DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2005
BUDGET ESTIMATES

JUSTIFICATION OF ESTIMATES
FEBRUARY 2004

SHIPBUILDING AND CONVERSION, NAVY

DEPARTMENT OF THE NAVY

FY 2005 PROCUREMENT PROGRAM

SUMMARY
($ IN MILLIONS)

February 2004

APPROPRIATION: SHIPBUILDING & CONVERSION, NAVY

ACTIVITY	FY 2003	FY 2004	FY 2005
02. OTHER WARSHIPS	7,299.7	8,680.8	7,728.1
03. AMPHIBIOUS SHIPS	1,408.1	1,668.8	1,202.6
05. AUXILIARIES, CRAFT, AND PRIOR-YEAR PROGRAM COSTS	400.2	1,052.1	1,031.4
TOTAL SHIPBUILDING & CONVERSION, NAVY	9,108.0	11,401.7	9,962.0

NOTE: The FY 2003 column reflects actuals update.

DEPARTMENT OF THE NAVY
FY 2005 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1611N SHIPBUILDING & CONVERSION, NAVY DATE: February 2004

LINE NO	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	SEC
	BUDGET ACTIVITY 02: OTHER WARSHIPS								
	OTHER WARSHIPS								
1	CARRIER REPLACEMENT PROGRAM	A		88.2					U
2	CARRIER REPLACEMENT PROGRAM								
	ADVANCE PROCUREMENT (CY)			395.5		1,177.2		626.1	U
	(FY 2003 FOR FY 2007) (MEMO)			(395.5)					
	(FY 2004 FOR FY 2007) (MEMO)					(1,177.2)			
	(FY 2005 FOR FY 2007) (MEMO)							(626.1)	
3	SSN-21	A		(4.8)					U
	COMPLETION OF PY PROGRAMS			(4.8)					U
				4.8					
4	VIRGINIA CLASS SUBMARINE	B	1	(2,470.9)	1	(2,143.7)	1	(2,253.5)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-675.5)		(-631.9)		(-672.4)	U
	COMPLETION OF PY PROGRAMS			(326.7)					U
				1,795.3		1,511.9		1,581.1	
5	VIRGINIA CLASS SUBMARINE								
	ADVANCE PROCUREMENT (CY)			632.1		857.9		871.9	U
	(FY 2003 FOR FY 2004) (MEMO)			(200.8)					
	(FY 2003 FOR FY 2005) (MEMO)			(431.3)					
	(FY 2004 FOR FY 2005) (MEMO)					(241.0)			
	(FY 2004 FOR FY 2006) (MEMO)					(494.6)			
	(FY 2004 FOR FY 2007) (MEMO)					(61.1)			
	(FY 2004 FOR FY 2008) (MEMO)					(61.1)			
	(FY 2005 FOR FY 2006) (MEMO)							(266.9)	
	(FY 2005 FOR FY 2007) (MEMO)							(525.0)	
	(FY 2005 FOR FY 2008) (MEMO)							(80.0)	

NOTE: The FY 2003 column reflects actuals update.

DEPARTMENT OF THE NAVY
FY 2005 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1611N SHIPBUILDING & CONVERSION, NAVY DATE: February 2004

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	SEC
6	SSGN CONVERSION	A	2	(589.4)	1	(1,603.6)	1	(783.8)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-178.3)		(-680.2)		(-314.6)	U
				411.1		923.4		469.2	
7	SSGN CONVERSION								
	ADVANCE PROCUREMENT (CY)			584.6		234.7		48.0	U
	(FY 2003 FOR FY 2004) (MEMO)			(534.8)					
	(FY 2003 FOR FY 2005) (MEMO)			(49.8)					
	(FY 2004 FOR FY 2005) (MEMO)					(234.7)			
	(FY 2005 FOR FY 2006) (MEMO)							(48.0)	
8	CRUISER CONVERSION	A				(64.7)			U
	LESS: ADVANCE PROCUREMENT (PY)					(-64.7)			U
9	CVN REFUELING OVERHAULS								
	ADVANCE PROCUREMENT (CY)			217.3		221.0		333.1	U
	(FY 2003 FOR FY 2006) (MEMO)			(217.3)					
	(FY 2004 FOR FY 2006) (MEMO)					(221.0)			
	(FY 2005 FOR FY 2006) (MEMO)							(333.1)	
10	SSN ERO	A	2	(506.9)	2	(449.6)		(90.7)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-80.0)		(-3.1)		(-90.7)	U
				426.9		446.5			
11	SSN ERO								
	ADVANCE PROCUREMENT (CY)			62.7		10.3		19.4	U
	(FY 2003 FOR FY 2005) (MEMO)			(9.8)					
	(FY 2003 FOR FY 2006) (MEMO)			(52.9)					
	(FY 2004 FOR FY 2005) (MEMO)					(10.3)			
	(FY 2005 FOR FY 2007) (MEMO)							(19.4)	

NOTE: The FY 2003 column reflects actuals update.

DEPARTMENT OF THE NAVY
FY 2005 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1611N SHIPBUILDING & CONVERSION, NAVY DATE: February 2004

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	SEC
12	SSBN ERO						1	(292.5)	U
	LESS: ADVANCE PROCUREMENT (PY)							(-30.2)	U
				-------		-------		-------	
								262.2	
13	SSBN ERO								
	ADVANCE PROCUREMENT (CY)					105.0		72.2	U
	(FY 2004 FOR FY 2005) (MEMO)					(30.2)			
	(FY 2004 FOR FY 2006) (MEMO)					(74.7)			
	(FY 2005 FOR FY 2006) (MEMO)							(68.2)	
	(FY 2005 FOR FY 2007) (MEMO)							(4.0)	
14	DDG-51	A	2	(2,869.1)	3	(3,323.7)	3	(3,505.0)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-187.9)		(-130.7)		(-60.0)	U
	COMPLETION OF PY PROGRAMS			(396.7)					U
				-------		-------		-------	
				2,681.2		3,193.0		3,445.0	
				-------		-------		-------	
TOTAL OTHER WARSHIPS				7,299.7		8,680.8		7,728.1	
BUDGET ACTIVITY 03: AMPHIBIOUS SHIPS									
	AMPHIBIOUS SHIPS								
15	LHD-1 AMPHIBIOUS ASSAULT SHIP	A		(238.1)		(352.2)		(1,091.2)	U
	LESS: ADVANCE PROCUREMENT (PY)							(-855.2)	U
				-------		-------		-------	
				238.1		352.2		236.0	
16	LPD-17	A	1	(1,611.9)	1	(1,355.0)	1	(1,103.6)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-441.9)		(-172.4)		(-137.1)	U
	COMPLETION OF PY PROGRAMS			(585.6)					U
				-------		-------		-------	
				1,170.0		1,182.7		966.6	
17	LPD-17								
	ADVANCE PROCUREMENT (CY)					133.9			U
	(FY 2004 FOR FY 2005) (MEMO)					(133.9)			
				-------		-------		-------	
TOTAL AMPHIBIOUS SHIPS				1,408.1		1,668.8		1,202.6	

NOTE: The FY 2003 column reflects actuals update.

DEPARTMENT OF THE NAVY
FY 2005 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1611N SHIPBUILDING & CONVERSION, NAVY DATE: February 2004

LINE NO	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS FY 2003 QUANTITY	FY 2003 COST	FY 2004 QUANTITY	FY 2004 COST	FY 2005 QUANTITY	FY 2005 COST	SEC
	BUDGET ACTIVITY 05: AUXILIARIES, CRAFT, AND PRIOR-YEAR PROGRAM COSTS								
	AUXILIARIES, CRAFT AND PRIOR YR PROGRAM COST								
18	LCU(X)	A					1	25.0	U
19	OUTFITTING	A		294.5		316.3		399.3	U
20	SERVICE CRAFT	A		9.6		23.3		32.1	U
21	LCAC SLEP	A	4	(89.3)	4	(72.5)	5	(90.5)	U
	COMPLETION OF PY PROGRAMS			(1.5)					U
				89.3		72.5		90.5	
22	CANCELLED ACCOUNT ADJUSTMENTS	A		*					U
23	MINE HUNTER	B		6.9		4.5			U
24	COMPLETION OF PY SHIPBUILDING PROGRAMS	B				(635.5)		(484.4)	U
	SSN-774 (MEMO NON ADD)					(300.4)		(91.3)	U
	DDG (MEMO NON ADD)					(75.9)		(128.3)	U
	LPD (MEMO NON ADD)					(259.2)		(264.8)	U
						635.5		484.4	
	TOTAL AUXILIARIES, CRAFT, AND PRIOR-YEAR PROGRAM COSTS			400.2		1,052.1		1,031.4	
	TOTAL SHIPBUILDING & CONVERSION, NAVY			9,108.0		11,401.7		9,962.0	

NOTE: The FY 2003 column reflects actuals update.

Fiscal Year 2005 Budget Estimates
Budget Appendix Extract Language

SHIPBUILDING AND CONVERSION, NAVY (SCN)

For expenses necessary for the construction, acquisition, or conversion of vessels as authorized by law, including armor and armament thereof, plant equipment, appliances, and machine tools and installation thereof in public and private plants; reserve plant and Government and contractor-owned equipment layaway; procurement of critical, long leadtime components and designs for vessels to be constructed or converted in the future; and expansion of public and private plants, including land necessary therefor, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title, **[**as follows:

Carrier Replacement Program (AP), $1,186,564,000;
NSSN, $1,511,935,000;
NSSN (AP), $827,172,000;
SSGN, $930,700,000;
SSGN (AP), $236,600,000;
CVN Refuelings (AP), $232,832,000;
SSN Submarine Refuelings, $450,000,000;
SSN Submarine Refuelings (AP), $10,351,000;
SSBN Submarine Refuelings (AP), $105,800,000;

Fiscal Year 2005 Budget Estimates
Budget Appendix Extract Language

SHIPBUILDING AND CONVERSION, NAVY (SCN)

DDG–51 Destroyer, $3,218,311,000;
LPD–17, $1,192,034,000;
LPD–17 (AP), $135,000,000;
LHD–8, $355,006,000;
LCAC Landing Craft Air Cushion, $73,087,000;
Mine Hunter SWATH, $4,500,000;
Prior year shipbuilding costs, $635,502,000;
Service Craft, $23,480,000; and
For outfitting, post delivery, conversions, and first destination transportation, $338,749,000.

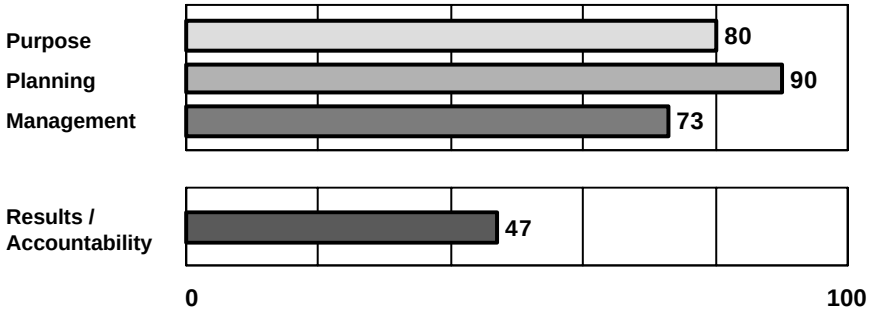
In all: $11,467,623,000**]** *$9,962,027,000*, to remain available for obligation until September 30, **[**2008**]** *2009*: *Provided*, That additional obligations may be incurred after September 30, **[**2008**]** *2009*, for engineering services, tests, evaluations, and other such budgeted work that must be performed in the final stage of ship construction: *Provided further*, That none of the funds provided under this heading for the construction or conversion of any naval vessel to be constructed in shipyards in the United States shall be expended in foreign facilities for the construction of major components of such vessel: *Provided further*, That none of the funds provided under this heading shall be used for the construction of any naval vessel in foreign shipyards. *(10 U.S.C. 5013, 5062; Department of Defense Appropriations Act, 2004.)*

PROGRAM ASSESSMENT RATING TOOL (PART)

As part of a government-wide initiative to systematically assess Federal programs, the Department of Defense reviewed the performance of the Navy shipbuilding program and included the assessment in the FY 2004 Budget publication. This included all of the programs included in the Shipbuilding and Conversion, Navy account and the ship construction effort in BA-1 of the National Defense Sealift Fund. The review found that there is a rigorous requirements analysis, planning, and reporting structure in-place for major shipbuilding programs. However, the shipbuilding program is limited by industrial base, political, and budgetary pressures from building ships at an optimal, efficient rate to meet long-term goals. More effort is needed to ensure that shipbuilding decisions on individual programs are consistent with long-term fleet size and capability goals. For more specific information, please see the attached exhibit.

Program: *Shipbuilding*

Agency: *Department of Defense--Military*
Bureau: *Procurement*



☐ Results Achieved ☑ Measures Adequate
☐ Results Not Demonstrated ☐ New Measures Needed

Key Performance Measures	***Year***	***Target***	***Actual***
Annual Measure: Percent change in acquisition costs for individual programs from established cost of the program. Results from Virginia Class attack submarine program shown as example; data from DoD's annual Selected Acquisition Reports. The Dec 2001 report represents a two-year period (1999-2001) due to the absence of a Dec 2000 report.	1999	<10%	12%
	2001	<10%	12%
	2002	<10%	
	2003	<10%	
Annual Measure: Percentage of ship construction complete Each ship under construction has a delivery date and construction schedule. At the end of each year, the Program Manager has a goal to have a percentage of the ship construction completed. The information provided is for the first Virginia Class submarine (SSN 774).	1999	22%	24%
	2001	57%	64%
	2002	>85%	
	2003		
Long-term Measure: Number of ships in the Fleet The Navy has a baseline level of ships that it should maintain. For example, the 2001 Quadrennial Defense Review set 55 attack submarines as the baseline force that the Navy should maintain. The information shown shows planned levels for attack submarines.	2000	55	56
	2005	55	54
	2009	55	60
	2012	55	60

****Rating:*** *Adequate*

Program Type *Capital Assets*

Program Summary:

The shipbuilding program buys new ships and overhauls older ships for the Navy.

The assessment shows that the Navy's shipbuilding program has a clear purpose, which directly relates to the Navy's mission to defend the nation. The shipbuilding program is designed around long-term goals to maintain a specific fleet size and capability. For example, the Navy uses a baseline of 12 aircraft carriers as the minimum number needed to carry out required missions. Because of this goal, aircraft carriers are purchased at levels required to maintain this quantity. Additional findings include:
1. The Navy has specific cost, schedule, and performance goals for each shipbuilding program.
2. The Department of Defense conducts periodic reviews of programs at major milestones of development and uses a structured reporting regime to help monitor the status of ship development and cost, and construction schedule.
3. The shipbuilding program is limited by industrial base, political, and budgetary pressures that have prevented the Navy from building ships at an optimal, efficient rate to provide for the long term.
4. The Navy has experienced cost increases and schedule slips on some ship construction programs.
5. The unique attributes of each ship and the small procurement quantities within the shipbuilding program challenge the Navy from realizing efficiencies that could be achieved program-wide. Optimistic budget assumptions have exacerbated this problem.

In reponse to these findings the Administration will:
1. Improve the cost estimates for the shipbuilding program or, in some cases, fully budget to cost estimates.
2. Work to ensure that shipbuilding decisions are made with long term fleet size and capability goals in mind.
3. Institute program-wide goals rather than the ship specific goals that are currently used.

Program Funding Level (in millions of dollars)

* This assessments has not changed since publication in the FY 2004 Budget. For updated program funding levels, see Data File - Funding, Scores, and Ratings.

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY2005 President's Budget Estimates

DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY
BA #2 OTHER WARSHIPS

P-1 ITEM NOMENCLATURE
CARRIER REPLACEMENT PROGRAM BLI: 200100

	PRIOR YEARS	FY 2003	FY 2004	FY2005	FY2006	FY2007	FY2008	FY2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	9		-	-	-	1			TBD	9
End Cost	26,156.1	0.0	0.0	0.0	0.0	8,604.6	0.0	0.0	TBD	34,760.7
Less Advance Procurement	2,821.3	0.0	0.0	0.0	0.0	2,967.7	0.0	0.0	TBD	5,789.0
Less Cost to Complete	0.0	0.0	0.0	0.0	0.0	2,830.1	0.0	0.0	TBD	2,830.1
Less Escalation	66.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	TBD	66.4
Less Transfer	1,279.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,279.0
Less Subsequent Year FF	88.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.2
Subsequent Year FF	0.0	88.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	88.2
Full Funding TOA	21,901.2	0.0	0.0	0.0	0.0	2,806.8	2,830.1	0.0	0.0	27,538.1
Plus Advance Procurement	2,821.3	395.5	1,177.2	626.1	611.9	162.1	420.8	1,568.6	TBD	7,783.5
Total Obligational Authority	24,722.5	483.7	1,177.2	626.1	611.9	2,968.9	3,250.9	1,568.6	TBD	35,409.8
Plus Outfitting and Post Delivery	0.0	50.8	3.0	15.0	38.4	6.7	68.1	24.5	0.0	206.5
Plus Escalation	66.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	TBD	66.4
Total	24,788.9	534.5	1,180.2	641.1	650.3	2,975.6	3,319.0	1,593.1	TBD	35,682.7
Unit Cost (Ave. End Cost)	2,906.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,862.3

Mission: To support and operate aircraft to engage in attacks on targets afloat and ashore which threaten our use of the sea and to engage in sustained operations in support of other forces.

Characteristics:

Hull:
Length overall: 1092'
Beam: 134'
Displacement: 97,337 Tons
Draft: 38.7'

CVN 77: SUBHD 6210

Major Electronics:
Radio Communication System
Ship Self Defense System
CATCC DAIR (TPX 42)
A/N SPN 41 ILS
A/N SPN 46 Aircraft Landing Radar
Carrier Intelligence Center
CEC (AN/USG-2)
SPS-48E
SPS-49A
NSWPC
RAM - Rolling Airframe Missile
JFN

Armament:

SPQ-9 (B)
NSSM
RAM
CV-TSC

Production Status:

	Original	Re-negotiation (planned)
Contract Award Planned	Jan/2001	Feb/2004
Months to Complete		
a) Award to Delivery	86 months	
b) Construction Start to Delivery	AP 26 months plus 86 months	
Completion of Fitting Out	May/2008	
Obligation Work Limiting Date (OWLD)	Apr/2009	

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

BUDGET ACTIVITY: 2
OTHER WARSHIPS

P-1 ITEM NOMENCLATURE: CARRIER REPLACEMENT PROGRAM

BLI: 200100

SUBHEAD: 6210

ELEMENT OF COST	QTY	FY 2001 CVN 77 TOT COST
PLAN COSTS	1	0
BASIC CONST/CONVERSION		3,389,764
CHANGE ORDERS		117,085
ELECTRONICS		262,886
PROPULSION EQUIPMENT		695,870
HM&E		37,524
ORDNANCE		216,454
OTHER COST		60,890
ESCALATION		243,271
TOTAL SHIP ESTIMATE		5,023,744
Less: (FY 1998) ADVANCE PROCUREMENT		48,737
Less: (FY 1999) ADVANCE PROCUREMENT		122,897
Less: (FY 2000) ADVANCE PROCUREMENT		747,503
Less: FY 03 SUBSEQUENT FF		88,170
NET P-1 LINE ITEM		4,016,437

P5 the 01

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Basic/Escalation
Ship Type: CVN 68 Class

	Start/Issue	Complete/Response
I. Design Schedule		
Issue date for TLR	July 94	
Issue date for TLS	N/A	N/A
Preliminary Design	N/A	N/A
Contract Design	Oct 97	Jan 01
Request for Proposals	May 00	Aug 00
Design Agent	Newport News Shipbuilding	

II. Classification of Cost Estimate: Class C

III. Basic Construction/Conversion	FY2001
A. Actual Award Date	26 January 2001
B. Contract Type (and Share Line if applicable)	FPIF (Ship Detail Design and Construction)
	CPAF (Warfare System Contract Line Item)

IV. Escalation	
Escalation Termination Date	Nov-08
Escalation Requirement (with FCOM)	243,271
Labor/Material Split	63.5% /36.5%
Allowable Overhead Rate	95%

V. Other Basic (Reserves/Miscellaneous)	Amount
None	

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
CVN 77	NEWPORT NEWS	2001	Jan-01	Sep-98	Mar-08

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN-77	(1) FY01 TOT COST
ELECTRICAL EQUIPMENT	
a. P-35 Items	
(AN/SPN-41) Instrument Landing System	3,370
AN/SLQ-32(V)4	6,858
AN/SPN-46	8,794
AN/UPX-29 (IFF)	6,025
Battle Force Tactical Training System (BFTT)	6,157
Common Data Link-Navy (CDL-N)	7,752
Cooperative Engagement Capability (CEC)	6,815
Digital Modular Radio UHF/VHF LOS SATCOM	12,225
GCCS-M	17,333
High Frequency Radio Group (HFRG)	5,540
ISNS	11,233
JFN	22,467
Ship Signal Exploitation Equipment SSEE	5,117
Radio Communications System (RCS)	23,282
Radio Room Automation	15,200
Ship Self Defense System (SSDS)	51,588
Subtotal	209,756
b. Major Items	
AN/SMQ-11A(V)2 METOC	1,420
AN/SPN-43C	2,405
AN/USQ-155(V)1	1,664
Automated Digital Network Sys (ADNS USQ-144E(V)2)	1,077
CDLMS (UYQ-86 (V) 3	1,999
EHF FOT (USC 38)	2,288
INFOSEC	1,535
MCCP	2,425
MIDS on Ship (MOS) URC-141C	2,412
Naval Tactical Command Support System (NTCSS)	2,251
NAVSSI (AN/SSN 6)	3,153
NIXIE (AN/SLQ-25A Dual) Surface Ship Torpedo Defense System	1,996
Publications	1,601
SIOC	6,355
SHF Multi-band Terminal (AN/WCS-6(V)7)	2,837
Ship Signal Exploit System SSES/SI COMMS	2,872
Ship Test Programs	2,788
Subtotal	41,078
c. Miscellaneous Electronics	12,052
TOTAL ELECTRONICS	262,886

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN-77

	(1) FY01 TOT COST
HULL, MECHANICAL & ELECTRICAL	
a. P-35 Items	0
Subtotal	
b. Major Items	
Composite Mast	4,250
Damage Control System	1,545
Digital Dead Reckoning Tracker (CADRT)	685
DSVL	985
ENVIRON EQPT (WASTE MGMT)	2,544
HM&E Engineering Services	2,681
ILS Support	3,576
ICAN	3,300
LIFERAFTS	1,896
Nuclear Plant Handling	1,179
Ring Laser Gyro	2,927
SUPSHIP Material & GFE	4,250
Test and Integration	2,596
TRUCKS (Forklifts)	2,342
Subtotal	34,756
Miscellaneous HM&E	2,768
TOTAL HULL, MECHANICAL & ELECTRICAL	37,524

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN-77	(1) FY01 TOT COST
OTHER	
a. Major Items	
BERTHING & MESSING	8,306
COMMISSIONING	765
CONTRACT ENGINEERING SERVICES	11,006
IN-HOUSE ENGINEERING SERVICES	13,606
MANAGEMENT SUPPORT SERVICES	26,665
PLANNED MAINTENANCE	542
TOTAL OTHER	60,890

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN-77

	(1) FY01 TOT COST
ORDNANCE	
a. P-35 Items	
AIRCRAFT LAUNCH SYSTEM (CATAPULT EQPT)	25,177
AIRCRAFT RECOVERY SYSTEM (ARRESTING GEAR)	13,600
AN/SPQ-9(B)	9,710
AN/SPS-48E	13,335
AN/SPS-49A(V)2	9,289
ASDS SPQ-14 (Adv Sensor Distribution System)	3,314
AVIATION DATA MANAGEMENT CONTROL SYSTEM	3,583
CATCC DAIR (TPX-42A)	4,419
CVIC	4,700
CV-TSC (Carrier Tactical Support Center)	12,311
IFLOLS	4,854
INTEGRATED WARFARE COMMANDERS CELL	5,877
MULTI-MODAL WORKSTATION (MMWS)	10,050
NAVAL STRIKE WARFARE PLANNING CENTER	26,968
NSSM (Nato Seasparrow)	28,430
RAM	13,087
Visual (Heads Up Display)	2,362
Subtotal	191,066
b. Major Items	
AN/SPS-67(V)1	1,222
AVIATION MAINT FAC	1,345
ILARTS (Integrated Launch & Recovery Television System)	2,996
JBD (Jet Blast Deflector)	361
MORIAH	1,067
SATCC	1,551
TIS & AIT	7,310
TOTAL SHIP TEST	2,401
VLA [Visual Landing Aids]	2,418
Subtotal	20,671
c. Miscellaneous Ordnance	4,717
TOTAL ORDNANCE	216,454

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CARRIER REPLACEMENT PROGRAM
Equipment Line: Aircraft Launch System (Catapult Equipment)
Parm Code - NAVAIR PMA 251

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: With few exceptions, the launching of an aircraft from the flight deck of an aircraft carrier requires that power, in addition to the aircraft's engines, be supplied during the take-off run in order to accelerate the aircraft to the necessary flying speed in the limited deck run available. This additional power is supplied by a catapult. The catapult consists of five major components: the engine and its control system, the shuttle, the tensioner, the holdback attachment point on the deck, and the retracting system. A direct-drive, steam-type catapult is used on all carriers.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	17,221
2. Technical Data and Documentation	486
3. Spares	95
4. Tech Engineering Services	4,276
5. Other Costs	3,099
TOTAL	25,177

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NAWC AD St. Indigos	TBD	1	17,221	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Mar 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CARRIER REPLACEMENT PROGRAM
Equipment Line: Aircraft Recovery System (Arresting Gear)
Parm Code - NAVAIR PMA 251

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The Mark 7 arresting gear is a linear hydraulic system which consists of three modules: the engine, the sheave damper, and the anchor damper. The Mark 7 arresting gear system provides for the successful recovery of aircraft onboard an aircraft carrier.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	9,536
2. Spares	230
3. Tech Engineering Services	3,703
4. Other Costs	131
TOTAL	13,600

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NAVAIR LAKEHURST	TBD	1	9,536	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Aug 05	1 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: AN/SPQ-9B Radar Set
Parm Code - PEO IWS2

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The AN/SPQ-9B is a high resolution X-band narrow beam radar that provides both air and surface tracking information to standard plan position indicator consoles.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	5673
2. Spares	667
3. Technical Data and Documentation	69
4. Tech Engineering Services	440
5. Other	2861
TOTAL	9,710

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY01	CVN	Northrop'Grumman /Norden	FFP	TBD	1	5,673	Dec-03

IV. DELIVERY DATE:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
MAR 08	2 Months	24 Months	Dec-03

V. Competition/Second Source Initiatives
None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: AN/SPS-48E
Parm Code - PEO IWS2

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The AN/SPS-48 Radar is the primary air search radar for the ship. This radar is a 3-D unit capable of providing not only range and bearing, but also altitude.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. MAJOR HARDWARE	6,455
2. Spares	400
3. Tech Data/Documentation	150
3. Tech Engineering Services	2,360
4. Other	3,970
TOTAL	13,335

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT/ OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY 01	CVN	Raytheon	FFP	New	1	6,455	TBD

IV. DELIVERY DATE:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
May 05	1 mo	36 mo	TBD

V. COMPETITION/SECOND SOURCE INITIATIVE

None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: AN/SPS-49(V)2
Parm Code - PEO IWS2

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The AN/SPS-49 Radar is a narrow beam, very long range, two dimensional air search radar. In replacing some older radars which are nearing end of life, the AN/SPS-49 offers greatly improved operational performance, reliability and maintainability.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. MAJOR HARDWARE	6,114
2. Tech Data/Documentation	1,300
3. Tech Engineering Services	1,086
4. Other	789
TOTAL	9,289

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT/ OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY 01	CVN	Raytheon	FFP	New	1	6,114	TBD

IV. DELIVERY DATE:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
May 05	1 mo	30 mo	TBD

V. COMPETITION/SECOND SOURCE INITIATIVE
None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CARRIER REPLACEMENT PROGRAM
Equipment Line: ASDS (SPQ-14)
Parm Code - PEO IWS 2.0I

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
ASDS (SPQ-14) is an interface to Navy radars and ship navigational sensors. Sensor signals are converted and distributed digitally throughout the platform to various displays, consoles and computers via copper or fiber optic cables.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	1,278
2. Tech Data/Documentation	93
3. Tech Engineering Services	878
4. Other Costs	1,065
TOTAL	3,314

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Frontier Elec	IDIQ	1	1,278	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jun 06	1 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CARRIER REPLACEMENT PROGRAM
Equipment Line: Aviation Data Management and Control System (ADMACS)
Parm Code - PMA 251

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

ADMACS is a mission critical real time fault tolerant (redundant) tactical information management system focused on air and flight operations and aviation work centers. It automates input, collection, processing distribution and display of data for ALRE programs and distributes this data to other C4I and non ALRE Systems.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	600
2. Tech Data/Documentation	150
3. Tech Engineering Services	885
4. Other Costs	1,948
TOTAL	3,583

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NUWC Keyport	FFP	1	600	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jun 06	1 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Carrier Air Traffic Control Center (CATCC), (AN/TPX-42A(V)14)
Parm Code - PMA 213

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Carrier Air Traffic Control Center: This is an automatic beacon and radar tracking system (IFF) that provides safe air space control of aircraft operations. Also provides processing of radar data for target detection and tracking, processing, and displaying flight plans, reference points, and map lines for easy association with mission operations.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	2,395
2. Spares	200
3. Tech Engineering Services	931
4. Other Costs	893
TOTAL	4,419

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NAWC AD, S	TBD	1	2,395	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Aug 05	1 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CARRIER REPLACEMENT PROGRAM
Equipment Line: Carrier Intelligence Center (CVIC)
Parm Code - PEO IWS5

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: AITs will install several systems in the CVIC space during PSA including parts of the Naval Strike Warfare Planning Center (NSWPC), Joint Fires Network (JFN), Global Command and Control System (GCCS-M) and IT-21 LAN Drops.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	0
2. Spares	0
3. Tech Engineering Services	4,700
4. Other Costs	0
TOTAL	4,700

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Lockheed Martin	TBD	0	0	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jun 06	1 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CARRIER REPLACEMENT PROGRAM
Equipment Line: Aircraft Carrier Tactical Support Center (CV-TSC)
Parm Code - PEO IWS5

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
CV-TSC is the primary source of undersea warfare data gathered from organic and non-organic sources. CV-TSC supports mission planning, in-flight data exchange, pre and post-mission briefing, real-time analysis, and mission reconstruction/evaluation of USW data for tactical support to the operational chain of command.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	2,464
2. Spares	300
3. Tech Engineering Services	2,365
4. Other Costs	7,182
TOTAL	12,311

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NUWC Keyport	N/A	1	2,464	N/A

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jul 06	1 mo	24	MAR 04

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Improved Fresnel Lens Optical Landing System (IFLOLS)
Parm Code - PMA 251

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The IFLOLS is the primary Visual Landing Aid displaying glide path and trend information to fixed wing pilots on final approach from 1.5 nautical miles to touchdown on CVN.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	2,628
2. Spares	0
3. Tech Engineering Services	1,879
4. Other Costs	347
TOTAL	4,854

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY01	CVN	Raytheon	TBD	TBD	1	2,628	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
May 06	1 mo	TBD	TBD

V. COMPETITION/SECOND SOURCE INITIATIVE:

None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Integrated Warfare Commander's Cell (IWCC)
Parm Code - PEO IWS 5B

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The IWCC provides all mission planning, tactical coordination and control capabilities required by the embarked USW/SUW warfare commander. IWCC supports the warfare commander and his staff in the roles of: sea combat commander/surface warfare commander, screen commander, undersea warfare commander, maritime interdiction operations commander, helicoper element coordinator commander mine warfare commander, and force protection commander.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	1,220
2. Spares	100
3. Tech Engineering Services	1,239
4. Other Costs	3,318
TOTAL	5,877

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY01	CVN	NUWC Keyport	N/A	N/A	1	1,220	N/A

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

V. COMPETITION/SECOND SOURCE INITIATIVE:

None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: JFN
Parm Code - PMA 213

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The Joint Fires Network (JFN) Tactical Exploitation System - Naval (TES-N) is transformational technology providing Multi-INT Real-Time sensor downlink from numerous National, Theater and Tactical sensor platforms, including National Imagery, National SIGINT, U-2, GLOBAL HAWK, P-3 Video, JSTARS and others, with the ability to dynamically re-task several sensors in flight. JFN will be installed in CVIC with integration/interface into the Naval Strike Warfare Planning Center (NSWPC) system of systems.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	9,058
2. Spares	1,440
3. Tech Engineering Services	3,819
4. Other Costs	8,150
TOTAL	22,467

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Northrup Grumman	Classified	1	9,058	2nd qtr FY04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jan 06	1 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Multi-Modal Workstation (MMWS)
Parm Code - IWS

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: Multi-Modal Work Station (MMWS) is the next generation display workstation that will be capable of scaleable multi-purpose and/or multi-modal operations including: Integration and simultaneous display of distributed sensor, video, audio and data; reconfigurable screens tailored to mission(s) and/or operator(s); reduced complexity of human-system interfaces (HSI) and utilizing all senses; touch screens, smart cards, and other HSI advances.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	2,700
2. System Engineering	0
3. Tech Engineering Services	7,350
4. Other Costs	0
TOTAL	10,050

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NAWC AD St. Indigoes	PO	1	2,700	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: REARCHITECTURED NATO SEASPARROW
Parm Code - PEO IWS 3D

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The Rearch NATO SEASPAROW Surface Missile System consists of a guided missile fire control system containing a power driven illuminator with bore-sight television, below deck control, and a digital computation, lighweight/low silhoutte, cell-type launcher in an 8 cell configuration. Directors will incorporate a transmitter enhancement. System will provide for cross launcher assignments.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	15,397
2. Spares	1,124
3. Tech Engineering Services	4,119
4. Other Costs	7,790
TOTAL	28,430

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT/ OPTION	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Raytheon	FFP	TBD	1	15,397	Jan-04

*Rearch award; ** Transmitter award

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Feb 06	1 mo	18 mo	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:
None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: NSWPC
Parm Code - PMA 281

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Naval Strike Warfare Planning Center (NSWPC) is a collection of interfaced and integrated systems that together provide the following functions:
Intelligence information processing, Strike Planning and Debrief/reporting

II. CURRENT FUNDING:

P-35 Category		FY 2001
1. Major Hardware		7,699
2. Tech Engineering Services		15,072
4. Other Costs		4,197
	TOTAL	26,968

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Northrop Grumman IT	TBD	1	7,699	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jun 07	01 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: MK49 GMLS w/HAS
Parm Code - PEO IWS 3B1C

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The RAM Guided Missile Weapon System is a short-range, fast-reaction, high firepower, lightweight, missile weapon system designed to engage and destroy incoming anti-ship cruise missiles that use active radar guidance.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1 Major Hardware	7,333
2. Spares	130
3. Tech Engineering Services	2,490
4. Other Costs	3,134
TOTAL	13,087

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT/ OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY01	CVN	Raytheon	FFP	N/A	2	3,667	Dec-02

IV. DELIVERY DATE:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
Feb 06	01 mo	24 Mos.	N/A

V. Competition/Second Source Initiatives
None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Virtual Imaging System for Approach and Landing (Visual)
Parm Code - PMA 251

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Provides the Landing Signal Officer (LSO) and other decision makers, enhanced images of the aircraft in low visibility and night conditions.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	1,039
2. Spares	53
3. Tech Engineering Services	1,176
4. Other Costs	94
TOTAL	2,362

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	TBD	TBD	1	1,039	FY05

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Sep 06	04 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Battle Force Tactical Training (BFTT)
Parm Code - PEO IWS 1E

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Provides training capabilities for fleet personnel to achieve and maintain combat readiness.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	3,385
2. Spares	150
3. Tech Data/Documentation	500
4. Tech Engineering Services	300
4. Other Costs	1,822
TOTAL	6,157

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Multiple	TBD	1	3,385	Multiple

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
Jun 06	01 mo	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: CDL-N (AN/USQ-123A)
Parm Code - PMW 189

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Provides a full duplex, microwave digital data link between shipboard processor and airborne sensor.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	3,990
2. Spares	597
3. Tech Engineering Services	0
4. Other Costs	3,165
TOTAL	7,752

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	TBD	TBD	1	3,990	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Cooperative Engagement Capability (CEC)
Parm Code - PEO IWS6A

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: Significantly improve Battle Force Anti-Air Warfare (AAW) capability by coordinating all force AAW sensors into a single real time, fire control quaility composite track picture. CEC will distribute sensor measurement data from each Cooperating Unit (CU) to all other CUs. Each CU consists of a Data Distribution System (DDS) and a Cooperative Engagement Processor (CEP). The DDS encodes and distributes ownship sensor and engagment data to other CUs, and receives and decodes the remotes data. The CEP processes ownship data and DDS supplied remote sensor and weapon data needed to provide the common air picture.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	5,571
2. Spares	202
3. Tech Engineering Services	790
4. Other Costs	252
TOTAL	6,815

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY01	CVN	Raytheon	FFP	N/A	1	5,571	12/03

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
MAR 08	6 mos.	18 mos.	12/03

V. COMPETITION/SECOND SOURCE INITIATIVE:

None

SHIPBUILDING AND CONVERSION, NAVY — P-35 EXHIBIT
MAJOR SHIP COMPONENT FACT SHEET — FY2005 President's
($000) — Budget Estimates
Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM — February 2004
Equipment Line: Digital Modular Radio-Ultra High Frequency Satellite Communications (DMR-VHF/UHF LOS/SATCOM)
Parm Code - PMW 179

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Digital, modular, software programmable, multi-channel, multi-function and multi-band (100 KHz - 2 GHz)

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	11,314
2. Spares	50
2. Tech Data/Documentation	120
3. Tech Engineering Services	150
4. Other Costs	591
TOTAL	12,225

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYP	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	SSC San Diego	various	1	11,314	FY03

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	30	12 Months	SEP 03

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Global Command Control System - Maritime (GCCS-M)
Parm Code -

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
The GCCS-M provides a C4I system that receives, processes, displays and maintains current geo-locational information on friendly, hostile, and neutral land, sea and air forces with intelligence and environmental information.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	8,713
2. Spares	820
3. Tech Data/Documentation	555
4. Tech Engineering Services	4,138
5. Other Costs	3,107
TOTAL	17,333

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	various	PO	1	8,713	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	6mo	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: High Frequency Radio Group (HFRG)
Parm Code - PMW 179

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Provides broadband High Frequency Radio Frequency capability for transmit (2-30MHz) and receive (10KHz-30MHz).

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	5,217
2. Tech Data/Documentation	36
3. Tech Engineering Services	139
4. Other Costs	148
TOTAL	5,540

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Harris	PO	1	5,217	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: MK 12 IFF
Parm Code - NAVAIR PMA 213

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: The Interrogator System AN/UPX-29(V) is deployed on high capability, state of the art platforms that require Identification Friend or Foe (FFF) operational performance beyond that provided by a standard MK XII system for combat identifcation. The Transponder Set receives interrogation signals from air, surface and land IFF-equipped units and automatically replies with a coded response signal that provides ownship position and identifcation.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware & Spares	3,616
2. Spares	584
3. Tech Data/Documentation	120
4. Tech Engineering Services	690
3. Engineering Support	1,015
TOTAL	6,025

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY 01	CVN	Litton - UPX-24/ Bae Sys. OE-120	SS-FFP	New	1	3,616	Sep-03

IV. DELIVERY DATE:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
MAR 08	TBD	25 Mos.	Sep-03

V. COMPETITION/SECOND SOURCE INITIATIVE

None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: ISNS
Parm Code - PMW 165

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
The ISNS is a part of the C4I Afloat Networks which provides network connectivity to the desktop for classified, unclassified coalition, and SCI applications.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	7,236
2. Spares	282
3. Tech Data/Documentation	122
4. Tech Engineering Services	773
4. Other Costs	2,820
TOTAL	11,233

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Various	PO	1	7,236	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Ships Signal Exploitation Equipment (SSEE) Increment E (AN/SRQ-6(V))
Parm Code - PMW 189

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The SSEE system provides cryptologic signal acquisition, recognition and analysis. Provides interfaces to CDL, ADNS and GCCS-M

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	2,100
2. Spares	270
3. Tech Engineering Services	0
4. Other Costs	2,747
TOTAL	5,117

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NAWC AD St. Indigoes	PO	1	2,100	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Radio Room Automation
Parm Code - PMW 179

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: RRA integrates communications apertures and C4I systems within the CVN 77 Radio Room to enable an automated full service integrated network. Benefits of this transitional technology will result in reduced manning, implementation of FORCEnet functionality, increased information bandwidth, increased effectiveness and efficiency through technology insertion and automation, and reduced electrical power, weight, and cooling requirements.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	142
2. Spares	15
3. Tech Data/Documentation	86
3. Tech Engineering Services	1,396
4. Other Costs	13,561
TOTAL	15,200

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	Lockheed Martin	TBD	1	142	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: AN/SLQ-32(V)4
Parm Code - PEO IWS4

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The SLQ-32(V)4 provides operational capability for early warning of threat weapon system emitters and emitters associated with targeting platform, threat information to own ship hard-kill weapons, automatic dispensing of chaff decoys, and Electronic Attack (EA) to alter specific and generic ASCM trajectories.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	4,981
2. Spares	60
3. Tech Data/Documentation	80
4. Tech Engineering Services	460
4. Other Costs	1,277
TOTAL	6,858

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NSWC Crane	PO	1	4,981	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: ILS (AN/SPN-41) Instrument Landing System
Parm Code - PMA 213

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
The (AN/SPN-41) Instrument Landing System provides aircraft landing on an aircraft carrier with an electronic aid to guide the aircraft's approach to and landing on the flight deck

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	2,407
2. System Engineering	780
3. Tech Engineering Services	183
4. Other Costs	0
TOTAL	3,370

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	NAWC AD St. Indigoes	PO	1	2,407	JAN 04

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Line: Automated Carrier Landing Systems (ACLS) (AN/SPN-46 (V)3)
Parm Code - NAVAIR PMA 213

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: Precision Landing System used for non-clear weather aircraft landings on board CVs.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware	5,497
2. Systems Engineering	957
3. Technical Engineering Services	323
4. Other Costs	2,017
TOTAL	8,794

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
FY 01	CVN	British Aerospace Sierra Nevada	FFP	1	5,497	Jan-03

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Item: Ship Self Defense System (MK2) (Previously ICDS)
PARM Code - PEO IWS1C

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: SSDS MK2 provides primary support for force/ownership combat systems control and enhanced self-defense capabilities. The SSDS MK2 integrates sensors, weapons systems, data links, and command and control elements into a unified combat system.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware & Spares	16,944
2. Spares	1,269
3. Tech Engineering Services	5,472
3. Other Costs	27,903
TOTAL	51,588

III. CONTRACT DATA

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT /OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY 01	CVN	Raytheon & Lockheed Martin	FFP	N00024-03-C-5127	1	16,944	Jul-03

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
MAR 08	40	18 Months	Jul-03

V. Competition/Second Source Initiatives

None

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY2005 President's
Budget Estimates
February 2004

Ship Type: CVN 77 CARRIER REPLACEMENT PROGRAM
Equipment Item: Turnkey RCS
PARM Code - PMW 05

I. DESCRIPTION/CHARACTERISTICS/PURPOSE: Turnkey for CVN 77 includes the integration of SPAWAR Radio Communication Systems (RCS) at the SPAWAR System Center Charleston Test and Integration Facility. SSC Charleston will provide program planning, management and technical services, and detailed C4I ship design and integration. The RCS will under total integration and testing prior to delivery to the shipbuilder.

II. CURRENT FUNDING:

P-35 Category	FY 2001
1. Major Hardware & Spares	2,000
2 Tech Data/Documentation	200
3. Tech Engineering Services	11,207
3. Other Costs	9,875
TOTAL	23,282

III. CONTRACT DATA

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	NEW CONTRACT /OPTION	QTY	HARDWARE UNIT COST	AWARD DATE
FY 01	CVN	TBD	TBD	TBD	1	2,000	TBD

IV. DELIVERY DATA:

EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
MAR 08	TBD	TBD	TBD

V. Competition/Second Source Initiatives

None

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)								Date: **February 2004**				
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **BA #2 OTHER WARSHIPS**								P-1 Line Item Nomenclature **CARRIER REPLACEMENT PROGRAM**				
Weapon System BLI: 200100 **CVN21 FY 07**				First System (BY3) Award Date **Dec-06**				First System (BY5) Completion Date **Sep-14**				
($ in Millions)												
	PLT	When Req'd	Prior Years	PY FY 03	CY FY 04	BY1 FY 05	BY2 FY 06	BY3 FY 07	BY4	BY5	To Complete	Total
End Item Qty												0.0
Plans (Detailed)	Up to 36			151.8	218.0	325.2	437.1					1132.1
Nuc Prop Equipment	30-96	Various	157.0	243.7	928.0	156.7						1485.4
HM&E					8.8	5.3						14.1
Basic	30-60				22.4	138.9	174.8					336.1
Total AP			157.0	395.5	1177.2	626.1	611.9	0.0	0.0	0.0	0.0	2967.7

Description:

Plans funding is required in FY03 to FY06 to support the CVN21 integrated design and construction schedule. Funding is required to efficiently and effectively complete design integration efforts, detailed design, and construction planning taking advantage of integrated product and process development to insert transformational technologies while reducing both construction costs and potential costly construction rework.

Nuclear Propulsion Equipment funding is required in FY01-FY05 to fund a shipset of reactor plant components for CVN21. The complexity, size and early shipyard need dates for reactor plant equipment make them among the longest lead items for CVN21.

Hull, Mechanical, & Electrical (HM&E) funding is required in FY04-FY05 for government furnished engineering services support

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)								Date: **February 2004**				
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **BA #2 OTHER WARSHIPS**						Weapon System **CVN21**		P-1 Line Item Nomenclature **CARRIER REPLACEMENT PROGRAM**				
(TOA, $ in Millions)												
	PLT	QPA	Unit Cost	CY FY 04 Qty	CY Contract Forecast Date	CY Total Cost Request	BY 1 FY 05 Qty	BY 1 Contract Forecast Date	BY 1 Total Cost Request	BY 2 FY 06 Qty	BY 2 Contract Forecast Date	BY 2 Total Cost Request
Plans (Detailed)	Up to 36				December-03	218.0		October-04	325.2		October-05	437.1
Nuc Prop Equipment	30-96	1 Shipset	1485.4		October-03	928.0		October-04	156.7			
HM&E					December-03	8.8		December-04	5.3			
Basic	30-60				December-03	22.4		October-04	138.9		October-05	174.8
Total AP						1177.2			626.1			611.9

Exhibit P-10, Advance Procurement Funding

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P-5)

BUDGET ACTIVITY: 2 OTHER WARSHIPS

P-1 ITEM NOMENCLATURE: SSN 21

SUBHEAD: 7229/8229

ELEMENTS OF COST	QTY	FY 1996 TOT COST	
PLAN COSTS	1	243,983	
BASIC CONST/CONVERSION		1,099,475	
CHANGE ORDERS		72,646	
ELECTRONICS		296,404	
PROPULSION EQUIPMENT		247,464	
HM&E		192,383	
OTHER COST		30,238	
ESCALATION		139,504	
TOTAL SHIP ESTIMATE		2,322,097	
LESS: AP (FY 1989)		207,500	
AP (FY 1990)		7,155	
AP (FY 1991)		153,970	
INDUSTRIAL BASE (FY 1992)		528,217	(1)
FY 1992 FULL FUNDING		13,800	(2)
FY 1990 PUMPS/VALVES/MC		23,394	(3)
FY 1991 PUMPS/VALVES/MC		5,031	(3)
FY 1992 ESCALATION			
FY 1997 FUNDING		630,769	
FY 1998 FUNDING		75,563	
FY 2003/2003 TRANSFER		4,782	
NET P-1 LINE ITEM		671,916	

NOTES:

(1) FY 1992 appropriated submarine Industrial Base funds.

(2) $13.8M (FY 1992 FF funds) sunk costs for SSN 23 propulsion executed prior to program truncation.

(3) Reflects application of FY 90 and FY 91 $28.4M for Pumps, Valves, and Main Condenser from FY 92 to FY 96.

UNCLASSIFIED
CLASSIFICATION

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
SSN 23	Electric Boat	FY 1996	Jun-96	Dec-95	Dec-04

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) | DATE: February 2004

FY2005 President's Budget

APPROPRIATION/BUDGET ACTIVITY: Ship and Conversion, Navy/BA#2 OTHER WARSHIPS

P-1 ITEM NOMENCLATURE: Virginia Class Submarine | BLI: 201300

	PRIOR YEARS	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	4	1	1	1	1	1	1	2	18	30
End Cost	10616.7	2147.5	2143.7	2245.2	2317.5	2478.6	2593.5	4940.1	45883.1	75365.9
Less Advance Procurement	3158.6	678.9	631.9	600.5	621.9	676.6	696.0	1338.4	13962.2	22364.8
Less Transfer/CTC	1061.1	.0	.0	.0	.0	.0	.0	.0	.0	1061.1
Less EOQ				63.6	143.6	193.3	193.4	.0	2431.1	3025.0
Full Funding	6397.	1468.7	1511.9	1581.1	1552.1	1608.7	1704.0	3601.7	29489.7	48915.
Plus Advance Procurement	4268.5	632.1	604.2	631.9	687.7	1101.5	1349.2	1385.7	11704.1	22364.9
Plus Transfer Authority	304.0	326.7	300.4							931.1
Plus EOQ			253.7	240.	100.1			401.1	2030.	3025.0
Total Obligational Authority	10969.6	2427.4	2670.1	2453.0	2339.9	2710.3	3053.3	5388.5	43223.8	75236.0
Plus Outfitting and Post Delivery	10.7	17.8	25.7	56.6	50.1	52.0	62.0	59.3	2261.1	2595.5
Total	10980.3	2445.3	2695.9	2509.6	2390.1	2762.3	3115.3	5447.9	45484.9	77831.4
Unit Cost (Ave. End Cost)	2654.2	2147.5	2143.7	2245.2	2317.5	2478.6	2593.5	2470.	2549.1	2512.2

NOTE: These VA Class Exhibits reflect a FY04-08 Multi-Year Procurement strategy with EOQ in FY04-06 and FY09.

MISSION: To seek out and destroy enemy ships across a wide spectrum of tactical scenarios, working both independently and in consort with a battle group/other ships, providing Joint Commanders with early, accurate knowledge of the battlefield on which power may be projected from sea; covert striking power against targets ashore; the capability to establish covertly an expeditionary force on land; and the maritime strength to destroy enemy naval forces and interdict seaborne commerce.

Characteristics:

Hull	
Length overall	377'
Beam	34'
Displacement	7830
Draft	32'

Armament:
Torpedo Tubes
Vertical Launch Tubes

Major Electronics:
Command, Control, Communications and Intelligence System
- Open System Architecture
- Twenty-three Subsystems

Production Status:	FY04	FY05
Contract Plans	SSN 779	SSN 780
Award Planned (Month)	Jan-04	Jan-05
Months to Complete		
a) Award to Delivery	01/04 - 04/10	01/05 - 04/11
b) Construction Start to Delivery	08/03 - 04/10	08/04 - 04/11
Commissioning Date	May-10	May-11
Completion of Fitting Out	Apr-10	Apr-11

DD Form 2454, JUL 88

CLASSIFICATION: UNCLASSIFIED

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P-5)

BUDGET ACTIVITY: 2 OTHER WARSHIPS

P-1 ITEM NOMENCLATURE: NEW SSN

SUBHEAD: 7232/H232/H230

	FY 1998		FY 1999		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005	
ELEMENTS OF COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
PLAN COSTS	1	1,421,966	1	245,276	1	60,751	1	76,378	1	36,637	1	55,084	1	63,710
BASIC CONST/CONVERSION		1,274,876		1,393,003		1,266,214		1,268,283		1,397,971		1,373,720		1,492,029
TECHNOLOGY INSERTION		0		0		11,499		16,354		0		0		0
ELECTRONICS		274,519		196,227		220,395		234,342		223,935		211,483		211,320
PROPULSION EQUIPMENT		452,000		419,008		430,149		431,200		429,000		430,600		431,337
HM&E		233,572		227,851		172,823		184,030		38,821		52,598		20,179
OTHER COST		25,120		23,037		30,293		27,550		21,162		20,232		26,640
ORDNANCE		0		0		0		0		0		0		0
ESCALATION		0		0		0		0		0		0		0
TOTAL SHIP ESTIMATE		3,682,053		2,504,402		2,192,124		2,238,137		2,147,526		2,143,717		2,245,215
LESS AP FY96		691,589		98,706										
LESS AP FY97		288,140		487,564										
LESS AP FY98				109,655		168,000								
LESS AP FY99						503,195								
LESS AP FY00						144,851		599,624						
LESS AP FY01								67,254		429,000				
LESS AP FY02										249,862		431,109		
LESS AP FY03												200,751		431,337
LESS AP FY04														169,184
LESS EOQ FY04														63,551
LESS:FY01 TRANSFER		77,000												
LESS:FY02 TRANSFER		166,561		60,429										
LESS:FY03 TRANSFER		190,882		135,800										
LESS:FY04 TRANSFER		81,060		156,978		62,372								
LESS:FY05 PENDING CTC				10,000		81,330								
LESS:FY06 PENDING CTC						38,713								
NET P-1 LINE ITEM		2,186,821		1,445,270		1,193,663		1,571,259		1,468,664		1,511,857		1,581,143

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

EXHIBIT P-27
FY2005 President's Budget
February 2004
BLI: 201300

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
SSN774	EB/NNS	98	Sep-98	Aug-97	Jun-04
SSN775	EB/NNS	99	Sep-98	Sep-98	Jun-05
SSN776	EB/NNS	01	Sep-98	Oct-99	Dec-06
SSN777	EB/NNS	02	Sep-98	Mar-01	Dec-07
SSN778	EB/NNS	03	Aug-03 *	Sep-02	Apr-09
SSN779	EB/NNS	04	Jan-04	Aug-03	Apr-10
SSN780	EB/NNS	05	Jan-04	Aug-04	Apr-11
SSN781	EB/NNS	06	Jan-04	Aug-05	Apr-12
SSN782	EB/NNS	07	Jan-04	Aug-06	Apr-13
SSN783	EB/NNS	08	Jan-04	Aug-07	Apr-14
SSN784	EB/NNS	09	Oct-08	Aug-08	Apr-15
SSN785	EB/NNS	09	Oct-08	Feb-09	Oct-15

* Note: Contract awarded in August 03 for a six ship block buy starting with SSN 778. The contract transitions to a 5 Ship Multi-Year Procurement starting in FY04 with SSN779.

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimate - Basic/Escalation

Fiscal Year: 2004/2005 Ship Type: VIRGINIA CLASS

I.	Design Schedule:	Start/Issue	Complete/Response	Reissue Complete/Response
	Issue Date for TLR	N/A	N/A	
	Issue Date for TLS	N/A	N/A	
	Preliminary Design	Oct-93	Sep-95	
	Contract Design	Oct-94	Sep-96	
	Detail Design	Jan-96	Jun-04	
	Request for Proposals	N/A	N/A	
	Design Agent	Electric Boat		

II. Classification of Cost Estimate C

III.	Basic Construction/Conversion	FY2004	FY2005	
	A. Award Date	Jan-04	Jan-04	
	B. Contract Type and Share Line	FPIF	FPIF	Multi Year Procurement with EOQ.
	C. Request for Proposals: Start/Issue: Jul 02		Complete/Response: Sept-02	

IV.	Escalation		
	Base Date	N/A	N/A
	Escalation Target Date	N/A	N/A
	Escalation Termination Date	N/A	N/A
	Escalation Requirement ($K)	N/A	N/A
	Labor/Material Split	N/A	N/A
	Allowable Overhead Rate	N/A	N/A

V.	Other Basic (Reserves/Miscellaneous)	Amount	Amount
	Item	N/A	N/A

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: VIRGINIA CLASS	FY 98		FY 99		FY 01		FY 02		FY 03		FY 04		FY 05	
	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
ELECTRONICS EQUIPMENT														
a. P-35 Items														
1. Sonar, Combat Control & Architecture	1	$122,144	1	$67,772	1	$75,444	1	$76,401	1	$89,876	1	$88,246	1	$88,686
2. ESM *	1	$17,652	1	$19,466	1	$20,538	1	$21,056	1	$14,162	1	$18,896	1	$19,327
3. Photonics Masts	1	$25,560	1	$21,756	1	$23,458	1	$25,340	1	$23,472	1	$19,756	1	$19,766
4. UMMs	1	$14,628	1	$13,525	1	$11,883	1	$10,691	1	$9,824	1	$8,109	1	$8,677
Subtotal		$179,984		$122,519		$131,323		$133,488		$137,334		$135,007		$136,456
b. Major Items														
1. SRWS*	1	$4,197	1	$3,991	1	$4,100	1	$4,125	1	$4,229	1	$4,349	1	$4,363
2. System Level Activities	1	$22,222	1	$17,372	1	$22,493	1	$21,237	1	$20,687	1	$16,960	1	$17,231
3. AN/BPS-16	1	$3,043	1	$3,025	1	$5,190	1	$5,300	1	$5,893	1	$4,993	1	$5,099
4. Navigation	1	$3,087	1	$2,271	1	$2,363	1	$2,490	1	$3,377	1	$2,864	1	$2,931
5. AN/UYQ-70	1	$5,500	1	$5,891	1	$6,496	1	$6,761	1	$14,809	1	$11,421	1	$11,549
6. ECS	1	$13,844	1	$11,057	1	$20,823	1	$27,769	1	$6,290	1	$7,139	1	$7,313
7. CWITT	1	$20,044	1	$15,485	1	$11,202	1	$11,622	1	$14,400	1	$12,956	1	$11,751
8. NPES SE&I	1	$22,138	1	$14,168	1	$15,905	1	$21,036	1	$16,332	1	$15,209	1	$14,037
Subtotal		$94,075		$73,260		$88,572		$100,340		$86,017		$75,891		$74,274
c. Other Electronics														
1. Misc Electronics		$460		$448		$500		$514		$584		$585		$590
Subtotal		$460		$448		$500		$514		$584		$585		$590
TOTAL ELECTRONICS		$274,519		$196,227		$220,395		$234,342		$223,935		$211,483		$211,320

*The FY03 Towed Array capability under the SCCA subsystems as well as the ESM and SRWS subsystems in this SCN exhibit will require OPN modernization upgrades to be fully capable subsystems.

P-35
ITEM: SONAR, COMBAT, CONTROL & ARCHITECTURE

EXHIBIT P-35
FY2005 President's Budget
February 2004
BLI: 201300

I. DESCRIPTION/CHARACTERISTICS/PURPOSE

The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: C3I Prime Contractor Furnished Equipment (Sonar, Combat Control and Architecture subsystems) and associated Government Furnished Equipment; technical data documentation; spares; technical engineering services; design engineering services; field engineering services; management support services; and shipboard certification efforts. The FY03 Towed Array capability under the SCCA subsystems in this SCN exhibit will require OPN modernization upgrades to be fully capable SCCA subsystems.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99	QTY	FY01	QTY	FY02	QTY	FY03	QTY	FY04	QTY	FY05
MAJOR HARDWARE	1	$57,452	1	$50,979	1	$59,363	1	$60,134	1	$67,957	1	$68,321	1	$68,661
TECH ENGINEERING SERVICES		$2,735		$2,755		$3,131		$3,217		$3,872		$3,892		$3,912
OTHER COSTS		$61,957		$14,038		$12,950		$13,050		$18,047		$16,033		$16,113
TOTAL		$122,144		$67,772		$75,444		$76,401		$89,876		$88,246		$88,686

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
98	SSN774	LMNESS	1 Shipset	$41,802	Feb-98
99	SSN775	LMNESS	1 Shipset	$41,317	May-99
01	SSN776	LMNESS	1 Shipset	$40,706	Mar-01
02	SSN777	LMNESS	1 Shipset	$41,728	Mar-02
03	SSN778	LMNESS/Raytheon	1 Shipset	$57,677	Dec-03
04	SSN779	LMNESS/Raytheon	1 Shipset	$49,300	Mar-04
05	SSN780	LMNESS/Raytheon	1 Shipset	$50,000	Mar-05

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	43	32	Mar-98
99	SSN775	Jun-05	38	32	Aug-99
01	SSN776	Dec-06	37	32	Mar-01
02	SSN777	Dec-07	37	32	Mar-02
03	SSN778	Dec-08	37	32	Dec-03
04	SSN779	Dec-09	37	32	Mar-04
05	SSN780	Dec-10	37	32	Mar-05

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

P-35 EXHIBIT P-35
ITEM: ELECTRONIC SUPPORT MEASURES SUBSYSTEM FY2005 President's Budget
February 2004
I. DESCRIPTION/CHARACTERISTICS/PURPOSE BLI: 201300

The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: Electronic Support Measures subsystem Prime Contractor Furnished Equipment, and associated Government Furnished Equipment; technical data documentation; spares; systems engineering; technical engineering services; computer program support; system test & evaluation; field engineering services; management support services; shipboard certification efforts; quality assurance and reliability/maintainability assurance; maintenance of technical data; and contractor support services efforts. This system provides the capability to process a variety of electromagnetic signal types over a wide frequency range in support of all applicable submarine mission areas. The FY03-04 ESM subsystems in this SCN exhibit will require OPN modernization upgrades to be fully capable ESM subsystems.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99	QTY	FY01	QTY	FY02	QTY	FY03	QTY	FY04	QTY	FY05
MAJOR HARDWARE	1	$13,834	1	$13,085	1	$14,501	1	$14,826	1	$9,898	1	$13,207	1	$13,506
TECH ENGINEERING SERVICES		$1,797		$1,010		$1,053		$1,113		$750		$1,002		$1,025
OTHER COSTS		$2,021		$5,371		$4,984		$5,117		$3,514		$4,687		$4,796
TOTAL		$17,652		$19,466		$20,538		$21,056		$14,162		$18,896		$19,327

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
98	SSN774	LM, Syracuse	1 Shipset	$13,834	Aug-00
99	SSN775	LM, Syracuse	1 Shipset	$13,085	Aug-00
01	SSN776	LM, Syracuse	1 Shipset	$14,501	Nov-01
02	SSN777	LM, Syracuse	1 Shipset	$14,826	Nov-02
03	SSN778	LM, Syracuse	1 Shipset	$9,898	Feb-03
04	SSN779	LM, Syracuse	1 Shipset	$13,207	Nov-04
05	SSN780	LM, Syracuse	1 Shipset	$13,506	Nov-05

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	43	18	May-99
99	SSN775	Jun-05	38	18	Oct-00
01	SSN776	Dec-06	37	18	May-02
02	SSN777	Dec-07	37	18	May-03
03	SSN778	Dec-08	37	18	May-04
04	SSN779	Dec-09	37	18	May-05
05	SSN780	Dec-10	37	18	May-06

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

P-35 EXHIBIT P-35
ITEM: PHOTONICS MAST FY2005 President's Budget
February 2004
I. DESCRIPTION/CHARACTERISTICS/PURPOSE BLI: 201300

The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: Photonics subsystem Prime Contractor Furnished Equipment; spares; systems engineering; technical engineering services; computer program support; field engineering services; management support services; shipboard certification; maintenance of technical data; and contractor support services efforts. This system consists of two outboard mast/antenna/camera assemblies and the associated inboard processing and display equipment. This system supports visual and infrared (IR) imaging, RF signal communications, early warning and contact direction finding capability.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99	QTY	FY01	QTY	FY02	QTY	FY03	QTY	FY04	QTY	FY05
MAJOR HARDWARE	1	$23,932	1	$18,340	1	$18,342	1	$17,567	1	$18,899	1	$16,054	1	$15,554
TECH ENGINEERING SERVICES		$726		$448		$505		$516		$623		$519		$520
OTHER COSTS		$902		$2,968		$4,611		$7,257		$3,950		$3,183		$3,692
TOTAL		$25,560		$21,756		$23,458		$25,340		$23,472		$19,756		$19,766

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
98	SSN774	Kollmorgen	1 Shipset	$23,932	Jan-98
99	SSN775	Kollmorgen	1 Shipset	$18,340	Dec-99
01	SSN776	Kollmorgen	1 Shipset	$18,342	Sep-01
02	SSN777	Kollmorgen	1 Shipset	$17,567	Sep-02
03	SSN778	Kollmorgen	1 Shipset	$18,899	Jan-04
04	SSN779	Kollmorgen	1 Shipset	$16,054	Sep-04
05	SSN780	Kollmorgen	1 Shipset	$15,554	Sep-05

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	43	24	Nov-98
99	SSN775	Jun-05	38	24	Apr-00
01	SSN776	Dec-06	37	24	Nov-01
02	SSN777	Dec-07	37	24	Nov-02
03	SSN778	Dec-08	37	24	Jan-04
04	SSN779	Dec-09	37	24	Nov-04
05	SSN780	Dec-10	37	24	Nov-05

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

P-35 EXHIBIT P-35
ITEM: UNIVERSAL MODULAR MAST FY2005 President's Budget
February 2004
I. DESCRIPTION/CHARACTERISTICS/PURPOSE BLI: 201300

The VIRGINIA Class Command, Control, Communications and Intelligence (C3I) System is the electronics suite which will provide required operational and warfighting capability for the Navy's newest attack submarine. The C3I System includes 15 subsystems (23 if all electronically interfaced subsystems are included) integrated by an overarching Architecture Subsystem. This P-35 covers the procurement requirements for the following: Modular Mast Prime Contractor Furnished Equipment; technical data documentation; spares; systems engineering; technical engineering services; management support services; shipboard certification; and maintenance of technical data efforts. This system consists of eight common masts for purposes of housing, raising and lowering antenna and other sensor units.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99	QTY	FY01	QTY	FY02	QTY	FY03	QTY	FY04	QTY	FY05
MAJOR HARDWARE	1	$9,865	1	$9,711	1	$7,136	1	$6,800	1	$6,922	1	$5,867	1	$6,393
TECH ENGINEERING SERVICES		$1,180		$1,428		$2,085		$1,600		$1,052		$891		$908
OTHER COSTS		$3,583		$2,386		$2,662		$2,291		$1,850		$1,351		$1,376
TOTAL		$14,628		$13,525		$11,883		$10,691		$9,824		$8,109		$8,677

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
98	SSN774	Kollmorgen	1 Shipset	$9,865	Apr-99
99	SSN775	Kollmorgen	1 Shipset	$9,711	Apr-99
01	SSN776	Kollmorgen	1 Shipset	$7,136	Jul-00
02	SSN777	Kollmorgen	1 Shipset	$6,800	Oct-02
03	SSN778	Kollmorgen	1 Shipset	$6,922	Jan-03
04	SSN779	Kollmorgen	1 Shipset	$5,867	Jan-04
05	SSN780	Kollmorgen	1 Shipset	$6,393	Jan-05

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	32	27	Jul-99
99	SSN775	Jun-05	41	27	Oct-99
01	SSN776	Dec-06	41	27	Apr-01
02	SSN777	Dec-07	41	27	Oct-02
03	SSN778	Dec-08	41	27	Apr-03
04	SSN779	Dec-09	41	27	Apr-04
05	SSN780	Dec-10	41	27	Apr-05

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: VIRGINIA CLASS	FY 98		FY 99		FY01		FY02		FY03		FY04		FY05	
	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
HM&E EQUIPMENT														
a. P-35 Items														
1. MPC	1	$73,117	1	$140,770	1	$132,505	1	$139,302	1	CFE	1	CFE	1	CFE
2. Propulsor *	1	$43,559	1	$31,898	1	$29,494	1	$31,928	1	$31,497	1	$37,370	1	$4,640
3. Main Condensers	1	$25,090	1	$7,875		CFE		CFE		CFE		CFE		CFE
Subtotal		$141,766		$180,543		$161,999		$171,230		$31,497		$37,370		$4,640
b. Major Items														
1. Heat Exchanger	1	$12,362	1	$5,333		CFE		CFE		CFE		CFE		CFE
2. Switchboard Elec	1	$12,803	1	$8,000		CFE		CFE		CFE		CFE		CFE
3. VLS PSE	1	$9,206	1	$7,197		CFE		CFE		CFE		CFE		CFE
4. MSW Pumps	1	$13,260	1	$4,616		CFE		CFE		CFE		CFE		CFE
5. H&B Valves	1	$16,547	1	$4,746		CFE		CFE		CFE		CFE		CFE
6. MF&C Pumps	1	$4,459	1	$2,549		CFE		CFE		CFE		CFE		CFE
7. ASW Pumps	1	$4,785	1	$2,862		CFE		CFE		CFE		CFE		CFE
8. CSA MK2	1	$1,696	1	$1,444	1	$1,234	1	$1,134	1	$1,157	1	$1,178	1	$1,184
Subtotal		$75,118		$36,747		$1,234		$1,134		$1,157		$1,178		$1,184
c. Other														
1. HM&E Installation and testing		$12,486		$4,049		$4,304		$6,541		$4,283		$7,626		$7,786
2. T&E		$3,202		$5,512		$4,286		$4,125		$1,052		$5,424		$5,569
3. SUPSHIP responsible material		$1,000		$1,000		$1,000		$1,000		$832		$1,000		$1,000
Subtotal		$16,688		$10,561		$9,590		$11,666		$6,167		$14,050		$14,355
TOTAL HM&E		$233,572		$227,851		$172,823		$184,030		$38,821		$52,598		$20,179

*The FY05 / SSN780 Propulsor will be utilized from a Seawolf Spare. Balance provides GFE support.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: MAIN PROPULSION COMPLEX FY2005 President's Budget
February 2004
BLI: 201300

I. DESCRIPTION/CHARACTERISTICS/PURPOSE

The Main Propulsion Complex (MPC) consists of the Main Propulsion Unit (MPU) and the Ship Service Turbine Generators (SSTG). The MPU consists of port and starboard turbines, reduction gears, thrust bearings and clutches mounted on a cast base. The MPU also includes an emergency propulsion motor and clutch. The purpose of the MPU is to utilize steam produced by the propulsion plant to propel the ship through the water via an arrangement of gearing and shafting. The SSTG is the main source of electric power for shipboard use. Interchangeable port and starboard SSTG units are steam driven and integrated with the main condensers which serve to recycle the steam in the secondary system.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99	QTY	FY01	QTY	FY02	QTY	FY03	QTY	FY04	QTY	FY05
MAJOR HARDWARE	1	61,629	1	134,940	1	126,371	1	132,974	1	0	1	0	1	0
SYSTEMS ENGINEERING		11,208		4,736		4,737		5,027		0		0		0
TECH ENGINEERING SERVICES		280		1,094		1,397		1,301		0		0		0
OTHER COSTS		0		0		0		0		0		0		0
TOTAL		73,117		140,770		132,505		139,302		0		0		0

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
98	SSN774	EBCorp	1 Shipset	61,629	Sep-94
99	SSN775	EBCorp	1 Shipset	134,940	Nov-97
01	SSN776	EBCorp	1 Shipset	126,371	Dec-98
02	SSN777	EBCorp	1 Shipset	132,974	Jul-00
03	SSN778	EBCorp	1 Shipset	0	CFE
04	SSN779	EBCorp	1 Shipset	0	CFE
05	SSN780	EBCorp	1 Shipset	0	CFE

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DAT	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	45	46	Nov-96
99	SSN775	Jun-05	45	46	Nov-97
01	SSN776	Dec-06	45	46	May-99
02	SSN777	Dec-07	45	46	Nov-01
03	SSN778	Dec-08	45	46	CFE
04	SSN779	Dec-09	45	46	CFE
05	SSN780	Dec-10	45	46	CFE

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: PROPULSOR FY2005 President's Budget
February 2004
BLI: 201300

I. DESCRIPTION/CHARACTERISTICS/PURPOSE

The propulsor consists of Ni-Al-bronze blades and a large steel and inconel fabrication piece. The purpose of the propulsor is to generate proper thrust to propel the ship at a rated speed within the approved limits of torque and shaft RPM, while at the same time meeting acoustic and structural requirements. This design is unique to the VIRGINIA Class. The propulsor consists of a large quantity of government supplied material and a contract for the fixed portion construction and assembly.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99	QTY	FY01	QTY	FY02	QTY	FY03	QTY	FY04	QTY	FY05 *
MAJOR HARDWARE	1	43,559	1	26,782	1	24,578	1	28,435	1	29,114	1	32,930	1	0
TECH ENGINEERING SERVICES		0		5,116		4,916		3,493		2,383		4,440		4,640
OTHER COSTS		0		0		0								
TOTAL		43,559		31,898		29,494		31,928		31,497		37,370		4,640

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY 1 Shipset	HARDWARE UNIT COST	CONTRACT AWARD DATE
98	SSN774	United Defense	1 Shipset	20,619	Dec-98
99	SSN775	United Defense	1 Shipset	12,727	Dec-98
01	SSN776	United Defense	1 Shipset	12,440	Dec-98
02	SSN777	United Defense	1 Shipset	15,131	Dec-98
03	SSN778	United Defense	1 Shipset	15,238	Feb-02
04	SSN779	United Defense	1 Shipset	15,915	Aug-03
05	SSN780	*The FY05 / SSN780 Propulsor will be utilized from a Virginia / Seawolf Spare. Balance provides GFE support.			

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	26	36	Apr-99
99	SSN775	Jun-05	26	36	Apr-00
01	SSN776	Dec-06	26	36	Oct-01
02	SSN777	Dec-07	26	36	Oct-02
03	SSN778	Dec-08	26	36	Oct-03
04	SSN779	Dec-09	26	36	Oct-04
05	SSN780	Dec-10	26	36	Oct-05

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: MAIN CONDENSER FY2005 President's Budget
February 2004
BLI: 201300

I. DESCRIPTION/CHARACTERISTICS/PURPOSE
A heat exchanger, that serves to condense exhaust steam from main and SSTG turbines,
producing fresh water, which is returned to the feed water system to supply the steam generators to produce steam.

II. CURRENT FUNDING:

SHIP:	QTY	FY98	QTY	FY99
MAJOR HARDWARE	1	21,030	1	6,570
TECH ENGINEERING SERVICES		2,516		809
OTHER COSTS		1,544		496
TOTAL		25,090		7,875

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST
98	SSN774	Electric Boat	1 Shipset	21,030
99	SSN775	Electric Boat	1 Shipset	6,570

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
98	SSN774	Jun-04	36	66	Jan-96
99	SSN775	Jun-05	36	66	Dec-97

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)											FY2005 President's Budget February 2004	
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 33201303											P-1 Line Item Nomenclature Virginia Class Submarine	
Weapon System VIRGINIA Class Submarines				First System (BY1) Award Date					First System (BY1) Completion Date			
($ in Millions)												
BLI: 201300	PLT	When Req'd	Prior Years	FY03	FY04	FY05	FY06	FY07	FY08	FY09	To Complete	Total
NUCLEAR PROPULSION PLANT EQUIPMENT (1)	30-72	Various	2592.0	431.3	435.0	445.0	456.0	861.5	872.4	887.6	6712.0	13692.8
ELECTRONICS EQUIPMENT (2)	44	Various	73.9	9.0	13.0	13.3	13.5	13.8	28.8	29.7	267.8	462.8
NON-NUCLEAR PROPULSION PLANT EQUIPMENT			578.1	32.2	.	10.0	34.4	36.3	75.9	79.3	729.4	1575.6
*Heat Exchanger	18	Various	17.7									17.7
Propulsor (3)	36	Various	97.0	32.2	.0	10.0	34.4	36.3	75.9	79.3	729.4	1094.5
*Main Condensers	66	Various	33.									33.0
*Switchboards Elec	18	Various	20.8									20.8
Main Propulsion Complex (4)	46	Various	355.7	.0	.0	.0	.0	.0	.0	.0	.0	355.7
Pumps & Valves	18	Various	53.9									53.9
LONG LEAD-TIME CFE (5)	24 - 42	Various	392.4	159.6	156.2	163.6	183.7	189.9	372.1	389.1	3994.9	6001.4
DETAIL DESIGN/DESIGN TRANSFER/SHIPBUILDER INTEGRATION			480.6				.				.0	480.6
ADVANCE CONSTRUCTION (6)			148.28								.0	148.3
OTHER (7)			3.19								.0	3.2
EOQ (8)					253.7	240.0	100.1			401.1	2030.0	3025.0
Total AP			4268.5	632.1	857.9	871.9	787.7	1101.5	1349.2	1786.8	13734.1	25389.6

*Funded as CFE verses GFE beginning with the FY01 ship.

Description:

(1) **Nuclear Propulsion Plant Equipment AP** is required to fund long lead-time propulsion plant equipment, which is the longest lead-time equipment in the construction of nuclear attack submarines, and ensure production capability to support projected production quantities. To support the VIRGINIA Class's innovative and more efficient modular construction method, reactor plant components must be delivered earlier in the construction process than that of previous submarine classes. Under the new method, the VIRGINIA Class reactor plant will be assembled and tested before being mounted into the hull.

(2) **Electronics Equipment AP** is required to fund the long lead time material for the Command and Control System Module (CCSM). In order to keep the CCSM out of the critical path to ship delivery and minimize the most risk to ship construction, selected electronics will be installed in this module to support construction of the CCSM.

(3) **Propulsor AP** is required to satisfy in-yard need dates for ship delivery. FY04AP for FY05/SSN780 is zero due to DON decision to use a VIRGINIA / SEAWOLF spare.

(4) **Main Propulsion Complex AP** is required to satisfy in-yard need dates for ship delivery and to stabilize the industrial base due to the low number of production units to contain per unit cost. The FY03/SSN778 and follow on hull Main Propulsion Complex (MPC) have been negotiated as CFE in the FY03 Multi-Year Construction Contract.

(5) **Long Lead-Time CFE AP** is required to fund long lead time contractor furnished material including the Weapons Handling Module and the Reactor Plant Module in addition to the MPC beginning with the FY03/SSN778. These components are required early in the construction phase to meet the delivery schedule. This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.

(6) **Advance Construction** was required to ensure industrial base continuity at the shipbuilder in the gap year.

(7) **Other** is for VIRGINIA Class curriculum development.

(8) **EOQ** is for Economic Order Quantity for large lot procurements of shipbuilder material and major Government Furnished Equipment to achieve savings under the MYP contract.This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)								FY2005 President's Budget February 2004	
Appropriation (Treasury)Code/CC/BA/SBA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 33201303					Weapon System VIRGINIA Class Submarines			P-1 Line Item Nomenclature Virginia Class Submarine	
(TOA, $ in Millions)									
	PLT	QPA	Unit Cost	FY04 Qty	FY04 Contract Forecast Date	FY04 Total Cost Request	FY05 Qty	FY05 Contract Forecast Date	FY05 Total Cost Request
BLI: 201300 End Item				1			1		
NUCLEAR PROPULSION PLANT EQUIPMENT (1)	30-72	1 Shipset	435.0	1 Shipset	1st Qtr FY04	435.0	1 Shipset	1st Qtr FY05	445.0
ELECTRONICS EQUIPMENT (2)	44	1 Lot	NA	1 Lot	various	13.0	1 Lot	various	13.3
PROPULSOR (3)	36	1 Shipset	.0	1 Shipset	various	.0	1 Shipset	various	10.0
LONG LEAD-TIME CFE (4)	24-42	1 Lot	NA	1 Lot	1st Qtr FY04	156.2	1 Lot	1st Qtr FY05	163.6
EOQ (5)			NA		various	253.7		various	240.
Total AP						857.9			871.9

Description:

(1) **Nuclear Propulsion Plant Equipment AP** is required to fund long-lead time propulsion plant equipment, which is the longest lead-time equipment in construction of nuclear attack submarines. FY05 AP is required for the FY07 ship.

(2) **Electronics Equipment AP** is required to fund long lead time material for the Command and Control System Module (CCSM). Because the CCSM will be on critical path to ship delivery and present the most risk to ship construction, selected electronics will be installed in this module to support construction of the CCS. FY05 AP is required for the FY06 ship.

(3) **Propulsor AP** is required to satisfy in-yard need dates for ship delivery. FY04 AP for the FY05/SSN780 is zero due to DON decision to utilize a VIRGINIA / SEAWOLF spare.

(4) **Long Lead-Time CFE AP** is required to fund long lead time contractor furnished material including the Weapons Handling Module and the Reactor Plant Module in addition to the MPC beginning with the FY03/SSN778. These components are required early in the construction phase to meet the delivery schedule. This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.

(5) **Economic Order Quantity** is for Economic Order Quantity for large lot procurements of shipbuilder material and major Government Furnished Equipment to achieve savings under the MYP contract.This funding schedule reflects the negotiated MYP contract requirement for the FY04-08 hulls, thereby rendering Multi-year savings.

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 President's Budget ($M)									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY Shipbuilding and Conversion, Navy					P-1 ITEM NOMENCLATURE BLI - 201700 SSGN CONVERSION					
	PRIOR YEARS	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY		2	1	1						4
End Cost		2061.7	540.3	677.8						3279.8
Less Advance Procurement		835.5	177.5	208.2						1221.1
Less Subsequent funding		815.1	254.6	255.0						1324.8
Plus Full Funding			815.1	254.6	255.0					1069.8
Full Funding TOA		411.1	923.4	469.2	255.0					2058.7
Plus Advance Procurement	353.7	584.6	234.7	48.0						1221.1
Total Obligational Authority	353.7	995.7	1158.1	517.2	255.0					356.6
Plus Outfitting and Post Delivery		0.7	2.4	4.8	7.2	6.7	6.4			28.2
Total	353.7	996.4	1160.6	522.0	262.2	6.7	6.4			384.8
Unit Cost (Ave. End Cost)		1030.9	540.3	677.8						820.0

Note: The conversion of SSBNs to SSGNs creates a unique situation concerning battle force ship count. Following offload of their strategic weapons, SSBNs are no longer counted as strategic assets. However, since they are not inactivated, they must still be counted. Navy designates these ships as SSGNs following their strategic weapons offload. Therefore, for purposes of ship count, there are two SSGNs in FY03 and two more in FY04.

A. MISSION: Covert striking power against targets ashore; the capability to establish covertly an expeditionary force on land. Working both independently and with a battle group/other ships, the OHIO Class SSGN will have the endurance and payload to prepare the battle space and to continue to project maritime power throughout a conflict.

Characteristics:		Production Status:	
Hull		Contract Plans	Conversion contract
Length overall	560'	Award Planned (Month)	Oct-05
Beam	42'	Months to Complete	
Displacement	18750	a) Award to Delivery	24
Draft	36'	b) Construction Start to Delivery	24
		Commissioning Date	NA
		Completion of Fitting-Out	Oct-07

Armament:	Major Electronics:
Torpedo Tubes	Attack Weapons Control System for Tomahawk
Multiple All-Up Round Canisters for Vertical Launch Tomahawk	AN/WSN-7 Ring Laser Gyro Navigator
	Common Submarine Radio Room
DDS and ASDS Host Capability	Tactical Information Distribution System

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPONS SYSTEM COST ANALYSIS (EXHIBIT P-5)

BUDGET ACTIVIT 2 — P-1 ITEM NOMENCLATURE: SSGN — SUBHEAD: H207/H208

OTHER WARSHIPS

	FY 2003		FY 2004		FY 2005	
ELEMENTS OF COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
PLANS	2	586,594	1	10,575	1	12,765
BASIC		1,067,347		413,796		551,496
CHANGE ORDERS		49,076		21,080		20,763
ELECTRONICS		54,807		29,223		25,947
PROPULSION EQUIPMENT		112,000		0		0
ORDNANCE		182,183		63,380		65,264
HM&E		9,721		2,252		1,543
OTHER		0		0		0
TOTAL SHIP ESTIMATE		2,061,729		540,306		677,778
LESS AP FY02		340,699		12,910		108
LESS AP FY03		494,773		67,210		22,651
LESS AP FY04				97,342		137,399
LESS AP FY05						48,000
LESS SUB FF FY04		815,150				
LESS SUB FF FY05				254,605		
LESS SUB FF FY06						255,000
PLUS FF FY04				815,150		
PLUS FF FY05						254,605
PLUS FF FY06						
NET P-1 LINE ITEM		411,107		923,388		469,226

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimate - Basic/Escalation

Ship Type: SSGN

I.	Design Schedule:	Start/Issue	Complete/Response	Reissue Complete/Response
	Issue Date for TLR	MAY 00	SEP 02	
	Issue Date for TLS	JUN 01	DEC 01	
	Preliminary Design	OCT 00	SEP 02	
	Contract Design	N/A	N/A	
	Detail Design	SEP 02	DEC 04	
	Request for Proposals	APR 03	JUL 03	
	Design Agent	Electric Boat		
II.	Classification of Cost Estimate	**C**		
III.	Basic Construction/Conversion			
	A. Award Date	NOV 03		
	B. Contract Type and Share Line	Cost Plus Incentive Fee		
		30/70 Below Target Cost		
		70/30 - 106% of Target Cost		
		40/60 over 106% of Target Cost		
		min fee 7%		
		max fee 16%		
IV.	Escalation	N/A		
	Base Date			
	Escalation Target Date			
	Escalation Termination Date			
	Escalation Requirement ($K)			
	Labor/Material Split			
	Allowable Overhead Rate			
V.	Other Basic (Reserves/Miscellaneous)			
	Item			
	Item			

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

EXHIBIT P-27
FY 2005 President's Budget
February 2004

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT/PROJECT AWARI ERO	CONV	START OF CONSTRUCTIOI ERO	CONV	DELIVERY DATE
SSGN 726	Puget Sound NSY/Electric Boat	2003	Nov-02	Nov-03	Nov-02	Nov-03	Nov-05
SSGN 728	lorfolk Naval Shipyard/ Electric Boat	2003	Aug-03	Mar-04	Aug-03	Apr-04	Apr-06
SSGN 727	Puget Sound NSY/Electric Boat	2004	Mar-04	Oct-04	Mar-04	Oct-04	Oct-06
SSGN 729	lorfolk Naval Shipyard/ Electric Boat	2005	Mar-05	Oct-05	Mar-05	Oct-05	Oct-07

Fiscal Year Authorized is based on ERO schedule
Contract Award/Start of construction/Delivery Date based on conversion schedule

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: TRIDENT SSGN CLASS	FY 03 QTY	FY 03 TOT COST	FY 04 QTY	FY 04 TOT COST	FY 05 QTY	FY 05 TOT COST
ELECTRONICS EQUIPMENT						
a. P-35 Items						
1. Common Submarine Radio Room	2 Shipsets	28,202	1 Shipset	13,501	1 Shipset	13,515
Subtotal		28,202		13,501		13,515
b. Major Items						
1. Universal Modular Masts	2 Shipsets	7,200	1 Shipset	3,625	1 Shipset	3,883
2. Tactical Integrated Digital System	2 Shipsets	4,751	1 Shipset	2,149	1 Shipset	2,118
3. AN/WSN-7	2 Shipsets	4,029	1 Shipset	1,673	1 Shipset	1,613
4. Data Processing System	2 Shipsets	4,936	1 Shipset	613	1 Shipset	658
5. OK-542 Handling System			1 Shipset	4,192		
Subtotal		20,916		12,251		8,272
c. Other						
1. AN/BQN-17 Secure Fathometer	2 Shipsets	1,361	1 Shipset	710	1 Shipset	710
2. Global Command & Control System	2 Shipsets	2,312	1 Shipset	1,033	1 Shipset	1,033
3. D5 DD-2 Depth Detector					1 Shipset	354
4. System Integration		819		1,381		1,251
5. Interior Communications/Data Transfer Syst	2 Shipsets	150	1 Shipset	75	1 Shipset	540
6. Navy Tactical Command Support Systems	2 Shipsets	800	1 Shipset	150	1 Shipset	150
7. Monitoring Sub-system		246		123		123
Subtotal		5,689		3,471		4,160
TOTAL ELECTRONICS		54,807		29,223		25,947

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type:

TRIDENT SSGN CLASS	FY 03		FY 04		FY 05	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
ORDNANCE						
a. P-35 Items						
1. MAC	2 Shipsets	92,308	1 Shipset	32,645	1 Shipset	32,944
2. AWCS	2 Shipsets	89,875	1 Shipset	30,735	1 Shipset	32,319
Subtotal		182,183		63,380		65,264
b. Major Items						
c. Other						
TOTAL ORDNANCE		182,183		63,380		65,264

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)									FY 2005 President's Budget February 2004
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 201700									P-1 Line Item Nomenclature SSGN Conversion
Weapon System SSGN				First System (BY1) Award Date NOV 02 ERO/ NOV 03 CONVERSION					First System (BY1) Completion Date NOV 05
($ in Millions)									
	PLT	When Req'd	Prior Years	PY-1	CY	BY-1	BY-2	To Complete	Total
				FY02	FY03	FY04	FY05		
PLANS (1)	36	Various		118.8	248.4	.7	5.5		373.4
ERO (2)	36	Various		74.1	48.4	40.4			162.8
CONVERSION (3)	36	Various		44.8	186.5	106.6	36.8		374.7
ORDNANCE (4)	36	Various			53.2	51.1	2.2		106.5
ELECTRONICS (5)	36	Various		4.1	48.1	36.0	3.5		91.8
REACTOR CORE				112.0					112.0
Total AP				353.7	584.6	234.7	48.0	.0	1221.1

Description:

(1) PLANS Ship detailed design work consisting of preparation of design products for fabrication, construction, testing and demonstration of SSGN, development of digital models, class drawings, ripout drawings, integrated schedules, technical team support at the conversion shipyard and lead yard services. The attack weapons control system development includes definition of new requirements for the Tactical Tomahawk Weapon Control System (TTWCS), definition for the Launcher Control System (LCS), detailed design, implementation, and integration of the system components and system engineering required to perform the SSBN to SSGN conversion.

(2) ERO CNO scheduled availability identified in the class maintenance plan which includes refueling of the nuclear reactor core and refurbishment or replacement of major equipment. Advance planning including ERO work package development is required to support the SSGN ERO and conversion schedule.

(3) CONVERSION Procurement of long lead time material and manufacturing labor to fabricate components and assemble installation kits is required to insure timely delivery to the shipyard. Advance planning is necessary to perform ripout and planning of the conversion installation.

(4) ORDNANCE Procurement of Attack Weapons Control Systems is required to support the SSGN conversion schedule.

(5) ELECTRONICS Procurement of the following Government Furnished equipment is required to insure timely delivery to the conversion and ERO activity: Common Submarine Radio Room, Universal Modular Mast, Global Command and Control System-Maritime (GCCS-M), AN/WSN-7 Ring Laser Gyro Navigator, Tactical Integrated Data System (TIDS), OK-542 Handling System, and AN/BQN-17 Secure Fathometer.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)												Date: February 2004
Appropriation (Treasury)Code/CC/BA/SBA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 201700						Weapons System SSGN						P-1 Line Item Nomenclature SSGN Conversion
(TOA, $ in Millions)												
	PLT	QPA	Unit Cost	2003 CY Qty	2003CY Contract Forecast Date	2003 CY Tota Cost Request	2004 BY1 Qty	2004 'BY1 Contract Forecast Date	2004'BY1 Total Cost Request	2005 BY2 Qty	2005'BY2 Contrac Forecast Date	2005'BY2 Total Cost Request
PLANS (1)	36	various		N/A	11/02	248.4	N/A	11/03	.7	N/A	11/04	5.5
ERO (2)	36	various		2	11/02	48.4	1	11/03	40.4			
CONVERSION (3)	36	various		4	11/02	186.5	2	11/03	106.6	1	11/04	36.8
ORDNANCE (4)	36	various		4	11/02	53.2	2	11/03	51.1	1	11/04	2.2
ELECTRONICS (5)	36	various		4	11/02	48.1	2	11/03	36.0	1	11/04	3.5
Total AP						584.6			234.7			48.0

Description:

(1) PLANS Ship detailed design work consisting of preparation of design products for fabrication, construction, testing and demonstration of SSGN, development of digital models, class drawings, ripout drawings, integrated schedules, technical team support at the conversion shipyard and lead yard services. The attack weapons control system development includes definition of new requirements for the Tactical Tomahawk Weapon Control System (TTWCS), definition for the Launcher Control System (LCS), detailed design, implementation, and integration of the system components and system engineering required to perform the SSBN to SSGN conversion.

(2) ERO CNO scheduled availability identified in the class maintenance plan which includes refueling of the nuclear reactor core and refurbishment or replacement of major equipment. Advance planning including ERO work package development is required to support the SSGN ERO and conversion schedule.

(2) CONVERSION Procurement of long lead time material and manufacturing labor to fabricate components and assemble installation kits is required to insure timely delivery to the shipyard. Advance planning is necessary to perform ripout and planning of the conversion installation.

(4) ORDNANCE Procurement of Attack Weapons Control Systems is required to support the SSGN conversion schedule.

(5) ELECTRONICS Procurement of the following Government Furnished equipment is required to insure timely delivery to the conversion and ERO activity: Common Submarine Radio Room, Universal Modular Mast, Global Command and Control System-Maritime (GCCS-M), AN/WSN-7 Ring Laser Gyro Navigator, Tactical Integrated Data System (TIDS), OK-542 Handling System, and AN/BQN-17 Secure Fathometer.

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 PRESIDENT'S BUDGET									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY BA #2 OTHER WARSHIPS/BLI 208600/SUBHEADS 8212/2218/2212/6212/6218					P-1 ITEM NOMENCLATURE CVN-68 CL NUCLEAR REFUELING COMPLEX OVERHAUL					
	PRIOR YR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL PROG
QUANTITY	2	0	0	0	1	0	0	0	2	4
End Cost	4,962.8	0.0	0.0	0.0	3,220.7	0.0	0.0	0.0	7,070.2	15,253.7
Less Advance Procurement	1,266.3	0.0	0.0	0.0	869.5	0.0	0.0	0.0	1,040.3	3,176.1
Less Transfer	63.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.1
Less Subsequent Year FF	1,252.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,252.7
Plus FY2001 Prior Year Ships	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65.0
Full Funding TOA	2,445.7	0.0	0.0	0.0	2,351.2	0.0	0.0	0.0	6,029.9	10,826.8
Plus Advance Procurement	1,266.3	217.3	221.0	333.1	27.6	106.8	328.8	454.1	1,040.3	3,995.3
Total Obligational Authority	3,712.0	217.3	221.0	333.1	2,378.8	106.8	328.8	454.1	7,070.2	14,822.1
Plus Outfitting/Post Delivery	0.0	16.5	28.1	21.2	3.0	15.8	28.4	0.0	0.0	113.0
Total	3,712.0	233.8	249.1	354.3	2,381.8	122.6	357.2	454.1	7,070.2	14,935.1
Unit Cost (Ave. End Cost)	2,481.4	0.0	0.0	0.0	3,220.7	0.0	0.0	0.0	3,535.1	9,237.2

MISSION:

To support and operate aircraft to engage in attacks on targets afloat and ashore which threaten our use of the sea and to engage in sustained operations in support of other forces. The refueling of the reactors and repair and upgrading the main propulsion equipments will provide for reliable operations during its remaining 20 years of ship life using only the normal maintenance cycle.

Characteristics:		Production Status	FY 06
Hull		Contract Plans	05/01
Length overall	1088'	Award Planned (Month)	11/05
Beam	134'	Months to Complete	
Displacement	91,878 TONS	a) Award to Delivery	36
Draft	35.8'	b) Construction Start to Delivery	36
		Commissioning Date	N/A
		Completion of Fitting Out	01/09

Armament:	Major Electronics:
CVN 69:	Cooperative Engagement Capability
Refurb NSSMS	C4ISR
MK49 GMLS w/HAS	Integrated Combat Direction System
AN/SPQ-9B Radar	Naval Warfare Strike Planning Center (NSWPC)
Tactical Support Center	
CVN 70	Cooperative Engagement Capability
MK49 GMLS w/HAS	C4ISR
AN/SPQ-9B Radar	Ship Self Defense System MK2
Tactical Support Center	Naval Warfare Strike Planning Center (NSWPC)

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

SUBHEAD 8212/2218/2212/6212/6218

BUDGET ACTIVITY: 2
OTHER WARSHIPS

P-1 ITEM NOMENCLATURE: CVN R/COH
AIRCRAFT CARRIER

ELEMENT OF COST	QTY	FY2001 CVN 69 TOTAL COST	QTY	FY2006 CVN 70 TOTAL COST
PLAN COSTS		20,531		41,330
BASIC CONST/CONVERSION		2,167,885		2,669,568
OTHER COST		53,510		51,586
PROPULSION EQUIPMENT		63,295		96,203
HM&E		35,574		46,103
ELECTRONICS		166,087		211,995
ORDNANCE		87,983		103,957
TOTAL SHIP ESTIMATE	1	2,594,865	1	3,220,742
LESS: FY98 ADVANCE PROCUREMENT		45,559		0
LESS: FY99 ADVANCE PROCUREMENT		260,873		0
LESS: FY00 ADVANCE PROCUREMENT		343,708		0
LESS: FY01 ADVANCE PROCUREMENT		0		24,770
LESS: FY02 ADVANCE PROCUREMENT		0		73,349
LESS: FY03 ADVANCE PROCUREMENT		0		217,271
LESS: FY04 ADVANCE PROCUREMENT		0		221,003
LESS: FY05 ADVANCE PROCUREMENT		0		333,061
LESS: FY02 SUBSEQUENT YEAR FULL FUNDING		1,201,557		0
LESS: FY03 ATR (03-10PA)		29,000		0
LESS: FY03 ATR (03-28PA)		22,139		0
NET P-1 LINE ITEM:		692,029		2,351,288

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
CVN 69 R/COH	NEWPORT NEWS SHIPBUILDING	FY 2001	Jun-01	Jun-01	Nov 04
CVN 70 R/COH	NEWPORT NEWS SHIPBUILDING	FY 2006	Nov-05	Nov-05	Nov 08
CVN 71 RCOH	NEWPORT NEWS SHIPBUILDING	FY 2010	Nov 09	Nov 09	Nov 12
CVN 72 RCOH	NEWPORT NEWS SHIPBUILDING	FY 2013	Oct-12	Oct 12	Oct 15

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN RCOH CLASS NUCLEAR AIRCRAFT CARRIER

	(1) FY 01 TOT COST	(1) FY 06 TOT COST
OTHER		
a. P-35 Items		
b. Major Items:		
1. Berthing	25,560	26,326
2. Engr Spt (NAVSSES, PERA, NNS)	14,062	13,116
3. ILS Support	4,899	3,144
4. Management Support	8,989	9,000
c. Miscellaneous Other Support	0	0
TOTAL OTHER	53,510	51,586

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN RCOH CLASS NUCLEAR AIRCRAFT CARRIER

	(1) FY 01		(1) FY06	
HULL, MECHANICAL & ELECTRICAL		TOT COST		TOT COST
a. P-35 Items				
1. JP-5 Electric Valve Operator Assembly	0	0	1	6,498
b. Major Items				
1. AC Plant	1	1,141	1	1,190
2. Conv R114 AC Plts	1	3,462	1	4,110
3. Aircraft Electrical Servicing System	0	0	1	1,204
4. Low Pressure Air Plant	0	0	1	1,970
3. 02N2 System	0	0	1	4,300
Subtotal		4,603		12,774
c. Miscellaneous Hull, Mechanical & Electrical				
1. HM&E Test & Inspection	1	1,000	1	2,000
2. HM&E Engr Svcs	1	13,142	1	11,800
3. SUPSHIP Matl/Svcs	1	15,697	1	10,100
4. HM&E Misc Equip	1	1,132	1	2,931
Subtotal		30,971		26,831
TOTAL HULL, MECHANICAL & ELECTRICAL		35,574		46,103

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN RCOH CLASS NUCLEAR AIRCRAFT CARRIER	(1) FY 01	TOT COST	(1) FY 06	TOT COST
ELECTRICAL EQUIPMENT				
a. P-35 Items				
1. C4ISR	1	56,894	1	63,224
2. Naval Strike Warfare Plng Ctr (NSWPC - Formerly CVIC)	1	20,855	1	24,471
3. Integrated Communication and Audio Network (ICAN)		CFE	1	40,600
4. SSDS MK2 (Formerly ICDS)	1	42,017	1	50,275
5. Cooperative Engagement Capability (CEC - AN/USG-2)	1	12,504	1	6,916
6. AN/SPN46 Overhaul/Upgrade	1	5,245	1	See Below
7. IFF Interrogator Set (An/UPX-29)	1	See Below	1	5,273
8. Battle Force Tactical Training System (BFTT)/wStim Sim	1	See Below	1	5,905
9. HYDRA	1	See Below	1	4,304
Subtotal		137,515		200,968
b. Major Items				
1. Doppler Sonar Velocity Log	1	874	1	950
2. Inertial Navigation System (RLGN)	1	3,369	1	450
3. LSO Improved Comm Station (SATCC)	1	1,430		0
4. CATCC Reconfiguration	1	1,630		0
5. AN/TPX-42 (V)14 Upgrade	1	3,455	1	1,508
6. IFF Interrogator Set (AN/UPX-29)	1	4,893		See Above
7. Battle Force Tactical Training System (BFTT)	1	3,740		See Above
8. HYDRA	1	3,996		See Above
9. AN/SPN-46 Overhaul		See Above	1	3,604
Subtotal		23,387		6,512
c. Miscellaneous Electronics		5,185		4,515
TOTAL ELECTRONICS		166,087		211,995

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: CVN RCOH NUCLEAR AIRCRAFT CARRIER	(1) FY 01 TOT COST		(1) FY06 TOT COST	
ORDNANCE				
a. P-35 Items				
1. Rearch NATO Seasparrow	1	23,930	1	27,497
2. MK49 GLMS w/HAS (formerly RAM)	2	17,407	2	13,205
3. AN/SPQ-9B Radar	1	6,652	1	8,608
4. Tactical Support Center (CV-TSC)	1	8,263	1	10,113
5. Aviation Equipment & Support	1	16,903	1	23,639
6. Integrated Warfare Commander's Cell (IWCC)	1	See Below	1	6,161
7. AN/SPS-49(V)5 Upgrade/Repair	1	See Below	1	5,385
Subtotal		73,155		94,608
b.Major Items				
1. AN/SPS-73 Radar	1	1,225	1	700
2. AN/SPS-48E Radar Set Upgrades	1	700	1	2,386
3. Integrated Warfare Commander's Cell (IWCC)	1	2,213		See Above
4. AN/SPS-49(V)5 Upgrade/Repair	1	4,359		See Above
5. Advanced Sensor Distribution System (ASDS)	1	2,082	1	2,863
Subtotal		10,579		5,949
c. Miscellaneous Ordnance				
1. Combat Systems support		737		-
2. Test & Certification		2,812		2,500
3. CSOSS		700		900
Subtotal		4,249		3,400
TOTAL ORDNANCE		87,983		103,957

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)								Date: **February 2004**				
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **BA #2 OTHER WARSHIPS**								P-1 Line Item Nomenclature **FY 06 CVN Refueling (RCOH)**				
Weapon System BLI: 208600 **CVN 70 Refueling**				First System (BY1) Award Date **Nov 05**				First System (BY1) Completion Date **Nov 08**				
($ in Millions)												
	PLT	When Req'd	Prior Years	CY03	CY FY04	BY1 FY05	BY2 FY06	BY3 FY07	BY4 FY08	BY5 FY09	To Complete	Total
End Item Qty												
Plans (Detailed)			19.3	8.0	7.0	7.0						41.3
Basic			51.9	143.1	139.8	220.6						555.4
Other Engineer			5.8	2.3	2.9	3.2						14.2
Nuc Prop Equip			16.9	30.5	16.3	4.1						67.8
HM&E			1.1	0.6	1.1	14.7						17.5
Electronics			0.6	21.5	38.8	52.5						113.4
Ordnance/Air			2.5	11.3	15.1	31.0						59.9
Total AP			98.1	217.3	221.0	333.1						869.5

Description:
Funding in FY 2003 thru FY 2005 is required to procure long lead items and fund long lead efforts crticial to supporting an FY 2006 contract award. Efforts include work package planning, integration, shipchecks, drawings. GFE engineering & hardware procurements include RAM, SSDS MK2, NATO Seasparrow, NSWPC, IFF, HYDRA, C4ISR components, CV-TSC, IWCC, aircraft recovery and launch equipment. The advance planning contracts with NNS are funded under Basic in each fiscal year.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)								Date: **February 2004**	
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **BA #2 OTHER WARSHIPS**						Weapon System **CVN 70 Refueling**		P-1 Line Item Nomenclature **CVN REFUELING (RCOH)**	
(TOA, $ in Millions)									
	PLT	QPA	Unit Cost	FY04 Qty	FY04 Contract Forecast Date	FY04 Total Cost Request	FY05 Qty	FY05 Contract Forecast Date	FY05 Total Cost Request
End Item									
Plans (Detailed)	various	Note 1	41.3			7.0			7.0
Basic	various	Note 1	555.4		Feb 04	139.8		Nov 04	220.6
Other Engineer	various	Note 1	14.2			2.9			3.2
Nuc Prop Equip	various	Note 1	67.8			16.3			4.1
HM&E	various	Note 1	17.5			1.1			14.7
Electronics	various	Note 1	113.4			38.8			52.5
Ordnance/Air	various	Note 1	59.9			15.1			31.0
Total AP			869.5			221.0			333.1

CVN 70 A/P Funding begins in FY01 and ends in FY05
Note 1: QPA is one shipset

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 05 President's Budget ESTIMATES ($M)									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY BA #2 OTHER WARSHIPS				P-1 ITEM NOMENCLATURE SSN Engineered Refueling Overhauls (ERO) (BLI 211100)						
	Prior Years *		FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	TO COMPLETE	TOTAL PROGRAM
QUANTITY	3		2	2	0	0	3	1	0	11
End Cost	674.8		506.9	449.6	-	-	745.5	272.7	-	2,649.6
Less Advance Procurement	58.8		80.0	3.1	-	-	91.6	54.4	-	287.9
Less FY 02 Appropriations for Prior Year Ships	16.2		-	-	-	-	-	-	-	16.2
Full Funding TOA	599.7		426.9	446.5	-	-	654.0	218.3	-	2,345.4
Plus Advance Procurement	217.5		62.7	10.3	19.4	80.6	46.1	-	-	436.5
Total Obligational Authority	817.2		489.6	456.7	19.4	80.6	700.0	218.3	-	2,781.9
Plus Outfitting and Post Delivery	1.5		3.5	2.9	4.0	4.6	3.9	8.3	0.3	17.4
Total	818.3		494.6	460.2	21.9	80.8	701.6	220.7	0.3	2,799.3
SSN Unit Cost (Ave. End Cost)	224.9		253.4	224.8	-	-	248.5	272.7	-	

* Prior Years controls do not reflect $19.6M transferred to USS BUFFALO's FY 2002 ERO in the FY 2004 omnibus appropriations act.

SSN ERO: This funding provides for Engineered Refueling Overhauls of LOS ANGLES Class (SSN 688) Fast Attack Submarines. This is a major overhaul performed near the mid-point of the submarine's service life to re-capitalize the vessel and extend the useful life to maintain SSN submarine force levels. Work performed includes: refueling of the reactor; major propulsion plant and ship equipments are repaired or upgraded; obsolete equipments are replaced; limited alterations to provide for reliable operations during the remaining operational life of the submarines and the ship is re-certified for Unrestricted Operations (SUBSAFE URO). The unit cost reflects the refueling, repair and alterations mandays with the appropriate shipyard rate and material.

SSBN ERO: FY-04 congressional direction requires separate Budget Line Items (BLI) for SSN EROs & SSBN EROs starting with FY04. Prior to FY04, SSBN ERO and D-5 Backfit Advance Procurement (AP) for SSBN 730 & SSBN 731 refueling overhauls were funded in the 211100 BLI. Details of FY02 and FY03 AP funding for these availablilities are included in the attached AP exhibits. FY04 and outyear funding for these and future SSBN availabilities is submitted in the 211300 BLI.

FY 2004 - The $3.1M in Advance Procurement is unique, non-recurring AP for rescheduled EROs. These sunk costs, not directly attributable to the two FY2004 EROs, are included in End Cost for accounting purposes only.

Characteristics:			SSN 708	SSN 709	SSN 718
		Production Status	FY07	FY07	FY07
		Contract Plans	Sep-05	May-05	Feb-05
SSN 688 Class Hulls		Award Planned (Month)	Sep-05	May-05	Feb-05
Length Overall	360'	Months to Complete			
Displacement	6,900 TONS	a) Award to Delivery	44	44	44
		b) Project Start to Delivery	24	24	24
		Commissioning Date	N/A	N/A	N/A
		Completion of Fitting Out	May-09	Jan-09	Oct-08

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

SUBHEAD: 8234

BUDGET ACTIVITY : 2
SUBMARINES

P-1 ITEM NOMENCLATURE: SUBMARINE REFUELING OVERHAUL (SSNs)

ELEMENT OF COST	FY01 QTY	FY01 TOTAL COST	FY02 QTY	FY02 TOTAL COST	FY03 QTY	FY03 TOTAL COST	FY04 QTY	FY04 TOTAL COST
PLAN COSTS		37,641 a/		82,663 a/		102,866		11,407
BASIC CONST/CONVERSION		197,546		351,752		392,149		432,253
CHANGE ORDERS		-		-		-		-
ELECTRONICS		-		-		-		-
PROPULSION EQUIPMENT		-		-		-		-
HULL, MECH & ELEC		-		-		-		-
OTHER COSTS		395		4,832		11,881		5,915
ORDNANCE		-		-		-		-
ESCALATION		-		-		-		-
TOTAL SHIP ESTIMATE	1	235,582 a/	2	439,247 a/b/	2	506,896	2	449,575
LESS: ADVANCE PROCUREMENT FY01		-		58,801		12,813		-
LESS: ADVANCE PROCUREMENT FY02						67,153		3,110 c/
LESS: FY 02 Appropriations for Prior Year Ships		16,248		-		-		-
NET P-1 LINE ITEM		219,334 a/		380,446 a/		426,930		446,465

a/ FY00 and prior year funding was not SCN and is not included in the End Cost.
b/ FY02 controls do not reflect $19.6M transferred to USS BUFFALO's ERO in the FY 2004 omnibus appropriations act.
c/ FY 2004 - The $3.1M in Advance Procurement is unique, non-recurring AP for rescheduled EROs. These sunk costs, not directly attributable to the two FY2004 EROs, are included in End Cost for accounting purposes only.

SHIPBUILDING AND CONVERSION, NAVY

SHIP PRODUCTION SCHEDULE

SHIP TYPE	INDUSTRIAL ACTIVITY	FISCAL YEAR AUTHORIZED	AWARD OF PROJECT	START OF PROJECT	DELIVERY DATE
SSN 706 ERO	PORTSMOUTH NAVAL SHIPYARD	FY 2001	Feb-00	Jul-01	Jul-03
SSN 713 ERO	PUGET SOUND NAVAL SHIPYARD	FY 2002	Feb-00	Oct-01	Aug-04
SSN 715 ERO	PEARL HARBOR NAVAL SHIPYARD & IMF	FY 2002	Oct-00	Jun-02	Aug-04
SSN 699 ERO	PORTSMOUTH NAVAL SHIPYARD	FY 2004	Oct-03	Sep-04	Sep-06
SSN 717 ERO	PEARL HARBOR NAVAL SHIPYARD & IMF	FY 2004	Oct-03	Sep-04	Sep-06

SHIPBUILDING AND CONVERSION , NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: Submarine Refueling Overhaul	(1) FY 01 TOT COST	(2) FY 02 TOT COST	(2) FY 03 TOT COST	(2) FY 04 TOT COST
OTHER				
b. Major Items				
Subtotal	-	-	-	-
c. Miscellaneous Other Support	395	4,832	11,881	5,915
TOTAL OTHER	395	4,832	11,881	5,915

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Basic Escalation

Ship Type: Submarine Refueling Overhaul

I. Design Schedule	Not Applicable to Refueling Overhauls
Issue Date for TLR	N/A
Issue Date for TLS	N/A
Preliminary Design	N/A
Contract Design	N/A
Request for Proposals	N/A
Design Agent	

II. Classification of Cost Estimate	Class D - Budget Quality Estimate (Conversion/Modernization/ERO)	
III. Basic Construction/Conversion	SSN 699	SSN 717
A. Assumed Award Date	Oct-03	Oct-03
B. Contract Type (and Share Line if applicable)	FFP	N/A

IV. Escalation	Not Applicable to Refueling Overhauls
Escalation Termination Date	N/A
Escalation Requirement	N/A
Labor/Material Split	N/A
Allowable Overhead Rate	N/A

V. Other Basic (Reserves/Miscellaneous)	Amount
None	N/A

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)															Date: Feb-04
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 211100															P-1 Line Item Nomenclature SSN Engineered Refueling Overhauls (EROs)
Los Angeles (SSN 688) Class Submarines Submarine Refueling Overhauls (ERO): SSN 713/SSN 715 (FY02), SSN 698/SSN 714 (FY03), SSN 699/SSN 717 (FY04), SSBN 730 (FY05) & SSBN 731 (FY06) - FY03 & prior				First System Award Date		Feb-00			First System Completion Date		Feb-04				
($ in Millions)		When	Prior												
	PLT	Req'd	Years	FY03	FY04	FY05									Total
End Item Qty															
PLANS - FY02 EROs (1)		Various	58.8	-	-	-									-
PLANS - FY03 EROs (1)		Various	80.0	-	-	-									
PLANS - FY04 EROs (1)		Various	3.1	-	-	-									
PLANS - FY05 EROs (1)		Various	-	9.8	10.3	-									
PLANS - FY07 EROs (1)		Various	-	-	-	19.4									
ORDNANCE - FY05 ERO (2)		Various	70.6	-	-	-									
ORDNANCE - FY06 ERO (2)		Various	5.0	52.9	-	-									
TOTAL AP			217.5	62.7	10.3	19.4									19.4

(1) **PLANS AP:** Submarine Engineered Refueling Overhauls (EROs) are complex, short duration availabilities performed to extend the useful life of the vessel. Average duration of an ERO is 24 months with a production period of less than 15 months. Unlike ships under construction EROs are preformed on assembled hulls with limited access. The unique sensitive and safety (SUBSAFE) nature of submarine repair and refueling efforts dictates that the availability must be thoroughly and carefully integrated in advance to minimize disruptions and delays. The production period at the beginning of the ERO is extraordinarily labor intensive advance Procurement (AP) is essential for timely & cost-efficient execution.

(2) **ORDNANCE AP**: Required to procure shipboard hardware needed to upgrade TRIDENT I (C4) configured SSBN 730 & SSBN 731 to TRIDENT II (D5) capability. The following page contains a detailed breakout of these costs.

FY 2004 - The $3.1M in Advance Procurement is unique, non-recurring AP for rescheduled EROs. These sunk costs, not directly attributable to the two FY2004 EROs, are included for accounting purposes only.

FY04 Congressional direction split SSN & SSBN ERO funding in FY04 & out. FY03 & prior SSBN ERO AP in FY02 & FY03 still remains in 211100.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)								Date: **February 2004**						
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number: 1711 Shipbuilding and Conversion, Navy/BA 2 - Other Warships/211100								P-1 Line Item Nomenclature: SSN Engineered Refueling Overhauls (EROs)						
OHIO (SSBN 726) Class Submarines				First System (BY1) Award and Completion Date: January 2002 - October 2004				Interval between Systems: One Year						
($ in Millions)														
	PLT in Months	When Required	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total
End Item Qty								1	1					2
CFE/Ordnance:														
System Integration	12-36	FY 05/06			4.0	2.0								6.0
Launcher & Handling	12-48	FY 05/06			60.6	24.9								85.5
Fire Control	12-24	FY 05/06				17.0								17.0
Navigation	24-48	FY 05/06			8.0	2.0								10.0
Instr/Missile Checkout	24	FY 05/06				4.0								4.0
Other Advance Proc:														
Advance Planning	12-36	FY 05/06			3.0	3.0								6.0
Total Advance Procurement					**75.6**	**52.9**								**128.5**

Description:

System Integration Adv. Proc. - Required to fund procurement and staging of long lead-time material needed to support the D5 Backfit Work Package. Items to be procured include special tooling and test equipment, jigs, mockups and handling fixtures.

Launcher & Handling Adv. Proc. - Required to fund procurement of 24 sets of shipboard launcher equipment (including the launch tube group, vertical support group, umbilical group, ejector group and firing group) for each D5 Backfit hull, and procurement of launcher expendables (gas generators and launch tube closures) and launch control groups for both the SSBN 730 and SSBN 731.

Fire Control Adv. Proc. - Required to fund procurement of a MK-98 Mod 4 Fire Control System (and associated installation and checkout tooling and test equipment) for both the SSBN 730 and SSBN 731.

Navigation Adv. Proc. - Required to fund procurement of one shipset of navigation subsystem equipment for each D5 Backfit hull.

Instrumentation & Missile Checkout Adv. Proc. - Required to fund procurement of two TRIDENT II M240R Data Recording Systems (one for each of the D5 Backfit hulls) and one shipset of handling and checkout equipment for both SSBNs 730 and 731.

Advance Planning - Required to provide for Shipyard training, schedule/resource analyses and manloading studies, transition of D5 Backfit Work Package drawings to Task Group Instructions; and for final assembly, staging and storage of installation material.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)												Date: February 2004
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 211100					Los Angeles (SSN 688) Class Submarines				P-1 Line Item Nomenclature SSN Engineered Refueling Overhauls (EROs)			
(TOA, $ in Millions)												
	PLT	QPA	Unit Cost	FY 04 Qty	FY 04 Contract Forecast Date	FY 04 Total Cost Request	FY 05 Qty	FY 05 Contract Forecast Date	FY 05 Total Cost Request			
End Item				2	October-03		0	N/A				
PLANS (1) FY05 ERO						10.3						
PLANS (1) FY07 ERO									19.4			
ORDNANCE (2) FY05 ERO												
ORDNANCE (2) FY06 ERO												
Total AP						10.3			19.4			

(1) **PLANS AP** consists of developing work packages and general engineering design for submarine maintenance, repair, and refueling.

(2) **ORDNANCE AP** is required to procure shipboard hardware needed to upgrade TRIDENT I (C4) configured SSBN 730 to TRIDENT II (D5) capability. The following pages contain a detailed breakout of these costs.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)								Date: **February 2004**	
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number: 1711 Shipbuilding and Conversion, Navy/BA 2 - Other Warships/211100					OHIO (SSBN 726) Class Submarines			P-1 Line Item Nomenclature: SSN Engineered Refueling Overhauls (EROs)	
(TOA, $ in Millions)									
	PLT in months	QPA	Unit Cost	FY 2002 Qty	FY 2002 Contract Forecast Date	FY 2002 Total Cost Request	FY 2003 Qty	FY 2003 Contract Forecast Date	FY 2003 Total Cost Request
End Item Qty		N/A				N/A			N/A
CFE/Ordnance:									
System Integration	12-36	1 Lot	27.0	1 Lot	2nd Quarter FY 02	4.0	1 Lot	1st Quarter FY 03	2.0
Launcher & Handling	12-48	1 Shipset	72.6	1 Shipset	2nd Quarter FY 02	60.6	Partial	1st Quarter FY 03	24.9
Fire Control	12-24	1 Shipset	19.8	N/A	N/A	0.0	1 Shipset	1st Quarter FY 03	17.0
Navigation	24-48	1 Shipset	8.9	2 Shipsets	2nd Quarter FY 02	8.0	2 Shipsets	1st Quarter FY 03	2.0
Instr/Missile Checkout	24	1 Shipset	11.0	N/A	N/A	0.0	1 Shipset	1st Quarter FY 03	4.0
Other Advance Proc:									
Advance Planning	12-36	N/A	10.7	N/A	2nd Quarter FY 02	3.0	N/A	1st Quarter FY 03	3.0
Total Advance Procurement						**75.6**			**52.9**

Description:

CLASSIFICATION; UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 President's Budget ESTIMATES ($M)											DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY BA #2 OTHER WARSHIPS					P-1 ITEM NOMENCLATURE SSBN ERO (BLI 211300)							
	Prior Years *		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	0		0	0	0	1	1	1	1	1	2	7
End Cost	-		-	-	-	292.5	468.8	366.9	343.4	363.8	768.0	2,603.1
Less Advance Procurement	-		-	-	-	30.2	134.7	75.0	48.4	63.4	76.2	428.0
Full Funding TOA	-		-	-	-	262.2	333.9	291.8	295.0	300.4	691.8	2,175.1
Plus Advance Procurement	-		-	-	105.0	72.2	62.8	57.4	68.3	62.3	-	428.0
Total Obligational Authority	-		-	-	105.0	334.4	396.7	349.2	363.3	362.7	691.8	2,603.1
Plus Outfitting and Post Delivery	-		-	-	-	-	-	-	-	-	-	-
Total	-		-	-	105.0	334.4	396.7	349.2	363.3	362.7	691.8	2,603.1
SSBN Unit Cost (Ave. End Cost)						292.5	468.6	366.9	343.4	363.8	384.0	371.9
End Cost (with BLI 211100 Funding) *	-		-	-	-	372.9	526.5	-	-	-	-	
SSBN Unit Cost (Ave. End Cost) w/BLI 211100 *						372.9	526.5	-	-	-	-	391.6

NOTE: FY04 congressional direction created a new SSBN Engineered Refueling Overhaul (ERO) budget line. Advance procurement for the FY05 and FY06 SSBN EROs and D-5 backfits was funded in FY02 and FY03 in SCN line item 211100.

SSBN ERO: This funding provides for Engineered Refueling Overhauls of OHIO Class (TRIDENT, SSBN 726) Strategic Ballistic Missile Submarines. This is a major overhaul performed near the mid-point of the submarine's service life to re-capitalize the vessel and extend the useful life to maintain the required SSBN force level. Work performed includes: refueling of the reactor; major propulsion plant and ship equipments are repaired or upgraded; obsolete equipments are replaced; Ballistic missile systems are repaired or upgrades; limited alterations to provide for reliable operations during the remaining operational life of the submarines and the ship is re-certified for Unrestricted Operations (SUBSAFE URO). Also provided for is the upgrade of USS HENRY M. JACKSON (SSBN 730) and USS ALABAMA (SSBN 731) strategic weapons systems from TRIDENT I (C4) to TRIDENT II (D5) to achieve the President's Nuclear Posture goal of 14 TRIDENT D-5 equipped SSBN. This upgrade will be performed concurrent with their ERO in FY 2005 and FY 2006, respectively. All funding in the ordnance element of cost provides for procurement and installation of shipboard hardware to upgrade these two C4 configured SSBNs to the D5 configuration. Superstructure modification costs are included to address Force Protection issues. The unit cost reflects the refueling, repair and alterations mandays with the appropriate shipyard rate and material

Characteristics:			SSBN 730
		Production Status	FY05
		Contract Plans	Feb-03
SSBN 726 Class Hulls		Award Planned (Month)	Feb-03
Length Overall	560'	Months to Complete	
Displacement	18,750 TONS	a) Award to Delivery	47
		b) Project Start to Delivery	24
		Commissioning Date	N/A
		Completion of Fitting Out	Jan-07

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

SUBHEAD: 8234

BUDGET ACTIVITY : 2 SUBMARINES

P-1 ITEM NOMENCLATURE: SSBN ERO (BLI 211300)

ELEMENT OF COST	QTY	FY05 TOTAL COST
PLAN COSTS		1,593
BASIC CONST/CONVERSION		167,464
CHANGE ORDERS		-
ELECTRONICS		-
PROPULSION EQUIPMENT		-
HULL, MECH & ELEC		-
OTHER COSTS		3,361
ORDNANCE		120,032
ESCALATION		-
TOTAL SHIP ESTIMATE	1	292,450
LESS: ADVANCE PROCUREMENT FY01		-
LESS: ADVANCE PROCUREMENT FY02		-
LESS: ADVANCE PROCUREMENT FY03		-
LESS: ADVANCE PROCUREMENT FY04		30,221
Pending SCN Execution Review Adjustment		
NET P-1 LINE ITEM		262,229

SHIPBUILDING AND CONVERSION, NAVY

SHIP PRODUCTION SCHEDULE

SHIP TYPE	INDUSTRIAL ACTIVITY	FISCAL YEAR AUTHORIZED	AWARD OF PROJECT	START OF PROJECT	DELIVERY DATE
SSBN 730 ERO	PUGET SOUND NAVAL SHIPYARD	FY 2005	Feb-03	Oct-04	Jan-07

SHIPBUILDING AND CONVERSION , NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: Submarine Refueling Overhaul	(1) FY 05 TOT COST
OTHER	
b. Major Items	
Subtotal	-
c. Miscellaneous Other Support	3,361
TOTAL OTHER	3,361
d. Ordnance	120,032
TOTAL ORDNANCE	120,032

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Basic Escalation

Ship Type: Submarine Refueling Overhaul

I. Design Schedule	Not Applicable to Refueling Overhauls
Issue Date for TLR	N/A
Issue Date for TLS	N/A
Preliminary Design	N/A
Contract Design	N/A
Request for Proposals	N/A
Design Agent	N/A
II. Classification of Cost Estimate	Class D - Budget Quality Estimate (Conversion/Modernization/ERO)
III. Basic Construction/Conversion	SSBN 730
A. Assumed Award Date	Feb-03
B. Contract Type (and Share Line if applicable)	N/A
IV. Escalation	Not Applicable to Refueling Overhauls
Escalation Termination Date	N/A
Escalation Requirement	N/A
Labor/Material Split	N/A
Allowable Overhead Rate	N/A

V. Other Basic (Reserves/Miscellaneous)	Amount
None	N/A

Date: **February 2004**

Shipbuilding and Conversion, Navy
Exhibit P-8a, Analysis of Ship Cost Estimate - Major Equipment
(Dollars in Thousands)

Ship Type: TRIDENT SSBN

Current Funding							FY 2004			FY 2005	
							Qty	Amt		Qty	Amt
Ordnance Equipment											
P-35 Items:											
Launcher & Handling							Partial	44,396			9,827
Fire Control							1 Shipset	18,000			2,800
Navigation											3,900
Instrumentation & Missile Checkout							1 Shipset	4,000		1 Shipset	7,000
Other Items:											
System Integration							1 Lot	29,000		1 Lot	9,000
Advance Planning							N/A	9,573		N/A	4,840
Shipyard Installation										1 Shipset	72,684
DASO Support										1 Shipset	2,800
Total Ordnance Equipment Estimate								**104,969**			**112,851**

P-1 Shopping List - Item No

Exhibit P-8a, Analysis of Ship Cost Estimate - Major Equipment

Date: **February 2004**

Shipbuilding and Conversion, Navy
Exhibit P-35, Major Ship Component Fact Sheet
(Dollars in Thousands)

Ship Type - TRIDENT SSBN Equipment Item - **Launcher & Handling**

Current Funding	FY 2004		FY 2005	
	SSBN	Total FY	SSBN	Total FY
Major Hardware	731	36,496		
Ancillary Equipment	730/731	4,300	730/731	2,187
Technical Data and Documentation				
Spares				
System Engineering				
Technical Engineering Services	730/731	3,600	730/731	5,640
Other Costs (Production Shutdown)			731	2,000
Total Launcher & Handling		**44,396**		**9,827**

Contract Data (Major Hardware)	Prime Contractor	Contract Award Date	Contract Type	New/Option	Contract Qty	Contract Hardware Unit Cost
FY 2004	Northrop Grumman Marine Systems	October 2003	CPIF/SS	New	1	36,496
FY 2005						

Delivery Data	Earliest Ship Delivery Date	Months Required before Delivery	Production Lead Time	Required Award Date
FY 2004		24	12-24	October 2003
FY 2005				

P-1 Shopping List - Item No

Date: **February 2004**

Shipbuilding and Conversion, Navy
Exhibit P-35, Major Ship Component Fact Sheet
(Dollars in Thousands)

Ship Type - TRIDENT SSBN Equipment Item - **Fire Control**

Current Funding	FY 2004		FY 2005	
	SSBN	Total FY	SSBN	Total FY
Major Hardware	731	17,000		
Ancillary Equipment				
Technical Data and Documentation				
Spares				
System Engineering				
Technical Engineering Services	730	1,000	730/731	2,800
Other Costs				
Total Fire Control		**18,000**		**2,800**

Contract Data (Major Hardware)	Prime Contractor	Contract Award Date	Contract Type	New/Option	Contract Qty	Contract Hardware Unit Cost
FY 2004	GDAIS	October 2003	CPIF/SS	New	1	17,000
FY 2005						

Delivery Data	Earliest Ship Delivery Date	Months Required before Delivery	Production Lead Time	Required Award Date
FY 2004	SSBN 731/September 2007	24	24	October 2003
FY 2005				

P-1 Shopping List - Item No

Date: **February 2004**

Shipbuilding and Conversion, Navy
Exhibit P-35, Major Ship Component Fact Sheet
(Dollars in Thousands)

Ship Type - TRIDENT SSBN Equipment Item - **Navigation**

Current Funding						FY 2004			FY 2005	
						SSBN	Total FY		SSBN	Total FY
Major Hardware										
Ancillary Equipment										
Technical Data and Documentation										
Spares										
System Engineering										
Technical Engineering Services									730	3,900
Other Costs										
Total Navigation							**0**			**3,900**

Contract Data (Major Hardware)	Prime Contractor	Contract Award Date	Contract Type	New/Option	Contract Qty	Contract Hardware Unit Cost
FY 2004						
FY 2005						

Delivery Data	Earliest Ship Delivery Date	Months Required before Delivery	Production Lead Time	Required Award Date
FY 2004				
FY 2005				

P-1 Shopping List - Item No

Date: **February 2004**

Shipbuilding and Conversion, Navy
Exhibit P-35, Major Ship Component Fact Sheet
(Dollars in Thousands)

Ship Type - TRIDENT SSBN Equipment Item - **Instrumentation & Missile Checkout**

Current Funding	FY 2004		FY 2005	
	SSBN	Total FY	SSBN	Total FY
Major Hardware	731	2,700		
Ancillary Equipment			730	2,000
Technical Data and Documentation				
Spares				
System Engineering				
Technical Engineering Services			730	5,000
Other Costs (M240R Data Recording System)	731	1,300		
Total Instrumentation & Missile Checkout		**4,000**		**7,000**

Contract Data (Major Hardware)	Prime Contractor	Contract Award Date	Contract Type	New/Option	Contract Qty	Contract Hardware Unit Cost
FY 2004	Lockheed Martin Space Systems Co.	October 2003	CPIF/SS	New	1	2,700
FY 2005						

Delivery Data	Earliest Ship Delivery Date	Months Required before Delivery	Production Lead Time	Required Award Date
FY 2004	SSBN 731/September 2007	24	24	October 2003
FY 2005				

P-1 Shopping List - Item No

Exhibit P-35, Major Ship Component Fact Sheet

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)									Date: Feb-04						
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 211300									P-1 Line Item Nomenclature SSBN EROs						
OHIO (SSBN 726) Class Submarines Submarine Refueling Overhauls (ERO): SSBN 730 (FY05), SSBN 731 (FY06), SSBN 732 (FY07)				First System Award Date Feb-03					First System Completion Date Jan-07						
($ in Millions)		When	Prior												
	PLT	Req'd	Years	FY03	FY04	FY05									Total
End Item Qty															
PLANS - FY05 ERO (1)		Various	-	-	-	-									-
PLANS - FY06 ERO (1)		Various	-	-	-	36.9									36.9
PLANS - FY07 ERO (1)		Various	-	-	-	12.2									12.2
ORDNANCE - FY05 ERO (2)		Various	-	-	30.2	-									30.2
ORDNANCE - FY06 ERO (2)		Various	-	-	74.7	23.0									97.8
TOTAL AP			-	-	105.0	72.2									177.1

(1) **PLANS AP:** Submarine Engineered Refueling Overhauls (EROs) are complex, short duration availabilities performed to extend the useful life of the vessel. Average duration of an ERO is 24 months with a production period of less than 15 months. Unlike ships under construction EROs are preformed on assembled hulls with limited access. The unique sensitive and safety (SUBSAFE) nature of submarine repair and refueling efforts dictates that the availability must be thoroughly and carefully integrated in advance to minimize disruptions and delays. The production period at the beginning of the ERO is extraordinarily labor intensive advance Procurement (AP) is essential for timely & cost-efficient execution.

(2) **ORDNANCE AP**: Required to procure shipboard hardware needed to upgrade TRIDENT I (C4) configured SSBN 730 & SSBN 731 to TRIDENT II (D5) capability. The following page contains a detailed breakout of these costs.

FY04 Congressional direction split SSN & SSBN ERO funding in FY04 & out. FY03 & prior SSBN ERO AP in FY02 & FY03 is funded in BLI 211100.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)												Date: February 2004
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 02/BLI 211300 Submarine Refueling Overhauls (ERO): SSBN 730 (FY05), SSBN 731 (FY06), SSBN 732 (FY07)				OHIO (SSBN 726) Class Submarines					P-1 Line Item Nomenclature: SSBN EROs			
(TOA, $ in Millions)												
	PLT	QPA	Unit Cost	FY 04 Qty	FY 04 Contract Forecast Date	FY 04 Total Cost Request	FY 05 Qty	FY 05 Contract Forecast Date	FY 05 Total Cost Request			
End Item				0	N/A		1	February-03				
PLANS (1) FY06 ERO									36.9			
PLANS (1) FY07 ERO									12.2			
ORDNANCE (2) FY05 ERO						30.2						
ORDNANCE (2) FY06 ERO						74.7			23.0			
Total AP						**105.0**			**72.2**			

(1) **PLANS AP** consists of developing work packages and general engineering design for submarine maintenance, repair, and refueling.

(2) **ORDNANCE AP** is required to procure shipboard hardware needed to upgrade TRIDENT I (C4) configured SSBN 730 to TRIDENT II (D5) capability. The following pages contain a detailed breakout of these costs.

BUDGET ITEM JUSTIFICATION SHEET (P-40) February 2004
FY 2005 PRESIDENT'S BUDGET

Appropriation/Budget Activity: Shipbuilding and Conversion, Navy
BA #2 OTHER WARSHIPS

'Item Nomenclature:- DDG Guided Missile Destroyer 212200
PEO SHIPS CONTROLLED RESOURCES

Total Funding By Ship	PRIOR YEARS	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Complete	TOTAL PROGRAM
Quantity	54	2	3	3	0	0	0	0	0	62
End Cost ($M) (1)	47,315.8	2,423.4	3,323.7	3,505.0	192.2 (2)	291.6 (2)	0.0	0.0	0.0	57,051.7
Less A.P.	(995.1)	(138.9)	(130.7)	(60.0)	0.0	0.0			0.0	(1,324.7)
Less FY96 Funding for MYP	(99.3)	0.0	0.0	0.0	0.0	0.0			0.0	(99.3)
Less FY97 Funding for MYP	(63.1)	0.0	0.0	0.0	0.0	0.0			0.0	(63.1)
Less Cost to Complete (1)	(731.4)	0.0	0.0	0.0	0.0	0.0			0.0	(731.4)
Less Escalation	(48.2)	0.0	0.0	0.0	0.0	0.0			0.0	(48.2)
Less FY00 Transfer	(32.5)	0.0	0.0	0.0	0.0	0.0			0.0	(32.5)
Less FY01 Supplemental	(151.0)	0.0	0.0	0.0	0.0	0.0			0.0	(151.0)
Less FY02 Transfer Funds (Sec 8130)	(17.5)	0.0	0.0	0.0	0.0	0.0			0.0	(17.5)
Less FY03 Transfer	(13.3)	0.0	0.0	0.0	0.0	0.0			0.0	(13.3)
F.F. TOA	45,164.4	2,284.5	3,193.0	3,445.0	192.2	291.6	0.0	0.0	0.0	54,570.7
PLUS A.P.	1,324.7	0.0	0.0	0.0	0.0	0.0			0.0	1,324.7
PLUS F.F. FOR MYP	162.4	0.0	0.0	0.0	0.0	0.0			0.0	162.4
TOA Controls	46,651.5	2,284.5	3,193.0	3,445.0	192.2	291.6			0.0	56,057.8
PLUS Cost to Complete (1)	143.7	383.5	75.9	128.3	0.0	0.0			0.0	731.4
PLUS FY00 Transfer	32.5	0.0	0.0	0.0	0.0	0.0			0.0	32.5
PLUS FY01 Supplemental	151.0	0.0	0.0	0.0	0.0	0.0			0.0	151.0
PLUS FY02 Transfer Funds (Sec 8130)	17.5	0.0	0.0	0.0	0.0	0.0			0.0	17.5
PLUS FY03 Transfer	0.0	13.3	0.0	0.0	0.0	0.0			0.0	13.3
PLUS Outfitting/ Post Delivery	1,150.4	154.7	160.3	162.1	158.7	164.8	161.4	129.4	229.1	2,470.9
PLUS Escalation	48.2	0.0	0.0	0.0	0.0	0.0			0.0	48.2
Total	48,194.8	2,836.0	3,429.2	3,735.4	350.9	456.4	161.4	129.4	229.1	59,522.6
Unit Cost (Avg. End Cost)	876.2	1,211.7	1,107.9	1,168.3					0.0	920.2

MISSION: DDG 51 will be able to operate offensively and defensively, independently or as units of Carrier Battle Groups and Surface Action Groups, in support of Marine Amphibious Task Forces in multithreat environments that include air, surface and subsurface threats. These ships will respond to Low Intensity Conflict/Coastal and Littoral Offshore Warfare (LIC/CALOW) scenarios as well as open ocean conflict providing or augmenting power projection and forward presence requirements, and escort operations at Sea.

Characteristics:		Production Status:	0401	0402	0403	0501	0502	0503
Hull	FLIGHT IIA	Contract Plans						
Length overall	471'	Award Planned (Month)	09/02	09/02	09/02	09/02	09/02	0902
Beam	59'	Months to Complete						
Displacement	9217 TONS	a) Award to Delivery	81	77	85	93	92	99
		b) Construction Start to Delivery	37	37	37	37	37	37
		Commissioning Date	TBD	TBD	TBD	TBD	TBD	TBD
		Completion of Fitting-Out	10/09	06/09	02/10	10/10	09/10	04/11

Armament	Major Electronics:
AEGIS WEAPON SYSTEM (SPY-1D(V))	AN/SQQ-89 (V) 15
VLS MK41/SM-2	AN/SLQ-32
5"62 Gun/NSFS/ERGM	AN/USQ-82(FODMS)
Tomahawk (ATWCS)	EXCOMM
MK 32 MOD 7 Torpedo Tubes	MK 12 IFF
CIWS / ESSM	COMBAT DF (COBLU)
CEC	JTIDS/MIDS

(1) Provides funding for prior year construction included in the SCN line item "Cost to Complete" (BA-5; BLI 530000).
(2) Reflects Program Completion Costs.

BUDGET ACTIVITY: 2
OTHER WARSHIPS

SUBHEAD: A224

ELEMENT OF COST	FY 2002		FY 2003		FY 2004		FY 2005	
		TOT COST		TOT COST		TOT COST		TOT COST
PLAN COSTS	3	83,939	2	88,973	3	76,404	3	79,165
BASIC CONSTRUCTION		1,547,859		1,008,754		1,600,690		1,663,123
CHANGE ORDERS		76,110		49,334		79,948		83,156
ELECTRONICS		503,268		350,437		463,029		497,294
HM&E		48,560		37,639		47,990		48,714
OTHER COST		54,474		50,162		56,066		57,064
ORDNANCE		982,799		838,170		999,588		1,076,434
ESCALATION		0		0		0		0
TOTAL SHIP ESTIMATE		**3,297,009**	**_A/ _B/**	**2,423,469**	**_A/**	**3,323,715**	**_A/**	**3,504,950**	**_A/**
LESS: ADVANCE PROCUREMENT FY 1998		2,394						
LESS: ADVANCE PROCUREMENT FY 1999				3,687		3,687		
LESS: ADVANCE PROCUREMENT FY 2001		244,960		70,800		77,000		60,000
LESS: ADVANCE PROCUREMENT FY 2002				64,442		50,000		
LESS: COMPLETION OF PRIOR YEAR FY 2003		98,000						
NET P-1 LINE ITEM (REQMT)	**3**	**2,951,655**	**2**	**2,284,540**	**3**	**3,193,028**	**3**	**3,444,950**

_A/ MYP is for 10 ships, FY02-FY05, and incorporates pricing consistent with LPD/DDG workload reallocations.

_B/ The additional ship in FY02, the option ship from the FY98-FY01 MYP, was awarded to NGSS and transferred to General Dynamics (BIW) in accordance with LPD/DDG MOU.

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

BUDGET ACTIVITY: 2
OTHER WARSHIPS

SUBHEAD: A224

ELEMENT OF COST	FY 1998 QTY	FY 1998 TOT COST	FY 1999 QTY	FY 1999 TOT COST	FY 2000 QTY	FY 2000 TOT COST	FY 2001 QTY	FY 2001 TOT COST
PLAN COSTS	4	78,537	3	59,752	3	72,079	3	73,787
BASIC CONSTRUCTION		1,658,888		1,238,998		1,260,730		1,297,690
CHANGE ORDERS		82,424		61,048		61,468		63,984
ELECTRONICS		648,965		483,775		457,620		465,495
HM&E		67,220		51,107		52,255		53,177
OTHER COST		55,947		51,919		53,292		54,478
ORDNANCE		1,183,268 _A/		947,377		937,408		917,433
ESCALATION		0		0		0		0
TOTAL SHIP ESTIMATE		**3,775,249 _B/**		**2,893,976 _B/**		**2,894,852 _B/_C/**		**2,926,044 _B/**
LESS: FY01 SUPPLEMENTAL		13,500						
LESS: TRANSFER		17,541						
LESS: FY2003 TRANSFER						13,344 _C/		
LESS: FY96 FUNDING FOR MYP/EQQ		74,531				24,844		
LESS: ADVANCE PROCUREMENT FY1996		1,092						
LESS: ADVANCE PROCUREMENT FY1997		84,086		49,552		50,081		48,957
LESS: ADVANCE PROCUREMENT FY1998				71,152		2,394		32,870
LESS: FY97 FUNDING FOR MYP/EQQ		35,936				15,750		11,314
LESS: COMPLETION OF PRIOR YEAR FY 2002		108,457						
LESS: COMPLETION OF PRIOR YEAR FY 2003		76,100		93,736		51,724		63,976
LESS: COMPLETION OF PRIOR YEAR FY 2004				44,420		24,510		6,984
LESS: COMPLETION OF PRIOR YEAR FY 2005						44,963		83,316
NET P-1 LINE ITEM	**4**	**3,364,006**	**3**	**2,635,116**	**3**	**2,667,242**	**3**	**2,678,627**
PLUS Transfer & Supplemental for Prior Year Ships						32,462		151,000
TOTAL P-1 LINE ITEM		**3,364,006**		**2,635,116**		**2,699,704**		**2,829,627**

_A/ SPY-1D(V) introduced with B/L 7 Ph I on the third ship in FY98.
_B/ Reflects award of the 12 ship MYP (3-3-3-3) for FY98-FY01, plus one awarded option in FY98.
_C/ Reflects FY03 Special Transfer Authority of prior year resources of $13,344K.

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Basic/Escalation

Fiscal Year: 2005 Ship Type: DDG 110-112

I. Design Schedule	**Start / Issue**	**Complete / Issue**	**Reissue**	**Complete / Response**
Issue date for TLR	8/85			
Issue date for TLS				
Preliminary Design	2/81	2/83		
Contract Design	3/83	3/84		
Request for Proposals				
Design Agent	BIW			

II. Classification of Cost Estimate

Class C Budget Estimate

III. Basic Construction/Conversion	**FY 2003**	**FY 2004**	**FY 2005**
a. Award Date	09/02	09/02	09/02
b. Contract Type	Multiyear procurement Fixed Price Incentive	Multiyear procurement Fixed Price Incentive	Multiyear procurement Fixed Price Incentive

IV. Escalation

Base Date	
Escalation Target Cost	
Escalation Termination Date	
Escalation Requirement	Shipbuilding Contracts are forward priced.
Labor/Material Split	
Allowable Overhead Rate	

V. Other Basic (Reserves/Miscellaneous)

N/A

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
DDG 92	BIW	98	Mar-98	Dec-00	Apr-04
DDG 93	NGSS	99	Mar-98	Mar-01	Mar-04
DDG 94	BIW	99	Mar-98	Aug-01	Oct-04
DDG 95	NGSS	99	Mar-98	Sep-01	Aug-04
DDG 96	BIW	00	Mar-98	Apr-02	Jun-05
DDG 97	NGSS	00	Mar-98	Mar-02	Jan-05
DDG 98	NGSS	00	Mar-98	Sep-02	Aug-05
DDG 99	BIW	01	Mar-98	Dec-02	Jan-06
DDG 100	NGSS	01	Mar-98	Mar-03	Mar-06
DDG 101	BIW	01	Mar-98	Aug-03	Aug-06
DDG 102	BIW	02	Jul-02	Feb-04	Mar-07
DDG 103	NGSS	02	Sep-02	Mar-04	Apr-07
DDG 104	BIW	02	Sep-02	Oct-04	Nov-07
DDG 105	NGSS	03	Sep-02	Feb-05	Mar-08
DDG 106	BIW	03	Sep-02	May-05	Jun-08
DDG 107	NGSS	04	Sep-02	May-06	Jun-09
DDG 108	BIW	04	Sep-02	Jan-06	Feb-09
DDG 109	BIW	04	Sep-02	Sep-06	Oct-09
DDG 110	NGSS	05	Sep-02	May-07	Jun-10
DDG 111	BIW	05	Sep-02	Apr-07	May-10
DDG 112	BIW	05	Sep-02	Nov-07	Dec-10

Ship Type: DDG-51 AEGIS DESTROYER

	(2) FY 03			(3) FY 04			(3) FY 05		
	QTY	TOT COST		QTY	TOT COST		QTY	TOT COST	
ELECTRONICS EQUIPMENT									
a. P-35 Items									
1. AN/SQQ 89	2	95,686		3	124,306		3	126,466	
2. AN/SLQ-32A(V)2	2	14,576		3	22,222		3	22,608	
3. USQ 82 FODMS	2	17,130		3	26,028		3	26,483	
4. EXCOMM	2	59,651		3	87,882		3	89,408	
Subtotal		**187,043**			**260,438**			**264,965**	
b. Major Items									
1. NAVIGATION SYSTEM	2	2,679		3	3,802		3	3,867	
2. MK-12 IFF Systems	2	10,676		3	15,450		3	15,725	
3. AN/SLQ 25 NIXIE	2	2,031		3	3,090		3	3,143	
4. AN/SRQ 4	2	9,582	_A/	3	10,735		3	10,921	
5. COMBAT DF (COBLU)	2	32,927		3	24,379		3	49,289	
6. JTIDS/MIDS	2	6,422		3	9,791		3	9,959	
7. CEC	0	0	_B/	0	0	_B/	0	0	_B/
Subtotal		**64,317**			**67,247**			**92,904**	
c. Misc. Electronics		99,077			135,344			139,425	
TOTAL ELECTRONICS		**350,437**			**463,029**			**497,294**	

_A/ AN/SRQ-4 reflects non-recurring for KU Band Upgrade.
_B/ CEC for DDG 103-112 will be backfit in OPN after the ships deliver

Ship Type: DDG-51 AEGIS DESTROYERS	(2) FY 03		(3) FY 04		(3) FY 05	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
H,M,&E EQUIPMENT						
a. P-35 Items						
1. AN/STC 2 (IVCS)	2	15,124	3	20,331	3	20,685
Subtotal		15,124		20,331		20,685
c. Misc. H,M,&E		22,515		27,659		28,029
TOTAL H,M,&E ESTIMATE		**37,639**		**47,990**		**48,714**

Ship Type: DDG-51 AEGIS DESTROYERS

	(2) FY 03			(3) FY 04		(3) FY 05	
	QTY	TOT COST		QTY	TOT COST	QTY	TOT COST
ORDNANCE EQUIPMENT							
a. P-35 Items							
1. AEGIS WEAPON SYSTEM (MK-7)	2	440,390		3	541,314	3	552,092
2. VLS MK 41	2	107,435		3	146,279	3	148,818
3. 5"/62 Gun	2	42,294		3	55,725	3	56,692
4. TOMAHAWK (TTWCS)	2	39,131		3	52,026	3	52,929
5. CIWS Block 1B (one mount)				3	26,935	3	22,142
Subtotal		**629,250**			**822,279**		**832,673**
b. Major Items							
1. Torpedo Tubes MK-32 Mod 7	4	4,127		6	5,822	6	5,923
2. Electro-Optical System	2	6,012		3	8,524	3	8,672
3. MK 160 GFCS	2	9,907		3	14,715	3	14,971
4. AN/SPS-67 RADAR	2	14,203	_A/	3	8,212	3	8,355
5. ESSM	2	1,204		3	1,833	3	1,864
Subtotal		**35,453**			**39,106**		**39,785**
c. Misc. Ordnance		173,467	_B/		138,203		203,976
TOTAL ORDNANCE		**838,170**			**999,588**		**1,076,434**

_A/ AN/SPS-67 Radar reflects increase for processor redesign for modifications required to replace obsolete components.

_B/ Includes funding for COTS Refresh and SPY-1D(V) Operational Test (IIIG).

FY2005 PRESIDENT'S BUDGET									DATE: FEBRUARY 2004
APPROPRIATION/BUDGET ACTIVITY BA #3 AMPHIBIOUS SHIPS				P-1 ITEM NOMENCLATURE LHD-1 AMPHIBIOUS ASSAULT SHIPS; BLI - 303500; SUBHEAD - 2385/2386/1386					
	PRIOR YEARS	FY2003	FY2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	8	0	0	0	0	0	0	0	0	8
End Cost	9,552.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9,552.2
Less Advance Procurement	1,496.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,496.7
Less Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less Subsequent Year FF	948.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	948.1
Full Funding TOA	7,107.4	238.0	352.2	236.0	121.9	0.0	0.0	0.0	0.0	8,055.5
Plus Advance Procurement	1,496.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,496.7
Total Obligational Authority	8,604.1	238.0	352.2	236.0	121.9	0.0	0.0	0.0	0.0	9,552.2
Plus Outfitting and Post Delivery	248.1	0.0	0.0	10.1	8.6	32.0	3.2	26.8	0.0	328.9
Plus Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	8,852.2	238.0	352.2	246.1	130.5	32.0	3.2	26.8	0.0	9,881.1
Unit Cost (Avg. End Cost)	1,194.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,194.0

MISSION:

The primary mission of the ship will be amphibious assault. As a secondary mission, the LHD will operate AV-8's in the attack role. The LHD will have the capability to operate and support helicopters, VSTOL aircraft, amphibious craft and landing craft. It will be capable of embarking the troops, vehicles, cargo and aircraft landing forces and launching them in surface and vertical assault.

Characteristics:		Production Status	FY02
Hull		Award	4/02
Length overall	844'	Months to Complete	
Beam	106'	a) Award to Delivery	63
Displacement	40,533 TONS	b) Construction Start to Delivery	50
Draft	26'6"	Commissioning Date	10/07

Armament:	Major Electronics
CIWS/MK-15 Mod 12 (LHD 7 only)	AN/SLQ-32(V)3
AN/SPS-49(V)5 Radar	EXCOMM
AN/SPS-48E	Ship Surveillance Exploitation System
NATO Seasparrow	NTCS-A
Rolling Airframe Missile	CEC (LHD 8)
	SSDS MK II (LHD 8)

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

BUDGET ACTIVITY: 3
AMPHIBIOUS SHIPS

P-1 ITEM NOMENCLATURE: LHD 1 CLASS AMPHIBIOUS ASSAULT SHIP

SUBHEAD: 2385/2386/1386

ELEMENT OF COST	QTY	FY02 TOT COST
PLAN COSTS	1	0
BASIC CONST/CONVERSION		1,390,183
CHANGE ORDERS		113,457
ELECTRONICS		255,680
PROPULSION EQUIPMENT		0
HM&E		49,373
OTHER COST		76,740
ORDNANCE		97,227
ESCALATION		76,673
TOTAL SHIP ESTIMATE		2,059,333
LESS ADVANCE PROCUREMENT FY99		44,205
LESS ADVANCE PROCUREMENT FY00		355,170
LESS ADVANCE PROCUREMENT FY01		455,777
LESS FY02 SUBSEQUENT YEAR FULL FUNDING		255,991
LESS FY03 SUBSEQUENT YEAR FULL FUNDING		238,058
LESS FY04 SUBSEQUENT YEAR FULL FUNDING		352,217
LESS FY06 SUBSEQUENT YEAR FULL FUNDING		121,897
NET P-1 LINE ITEM		236,018

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Basic/Escalation

Ship Type: LHD

I. Design Schedule	Start	Complete
Preliminary Design		
Contract Design		
Issue Date for TOR		
Detail Design (LHD 8)	JUN 2000	JUN 2002

II. Classification of Cost Estimates

CLASS C

III. Basic Construction/Conversion	FY02
a. RFP Response Date	NOV 2001
b. Award Date	APR 2002
c. Contract Type	FPI

IV. Escalation	
Base Date	JUN 2001

SHIPBUILDING AND CONVERSION, NAVY
Ship Production Schedule

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LHD 8	INGALLS	2002	Apr-02	May-03	Jul-07

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: LHD

	(1) FY 02 QTY	(1) FY 02 TOT COST
ELECTRONIC EQUIPMENT		
a. P-35 Items		
1. AADS	1	5,068
2. AN/SLQ-32	1	5,704
3. AN/SPN-35C	1	2,395
4. AN/SPN-41	1	3,258
5. AN/TPX-42	1	3,959
6. AN/WSN-7	1	2,647
7. BFTT	1	7,050
8. C4ISR	1	98,892
9. CEC	1	12,081
10 . IVN	1	8,982
11. JSIPS	1	6,300
12. MK-12 IFF	1	5,152
13. SSDS	1	53,656
14. AN/WQN-1	1	0
Subtotal		215,144
b. Major Items		
1. AN/SLQ-25	1	1,579
2. AN/SPN-43	1	2,682
3. AN/SRC-55	1	2,196
Subtotal		6,457
c. Other Electronics		34,079
TOTAL ELECTRONICS		255,680

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: LHD

	(1) FY 02 QTY	(1) FY 02 TOT COST
HM&E EQUIPMENT		
a. P-35 Items		
NONE		
Subtotal		0
b. Major Items		
1. Equipment & Engineerin		37,525
2. SUPSHIP Material/Svcs		3,675
3. Test & Instrumentation		8,173
4. Live Fire Test & Evaluati		0
Subtotal		49,373
c. Other HM&E		0
NONE		
TOTAL HM&E		49,373

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: LHD

	(1) FY 02 QTY	TOT COST
ORDNANCE EQUIPMENT		
a. P-35 Items		
1. AN/SPQ-9B	1	6,997
2. AN/SPS-48E	1	12,675
3. AN/SPS-49	1	5,542
4. CIWS	2	11,537
5. Nato Seasparrow	2	22,145
6. RAM	2	16,981
Subtotal		75,877
b. Major Items		
1. AN/SPS-67	1	1,109
2. TISS	1	1,705
3. SPQ-14 (ASDS)	1	2,559
Subtotal		5,373
c. Other Ordnance		
1. Aviation Support		5,358
2. Ordnance Support		3,185
3. Total Ship Test Program		7,434
Subtotal		15,977
TOTAL ORDNANCE		97,227

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AMPHIBIOUS ASSAULT DIRECTION SYSTEM (AADS)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: AADS uses the Position Location Reporting System (PLRS)and/or the Enhanced PLRS (EPLRS) to track those ships and craft equipped with PLRS or EPLRS radios launched from the Amphibious Ready Group (ARG). The PLI tracks are calculated at the PLRS Master Station (MS) or EPLRS Net Control Station (NCS) installed on the ARG Command Ship (LHD/LHA) and transmitted to the AN/KSQ-1 workstation resident in CIC. The track data base is displayed on the KSQ-1 workstation allowing the Boat Control Officer to monitor the craft transiting the lanes to and from the objective.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	850
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	160
SPARES	362
SYSTEMS ENGINEERING	624
TECH ENGINEERING SVCS	0
OTHER COSTS	3,072
TOTAL	5,068

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	AVAYA AND DYNALEC	1	VARIOUS	VARIOUS

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	VARIOUS	VARIOUS	VARIOUS	VARIOUS

V. COMPETITION/SECOND SOURCE INITIATIVES
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AN/SLQ-32A(V3)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/SLQ-32A(V)3 is the Anti-Ship Missile Defense (ASMD) electronic warfare system that provides a family of modular shipborne electronic warfare equipment's. The Electronic Support Measures (ESM) part of the system automatically detects, sorts, classifies, identifies, and continuously displays signals within their frequency band.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	3,700 *
ANCILLARY EQUIPMENT	155
TECH DATA & DOC	79
SPARES	120
SYSTEMS ENGINEERING	60
TECH ENGINEERING SVCS	300
OTHER COSTS	1,290
TOTAL	5,704

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	N/A	1	3,700	N/A*

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Jun-04	30 Months	30 Months	N/A*

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A
* Refurbished System

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AN/SPN-35C

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/SPN-35C is a Precision Approach Radar (PAR) set deployed on the MCS and LHD Class ships to provide mode III localizer and glide slope guidance to Navy/Marine aircraft. The radar set is used in conjunction with a Vertical/Short Take-off and Landing (V/STOL) Optical Landing System (OLS) and the AN/SPN-41A Instrument Control Landing System (ICLS) for precision landing operations.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	1,720
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	0
SPARES	0
SYSTEMS ENGINEERING	590
TECH ENGINEERING SVCS	31
OTHER COSTS	54
TOTAL	2,395

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	VARIOUS	1	1,720	VARIOUS

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Feb-05	32 Months	17 Months	Sep-03

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM:AN/SPN-41A

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: AN/SPN-41/41A: Transmitting set that provides all weather instrument approach guidance from the ship to the aircraft. Used as the ship's Instrument Landing System (ILS) & Monitor to provide azimuth and elevation alignment information.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	2,247
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	0
SPARES	0
SYSTEMS ENGINEERING	498
TECH ENGINEERING SVCS	156
OTHER COSTS	357
TOTAL	3,258

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	VARIOUS	1	2,247	VARIOUS

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Nov-06	23 Months	12 Months	Nov-03

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM:AN/TPX-42A(V) 14

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/TPX-42A(V) Direct Altitude and Identity Readout (DAIR) systems are designed to provide improved flight data processing, tracking and display capabilities for air traffic control (ATC) centers. They provide air traffic controllers with identity, altitude, and current status on aircraft within 50nm of the aviation capable platform.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	2,629
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	0
SPARES	280
SYSTEMS ENGINEERING	611
TECH ENGINEERING SVCS	0
OTHER COSTS	439
TOTAL	3,959

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	VARIOUS	1	2,629	VARIOUS

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Feb-04	32 Months	24 Months	Feb-02

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: RING LASER GYRO NAVIGATOR (RLGN) - AN/WSN-7(V)3

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/WSN-7 is a passive shipboard navigation system which continuously provides ship's position, attitude, heading and velocity information for navigation and combat systems users. Replaces AN/WSN-1/3/5 on surface and subsurface ships, to provide commonality, as well as correcting existing inadequacies in the areas of maintainability, performance, environmental effects, reliability and ownship costs.monitor the craft transiting the lanes to and from the objective.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
ANCILLARY EQUIPMENT	
MAJOR HARDWARE	1,100
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	135
SPARES	129
SYSTEMS ENGINEERING	212
TECH ENGINEERING SVCS	159
OTHER COSTS	912
TOTAL	2,647

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	AVAYA AND DYNALEC	1	1,100	Feb-03

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Nov-06	9 Months	7 Months	Apr-06

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: BATTLE FORCE TACTICAL TRAINING (BFTT) SYSTEM AND INTEGRATION

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/USQ-T46(V)BFTT System provides standardized combat system team proficiency training for the Surface Fleet in accordance with the Afloat Training Strategy. BFTT interfaces to and/or provides an integrated training capability for the primary combat system elements onboard LHD8.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	4,300
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	450
SPARES	125
SYSTEMS ENGINEERING	500
TECH ENGINEERING SVCS	400
OTHER COSTS	1,275
TOTAL	7,050

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	N/A	1	4,300	N/A

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	N/A	N/A	12	N/A

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: COMMAND, CONTROL, COMMUNICATION, COMPUTER, INTELLIGENCE, SURVEILANCE, AND RECONNAISANE (C4ISR)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The Command, Control, Communication, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) provides the link between the ship, the command hierarchy and other unit of the operation force.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	74,566
ANCILLARY EQUIPMENT	2,250
TECH DATA & DOC	4,000
SPARES	4,000
SYSTEMS ENGINEERING	3,500
TECH ENGINEERING SVCS	4,250
OTHER COSTS	6,326
TOTAL	98,892

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	VARIOUS	1	VARIOUS	TBD

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	VARIOUS	VARIOUS	VARIOUS	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AN/USG-2 COOPERATIVE ENGAGEMENT CAPABILITY (CEC)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: AN/USG-2 Cooperative Engagement Capability (CEC) significantly improves Battle Force Anti-Air Warfare (AAW) capability (CEC) significantly improves by coordinating all Battle Force AAW sensors into a single, real-time, composite track picture capable of fire control quality. CEC distributes sensor data from each ship and aircraft, or cooperating unit (CU), to all other CU's in the battle force through a real-time, line of sight, high data rate sensor and engagement data distribution network. CEC data is presented as a superset of the best AAW sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapons system. Moreover, CEC will provide critical connectivity and integration of over-land air defense systems capable of countering emerging air threats, including land attack cruise missiles, in a complex littoral environment. CEC consists of the DATA Distribution System (DDS), the Cooperative Engagement Processor (CEP), and Combat System modifications. The DDS encodes and distributes ownship sensor and providing a precision gridlocking and high throughput of data. The CEP is a high capacity distributed processor that is able to process force levels of data in a timely manner, allowing its output to be considered real-time fire control data.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	5,928
ANCILLARY EQUIPMENT	200
TECH DATA & DOC	0
SPARES	1,426
SYSTEMS ENGINEERING	450
TECH ENGINEERING SVCS	750
OTHER COSTS	3,327
TOTAL	12,081

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	RAYTHEON	1	5,928	Jun-01

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Nov-02		18 Months	Jun-01

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: INTEGRATED VOICE NETWORK(IVN)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The Integrated Voice Network (IVN) system provides replacement of current unsupportable, labor intensive shipboard tactical interior communication systems. IVN provides increased video, voice and data communications capability, and decreases the number of handsets and terminals in confined operational spaces onboard ship. IVN provides all interfaces to C41 installations onboard ship.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	6,913
ANCILLARY EQUIPMENT	715
TECH DATA & DOC	90
SPARES	0
SYSTEMS ENGINEERING	125
TECH ENGINEERING SVCS	0
OTHER COSTS	1,139
TOTAL	8,982

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	AVAYA AND DYNALEC	1	6,913	Feb-03

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Nov-06	9 Months	7 Months	Apr-06

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM:JOINT SERVICE IMAGERY PROCESSING SYSTEM - NAVY(JSIPS)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The Joint Service Imager Processing System-Navy (JSIPS-N) is a shipboard digital imagery system with the capability to receive, process, exploit, store and disseminate imagery products and imagery derived intelligence reports based upon multi-source imagery from national and tactical sensors. The primary purpose of JSIPS-N is to increase the self-sufficiency afloat of tactical aviators and strike, naval fire support and expeditionary force planners in the precision delivery of ordinance.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	5,300
ANCILLARY EQUIPMENT	250
TECH DATA & DOC	160
SPARES	240
SYSTEMS ENGINEERING	0
TECH ENGINEERING SVCS	0
OTHER COSTS	350
TOTAL	6,300

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	TBD	1	5,300	TBD

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	TBD	TBD	TBD	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM:MK12 IFF

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The Interrogator System AN/UPX-29 (V) is deployed on high capability, state of the art surface platforms that require Identification Friend or Foe (IFF) operational performance beyond that provided by a standard Mark XII system for combat identification.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	3,559
ANCILLARY EQUIPMENT	82
TECH DATA & DOC	138
SPARES	308
SYSTEMS ENGINEERING	291
TECH ENGINEERING SVCS	150
OTHER COSTS	624
TOTAL	5,152

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	LITTON	1	2,663	Nov-01
02	LHD	SANDERS	1	896	Mar-01

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Feb-04	32 Months	22 Months	N/A

V. COMPETITION/SECOND SOURCE INITIATIVES
Non-Competitive/Sole Source Production Contract/CPAF

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: SHIP SELF DEFENSE SYSTEM (SSDS)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The SSDS MK2 provides selected ships with greater capability to defend themselves against Anti-Ship Cruise Missile (ASCM) attacks.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	14,163
ANCILLARY EQUIPMENT	204
TECH DATA & DOC	611
SPARES	1,179
SYSTEMS ENGINEERING	2,536
TECH ENGINEERING SVCS	1,000
OTHER COSTS	33,963
TOTAL	53,656

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	RAYTHEON	1	14,163	May-02

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Feb-04	28 Months	18 Months	Aug-02

V. COMPETITION/SECOND SOURCE INITIATIVES
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AN/SPQ-9B

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/SPQ-9B is a multimode. X-Band, narrow beam, pulse Dopper radar that detects all known projected sea skimming missiles at the horizon in heavy clutter, while simultaneously providing detection and tracking of surface targets and beacon responses.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	5,047
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	100
SPARES	400
SYSTEMS ENGINEERING	1,450
TECH ENGINEERING SVCS	0
OTHER COSTS	0
TOTAL	6,997

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	NORTHROP GRUMMAN	1	5,047	Jun-02

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	N/A	12 Months	18 Months	Jun-02

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AN/SPS-48E RADAR

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/SPS-48E Radar is a three-coordinate air search radar whose primary function is to provide target position data to a weapon system. Collateral functions include air traffic and intercept control.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	7,700 *
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	150
SPARES	200
SYSTEMS ENGINEERING	960
TECH ENGINEERING SVCS	1,500
OTHER COSTS	2,165
TOTAL	12,675

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	ITT/GILFILLAN	1	7,700	N/A*

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	12/05	32 Months	18 Months	N/A*

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A
* Refurbished system

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: AN/SPS-49 (V)5 RADAR

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The AN/SPS-49 Radar is a narrow beam, very long range, two dimensional air search radar. In replacing some older radar's which are nearing end-of-life, the AN/SPS-49 offers greatly improved operational performance, reliability and maintainability.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	3,439
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	0
SPARES	0
SYSTEMS ENGINEERING	575
TECH ENGINEERING SVCS	0
OTHER COSTS	1,528
TOTAL	5,542

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	RAYTHEON	1	3,439	N/A*

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	12/05	32 Months	24 Months	N/A*

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: CLOSE-IN WEAPONS SYSTEM (CIWS)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: A fast reaction terminal defense against low-flying high speed, anti-ship missile penetrating other fleet defensive envelopes. The system is an automatic, self contained unit consisting of search and track radar, digitalized fire control and a 20 MM gun on CIWS all mounted in a single above deck structure requiring a minimum of interference with other ship systems.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	9,476 *
ANCILLARY EQUIPMENT	100
TECH DATA & DOC	57
SPARES	968
SYSTEMS ENGINEERING	188
TECH ENGINEERING SVCS	367
OTHER COSTS	381
TOTAL	11,537

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	RAYTHEON	2	4,738	Feb-04

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Dec-05	19 Months	22 Months	Feb-04

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A
* Refurbished System

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: NATO SEASPARROW SURFACE MISSILE SYSTEM (NSSMS)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: The NSSMS consists of a guided missile fire control system containing a power driven illuminator with bore sight television below deck control, digital computation, lightweight/low silhouette eight cell type launcher in an eight cell launcher.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	9,658 *
ANCILLARY EQUIPMENT	0
TECH DATA & DOC	0
SPARES	1,128
SYSTEMS ENGINEERING	2,479
TECH ENGINEERING SVCS	1,827
OTHER COSTS	7,053
TOTAL	22,145

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	RAYTHEON	2	4,829	Jan-03

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Nov-04	24 Months	24 Months	Jan-03

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A
*Refurbished System

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
($000)

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEBRUARY 2004

ITEM: ROLLING AIRFRAME MISSILE (RAM)

I. DESCRIPTION/CHARACTERISTIC/PURPOSE: RAM is a lightweight, quick reaction high firepower missile system designed to provide anti-ship defense. The system is comprised of a MK44 Guided Missile Round Pack (GMRP) and and the MK49 Guided Missile Launching System (GMLS) which holds 21 RAM missiles. This system is designed to counter high density anti-ship cruise missile raids and provides for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence.

II. CURRENT FUNDING

SHIPTYPE: LHD	FY02
MAJOR HARDWARE	10,804
ANCILLARY EQUIPMENT	153
TECH DATA & DOC	0
SPARES	318
SYSTEMS ENGINEERING	2,330
TECH ENGINEERING SVCS	120
OTHER COSTS	3,256
TOTAL	16,981

III. CONTRACT DATA:

PROGRAM YEAR	SHIPTYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE
02	LHD	RAYTHEON	2	5,402	Dec-01

IV. DELIVERY DATA:

PROGRAM YEAR	SHIPTYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE SHIP DEL	PRODUCTION LEAD TIME	REQUIRED AWARD
02	LHD	Oct-03	33 Months	21 Months	N/A

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40)

FY 2005 President's Budget

DATE: FEBRUARY 2004

APPROPRIATION/BUDGET ACTIVITY
BA #3 AMPHIBIOUS SHIPS

P-1 ITEM NOMENCLATURE
LPD-17 AMPHIBIOUS TRANSPORT DOCK BLI 303600; SUBHEAD 8317/2317/2316

	PRIOR YRS	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMP	TOTAL PROGRAM
QUANTITY	4	1	1	1	1	1	1	1	1	12
Total Funding By Ship										
End Cost	4,747.7	1,138.3	1,246.7	1,108.5	1,103.8	1,199.7	1,225.5	1,254.0	1,612.3	14,636.5
Less Advance Procurement	96.0	554.0	64.1	141.9	8.7	0.0	0.0	0.0	0.0	864.6
Less Cost to Complete	1273.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,273.4
Less FY 2001 Transfer	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0
Less FY 2001 Supplemental Transfer	113.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	113.0
Less FY 2002 Transfer	90.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90.8
Less FY 2003 Transfer	20.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2
Less Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Funding TOA	3127.3	584.4	1182.7	966.6	1095.1	1199.7	1225.5	1254.0	1612.3	12,247.5
Plus Advance Procurement	730.7	0.0	133.9	0.0	0.0	0.0	0.0	0.0	0.0	864.6
Plus Transfer / Supplemental	230.8	20.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	251.0
Total Obligational Authority	4,088.8	604.6	1,316.6	966.6	1,095.1	1,199.7	1,225.5	1,254.0	1,612.3	13,363.1
Total Program Funding By Fiscal Year										
Plus Cost to Complete	173.0	569.7	259.2	264.8	6.8	0.0	0.0	0.0	0.0	1,273.4
Plus Outfitting & Post Delivery	0.0	26.9	68.5	81.1	120.7	45.4	32.9	72.0	396.9	844.5
TOTAL	4,261.7	1201.2	1644.3	1312.5	1222.6	1,245.2	1,258.4	1,326.0	2,009.2	15,481.0
Unit Cost (Ave. End Cost)	1,186.9	1,138.3	1,246.7	1,108.5	1,103.8	1,199.7	1,225.5	1,254.0	1,612.3	1,219.7

MISSION: Functional replacement for LKA 113, LPD 4, LSD 36, and LST 1179 classes of Amphibious Ships in embarking, transporting, and landing elements of a Marine landing force in an assault by helicopters, landing craft, amphibious vehicles, and by a combination of these methods to conduct primary amphibious warfare missions.

CHARACTERISTICS:

Hull

Length overall	208.5M (684')
Beam	31.9M (105')
Displacement	25.3L MT (24.9K I
Draft	7M (23')

PRODUCTION STATUS:

Contract Plans	0501
Award Planned (Month)	Dec 04
Months to Complete	
a) Award to Delivery	54
b) Const. Start to Delivery	42
Commissioning Date	Aug 09

Armament

RAM Missile System

SPQ-9B

AN/SPS-48E

30 mm Mark 46 Gun System

50 cal Machine Gun

VLS/ESSM (Space, weight, cables and foundations only.)

Totals may not add due to rounding.

WEAPONS SYSTEM COST ANALYSIS (EXHIBIT P-5)

(Dollars in Thousands)

BUDGET ACTIVITY: 3 — AMPHIBIOUS SHIPS

P-1 ITEM NOMENCLATURE: LPD-17 — AMPHIBIOUS TRANSPORT DOCK

SUBHEAD: 8317

	FY 1996 LPD 17		FY 1999 LPD 18		FY 2000 LPD 19/20		FY 2003 LPD 21		FY 2004 LPD 22		FY 2005 LPD 23	
ELEMENT OF COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
PLAN COSTS	1	0	1	0	2	0	1	0	1	0	1	0
BASIC CONSTRUCTION		1,396,028		725,988		1,458,101		798,446		844,286		819,189
CHANGE ORDERS		98,600		72,801		98,205		36,768		42,342		41,468
ELECTRONICS		142,669		138,735		260,367		170,832		202,502		171,129
PROPULSION EQUIPMENT		0		0		0		0		0		0
HM&E		57,727		18,487		55,995		54,658		60,576		15,492
OTHER COST		13,067		7,308		2,929		9,043		10,510		10,025
ORDNANCE		49,968		47,795		102,905		68,569		86,521		51,194
ESCALATION		0		0		0		0		0		0
TOTAL SHIP ESTIMATE		1,758,059		1,011,114		1,978,502		1,138,316		1,246,736		1,108,498
LESS: ADVANCE PROCUREMENT (FY98)				96,026								
LESS: ADVANCE PROCUREMENT (FY01)								399,706		64,067		8,000
LESS: ADVANCE PROCUREMENT (FY02)								154,249				
LESS: ADVANCE PROCUREMENT (FY03)												0
LESS: ADVANCE PROCUREMENT (FY04)												0
LESS: ADVANCE PROCUREMENT (FY04)												133,939
LESS: FY 2000 TRANSFER		26,984										
LESS: FY 2001 SUPPLEMENTAL TRANSFER		113,000										
LESS: FY 2002 TRANSFER				90,783								
LESS: FY02 COST TO COMPLETE		172,956										
LESS: FY 2003 TRANSFER				20,220								
LESS: FY03 COST TO COMPLETE		300,681		82,000		187,000						
LESS: FY04 COST TO COMPLETE		95,300		51,100		112,778						
LESS: FY05 COST TO COMPLETE		55,000		38,100		171,681						
LESS: FY06 COST TO COMPLETE		0		0		6,808						
NET P-1 LINE ITEM		994,138		632,885		1,500,235		584,361		1,182,669		966,559
Appropriation for Prior Year Ships						26,984						
Total P-1 LINE ITEM						1,527,219						

WEAPONS SYSTEM COST ANALYSIS (EXHIBIT P-5)
(Dollars in Thousands)

BUDGET ACTIVITY: 3 AMPHIBIOUS SHIPS

P-1 ITEM NOMENCLATURE: LPD-17 AMPHIBIOUS TRANSPORT DOCK

SUBHEAD: 8317

	FY 2006 LPD 24		FY 2007 LPD 25		FY 2008 LPD 26		FY 2009 LPD 27	
ELEMENT OF COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
PLAN COSTS	1	0	1	0	1	0	1	0
BASIC CONSTRUCTION		825,500		832,686		853,600		875,443
CHANGE ORDERS		41,275		41,608		42,680		43,777
ELECTRONICS		165,369		197,324		196,679		197,854
PROPULSION EQUIPMENT		0		0		0		0
HM&E		11,614		42,919		44,983	0	44,053
OTHER COST		9,345		10,230		10,295		10,300
ORDNANCE		50,687		74,964		77,225		82,529
ESCALATION		0		0		0		0
TOTAL SHIP ESTIMATE		1,103,789		1,199,731		1,225,462		1,253,956
LESS: ADVANCE PROCUREMENT (FY01)		8,700						
NET P-1 LINE ITEM		1,095,089		1,199,731		1,225,462		1,253,956

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Basic/Escalation

Ship Type: LPD 17

I. Design Schedule	Start	Complete
Preliminary Design	JAN 1993	NOV 1993
Contract Design	DEC 1993	MAR 1996
Issue Date for TOR	-	SEP 1988
Detail Design	DEC 1996	JUL 2002

II. Classification of Cost Estimates

CLASS C

III. Basic Construction/Conversion	FY96 (0001)	FY99 (0001)	FY00 (0001)	FY00 (0002)	FY03 (0001)	FY04 (0001)	FY05 (0001)
a. RFP Response Date	JUN 1996	JUN 1996	JUN 1996	OCT 1999	JAN 2003	MAR 2004	SEP 2004
b. Award Date	DEC 1996	DEC 1998	FEB 2000	MAY 2000	NOV 2003	JUN 2004	DEC 2004
c. Contract Type	CPIF	CPIF	CPIF	CPIF	CPIF	FPIF/AF	FPIF/AF
IV. Escalation							
Base Date	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED	JUL 2003	JUL 2004

SHIPBUILDING AND CONVERSION, NAVY

SHIP PRODUCTION SCHEDULE

EXHIBIT P-27

FY 2005 PRESIDENT'S BUDGET

FEB 2004

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LPD 9601	LPD 17	NGSSAO	1996	DECEMBER 1996	JUNE 2000	DECEMBER 2004
LPD 9901	LPD 18	NGSSAO	1999	DECEMBER 1998	FEBRUARY 2002	SEPTEMBER 2005
LPD 0001	LPD 19	NGSSAO	2000	FEBRUARY 2000	JULY 2001	DECEMBER 2005
LPD 0002	LPD 20	NGSSAO	2000	MAY 2000	OCTOBER 2002	JUNE 2006
LPD 0301	LPD 21	NGSSAO	2003	NOVEMBER 2003	MARCH 2004	AUGUST 2007
LPD 0401	LPD 22	NGSSAO	2004	JUNE 2004	DECEMBER 2004	JUNE 2008
LPD 0501	LPD 23	NGSSAO	2005	DECEMBER 2004	DECEMBER 2005	JUNE 2009
LPD 0601	LPD 24	NGSSAO	2006	DECEMBER 2005	DECEMBER 2006	JUNE 2010
LPD 0701	LPD 25	NGSSAO	2007	DECEMBER 2006	DECEMBER 2007	JUNE 2011
LPD 0801	LPD 26	NGSSAO	2008	DECEMBER 2007	DECEMBER 2008	JUNE 2012
LPD 0901	LPD 27	NGSSAO	2009	DECEMBER 2008	DECEMBER 2009	JUNE 2013
LPD 1001	LPD 28	NGSSAO	2010	DECEMBER 2009	DECEMBER 2010	JUNE 2014

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	(1) FY 96		(1) FY 99		(2) FY 00		(0) FY 01		(0) FY 02		(1) FY 03		(1) FY 04		(1) FY 05	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
ELECTRONIC EQUIPMENT																
a. P-35 Items																
1. C4ISR	1	63,525	1	64,216	2	121,880	0	0	0	0	1	69,162	1	69,586	1	70,415
2. SSDS Mark 2	1	34,520	1	32,692	2	64,406	0	0	0	0	1	30,733	1	22,757	1	23,239
3. CEC (FY 96-00 included in SSDS MK2)	0	0	0	0	0	0	0	0	0	0	1	6,833	1	5,898	1	6,636
4. MK 12 AIMS IFF	1	5,819	1	5,255	2	10,374	0	0	0	0	1	5,455	1	5,823	1	6,308
5. AN/SLQ-32(V)2 (Refurb)	1	4,343	1	4,753	2	9,706	0	0	0	0	1	5,165	1	5,366	1	5,378
Subtotal		108,207		106,916		206,366		0		0		117,348		109,430		111,976
b. Major Items																
1. NULKA	1	1,588	1	1,298	2	2,725	0	0	0	0	1	1,546	1	1,578	1	1,578
2. AMPHIB ASSAULT DIR SYSTEM	1	3,402	1	3,416	2	6,738	0	0	0	0	1	3,237	1	3,305	1	2,767
3. BATTLE FORCE TACTICAL TRAINER	1	5,700	1	4,545	2	9,270	0	0	0	0	1	4,912	1	5,015	1	4,286
4. NIXIE	1	975	1	964	2	1,014	0	0	0	0	1	937	1	1,135	1	1,140
5. RADIAC	1	131	1	142	2	267	0	0	0	0	1	141	1	144	1	130
6. UNMANNED AERIAL VEHICLES	0	0	0	0	0	0	0	0	0	0	1	3,880	1	3,962	1	4,045
7. SIGNAL INTELLIGENCE	0	0	0	0	0	0	0	0	0	0	1	1,080	1	1,103	1	1,126
8. AN/S[Q-14 (FY 96-00 included in SSDS MK2)	0	0	0	0	0	0	0	0	0	0	1	1,244	1	1,285	1	1,472
Subtotal		11,796		10,365		20,014		0		0		16,977		17,527		16,544
c. Other Electronics		22,666		21,454		33,987		0		0		36,507		75,545		42,609
TOTAL ELECTRONICS		142,669		138,735		260,367		0		0		170,832		202,502		171,129

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	(1) FY 06		(1) FY 07		(1) FY 08		(1) FY 09	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
ELECTRONIC EQUIPMENT								
a. P-35 Items								
1. C4ISR	1	67,555	1	75,067	1	75,523	1	76,398
2. SSDS Mark 2	1	23,856	1	24,639	1	25,139	1	25,456
3. CEC (FY 96-00 included in SSDS MK2)	1	6,728	1	6,822	1	6,918	1	7,164
4. MK 12 AIMS IFF	1	6,339	1	6,020	1	5,755	1	5,846
5. AN/SLQ-32(V)2 (Refurb)	1	5,572	1	5,678	1	5,792	1	5,907
Subtotal		110,051		118,226		119,127		120,772
b. Major Items								
1. NULKA	1	1,582	1	1,582	1	1,601	1	1,601
2. AMPHIB ASSAULT DIR SYSTEM	1	2,767	1	2,833	1	2,833	1	2,874
3. BATTLE FORCE TACTICAL TRAINER	1	4,595	1	4,682	1	4,685	1	4,639
4. NIXIE	1	1,140	1	1,140	1	1,140	1	1,140
5. RADIAC	1	130	1	130	1	130	1	130
6. UNMANNED AERIAL VEHICLES	1	4,130	1	4,217	1	4,305	1	4,396
7. SIGNAL INTELLIGENCE	1	1,150	1	1,174	1	1,199	1	1,224
8. AN/S[Q-14 (FY 96-00 included in SSDS MK2)	1	1,513	1	1,622	1	1,722	1	1,735
Subtotal		17,007		17,380		17,615		17,739
c. Other Electronics		38,311		61,718		59,937		59,343
TOTAL ELECTRONICS		165,369		197,324		196,679		197,854

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: LPD 17	(1) FY 96		(1) FY 99		(2) FY 00		(0) FY 01		(0) FY 02		(1) FY 03		(1) FY 04		(1) FY 05	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
HM&E EQUIPMENT																
a. P-35 Items																
NONE																
Subtotal		0		0		0		0		0		0		0	0	0
b. Major Items																
1. Boats	3	865	3	833	6	1,562	0		0		3	912	3	937	3	967
2. CCTV, Site 400	1	340	1	325	2	631					1	359	1	376	1	381
3. Truck, Forklift	14	639	14	873	14	1,536					14	929	14	948	14	989
4. Chemical Warfare Detector	1	28	1	28	2	56					1	177	1	173	1	184
5. Military Payroll System	0	0	0	0	0	0					1	250	1	255	1	266
Subtotal		1,872		2,059		3,785						2,627		2,689		2,787
c. Other HM&E		55,855		16,428		52,210		0		0		52,031	1	57,887		12,705
(Includes Shock Test, $28.0 million in FY 1996 for LPD17)																
TOTAL HM&E		57,727		18,487		55,995		0		0		54,658		60,576		15,492

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: LPD 17	(1) FY 06		(1) FY 07		(1) FY 08		(1) FY 09	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
HM&E EQUIPMENT								
a. P-35 Items								
Subtotal		0		0		0		0
b. Major Items								
1. Boats	3	993	3	1,024	3	1,056	3	1,088
2. CCTV, Site 400	1	385	1	387	1	399	1	406
3. Truck, Forklift	14	1,009	14	1,029	14	1,050	14	1,071
4. Chemical Warfare Detector	1	188	1	191	1	195	1	199
5. Military Payroll System	1	272	1	277	1	283	1	289
Subtotal		2,846		2,909		2,983		3,053
c. Other HM&E		8,768		40,010		42,000		41,000
TOTAL HM&E		11,614		42,919		44,983		44,053

P-8A EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEB 2004

SHIPBUILDING AND CONVERSION, NAVY
Analysis of Ship Cost Estimates - Major Equipment
(Dollars in Thousands)

Ship Type: LPD 17	(1) FY 96		(1) FY 99		(2) FY 00		(0) FY 01		(0) FY 02		(1) FY 03		(1) FY 04		(1) FY 05	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
ORDNANCE EQUIPMENT																
a. P-35 Items																
1. RAM Missle System	2	19,900	2	19,348	4	40,615	0	0	0	0	2	11,560	2	11,228	2	19,828
2. AN/SPS-48E	1	10,659	1	10,188	2	21,326	0	0	0	0	1	13,325	1	14,844	1	15,911
3. SPQ-9B	1	5,740	1	5,136	2	13,224	0	0	0	0	1	6,544	1	6,231	1	8,578
Subtotal		36,299		34,672		75,165		0		0		31,429		32,303		44,317
b. Major Items																
1. 50 CAL Machine Gun	2	35	2	30	4	84	0	0	0	0	2	43	2	20	2	20
2. Flight Cntrl & Instrument Landing System with Helicopter Operations Surveillance System and Dynamic Interface Test	1	1,992	1	600	2	976	0	0	0	0	1	659	1	659	1	633
3. MK46 Gun Barrels	2	641	2	541	4	1,082	0	0	0	0	2	650	2	754	2	869
4. Ordnance Handling Equipment														355		355
Subtotal		2,668		1,171		2,142		0		0		1,352		1,788		1,877
c. Other Ordnance		11,001		11,952		25,598		0		0		35,788		52,430		5,000
TOTAL ORDNANCE		49,968		47,795		102,905		0		0		68,569		86,521		51,194

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	(1) FY 06		(1) FY 07		(1) FY 08		(1) FY 09	
	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
ORDNANCE EQUIPMENT								
a. P-35 Items								
1. RAM Missle System	2	19,828	2	27,270	2	27,816	2	28,400
2. AN/SPS-48E	1	16,484	1	16,465	1	17,039	1	18,331
3. SPQ-9B	1	8,517	1	8,688	1	8,652	1	8,698
Subtotal		44,829		52,423		53,507		55,429
b. Major Items								
1. 50 CAL Machine Gun	2	20	2	21	2	21	2	22
2. Flight Cntrl & Instrument Landing System with Helicopter Operations Surveillance System and Dynamic Interface Test	1	693	1	707	1	721	1	735
3. MK46 Gun Barrels	2	789	2	797	2	811	2	762
4. Ordnance Handling Equipment		355		355		355		355
Subtotal		1,857		1,880		1,908		1,874
c. Other Ordnance		4,000		20,661		21,809		25,226
TOTAL ORDNANCE		50,687		74,964		77,225		82,529

Ship Type - LPD 17

Item - Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaisance

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

To provide the link between the ship, the command hierarchy and other units of the operating forces.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	1	24,190	0	0	0	0	1	23,023	2	42,495	0	0	0	0	1	29,914	1	30,394	1	31,587
Ancillary Equipment		52						172		415						415		425		501
Documentation and Systems Engineering		3,469						5,150		7,373						3,705		3,102		2,653
Software		111						550		714						750		578		1,061
Technical Engineering		2,922						2,120		4,231						2,710		2,783		3,178
Spares		1,580						465		1,978						1,507		1,357		962
Other Appropriate Costs		2,342						5,133		9,084						5,106		4,857		4,938
Turnkey		28,859						27,603		55,590						25,055		26,090		25,535
TOTAL		63,525						64,216		121,880						69,162		69,586		70,415

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVER	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaisance

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

To provide the link between the ship, the command hierarchy and other units of the operating forces.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	1	32,177	1	38,563	1	38,487	1	38,640
Ancillary Equipment		514		520		500		500
Documentation and Systems Engineering		2,848		2,870		2,896		2,954
Software		619		1,122		1,140		1,154
Technical Engineering		3,174		3,322		3,257		3,322
Spares		971		1,052		1,073		1,095
Other Appropriate Costs		4,377		5,326		5,433		5,541
Turnkey		22,875		22,292		22,738		23,193
TOTAL		67,555		75,067		75,523		76,398

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - Ship Self Defense System Mark 2

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Ship Self Defense System Mark 2 is microcomputer-based, self-defense coordination system that integrates and automates multiple sensors, self defense weapons, and softkill systems to provide quick reaction combat capability against anti-ship cruise missile threats. Cooperative Engagement Capability (CEC) coordinates all anti-air warfare sensors into single, real time, fire control quality composite track which improves battle force air defense (CEC funding is included FY 96-00).

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	1	17,316	0	0	0	0	1	17,570	2	27,540	0	0	0	0	1	11,250	1	10,650	1	11,250
Ancillary Equipment		0						0		0						0		0		0
Systems Engineering		2,828						3,468		0						1,833		1,050		600
Technical Data and Documentation		231						391		4,135						0		0		0
Technical Engineering		3,739						391		13,303						402		402		402
Spares		943						2,287		2,897						808		808		587
Other Appropriate Costs		9,463						8,585		16,531						16,440		9,847		10,400
TOTAL		34,520						32,692		64,406						30,733		22,757		23,239

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - Ship Self Defense System Mark 2

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Ship Self Defense System Mark 2 is microcomputer-based, self-defense coordination system that integrates and automates multiple sensors, self defense weapons, and softkill systems to provide quick reaction combat capability against anti-ship cruise missile threats. CEC funding is included FY 96-00.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	1	10,650	1	10,650	1	10,650	1	11,250
Ancillary Equipment		0		0		0		0
Systems Engineering		665		600		600		665
Technical Data and Documentation		0		0		0		0
Technical Engineering		402		402		402		402
Spares		587		587		587		587
Other Appropriate Costs		11,552		12,400		12,900		12,552
TOTAL		23,856		24,639		25,139		25,456

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - CEC AN/USG-2(V)

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Cooperative Engagement Capability (CEC) coordinates all anti-warfare sensors ino single, real time, fire control quality composite track which improves battle force air defense.

FY 96-00 CEC funding is included with SSDS Mark 2.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4,868	1	4,516	1	4,606
Ancillary Equipment		0						0		0						0		0		0
Systems Engineering		0						0		0						425		500		500
Technical Data and Documentation		0						0		0						0		0		0
Technical Engineering		0						0		0						300		221		300
Spares		0						0		0						395		409		395
Other Appropriate Costs		0						0		0						845		252		835
TOTAL		0						0		0						6,833		5,898		6,636

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - CEC AN/USG-2(V)

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Cooperative Engagement Capability (CEC) coordinates all anti-warfare sensors ino single, real time, fire control quality composite track which improves battle force air defense.

FY 96-00 CEC funding is included with SSDS Mark 2.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	1	4,698	1	4,792	1	4,888	1	4,986
Ancillary Equipment		0		0		0		0
Systems Engineering		500		500		500		550
Technical Data and Documentation		0		0		0		0
Technical Engineering		300		300		300		365
Spares		395		395		395		395
Other Appropriate Costs		835		835		835		868
TOTAL		6,728		6,822		6,918		7,164

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVER	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

UNCLASSIFIED

CLASSIFICATION

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEB 2004

Ship Type - LPD 17

Item - MK 12 AIMS IFF [AN/UPX-28]

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Transponder Set is an Automatic Identification and Monitoring System (AIMS) Identification Friend or Foe (IFF) system that receives interrogation signals from air, surface and land IFF - equipped units and automatically replies with a coded response signal that provides ownship position and identification.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY04	QTY	FY05
Major Hardware	1	3,234	0	0	0	0	1	3,434	2	6,624	0	0	0	0	1	3,651	1	3,867	1	4,310
Ancillary Equipment		10						236		474						35		96		112
Systems Engineering		892						843		1,002						342		1,320		1,241
Technical Data and Documentation		0						93		186						273		0		105
Technical Engineering		190						0		300						238		0		0
Spares		1,060						130		1,090						308		155		155
Other Appropriate Costs		433						519		698						610		385		385
TOTAL		5,819						5,255		10,374						5,455		5,823		6,308

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - MK 12 AIMS IFF [AN/UPX-28]

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Transponder Set is an Automatic Identification and Monitoring System (AIMS) Identification Friend or Foe (IFF) system that receives interrogation signals from air, surface and land IFF - equipped units and automatically replies with a coded response signal that provides ownship position and identification.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY07	QTY	FY 08	QTY	FY09
Major Hardware	1	4,396	1	4,484	1	4,574	1	4,665
Ancillary Equipment		112		112		112		112
Systems Engineering		1,216		934		674		674
Technical Data and Documentation		105		105		105		105
Technical Engineering		0		0		0		0
Spares		155		140		125		125
Other Appropriate Costs		355		245		165		165
TOTAL		6,339		6,020		5,755		5,846

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - AN/SLQ-32(V)2 (Refurbished)

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SLQ-32(V)2 is a passive electronics countermeasure system.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	1	3,203	0	0	0	0	1	3,897	2	7,958	0	0	0	0	1	4,235	1	3,613	1	3,592
Ancillary Equipment		177						186		380						202		158		160
Systems Engineering		0						0		0						0		0		0
Technical Data and Documentation		1						2		4						2		1		1
Technical Engineering		196						290		592						315		327		334
Spares		62						78		159						85		132		135
Other Appropriate Costs		704						300		613						326		1,135		1,156
TOTAL		4,343						4,753		9,706						5,165		5,366		5,378

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - AN/SLQ-32(V)2 (Refurbished)

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SLQ-32(V)2 is a passive electronics countermeasure system.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	1	3,751	1	3,821	1	3,897	1	3,975
Ancillary Equipment		164		168		171		175
Systems Engineering		0		0		0		0
Technical Data and Documentation		1		1		1		1
Technical Engineering		341		347		354		361
Spares		137		140		143		146
Other Appropriate Costs		1,178		1,201		1,225		1,250
TOTAL		5,572		5,678		5,792		5,907

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - RAM Missile System [MK31 MOD 0]

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Rolling Airframe Missile system is a short-range, fast-reaction, high-firepower, lightweight weapon designed to destroy incoming anti-ship cruise missiles.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	2	11,538	0	0	0	0	2	10,325	4	22,363	0	0	0	0	2	8,785	2	8,785	2	10,861
Ancillary Equipment		588						485		970						0		0		485
Systems Engineering		433						3,990		7,675						1,318		1,508		3,799
Technical Data and Documentation		0						0		0						0		0		0
Technical Engineering		3,384						0		0						1,457		935		25
Spares		474						371		1,000						0		0		121
Other Appropriate Costs		3,483						4,177		8,607						0		0		4,537
TOTAL END COST		19,900						19,348		40,615						11,560		11,228		19,828
Advance Procurement FY01 for FY05*												8,000								
Advance Procurement FY01 for FY06*												8,700								

* Provides economic order quantity for Rolling Airframe Missile System multiyear procurement

Total Obligational Authority FY01 16,700

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - RAM Missile System [MK31 MOD 0]

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Rolling Airframe Missile system is a short-range, fast-reaction, high-firepower, lightweight weapon designed to destroy incoming anti-ship cruise missiles.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	2	10,620	2	17,869	2	18,226	2	18,609
Ancillary Equipment		485		495		505		516
Systems Engineering		3,899		3,981		4,060		4,146
Technical Data and Documentation		0		0		0		0
Technical Engineering		25		26		26		27
Spares		121		124		126		129
Other Appropriate Costs		4,678		4,776		4,872		4,974
TOTAL END COST		19,828		27,270		27,816		28,400

NOTE: LPD 25-28 ARE NO LONGER PART OF THE MULTIYEAR CONTRACT.

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

UNCLASSIFIED

CLASSIFICATION

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEB 2004

Ship Type - LPD 17

Item - AN/SPS-48E (Refurbished)

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPS-48E is a long-range, three dimensional, air-search radar system that provides contact range, bearing, and height information.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	1	8,265	0	0	0	0	1	7,787	2	15,904	0	0	0	0	1	6,150	1	10,965	1	11,765
Ancillary Equipment		0						0		0						135		120		120
Systems Engineering		216						222		947						710		0		0
Technical Data and Documentation		108						111		228						150		35		35
Technical Engineering		216						668		458						1,450		633		660
Spares		300						242		976						400		200		200
Other Appropriate Costs		1,554						1,158		2,813						4,330		2,891		3,131
TOTAL		10,659						10,188		21,326						13,325		14,844		15,911

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Ship Type - LPD 17

Item - AN/SPS-48E (Refurbished)

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPS-48E is a long-range, three dimensional, air-search radar system that provides contact range, bearing, and height information.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	1	12,015	1	12,255	1	12,500	1	12,750
Ancillary Equipment		120		120		120		120
Systems Engineering		0		0		0		0
Technical Data and Documentation		35		40		40		45
Technical Engineering		665		672		682		706
Spares		200		200		200		200
Other Appropriate Costs		3,449		3,178		3,497		4,510
TOTAL		16,484		16,465		17,039		18,331

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

UNCLASSIFIED

CLASSIFICATION

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEB 2004

Ship Type - LPD 17
Item - AN/SPQ-9B

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPQ-9B is a high resolution, X-band, narrow beam radar that provides both air and surface tracking information.

II. CURRENT FUNDING:	QTY	FY 96	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	FY 04	QTY	FY 05
Major Hardware	1	4,080	0	0	0	0	1	4,433	2	9,480	0	0	0	0	1	5,284	1	4,797	1	6,208
Ancillary Equipment		0						0		0						0		0		0
Systems Engineering		233						277		1,390						151		250		306
Technical Data and Documentation		200						100		200						241		62		100
Technical Engineering		145						46		0						35		478		554
Spares		647						210		460						327		100		107
Other Appropriate Costs		435						70		1,694						507		544		1,303
TOTAL		5,740						5,136		13,224						6,544		6,231		8,578

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	HARDWARE UNIT COST	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQ. BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

P-35 EXHIBIT
FY 2005 PRESIDENT'S BUDGET
FEB 2004

Ship Type - LPD 17
Item - AN/SPQ-9B

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPQ-9B is a high resolution, X-band, narrow beam radar that provides both air and surface tracking information.

II. CURRENT FUNDING:	QTY	FY 06	QTY	FY 07	QTY	FY 08	QTY	FY 09
Major Hardware	1	6,319	1	6,445	1	6,574	1	6,706
Ancillary Equipment		0		0		0		0
Systems Engineering		271		276		246		231
Technical Data and Documentation		100		102		100		100
Technical Engineering		503		513		465		438
Spares		109		111		111		113
Other Appropriate Costs		1,215		1,239		1,156		1,110
TOTAL		8,517		8,688		8,652		8,698

III. CONTRACT DATA:

PROGRAM YEAR	CONTRACTOR	QUANTITY	CONTRACT AWARD DATE

IV. DELIVERY DATA:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	PRODUCTION LEAD TIME	REQUIRED AWARD DATE

V. COMPETITION/SECOND SOURCE INITATIVES:

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)								Date: Feb 2004						
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 1711N/BA3/Amphibious Ships/3036								P-1 Line Item Nomenclature: LPD17						
Weapon System: LPD17-28				First System (BY1) Award Date:				First System (BY1) Completion Date:						
($ in Millions)														
	PLT	When Req'd	Prior Years	PY-1 FY 02	PY1 FY 03	CY FY 04	BY1 FY 05	BY2 FY06	BY3 FY07	BY4 FY08	BY5 FY09	BY6 FY10	To Complete	Total
End Item Qty			4	0	1	1	1	1	1	1	1	1	0	12
Plans														
Basic (FY98 for FY99)			96.0											96.0
Basic (FY 01 for FY 03)			315.7											315.7
Basic (FY 01 for FY 04)			49.4											49.4
Basic (FY02 for FY03)				102.1										102.1
Basic (FY04 for FY05)						100.9								100.9
Electronics (FY 01 for FY 03)			54.2											54.2
Electronics (FY 01 for FY 04)			2.3											2.3
Electronics (FY02 for FY03)				12.5										12.5
Electronics (FY04 for FY05)						16.5								16.5
HM&E (FY 01 for FY 03)			25.8											25.8
HM&E (FY02 for FY03)				21.6										21.6
Other Cost (FY 01 for FY 03)			4.0											4.0
Other Cost (FY02 for FY04)				4.2										4.2
Ordnance (FY01 for FY04)			12.4											12.4
Ordnance (FY01 for FY05)			8.0											8.0
Ordnance (FY01 for FY06)			8.7											8.7
Ordnance (FY02 for FY03)				13.8										13.8
Ordnance (FY04 for FY05)						16.5								16.5
Total AP			576.5	154.2	0.0	133.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	864.6

Description:
FY98 Advance Procurement for FY99 Ship
FY01 Rolling Airframe Missile (RAM) System Multiyear Procurement for LPD21-24
FY01 Advance Procurement for LPD21 and LPD22
FY02 Advance Procurement for LPD21
FY04 Advance Procurement for LPD 23

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)																Date: Feb 2004		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 1711N/BA3/Amphibious Ships/3036								Weapon System LPD17-28								P-1 Line Item Nomenclature LPD17		
(TOA, $ in Millions)																		
	PLT	QPA	Unit Cost	FY 98 Qty	FY 98 Contract Forecast Date	FY 98 Total Cost Reques	FY 01 Qty	FY 01 Contract Forecast Date	FY 01 Total Cost Request	FY02 Qty	FY02 Contract Forecast Date	FY 02 Total Cost Request	FY03 Qty	FY03 Contract Forecast Date	FY 03 Total Cost Request	FY04 Qty	FY04 Contract Forecast Date	FY 04 Total Cost Request
End Item Full Funding																		
End Item Economic Order Quantity Advance Procurement																		
Plans																		
Basic (FY98 for FY99)	Various				July-98	96.0												
Basic (FY 01 for FY 03)	Various							Various	315.7									
Basic (FY 01 for FY 04)	Various							Various	49.4									
Basic (FY02 for FY03)	Various										Various	102.1						
Basic (FY04 for FY05)	Various																Feb 04	100.9
Electronics (FY 01 for FY 03)	Various							Various	54.2									
Electronics (FY 01 for FY 04)	Various							Various	2.3									
Electronics (FY02 for FY03)	Various										Various	12.5						
Electronics (FY04 for FY05)	Various																Various	16.5
HM&E (FY 01 for FY 03)	Various							Various	25.8									
HM&E (FY02 for FY03)	Various										Various	21.6						
Other Cost (FY 01 for FY 03)	Various							Various	4.0									
Other Cost (FY02 for FY04)	Various										Various	4.2						
Ordnance (FY01 for FY04)	Various							Various	12.4									
Ordnance (FY01 for FY05)	Various							Various	8.0									
Ordnance (FY01 for FY06)	Various							Various	8.7									
Ordnance (FY02 for FY03)	Various										Various	13.8						
Ordnance (FY04 for FY05)	Various																Various	16.5
Escalation																		
Total AP						96.0			480.5			154.2			0.0			133.9

Description:
FY98 Advance Procurement for FY99 Ship (LPD-18)
FY01 Rolling Airframe Missile System Multiyear Procurement for LPD21-24
FY01 Advance Procurement for LPD21 and LPD22
FY02 Advance Procurement for LPD21
FY04 Advance Procurement for LPD23

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 President's Budget ($M)									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA -5 Auxiliaries and Craft/BLI 510000									P-1 ITEM NOMENCLATURE LCU(R)	
	PRIOR YEAR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	0	0	0	1	1	3	3	4	7	19
End Cost	3.0	0.0	0.0	25.0	22.0	46.5	47.4	64.5	116.1	324.5
Less Advance Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Funding TOA	3.0	0.0	0.0	25.0	22.0	46.5	47.4	64.5	116.1	324.5
Plus Advance Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Obligational Authority	3.0	0.0	0.0	25.0	22.0	46.5	47.4	64.5	116.1	324.5
Plus Outfitting and Post Delivery	0.0	0.0	0.0	0.9	0.2	0.3	0.0	0.0	0.0	1.4
Plus Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.0	0.0	0.0	25.9	22.2	46.8	47.4	64.5	116.1	325.9
Unit Cost (Ave. End Cost)	0.0	0.0	0.0	25.0	22.0	15.5	15.8	16.1	16.6	17.1

MISSION:

PRIOR YEAR REFLECTS FY02 SERVICE CRAFT - SEE DETAILED P-5 FOR BREAKOUT. FY03-09 ESTABLISHED UNDER NEW SERVICE CRAFT BLI 511300.

FY05-FY09 -THE LANDING CRAFT UTILITY REPLACEMENT LCU(R) PROGRAM REPLACES AGING LCU FORCE (27 TO 42 YEARS OLD):
DEVELOPS AND PROCURES A MODERN HEAVY LIFT UTILITY LANDING CRAFT TO COMPLEMENT THE HIGH-SPEED, OVER-THE-HORIZON, SHIP-TO-OBJECTIVE AMPHIBIOUS LIFT REQUIRED BY OMFTS AND SEA BASED LOGISTICS COMPLEMENT TO LCAC.
FY 2005/2006 ARE LOW RATE INITIAL PRODUCTION (LRIP) HULLS.

Characteristics:	(WIDE BEAM OPTION) (MAXIMUM)	Production Status:	LCU(R) 0501	LCU(R) 0601
Hull		Contract Plans		
Length overall	135 FT	Award Planned (Month)	Dec-04	APR-06
Beam	44 FT	Months to Complete		
Displacement	600 LT	a) Award to Delivery	16	14
Draft	5 FT	b) Construction Start to Delivery	12	14
		Commissioning Date	N/A	N/A
		Completion of Fitting-Out	May-06	Jul-07

Armament: N/A

Major Electronics: N/A

DD Form 2454, JUL 88

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

BUDGET ACTIVITY:BA-5 AUXILIARIES AND CRAFT	P-1 ITEM NOMENCLATURE:	SUBHEAD: TBD
BUDGET LINE ITEM: 510000	LCU(R)	

ELEMENT OF COST	FY 2005 QTY	FY 2005 TOT COST
PLAN COSTS	1	0
BASIC CONST/CONVERSION		21,292
CHANGE ORDERS		1,065
ELECTRONICS		1,503
PROPULSION EQUIPMENT		0
HM&E		751
OTHER COST		437
ORDNANCE		0
ESCALATION		0
TOTAL SHIP ESTIMATE		25,048
NET P-1 LINE ITEM		25,048

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LCU(R) 0501	TBD	2005	DEC-04	APR-05	APR-06
LCU(R) 0601	TBD	2006	APR-06	APR-06	JUN-07
LCU(R) 0701	TBD	2007	TBD	TBD	TBD
LCU(R) 0702	TBD	2007	TBD	TBD	TBD
LCU(R) 0703	TBD	2007	TBD	TBD	TBD
LCU(R) 0801	TBD	2008	TBD	TBD	TBD
LCU(R) 0802	TBD	2008	TBD	TBD	TBD
LCU(R) 0803	TBD	2008	TBD	TBD	TBD
LCU(R) 0901	TBD	2009	TBD	TBD	TBD
LCU(R) 0902	TBD	2009	TBD	TBD	TBD
LCU(R) 0903	TBD	2009	TBD	TBD	TBD
LCU(R) 0904	TBD	2009	TBD	TBD	TBD

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

BUDGET ACTIVITY:BA-5 AUXILIARIES AND CRAFT	P-1 ITEM NOMENCLATURE:	SUBHEAD:	8552
BUDGET LINE ITEM: 510000	SERVICE CRAFT		

	FY 2002	
ELEMENT OF COST	QTY	TOT COST
PLAN COSTS		0
BASIC CONST/CONVERSION		2,305
CHANGE ORDERS		184
ELECTRONICS		0
PROPULSION EQUIPMENT		0
HM&E		0
OTHER COST		497
ORDNANCE		0
ESCALATION		0
TOTAL SHIP ESTIMATE		2,986
NET P-1 LINE ITEM		2,986
PROGRAM OFFICE ESTIMATES	1-YON	2,986
	0-YFN	0
	0-YC	0
	0-YP	0
		2,986

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
YON 0321	Sundial Marine	2002	Jul-03	Jul-03	Apr-04

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40)										DATE: FEB - 2004
FY 05 President's Budget ($M)										
APPROPRIATION/BUDGET ACTIVITY BA 5, Auxiliaries and Craft							P-1 ITEM NOMENCLATURE OUTFITTING			BLI 511000
	PY	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009		
Full Funding TOA-Outfitting	248.7	166.2	185.2	189.3	191.4	127.9	180.6	178.9		
Full Funding TOA-Post Delivery	96.7	125.2	127.9	206.2	246.8	230.0	225.1	190.8		
Full Funding TOA-First Destination	0.0	3.1	3.2	3.8	3.6	4.2	4.5	4.9		
Total Obligational Authority	345.4	294.5	316.3	399.3	441.8	362.1	410.2	374.6		

MISSION:

Outfitting funds are used to acquire on board repair parts, other secondary items, equipage, recreation items, precommissiong crew support and general use consumables furnished to the shipbuilder or the fitting-out activity to fill the ship's initial allowances as defined by the baseline Coordinated Shipboard Allowance List (COSAL). The program also budgets for contractor-furnished spares, lead-time away from delivery. The program ensures operational readiness of ships undergoing new construction, conversion, ship life extension program, and nuclear refueling. It ensures these ships receive their full allowances of spare parts and equipment which are vitally required to support the shipboard maintenance process; ensures ships are equipped with operating space items (tools, test equipment, damage control), personnel safety and survivability commodities for successful completion of builder sea trials; supports shipboard maintenance and thereby achieving the OPNAV-directed Supply Readiness goals for material on board ship at delivery. SCN funding for the initial fill of allowance list items is limited to those items on the COSAL and authorized requirements through the Obligation and Work Limiting Date (OWLD).

Post Delivery funding covers the fixing of government-responsible items which were believed to have been complete to standard and/or operable at delivery, as well as funding to conduct tests and trials after delivery. It is essential to deliver to the Fleet complete ships, free from both contractor and government responsible deficiencies, capable of supporting the Navy's mission from the first day of service. The Post Shakedown Availability (PSA) is a shipyard availability assigned to commence after delivery and to be completed prior to the expiration of the SCN OWLD. It is during this time that Acceptance and Final Contract Trials deficiencies will be corrected. The purpose of the PSA is to accomplish correction of new construction deficiencies found during the shakedown period which are authorized; correction of other contractor and government responsible deficiencies previously authorized; and accomplishment of other improvements or class items as authorized. Funding is used for corrections authorized by the Ship Program Manager as a result of builders' trials (pre-delivery), acceptance or underway trials, final contract trials, trial board items, and correction of production-related defects or deficiencies which develop during the Post Delivery period.

First Destination Transportation (FDT) finances the movement of newly procured equipment and materials from the contractor's plant to the initial point of receipt by the government.

The Outfitting, Post Delivery and First Destination Program is a separate budget line item in the SCN appropriation and while not part of the end cost of the ship, is subject to the OWLD.

FY 05 President's Budget
Feb-04

FY	Ship Class	Hull #	Contract Award	Start of Constr.	DEL DATE	CFO	PSA START	PSA FINISH	OWLD	PY OF	PY PD	FY 03 OF	FY 03 PD	FY 04 OF	FY 04 PD	FY 05 OF	FY 05 PD	Total OF	TOTAL PD
96	SSN	23	Jun-96	Dec-95	Dec-04	Dec-04	N/A	N/A	Jun-06	11,513		2,936	-	1,208	1,306	323	18,444	15,980	19,750
															-			-	-
98	VIRGINIA	774	Sep-98	Aug-97	Jun-04	Jun-04	Jul-05	Jun-06	Oct-06	8,879		9,387	-	266	8,637	645	31,574	19,177	40,211
99	VIRGINIA	775	Sep-98	Sep-98	Jun-05	Jun-05	Jul-06	Jun-07	Oct-07	2,305	85	8,370	-	9,464	1,122	273	14,735	20,412	15,942
01	VIRGINIA	776	Sep-98	Oct-99	Dec-06	Dec-06	Jul-07	Mar-08	Oct-08	2,166		85	-	6,165	-	2,573	446	10,989	446
02	VIRGINIA	777	Sep-98	Mar-01	Dec-07	Dec-07	Jul-08	Mar-09	Oct-10	2,166		-	-	85	-	6,318	-	8,569	-
	VIRGINIA	9 - 21																-	-
	Virginia Total									15,516	85	17,842	-	15,980	9,759	9,809	46,755	59,147	56,599
01	SUB ERO	SSN 706	Feb-00	Jul-01	Jul-03	Jul-03	N/A	N/A	Jun-04	568		577	-	296	-	-	-	1,441	-
02	SUB ERO	SSN 713	Feb-00	Oct-01	Aug-04	Aug-04	N/A	N/A	Jan-05	584		775	-	316	-	-	-	1,675	-
02	SUB ERO	SSN 715	Oct-00	Jun-02	Aug-04	Aug-04	N/A	N/A	Jul-05	353		868	-	543	-	152	-	1,916	-
03	SUB ERO	SSN 714	Feb-01	Oct-02	Oct-04	Oct-04	N/A	N/A	Sep-05	-		1,282	-	648	-	211	-	2,141	-
03	SUB ERO	SSN 698	Oct-02	Sep-03	May-06	May-06	N/A	N/A	Aug-06	-		-	-	1,104	-	388	-	1,492	-
04	SUB ERO	SSN 699	Oct-03	Sep-04	Sep-06	Sep-06	N/A	N/A	Sep-07	-		-	-	-	-	1,108	-	1,108	-
04	SUB ERO	SSN 717	Oct-03	Sep-04	Sep-06	Sep-06	N/A	N/A	Aug-07	-		-	-	-	-	1,108	-	1,108	-
05	SUB ERO	SSBN 730	Feb-03	Oct-04	Jan-07	Jan-07	N/A	N/A	Dec-07	-		-	-	-	-	1,077	-	1,077	-
	Sub ERO Total									1,505	-	3,502	-	2,907	-	4,044	-	11,958	-
03	SSGN CONV	726	Nov-03	Nov-03	Nov-05	Nov-05	N/A	N/A	Oct-06	-		650	-	1,206	-	924	-	2,780	-
03	SSGN CONV	728	Mar-04	Apr-04	Apr-06	Apr-06	N/A	N/A	Mar-07	-		-	-	662	-	1,734	-	2,396	-
04	SSGN CONV	727	Oct-04	Oct-04	Oct-06	Oct-06	N/A	N/A	Sep-07	-		-	-	562	-	1,446	-	2,008	-
05	SSGN CONV	729	Mar-05	Apr-05	Apr-07	Apr-07	N/A	N/A	Mar-08	-		-	-	-	-	688	-	688	-
	SSGN Conv Total									-		650	-	2,430	-	4,792	-	7,872	-
95	CVN	76	Dec-94	Jan-95	Jun-03	Jul-03	Dec-03	Apr-04	Mar-05	60,492		12,196	38,632	2,957	-	-	-	75,645	38,632
01	CVN	77	Jan-01	Mar-01	Mar-08	May-08	Oct-08	Mar-09	Apr-09			-	-	-	-	14,971	-	14,971	-
	CVN Total									60,492	-	12,196	38,632	2,957	-	14,971	-	90,616	38,632
01	CVN-RCOH	69	Jun-01	Jun-01	Oct-04	Dec-04	Jan-05	Jul-05	Nov-05	38,777		16,508	-	13,856	14,267	1,000	20,200	70,141	34,467
97	DDG	85	Dec-96	May-98	Mar-02	May-02	Jul-03	Oct-03	Mar-04	22,340	20,655	311	4,000	6	-	-	-	22,657	24,655
97	DDG	86	Dec-96	Nov-98	Feb-02	Apr-02	Sep-02	Dec-02	Mar-04	19,401	27,941	963	-	6	-	-	-	20,370	27,941
97	DDG	87	Dec-96	Nov-98	Nov-02	Mar-03	Sep-03	Dec-03	Mar-04	17,602	11,604	1,237	19,324	6	-	-	-	18,845	30,928
97	DDG	88	Dec-96	Jul-99	Aug-02	Oct-02	Apr-03	Jul-03	Mar-04	19,016	17,805	1,227	10,207	0	-	-	-	20,243	28,012
98	DDG	89	Mar-98	Mar-00	Feb-03	Jun-03	Jan-04	Apr-04	May-04	17,150	5,770	2,218	11,617	235	11,593	-	-	19,603	28,980
98	DDG	90	Mar-98	Apr-00	Aug-03	Oct-03	May-04	Aug-04	Sep-04	11,191	6,500	3,695	11,881	241	11,002	-	-	15,127	29,383
98	DDG	91	Mar-98	Sep-00	Oct-03	Mar-04	Jan-05	Apr-05	Feb-05	8,602	3,436	7,774	7,129	424	23,315	24	-	16,824	33,880
98	DDG	92	Mar-98	Dec-00	Apr-04	Jul-04	May-05	Aug-05	Jun-05	2,013	2,868	12,942	5,967	1,821	10,040	237	12,263	17,013	31,138
99	DDG	93	Mar-98	Mar-01	Mar-04	Jul-04	Feb-05	May-05	Jun-05	1,200		16,316	7,988	2,422	8,180	237	15,713	20,175	31,881
99	DDG	94	Mar-98	Aug-01	Oct-04	Jan-05	Aug-05	Nov-05	Dec-05	1,297		10,574	4,488	7,786	6,782	431	20,690	20,088	31,960
99	DDG	95	Mar-98	Sep-01	Aug-04	Dec-04	Sep-05	Nov-05	Nov-05	1,000		8,605	3,218	10,094	9,871	426	17,515	20,125	30,604
00	DDG	96	Mar-98	Apr-02	Jun-05	Oct-05	Apr-06	Jul-06	Sep-06			1,000	-	10,993	7,537	7,772	10,414	19,765	17,951
00	DDG	97	Mar-98	Mar-02	Jan-05	May-05	Jan-06	Mar-06	Apr-06			1,000	-	16,653	4,103	2,432	14,956	20,085	19,059
00	DDG	98	Mar-98	Sep-02	Aug-05	Dec-05	Jun-06	Sep-06	Nov-06			1,000	-	11,001	4,203	2,425	11,577	14,426	15,780
01	DDG	99	Mar-98	Dec-02	Jan-06	May-06	Jan-07	Apr-07	Apr-07			0	-	1,018	-	16,695	873	17,713	873
01	DDG	100	Mar-98	Mar-03	Mar-06	Jul-06	Oct-06	Dec-06	Jun-07			0	-	1,000	-	12,243	873	13,243	873
01	DDG	101	Mar-98	Aug-03	Aug-06	Dec-06	Aug-07	Nov-07	Nov-07			0	-	-	-	11,980	314	11,980	314
02	DDG	102	Jul-02	Mar-04	Mar-07	Jul-07	TBD	TBD	Jun-08			0	-	-	-	1,000	-	1,000	-
02	DDG	103	Sep-02	Jun-04	Apr-07	Aug-07	TBD	TBD	Jul-08			0	-	-	-	1,000	-	1,000	-
	DDG Total									120,812	96,579	68,862	85,821	63,706	96,626	56,902	105,188	310,282	384,214
02	LHD	8	Apr-02	May-03	Jul-07	Dec-07	Apr-08	Aug-08	Nov-08			-	-	-	-	10,127	-	10,127	-

FY	Ship Class	Hull #	Contract Award	Start of Constr.	DEL DATE	CFO	PSA START	PSA FINISH	OWLD	PY OF	PY PD	FY 03 OF	FY 03 PD	FY 04 OF	FY 04 PD	FY 05 OF	FY 05 PD	Total OF	TOTAL PD
00	LCACSLEP	25	May-01	Sep-01	Nov-03	Dec-03	Jan-04	Feb-04	May-08	69		314	345	-	-	-	-	383	345
01	LCACSLEP	2	May-01	Nov-01	Feb-04	Mar-04	Apr-04	May-04	May-08			275	345	-	-	-	-	275	345
02	LCACSLEP	4	Dec-02	Jan-03	Jan-05	Feb-05	Mar-05	Apr-05	May-09			-	-	583	350	-	-	583	350
02	LCACSLEP	7	Dec-02	Mar-03	Mar-05	Apr-05	May-05	Jun-05	May-09			-	-	-	-	584	355	584	355
03	LCACSLEP	9	Dec-02	Jul-03	Jul-05	Aug-05	Sep-05	Oct-05	May-09			-	-	558	-	-	355	558	355
03	LCACSLEP	8	Dec-02	May-03	May-05	Jun-05	Jul-05	Aug-05	May-09			-	-	558	-	-	355	558	355
03	LCACSLEP	10	Jun-03	Sep-03	Sep-05	Oct-05	Nov-05	Dec-05	May-09			-	-	-	-	559	355	559	355
03	LCACSLEP	21	Dec-02	Nov-03	Feb-06	Mar-06	Apr-06	May-06	May-09			-	-	-	-	559	-	559	-
04	LCACSLEP	26	Jan-04	Oct-04	Aug-05	Sep-05	Oct-05	Nov-05	May-10			-	-	-	-	559	355	559	355
04	LCACSLEP	27	Jan-04	Jan-05	Nov-05	Dec-05	Jan-06	Feb-06	May-10			-	-	-	-	-	345	-	345
04	LCACSLEP	28	Jan-04	Mar-05	Jan-06	Feb-06	Mar-06	Apr-06	May-10			-	-	-	-	559	-	559	-
04	LCACSLEP	40	Jan-04	Jun-05	Apr-06	May-06	Jun-06	Jul-06	May-10			-	-	-	-	270	-	270	-
05	LCACSLEP	0501	Jan-05	Oct-05	Aug-06	Sep-06	Oct-06	Nov-06	May-10			-	-	-	-	74	-	74	-
	Total LCACSLEP									69	-	589	690	1,699	350	3,164	2,120	5,521	3,160
96	LPD	17	Dec-96	Jun-00	Dec-04	Feb-05	Jul-06	Oct-06	Nov-06			16,605	-	22,328	5,448	2,844	7,405	41,777	12,853
99	LPD	18	Dec-98	Feb-02	Sep-05	Dec-05	Jul-06	Oct-06	Nov-06			10,300	-	12,746	-	17,017	5,927	40,063	5,927
00	LPD	19	Feb-00	Jul-01	Dec-05	Mar-06	Sep-06	Dec-06	Feb-07			-	-	17,478	-	23,119	-	40,597	-
00	LPD	20	May-00	Oct-02	Jun-06	Sep-06	Apr-07	Jul-07	Aug-07			-	-	10,536	-	24,822	-	35,358	-
	LPD Total											26,905	-	63,088	5,448	67,802	13,332	157,795	18,780
05	LCU(R)	0501	Dec-04	Apr-05	Apr-06	May-06	TBD	TBD	Apr-07			-	-	-	-	906	-	906	-
	LCU(R) Total																		
03	YC	1669	Feb-04	Feb-04	Nov-04	Dec-04	N/A	N/A	Nov-05			-	-	48	-	-	-	48	-
04	YC	401	Feb-04	Feb-04	Jan-05	Feb-05	N/A	N/A	Jan-06			-	-	25	-	-	-	25	-
04	YC	402	Feb-04	Sep-04	Aug-05	Sep-05	N/A	N/A	Aug-06			-	-	25	-	-	-	25	-
																		-	-
03	YFN	1285	Oct-03	Dec-03	Jun-04	Jul-04	N/A	N/A	Jun-05			-	-	82	-	-	-	82	-
04	YFN	0401	Nov-03	Jan-04	Jul-04	Aug-04	N/A	N/A	Jul-05			-	-	50	-	-	-	50	-
																		-	-
02	YON	0321	Jul-03	Jul-03	Apr-04	May-04	TBD	TBD	Apr-05			-	49	368	-	-	-	368	49
03	YON	0322	Jul-03	Oct-03	Jul-04	Aug-04	TBD	TBD	Jul-05			-	-	343	49	-	-	343	49
03	YON	0323	Jul-03	Jan-04	Oct-04	Nov-04	TBD	TBD	Oct-05			-	-	182	49	-	-	182	49
03	YON	0324	Dec-03	Apr-04	Jan-05	Feb-05	TBD	TBD	Jan-06			-	-	182	-	-	49	182	49
04	YON	0325	Oct-04	Oct-04	Jul-05	Aug-05	TBD	TBD	Jul-06			-	-	170	-	-	-	170	-
04	YON	0326	Oct-04	Oct-04	Jul-05	Aug-05	TBD	TBD	Jul-06			-	-	286	-	-	-	286	-
04	YP	0703	Jun-04	Jan-05	Dec-05	Jan-06	TBD	TBD	Dec-06			-	-	328	-	-	136	328	136
	Service Craft Total											-	49	2,089	98	-	185	2,089	332
	PUBS											16,170	-	15,316	-	15,423	-	46,909	-

Total Outfitting	**248,684**	**166,160**	**185,236**	**189,263**
Total Post Delivery	**96,664**	**125,192**	**127,854**	**206,224**
Total First Destination Transportation	**-**	**3,143**	**3,198**	**3,840**
Total BLI	**345,348**	**294,495**	**316,288**	**399,327**

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 President's Budget ($M)								DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA -5 Auxiliaries and Craft/BLI 511300								P-1 ITEM NOMENCLATURE SERVICE CRAFT		
	PRIOR YEAR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	0	0	0	0	0	0	0	0	0	0
End Cost	0.0	9.6	23.3	32.1	56.3	48.1	49.2	38.1	0.0	256.7
Less Advance Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Funding TOA	0.0	9.6	23.3	32.1	56.3	48.1	49.2	38.1	0.0	256.7
Plus Advance Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Obligational Authority	0.0	9.6	23.3	32.1	56.3	48.1	49.2	38.1	0.0	256.7
Plus Outfitting and Post Deliv	0.0	0.1	2.2	0.1	1.0	1.3	0.1	0.0	0.0	4.8
Plus Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	9.7	25.5	32.2	57.3	49.4	49.3	38.1	0.0	261.5
Unit Cost (Ave. End Cost)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

MISSION:

NEW CONSTRUCTION BEGINNING FY02 TO ACQUIRE OIL BARGES (YONs), COVERED LIGHTERS (YFNs), OPEN LIGHTERS (YCs), LARGE HARBOR TUGS (YTBs), FLOATING CRANES (YTDs) AND YARD PATROL CRAFT (YPs). SEE SERVICE CRAFT P-5 FOR DETAILED BREAKOUT FOR CRAFT PROCUREMENT.
FY02 INCLUDED IN BUDGET SUBMIT FOR BLI 510000 LCU (R). FY03 - FY09 ESTABLISHED UNDER BLI 511300.

Characteristics:	Various	Production Status:	Various - Multiple Contracts
Hull	Multiple Craft	Contract Plans	
Length overall		Award Planned (Month)	
Beam		Months to Complete	
Displacement		a) Award to Delivery	
Draft		b) Construction Start to Delivery	
		Commissioning Date	
		Completion of Fitting-Out	

Armament: N/A

Major Electronics: N/A

DD Form 2454, JUL 88

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

BUDGET ACTIVITY:BA-5 AUXILIARIES AND CRAFT | P-1 ITEM NOMENCLATURE: | SUBHEAD: 8552

ELEMENT OF COST	FY 2003 QTY	FY 2003 TOT COST	FY 2004 QTY	FY 2004 TOT COST	FY 2005 QTY	FY 2005 TOT COST
PLAN COSTS		0		0		0
BASIC CONST/CONVERSION		9,102		21,527		30,303
CHANGE ORDERS		250		877		905
ELECTRONICS		0		0		0
PROPULSION EQUIPMENT		0		0		0
HM&E		0		0		0
OTHER COST		205		891		891
ORDNANCE		0		0		0
ESCALATION		0		0		0
PROGRAM MANAGER'S GROWTH		0		0		0
TOTAL SHIP ESTIMATE		9,557		23,295		32,099
NET P-1 LINE ITEM		9,557		23,295		32,099
PROGRAM OFFICE ESTIMATES						
			2-YON*	5,364		
	3-YON	8,060	1-YFN	926	1-YON	3,076
	1-YFN	1,000	2-YC	897	1-YFN	945
	1-YC	497	1-YP	11,608	2-YC	939
	0-YP	0	1-TWR*	4,500	4-YP	27,139
		9,557		23,295		32,099

* FY 2004 Congressional Adds include $2.5 million for the procurement of 1 Yard Oiler (YON) and $4.5 million for the procurement of 1 High Speed Torpedo Recovery/Security Craft (TWR).

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
YC 1669	TBD	2003	Feb-04	Feb-04	Nov-04
YC 1670	TBD	2004	Feb-04	Feb-04	Jan-05
YC 1671	TBD	2004	Feb-04	Sep-04	Aug-05
YC 0501	TBD	2005	Oct-04	Oct-04	Jul-05
YC 0502	TBD	2005	Oct-04	Oct-04	Sep-05
YC 0601	TBD	2006	Oct-05	Oct-05	Jul-06
YC 0602	TBD	2006	Oct-05	Oct-05	Sep-06
YC 0701	TBD	2007	Oct-06	Oct-06	Jul-07
YC 0702	TBD	2007	Oct-06	Oct-06	Sep-07
YC 0801	TBD	2008	TBD	TBD	TBD
YC 0802	TBD	2008	TBD	TBD	TBD
YC 0901	TBD	2009	TBD	TBD	TBD
YC 0902	TBD	2009	TBD	TBD	TBD
YD 0601	TBD	2006	TBD	TBD	TBD
YD 0701	TBD	2007	TBD	TBD	TBD
YD 0801	TBD	2008	TBD	TBD	TBD
YFN 1285	TBD	2003	Feb-04	Feb-04	Feb-05
YFN 1286	TBD	2004	Feb-04	Mar-04	May-05
YFN 0501	TBD	2005	Oct-04	Oct-04	Dec-05
YFN 0601	TBD	2006	Oct-05	Oct-05	Dec-06
YFN 0701	TBD	2007	Oct-06	Oct-06	Dec-07
YFN 0801	TBD	2008	TBD	TBD	TBD
YFN 0901	TBD	2009	TBD	TBD	TBD
YON 0322	Sundial Marine	2003	Jul-03	Oct-03	Jul-04
YON 0323	Sundial Marine	2003	Jul-03	Jan-04	Oct-04
YON 0324	Sundial Marine	2003	Dec-03	Apr-04	Jan-05
YON 0325	Sundial Marine	2004	Oct-04	Oct-04	Jul-05
YON 0326	Sundial Marine	2004	Oct-04	Oct-04	Jul-05
YON 0501	Sundial Marine	2005	Oct-05	Oct-05	Jul-06
YON 0601	Sundial Marine	2006	Oct-06	Oct-06	Jul-07
YON 0602	Sundial Marine	2006	Oct-06	Oct-06	Jul-07
YON 0701	TBD	2007	TBD	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
YON 0702	TBD	2007	TBD	TBD	TBD
YON 0801	TBD	2008	TBD	TBD	TBD
YON 0802	TBD	2008	TBD	TBD	TBD
YON 0901	TBD	2009	TBD	TBD	TBD
YON 0902	TBD	2009	TBD	TBD	TBD
YP 0703	TBD	2004	Jun-04	Jan-05	Dec-05
YP 0501	TBD	2005	Feb-05	Dec-05	Oct-06
YP 0502	TBD	2005	Feb-05	Mar-06	Nov-06
YP 0503	TBD	2005	Feb-05	Jun-06	Dec-06
YP 0504	TBD	2005	Feb-05	Sep-06	Jan-07
YP 0601	TBD	2006	TBD	TBD	TBD
YP 0602	TBD	2006	TBD	TBD	TBD
YP 0603	TBD	2006	TBD	TBD	TBD
YP 0604	TBD	2006	TBD	TBD	TBD
YP 0701	TBD	2007	TBD	TBD	TBD
YP 0702	TBD	2007	TBD	TBD	TBD
YP 0801	TBD	2008	TBD	TBD	TBD
YP 0802	TBD	2008	TBD	TBD	TBD
YP 0803	TBD	2008	TBD	TBD	TBD
YP 0804	TBD	2008	TBD	TBD	TBD
YP 0901	TBD	2009	TBD	TBD	TBD
YP 0902	TBD	2009	TBD	TBD	TBD
YP 0903	TBD	2009	TBD	TBD	TBD
YP 0904	TBD	2009	TBD	TBD	TBD
YTB 0601	TBD	2006	TBD	TBD	TBD
YTB 0602	TBD	2006	TBD	TBD	TBD
YTB 0701	TBD	2007	TBD	TBD	TBD
YTB 0702	TBD	2007	TBD	TBD	TBD
YTB 0703	TBD	2007	TBD	TBD	TBD
TWR 0401	TBD	2004	TBD	TBD	TBD

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 PRESIDENT'S BUDGET ESTIMATES ($M)								DATE: FEBRUARY 2004		
APPROPRIATION/BUDGET ACTIVITY BA 5 AMPHIBIOUS SHIPS			P-1 ITEM NOMENCLATURE: LCAC SLEP LANDING CRAFT AIR CUSHION/ 513900/ 2576 / 1576							
	PRIOR YEARS	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	4	4	4	5	6	6	6	6	30	71
End Cost	122.4	87.8	72.5	90.5	103.1	107.8	108.1	136.9	539.6	1,368.6
Less Advance Procurement	27.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9
Less FY 2003 Transfer	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Less Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Funding TOA	93.0	87.8	72.5	90.5	103.1	107.8	108.1	136.9	539.6	1,339.2
Plus Advance Procurement	27.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9
Plus Transfer Cost	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Total Obligational Authority	120.9	89.3	72.5	90.5	103.1	107.8	108.1	136.9	539.6	1,368.6
Plus Outfitting and Post Delivery	2.0	1.3	2.0	5.3	6.3	3.0	5.6	4.7	47.9	78.1
Plus Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	122.9	90.6	74.5	95.8	109.4	110.8	113.7	141.6	587.5	1,446.7
Unit Cost (Ave. End Cost)	30.6	22.0	18.1	18.1	17.2	18.0	18.0	22.8	18.0	19.3

MISSION: LCAC is for transporting from ship to shore and across the beach, weapon systems, equipment, and cargo to personnel of the assault elements of the Marine Air/Ground Task Force.

The LCAC Service Life Extension Program (SLEP) extends the craft service life from the current service life of twenty years to thirty years.

For FY 2000 through FY 2003 the program replaces the current buoyancy box with the latest configuration. The new hull incorporates four modifications. 1) additional internal compartmentization to increase cargo carrying capacity, 2) a modified fuel system to increase range, 3) improved skirt attachments to reduce maintenance and 4) a deep skirt to improve performance and maximize safety. The SLEP will also include the C4N electronic suite replacement in the early years of the program as well as a modified set of TF40B engines designated ETF40B.

For FY 2004 and beyond, the buoyancy box will not be replaced. The existing box will be refurbished and the four modifications (listed above) will be installed. This change will allow construction to be accomplished near the operating units, saving transportation as well as disassembly and buoyancy box construction costs, while still achieving the same operational capabilities and service life extension.

FY 2009: The first Heavy Lift LCAC is planned for procurement. In FY 2005, Research and Development will commence for the Heavy Lift LCAC Program. The craft is planned to have twice the payload of the current LCAC and be approximately 1/3 longer.

The full rehabilitation of 6 reduced operational status craft (ROS) is included in the SLEP program: 1 craft each in FY 2005 through FY 2009, except 2 craft in FY 2007. Rehabilitating the ROS craft for use in SLEP will avoid taking active mission capable craft out of the inventories at the operating units.

Characteristics: (no change in overall craft dimensions)

Hull

Length overall	**88ft**
Beam	**47ft**
Displacement	**150 tons**
Draft	**None (rides on cushion of air)**

Armament:

None

UNCLASSIFIED

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

BUDGET ACTIVITY: 5
AUXILIARIES AND CRAFT

P-1 ITEM NOMENCLATURE: LCAC LANDING CRAFT AIR CUSHION
SUBHEAD: 2576 /1576

	FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005	
ELEMENT OF COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST	QTY	TOT COST
PLAN COSTS	1	0	1	0	2	0	4	0	4	0	5	0
BASIC CONST/CONVERSION		25,994		10,452		25,652		49,138		28,486		35,201
CHANGE ORDERS		0		0		0		0		0		0
ELECTRONICS		649		169		2,354		4,066		7,945		8,530
PROPULSION EQUIPMENT		0		0		0		0		0		0
HM&E		11,680		2,362		14,839		27,582		31,718		43,263
OTHER COST		22,128		3,122		3,023		7,028		4,364		3,496
ORDNANCE		0		0		0		0		0		0
ESCALATION		0		0		0		0		0		0
TOTAL SHIP ESTIMATE		60,451		16,105		45,868		87,814		72,513		90,490
LESS: ADVANCE PROCUREMENT		27,346		633		0		0		0		0
LESS: FY 2003 SPECIAL TRANSFER AUTHORITY		1,500		0		0		0		0		0
NET P-1 LINE ITEM		31,605		15,472		45,868		87,814		72,513		90,490
APPROPRIATION FOR PRIOR YEAR SHIPS`								1,500				
NET P-1 LINE ITEM								89,314				

SHIPBUILDING AND CONVERSION, NAVY

SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LCAC	TM&LS	2000	May-01	Sep-01	Nov-03
LCAC	TM&LS	2001	May-01	Nov-01	Feb-04
LCAC	TM&LS	2002	Dec-02	Jan-03	Mar-05
LCAC	TM&LS	2003	Dec-02	May-03	Feb-06
LCAC	TM&LS	2004	Jan-04	Oct-04	Apr-06
LCAC	TM&LS	2005	Jan-05	Oct-05	May-07
LCAC	TM&LS	2006	Dec-05	Sep-06	May-08
LCAC	TM&LS	2007	Dec-06	Sep-07	May-09
LCAC	TM&LS	2008	Dec-07	Sep-08	May-10
LCAC	TM&LS	2009	Dec-08	Sep-09	Dec-11

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2005 President's Budget ($M)									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA-5 Auxiliaries and Craft/BLI-520000									P-1 ITEM NOMENCLATURE MINE HUNTER (SWATH)	
	PRIOR YEAR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TO COMPLETE	TOTAL PROGRAM
QUANTITY	0	2	1	0	0	0	0	0	0	3
End Cost	0.0	6.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Less Advance Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full Funding TOA	0.0	6.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Plus Advance Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Obligational Authority	0.0	6.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Plus Outfitting and Post Delivery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plus Escalation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	6.9	4.5	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Unit Cost (Ave. End Cost)	0.0	3.4	4.5	0.0	0.0	0.0	0.0	0.0	0.0	3.8

MISSION:

FY03 - MINE HUNTER (SWATH) - THE EXPLOSIVE ORDNANCE DISPOSAL FORCES OPERATE A SINGLE MINE HUNTER SWATH VESSEL. IT IS CAPABLE OF OPERATING IN VERY SHALLOW WATER AND CAN BE OPERATIONALLY DEPLOYED WITHIN 24 HOURS VIA C-5 TRANSPORT. THE AREA SEARCH VESSEL (ASV) SWATH IS AN EXPANSION OF THE ORIGINAL MHS-1 PROGRAM AND DOES NOT REQUIRE A NEW STUDY, NOR A COMPETITIVE PROCUREMENT. REPLACEMENT VESSEL DESIGNATION IS 41' TWIN HULL (TH). MINE HUNTER FUNDING ADDED BY CONGRESS IN THE FY 2003 DoD APPROPRIATIONS ACT. GSA SCHEDULE PROCUREMENT AWARDED DEC 03.

FY04 - ADDITIONAL MINE HUNTER (SWATH) FUNDING ADDED BY CONGRESS IN THE FY 2004 DoD APPROPRIATIONS ACT

Characteristics:

Hull	
Length overall	41 FT
Beam	18 FT
Displacement	24 LT
Draft	4 FT 5-1/2 IN

Production Status:

Contract Plans	41TH 0301	41TH 0302	41TH 0401
Award Planned (Month)	DEC-2003	DEC-2003	SEP-2004
Months to Complete	18	18	18*
a) Award to Delivery	18	18	18*
b) Construction Start to Delivery	14	12	12
Commissioning Date	N/A	N/A	N/A
Completion of Fitting-Out	N/A	N/A	N/A

Armament: N/A

Major Electronics: Radar, GPS and UHF/VHF radio

* GSA SCHEDULE STATES DELIVERY 18 MONTHS AFTER AWARD. EARLIER DELIVERY SUBJ TO NEGOTIATIONS WITH BUYER.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY

BUDGET ACTIVITY:BA-5 AUXILIARIES AND CRAFT	P-1 ITEM NOMENCLATURE:	SUBHEAD:	2527
BUDGET LINE ITEM: 520000	MINE HUNTER (SWATH)		

	FY 2003		FY 2004	
ELEMENT OF COST	QTY	TOT COST	QTY	TOT COST
PLAN COSTS		0		0
BASIC CONST/CONVERSION	2	6,562	1	4,465
CHANGE ORDERS		206		0
ELECTRONICS		0		0
PROPULSION EQUIPMENT		0		0
HM&E		0		0
OTHER COST		90		0
ORDNANCE		0		0
ESCALATION		0		0
PROGRAM MANAGER'S GROWTH		0		0
TOTAL SHIP ESTIMATE		6,858		4,465
NET P-1 LINE ITEM		6,858		4,465

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
41TH0301	SWATH OCEAN SYS	2003	Dec-03	Apr-04	May-05
41TH0302	SWATH OCEAN SYS	2003	Dec-03	May-04	May-05
41TH0303	TBD	2004	Sep-04	Jan-05	Jan-06

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2005 President's Budget ($M) **February 2004**

Shipbuilding and Conversion, I BA-5 **Completion of PY Shipbuilding Programs** **BLI 530000**

	Prior Year	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Compl	TOTAL PROGRAM
Cost To Complete										
DDG 51	143.6	383.5	75.9	128.3	0.0	0.0	0.0	0.0	0.0	731.3
Virginia Class	227.0	326.7	300.4	91.3	38.7	0.0	0.0	0.0	0.0	984.1
Submarine Refueling	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2
CVN	169.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	169.4
LPD 17	173.0	569.7	259.2	264.8	6.8	0.0	0.0	0.0	0.0	1,273.5
Total	729.2	1,279.9	635.5	484.4	45.5	0.0	0.0	0.0	0.0	3,174.5

COST TO COMPLETE

Virginia Class Submarine:

During the 1998,1999, 2000 and 2001 Ship Cost Adjustments (SCA), significant PY bills were identified that, due to lack of available assets, were deferred to later years. The PY Cost to Complete line (BA 05) funds the pay back of items that were cash flowed to cover those previously identified SCA items. Funds are required for completion of prior year ships of the VA Class Program (SSN 774, 775 & 776). Funds are required to complete the Virginia Class Submarine Design, Contruction Cost Growth, higher than expected costs for Special Hull Treatment (SHT) and higher than expected costs for Electronic, Propulsor and Special Operating Forces (SOF) components.

LPD 17:

Funds are required for completion of prior year ships of the LPD 17 program. These requirements arise due to a number of factors that have occurred since the ships were appropriated. Factors include: changing/shrinking industrial base, higher overhead reates, investments to reduce future ownership costs, worker attrition rates, labor inefficiency, and an underestimation of the complexity of LPD 17 design and integration efforts.

DDG 51

Fund are required for the completion of prior year shiips of the DDG-51 Class Program. The funds that are identified in FY 04/05 in the Prior Year Cost to Complete line are required to fund shipbuilding construction contracts for FY 99 - FY 01 DDG 51 Class ships.