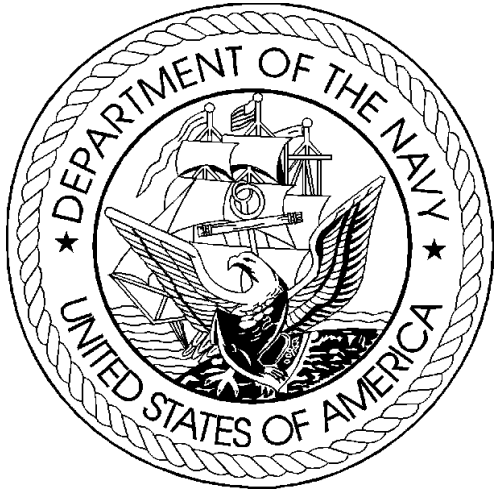
DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2000/2001 BIENNIAL BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 1999

OTHER PROCUREMENT, NAVY
BUDGET ACTIVITY 7

Department of the Navy

FY 2000/2001 Procurement Program Exhibit P-1

APPROPRIATION: 1810N Other Procurement, Navy DATE: February 1999

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2000 UNIT COST	TOA, $ IN MILLIONS -----FY 1998---- QUANTITY	COST	-----FY 1999---- QUANTITY	COST	-----FY 2000---- QUANTITY	COST	-----FY 2001---- QUANTITY	COST	S E C
	BUDGET ACTIVITY 07: Personnel and Command Support Equipment											
	Training Devices											
192 8081	Training Support Equipment	A		2.0	5.2		3.1		2.2			U
	Command Support Equipment											
193 8106	Command Support Equipment	A		21.7	22.0		14.5		10.7			U
194 8108	Education Support Equipment	A		2.1	-		-		-			U
195 8109	Medical Support Equipment	A		-	2.5		5.0		7.8			U
196 8115	Intelligence Support Equipmen	A		23.6	21.6		19.4		17.4			U
197 8118	Operating Forces Support Equi	A		10.2	6.2		5.8		4.4			U
198 8126	Environmental Support Equipme	A		20.9	16.6		18.4		22.5			U
199 8128	Physical Security Equipment	A		.3	-		1.4		2.5			U
	Other											
200 8150	Cancelled Account Adjustments	A		10.0	-		-		-			U
	TOTAL Personnel and Command Support Equipment			90.9	74.1		67.6		67.6			

* ITEMS UNDER $50,000

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

Identification code 17-1810-0-1-051		Budget Plan (amounts for actions programed) PROCUREMENT			
		1998 actual	1999 est.	2000 est.	2001 est.
	Program by activities:				
	Direct program:				
00.0101	Ships support equipment	727,750	954,401	858,709	703,509
00.0201	Communications and electronics equipment	1,095,702	1,629,901	1,845,227	1,531,094
00.0301	Aviation support equipment	204,148	243,679	216,237	215,043
00.0401	Ordnance support equipment	520,423	715,972	629,418	668,357
00.0501	Civil engineering support equipment	48,370	54,856	67,144	94,062
00.0601	Supply support equipment	54,583	89,537	139,628	180,239
00.0701	Personnel and command support equipment	136,986	74,063	67,598	67,570
00.0801	Spares and repair parts	219,654	246,506	276,130	180,279
00.9101	Total direct program	3,007,616	4,008,915	4,100,091	3,640,153
01.0101	Reimbursable program	49,428	42,000	42,000	42,000
10.0001	Total	3,057,044	4,050,915	4,142,091	3,682,153
	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	-1,417	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-48,011			
17.0001	Recovery of prior year obligations				
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans				
21.4003	Available to finance new budget plans	-7,700	-28,500		
21.4009	Reprograming from/to prior year budget plans	-20,391			
22.1001	Unobligated balance transferred to other accounts	11,177			
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans				
24.4003	Available to finance subsequent year budget plans	28,500			
25.0001	Unobligated balance expiring	9,214			
39.0001	Budget authority	3,028,416	3,980,415	4,100,091	3,640,153
	Budget authority:				
40.0001	Appropriation	3,136,505	4,005,415	4,100,091	3,640,153
40.3601	Appropriation rescinded (unob bal)		-28,500		
40.7601	Reduction pursuant to P.L. 105-56 (-), 8035	-56,735			
41.0001	Transferred to other accounts (-)	-82,017			
42.0001	Transferred from other accounts	30,663	3,500		
43.0001	Appropriation (adjusted)	3,028,416	3,980,415	4,100,091	3,640,153

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

Identification code 17-1810-0-1-051		Obligations			
		1998 actual	1999 est.	2000 est.	2001 est.
	Program by activities:				
	Direct program:				
00.0101	Ships support equipment	730,410	803,087	845,223	739,332
00.0201	Communications and electronics equipment	1,127,427	1,479,892	1,756,499	1,583,160
00.0301	Aviation support equipment	222,704	210,650	212,051	216,653
00.0401	Ordnance support equipment	511,296	612,449	611,088	664,897
00.0501	Civil engineering support equipment	46,899	46,682	62,833	88,063
00.0601	Supply support equipment	57,524	74,718	127,586	169,612
00.0701	Personnel and command support equipment	85,983	122,715	76,319	67,896
00.0801	Spares and repair parts	220,864	204,354	263,425	197,969
00.9101	Total direct program	3,003,107	3,554,547	3,955,024	3,727,582
01.0101	Reimbursable program	46,543	47,000	42,526	42,000
10.0001	Total	3,049,650	3,601,547	3,997,550	3,769,582
	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	-4,242	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-46,448			
17.0001	Recovery of prior year obligations	-9,138			
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans	-439,651	-437,055	-886,423	-1,030,964
21.4003	Available to finance new budget plans	-7,700	-28,500		
21.4009	Reprograming from/to prior year budget plans				
22.1001	Unobligated balance transferred to other accounts	11,177			
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans	437,055	886,423	1,030,964	943,535
24.4003	Available to finance subsequent year budget plans	28,500			
25.0001	Unobligated balance expiring	9,214			
39.0001	Budget authority	3,028,416	3,980,415	4,100,091	3,640,153
	Budget authority:				
40.0001	Appropriation	3,136,505	4,005,415	4,100,091	3,640,153
40.3601	Appropriation rescinded (unob bal)		-28,500		
40.7601	Reduction pursuant to P.L. 105-56 (-), 8035	-56,735			
41.0001	Transferred to other accounts (-)	-82,017			
42.0001	Transferred from other accounts	30,663	3,500		
43.0001	Appropriation (adjusted)	3,028,416	3,980,415	4,100,091	3,640,153

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

Identification code 17-1810-0-1-051	Obligations			
	1998 actual	1999 est.	2000 est.	2001 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	2,998,960	3,559,547	3,955,550	3,727,582
72.1001 From Federal sources: Receivables and unpaid, unfilled orders, SOY	-89,947	-78,045	-78,045	-78,045
72.4001 Obligated balance, start of year	3,407,474	3,193,644	3,249,253	3,563,053
74.1001 From Federal sources: Receivables and unpaid, unfilled orders, EOY	78,045	78,045	78,045	78,045
74.4001 Obligated balance, end of year	-3,193,644	-3,249,253	-3,563,053	-3,492,582
77.0001 Adjustments in expired accounts (net)	-230,320			
78.0001 Adjustments in unexpired accounts	-9,138			
90.0001 Outlays (net)	2,961,430	3,503,938	3,641,750	3,798,053

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

Identification code 17-1810-0-1-051	1998 actual	1999 est.	2000 est.	2001 est.
Direct obligations:				
125.101 Advisory and assistance services	20,243	25,686	25,286	25,804
Purchases goods/services from Government accounts				
125.301 Purchase of goods/services from Government accounts	50,825	48,754	56,614	56,259
125.303 Purchases from revolving funds	647,649	708,534	799,399	737,514
126.001 Supplies and materials	109,613	133,007	105,941	58,389
131.001 Equipment	2,174,777	2,638,566	2,967,784	2,849,616
199.001 Total Direct obligations	3,003,107	3,554,547	3,955,024	3,727,582
Reimbursable obligations:				
231.001 Equipment	46,543	47,000	42,526	42,000
299.001 Total Reimbursable obligations	46,543	47,000	42,526	42,000
999.901 Total obligations	3,049,650	3,601,547	3,997,550	3,769,582

Comparison of FY 1998 Financing as reflected in FY 1999 Budget with 1998 Financing as Shown in the FY 2000 Budget

($ In Thousands)

	Financing Per FY 1999 Budget	**Financing Per FY 2000 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$3,030,074	$3,057,044	+$26,970
Program Requirements (Service Account)	($2,988,074)	($3,007,616)	(+19,542)
Program Requirements (Reimbursable)	($42,000)	($49,428)	(+7,428)
Appropriation (Adjusted)	**$2,982,574**	**$3,028,416**	**+$45,842**

Explanation of Changes in Financing

The Fiscal Year 1998 program has changed since the presentation of the FY 1999 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of (+$45,842). This net change is comprised of an increase in program requirements (+$19,542) plus an increase in reimbursable authority of (+$7,428).

Comparison of FY 1998 program requirements as reflected in the FY 1999 Budget with FY 1998 program requirements as shown in the FY 2000 Budget

Summary of Requirements
($ in Thousands)

	Total Program Requirements per FY 1999 Budget	**Total Program Requirements per FY 2000 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$721,811	$724,150	+$2,339
Communications and Electronic Equip	1,165,616	1,141,796	-23,820
Aviation Support Equipment	188,669	204,148	+15,479
Ordnance Support Equipment	517,909	520,423	+2,514
Civil Engineering Support Equip	46,404	51,970	+5,566
Supply Support Equipment	51,902	54,583	+2,681
Personnel and Command Support Equip	79,788	90,892	+11,104
Spares and Repair Parts	215,975	219,654	+3,679
Total Fiscal Year Program	$2,988,074	$3,007,616	+$19,542

Explanation by Budget Activity

($ In Thousands)

1. SHIP SUPPORT EQUIPMENT (+$2,339) - Net increase reflecting (-$8,300) FY 1998 Congressional recissions and internal reprogrammings (+$10,639) including (+$4,606) for Counter Drug Interdiction.

Explanation by Budget Activity (Continued)

($ In Thousands)

2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-$23,820) - Net decrease reflecting (-$2,300) FY 1998 Congressional recission, decrease for economic assumptions (-$7295), offsets for higher priority Navy programs, (-$7829), and internal reprogramming actions of (-$6396).

3. AVIATION SUPPORT EQUIPMENT (+$15,479) - Net increase reflecting (+$17,779) Congressional adjustments, and FY 1998 recisions (-$2,300).

4. ORDNANCE SUPPORT EQUIPMENT (+$2,514) - Net increase reflecting FY 1998 recisions (-$15,000), and Congressional adjustments (+$18,514).

5. CIVIL ENGINEERING SUPPORT (+$5,566) - Net increase reflecting Congressional adjustments (+$4,500), and internal realignments (+$1,566).

6. SUPPLY SUPPORT EQUIPMENT (+$2,691) - Net increase reflecting Congressional adjustments (-$1,279), internal realignments (-$330), and adjustment for Automated Teller Machines at Sea (+$4,300).

7. PERSONNEL & COMMAND SUPPORT (+$11,104) - Net increase reflecting Congressional adjustments (+$8,000), economic assumptions (-$932), and increases for high priority Navy programs including paperless acquisition (+$4,036).

8. SPARES & REPAIR PARTS (+$3,679) - Net increase reflecting economic assumptions (-$1,381), and internal realignments (+$5,060).

Comparison of FY 1999 Financing as reflected in FY 1999 Budget with 1999 Financing as Shown in the FY 2000 Budget

($ In Thousands)

	Financing Per FY 1999 Budget	**Financing Per FY 2000 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$3,979,737	$4,050,915	+$71,178
Program Requirements (Service Account)	($3,937,737)	($4,008,915)	(+71,178)
Program Requirements (Reimbursable)	($42,000)	($42,000)	0
Appropriation (Adjusted)	**$3,937,737**	**$3,980,415**	**+$42,678**

Explanation of Changes in Financing

The Fiscal Year 1998 program has changed since the presentation of the FY 1998 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of +$42,678. This net change is comprised of an increase in program requirements (+$71,178), less rescissions of (-$28,500).

Comparison of FY 1999 program requirements as reflected in the FY 1999 Budget with FY 1999 program requirements as shown in the FY 2000 Budget

Summary of Requirements ($ in Thousands)

	Total Program Requirements per FY 1999 Budget	**Total Program Requirements per FY 2000 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$963,074	$954,401	-$8,673
Communications and Electronic Equip	1,530,802	1,629,901	+99,099
Aviation Support Equipment	245,663	243,679	-1,984
Ordnance Support Equipment	674,703	715,972	+41,269
Civil Engineering Support Equip	69,902	54,856	-15,046
Supply Support Equipment	108,905	89,537	-19,368
Personnel and Command Support Equip	65,660	74,063	+8,403
Spares and Repair Parts	279,028	246,506	-32,522
Total Fiscal Year Program	$3,937,737	$4,008,915	+$90,546

Explanation by Budget Activity
($ in Thousands)

1. Ships Support Equipment (-$8,673) – Net changes reflect FY 1998 Congressional adjustments (-$8,673).

2. Communications and Electronics Equipment (+$99,099) – Net changes reflect FY 1998 Congressional reductions (-$61,730), Congressional increases(+$155,206), and DoN internal realignments (+$5,623).

Comparison of FY 1999 program requirements as reflected in the FY 1999 Budget with FY 1999 program requirements as shown in the FY 2000 Budget

Explanation by Budget Activity (Continued)
($ in Thousands)

3. Aviation Support Equipment (-$1,984) - Changes reflect FY 1998 Congressional reductions (-$9,551), Congressional increases(+$18,000), and DoN offsets for higher priority programs (-$6,465).

4. Ordnance Support Equipment (+$41,269) - Changes reflect FY 1998 Congressional reductions (-$7,960), Congressional increases(+$47,800), and DoN internal realignments (+$1,429).

5. Civil Engineering Support Equipment (-$15,046) - Changes reflect FY 1998 Congressional reductions (-$7,260), and DoN offsets for higher priority programs (-$7,786) .

6. Supply Support Equipment (-$19,368) - Changes reflect FY 1998 Congressional reductions (-$27,417), and DoN realignments for Automated Teller Machines at Sea (+$8,049).

7. Personnel and Command Support (+$8,043) - Changes reflect Congressional reductions (-$297), Congressional increases (+$6,500), and DoN realignments for Paperless Acquisition (+$2,200).

8. Spare and Repair Parts (-$32,522) - Changes reflect FY 1998 Congressional reductions (-$32,522).

DEPARTMENT OF THE NAVY
OTHER PROCUREMENT, NAVY
FY 2000 PRESIDENT'S BUDGET

APPROPRIATION	BUDGET ACTIVITY: 7	LINE ITEM: 8081	
OTHER PROCUREMENT, NAVY	PERSONNEL AND COMMAND SUPPORT EQUIPMENT	TRAINING SUPPORT EQUIPMENT	FEB 1999

TOTAL COSTS IN THOUSANDS

NO	ITEM	END USER	FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
1	STASS	VARIOUS		1,884		2,154		3,076		2,242		2,232		2,226		2,273		2,320
2	PRIOR YEAR PAYMENT			105		0		0		0		0		0		0		0
3	LASER MARKSMANSHIP TRAINING SYSTEM(LMTS)					3,000												
	TOTAL			1,989		5,154		3,076		2,242		2,232		2,226		2,273		2,320

P40 - JUSTIFICATION STATEMENT:

1. STASS is a mission critical training management system approved by CNET as delegated by ASN (RD&A) to be implemented at 90+ Navy training activities. STASS will eliminate seven legacy systems that are more than 15 years old, obsolete both technically and functionally, and becoming cost prohibitive to maintain. STASS will provide comprehensive automation support tools for the day to day schoolhouse training functions. In today's environment when accurate and current information is critical to the training mission and in accordance with SECNAV's direction, there are no alternatives. STASS "up-line" reporting provides accurate student status and quota utilization information to the Navy Integrated Training Resource Management System (NITRAS) and the planned Navy Training Reservation System (NTRS). These systems, STASS/NITRAS/NTRS, form the overarching strategy which integrates the critical functions required for the efficient and effective recruiting, training, and distribution of personnel to the fleet. Together these systems, known as the Integrated Navy Training Requirements and Planning Data Base (INTRPD), will support on-line real time synchronization of data bases and will provide timely accurate processing of military manpower between the personnel and training commands. STASS is a major building block and key element to the success of the INTRPD concept.

2. As directed by the Assistant Secretary of the Navy (Financial Management and Comptroller) in the letter dated 27 January 1998, CNET has used $105K of FY 1998 funds to pay a prior year bill to the IBM Corporation.

3. The Laser Marksmanship Training System (LMTS) will enable military personnel to train with their own weapons and do so under home station conditions thereby conserving ammunition and other resources. LMTS is so precise that it can be used to correct the aim of both weapons and aiming devices. Congress provided funding for the LMTS in FY 1999.

Appropriation/Budget Activity: OTHER PROCUREMENT, NAVY BA-7 - Training Support Equipment			P-1 Line Item Nomenclature: TRAINING SUPPORT EQPT LI: 8081	
COST ELEMENTS: Hardware for STASS Locations	ID Code	FY 98 Total Cost	FY 99 Total Cost	FY00 Total Cost
NAVSUBSCOL NEW LONDON		0.417		
NETC NEWPORT RI		0.121		
EWTGPAC		0.121		
FTC SAN DIEGO/WTG/NI		0.417		
NAVSUBTRACENPAC		0.232		
SUBTRACENPACDet SAN DIEGO		0.121		
EWTGL LCREEK		0.121		
NAVTECHTRACEN CORRY		0.232		
NAVLEADTRU CORON		0.043		
NTTC LACKLAND AFB, TX		0.059		
SWOSCOLCOM NEWPORT			0.121	
FCTCP SAN DIEGO			0.121	
NAVDIVESALVTRACN			0.121	
NAVSCOLEOD DET EGLIN			0.043	
NAVTECHTRACEN MERIDIAN			0.232	
FAMWTC INGLESIDE			0.121	
FLEASWTRACENPAC			0.232	
NAVTECHTRAU KEESLER			0.232	
NATTCDET LAKEHURST			0.006	
NAVSCSCOL ATHENS			0.006	
NAVNUPWRTRAU CHARLESTON			0.121	
FITCPAC SAN DIEGO			0.006	
NAVRESPRODEVCEN			0.121	
LTA SAN DIEGO			0.043	
CNATRA			0.043	
NAVCONSTRACEN DET SHEPPARD			0.006	
DENTAL SCHOOL			0.006	
NAVSCSCOLDET FT GORDON			0.043	
NAVSPECWARCEN			0.043	
NAVTECHTRACEN DET FT HUA			0.043	
NAMTRAGRUDET FT HUA			0.121	
NCTCDET FTMCCLALA			0.043	
NCTCDET FORT LEONARD WOOD			0.043	
NTTCDET GOODFELL			0.043	
NAVNUPWRTRAU NEW YORK			0.043	
FASOTRAGRUPAC			0.043	
TACTRAGRULANT			0.043	
TACTRAGRUPAC			0.043	
COMNAVAIRLANT			0.022	0.021
COMNAVAIRPAC				0.043
COMNAVSURFPAC				0.043
COMNAVSURFLANT				0.043
AFLOATRAGRU WESTPAC				0.121
COMSUBPAC				0.043
COMSUBLANT				0.043
TACTRAGRUPAC				0.043
NAMTRAGRUDET Corpus Christi				0.121
NAVAIRSYSCOM Pax River				0.043
Schoolhouse Technology Upgrade				1.415
Corporate Host Backup				0.425
Regional Host Backups				0.534
STASS RTM Upgrade/Expansion				0.138
Replace Obsolete HP Servers				
LMTS			3.000	
Prior Year Legal		0.105		
TOTALS		1.989	5.154	3.076

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEB 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA7	P-1 ITEM NOMENCLATURE/LINE ITEM # *BLI: 8106 Command Support Equipment*
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)				$21.7	$22.0	$14.5	$10.7	$11.5	$11.0	$9.8	$9.8	N/A	
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

Naval Sea Systems Command (NAVSEA)

FY98 funding procures Advanced Technical Information System (ATIS), to be attached to ship local area networks to allow access to technical drawings/tech manuals and other CD ROMs. The funding will allow completion of 50 ships. The specific ships will be determined by Fleet priorities, but most likely will be tied to deploying battlegroup ships.

FY98 funding ($2,413K) procures hardware (PCs/servers/printers/memory upgrades, etc) for the Standard Procurement System (SPS) which supports DOD procurement functions that include acquiring supplies and services and paperless acquisition.

FY99 funding for this line item provides ADP/IT Equipment and Software funding for the newly established consolidated Pearl Harbor Naval Shipyard/Intermediate Maintenance Facility. Funds will be used for the procurement and execution of ADP/IT equipment projects (hardware and software) to maintain, modernize, and improve the PHNSY/IMF infrastructure and industrial base. Funding will allow PHNSY/IMF to support the mission of repairing, conversion, and modernization of fleet ships and submarines in the most economical, efficient, environmentally sound, and safe manner possible. As this is a pilot program having impact on other fleet depot maintenance activities, it is critical these projects be funded in order to most accurately determine the economic and operational success or failure of the program itself.

FY00 and outyear funding provides support for the Regional Maintenance Automated Information System (RMAIS) Initiative. Specifically the funds will be used to procure computer hardware and software needed to connect existing Maintenance Automated Information Systems with established Local Area Networks (LANs) and Wide Area Networks (WANS) to facilitate the transfer of maintenance data. The per unit cost for this effort is $100K per server, which includes hardware, software and installation.

Naval Computer and Telecommunications Command (NCTC)

Command Support Equipment for NCTC involves the purchase of various pieces of equipment, such as: reprographic equipment and security disintegrators. This program provides the systematic replacement of investment items required in support of the operational mission of the claimancy.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEB 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA7	P-1 ITEM NOMENCLATURE/LINE ITEM # *BLI: 8106 Command Support Equipment*
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)				$21.7	$22.0	$14.5	$10.7	$11.5	$11.0	$9.8	$9.8	N/A	
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

Chief of Naval Operations

Command Support Equipment Supports the U.S. Atlantic Command in performing its mission of commanding most continental U.S. combat forces. Various systems to be kept operational include those for Information Transfer, Information, Training, Analysis, Modeling and Simulation and Command/Control Computers/Communications Intelligence (C4I). It also supports the Naval Space Command, which budgets for satellite/ground/fleet interface equipment., and the Naval Central Command, which budgets for equipment to protect forces from terrorism.

Bureau of Naval Personnel

The Chief of Naval Personnel Claimancy is charged with the responsibility of providing the quantitative and qualitative manpower requirements of the United States Navy as determined by the Chief of Naval Operations. To accomplish this task, the Claimancy is concerned with the conception, development, execution, appraisal and management of plans and programs for the recruitment; distribution; accounting; utilization; morale, welfare, and recreation; religious programs; and discipline of the members of the Navy. Programs include: Navy Recruiting Command; Human Resource Management Support System; United States Navy Bands; Enlisted Personnel Management Center; and various other functions and activities. Funds requested provide necessary equipment for the Defense Message System, Memphis Local Area Network, Recruiting Tools - Twenty-first Century, and Personalized Recruiting for Immediate and Delayed Enlistment.

Department of the Navy, Information Network Program Office

The Department of the Navy, Information Network Program Office (DoNINPO) is a SECNAV directed program tasked to consolidate the disparate DoN HQ Local Area Networks (LANs) and resources within the Pentagon, interconnect the major Navy Wide Area Networks (WANs) in the National Capitol Region (NCR), and to facilitate the development of DoN Information Technology (IT) standards.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEB 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA7	P-1 ITEM NOMENCLATURE/LINE ITEM # *BLI: 8106 Command Support Equipment*
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY													
EQUIPMENT COST (In Millions)				$21.7	$22.0	$14.5	$10.7	$11.5	$11.0	$9.8	$9.8	N/A	
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

Department of the Navy, Information Network Program Office (cont.)

Included in this effort are the architectures, technologies, standards, policies, and profiles necessary to provide or direct the acquisition and installation of the plethora of common information infrastructure tools and E-apps including those listed here as well as those emergent in the future to include: local area networks (LAN), remote and mobile network connectivity, palm-top and Personal Digital Assistant (PDA) technologies, wireless networking, wide area networks (WAN), network management, E-desktop applications, file standards, groupware applications, E-tools, E-data and repositories, telephony and telephone switching, cellular, Personal Communications Systems (PCs), television, desktop video teleconferencing technology (DT-VTC), low bit rate video (LBRV) and theater or conference room video teleconferencing technologies (VTC) used in support of connectivity and communications between Headquarters elements within the Washington region. In conjunction with the Defense Messaging System (DMS) architecture, an electronic mail system supporting both the X.400 and X.500 messaging protocols will be implemented on both the Classified and Unclassified LANs. Desktop and network hardware and software updates will be accomplished over a four year refresh cycle.

DoNINPO also supports the Electronic Acquisition-21 Program. This program was created to develop and implement the plan to move the Navy to a paperless environment by 1 January 2000. The Navy established a Program Executive Officer for Acquisition Related Business Systems (PEO ARBS) to oversee the functional and technical efforts required to provide the Navy Acquisition Workforce with effective and supportable business systems. The identification and development of most promising business processes and hardware/software alternatives is necessary to achieve the goal of a paperlss acquisition process.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: FEB 1999
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy/BA-7**		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **BLI: 8106 Command Support Equipment**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NAVSEA		8106												
	Advanced Technical Info System		49		1,954	50	40	2,000			0			
	Standard Procurement System (SPS)		500		2,413			0			0			
	Pearl Harbor ADP/IT Equipment and Software (Pearl Harbor Pilot)				0	659	2	1,570			0			
	Regional Maintenance AIS				0			0	100	9.9	992			
	TOTAL NAVSEA				**4,367**			**3,570**			**992**			
NCTC														
	Command Support Equipment	8106			2,091			1,307			1,653			
BUPERS														
	Memphis Local Area Network				5,340			0			317			
	Defense Message System				500			350			0			
	Recruiting Tools - 21st Century				0			0			300			
	Personal Recruitment Immed/Delay Enlist				0			0			481			
	Mail Sorting Eqpt				300			0			0			
	TOTAL BUPERS				**6,140**			**350**			**1,098**			
CNO														
	USACOM				5,499			6,285			7,321			
	NAVSPACECOM				137			0			1,441			
	NAVCENT				0			418			0			
	TOTAL CNO				**5,636**			**6,703**			**8,762**			
AAUSN														
	EA-21				2587									
	Electronic Commerce Commerce Online							997			1,966			
	CPARS							550						
	Electronic Mall/E-Catalog							620						
	DONINPO				914			7,936			0			
	TOTAL AAUSN				**3,501**			**10,103**			**1,966**			
TOTAL					**21,735**			**22,033**			**14,471**			

(DOD EXHIBIT P-40)

OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET

BUDGET ACTIVTY BA-7						P-1 ITEM NOMENCLATURE BLI: 8109 MEDICAL SUPPORT EQUIP		
QUANTITY	FY 98	FY99	FY00	FY 01	FY02	FY 03	FY 04	FY 05
COST (in millions)	$ -	$ 2.5	$ 5.0	$ 7.8	$ 7.9	$ 9.4	$ 9.8	$ 9.6

This line provides funding for the Fleet Hospital Program whose mission is to provide comprehensive medical support to the Fleet and Fleet Marine Forces engaged in combat operations. Fleet Hospitals complement and expand the medical capabilities of the Fleet and play a critical role in the Navy's doctrinal concept of overseas theater support. Fleet Hospitals will deliver definitive health care (surgical or other acute) necessary to stabilize, treat, and rehabilitate (in-theater) wounded Sailors and Marines through relocatable, prepositioned, modular, rapidly erectable medical and surgical facilities accommodating 500 beds.

This line item also provides deployable medical support equipment to CINCLANTFLT for the USNS Comfort hospital ship and to CINCPACFLT for the USNS Mercy. These ships are deployed in the combat theater to treat wounded sailors and marines.

Classification: Unclassified

Exhibit P-40a, Budget Item Justification for Aggregated Items — February-99

OTHER PROCUREMENT, NAVY/BA-7, PERSONNEL AND COMMAND SUPPORT EQUIPMENT — (In Millions)

Procurement Items \ Quantity	ID Code	PY FY 1998	CY FY 1999	BY1 FY 2000
COMP RAD (C-R) WORKSTATION (2)	A		$ 1.263	$ -
C-ARM (2)	A		$ -	$ 0.442
ENDOSCOPIC SYSTEM (1)	A		$ -	$ -
X-RAY ROOM W/TOMOGRAPHY (1)	A		$ -	$ -
NON-STEAM STERILIZER (1)	A		$ -	$ -
TOTAL PACFLT		**0.000**	**$ 1.263**	**$ 0.442**
Comp RAD (C-r) Workstation	8109		$ 1.263	$ -
C-ARM	8109		$ -	$ 0.442
Endoscopic System	8109		$ -	$ -
X-Ray Room W/Tomography	8109		$ -	$ -
Non Stern Sterilizer	8109		$ -	$ -
TMIP Hardware	8109		$ -	$ -
TOTAL LANTFLT		**0.000**	**$ 1.268**	**$ 0.442**
Tractor 25 Ton	8109			$1,478
Laundry	8109			$250
Fire Truck	8109			$92
TRK, Wrecker	8109			$570
Ambulance	8109			$373
Bus Ambulance	8109			$344
Pickup - 6 Passenger	8109			$583
TRK, Stake 15 Ton	8109			$88
TRK, Fuel and Lube	8109			$0
TRK, Util/Maint	8109			$0
TRK, Septic, Clean	8109			$0
RTCH	8109			$371
TOTAL BUMED				
			0	$4,149
TOTAL MEDICAL SUPPORT EQUIPMENT		**$ -**	**$ 2.526**	**$ 5.033**

P-1 SHOPP. LIST 195 | PAGE NO. 2

(DOD EXHIBIT P-40)

OTHER PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET

BUDGET ACTIVTY	P-1 ITEM NOMENCLATURE
07 - Personnel and Command Support Equipment	Operating Forces Support Equipment BLI: 8118

	FY 98	FY 99	FY00	FY01	FY02	FY03	FY04	FY05
QUANTITY								
COST (in millions)	$10.2	$6.2	$5.8	$4.4	$4.4	$4.4	$4.4	$4.5

This category includes funding for
LANTFLT: (a) Information Technology Systems of automated financial equipment (FMIS); other information technology systems inclusive of computers, ancillary equipment, software, and support services; an automated warfare system (FIWC); and communications and connectivity LAN for warfare and Battle Group commanders (COMNAVBASE Norfolk); (b) General Purpose Equipment which encompasses telephone system upgrades and emergency generators; and (c) Waterfront Equipment which includes camels (carrier, Trident, wooden, and deep draft), paint floats, and fenders (submarine, Arleigh Burke Class, and Yokohama).
PACFLT: Firetrucks, Generators, Security Cameras, Security Motion Detectors, High Presure Washers, Ship to Shore Conveyors, Access Control Systems, and Central Dispatch Systems.

UNCLASSIFIED
CLASSIFICATION

APPROPRIATION OTHER PROCUREMENT, NAVY		**PROGRAM COST BREAKDOWN**		(DOD Exhibit P-5)
BUDGET ACTIVITY 07 - Personnel and Command Support Equipment		P-1 ITEM NOMENCLATURE Operating Forces Support Equipment		SUBHEAD NO.

			TOTAL COST IN THOUSANDS OF DOLLARS					
			FY 1998		FY 1999		FY 2000	
COST CODE	ELEMENT OF COST	IDENT CODE	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	IDS System	A					1	0.496
	Security Communications System	A					1	0.116
	Fire Truck	A					1	0.209
	Emergency Generator	A					1	0.104
	Ship to Shore Conveyor	A		0.500				
	Access Control System			0.668				
	Ultra High Pressure Washers			1.800				
	Central Dispatch System			0.352				
	TOTAL (PACFLT)			**3.320**		**-**		**0.925**
	General Power Sources	8118		0.487		0.353		
	Waterfront	8118		2.853		2.515		2.030
	IT	8118		3.575		1.791		2.893
	NOC Capital Equipment							
	Reverse Osmosis Desalination Gear					1.500		
	TOTAL (LANTFLT)			**6.915**		**6.159**		**4.923**
	TOTAL OPERATING FORCES SUPPORT EQUIPMEN			**10.235**		**6.159**		**5.848**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEBRUARY 1999					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL & COMMAND SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total	
QUANTITY			N/A	N/A	N/A								
EQUIPMENT COST (In Millions)			$20.9	$16.6	$18.4	$22.5	$27.6	$23.7	$24.2	$24.7		$178.6	
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

The Oceanographic Support Equipment line provides funding for equipment to support a large inventory of oceanographic, hydrographic, geodetic, meteorological and astronomical equipment, systems and instrumentation. This equipment is required by the Naval Meteorology and Oceanography Command and the U.S. Naval Observatory to collect, process, analyze and disseminate environmental data to operating forces, DoD and other agency users. This data is critical for precise positioning, navigation and targeting of friendly and enemy air, surface, and sub-surface weapons systems and space vehicles.

Funding within this lineitem supports the performance of Naval meteorological and oceanographic mission functions including eight ships operated by the Military Sealift Command, Meteorology and Oceanography centers, facilities, and detachments at locations worldwide. It also supports the Naval Observatory mission.

A major portion of our equipment inventory is dedicated to our survey mission and is deployed at sea. Most equipment includes sensitive instruments and contains sophisticated electronics that have a short service life in a harsh marine environment (salt spray, humidity, shock, vibration, corrosion). Cyclical replacement of related instruments is a large part of our equipment acquisition program. A significant part of our program contains the high speed computers and communications network required to run the complex geophysical models that predict the state of the atmosphere and oceans. Additionally, the Naval Observatory's astronomical equipment is a diverse and highly specialized suite of instrumentation supporting all DoD and U.S. Time and Positioning requirements.

UNCLASSIFIED

P-40 Exhibit

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

U.S. NAVAL OBSERVATORY

The Naval Observatory, Washington, DC, provides the astronomical and timing data required by the Navy, the Department of Defense, other government agencies and the general public. Precise time and astronomical data are essential for command, control and communications; navigation and precise positioning; and targeting of tactical and strategic weapons systems.

Mark IV VLBI CORRELATOR

Very Long Base Interferometer (VLBI) provides the most accurate means of determining astronomical time and the celestial reference frame. These data are required for GPS operations. Precision of GPS navigation is directly related to the accuracy of estimates of astronomical time. VLBI uses complex RF, IF, recording, playback and correlator systems. The present correlator has been in use since 1980 and has reached the end of its operational lifetime.

VLBI SUBSYSTEM

VLBI provides the most accurate means of determining astronomical time and the celestial reference frame. Subsystems are needed to keep the VLBI program in Earth orientation in operation. These are data acquisition systems (receivers, digitizing and recording systems) and hydrogen maser clocks needed at the three observation sites in Kokee Park, Hawaii; Fairbanks, Alaska; and Green Bank, West Virginia.

1.3M CHARGED COUPLED DEVICE ARRAY

Procurement of this array is to enable the 1.3M astrometric telescope to track Earth satellites and space debris. This array must have a state-of-the-art readout capability in order to achieve this.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

METROLOGY/DELAY LINES & SIDEROSTATS

The optical interferometer is coming on-line to drastically improve observation of star positions and stellar inertial reference frame which is needed by all autonomous modern navigation and guidance systems. The interferometer will establish a stellar optical reference frame to an accuracy of 10 milliarcseconds. The interferometer consists of four separate siderostats. The siderostats are interconnected with a highly sophisticated meteorology system which ties them together with an accuracy greater than 1 millionth of a meter. The optical interferometer has a metrology system attached to all four siderostats as well as extensive metrology in the central building. The delay lines condition the light from each of the four siderostats to coherently combine it to form a synthetic aperture. This aperture will precisely measure the positions of stars by time difference of arrival to an accuracy of a milliarcsecond. These accurate star positions are needed for the guidance and pointing of military and surveillance platforms.

INDIUM ANTIMONIDE ARRAY DETECTORS

These array detectors with sensitivities between 1 and 5 micron wavelengths are needed to astronomically map the celestial background emission. The precise positions of objects at these wavelengths may be used in guidance systems for infrared seekers.

TIME TRANSFER RECEIVER

These receivers are needed to monitor the time on the GPS code signal. They are to be multi-channel in order to monitor all satellites above the horizon at Washington, D.C. and Falcon, AFB. This information is needed to maintain time on the GPS satellites in accord with an Interface Control Document between the Observatory and the Air Force.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

MARK IV UPGRADE

This procurement will upgrade the VLBI Data Acquisition System to Mark IV capability. These capabilities will replace the data acquisition hardware at the VLBI station at Kauai (Hawaii) and Green Bank (West Virginia) currently equipped with Mark IIIA or VLBA style systems. This is also essential to maintain compatibility with other VLBI stations in the global network, some of which have already made the upgrade.

CESIUM SYSTEM

The Master Clock consists of over 10 hydrogen masers, 45 cesium standards and associated electronics, computer and communications systems to establish the time scale. Additional maser and cesium atomic clock standards must be procured to replace those that have reached the end of their useable ten-year lifetime. The hydrogen maser atomic clocks are very precise in short-term stability and are utilized in conjunction with cesium beam atomic clocks that provide long-term stability to ensure the accuracy of the Navy/DOD/National Master Clock System. The components of the clock must be replaced as they age to maintain the accuracy of the timescale. This system must continue to provide a timescale stable to 12 billionths of a second for GPS operations. Smart weapons, long-range Cruise missiles and weapons delivery platforms need near-perfect positioning and precise time (nanoseconds) information. Lack of replacement of the hydrogen maser and cesium standards will degrade the accuracy of the Maser Clock, leading to the possibility of failing to meet the requirements for accurate time for precise targeting systems and degraded security for secure communication systems. The Observatory will not be able to meet its mission of providing time to GPS and other DOD users who need accurate time without the Master Clock Replacement.

OPTICAL INTERFEROMETER SUBSYSTEM

These subsystems are necessary to bring the optical interferometer into full operation. Subsystems include mirror systems for conditioning and reducing the beam size and fast steering mirror systems to compensate for the atmosphere. These observations are necessary for the maintenance of the accuracy of the celestial reference frame for guidance systems.

OPTICAL INTERFEROMETER (INFRARED)

The optical interferometer must operate at Infrared wavelengths in order to obtain complete information regarding the astrometric precision of celestial objects at optical wavelengths. This will allow the interferometer to operate at wavelengths of 1-5 microns. This capability is needed to establish a reference frame for the precise determination of satellite positions and space debris. It can also be used for guidance systems with Infrared Sensors.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

FLEET NUMERICAL METEOROLOGY AND OCEANOGRAPHY CENTER

Fleet Numerical Meteorology and Oceanography Center (FNMOC), Monterey, CA provides responsive quality meteorological and oceanographic (METOC) guidance and information to Navy and other Department of Defense activities worldwide to increase safety of forces and to optimize the use of platforms, weapons, sensors and facilities. METOC support to the operating forces is provided principally through five geographically dispersed commands (four USN sites located in Fleet concentration areas, and Air Force Global Weather Center which supports USAF and USA) via direct connectivity and through DoD circuits. Additionally, thousands of DoD PC users receive therir product support directly from FNMOC using advanced mathematical techniques on high-performance computers. Analyses are used to predict the state of atmosphere and oceans for periods ranging from a few hours to a week. These analyses and predictions are used as the basis of specific, fleet-related products for platforms, weapon systems and sensors.

PRIMARY OCEAN PREDICTION SYSTEM (POPS) ENHANCEMENTS

DoD's role of "global presence" has stressed the current super computer architecture beyond its capacity to provide adequate support. Mission critical functions will be addressed through the use of additional processors and disk storage devices. Customer service will be improved via upgrades to client/server architecture of the worldwide distribution system. Greater emphasis on preparation for and reaction to regional conflicts and the littoral threat has resulted in a greatly increased demand for high resolution, coupled model meteorological guidance and forecasts, as well as oceanographic support to tactical coastal operations. The capability to produce and distribute products to users will be significantly improved as well. Improved atmospheric model output will be available for regional centers to initialize locally-run mesoscale models. Higher resolution nests will be available to ships to run local area analysis and short duration forecasts. This upgrade will provide FNMOC customers with better atmospheric and oceanographic forecasts at longer ranges as a result of sharper data focus, improvements in physics and increase in the resolution of the models, including a coupled atmosphere/wave model. It will also provide improved operational data management and implementation of 3-dimensional variational data assimilation.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHY SUPPORT EQUIPMENT LI:8126

NAVAL OCEANOGRAPHIC OFFICE

The Naval Oceanographic Office, Stennis Space Center, MS collects processes, analyzes and provides oceanographic, hydrographic and geophysical data worldwide to meet requirements for precise bathymetric,gravity, magnetic and environmental measurements. This data is critical for navigation, positioning and alignment, and targeting of both tactical and strategic subsurface, surface, air and space vehicles, and weapons systems. The office is supported by eight ocean survey ships and one dedicated project aircraft.

AIRCRAFT DATA ACQUISITION SYSTEM

This lineitem is for portable data acquisition and processing systems for use on either Fleet aircraft Fleet aircraft or dedicated aircraft (Naval Research Laboratory (NRL). The systems will have the capability to collect/process physical oceanographic (temperature, conductivity, and sound speed versus depth) and acoustic data (ambient noise, bottom reverberation and tranmission loss). The data will be collected via expendable sensors (physical oceanography (AXBT, ACTD, AXSV) and Acoustics (sonobuoys). One of the systems will be UNIX-based and be derived from AIRDALE technology. A significant portion of its mission will include in-house processing and training for NAVOCEANO personnel. The other systems shall utilize a PC-based technology. All the systems will provide field personnel with data to prepare near real time briefings to support Fleet exercises such as SHAREM and Rapid Response.

ALTIMETRY DATA FUSION CENTER

NAVOCEANO's Altimetry Data Fusion Center (ADFC) is the DoD processing center for all military, civilian, and foreign altimetry data streams (USN GEOSAT Follow-On, NASA Topex, European Space Agency ERS-2) as mandated by CNO OCEN 90-02 . Altimetry is an essential input to modeling and determining ocean currents as required by LITT OCEN 93-01 (Improved Mine Drift Predictions), LITT OCEN 93-06 (High Resolution Surface/Subsurface Current Predictions), and CINC OCEN 91-06 (Ocean Prediction Models). Two additional data streams will become operational in the FY00 timeframe, namely NASA's JASON and the European Space Agency's ENVISAT. These systems will dramatically improve the Navy's capability to meet the above requirements through improved ocean circulation modeling, but will also dramatically increase the data volume and processing load on the ADFC. In addition, by FY00 much of the ADFC hardware will be 5 to 7 years old. This acquisition is for hardware replacements and upgrades to the baseline ADFC system.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

AUTONOMOUS UNDERWATER VEHICLE/ RECOVERY SYSTEM

The Autonomous Underwater Vehicle (AUV) technology has reached a point where it is now a cost effective means for environmental data collection. Examples of this data include: Q-Route data to assist in the identification and neutralization of mine threats, identification of navigational hazards for nautical charts, and bottom composition and current data which directly impacts amphibious and SPECWAR operations. The importance of this system is that NAVOCEANO and government contracted organizations required the assurance of recovery of AUVs. The cost of the large AUV requires this recovery system as assurance of safe and efficient operations.

CENTRAL DATA BASE SERVER

NAVOCEANO scientific data are stored within the Data Warehouse (DW) in standardized formats. The DW, using a distributed client-server architecture, is used to manage the 600 plus gigabytes of on-line storage needed to provide responsive access to users that include DoD and non-DoD agencies. The existing DW servers and mass storage are at the end of their life cycle and are constrained in the number of data request transactions that may be simultaneously processed, as well as the quar of data that may be stored and managed.

SURVEY WORKSTATIONS/MASS STORAGE

Workstations aboard NAVOCEANO survey platforms are presently used to quality control data as it is acquired to ensure its validity and content. This process allows technical specialists to quickly identify problems associated with the collection sensors so that immediate corrective actions may be taken. Using this approach, NAVOCEANO maximizes ship collection time while assuring that all survey expenditures result in valid, useful data. Present workstations and associated mass storage are at the end of their life cycle and are inadequate to process the greater volumes of data generated by the current generation of collection sensors coming on-line. In addition, NAVOCEANO is re-engineering the data processing function such that the final quality control steps are performed at sea vice the current process in which the final quality control is performed at Stennis Space Center. This approach will push activities associated with the final data quality control closer to the collection point resulting in a higher quality product. Further, by more fully utilizing the technical specialists at sea, NAVOCEANO will be able to more quickly make the data available for the office wide product lines.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

ATM CAPABILITY/LAN UPGRADE

This effort is to equip the current classified and unclassified Local Area Network (LAN) Ethernet hardware with microprocessor controlled LAN and cell switching units. In addition, fiber optic cable will replace existing Ethernet coaxial cable through the network. The topology upgrade will provide NAVOCEANO's classified and unclassified networks with a minimum capacity of 155 Mbs backbone and switched 10 Mbs Ethernet to the desktop. Selected workstations will have 100 Mbs Ethernet, 100 Mbs FDDI, or 155 Mbs ATM interfaces. This will provide a hardware topology that supports existing bandwidth demands, and scalability to support high-speed data requirements. The new NAVOCEANO network topology will immediately support higher speed information transfer, data will be analyzed faster, and imagery will be delivered to the warfighter closer to real-time. After completion, the NAVOCEANO network will be seamlessly interoperable with all external ATM network connections.

INTEGRATED DRIFTING BUOYS

The Integrated Drifting Buoy Program supports Fleet activities ashore and afloat with near real-time environmental data. The buoys are deployed in Navy operational areas and disseminate oceanographic, acoustic, and meteorological data to operational commands in the area, through various real-time means. These near real-time data are used for severe weather forecasting and typhoon warning, ground truthing satellite-derived multi-channel sea surface temperature extraction, refining the fronts and eddies bogus, and initializing the Modular Ocean Data Assimilation System. Procurement has been centrally managed through Naval Air Warfare Center, Indianapolis. This will ensure a smooth transition of the WSQ (SAN-1 through 6) series drifting buoy into the Fleet supply system. This transition to central management necessitated a change in funding and these funds were transferred from NAVOCEANO's O&M,N allotment accordingly.

KLEIN 5000 TOWFISH/TOPSIDER

NAVOCEANO currently collects high speed side scan imagery data in support of Q-Route and Mine Warfare (MIW) requirements. Requirements for this type of data have been increasing and NAVOCEANO has only a single system of this type in the inventory. This significantly limits the ability to collect high resolution data in more than one operational area, or to have an installed backup capability on another platform. A spare towbody is needed to serve as a backup.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

OPTICS MEASUREMENT ARRAY

Validated Fleet requirements task NAVOCEANO to provide optics support to warfare areas including Mine, Special, and Undersea Operations. This information is vital to the Navy's ability to operate undetected and to locate/identify threats based on non-acoustic methods. The function of the Optics Measurement Array is to acquire core data for IDBMS to apply such Fleet products as STOIC and STORM and to support in-house requirements such as the Laser Airborne Bathymetry System (LABS). This sensor system measures optical properties of the water column over various temporal an spatial scales so that the impact of the optical environment on a number of issues pertinent to the warfighter can be comprehensively characterized.

DTC/GFMPL SYSTEMS

NAVOCEANO is tasked to provide deployed on-scene environmental prediction systems to the Fleet. These high visibility systems are developed to provide a local resource to predict the effects of the environment on Fleet platforms, sensors, and systems. NAVOCEANO must maintain currency with the Navy's Tactical Advanced Computer (TAC-n) family which includes the base line TAC-n processor with standard 3-D display subsystems (or "g3" subsystems as described by TAC-3 and TAC-4). Acquisition of a high-end TAC-n visualization system (i.e. "g4" for TAC-4) which will allow NAVOCEANO to develop advanced visualization capabilities for deployment on Fleet assets.

GFMPL HARDWARE UPGRADE

NAVOCEANO is tasked to provide deployed on-scene environmental prediction systems to the Fleet. These high visibility systems are developed to provide a local resource to predict the effect of the environment on Fleet platforms, sensors, and systems. The Tactical Environmental Prediction System (TESS) is a bundled hardware/software package, while the Geophysical Fleet Mission Program Library (GFMPL) essentially consists of the TESS software configured to be run on the Fleet users' own computer resources. This equipment will allow TESS (3) software to be rehosted for subsequent distribution to the Fleet for use on their systems.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: 'FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

HYCOOP DIGITAL SIDE SCAN SONAR

Side scan sonar data is used to ascertain hazards to navigation and to determine depth between survey lines. These data are used to populate imagery data bases such as the Sea Floor Trackline Data Base and various Mapping, Charting, and Geodesy (MC&G) charts. Current HYCOOP assets do not possess the capability to digitally record the side scan data. The existing analog paper records obtained have short shelf lives, are expensive to use, and are generally poor quality. Moreover, the side scan data record acquired by NAVOCEANO from HYCOOP is a paper copy of the single, poor quality original. The upgrade to digital recording will facilitate digital archiving on magnetic media which has a much longer shelf life, is inexpensive to use, has high accuracy recording and is readily and accurately reproducible. Digital archiving will facilitate the construction of sonar mosaics to obtain aerial views having a photographic-like quality from acoustic side scan data. The systems will incorporate a video display to provide fast, accurate, and simple target marking identification. This computerized approach will dramatically reduce the required data analysis time. Additionally, the acquisition of digital technology has much greater system dynamic range than current systems and enables the use of in-house digital signal and image processing techniques to extract subtle details from the data.

HYDROPHONE COLLECTION SYSTEMS

The Echo Repeater System is an active frequency acoustic system designed for direct Fleet support during military exercises such as Ship ASW Readiness Effectiveness Measuring (SHAREM) Program. The system can collect and process sonar signals, transmit sonar pulses back to the Fleet unit and act as a repeater to retransmit a sonar pulse back to the Fleet unit. The Echo Repeater allows near real time performance evaluation on sonars in actual operating conditions. This is important to the Fleet that it allows them to study the performance of their sonar systems. Multiple SHAREM exercises are conducted each year; therefore, funding is needed to bring a second system on line for Fleet support and to add improved transducers for different sonars.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

ISS-60 T-AGS 51/52

ISS-60 was developed for the T-AGS 60 class ships to allow them to collect and monitor a broad spectrum of oceanographic data both on station and underway. While performing data collection tasks, the ship's position will be continuously determined by an integrated navigation system using all available navigation sources. The underway data collected will include swath an single beam bathymetry, imagery, gravity, magnetic field intensity, sea-surface expendable probes. Periodically the ship will switch to an on-station mode of operation where the ISS-60 will provide e4nvironmental and navigation information to systems such as Conductivity/Temperature/Depth sensors. The ISS-60 consists of collection (navigation, real-time, echo sounding system) security, diagnostic, archiving, processing and communication capabilities. The system's distributed design provides a separate computer for Inertial Navigation System and environmental data acquisition and distributes the processing and archiving requirements for four computers. The design will provide NAVOCEANO with the maximum opportunity for standardization and flexibility.

ISS-60/SYSTEM INTEGRATION LAB UPGRADE

The ISS-60 systems integration laboratory upgrade will greatly improve the training, integration, and testing facility in support of the T-AGS 51 class, T-AGS 60 class and Hydrographic Survey Launch (HSL) deployed acquisition systems. Incorporating this increased capability into NAVOCEANO's ISS-60 configuration, making it a better training facility to prepare ship riders.

METEOROLOGY PHASE II UPGRADE

The Meteorological (MET) Phase II Upgrade will provide upgrades to existing NSDS-G computers at NAVPACMETOCCEN Pearl Harbor, NAVEURMETOCCEN Rota, NAVLANTMETOCCEN Norfolk. These upgrades will provide faster and more accurate environmental forecasting for each site. The upgrades will also provide faster and more accurate environmental forecasting data for mission critical USS Fleet operations as well as provide local weather forecasting for each site. These upgrades will replace aging (1990) computers with state-of-the-art Sun Ultra computers.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

MWF GRAPHICS/ANALYSIS COMPUTER SYSTEM

The Mine Warfare Graphics/Analysis Computer System will be used to produce Mine Warfare Pilots (MWPs) and Special Tactical Oceanographic Information Charts (STOICs) in-house for Commander, Mine Warfare Command in support of both contingency planning exercises. MWPs are now produced digitally and there is a need for a digital STOIC. All current data provided for the hard-copy STOIC are produced digitally. A replacement computer system is required to upgrade the present graphic, digitizing and scanning capability. The replacement systems would also be used for oceanographic analysis using NIDAS software, other IDBMS data base analysis, and for acoustic prediction modeling and analysis. Additional local storage space is required for the large working files. NAVOCEANO has lost a substantial amount of in-house production capability, particularly digitizing, and large format scanning. Other SUN and SGI workstations are no longer supported by the manufacturer.

GEODETIC GPS - T-AGS 51

A geodetic capability is required aboard each ship that deploys Hydrographic Survey Launches (HSLs) in order to establish the location of Differential Global Positioning Systems (DGPS) reference stations and tidal measurement benchmarks. In addition, this system is used for calibration of swath systems and benchmarks as well as calibration of swath systems and the location of aids to navigation. The new systems are in full compliance with the location of aids to navigation. The new systems are in full compliance with DoD GPS regulations an capable of negating the effects of Selective Denial when keyed. The present systems in inventory do not comply with DoD regulations and are over 7 years old and technically out-of-date.

GEODETIC GPS - T-AGS 52

A geodetic capability is required aboard each ship that deploys Hydrographic Survey Launches (HSLs) in order to establish the location of Differential Global Positioning Systems (DGPS) reference stations and tidal measurement benchmarks. In addition, this system is used for calibration of swath systems and benchmarks as well as calibration of swath systems and the location of aids to navigation. The new systems are in full compliance with the location of aids to navigation. The new systems are in full compliance with DoD GPS regulations an capable of negating the effects of Selective Denial when keyed. The present systems in inventory do not comply with DoD regulations and are over 7 years old and technically out-of-date.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

SATELLITE PROCESSING UPGRADE

NAVOCEANO is the National Center of Expertise for the production of multi-channel sea surface temperatures (MCSSTs). MCSSTs are produced from NOAA's Polar Orbiting Environmental Satellites using the Satellite Processing System (SPS). Recent improvements to NOAA's Geostationary Orbiting Environmental Satellites (GOES) make it possible for the first time to produce MCSSTs from the GOES data stream. These GOES MCSSTs will dramatically improve the coverage, resolution, timeliness and accuracy of sea surface temperatures. Ingest and processing of the GOES data stream will require acquisition of GOES antenna/receiver equipment. Production automation and data storage will require an integrated computer system upgrade for the current SPS. Sea surface temperatures are a critical element of information for (1) support of DoD personnel exposed to in-water activity (e.g. SEALs), (2) acoustic prediction in support of ASW, and (3) input to numerical circulation models providing ocean currents affecting mine countermeasures an amphibious operations. NAVOCEANO production of MCSSTs is required by the Joint Navy/Air Force/NOAA Shared Processing Memorandum of Agreement. Production of MCSSTs supports a number of validated requirements including USMC-OCEN 93-01 (Littoral Sea Environment), LITT OCEN 93-01 (Improved Mine Drift Predictions), LITT OCEN 93-06 (High Resolution Surface/Subsurface Current Predictions), and CINC OCEN 91-06 (Ocean Prediction Models).

SEAMAP TOWFISH UPGRADE

This upgrade to the SEAMAP system will allow survey requirements to be met without interruption. Fleet requirements for seafloor bathymetric and acoustic backscatter maps, and quantitative backscatter measurements for SWASI, Mine Warfare, and Route Survey data collection can be accomplished.

TOWED BIO-ASSAYER SYSTEM

This roll-on/roll-off (ro/ro) Towed Bio-Assayer System provides a complete volume reverberation data collection system including bottom-backscatter data. The data will support the Oceanographic and Atmospheric Master Library (OAML) and OAML data bases. Without the Towed Bio-Assayer System, NAVOCEANO would not be able to collect volume-scattering data needed for the OAML data bases.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

TRANSMISSION LOSS/BOTTOM LOSS SYSTEM UPGRADE

This acquisition will provide for the complete upgrade and replacement of the existing Transmission Loss/Bottom Loss (TL/BL) Measurement Systems. The primary purpose of this acquisition is to provide life cycle replacement of aging and obsolete equipment. The goal is to maintain a minimum capability of three field systems in order to meet our survey requirements. The goal is to maintain a minimum capability of three field systems in order to meet our survey requirements. These systems will be available for use on all NAVOCEANO surface platforms for the collection of acoustic data received/transmitted by sonobuoys. The data collected by this system supports the Oceanographic and Atmospheric Master Library (OAML), provides acoustic properties of the water column in high priority areas of interest to the Fleet, and supports acoustic model validation.

CTD ACQUISITION & PROCESSING SYSTEM CALIBRATION UPGRADE

The existing inventory of CTD sensors consists primarily of underwater units and deck units. Due to problems associated with design and quality control there have been complaints about performance and reliability. NAVOCEANO is working directly with the manufacturer to resolve these issues at this time. However, it is imperative that NAVOCEANO has a plan in place in the event that the problems with the current systems cannot be resolved. The CTD is one of the primary sensor systems used in the NOLS program throughout the research community. This CTD system will be evaluated "in-house" and at sea as a potential replacement for the system.

DIGITAL SIDE SCAN T-AGS 51/52

The collection and analysis of side scan sonar data is used to determine shoal depth between survey lines. This acquisition will enable the digital recording and archiving of side scan data to facilitate its use in sonar mosaics to better "see" the entire area. It incorporates the display onto video monitor and allows fast, accurate and simple target marking/identification. This computerized approach will dramatically improve production time of side scan data analysis. Additionally, the acquisition of digital technology will expand the system dynamic range and enable the use of NAVOCEANO in-house digital signal and image processing techniques to extract detailed information from the data. These data are used to populate imagery data bases and various Mapping, Charting, and Geodesy products.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

DIGITAL SIDE SCAN WITH CHIRP 915

The collection and analysis of side scan sonar data is used to determine shoal depth between survey lines. This acquisition will enable the digital recording and archiving of side scan data to facilitate its use in sonar mosaics to better "see" the entire area. It incorporates the display onto video monitor and allows fast, accurate and simple target marking/identification. This computerized approach will dramatically improve production time of side scan data analysis. Additionally, the acquisition of digital technology will expand the system dynamic range and enable the use of NAVOCEANO in-house digital signal and image processing techniques to extract detailed information from the data. These data are used to populate imagery data bases and various Mapping, Charting, and Geodesy products.

DIGITAL SIDE SCAN WITH CHIRP - T-AGS 63

NAVOCEANO does not currently have side scan sonar capability aboard T-AGS 63. It is anticipated that these vessels will be fitted with Hydrographic Survey Launches (HSLs) at some point. Side scan sonar capability is required to effectively meet DMA hydrographic and Mine Warfare (MIW) data requirements. T-AGS 63 and later HSLs will be outfitted with these systems, which will provide the capability to (1) digitally archive raw side-scan data to be used in populating sea floor trackline databases, (2) precisely geo-referenceside scan sonar scan-line data for accurate target location and identification, and (3) monitor real-time data collection using a video display with optional and concurrent hardcopy output. Current systems collect analog data only and are limited to hardcopy archiving. This is a significant operational and processing limitation, supporting only marginal data analysis and subsequent product development.

EM1000 MULTIBEAM SYSTEM-PATHFINDER/SUMNER

Increased littoral survey requirements require use of higher shallow water multibeam systems. These ships are only equipped with 12 KHz full ocean depth multibeam systems which do not provide sufficient data resolution at depths more shallow than 300m. Without this system the ships cannot perform bathymetric surveys in depths less than 300m which is not sufficient for mapping and charting.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

EM1000 MULTIBEAM UPGRADE - T-AGS 51

T-AGS 51 is currently equipped with an EM100 Shallow Water Multibeam. This system is no longer in production and is expensive to maintain, especially with regard to replacements part availability and long lead time logistics support. This EM100 multibeam has been in use for approximately 10 years and required life cycle replacement. Without the EM1000 system, the ability of the ship to conduct multibeam surveys will degrade as equipment becomes unsupportable.

EM1000 MULTIBEAM UPGRADE - T-AGS 52

T-AGS 51 is currently equipped with an EM100 Shallow Water Multibeam. This system is no longer in production and is expensive to maintain, especially with regard to replacements part availability and long lead time logistics support. This EM100 multibeam has been in use for approximately 10 years and required life cycle replacement. Without the EM1000 system, the ability of the ship to conduct multibeam surveys will degrade as equipment becomes unsupportable.

GEODETIC GLOBAL POSITIONING SYSTEM - TAGS 64

Differential Global Positioning System (DGPS) with Geodetic capability are required to provide the geographic accuracy specified on hydrographic charts. These new systems replace older versions that become obsolete in CY97. DGPS Reference Stations and landmarks can be rapidly positioned if the DGPS includes a geodetic capability. Set up time can be reduced by 90 to 95%. Since JPO will be eliminating non-military access to the L2 frequency on GPS satellites, accuracy of civilian systems will be immediately degraded. This affects NAVOCEANO since we use untended receivers and currently employ civilian systems.

BUDGET ITEM JUSTIFICATION SHEET P- 40 CONTINUATION	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/LINE ITEM # OCEANOGRAPHIC SUPPORT EQUIPMENT LI:8126

HSL T-AGS 63

The procurement and outfitting of a shore-based Hydrographic Survey Launch (HSL) provides NAVOCEANO with a local system integration platform that is identical to t HSLs that will be deployed on T-AGS 60 class ships. This platform will be used for at-sea testing of survey system installation or upgrade. The shore-based HSL will also provide NAVOCEANO the capability to provide its survey personnel with comprehensive hydrographic training prior to field assignment. Incorporating this capability into NAVOCEANO's operating tools will increase the effectiveness of hydrographic survey efforts by providing the ability to perform integration and engineering testing and improved personnel training in the local commuting area.

HIGH SPEED DIGITAL SIDE SCAN SONAR-T-AGS 62

NAVOCEANO currently collects high speed side scan imagery data in support of Q-Routes and Mine Warfare (MW) requirements. Requirements for this type of data have been increasing and NAVOCEANO has only a single system of this type in the inventory. This significantly limits the ability to collect high resolution data in more than one operational area, or to have an installed backup capability on another platform. Without the addition of this high speed digital side scan sonar system to T-AGS 62, our ability to collect this data will remain very limited.

HSL T-AGS 62

The Hydrographic Survey Launch (HSL) is required to accomplish procurement and retrofit of HSLs aboard T-AGS 60 class ships in support of CNO's Naval Oceanography Policy Statement to incorporate near-shore hydrographic capability into all ships. NAVOCEANO has multiple requirements to collect bathymetry and imagery data in littoral areas. Presently the near-shore data (less than 50 meters) is collected from HSLs having a single beam sounder and imagery data is collected by towing a side scan sonar. The replacement of the single beam sonar with a high resolution swath multibeam capable of collecting 140 degrees swath to 20 meters, 100 degrees swath 20 to 50 meters and 60 degrees swath 50 to 150 meters. The system will collect concurrent bathymetry and imagery data. In 25 meters the HSL would need less than 10% of the time to survey a given area and would collect higher resolution bathymetry and imagery.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System			DATE: FEBRUARY 1999		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OCEANOGRAPHIC SUPPORT EQUIPMENT L7Z7					

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	U.S. NAVAL OBSERVATORY													
	1.3 Charged Coupled Device Array		2	142.5	285.0	1	150.0	150.0	2	136.5	273.0			
	Indium Antimonide Array Detectors					1	190.0	190.0						
	Metrology/Delay Lines & Siderostats/BD		4	220.8	883.0									
	Mark IV VLBI Correlator		1	271.0	271.0									
	Optical Interferometer Subsystem					1	388.0	388.0						
	Optical Interferometer (Infrared)								2	150.0	300.0			
	Cesium System					2	335.0	670.0	3	306.7	920.0			
	Time Transfer Receiver		1	100.0	100.0	2	146.0	291.0	4	146.0	583.0			
	Mark IV Upgrade					1	240.0	240.0						
	VLBI Subsystem					2	125.0	250.0	1	150.0	150.0			
	OBSERVATORY SUBTOTAL		**8**		**1,539.0**	**10**		**2,179.0**	**12**		**2,226.0**			

CLASSIFICATION:
UNCLASSIFIED
EXHIBIT P-5

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: FEBRUARY 1999

APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD
Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT		OCEANOGRAPHIC SUPPORT EQUIPMENT L7Z7

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	NAVAL OCEANOGRAPHIC OFFICE													
	Aircraft Systems													
	Aircraft Data Acquisition System		2	150.0	300.0	1	200.0	200.0						
	Altimetry Data Fusion Systems													
	Altimetry Data Fusion Center					1	200.0	200.0						
	AUTONOMOUS UNDERWATER VEHICLE													
	Autonomous Underwater Vehicle Recovery		1	300.0	300.0									
	Autonomous Underwater Vehicle					1	2,650.0	2,650.0	1	2,656.0	2,656.0			
	Central Site Systems													
	Central Data Base Server					1	216.0	216.0						
	Survey Workstations/Mass Storage					3	130.0	390.0						
	Communications Systems													
	ATM Capability/LAN Upgrade		1	972.0	972.0				1	274.0	274.0			
	Environmental Systems													
	Integrated Drifting Buoys					145	4.0	580.0	130	4.0	518.0			
	Klein 5000 Towfish/Topsider		1	280.0	280.0									
	Optics Measurement Array		1	120.0	120.0	1	120.0	120.0						
	NAVOCEANO PAGE TOTAL		**6**		**1,972.0**	**153**		**4,356.0**	**132**		**3,448.0**			

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OCEANOGRAPHIC SUPPORT EQUIPMENT L7Z7	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	GFMPL SYSTEMS													
	DTC/GFMPL System					1	150.0	150.0						
	GFMPL Hardware Upgrade					1	150.0	150.0						
	HYCOOP SYSTEMS													
	HYCOOP Digital Side Scan Sonar					1	515.0	515.0						
	HYDROPHONE SYSTEMS													
	Hydrophone Collection System					1	250.0	250.0						
	ISS SYSTEMS													
	ISS-60 T-AGS 51/52		1	230.0	230.0									
	ISS-60/System Integration Laboratory UG		1	275.0	275.0									
	METEOROLOGY SYSTEMS													
	Meteorology Phase II Upgrade		4	150.0	600.0									
	MINE WARFARE SYSTEMS													
	MWF Graphics/Analysis Computers		1	160.0	160.0									
	NAVIGATION SYSTEMS													
	Geodetic GPS - T-AGS 51		1	171.0	171.0									
	Geodetic GPS - T-AGS 52					1	171.0	171.0						
	NAVOCEANO PAGE TOTAL		**8**		**1,436.0**	**5**		**1,236.0**	**0**		**0.0**			

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System	DATE: FEBRUARY 1999
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OCEANOGRAPHIC SUPPORT EQUIPMENT L7Z7	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1998			FY 1999			FY 2000					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	SATELLITE SYSTEMS													
	Satellite Processing Upgrade		3	128.0	384.0	1	200.0	200.0						
	SEAMAP SYSTEMS													
	SEAMAP Towfish Upgrade		1	250.0	250.0									
	SHALLOW WATER SYSTEMS													
	Towed Bio-Assayer System		1	400.0	400.0									
	Transmission Loss/Bottom Loss Upgrade		3	160.0	478.0									
	SHIPBOARD INSTRUMENTATION													
	CTD Acquisition & Processing System UG		4	128.5	514.0									
	Digital Side Scan T-AGS 51/52		1	265.0	265.0									
	Digital Side Scan with Chirp Subbottom T-AGS 63					1	530.0	530.0						
	EM1000 Multibeam Upgrade - T-AGS 51/52					2	684.0	1,368.0						
	EM1000 Multibeam Sys-Pathfinder		2	453.0	906.0									
	Geodetic Global Positioning Sys-T-AGS 64								1	175.0	175.0			
	High Speed Digital Side Scan - T-AGS 62					1	400.0	400.0						
	Hydrographic Survey Launch T-AGS 60								2	2,050.0	4,100.0			
	NAVOCEANO PAGE TOTAL		**15**		**3,197.0**	**5**		**2,498.0**	**3**		**4,275.0**			

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System			DATE: FEBRUARY 1999		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OCEANOGRAPHIC SUPPORT EQUIPMENT		L7Z7		
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS					
			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	Hydrographic Survey Launch T-AGS 63		1	1,800.0	1,800.0			
	Multibeam - HSL 915 T-AGS 61		1	904.0	904.0			
	Hydrographic Survey Launch - T-AGS 62		2	2,035.0	4,070.0			
	NAVOCEANO PAGE TOTAL		**4**		**6,774.0**			
	NAVOCEANO SUBTOTAL		**33**		**13,379.0**	**163**		**8,090.0**
	FLEET NUMERICAL METEOROLOGY AND OCEANOGRAPHY CENTER							
	POPS Enhancements		1		4,448.0	1		6,328.0
	CNMOC HEADQUARTERS							
	World Magnetic Model		1		1,500.0			
	TOTAL		**43**		**20,866.0**	**174**		**16,597.0**

			FY 2000									
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST				
	Hydrographic Survey Launch T-AGS 63											
	Multibeam - HSL 915 T-AGS 61											
	Hydrographic Survey Launch - T-AGS 62											
	NAVOCEANO PAGE TOTAL											
	NAVOCEANO SUBTOTAL		**135**		**7,723.0**							
	FLEET NUMERICAL METEOROLOGY AND OCEANOGRAPHY CENTER											
	POPS Enhancements		1		8,405.0							
	CNMOC HEADQUARTERS											
	World Magnetic Model											
	TOTAL		**148**		**18,354.0**							

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-7: PERSONNEL AND COMMAND SUPPORT EQUIPMEN	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
CNMOC HEADQUARTERS										
World Magnetic Model	1	1,500.0	NAVOCEANO MS	12/97	MIPR	USGS-DENVER, CO	04/98	06/98	YES	
NAVAL OBSERVATORY										
Mark IV VLBI Correlator	1	271.0	NASA GODDARD SPACE FLIGHT CTR	12/97	C/FP	NASA MARYLAND	01/98	05/98	YES	
1.3M CCD Array	2	142.5	FISC WASH	10/97	C/FP	SITE, INC.-BEAVERTON,OR	01/98	06/98	YES	
Metrology/DL & Siderostats/BD	4	220.8	NRL WASH	12/97	C/FP	NRL WASH	08/98	10/98	YES	
Time Transfer Receiver	1	100.0	NRL WASH	03/98	C/FP	NRL WASH	04/98	08/98	YES	
FLEET NUMERICAL METEOROLOGY & OCEANOGRAPHY CTR										
POPS Enhancements	1	2,470.0	GSA	08/98	C/FP	LITTON PRC, INC SAN DIEGO, CA	08/98	11/98	YES	
" "	1	1,978.0	TAC-JW SPAWAR	08/98	C/FP	SUN MICRO SYSTEMS SANTA CLARA, CA	08/98	11/98		

CLASSIFICATION:
UNCLASSIFIED

EXHIBIT P-5A

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
NAVAL OCEANOGRAPHIC OFFICE										
AIRCRAFT SYSTEMS										
Aircraft Data Acquisition System	2	150.0	NAVOCEANO	06/98	C/FP	UNKNOWN	09/98	11/98	YES	
AUTONOMOUS UNDERWATER VEHICLE										
Autonomous Underwater Vehicle	1	300.0	NAVOCEANO	06/98	C/FP	UNKNOWN	09/98	12/98	YES	
COMMUNICATIONS SYSTEMS										
ATM Capability/LAN Upgrade	1	972.0	NAVOCEANO	12/97	C/FP	FDC TECHNOLOGIES BETHESDA, MD	08/98	09/98	YES	
ENVIRONMENTAL SYSTEMS										
KLEIN 5000 Towfish/Topsider	1	280.0	NAVOCEANO	06/98	C/FP	KLEIN, INC. SALEM, NH	08/98	10/98	YES	
Optics Measurement System	1	120.0	NRL	06/98	WR	SATLANTIC, INC	08/98	11/98	YES	

D. REMARKS

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
ISS-60 SYSTEMS										
ISS-60 T-AGS 51/52	1	230.0	SPAWARS	12/97	WR	SPAWARS N. Charleston, SC	03/98	05/98	YES	
ISS-60/Systems Integration Laboratory UG	1	275.0	SPAWARS	07/98	C/FP	UNKNOWN	09/98	11/98	YES	
METEOROLOGY SYSTEMS										
Meteorology Phase II Upgrade	4	150.0	NAVOCEANO	05/98	C/FP	SUN MICRO SYSTEMS McLEAN, VA	07/98	09/98	YES	
MINE WARFARE SYSTEMS										
Mine Warfare Graphics/Analysis Computer	1	160.0	SPAWARS	03/98	RCP	SPAWAR Washington, DC	08/98	11/98	YES	
NAVIGATION SYSTEMS										
Geodetic Global Positioning System - T-AGS 51	1	171.0	NAVAL ORDINANCE Seal Beach, CA	05/98	RCP	Naval Ordinance Seal Beach, CA	07/98	10/98	YES	
SATELLITE SYSTEMS										
Satellite Processing System Upgrade	3	128.0	NAVOCEANO	07/98	C/FP	UNKNOWN	09/98	12/98	YES	

D. REMARKS

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT	L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
SEAMAP SYSTEMS										
SEAMAP Towfish Upgrade	1	250.0	NRL	06/98	RCP	Naval Research Laboratory Washington, DC	08/98	10/98	YES	
SHALLOW WATER SYSTEMS										
Towed Bio-Assayer System	1	400.0	NAVOCEANO	06/98	C/FP	UNKNOWN	09/98	11/98	YES	
Transmission Loss/Bottom Loss Upgrade	3	160.0	NAVOCEANO	03/98	C/FP	UNKNOWN	09/98	11/98	YES	
SHIPBOARD INSTRUMENTATION										
CTD Acquisition & Processing System UG	4	129.0	NAVOCEANO	08/98	C/FP	UNDER PROTEST	11/98	01/99	YES	
Digital Side Scan T-AGS 51/52	1	265.0	NRCC Philadelphia	12/97	RCP	Datasonics, Inc. Cataumet, MA	08/98	10/98	YES	

D. REMARKS

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMEN	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMEN	L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1998										
EM1000 Multibeam Sys-PATHFINDER	2	453.0	SPAWAR	02/98	RCP	SIMRAD SEATTLE, WA	06/98	08/98	YES	
Hydrographic Survey Launch -T-AGS 62	2	2,035.0	NAVSEA	07/98	RCP	HALTER MARINE MOSS POINT, MS	09/98	11/98	YES	
Hydrographic Survey Launch T-AGS 63	1	1,800.0	NAVSEA	07/98	C/FP	HALTER MARINE MOSS POINT, MS	08/98	10/98	YES	
Multibeam - HSL 915 T-AGS 61	1	904.0	SPAWAR	08/98	C/FP	SIMRAD SEATTLE, WA	12/98	02/99	YES	

D. REMARKS

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								Weapon System		A. DATE February 1999	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-7: PERSONNEL AND COMMAND SUPPORT EQUIPMEN					C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT					SUBHEAD L7Z7	
Cost Element/ FISCAL YEAR	**QTY**	**UNIT COST (000)**	**LOCATION OF PCO**	**RFP ISSUE DATE**	**CONTRACT METHOD & TYPE**	**CONTRACTOR AND LOCATION**	**AWARD DATE**	**DATE OF FIRST DELIVERY**	**SPECS AVAILABLE NOW**	**IF NO WHEN AVAILABLE**	
FY 1999											
NAVAL OBSERVATORY											
Indium Antimonide Array Detectors	1	190.0	FISC WASH	10/98	C/FP	SBRC-ST BARBARA,CA	11/98	03/99	YES		
1.3M CCD Array	1	150.0	NRL WASH	10/98	C/FP	NRL WASH	11/98	03/99	YES		
Optical Interferometer Subsystem	1	388.0	NRL WASH	12/98	C/FP	NRL WASH	01/99	04/99	YES		
Cesium System	2	335.0	NRL WASH	12/98	C/FP	NRL WASH	01/99	05/99	YES		
Time Transfer Receiver	2	146.0	NRL WASH	03/99	C/FP	NRL WASH	04/99	08/99	YES		
Mark IV Upgrade	1	240.0	NASA MARYLAND	11/98	C/FP	NASA MARYLAND	12/98	04/99	YES		
VLBI Subsystem	2	125.0	NASA GODDARD SPACE FLIGHT CTR	11/98	C/FP	NASA MARYLAND	12/98	04/99	YES		
FLEET NUMERICAL METEOROLOGY & OCEANOGRAPHY CTR											
POPS Enhancements	1	6,354.0	GSA	10/98	C/FP	LITTON PRC, INC SAN DIEGO, CA	02/99	05/99	YES		

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE 'FEBRUARY 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMEN	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMEN	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1999										
NAVAL OCEANOGRAPHIC OFFICE										
AIRCRAFT SYSTEMS										
Aircraft Data Acquisition System	1	200.0	NAVOCEANO	02/99	C/FP	UNKNOWN	03/99	06/99	YES	
ALTIMETRY DATA FUSION SYSTEMS										
Altimetry Data Fusion Center	1	200.0	NAVOCEANO	12/98	C/FP	UNKNOWN	01/99	03/99	YES	
AUTONOMOUS UNDERWATER VEH										
Autonomous Underwater Vehicle	1	2,650.0	NAVOCEANO	12/98	C/FP	UNKNOWN	01/99	03/99	YES	
CENTRAL SITE SYSTEMS										
Central Data Base Server	2	108.0	NAVOCEANO	12/98	C/FP	UNKNOWN	01/99	03/99	YES	
Survey Workstations/Mass Storage	3	130.0	NAVOCEANO	02/99	C/FP	UNKNOWN	03/99	06/99	YES	
ENVIRONMENTAL SYSTEMS										
Integrated Drifting Buoys	145	4.0	NAVAIR Crane, Ind	11/98	RCP	NAVAIR WARFARE Indianapolis, IN	12/98	02/99	YES	
Optics Measurement Array	1	120.0	NAVOCEANO	11/98	C/FP	UNKNOWN	12/98	02/99	YES	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE 'FEBRUARY 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMEN'	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1999										
GFMPL SYSTEMS										
DTC/GFMPL System	1	150.0	NAVOCEANO	01/99	C/FP	UNKNOWN	02/99	04/99	YES	
GFMPL Hardware Upgrade	1	150.0	NAVOCEANO	02/99	C/FP	UNKNOWN	03/99	05/99	YES	
HYCOOP SYSTEMS										
HYCOOP Digital Side Scan Sonar	1	515.0	NRCC Philadelphia	09/98	C/FP	UNKNOWN	10/98	02/99	YES	
HYDROPHONE SYSTEMS										
Hydrophone Collection Ssytem	1	250.0	NAVOCEANO	10/98	C/FP	UNKNOWN	11/98	03/99	YES	
NAVIGATION SYSTEMS										
Geodetic GPS - T-AGS 52	1	171.0	NAVAL ORDINANCE Seal Beach, CA	11/98	RCP	Naval Ordinance	12/98	02/99	YES	
SATELLITE SYSTEMS										
Satellite Processing System Upgrade	1	200.0	NAVOCEANO	11/98	C/FP	UNKNOWN	12/98	02/99	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE 'FEBRUARY 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMEN	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMENT	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 1999										
SHIPBOARD INSTRUMENTATION										
Digital Side Scan with Chirp Subbottom 63	1	530.0	NRCC Philadelphia	11/98	C/FP	UNKNOWN	12/98	02/99	YES	
EM1000 Multibeam Upgrade - T-AGS 51/52	2	684.0	SPAWARS	12/98	C/FP	UNKNOWN	01/99	04/99	YES	
High Speed Digital Side Scan - T-AGS 62	1	400.0	NAVOCEANO	11/98	C/FP	UNKNOWN	12/98	02/99	YES	

D. REMARKS

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 1999
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy OPN BA-7: PERSONNEL AND COMMAND SUPPORT EQUIPMEN	C. P-1 ITEM NOMENCLATURE OCEANOGRAPHIC SUPPORT EQUIPMEN	SUBHEAD L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 2000										
NAVAL OBSERVATORY										
1.3M CCD Array	2	136.5	NRL WASH	10/99	C/FP	NRL WASH	01/00	05/00	YES	
Optical Interferometer (Infrared)	2	150.0	NRL WASH	10/99	C/FP	NRL WASH	11/99	03/00	YES	
Cesium System	3	306.7	NRL WASH	12/99	C/FP	NRL WASH	01/00	05/00	YES	
Time Transfer Receiver	4	145.8	NRL WASH	10/99	C/FP	NRL WASH	04/00	08/00	YES	
VLBI Subsystem	1	150.0	NASA GODDARD SPACE FLIGHT CTR	11/99	C/FP	NASA MARYLAND	12/99	04/00	YES	
FLEET NUMERICAL METEOROLOGY & OCEANOGRAPHY CTR										
POPS Enhancements	1	8,405.0	GSA	10/99	C/FP	LITTON PRC, INC SAN DIEGO, CA	02/00	05/00	YES	

CLASSIFICATION: **UNCLASSIFIED**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1999		
Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMEN					OCEANOGRAPHIC SUPPORT EQUIPMEN				L7Z7	
Cost Element/ FISCAL YEAR	**QTY**	**UNIT COST (000)**	**LOCATION OF PCO**	**RFP ISSUE DATE**	**CONTRACT METHOD & TYPE**	**CONTRACTOR AND LOCATION**	**AWARD DATE**	**DATE OF FIRST DELIVERY**	**SPECS AVAILABLE NOW**	**IF NO WHEN AVAILABLE**
FY 2000										
NAVAL OCEANOGRAPHIC OFFICE										
AUTONOMOUS UNDERWATER VEH										
Automomous Underwater Vehicle	1	2,656.0	NAVOCEANO	11/00	C/FP	UNKNOWN	12/00	03/01	YES	
COMMUNICATIONS SYSTEMS										
ATM Capability/LAN Upgrade	1	274.0	NAVOCEANO	12/99	C/FP	UNKNOWN	01/00	03/00	YES	
ENVIRONMENTAL SYSTEMS										
Integrated Drifting Buoys	130	4.0	NAVAIR Crane, Ind	01/00	C/FP	UNKNOWN	02/00	04/00	YES	
D. REMARKS										

CLASSIFICATION:
UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 1999

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-7 PERSONNEL AND COMMAND SUPPORT EQUIPMENT	OCEANOGRAPHIC SUPPORT EQUIPMENT	L7Z7

Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 2000										
Shipboard Instrumentation										
Geodetic Global Positioning System T-AGS-64	1	175.0	NAVAL ORDINANCE Seal Beach, CA	12/99	C/FP	UNKNOWN	01/00	04/00	YES	
Hydrographic Survey Launch T-AGS 61	1	2,050.0	NAVSEA	12/99	C/FP	UNKNOWN	01/00	03/00	YES	

D. REMARKS

CLASSIFICATION:
UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET						DATE FEB 1999		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY / BUDGET ACTIVITY 7			**P-1 ITEM NOMENCLATURE** PHYSICAL SECURITY EQUIPMENT (812800)					
	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05
QUANTITY								
Cost (in millions)	$0.3	-	$1.4	$2.5	-	-	-	-

Port Security Vehicles
This line item provides for the establishment and outfitting of new U.S. Coast Guard Port Security Units.
These Port Security Units will satisfy the validated DOD need for out of CONUS port security operations

Up-Armored High Mobility Multipurpose Wheeled Vehicles (HMMWVs)
The SSP funding in this P-1 line in FY 2000 and FY 2001 provides for the procurement of nuclear weapons security vehicles required at the Strategic Weapons Facility, Atlantic (SWFLANT) and Strategic Weapons Facility, Pacific (SWFPAC). The current armored personnel carriers (APCs) in use at SWFLANT and SWFPAC are not HMMWV-type vehicles. SWFLANT has a model of APC known as Dragoons and the SWFPAC vehicles are V-150s. Vehicles at both sites are becoming increasingly more difficult and expensive to support. The existing vehicles have major reliability and operability problems requiring significant management attention to maintain the fleet without presenting excessive risk to site security. The The HMMWV is the proposed replacement APC to both Dragoons and V-150s since it fulfills all mission requirements, has proven reliability, has low projected major maintenance costs and has a projected long production run.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) PROGRAM COST BREAKDOWN								DATE: FEB 1999
A. APPROPRIATION/BUDGET ACTIVITY OPN BA-7:PERSONNEL AND COMMAND SUPPORT EQUIPMENT		P-1 ITEM NOMENCLATURE/SUBHEAD PHYSICAL SECURITY EQUIPMENT						
		TOTAL COST IN THOUSANDS OF DOLLARS						
WEAPON SYSTEM COST ELEMENTS	Ident. Code	FY 98 Qty	TOTAL COST	FY 99 Qty	TOTAL COST	FY 00 Qty	TOTAL COST	
Up-Armored High Mobility Multipurpose Wheeled Vehicles (HMMWVs)						9	1,377	
Port Security Boats								
Ancillary Equipment for Boats								
Vehicles								
Communication Equipment								
Generators 15 kw								
Generators 3 kw								
Emergency Medical Equipment								
Equipment Support Kits								
Field Outfitting Equipment								
Sigonella Security System Upgrade			300					
Total			300				1,377	

P-1 Shopping List
Item No. 199 **Page No. 2**