.576		48.645		58.016

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 01 FORLIFT TRUCKS			D. Activity Identification NWCF		
		FY 2000		FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
01 FORLIFT TRUCKS	VAR	VAR	490	VAR	VAR	1,793	VAR	VAR	2,228

**Narrative Justification:**

This program funds the procurement of new/initial outfitting and the replacement of Material Handling Equipment (MHE) for the Fleet and Industrial Supply Centers (FISC). This request is for several key FISC areas that are in need of replacement/new equipment, namely: FISC Yokosuka fuel operations, FISC Jacksonville's replacement of several older trucks, and FISC Norfolk replacement of overage forklifts including one wire guided truck. This program also supports FISC partnering efforts with other regional commands.

For FISC YOKO considering the volume of heavy repair work routinely accomplished within the three fuel departments reliable equipment is an absolute necessity. FISC YOKO MHE inventories have more than surpassed their life expectancy for Navy MHE with more than 44% overage at Yokosuka. The continued mechanical breakdowns cannot be supported and the units require full time maintenance to keep them operating. Due to the age of equipment, size and capacity, those identified are beyond any economical overhaul and replacement is required. For FISC JAX replacement of a couple older units beyond economical repair is required. For FISC Norfolk, 41% of their equipment is over 10 years old and replacement of some of this equipment each year is needed to prevent potential outyear breakdowns and work stoppages. Due to the age and condition of the existing equipment, the FISCs are experiencing inordinate amounts of downtime with resultant work stoppage. Typically, the equipment is down for two to three weeks, several times a year for unscheduled repairs. The extended down time is a result of longer than usual lead times for replacement parts due to aging technology on this equipment. In addition, because of the special nature of this equipment and building requirements, substitute trucks are not readily available within operations at FISC Norfolk.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 03 AUTOMATED MAT'L HANDLING SYSTEM			D. Activity Identification NWCF		
	FY 2000			FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
03 AUTOMATED MAT'L HANDLING SYSTEM	VAR	VAR	150	VAR	VAR	90	VAR	VAR	90
<p><b>Narrative Justification:</b></p> <p>This program funds the procurement of new/initial outfitting and the replacement of Automated Material Handling Systems (AMHS) for the Fleet and Industrial Supply Centers (FISC). This request is for several key FISC areas that are in need of replacement/new equipment. This program also supports FISC partnering efforts with other regional commands.</p> <p>In addition the FISC is asking for state-of-the-art AMHS equipment to safely handle hazardous material and keep pace with current demand. Due to the age and condition of the existing equipment, the FISCs are experiencing inordinate amounts of downtime with resultant work stoppage. Typically, the equipment is down for two to three weeks, several times a year for unscheduled repairs. The extended down time is a result of longer than usual lead times for replacement parts due to aging technology on this equipment. Also, because of the special nature of this equipment and building requirements, substitute equipment is not readily available within operations at FISC Norfolk.</p>									

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 03 CIVIL ENGINEERING SUPPORT EQUIP			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
03 CIVIL ENGINEERING SUPPORT EQUIP	VAR	VAR	210	VAR	VAR	574	VAR	VAR	597
<p><b>Narrative Justification:</b></p> <p>NAVSUP is responsible for replacing and maintaining aging Civil Engineering Support Equipment (CESE) necessary for fuel depot operations throughout the claimancy. This equipment is necessary to maintain and improve the working conditions and assist NAVSUP employees operating the fuel depots. Safety, reliability, maintenance cost and customer support are directly impacted by age and condition of this equipment. Specific requirements support approximately 80% of requested funding, additional 20% requested to cover emergent requirements that could emerge after field evaluations. Examples: Tanker truck, Fire fighting pumper truck, 20 ton Semi trailer stake 2 axle, 20 ton Semi trailer van 2 axle.</p>									

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 07 BASE LEVEL COMPUTING			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
07 BASE LEVEL COMPUTING	VAR	VAR	1,938	VAR	VAR	1,940	VAR	VAR	3,425

**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 and other 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 Assistant Secretary of the Navy (ASN(RD&A)). 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.

The BLC Program is phased over time with information technology being replaced continuously. The ultimate goal is to build and maintain an Information Technology architecture which will support a one touch supply system which locates processing at the most economical and technically efficient level, and is consistent with overall DoD 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.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 08 AUTOMATED IDENTIFICATION TECHNOLOGY			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
08 AUTOMATED IDENTIFICATION TECHNOLOGY	VAR	VAR	888	VAR	VAR	-	VAR	VAR	-

**Narrative Justification:**

Automated Identification Technology is a suite of technologies that enables the automatic capture of source data, thereby enhancing the ability to identify, track, document and control deploying and redeploying forces, equipment, personnel and sustainment cargo. Two specific technologies are the Optical Memory Card (OMC) and Radio Frequency Identification (RFID). Effective use of OMC/RFID streamlines the DOD's logistics business processes and enhances its warfighting capability by facilitating the collection of initial source data, thereby reducing administrative and logistics costs. It also eliminates errors and speeds collection and transmission of data in a wide variety of applications. OMC and RFID facilitate Total Asset Visibility by eliminating data entry errors and bridging the gaps between current computer systems. In short, OMC and RFID greatly reduce the need for paper transactions as well as manual data entry. DOD has employed OMC and RFID technologies for several years and has used these sophisticated AIT devices during recent operations in Somalia, Haiti and Bosnia. The sophistication of RFID device capability, accuracy, reliability and stand-off capability continues to grow, opening new opportunities to exploit the technologies. Traditionally used mostly in transportation, RFID is expanding rapidly into maintenance and other areas of logistics. One breakthrough blends micro-electro-mechanical devices with radio frequency systems to improve the safety and service life of ordnance. Both systems require new equipment and programming. OMC and RFID have generated significant cost avoidance's and cost savings in the functional areas of physical inventory, inventory location survey, material receiving and issue, in-transit visibility and plant property accounting. OMC and RFID also promote increased productivity, data accuracy, increased asset visibility, afloat and ashore life cycle support utilizing existing and new equipment and communication interfaces. DMRD 987, "Inventory Reduction Plan Improvement (IRP) specifically cites AIT as a new technology. Navy must continue AIT exploitation to enhance readiness, responsiveness, productivity, inventory control and the overall quality of logistics support. The significant increase in requirements is a result of technological breakthroughs in size and cost of the MEMS/RFID. This budget request reflects the anticipated growth of optical memory card and radio-frequency equipment afloat and ashore to support the DOD Logistics AIT Concept of Operations (CONOPS)

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 09 FMSO EQUIPMENT			D. Activity Identification NWCF		
FY 2000				FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
09 FMSO EQUIPMENT			-			-	VAR	VAR	500
<p><b>Narrative Justification:</b></p> <p>FMSO - Funds provide support to the Navy Fleet Material Support Office's (FMSO) Local Area Network (LAN) Plan. As part of the plan, FMSO is upgrading its LAN which will replace obsolete ADP equipment in order to provide an environment for client/server development. A variety of PC hardware platforms currently exist in FMSO which prevents deployment of the development tools needed to maintain its competitiveness. Upgrading and standardizing hardware infrastructure will allow FMSO to use the LAN to deploy the latest software products.</p>									

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 11 UADPS ICP [CDA]			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
11 UADPS ICP [CDA]	38.7	VAR	3,532	35.5	VAR	3,525	28.3	VAR	2,862

**Narrative Justification:**

UICP- The Uniform Inventory Control Point automated information system provides Navy-wide logistics support for secondary items of supply for weapons, weapon support systems and equipment with aviation or marine applications.

Naval logistic business practices are constantly being revised to support customer requirements. Also, regulations, MIL Standards, legislative requirements and audit findings generate an obligation of frequently schedule program upgrades to UICP. These facts necessitate the permission to issue changes to this legacy system..

The UICP is a mainframe software solution which was established to automate logistics functions at command Inventory Control Points. These funds also provide for software conversion effort required to migrate UICP COBOL mainframe applications to a modernized three-tiered client/server Open Systems Environment in order to provide more direct and transparent access of database resources to the base-level end user. This will streamline business processes and reduce systems enhancement and reengineering development cycle times while reducing mainframe dependency and mainframe access charges.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 12 UADPS SP [CDA]			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
12 UADPS SP [CDA]	60.3	VAR	5,509	49.3	VAR	4,897	54.1	VAR	5,476

**Narrative Justification:**

UADPS-SP/U2- U2 is the automated system used for material management of consumer level inventory. It also contains requisite physical distribution capability for the Fleet Industrial Support Centers (FISCs) and partner sites. Development of a single, world-wide copy of U2 will allow the NAVSUP claimancy to single up inventory management and systems analysis while maintaining the current level of fleet and industrial support. The singling up will allow NAVSUP to significantly reduce U2 processing costs. This concept, U2-Consolidated (U2-C), is seen as both a SUP-21 strategy toward implementation of a Single National Inventory and a mechanism for reducing overall costs.

The Central Design Agency (CDA) efforts reflected herein are also 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 expand consumer level asset visibility and sharing.
- To achieve cost avoidance as legacy systems are eliminated.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 13 SOFTWARE SVCS [CDA]			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
13 SOFTWARE SVCS [CDA]	7.2	VAR	658		VAR	-		VAR	-
<p><b>Narrative Justification:</b></p> <p>Central Design Activity Software Dev/Mod Services will be provided to support the following efforts:</p> <p>Network Services: Network Services covers efforts to increase the utilization of client/server environments. Central administration responsibilities include the development of test beds in support of application testing and site system problem resolution and on-site assistance to install software upgrades. Corporate C/S system engineering is provided during the application design or conception phases of a project to assist with technical aspects to ensure the design is within the specification of the NAVSUP C/S environment. Software development engineering is utilized to develop the software in a Tier II environment that is required to support Navy application that will be rehosted in a C/S processing environment, particularly all processes required for File Replication. CDA effort takes the form of providing centralized technical support and direction for Internet and corporate desk support. FY00: \$347K; FY01: \$0K; FY02: \$0K</p> <p>Standard Procurement System: SPS is the DoD standard automated procurement system that facilitates administration, control and processing of all purchase requests within the procurement component by providing: document tracking, management, and buyer support information, automated document preparation, and automated interface capabilities. As a CIM migration system, SPS replaces existing systems as the automated procurement tool. Successful implementation requires the development of interface modules and on-going services for development testing, operational testing and certification of the interfaces to achieve Full Operating Capability. FY00: \$311K; FY01: \$0K; FY02: \$0K</p>									

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 15 FINANCIAL INITIATIVES			D. Activity Identification NWCF		
		FY 2000		FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
15 FINANCIAL INITIATIVES	VAR	VAR	5,703	VAR	VAR	2,954	VAR	VAR	2,809

**Narrative Justification:** Financial Initiatives include the initiative(s) identified below:

The Naval Supply Systems Command (NAVSUP) started a strategic systems migration and application development effort to improve its global Navy logistics support mission and to become compliant with mandated accounting processes. The migration project was initiated in response to significant changes in NAVSUP's operating environment, including migration of former Navy data centers to the Defense Information Services Agency (DISA), Service-wide downsizing, increased Service authority to enhance legacy systems, and most importantly, rapid advancement in information technology that permits large legacy systems to be migrated, using automated tools, off mainframe hosts and onto mid-tier processors using open, standards based, client-server systems architectures. The application development effort has been initiated to comply with accounting requirements of the Chief Financial Officers' (CFO) Act (standard financial statements) and fiscal requirements of the Grassley Amendment (prevalidation for obligations).

NAVSUP has engaged organic and contractor resources to develop new applications to provide compliant functionality using more modern information technology infrastructures and a modernized mid-tier or base level computing client server environment. Once fully funded and implemented, this vision will provide the technical infrastructure for rapid future systems reengineering using 4+ generation development tools, greater data flexibility within relational database environments, provide base level end users direct and transparent access to data. This architecture will significantly facilitate the realization of NAVSUP's corporate vision of "One Touch Supply" and provide a sound business case using migration strategy to achieve DISA Common Operating Environment (COE) systems compliancy.

Along with the current MFCS migration initiative is the continuing budgetary requirement to cut business costs by reducing the labor required to execute systems enhancement, reengineering development cycle times and associated DISA mainframe development and production access charges. The MFCS project will migrate the NAVICP business process and associated UICP application operations by custom developing PX02/04 into a logical three tier client server architecture that will help solve complex systems and implementation challenges currently confronting the remaining COBOL development of MFCS. Once implemented, this technical solution will also solve other specific UICP material accounting process problems, deliver numerous enhancements, increase the efficiency of the integrated NAVICP business process and support the joint NAVSUP/DFAS goal of singling-up financial systems and creating a single national level of inventory.

NAVSUP, DFAS-HQ and the NAVICP have approved this conceptual approach to these MFCS systems development issues. Implementation of this technical approach will also result in the infusion of new technology and skills at FMSO and the NAVICP.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 16 COMMERCIAL ASSET VISIBILITY II			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
16 COMMERCIAL ASSET VISIBILITY II	VAR	VAR	950	VAR	VAR	1,797	VAR	VAR	1,808

**Narrative Justification:**

DoD Commercial Inventory Accuracy tracking program. The Commercial Asset Visibility Program (CAV) was developed by the NAVY and is now used by the Army, Marines and Air Force. CAVs internal edits and validations impose inventory accuracy standards on Commercial DoD repair contractors. CAV has processed over 2 million TIRs (transaction inventory reports) and has an accuracy rate of over 99 percent. CAV is mandated by both congressional and GAO audits and has documented savings total more than \$675M. This represents a technological investment in our material management systems, which has already saved the Navy millions of dollars that would have been spent in the procurement and stocking of large inventories. In order to remain responsive to the needs of the warfighter and reduce overall logistics costs, the Navy/DOD CAV programs have are being transitioned into an open system architecture that can be used to rapidly incorporate or modify system software. Using a WEB-Based Client Server format/architecture will facilitate Navy TAV efforts to gain visibility and automated access into commercially repaired assets, inclusion of EC/EDI ANSI X12 transaction capabilities will allow CAV to be used for DVD vendors and PICA/SICA activities. Additionally, efforts to integrate In-transit information are critical to "close the loop" and provide a complete TAV picture to our customers. Concurrently, we will be modifying/upgrading CAV to allow us to fully utilize/interface with this new TAV capability/information as well as integrating our Navy TAV efforts with DOD JTAV efforts. The CAV initiative was developed in response to a Congressional Inquiry and GAO audit, to provide 100% accountability and visibility if the \$2 Billion dollars worth of Navy material undergoing repair at commercial DOD vendors repair facilities. Previous tracking methods of proved inaccurate and costly. CAV is an integral part of the Navy TAV effort which reduces procurement costs through redistribution of assets and increases operational readiness through higher accountability, availability and accessibility. Additionally, a customer's confidence in the Supply System increases over time as his material and information needs are met in a more timely, effective manner. Improved inventory accuracy reduces the volume of material reorders and lower safety levels (logistics footprint) both INCONUS and In-Theater.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 17 DISTRIBUTION STANDARD SYSTEM			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
17 DISTRIBUTION STANDARD SYSTEM	VAR	VAR	811	VAR	VAR	-	VAR	VAR	-
<p><b>Narrative Justification:</b></p> <p>DSS - In response to DMRD 902, DLA is replacing its legacy physical distribution system (NISTARS) at all former Navy supply depots (DD's) within CONUS with DSS. On 4 Feb 98, NAVSUP decided to adopt DSS for use at the Navy OCONUS physical distribution sites, FISC Yokosuka and FISC Pearl Harbor. Navy OCONUS sites were not included under DMRD 902, however, economic analysis showed that implementing DSS at these sites will save the Navy over \$11million (after costs) over a ten year planning horizon (a 137% return on investment). This cost element applies to DLA's development of multi-site capability within DSS (required by Navy), testing, training, travel, implementation and follow-on development at the OCONUS sites.</p>									

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 18 TOTAL ASSET VISABILITY			D. Activity Identification NWCF		
FY 2000				FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
18 TOTAL ASSET VISABILITY	VAR	VAR	3,750	VAR	VAR	3,554	VAR	VAR	-

**Narrative Justification:**

TAV - Total Asset Visibility reduces procurement costs through redistribution of assets and increases operational readiness through higher availability. Additionally, a customer's confidence in the Supply System increases over time as his material and information needs are met in a more timely, effective manner. Improved confidence can potentially reduce the volume of material reorders and lower safety levels (logistics footprint) both INCONUS and In-Theater. Technological investment in our material management systems has already saved the Navy millions of dollars that would have been spent in the procurement and stocking of large inventories. In order to remain responsive to the needs of the warfighter, the Navy TAV programs have to be transitioned into an open system architecture that can be used to rapidly incorporate or modify system software. Using a JCALS open architecture will facilitate Navy TAV efforts to gain visibility and automated access into many non-traditional "supply" inventories. Additionally, efforts to integrate In-transit information are critical to "close the loop" and provide a complete TAV picture to our customers. Concurrently, we will be modifying/upgrading several key systems to allow us to fully utilize/interface with this new TAV capability/information as well as integrating our Navy TAV efforts with DOD JTAV efforts.

Projects planned:

- TAV Training Development: A broad training approach will be implemented to allow for classroom training and remote training. Incorporating TAV training into the NSCS Supply Officer School, enlisted supply schools, maintenance/ line schools, and developing remote learning (e.g., over the web).
- Single CPEN: Effort would reengineer and single up the Central Point of Entry Network, providing an open architecture that meets DISA standards, and a more robust, flexible, single CPEN.
- In-Transit Visibility Integration: To provide a complete asset visibility picture, a link with GTN, and providing information to platforms with varying communications capability and providing customer routing update capability.
- Shipboard TAV Integration: Modification of systems such as SALTS, SNAP, SUADPS, Micro-SNAP, R-Supply, etc. to interface with and take advantage of TAV efforts.
- JCALS: Use the CALs tool set to integrate/display NAVTAV systems, expand JCALS visibility and accessibility functionality to legacy and new NAVTAV initiatives to include but not limited to GOM (ROMIS), RAM, DRMSVIS, AFLOAT.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 19 PAPER FREE INITIATIVES			D. Activity Identification NWCF		
		FY 2000		FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
19 PAPER FREE INITIATIVES	VAR	VAR	987	VAR	VAR	3,142	VAR	VAR	945

**Narrative Justification:**

PAPER-FREE ACQUISITION - In MRM # 2 - Moving to a Paper-Free Contracting Process, the Secretary of Defense has directed that DoD undertake a revolution in business practices in conjunction with the Quadrennial Defense Review. SECDEF has specifically cited the need to simplify and modernize our acquisition process in the area of contract, writing, administration, finance and auditing. The paperless acquisition process will span the entire life-cycle of the acquisition process from requirements generation to contract closeout. The Navy's working definition of paperless means that paper can not be used as a means of transmitting information from one 'desk' to another 'desk.' The benefits of paperfree acquisition will be the satisfaction of the requirements of MRM # 2; the reduction of unmatched disbursements; the reduction of purchase card delinquencies; the reduction of procurement time, costs, and personnel with implementation of e-mail/e-catalogs initiatives; process/organizational improvements; better cash management; standardized software, training, and support resulting from enterprise initiatives; improved accuracy in acquisition tracking/reporting; reduced FOIA requests and processing costs; reduced paper [towards NPR # 7 goal of 50% reduction in all paper transactions]; and support of integrated digital environment [IDE] mandate. The Naval Supply Systems Command has two initiatives that will accomplish MRM # 2 goals,.

[1] Automated Non-Standard Requisitioning System (ANSRS). This is an automated program to do non-standard requisitioning. It creates a user friendly system that reduces Logistics Response Time by making the entire requisitioning process paperless and eliminating duplicate tech screening. ANSRS is the Electronic Procurement Generator (EPG) for Standard Procurement System (SPS).

(2) One Touch Supply 3.0 enables the customer to use internet technology to access the broad scope of the Navy/DoD supply system to locate available stock, enter requisitions, perform technical screening functions and check on requisition status. Through Once Touch 3.0, the user has virtual access to all Navy authorized supply sources using a single password using commercially available PKI technology.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 20 ENTERPRISE RESOURCE PLANNING			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
20 ENTERPRISE RESOURCE PLANNING	VAR	VAR	14,000	VAR	VAR	19,000	VAR	VAR	34,000

**Narrative Justification:**

Enterprise Resource Planning (ERP): The effectiveness of the Navy logistics chain is dependent upon transitioning from an inventory based, constant-flow system to a velocity-based, variable-flow system using more efficient programming, scheduling and repair processes; total asset visibility technologies; and integrated logistics information and decision support tools. Integrated logistics chain management techniques provide the means to accurately predict requirements, acquire the right amount of inventory, rapidly move serviceable and repairable items, and select the optimum path for each item as it moves through the logistics chain. Proper management optimizes the performance and cost of the entire logistics chain, end-to-end, and results in delivery of required support to the customers to the right place, at the right time, and right price. The Navy has completed an initial examination of its logistics infrastructure and associated processes to ascertain ways to improve and reduce costs while maintaining/improving support to the warfighter. We have found that commercially available Enterprise Resource Planning (ERP) programs have potential applicability for the Navy. The Navy needs to further examine these private sector capabilities to determine/demonstrate their feasibility and applicability to its logistics, supply and maintenance chains. In order to do so, the Navy will conduct a study and pilot initiative to determine if commercially available ERP programs can be utilized. It is recognized that commercial industry holds the expertise in the ERP area. It is the intent of the Navy to acquire this expertise to demonstrate the feasibility and applicability of ERP programs to the Navy supply chain and maintenance areas by conducting a study and pilot project. To best support the war-fighter and make optimum use of limited support resources, the Navy logistics community intends industry to identify changes that: (1) Best integrate and coordinate Navy supply chain and maintenance management processes, (2) Enhance and integrate the Navy's ability to manage and control supply chain processes, products, services and information from end to end, and (3) Optimize inventory levels to provide effective readiness at the best value.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 21 INFORM-21			D. Activity Identification NWCF		
		FY 2000		FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
21 INFORM-21	VAR	VAR	-	VAR	VAR	1,700	VAR	VAR	350

**Narrative Justification:**  
 INFORM 21 provides the Information Technology (IT) infrastructure to support the SUP-21 Re-engineering effort. It will deliver a consolidated Naval Supply (NAVSUP) Corporate Data Warehouse, combining data from both Mechanicsburg and Philadelphia UICP operational systems. The Corporate Data Warehouse will then be expanded to include retail inventory (UADPS/U2) and consumer level inventory (RSupply). Facilitated by data warehouse expansion, process improvements will be inserted into the NAVSUP claimancy applications portfolio. These process improvements will include new business processes obtained through the purchase of commercial-off-the-shelf (COTS) software such as Advanced Planning and Scheduling (APS) and Supply Chain Management (SCM) systems. Planned achievements are:

1. a shift in emphasis from inventory management to a focus on program and weapon systems support,
2. movement from an echelon demand based, multi-level, stovepiped inventory system to a nationally managed response based profile,
3. movement from organic based regional supply support to prime vendor and supply chain management profile,
4. migration from a dominant physical presence to a dominant logistics information domain (information broker),
5. transformation of the FISCs from sizable physical commands to the regional husbanding agent role,
6. transition from MILS based transactions to EC/EDI transactions,
7. reduction of material consumption in the fleet and improving logistics response time,
8. monitor the performance of suppliers such as DLA, Navy/DoD, and commercial providers,
9. offer our customers unlimited access to comprehensive, integrated, quality data from dispersed but networked sources,
10. accomplish the goals of the Total Asset Visibility Program, and
11. provide a reduction for the need of expeditors, customer service representatives, and TYCOM training teams

It will also be more difficult and more costly to comply with the mandates of DUSD(L) concept of operations for the DOD Interpretable Information Environment (IIE), the DOD logistics strategic Plan (to achieve maximum logistics productivity), and the NAVSUP Strategic Plan Goal 6 (provide the modern information technology needed to continuously improve the efficiency and responsiveness of the next generation of the Navy Supply System.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 22 RESIDUAL ASSET MANAGEMENT			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
22 RESIDUAL ASSET MANAGEMENT	VAR	VAR	-	VAR	VAR	1,100	VAR	VAR	950
<p><b>Narrative Justification:</b></p> <p>In October 1995 the Residual Asset Management (RAM) program was launched to provide real time visibility of residual end use material for redistribution to Fleet units and selected Naval Sea Systems Command (NAVSEA) activities. RAM has proven a great success in its short existence, processing 120 thousand plus requisitions, worth \$172M. Additionally, RAM has provided \$30M in inventory to NAVICP/DLA item managers and \$26.2M in MTIS Credits have been granted to the inventory owners. RAM is currently funded within the Navy Working Capital Fund (NWCF) through a portion of the Wholesale Cost Recovery Rate. RAM is currently a mainframe-based application/production system and is currently installed at TYCOM/NAVSEA residual warehouse sites, by personnel from the Navy Inventory Control Point Mechanicsburg. NAVSUP is the program sponsor and is responsible for the overall program management (PM) of the Residual Asset Management Program, which includes funding. NAVICP-M assumed functional management of the system in Oct.1998, with an office located at NAVICP-M, which consists of contractor personnel as well as government personnel. . NAVICP-M is responsible for sustainment, deployments, training and RAM software interfaces with UADPS and UICP and ICP integration responsibilities. FMSO is currently responsible for the PC software development and sustainment. If not funded the NAVY ROI Greater than 17:1 will not be achieved. Savings in excess of \$500M will not be achieved... NAVY loses ability to track RFI material held at TYCOM/Hardware commands. Additionally, non funding would place NAVY in violation of numerous GAO audits.</p>									

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget			
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 23 ACTIVITY BASED COSTING			D. Activity Identification NWCF			
		FY 2000			FY 2001			FY 2002		
Element of Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
23 ACTIVITY BASED COSTING	VAR	VAR	-	VAR	VAR	680	VAR	VAR	-	

**Narrative Justification:**

Funds are required for centralized management of commercial off-the-shelf (COTS) software tools necessary to support Activity Based Costing / Activity Based Management (ABC/ABM) program initiatives within the NAVSUP claimancy. Current planning calls for continued use of ABC modeling techniques in analyzing opportunities for competitive sourcing, reengineering, and reorganization throughout the claimancy . Projects underway, using previously acquired ABC Technologies Easy ABC software include ICP-wide Activity-Based Costing modeling effort and FISC model refinement to support retail supply A-76 study. Outyear efforts will capitalize on the development of Activity-Based Management systems for ICP and FISC future management. These projects will require central (claimancy) investment in ABC Technologies OROS 4.0 software which is specifically designed to support fully functioning Activity-Based Management systems. NAVSUP cannot realize the benefits of ABC/ABM without a corporate commitment and investment in the tools necessary to support ongoing management. Initial ABC modeling efforts at FISCs and ICPs indicate a lack of techniques and tools to enable a clear understanding of the true costs of NAVSUP products and services. Improved information will be critical in meeting the management challenges presented by increasing A-76 and downsizing pressures over the next few years.

ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. Budget Submission FY 2002 President's Budget		
B. Component/Business Area/Date Navy/Supply Management				C. Line No. & Item Description 25 MINOR CONSTRUCTION			D. Activity Identification NWCF		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
25 MINOR CONSTRUCTION	VAR	VAR	1,000	VAR	VAR	1,900	VAR	VAR	1,976
<p><b>Narrative Justification:</b></p> <p>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. Although these types of alterations are accomplished at a relatively small cost, they have significant impacts on the methods or economies of performing the work. The impact of not funding these projects is a continuation of situations of poor working conditions without the opportunity for increased efficiencies or improved quality of life. Each minor construction project must be less than \$500,000.</p> <p>Projects planned for FY00 include the following:  \$200K FISC-PH POL Storage Shed  \$350K NAVICP Bldg311-2 HVAC Alterations  \$350K FISC-Y Emergency Generator Fac 1390  \$100K Change Orders to Prior Year Contract Awards</p> <p>Projects planned for FY01 include the following:  \$182K FISC YOKO Hakozaki Renovate/widen boat ramp  \$215K FISC N-CAX CAD - 13, Sec 1 Construct loading ramp  \$120K FISC PH Red Hill Inst septic line for bathroom  \$185K FISC PH 473 Inst Helo pad/shrink wrap upgrades  \$125K FISC PH 475 ADA / Handicap Mods  \$325K FISC PH 479 Move JPPSO from 487  \$400K FISC PH 434 Fire sprinklers/historic cat 1/safety deficiency  \$100K FISC PH 1762 Inst emergency generator for POL lab  \$200K FISC PH Various Hurricane upgrades for WWII bldgs  \$48K Change Orders to Prior Year Contract Awards</p> <p>Projects planned for FY02 include the following:  \$266K NSA Philly Foster Ave Phase 2 site improvements  \$185K NSA Philly Foster Ave Phase 3 site improvements  \$185K NSA Philly Foster Ave Phase 4 site improvements  \$271K NSA Mech 409-410 Parking &amp; Site renovations  \$118K NSA Mech 311-312 Parking &amp; Site renovations  \$492K FISC PS New Bldg Construct 12000 sf pre-engr bldg  \$166K FISC PS New Bldg Construct 3200 sf pre-engr bldg  \$150K FISC PH K &amp; H Piers Inst cable tv support for transient ships  \$143K Change Orders to Prior Year Contract Awards</p>									

**FY 2002 President's Budget**  
**Department of Navy**  
**Activity Group: Supply Management**  
**FY 2000**

		(Dollars in Millions)				
<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/ Deficiency</u>	<u>Explanation/Reason for Change</u>
00	Equipment except ADPE and TELECOM	-3.333	4.183	.850	.000	Reduced Requirements
00	Equipment - ADPE and TELECOM	-4.249	7.075	2.826	.000	Reduced Requirements
00	Software Development	14.325	21.575	35.900	.000	Additional requirement for ERP
00	Minor Construction	-.822	1.822	1.000	.000	
	Total FY 2000	5.921	34.655	40.576	.000	

**FY 2002 President's Budget**  
**Department of Navy**  
**Activity Group: Supply Management**  
**FY 2001**

(Dollars in Millions)

<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/ Deficiency</u>	<u>Explanation/Reason for Change</u>
01	Non-ADP Equipment	.171	2.286	2.457	.000	Adjusted Requirements fore AMHS & CESE
01	ADP Equipment	-2.000	3.940	1.940	.000	Deleted Requirement for AIT
01	Software Development	-2.999	45.347	42.348	.000	CDA Rate Adjustments & Adjusted Requirements for Software Development Efforts
01	Minor Construction	.316	1.584	1.900	.000	
	Total Capital Investment	-4.512	53.157	48.645	.000	

**FY 2002 President's Budget**  
**Department of Navy**  
**Activity Group: Supply Management**  
**FY 2002**

(Dollars in Millions)						
<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/ Deficiency</u>	<u>Explanation/Reason for Change</u>
02	Non-ADP Equipment	.000	2.915	2.915	.000	
02	ADP Equipment	.000	3.925	3.925	.000	
02	Software Development	.000	49.200	49.200	.000	
02	Minor Construction	.000	1.976	1.976	.000	
	Total Capital Investment	.000	58.016	58.016	.000	

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
WAR RESERVE MATERIAL (WRM) STOCKPILE  
FY2002 PRESIDENT'S BUDGET  
FY2000 (\$ in millions)**

**JUN 2001  
SM-6**

<b>STOCKPILE STATUS</b>	<b><u>Total</u></b>	<b><u>WRM Protected</u></b>	<b><u>WRM Other</u></b>
1. Inventory BOP @ std	237.0	237.0	0.0
2. Price Change	(3.6)	(3.6)	0.0
3. Reclassification	0.0	0.0	0.0
4. Inventory Changes	1.0	1.0	0.0
a. Receipts @ std	3.6	3.6	0.0
(1). Purchases	3.6	3.6	0.0
(2). Returns from customers	0.0	0.0	0.0
b. Issues @ std	0.0	0.0	0.0
(1). Sales	0.0	0.0	0.0
(2). Returns to suppliers	0.0	0.0	0.0
(3). Disposals	0.0	0.0	0.0
(4). Issues/receipts w/o ADJs	0.0	0.0	0.0
c. Adjustments @ std	(2.6)	(2.6)	0.0
(1). Capitalizations	0.0	0.0	0.0
(2). Gains and losses	0.0	0.0	0.0
(3). Other	(2.6)	(2.6)	0.0
5. Inventory EOP	234.4	234.4	0.0

**STOCKPILE COSTS**

1. Storage	0.1
2. Management	0.0
3. Maintenance/Other	0.0
Total Cost	0.1

**WRM BUDGET REQUEST**

1. Obligations @ cost	0.2
a. Additional WRM	0.2
b. Replen. WRM	0.0
c. Repair WRM	0.0
d. Assemble/Disassemble	0.0
e. Other	0.0
Total Request	0.2

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
WAR RESERVE MATERIAL (WRM) STOCKPILE  
FY2002 PRESIDENT'S BUDGET  
FY2001 (\$ in millions)**

**JUN 2001  
SM-6**

<b>STOCKPILE STATUS</b>	<u><b>Total</b></u>	<u><b>WRM Protected</b></u>	<u><b>WRM Other</b></u>
1. Inventory BOP @ std	234.4	234.4	0.0
2. Price Change	4.0	4.0	0.0
3. Reclassification	0.0	0.0	0.0
6. Inventory Changes	8.6	8.6	0.0
a. Receipts @ std	0.5	0.5	0.0
(1). Purchases	0.4	0.4	0.0
(2). Returns from customers	0.1	0.1	0.0
b. Issues @ std	0.0	0.0	0.0
(1). Sales	0.0	0.0	0.0
(2). Returns to suppliers	0.0	0.0	0.0
(3). Disposals	0.0	0.0	0.0
(4). Issues/receipts w/o ADJs	0.0	0.0	0.0
c. Adjustments @ std	8.1	8.1	0.0
(1). Capitalizations	0.0	0.0	0.0
(2). Gains and losses	0.0	0.0	0.0
(3). Other	8.1	8.1	0.0
7. Inventory EOP	247.0	247.0	0.0

**STOCKPILE COSTS**

1. Storage	0.2
2. Management	0.0
3. Maintenance/Other	0.0
Total Cost	0.2

**WRM BUDGET REQUEST**

1. Obligations @ cost	0.2
a. Additional WRM	0.2
b. Replen. WRM	0.0
c. Repair WRM	0.0
d. Assemble/Disassemble	0.0
e. Other	0.0
Total Request	0.2

**NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT ACTIVITY GROUP  
WAR RESERVE MATERIAL (WRM) STOCKPILE  
FY2002 PRESIDENT'S BUDGET  
FY2002 (\$ in millions)**

**JUN 2001  
SM-6**

<b>STOCKPILE STATUS</b>	<u><b>Total</b></u>	<u><b>WRM Protected</b></u>	<u><b>WRM Other</b></u>
1. Inventory BOP @ std	247.0	247.0	0.0
2. Price Change	(1.5)	(1.5)	0.0
3. Reclassification	0.0	0.0	0.0
6. Inventory Changes	0.3	0.3	0.0
a. Receipts @ std	0.2	0.2	0.0
(1). Purchases	0.2	0.2	0.0
(2). Returns from customers	0.0	0.0	0.0
b. Issues @ std	0.0	0.0	0.0
(1). Sales	0.0	0.0	0.0
(2). Returns to suppliers	0.0	0.0	0.0
(3). Disposals	0.0	0.0	0.0
(4). Issues/receipts w/o ADJs	0.0	0.0	0.0
c. Adjustments @ std	0.1	0.1	0.0
(1). Capitalizations	0.0	0.0	0.0
(2). Gains and losses	0.0	0.0	0.0
(3). Other	0.1	0.1	0.0
7. Inventory EOP	245.8	245.8	0.0

**STOCKPILE COSTS**

1. Storage	0.2
2. Management	0.0
3. Maintenance/Other	0.0
Total Cost	0.2

**WRM BUDGET REQUEST**

1. Obligations @ cost	0.3
a. Additional WRM	0.3
b. Replen. WRM	0.0
c. Repair WRM	0.0
d. Assemble/Disassemble	0.0
e. Other	0.0
Total Request	0.3

DEPARTMENT OF THE NAVY  
NAVY WORKING CAPITAL FUND  
ACTIVITY GROUP: SUPPLY MANAGEMENT – MARINE CORPS  
FY 2002 PRESIDENT’S BUDGET SUBMISSION

BACKGROUND

The Supply Management Activity Group performs inventory management functions that result in the sale of consumable and reparable items to support both Department of Defense (DoD) and other government agencies. Major customers include Fleet Marine Force and other military services. All costs related to supplying this material to the customer are recouped through stabilized prices that include cost recovery elements to cover expenses such as inventory management, receipt and issue of Department managed material.

BUDGET HIGHLIGHTS

The following addresses pertinent issues in Supply Management - Marine Corps Budget Projects:

- (1) Subsistence - (BP 21). The Defense Logistics Agency (DLA) capitalized cold weather rations from Marine Corps Supply Management in FY 2000. This Budget Project will remain open only for residual accounting.
- (2) Retail Supplies - (BP 28). Initial obligation for War Reserve Material is occurring in FY 2001, and future obligations are spread over the Future Year Defense Program (FYDP).
- (3) Fuel- (BP 38). Capitalization of ground fuel by DLA was initiated in FY 2000. In future years, obligations and net sales will continue to decrease until capitalization of fuel is complete at all Marine Corps activities in FY 2003.
- (4) Depot Level Reparable – (BP 84). In FY 2001, obligations are increasing proportionally to anticipated future demand. Initial obligation for War Reserve Material is occurring in FY 2001, and future obligations are spread over the Future Year Defense Program (FYDP).
- (5) Cost of Operations – (BP 91). In FY 2001, use of Direct Vendor delivery contracts has decreased costs of DLA distribution services at Inventory Control Point (ICP).

The following tables outline Retail and Wholesale operations for recurring business:

Projected Retail sales, obligations, and unit costs:

(\$M)	Actual FY 2000	Estimated FY 2001	Estimated FY 2002
Gross Sales	113.9	117.4	77.8
Credit Returns	0.3	0.3	0.3
Net Sales	113.6	117.1	77.5
Obligation	79.7	117.4	77.1
Unit Cost	0.70	1.00	0.99

Projected Wholesale sales, obligations, and unit costs:

(\$M)	Actual FY 2000	Estimated FY 2001	Estimated FY 2002
Gross Sales	63.0	60.3	53.3
Credit Returns	10.3	2.0	1.7
Net Sales	52.7	58.3	51.6
Obligations	47.1	60.5	39.7
Unit Cost	0.91	1.04	0.78

Projected War Reserve material obligations and reimbursements:

(\$M)	Obligations		Reimbursements	
	Estimated FY 2001	Estimated FY 2002	Estimated FY 2002	Estimated FY 2003
Retail	1.7	4.0	1.7	4.0
Wholesale	4.8	4.4	4.8	4.4

## ECONOMIC INDICATORS

The primary function of the Marine Corps Supply Management Activity Group (SMAG) is to provide material in a timely manner to their customers. A key indicator of their success is measured by how well and how quickly customer demands are satisfied, fill rate or supply availability rate. Fill rate is the percentage of demands processed by the supply system without delay at initial processing. The following table displays selected measures of effectiveness:

Description	Actual	Estimated	Estimated
-------------	--------	-----------	-----------

	FY 2000	FY 2001	FY 2002
Fill Rate (%): Reparable Goal	68.0	85.0	85.0
Reparable items managed -			
• LD (Qty)	1,246	1,246	1,246
• Non-LD (Qty)	1,651	1,651	1,651
Cost Recovery Rate (Surcharge) (%)	36.75	27.11	25.74
Annual Price Change (%)	-5.14	-5.68	0.77
Requisitions Received (\$M)	54.5	61.5	55.7
Contracts Executed (Qty)	32	35	35
Personnel (End Strength):			
Civilians	48	48	48
Military	0	0	0

### Peacetime Operating Stock (POS) Inventory

Peacetime stocks include clothing, hard goods, fuel, provisioning and replenishment spares, and special project assets, such as bulk fuel parts. Mobilization stocks include cold weather rations in Norway and consumable and reparable items for Fleet Marine Force (FMF) units. Capitalization of subsistence and clothing is considered in projected inventories:

Standard Unit Price (\$M)	Actual FY 2000	Estimated FY 2001	Estimated FY 2002
Retail	114.2	97.7	88.5
Wholesale	430.5	428.5	426.6
Total	544.7	526.2	515.1

### Net Operating Result (NOR)/Accumulated Operating Result (AOR)

As a result of General Accounting Office (GAO) audit findings, the Marine Corps corrected their spare parts pricing problem, by setting FY 2001 standard and exchange prices on procurement and repair costs, respectively.

In FY 1999, the Marine Corps presented an end of year AOR balance of \$47.8M. In FY 2000, the actual NOR gain of \$33.4M resulted in an end of year AOR of \$81.2M. In this budget, \$71.4M of this AOR is liquidated in FY2001, via price reductions to Navy and Marine Corps customers, resulting in a positive AOR of \$5.6M by the end of the year. In FY 2002, War Reserve Material adjustment will bring FY2002 AOR to zero.

The following table displays the projected Net Operating Results/Accumulated Operating Results:

(\$M)	Actual FY 2000	Estimated FY 2001	Estimated FY 2002
Revenue	166.3	175.4	135.6
Expenses	132.9	179.5	134.7
Operating result	33.4	-4.1	.9
Adj. to NOR	0.0	0.0	-6.5*
NOR	33.4	-4.1	-5.6
Prior Year AOR	47.8	81.2	5.6
Adj. to AOR	0	-71.4	0
AOR	81.2	5.6	0

\*Reduction from sales for War Reserve Material Reimbursement.

### CASH PROJECTION

In Marine Corps Supply Management 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 obligations. Annual sales and obligations programs, as outlined in this submission, are the principal factors in determining cash availability. The following table depicts actual and projected net outlay posture:

(\$M)	Actual FY 2000	Estimated FY 2001	Estimated FY 2002
Collections	163.8	169.2	121.8
Disbursements	144.7	168.8	121.1
Net Outlays	-19.1	-0.4	-0.7

FY 2002 AMENDED BUDGET ESTIMATES  
NAVY WORKING CAPITAL FUND  
SUPPLY MANAGEMENT - MARINE CORPS  
REVENUE AND EXPENSES  
(Dollars in Millions)  
**SUMMARY**

	<u>FY 2000</u> <u>ACTUAL</u>	<u>FY 2001</u>	<u>FY 2002</u>
<b>Revenue:</b>			
Gross Sales (less Credit Returns)	166.3	175.4	129.1
Capital Surcharge	0.0	0.0	0.0
Depreciation except Maj Const	0.0	0.0	0.0
Major Construction Depreciation	0.0	0.0	0.0
Other Income ( <i>Revenue from War Reserve</i> )	0.0	0.0	6.5
Refunds/Discounts	0.0	0.0	0.0
Total Income:	166.3	175.4	135.6
<b>Expenses:</b>			
Cost of Materiel Sold from Inventory	124.8	170.7	125.7
Salaries and Wages:			
Military Personnel Compensation & Benefits	0.0	0.0	0.0
Civilian Personnel & Compensation & Benefits	2.6	2.7	2.8
Travel & Transportation of Personnel	0.1	0.1	0.1
Materials & Supplies (For internal Operations)	0.0	0.0	0.0
Equipment	0.0	0.0	0.0
Other Purchases from Revolving Funds	1.7	2.1	2.1
Transportation of Things	0.0	0.1	0.1
Depreciation - Capital	0.0	0.0	0.0
Printing and Reproduction	0.0	0.0	0.0
Advisory and Assistance Services	0.0	0.0	0.0
Rent, Communication, Utilities, & Misc. Charges	0.0	0.0	0.0
Other Purchased Services	3.7	3.8	3.9
<b>Total Expenses</b>	<b>132.9</b>	<b>179.5</b>	<b>134.7</b>
Operating Result	33.4	-4.1	0.9
Less Capital Surcharge Reservation	0.0	0.0	0.0
Plus Appropriations Affecting NOR/AOR - <i>WRM</i>	0.0	0.0	-6.5
Other Changes Affecting NOR/AOR	0.0	0.0	0.0
Navy Cash Recovery	0.0	0.0	0.0
<b>Net Operating Result</b>	<b>33.4</b>	<b>-4.1</b>	<b>-5.6</b>
Other Changes Affecting AOR			
Prior Year AOR	47.8	81.2	5.6
AOR Redistribution	0.0	-71.4	0.0
Cash Factor	0.0	0.0	0.0
Accumulated Operating Result	81.2	5.6	0.0

FUND 11

June 2001

Source of Revenue  
**Summary**  
(Dollars in Millions)

Marine Corps/Supply Management

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
1. New Orders			
1a. Orders from DoD Components:			
Own Component			
Military Personnel, M.C.	33.5	33.7	3.7
O & M, M.C.	61.4	83.7	69.3
O & M, M.C. Reserve	1.4	1.7	1.6
Reserve Personnel, M.C.	4.4	4.4	4.2
Procurement, M.C.	22.6	18.1	12.3
Other Services (O&M)			
Army	1.4	1.2	1.3
Air Force	0.6	0.6	0.6
Navy	1.7	2.0	2.0
All Other DOD	2.9	2.9	2.7
Subtotal	129.9	148.3	97.7
1b. Orders from other Fund Business Areas:			
Navy Supply Management	0.0	0.0	0.0
M.C. Depot Maintenance	7.6	8.2	8.1
Subtotal	7.6	8.2	8.1
1c. Total DoD	137.5	156.5	105.8
1d. Other Orders:			
Other Federal Agencies	0.1	0.1	0.1
Foreign Military Sales	0.0	0.0	0.0
Non Federal Agencies	5.1	5.3	5.4
Subtotal	5.2	5.4	5.5
1. Total New Orders	142.7	161.9	111.3
2. Carry-In Orders	25.7	17.2	18.6
3. Total Gross Orders:	168.4	179.1	129.9
4. Funded Carry-over:	17.2	18.6	17.4
5. Total Gross Sales:	176.9	177.7	131.1

Fund-15

JUNE 2001

MARINE CORPS  
**BUDGET PROJECT 38**  
(DOLLARS IN MILLIONS)  
FY 2000

<u>PRODUCT</u>	<u>-----PROCURED FROM DFSC-----</u>			<u>-----PROCURED BY SERVICE-----</u>			<u>STABILIZED PRICE</u>
	<u>Barrels</u>	<u>U/P</u>	<u>Ext Cost</u>	<u>Barrels</u>	<u>U/P</u>	<u>Ext Cost</u>	
JP5	0.001	\$26.46	0.035	0.0	\$0.00	0.000	\$26.460
JP-8	0.008	\$26.04	0.218	0.0	\$27.30	0.000	\$26.040
Propane	0.000	\$0.00	0.000	0.0	\$0.93	0.000	\$0.000
Distillates	0.100	\$25.20	2.520	0.0	\$0.00	0.000	\$25.200
MOGAS Lead		\$34.02	0.000	0.0	\$0.00	0.000	\$34.020
MOGAS Unlead	0.082	\$28.56	2.346	0.0	\$0.00	0.000	\$28.560
Residual	0.010	\$15.96	0.153	0.0	\$0.00	0.000	\$15.960
Kerosene	0.001	\$0.00	0.000	0.0	\$63.88	0.000	\$0.000
Other		\$0.00	0.000	0.0	\$0.00	0.000	\$0.000
Coal	0.027	\$52.20	1.409	0.0	\$0.00	0.000	\$52.200
Diesel	0.157	\$23.94	3.756	0.0	\$0.00	0.000	\$23.940
TOTAL	<u>0.386</u>		<u>10.437</u>	<u>0.00</u>		<u>0.000</u>	
				10.437			

Fund-15

JUNE 2001

MARINE CORPS  
**BUDGET PROJECT 38**  
(DOLLARS IN MILLIONS)  
FY 2001

<u>PRODUCT</u>	<u>-----PROCURED FROM DFSC-----</u>			<u>-----PROCURED BY SERVICE-----</u>			<u>STABILIZED PRICE</u>
	<u>Barrels</u>	<u>U/P</u>	<u>Ext Cost</u>	<u>Barrels</u>	<u>U/P</u>	<u>Ext Cost</u>	
JP5	0.001	\$43.26	0.043		\$0.00	\$0.000	\$43.260
JP4		\$0.00	0.000		\$0.00	\$0.000	\$0.000
Propane		\$0.00	0.000	0.009	\$0.93	\$0.009	\$0.000
Distillates	0.132	\$41.16	5.433		\$0.00	\$0.000	\$41.160
MOGAS Lead		\$53.34	0.000		\$0.00	\$0.000	\$53.340
MOGAS Unlead	0.064	\$45.78	2.953		\$0.00	\$0.000	\$45.780
Residual	0.066	\$27.30	1.793		\$0.00	\$0.000	\$27.300
Kerosene		\$0.00	0.000	0.001	\$92.40	\$0.138	\$0.000
Other		\$0.00	0.000	0.002	\$25.27	\$0.058	\$0.000
Coal	0.022	\$52.20	1.161		\$0.00	\$0.000	\$52.200
JP-8	0.189	\$42.42	8.009		\$0.00	\$0.000	\$42.420
<b>TOTAL</b>	<u>0.474</u>		<u>19.392</u>	<u>0.013</u>		<u>\$0.205</u>	
				19.597			

Fund-15

JUNE 2001

MARINE CORPS  
**BUDGET PROJECT 38**  
(DOLLARS IN MILLIONS)  
FY 2002

<u>PRODUCT</u>	<u>-----PROCURED FROM DFSC-----</u>			<u>-----PROCURED BY SERVICE-----</u>			<u>STABILIZED PRICE</u>
	<u>Barrels</u>	<u>U/P</u>	<u>Ext Cost</u>	<u>Barrels</u>	<u>U/P</u>	<u>Ext Cost</u>	
JP5	0.001	\$42.84	0.043	0.000	\$0.00	0.000	\$42.84
JP4		\$0.00	0.000	0.000	\$0.00	0.000	\$0.00
Propane		\$0.00	0.000	0.009	\$0.93	0.008	\$0.00
Distillates	0.140	\$40.32	5.645	0.000	\$0.00	0.000	\$40.32
MOGAS Lead		\$49.14	0.000	0.000	\$0.00	0.000	\$49.14
MOGAS Unlead	0.042	\$52.92	2.223	0.000	\$0.00	0.000	\$52.92
Residual	0.066	\$29.40	1.940	0.000	\$0.00	0.000	\$29.40
Kerosene		\$0.00	0.000	0.001	\$92.40	0.092	\$0.00
Diesel	0.045	\$48.30	2.174	0.002	\$25.27	0.051	\$48.30
Coal	0.022	\$52.20	1.148	0.000	\$0.00	0.000	\$52.20
JP-8	0.057	\$42.00	2.377	0.000	\$0.00	0.000	\$42.00
<b>TOTAL</b>	<u>0.373</u>		<u>15.550</u>	<u>0.012</u>		<u>0.151</u>	
				15.701			

NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
(DOLLARS IN MILLIONS)  
**TOTAL PROGRAM SUMMARY**

DIVISION	PEACETIME INVENTORY	NET CUSTOMER ORDERS	NET SALES	OBLIGATION TARGETS			TOTAL OBLIGATION	COMMITMENT TARGET	TARGET TOTAL	CREDIT SALES
				OPERATING	MOBILIZATION	OTHER				
FY 00										
Approved	504.4	162.6	166.1	167.6	0.0	0.0	167.6	0.0	167.6	1.6
Actual	544.7	174.3	166.3	126.8	0.0	0.0	126.8	0.0	127.5	10.6
Delta	40.3	11.7	0.2	(40.1)	0.0	0.0	(40.1)	0.0	(40.1)	9.0
FY 01										
Approved	499.5	173.2	174.3	172.1	6.5	0.0	178.6	0.0	178.6	1.6
Request	526.2	176.6	175.4	177.9	6.5	0.0	184.4	35.1	219.5	2.3
Delta	26.7	3.4	1.1	5.8	0.0	0.0	5.8	35.1	40.9	0.7
FY 02										
Approved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Request	515.1	127.5	129.1	116.8	8.4	0.0	125.2	22.7	147.9	2.0
Delta	515.1	127.5	129.1	116.8	8.4	0.0	125.2	22.7	147.9	2.0

NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
**FY 2000**  
(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	0.8	0.8	1.2	0.0	0.0	1.2	0.0	1.2	0.0
Actual	0.0	0.8	0.8	(24.9)	0.0	0.0	(24.9)	0.0	(24.9)	0.0
Delta	0.0	0.0	0.0	(26.1)	0.0	0.0	(26.1)	0.0	(26.1)	0.0
BP 28										
Approved	76.6	92.8	93.0	92.2	0.0	0.0	92.2	0.0	92.2	0.0
Actual	113.6	101.5	101.5	94.2	0.0	0.0	94.2	0.0	94.2	0.3
Delta	37.0	8.7	8.5	2.0	0.0	0.0	2.0	0.0	2.0	0.3
BP 38										
Approved	0.7	12.6	12.6	12.6	0.0	0.0	12.6	0.0	12.6	0.0
Actual	0.6	11.3	11.3	10.4	0.0	0.0	10.4	0.0	10.4	0.0
Delta	(0.1)	(1.3)	(1.3)	(2.2)	0.0	0.0	(2.2)	0.0	(2.2)	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
Actual	0.0	0.0	0.0	(0.7)	0.0	0.0	(0.7)	0.0	(0.7)	0.0
Delta	0.0	0.0	0.0	(0.7)	0.0	0.0	(0.7)	0.0	(0.7)	0.0
BP 84										
Approved	427.1	56.4	59.7	51.1	0.0	0.0	51.1	0.0	51.1	1.6
Actual	430.5	60.7	52.7	39.7	0.0	0.0	39.7	0.0	39.7	10.3
Delta	3.4	4.3	(7.0)	(11.4)	0.0	0.0	(11.4)	0.0	(11.4)	8.7
			*REPAIR ----->	15.8						
BP 91										
Approved	0.0	0.0	0.0	10.5	0.0	0.0	10.5	0.0	10.5	0.0
Actual	0.0	0.0	0.0	8.1	0.0	0.0	8.1	0.0	8.1	0.0
Delta	0.0	0.0	0.0	(2.4)	0.0	0.0	(2.4)	0.0	(2.4)	0.0
TOTAL										
Approved	504.4	162.6	166.1	167.6	0.0	0.0	167.6	0.0	167.6	1.6
Actual	544.7	174.3	166.3	126.8	0.0	0.0	126.8	0.0	126.8	10.6
Delta	40.3	11.7	0.2	(40.8)	0.0	0.0	(40.8)	0.0	(40.8)	9.0

NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
**FY 2001**  
(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	0.9	0.9	0.9	0.0	0.0	0.9	0.0	0.9	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	(0.9)	(0.9)	(0.9)	0.0	0.0	(0.9)	0.0	(0.9)	0.0
BP 28										
Approved	73.0	90.6	90.7	92.0	1.7	0.0	93.7	0.0	93.7	0.0
Request	96.8	97.5	97.5	97.8	1.7	0.0	99.5	19.9	119.4	0.3
Delta	23.8	6.9	6.8	5.8	0.0	0.0	5.8	19.9	25.7	0.3
BP 38										
Approved	1.0	19.6	19.6	19.6	0.0	0.0	19.6	0.0	19.6	0.0
Request	0.9	19.6	19.6	19.6	0.0	0.0	19.6	3.9	23.5	0.0
Delta	(0.1)	0.0	0.0	0.0	0.0	0.0	0.0	3.9	3.9	0.0
BP 84										
Approved	425.5	62.1	63.1	50.2	4.8	0.0	55.0	0.0	55.0	1.6
Request	428.5	59.5	58.3	51.7	4.8	0.0	56.5	11.3	67.8	2.0
Delta	3.0	(2.6)	(4.8)	1.5	0.0	0.0	1.5	11.3	12.8	0.4
			*REPAIR ----->	20.0						
BP 91										
Approved	0.0	0.0	0.0	9.4	0.0	0.0	9.4	0.0	9.4	0.0
Request	0.0	0.0	0.0	8.8	0.0	0.0	8.8	0.0	8.8	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	499.5	173.2	174.3	172.1	6.5	0.0	178.6	0.0	178.6	1.6
Request	526.2	176.6	175.4	177.9	6.5	0.0	184.4	35.1	219.5	2.3
Delta	26.7	3.4	1.1	5.8	0.0	0.0	5.8	35.1	40.9	0.7

NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
**FY 2002**  
(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	87.5	61.8	61.8	61.4	4.0	0.0	65.4	13.1	78.5	0.3
Delta	87.5	61.8	61.8	61.4	4.0	0.0	65.4	13.1	78.5	0.3
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	15.7	15.7	15.7	0.0	0.0	15.7	2.6	18.3	0.0
Delta	1.0	15.7	15.7	15.7	0.0	0.0	15.7	2.6	18.3	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	426.6	50.0	51.6	30.7	4.4	0.0	35.1	7.0	42.1	1.7
Delta	426.6	50.0	51.6	30.7	4.4	0.0	35.1	7.0	42.1	1.7
			*REPAIR ----->	17.0						
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	9.0	0.0	0.0	9.0	0.0	9.0	0.0
Delta	0.0	0.0	0.0	9.0	0.0	0.0	9.0	0.0	9.0	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	515.1	127.5	129.1	116.8	8.4	0.0	125.2	22.7	147.9	2.0
Delta	515.1	127.5	129.1	116.8	8.4	0.0	125.2	22.7	147.9	2.0

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NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
BY WEAPON SYSTEM/CATEGORY  
**RETAIL CENTRALLY MANAGED**  
**FY 2000**  
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS BP 28	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
Improved Recovery Vehicle		0.7			0.7
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN	0.1	0.0	0.0		0.1
TOTAL ORDNANCE TANK AUTOMOTIVE	0.1	0.7	0.0	0.0	0.8
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL GUIDED MISSILES AND EQUIPMENT	0.0	0.0	0.0	0.0	0.0
					0.0
Mod Kits MAGTF C41		0.1			0.1
Command Post Systems		1.2			1.2
Mod Kits (Intel)		0.2			0.2
Radio Systems		0.3			0.3
					0.0
					0.0
					0.0
BASIC REPLEN	-0.1				-0.1
TOTAL COMMUNICATION AND ELECTRONICS	-0.1	1.8	0.0	0.0	1.7
					0.0
					0.0
					0.0
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
					0.0
BASIC REPLEN	-0.8				-0.8
TOTAL GENERAL PROPERTY	-0.8	0.0	0.0	0.0	-0.8
					0.0
TOTAL PROCUREMENT	-0.8	2.5	0.0	0.0	1.7
WAR RESERVE					0.0
TOTAL COST	-0.8	2.5	0.0	0.0	1.7

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NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
BY WEAPON SYSTEM/CATEGORY  
**RETAIL CENTRALLY MANAGED**  
FY 2001  
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS BP 28	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
Modification Kits Tracked Vehicles		0.1			0.1
Marine Enhancement Program		0.1			0.1
HMMWV		0.5			0.5
Items < \$2M		0.1			0.1
					0.0
TOTAL AUTOMATIVE	0.0	0.8	0.0	0.0	0.8
					0.0
Auto Test Equipment		0.2			0.2
Gen purpose Test Equipment		0.1			0.1
Maneuver C2 Systems		0.4			0.4
Radio Systems		0.3			0.3
Modification Kits MAGTF C4I		0.1			0.1
Intelligence Support Equipment		0.6			0.6
Modification Kits Intelligence		0.2			0.2
Items under \$2M		0.3			0.3
Night Vision Equipment		0.1			0.1
					0.0
TOTAL COMMUNICATION AND ELECTRONICS	0.0	2.3	0.0	0.0	2.3
					0.0
					0.0
					0.0
					0.0
TOTAL GUIDED MISSILES AND EQUIPMENT					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
Material Handling Equipment	0.1	0.3			0.4
TOTAL GENERAL PROPERTY	0.1	0.3	0.0	0.0	0.4
					0.0
TOTAL PROCUREMENT	0.1	3.4	0.0	0.0	3.5
WAR RESERVE			1.7		1.7
TOTAL COST	0.1	3.4	1.7	0.0	5.2

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NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
BY WEAPON SYSTEM/CATEGORY  
**RETAIL CENTRALLY MANAGED**  
**FY 2002**  
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS BP 28	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
LW155 Towed Howitzer		0.9			0.9
Improved Recovery Vehicle		0.2			0.2
					0.0
					0.0
					0.0
TOTAL ORDNANCE TANK AUTOMOTIVE	0.0	1.1	0.0	0.0	1.1
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL GUIDED MISSILES AND EQUIPMENT	0.0	0.0	0.0	0.0	0.0
Radio System		0.5			0.5
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
TOTAL COMMUNICATION AND ELECTRONICS	0.0	0.5	0.0	0.0	0.5
					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
TOTAL GENERAL PROPERTY	0.0	0.1	0.0	0.0	0.1
					0.1
TOTAL PROCUREMENT	0.0	1.7	0.0	0.0	1.7
WAR RESERVE			4.0		4.0
TOTAL COST	0.0	1.7	4.0	0.0	5.7

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NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
BY WEAPON SYSTEM/CATEGORY  
**DEPOT LEVEL REPARABLES**  
FY 2000  
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
Improved Recovery Vehicle		12.4			12.4
Mod Kits (TRKVEH)		0.7			0.7
BASIC REPLEN	-0.8	0.0	0.0	3.2	2.4
TOTAL ORDNANCE TANK AUTOMOTIVE	-0.8	13.1	0.0	3.2	15.5
					0.0
					0.0
					0.0
BASIC REPLEN	4.1			2.0	6.1
TOTAL GUIDED MISSILES AND EQUIPMENT	4.1	0.0	0.0	2.0	6.1
Radio Systems		1.3			1.3
Communication Switching and Control System		0.4			0.4
Command Post Systems		1.5			1.5
Air Operations C2 Systems		1.7			1.7
Mod Kits (INTEL)		2.9			2.9
Mod Kits MAGTF C4I		0.3			0.3
					0.0
					0.0
BASIC REPLEN	-0.4			10.5	10.1
TOTAL COMMUNICATION AND ELECTRONICS	-0.4	8.1	0.0	10.5	18.2
					0.0
BASIC REPLEN	-0.2			0.1	-0.1
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	-0.2	0.0	0.0	0.1	-0.1
					0.0
BASIC REPLEN	0.0			0.0	0.0
TOTAL GENERAL PROPERTY	0.0	0.0	0.0	0.0	0.0
TOTAL PROCUREMENT	2.7	21.2	0.0	15.8	39.7
War Reserve			0.0		0.0
TOTAL COST	2.7	21.2	0.0	15.8	39.7

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NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
BY WEAPON SYSTEM/CATEGORY  
**DEPOT LEVEL REPARABLES**  
**FY 2001**  
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
Modification Kits (Tracked Vehicles)		1.0			1.0
LTWTISS		1.4			1.4
					0.0
BASIC REPLEN/BASIC REWORK	2.4			7.5	9.9
TOTAL ORDNANCE TANK AUTOMOTIVE	2.4	2.4	0.0	7.5	12.3
					0.0
					0.0
					0.0
BASIC REPLEN/BASIC REWORK	0.5			0.0	0.5
TOTAL GUIDED MISSILES AND EQUIPMENT	0.5	0.0	0.0	0.0	0.5
Automated Test Equipment		0.5			0.5
General Purpose Elect Test Equipment		0.5			0.5
Command Post Systems		0.2			0.2
Maneuver C2 Systems		0.5			0.5
Radio Systems		1.4			1.4
Communications Switching and Control System		2.9			2.9
Modification Kits MAGTF C41		0.2			0.2
<MIL MAGTF C41		0.7			0.7
Air Operations C2 Systems		0.4			0.4
Target Locator Design System		1.0			1.0
Command Post Systems		0.6			0.6
Intelligence Support Equipment		2.7			2.7
Modification Kits (Intel)		4.3			4.3
Items Under \$2M		0.1			0.1
General Purpose Mech TMDE		0.1			0.1
Night Vision Equipment		1.5			1.5
BASIC REPLEN/BASIC REWORK	7.9			11.6	19.5
TOTAL COMMUNICATION AND ELECTRONICS	7.9	17.6	0.0	11.6	37.1
					0.0
					0.0
BASIC REPLEN/BASIC REWORK	0.7			0.1	0.8
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.7	0.0	0.0	0.1	0.8
					0.0
BASIC REPLEN/BASIC REWORK	0.1			0.9	1.0
TOTAL GENERAL PROPERTY	0.1	0.0	0.0	0.9	1.0
					0.0
<b>TOTAL PROCUREMENT</b>	<b>11.6</b>	<b>20.0</b>	<b>0.0</b>	<b>20.1</b>	<b>51.7</b>
War Reserve			4.8		4.8
<b>TOTAL COST</b>	<b>11.6</b>	<b>20.0</b>	<b>4.8</b>	<b>20.1</b>	<b>56.5</b>

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June 2001

NAVY WORKING CAPITAL FUND  
MARINE CORPS SUPPLY MANAGEMENT  
BY WEAPON SYSTEM/CATEGORY  
**DEPOT LEVEL REPARABLES**  
**FY 2002**  
(DOLLARS IN MILLIONS)

WEAPON SYSTEM	BASIC REPLEN	OUTFITS	SPECIAL PROGRAMS	BASIC REWORK	TOTAL
LW 155 Towed Howitzer		0.6			0.6
Improved Recovery Vehicle		3.4			3.4
					0.0
					0.0
BASIC REPLEN/BASIC REWORK	1.4			5.8	7.2
TOTAL ORDNANCE TANK AUTOMOTIVE	1.4	4.0	0.0	5.8	11.2
					0.0
					0.0
					0.0
BASIC REPLEN/BASIC REWORK	0.5			1.5	2.0
TOTAL GUIDED MISSILES AND EQUIPMENT	0.5	0.0	0.0	1.5	2.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
BASIC REPLEN/BASIC REWORK	7.7			9.2	16.9
TOTAL COMMUNICATION AND ELECTRONICS	7.7	0.0	0.0	9.2	16.9
					0.0
BASIC REPLEN/BASIC REWORK	0.0				0.0
TOTAL ENGINEER SUPPORT AND CONSTRUCTION	0.0	0.0	0.0	0.0	0.0
					0.0
BASIC REPLEN/BASIC REWORK	0.1			0.5	0.6
TOTAL GENERAL PROPERTY	0.1	0.0	0.0	0.5	0.6
					0.0
TOTAL PROCUREMENT	9.7	4.0	0.0	17.0	30.7
War Reserve			4.4		4.4
TOTAL COST	9.7	4.0	4.4	17.0	35.1

NAVY WORKING CAPITAL FUND  
INVENTORY STATUS  
**SUMMARY**  
(DOLLARS IN MILLIONS)  
**FISCAL YEAR 2000**

	<u>Total</u>	<u>Mobilization</u>	---- Peacetime ----	
			<u>Operating</u>	<u>Other</u>
1. INVENTORY BOP	677.7	109.3	473.5	94.9
2. BOP INVENTORY ADJUSTMENTS	(28.4)	(5.0)	(19.3)	(4.1)
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	(28.4)	(5.0)	(19.3)	(4.1)
C. INVENTORY RECLASSIFIED AND REPRICED	649.3	104.3	454.2	90.8
3. RECEIPTS AT STANDARD	143.2	0.7	142.5	0.0
4. SALES AT STANDARD	176.9	0.8	176.1	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(0.5)	0.0	0.0	(0.5)
B. RETURNS FROM CUSTOMERS FOR CREDIT	2.6	0.0	2.6	0.0
C. RETURNS FROM CUSTOMERS W/O CREDIT	91.3	3.7	22.7	64.9
D. RETURNS TO SUPPLIERS (-)	(33.3)	0.0	(0.7)	(32.6)
E. TRANSFERS TO PROP. DISPOSAL (-)	(26.9)	(0.1)	(1.5)	(25.3)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(41.4)	(42.8)	(0.3)	1.7
G. OTHER (list/explain)	11.4	9.1	2.3	0.0
H. TOTAL ADJUSTMENTS	3.2	(30.1)	25.1	8.2
6. INVENTORY EOP	618.8	74.1	445.7	99.0
7. INVENTORY EOP, REVALUED	276.9	47.3	183.9	45.7
A. ECONOMIC RETENTION (memo)				10.1
B. CONTINGENCY RETENTION (memo)				16.4
C. POTENTIAL DOD EXCESS (memo)				19.2
8. INVENTORY ON ORDER EOP (memo)	60.4	0.0	57.0	3.4
9. NARRATIVE:				

Other adjustments (line 5g):

	<u>Total</u>	<u>Mobilization</u>	<u>Operating</u>	<u>Other</u>
Other Gains/Losses	11.4	9.1	2.3	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	11.4	9.1	2.3	0.0

NAVY WORKING CAPITAL FUND  
INVENTORY STATUS  
**SUMMARY**  
(DOLLARS IN MILLIONS)  
**FISCAL YEAR 2001**

	<u>Total</u>	<u>Mobilization</u>	---- Peacetime ---- <u>Operating</u>	<u>Other</u>
1. INVENTORY BOP	618.8	74.1	445.7	99.0
2. BOP INVENTORY ADJUSTMENTS	33.8	5.7	24.2	3.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	33.8	5.7	24.2	3.9
C. INVENTORY RECLASSIFIED AND REPRICED	652.6	79.8	469.9	102.9
3. RECEIPTS AT STANDARD	148.7	0.0	148.7	0.0
4. SALES AT STANDARD	177.7	0.0	177.7	0.0
5. INVENTORY ADJUSTMENTS				
A. CAPITALIZATIONS + or (-)	(9.0)	(2.8)	(6.2)	0.0
B. RETURNS FROM CUSTOMERS FOR CREDIT	2.3	0.0	2.3	0.0
C. RETURNS FROM CUSTOMERS W/O CREDIT	92.2	0.0	18.0	74.2
D. RETURNS TO SUPPLIERS (-)	(11.6)	0.0	0.0	(11.6)
E. TRANSFERS TO PROP. DISPOSAL (-)	(13.9)	0.0	0.0	(13.9)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(61.4)	0.1	(5.0)	(56.5)
G. OTHER (list/explain)	(18.9)	0.0	(1.7)	(17.2)
H. TOTAL ADJUSTMENTS	(20.3)	(2.7)	7.4	(25.0)
6. INVENTORY EOP	603.3	77.1	448.3	77.9
7. INVENTORY EOP, REVALUED	266.0	51.0	183.2	31.8
A. ECONOMIC RETENTION (memo)				6.9
B. CONTINGENCY RETENTION (memo)				10.4
C. POTENTIAL DOD EXCESS (memo)				14.4
8. INVENTORY ON ORDER EOP (memo)	74.2	0.0	70.8	3.4
9. NARRATIVE:				
Other adjustments (line 5g):				
	<u>Total</u>	<u>Mobilization</u>	<u>Operating</u>	<u>Other</u>
Other Gains/Losses	(18.9)	0.0	(1.7)	(17.2)
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	(18.9)	0.0	(1.7)	(17.2)

NAVY WORKING CAPITAL FUND  
INVENTORY STATUS  
**SUMMARY**  
(DOLLARS IN MILLIONS)  
**FISCAL YEAR 2002**

	<u>Total</u>	<u>Mobilization</u>	---- Peacetime ---- <u>Operating</u>	<u>Other</u>
1. INVENTORY BOP	603.3	77.1	448.3	77.9
2. BOP INVENTORY ADJUSTMENTS	7.9	1.4	5.6	0.9
A. RECLASSIFICATION CHANGE (memo)	0.0	0.0	0.0	0.0
B. PRICE CHANGE AMOUNT (memo)	7.9	1.4	5.6	0.9
C. INVENTORY RECLASSIFIED AND REPRICED	611.2	78.5	453.9	78.8
3. RECEIPTS AT STANDARD	108.9	6.5	102.4	0.0
4. SALES AT STANDARD	131.1	0.0	131.1	0.0
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 W/O CREDIT	95.3	0.0	21.4	73.9
D. RETURNS TO SUPPLIERS (-)	(10.4)	0.0	0.0	(10.4)
E. TRANSFERS TO PROP. DISPOSAL (-)	(7.3)	0.0	0.0	(7.3)
F. ISSUES/RECEIPTS WITHOUT REIMBURSEMENT + or (-)	(62.3)	0.0	(1.3)	(61.0)
G. OTHER (list/explain)	(6.2)	0.0	(9.8)	3.6
H. TOTAL ADJUSTMENTS	11.1	0.0	12.3	(1.2)
6. INVENTORY EOP	600.1	85.0	437.5	77.6
7. INVENTORY EOP, REVALUED	261.1	54.7	175.5	30.8
A. ECONOMIC RETENTION (memo)				6.5
B. CONTINGENCY RETENTION (memo)				10.0
C. POTENTIAL DOD EXCESS (memo)				14.2
8. INVENTORY ON ORDER EOP (memo)	64.3	0.0	61.0	3.3
9. NARRATIVE:				

Other adjustments (line 5f):

	<u>Total</u>	<u>Mobilization</u>	<u>Operating</u>	<u>Other</u>
Other Gains/Losses	(6.2)	0.0	(9.8)	3.6
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	(6.2)	0.0	(9.8)	3.6

SM-5B

June 2001

FY 2002 AMENDED BUDGET SUBMISSION  
 NAVY WORKING CAPITAL FUND  
 MARINE CORPS SUPPLY MANAGEMENT  
**Wholesale Only (BP 84 MC Managed)**  
 Customer Price Change  
 (\$ IN MILLIONS)

Composite ( BP 84)

				FY 2000		FY 2001		FY 2002
1. Net Sales at Cost				35.1		35.0		27.2
2. Less: Mat'l Inflation Adj.				0.4		0.5		0.5
3. Revised Net Sales				34.7		34.5		26.7
4. Surcharge (\$)				12.9		9.5		7.0
5. Change to Customers								
a. Previous Year's Surcharge (%)				45.83%		36.75%		27.11%
b. This year's Surcharge and Material Inflation divided by line 3 above (\$)				38.33%		28.99%		28.09%
c. Percent change to customer				-5.14%		-5.68%		0.77%

Fund-9a							
Activity Group Capital Investment Summary Marine Corps Supply Management Activity Group FY 2002 Amended Budget Submission June 2001 (\$ in Millions)							
Line Number	Item Description	FY 2000		FY 2001		FY 2002	
		Quantity	Total Cost	Quantity	Total Cost	Quantity	Total Cost
1a	Non-ADP Equipment (>500,000)	N/A	0.0	N/A	0.0	N/A	0.0
	<b>Subtotal Equipment (&gt;500,000)</b>	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
	<b>Subtotal Equipment (&gt;15,000&lt;500,000)</b>	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
	<b>Subtotal Minor Const (&gt;15,000&lt;300,000)</b>	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
	<b>Subtotal ADP Equipment (&gt;100,000)</b>	0.0	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
	<b>Subtotal ADP Equipment (&gt;15,000&lt;100,000)</b>	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
	<b>Subtotal Telecomm Equip (&gt;15,000&lt;100,000)</b>	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
	<b>Subtotal Off the Shelf (&gt;15,000&lt;100,000)</b>	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
	<b>Subtotal CDA (Software&gt;100,000)</b>	N/A	0.0	N/A	0.0	N/A	0.0
	<b>GRAND TOTAL CAPITAL PURCHASE PROGRAM</b>	0.0	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
	Major Construction (MILCON) Total - Non Add	N/A	0.0	N/A	0.0	N/A	0.0

MARINE CORPS SUPPLY MANAGEMENT ACTIVITY GROUP CAPITAL INVESTMENT JUSTIFICATION (\$ in Thousands)							A. FY 2002 Amended Budget Submission		
B. Marine Corps Supply Management				C. Line No.			D. MC Supply		
Element of Cost	FY 2000			FY 2001			FY 2002		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
TOTAL			0			0			0

Narrative Justification:

**Navy Working Capital Fund**  
**Marine Corps Supply Management Activity Group**  
**FY 2002 AMENDED BUDGET ESTIMATES**  
**FY 2000**  
(Dollars in Millions)

<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/Deficiency</u>
<b>2000</b>	<b>Equipment except ADPE and TELECOM</b>				
	N/A	0.000	0.000	0.000	0.000
	Subtotal Equipment	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Equipment - ADPE and TELECOM</b>				
	Subtotal ADPE/TelCom	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Software Development</b>				
	Subtotal Software	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Minor Construction</b>				
	N/A	0.000	0.000	0.000	0.000
	Subtotal Minor Construction	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Total FY 2000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**Navy Working Capital Fund**  
**Marine Corps Supply Management Activity Group**  
**FY 2002 AMENDED BUDGET ESTIMATES**  
**FY 2001**  
(Dollars in Millions)

<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/Deficiency</u>
<b>2001</b>	<b>Equipment except ADPE and TELECOM</b>				
	N/A	0.000	0.000	0.000	0.000
	Subtotal Equipment	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Equipment - ADPE and TELECOM</b>				
	Subtotal ADPE/TelCom	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Software Development</b>				
	Subtotal Software	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Minor Construction</b>				
	N/A	0.000	0.000	0.000	0.000
	Subtotal Minor Construction	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Total FY 2001</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**Navy Working Capital Fund**  
**Marine Corps Supply Management Activity Group**  
**FY 2002 AMENDED BUDGET ESTIMATES**  
**FY 2002**  
(Dollars in Millions)

<u>FY</u>	<u>Approved Project</u>	<u>Reprogs</u>	<u>Approved Proj Cost</u>	<u>Current Proj Cost</u>	<u>Asset/ Deficiency</u>
<b>2002</b>	<b>Equipment except ADPE and TELECOM</b>				
	N/A	0.000	0.000	0.000	0.000
	Subtotal Equipment	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Equipment - ADPE and TELECOM</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	Subtotal ADPE/TelCom	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Software Development</b>				
	Subtotal Software	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Minor Construction</b>				
	N/A	0.000	0.000	0.000	0.000
	Subtotal Minor Construction	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
	<b>Total FY 2002</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**War Reserve Material (WRM)**  
**Stockpile**  
**FY 2000**  
(\$ in millions)

Stockpile Status			
	Total	WRM Protected	WRM Other
1. Inventory BOP @ std	106.6	106.6	0.0
2. Price Change	-5.0	-5.0	0.0
3. Reclassification	101.6	101.6	0.0
Inventory Changes	-30.0	-30.0	0.0
a. Receipts @ std	0.7	0.7	0.0
(1). Purchases	0.7	0.7	0.0
(2). Returns from customers	0.0	0.0	0.0
b. Issues @ std	0.0	0.0	0.0
(1). Sales	0.0	0.0	0.0
(2). Returns to suppliers	0.0	0.0	0.0
(3). Disposals	0.0	0.0	0.0
c. Adjustments @ std	-30.7	-30.7	0.0
(1). Capitalizations	0.0	0.0	0.0
(2). Gains and losses	0.0	0.0	0.0
(3). Other	-30.7	-30.7	0.0
Inventory EOP	71.6	71.6	0.0
Stockpile Costs			
1. Storage	0.0	0.0	0.0
2. Management	0.0	0.0	0.0
3. Maintenance/Other	0.0	0.0	0.0
Total Cost	0.0	0.0	0.0
WRM Budget Request			
1. Obligations @ cost	0.0	0.0	0.0
a. Additional WRM Investment	0.0	0.0	0.0
b. Replen./Repair WRM Reinvest.	0.0	0.0	0.0
c. Stock Rotation/Obsolescence	0.0	0.0	0.0
d. Assemble/Disassemble	0.0	0.0	0.0
e. Other	0.0	0.0	0.0
Total Request	0.0	0.0	0.0

**War Reserve Material (WRM)**  
**Stockpile**  
**FY 2001**  
(\$ in millions)

Stockpile Status			
	Total	WRM Protected	WRM Other
1. Inventory BOP @ std	71.6	71.6	0.0
2. Price Change	5.7	5.7	0.0
3. Reclassification	77.3	77.3	0.0
Inventory Changes	-0.2	-0.2	0.0
a. Receipts @ std	0.0	0.0	0.0
(1). Purchases	0.0	0.0	0.0
(2). Returns from customers	0.0	0.0	0.0
b. Issues @ std	0.0	0.0	0.0
(1). Sales	0.0	0.0	0.0
(2). Returns to suppliers	0.0	0.0	0.0
(3). Disposals	0.0	0.0	0.0
c. Adjustments @ std	-0.2	-0.2	0.0
(1). Capitalizations	0.0	0.0	0.0
(2). Gains and losses	0.0	0.0	0.0
(3). Other	-0.2	-0.2	0.0
Inventory EOP	77.1	77.1	0.0
Stockpile Costs			
1. Storage	0.0	0.0	0.0
2. Management	0.0	0.0	0.0
3. Maintenance/Other	0.0	0.0	0.0
Total Cost	0.0	0.0	0.0
WRM Budget Request			
1. Obligations @ cost	0.0	0.0	0.0
a. Additional WRM Investment	0.0	0.0	0.0
b. Replen./Repair WRM Reinvest.	6.5	6.5	0.0
c. Stock Rotation/Obsolescence	0.0	0.0	0.0
d. Assemble/Disassemble	0.0	0.0	0.0
e. Other	0.0	0.0	0.0
Total Request	6.5	6.5	0.0

**War Reserve Material (WRM)**  
**Stockpile**  
**FY 2002**  
(\$ in millions)

Stockpile Status			
	Total	WRM Protected	WRM Other
1. Inventory BOP @ std	77.1	77.1	0.0
2. Price Change	1.4	1.4	0.0
3. Reclassification	78.5	78.5	0.0
Inventory Changes	6.5	6.5	0.0
a. Receipts @ std	6.5	6.5	0.0
(1). Purchases	6.5	6.5	0.0
(2). Returns from customers	0.0	0.0	0.0
b. Issues @ std	0.0	0.0	0.0
(1). Sales	0.0	0.0	0.0
(2). Returns to suppliers	0.0	0.0	0.0
(3). Disposals	0.0	0.0	0.0
c. Adjustments @ std	0.0	0.0	0.0
(1). Capitalizations	0.0	0.0	0.0
(2). Gains and losses	0.0	0.0	0.0
(3). Other	0.0	0.0	0.0
Inventory EOP	85.0	85.0	0.0
Stockpile Costs			
1. Storage	0.0	0.0	0.0
2. Management	0.0	0.0	0.0
3. Maintenance/Other	0.0	0.0	0.0
Total Cost	0.0	0.0	0.0
WRM Budget Request			
1. Obligations @ cost	0.0	0.0	0.0
a. Additional WRM Investment	0.0	0.0	0.0
b. Replen./Repair WRM Reinvest.	8.4	8.4	0.0
c. Stock Rotation/Obsolescence	0.0	0.0	0.0
d. Assemble/Disassemble	0.0	0.0	0.0
e. Other	0.0	0.0	0.0
Total Request	8.4	8.4	0.0