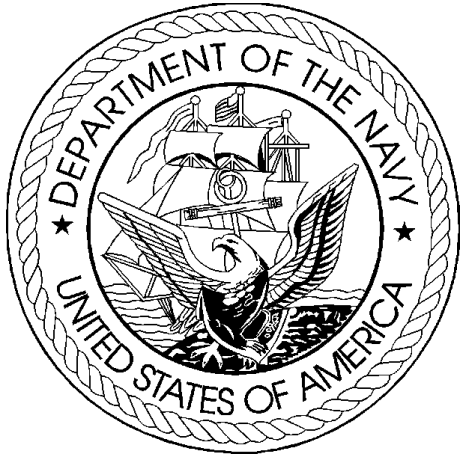
DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2010
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
MAY 2009

SHIPBUILDING AND CONVERSION, NAVY

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Shipbuilding and Conversion, Navy

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, $739,269,000;
Carrier Replacement Program (AP), $484,432,000;
Virginia Class Submarine, $1,964,317,000;
Virginia Class Submarine (AP), $1,959,725,000;
CVN Refueling, $1,563,602,000;
CVN Refueling (AP), $211,820,000;
DD(X), $1,084,161,000;
DDG-51, $1,912,267,000;
DDG-51 (AP), $328,996,000;
Littoral Combat Ship, (LCS), $1,380,000,000;
LPD-17, $872,392,000;
LPD-17 (AP), $184,555,000;
Joint High Speed Vessel (JHSV), $177,956,000;
Service Craft, $3,694,000;
LCAC Service Life Extension Program, $63,857,000;
Prior year shipbuilding costs, $454,586,000; and
For outfitting, post delivery, conversions, and first destination transportation, $391,238,000.

In all: $13,776,867,000, to remain available for obligation until September 30, 2014: *Provided,* That additional obligations may be incurred after September 30, 2014, 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.

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Department of the Navy
FY 2010/2011 President's Budget
Exhibit P-1 FY 2010 Base and Overseas Contingency Operations (OCO) Request
Summary
(Dollars in Thousands)

05 MAY 2009

APPROPRIATION	FY 2008 Base&OCO Actuals	FY 2009 Base&OCO SupReq 4/9/09	FY 2010 Base	FY 2010 OCO	FY 2010 Total
Shipbuilding & Conversion, Navy	13,177,449	13,015,870	13,776,867		13,776,867
TOTAL Department of the Navy	13,177,449	13,015,870	13,776,867		13,776,867

Exhibit P-1Q: FY 2010 Base and Overseas Contingency Operations (OCO) Request, as of May 5, 2009 at 14:24:40

Department of the Navy
FY 2010/2011 President's Budget
Exhibit P-1 FY 2010 Base and Overseas Contingency Operations (OCO) Request
Summary
(Dollars in Thousands)

05 MAY 2009

APPROPRIATION: Shipbuilding & Conversion, Navy

Budget Activity	FY 2008 Base&OCO Actuals	FY 2009 Base&OCO SupReq 4/9/09	FY 2010 Base	FY 2010 OCO	FY 2010 Total
02. Other warships	9,798,083	11,099,157	11,628,589		11,628,589
03. Amphibious ships	2,872,011	1,329,848	1,234,903		1,234,903
05. Auxiliaries, craft, and prior-year program costs	507,355	586,865	913,375		913,375
TOTAL Shipbuilding & Conversion, Navy	13,177,449	13,015,870	13,776,867		13,776,867

Exhibit P-1Q: FY 2010 Base and Overseas Contingency Operations (OCO) Request, as of May 5, 2009 at 14:24:40

Department of the Navy
FY 2010/2011 President's Budget
Exhibit P-1 FY 2010 Base and Overseas Contingency Operations (OCO) Request
(Dollars in Thousands)

APPROPRIATION: 1611N Shipbuilding & Conversion, Navy DATE: 05 MAY 2009

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2008 Base&OCO Actuals Quantity	FY 2008 Base&OCO Actuals Cost	FY 2009 Base&OCO SupReq 4/9/09 Quantity	FY 2009 Base&OCO SupReq 4/9/09 Cost	FY 2010 Base Quantity	FY 2010 Base Cost	FY 2010 OCO Quantity	FY 2010 OCO Cost	FY 2010 Total Quantity	FY 2010 Total Cost	SEC
BUDGET ACTIVITY 02: Other warships													
OTHER WARSHIPS													
1	CARRIER REPLACEMENT PROGRAM	A	1	(6,165,169)		(2,705,081)		(739,269)				(739,269)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-3,143,679)									U
				3,021,490		2,705,081		739,269				739,269	
2	CARRIER REPLACEMENT PROGRAM ADVANCE PROCUREMENT (CY)			123,530		1,210,561		484,432				484,432	U
3	VIRGINIA CLASS SUBMARINE	B	1	(2,750,092)	1	(2,937,721)	1	(2,756,699)			1	(2,756,699)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-857,477)		(-755,974)		(-792,382)				(-792,382)	U
				1,892,615		2,181,747		1,964,317				1,964,317	
4	VIRGINIA CLASS SUBMARINE ADVANCE PROCUREMENT (CY)			1,281,676		1,391,380		1,959,725				1,959,725	U
5	CVN REFUELING OVERHAULS	A			1	(1,023,413)		(1,563,602)				(1,563,602)	U
	LESS: ADVANCE PROCUREMENT (PY)					(-431,652)							U
						591,761		1,563,602				1,563,602	
6	CVN REFUELING OVERHAULS ADVANCE PROCUREMENT (CY)			295,263		21,325		211,820				211,820	U
7	SSBN ERO		1	(222,530)	1	(279,418)		(39,742)				(39,742)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-36,185)		(-42,013)		(-39,742)				(-39,742)	U
				186,345		237,405							
8	SSBN ERO ADVANCE PROCUREMENT (CY)			42,449		39,245							U

Exhibit P-1Q: FY 2010 Base and Overseas Contingency Operations (OCO) Request, as of May 5, 2009 at 14:24:40

Department of the Navy
FY 2010/2011 President's Budget
Exhibit P-1 FY 2010 Base and Overseas Contingency Operations (OCO) Request
(Dollars in Thousands)

APPROPRIATION: 1611N Shipbuilding & Conversion, Navy DATE: 05 MAY 2009

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2008 Base&OCO Actuals Quantity	FY 2008 Base&OCO Actuals Cost	FY 2009 Base&OCO SupReq 4/9/09 Quantity	FY 2009 Base&OCO SupReq 4/9/09 Cost	FY 2010 Base Quantity	FY 2010 Base Cost	FY 2010 OCO Quantity	FY 2010 OCO Cost	FY 2010 Total Quantity	FY 2010 Total Cost	S E C
9	DDG 1000	A		(2,757,037)	1	(1,654,127)		(1,084,161)				(1,084,161)	U
	LESS: ADVANCE PROCUREMENT (PY)					(-149,830)							U
				2,757,037		1,504,297		1,084,161				1,084,161	
10	DDG 1000 ADVANCE PROCUREMENT (CY)			149,830									U
11	DDG-51	A		(47,742)			1	(2,111,670)			1	(2,111,670)	U
	LESS: ADVANCE PROCUREMENT (PY)							(-199,403)				(-199,403)	U
				47,742				1,912,267				1,912,267	
12	DDG-51 ADVANCE PROCUREMENT (CY)					199,403		328,996				328,996	U
13	LITTORAL COMBAT SHIP	A		106	2	1,016,952	3	1,380,000			3	1,380,000	U
TOTAL Other warships				9,798,083		11,099,157		11,628,589				11,628,589	
BUDGET ACTIVITY 03: Amphibious ships													
AMPHIBIOUS SHIPS													
14	LPD-17	A	1	(1,756,478)	1	(1,013,162)		(872,392)				(872,392)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-299,903)		(-49,651)							U
				1,456,575		963,511		872,392				872,392	
15	LPD-17 ADVANCE PROCUREMENT (CY)			49,651				184,555				184,555	U
16	LHA REPLACEMENT	A		1,365,785		14,310							U
17	LHA REPLACEMENT ADVANCE PROCUREMENT (CY)					177,767							U
18	INTRATHEATER CONNECTOR	B			1	174,260	1	177,956			1	177,956	U
TOTAL Amphibious ships				2,872,011		1,329,848		1,234,903				1,234,903	

Exhibit P-1Q: FY 2010 Base and Overseas Contingency Operations (OCO) Request, as of May 5, 2009 at 14:24:40

Department of the Navy
FY 2010/2011 President's Budget
Exhibit P-1 FY 2010 Base and Overseas Contingency Operations (OCO) Request
(Dollars in Thousands)

APPROPRIATION: 1611N Shipbuilding & Conversion, Navy DATE: 05 MAY 2009

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2008 Base&OCO Actuals Quantity	FY 2008 Base&OCO Actuals Cost	FY 2009 Base&OCO SupReq 4/9/09 Quantity	FY 2009 Base&OCO SupReq 4/9/09 Cost	FY 2010 Base Quantity	FY 2010 Base Cost	FY 2010 OCO Quantity	FY 2010 OCO Cost	FY 2010 Total Quantity	FY 2010 Total Cost	S E C
BUDGET ACTIVITY 05: Auxiliaries, craft, and prior-year program costs													
	AUXILIARIES, CRAFT AND PRIOR YR PROGRAM COST												
19	OUTFITTING	A		376,853		428,305		391,238				391,238	U
20	SERVICE CRAFT	A		32,672		47,973		3,694				3,694	U
21	LCAC SLEP	A	5	97,830	6	110,587	3	63,857			3	63,857	U
22	COMPLETION OF PY SHIPBUILDING PROGRAMS	B						(454,586)				(454,586)	U
	SSN-774 (MEMO NON ADD)							(45,608)				(45,608)	U
	DDG-1000 (MEMO NON ADD)							(309,636)				(309,636)	U
	LPD 17 (MEMO NON ADD)							(99,342)				(99,342)	U
								454,586				454,586	
TOTAL Auxiliaries, craft, and prior-year program costs				507,355		586,865		913,375				913,375	
TOTAL Shipbuilding & Conversion, Navy				13,177,449		13,015,870		13,776,867				13,776,867	

Exhibit P-1Q: FY 2010 Base and Overseas Contingency Operations (OCO) Request, as of May 5, 2009 at 14:24:40

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BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 PRESIDENT'S BUDGET

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 2 Other Warships

P-1 LINE ITEM NOMENCLATURE
CARRIER REPLACEMENT PROGRAM
BLI: 2001

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
QUANTITY	9	1	0	0						
End Cost	24,866.5	10,845.8	0.0	0.0						
Less Advance Procurement	2,821.3	3,693.2	0.0	0.0						
Less Subsequent Funds	0.0	4,467.6	2,684.6	739.3						
Less Escalation	66.4	0.0	0.0	0.0						
Full Funding TOA	21,978.8	2,685.0	2,684.6	739.3						
Plus Advance Procurement	6,962.8	123.5	1,210.6	484.4						
Plus Cost to Complete	1,597.0	336.5	20.5	0.0						
Total Obligational Authority	30,538.6	3,145.0	3,915.6	1,223.7						
Plus Outfitting / Plus Post Delivery	94.2	34.5	48.0	0.0						
Plus Escalation	66.4	0.0	0.0	0.0						
Total	30,699.2	3,179.5	3,963.6	1,223.7						
Unit Cost (Ave. End Cost)	2,762.9	10,845.8	0.0	0.0						

MISSION:

To provide credible, sustainable, independent forward presence during peacetime without access to land bases; operate as the cornerstone of a joint and/or allied maritime expeditionary force in response to crisis; and carry the war to the enemy through joint multi-mission offensive operations.

NOTE:

04/2008 is contractual date for CVN 77, projected delivery date is 05/2009

Characteristics:	CVN 77 Major Electronics/Armament	CVN 78 Major Electronics/Armament
Hull:	Automated Radio Communication System	Common C2 System
Length overall: 1092'	Ship Self Defense System	EMALS
Beam: 134'	Carrier Tactical Support Center (CV-TSC)	Dual Band Radar (DBR)
Displacement: 97,337 Tons	CEC (AN/USG-2)	Advanced Arresting Gear (AAG)
Draft: 38.7'	SPS-48E	
	Rolling Airframe Missile (RAM)	

Production Status:	**FY01**	**FY08**
Contract Award Date	01/01	09/08
Months to Completion:		
a) Contract Award to Delivery	100 months	87 months
b) Construction Start to Delivery	67 months	64 months
Delivery Date	05/09	09/15
Completion of Fitting Out	05/09	11/15
Obligation Work Limiting Date	04/10	10/16

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

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. BLI: 2001**
Other Warships	**CARRIER REPLACEMENT PROGRAM**	

	FY 2001		**FY 2008**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	1		1	2,520,762
BASIC CONST/CONVERSION		3,725,307		5,185,248
CHANGE ORDERS		175,534		230,106
ELECTRONICS		258,686		346,423
PROPULSION EQUIPMENT		695,870		1,515,612
HM&E		54,241		35,971
OTHER COST		70,401		81,071
ORDNANCE		181,140		930,638
ESCALATION		681,495		
TOTAL SHIP ESTIMATE		5,842,674		10,845,831
LESS ADVANCE PROCUREMENT FY98		48,737		
LESS ADVANCE PROCUREMENT FY99		122,897		
LESS ADVANCE PROCUREMENT FY00		747,503		
LESS ADVANCE PROCUREMENT FY01				21,668
LESS ADVANCE PROCUREMENT FY02				135,341
LESS ADVANCE PROCUREMENT FY03				395,493
LESS ADVANCE PROCUREMENT FY04				1,162,905
LESS ADVANCE PROCUREMENT FY05				623,073
LESS ADVANCE PROCUREMENT FY06				618,884
LESS ADVANCE PROCUREMENT FY07				735,800
LESS SUBSEQUENT FULL FUNDING FY03		88,170		
LESS SUBSEQUENT FULL FUNDING FY09				2,684,565
LESS SUBSEQUENT FULL FUNDING FY10				739,269
LESS SUBSEQUENT FULL FUNDING				1,043,812
LESS COST TO COMPLETE FY06		143,573		
LESS COST TO COMPLETE FY07		318,400		
LESS COST TO COMPLETE FY08		336,475		
LESS COST TO COMPLETE FY09		20,516		
NET P-1 LINE ITEM:		4,016,403		2,685,021

SHIPBUILDING AND CONVERSION, NAVY

FY 2010 PRESIDENT'S BUDGET

Analysis of Ship Cost Estimate - Basic/Escalation

DATE:

Ship Type: CARRIER REPLACEMENT PROGRAM

May 2009

I.	**Design/Schedule**	**Start/Issue**	**Complete /Response**	**Reissue**	**Complete /Response**
	Issue date for TLR	APR 04			
	Issue date for TLS	SEPT 06			
	Preliminary Design	JAN 03	JUL 08		
	Contract Design	MAY 04	APR 08		
	Detail Design	JAN 04	SEP 09		
	Request for Proposals	JUL 07	OCT 07		
	Design Agent	NORTHROP GRUMMAN SHIP BUILDING - NEWPORT NEWS			
II.	**Classification of Cost Estimate**	C			
III.	**Basic Construction/Conversion**				
	A. Actual Award Date	SEP 08			
	B. Contract Type (and Share Line if applicable)	CPIF			
	C. RFP Response Date	OCT 07			
IV.	**Escalation**				
	Escalation Termination Date				
	Escalation Requirement				
	Labor/Material Split				
	Allowable Overhead Rate				
V.	**Other Basic(Reserves/Miscellaneous)**	**Amount**			

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
CVN	77	NORTHROP GRUMMAN NEWPORT NEWS	2001	JAN-01	SEP-98	MAY-09
CVN	78	NORTHROP GRUMMAN NEWPORT NEWS	2008	SEP-08	AUG-05	SEP-15

April 2008 is contractual date for CVN 77. Projected Delivery Date is May-09.

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CARRIER REPLACEMENT PROGRAM

	FY 2008 QTY	FY 2008 COST
ELECTRONICS		
a. P-35 Items		
INTEGRATED STRIKE PLANNING & EXECUTION SYSTEMS (ISP&E)	1	14,014
AN/USQ-T46X(V)X, BATTLE FORCE TACTICAL TRAINING SYSTEM (BFTT)	1	6,621
AN/USQ-123(V) , COMMUNICATIONS DATA LINK-SYSTEM (CDL-S)	1	3,311
CANES	1	23,969
AN/USG-2, COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	1	7,230
DIGITAL MODULAR RADIO (DMR) ULTRA HIGH FREQUENCY/VERY HIGH FREQUENCY LINE OF SIGHT (EHF/VHF LOS) SATCOM	1	11,729
HIGH FREQUENCY RADIO GROUP (HFRG)	1	3,426
AN/UPX-29(V), INTERROGATOR FRIEND OR FOE (IFF) W/MK XII	1	8,296
AN/SPN-41(V), INSTRUMENT LANDING SYSTEM (ILS)	1	3,345
SPN-46, AUTOMATIC CARRIER LANDING SYSTEM	1	10,991
COMMON C2 SYSTEM	1	87,733
SHIP SIGNAL EXPLOITATION SPACE (SSES/SI) COMMUNICATIONS	1	4,185
AN/TPX-42A(V)14, CARRIER AIR TRAFFIC CONTROL CENTER - DIRECT ALTITUDE AND IDENTIFY READOUT (CATCC-DAIR)	1	5,523
TURNKEY RADIO COMMUNICATIONS SYSTEM (RCS)	1	17,678
NAVY MULTI-BAND TERMINAL (NMT)	1	6,068
ELECTRONIC SURVEILLANCE SUITE, SEWIP BLOCK 2 (EWS)	1	27,810
Subtotal		241,929
b. Major Items		
AN/USQ-155(V)1 TACTICAL VARIANT SWITCH	1	2,492

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CARRIER REPLACEMENT PROGRAM

	FY 2008	
	QTY	COST
INFORMATION ASSURANCE (IA)	0	2,619
MAST CLAMP CURRENT PROBE (MCCP) UPGRADE	1	2,289
AN/URC-141X(V), MULTI-FUNCTION INFORMATION DISTRIBUTION SYSTEM (MIDS)-ON-SHIP (MOS)	1	2,274
AN/SLQ-25A DUAL, SURFACE SHIP TORPEDO DEFENSE SYSTEM, NIXIE	1	2,316
AN/UYK-158 (V), NAVAL TACTICAL COMMAND SUPPORT SYSTEM (NTCSS)/WEB ENABLE NTCSS (ENTCSS) BLOCK UPGRADE	1	679
AN/SMQ-11, METEOROLOGICAL/OCEANOGRAPHIC (METOC) SATELLITE RECEIVER - RECORD SET	1	1,463
SHIPBOARD AIR TRAFFIC CONTROL COMMUNICATIONS (SATCC)	1	1,978
SHIP TEST AND INTEGRATION PROGRAMS	0	1,767
AN/USQ-162(V)3 ARC AUTOMATED RADIO COMMUNICATIONS SYSTEM	1	1,051
AN/WSN-7(V)3, RING LASER GYRO NAVIGATOR (RLGN)	1	2,411
DISTRIBUTED SYSTEMS DESIGN INTEGRATION SERVICES	1	9,374
C4I INTEGRATION & COORDINATION	0	9,025
SEA-BASED JOINT PRECISION APPROACH & LANDING SYSTEM (JPALS)	1	2,637
DISTRIBUTED COMMON GROUND STATION - NAVY (DCGS-N)	1	1,631
AN/USQ-144K AUTOMATED DIGITAL NETWORK SYSTEM (ANDS)	1	1,461
AN/UYQ-86 CDLMS WITH NGC2P	1	1,787
OA-9277 UHF MULTICOUPLER	1	1,988
ARC-210 CATCC-PRIFLY-LSO SYSTEM	1	1,406
WARFARE SYSTEM INTEGRATION	0	30,204
NET-ENABLED COMMAND CAPABILITY (NECC)	1	1,554
COMMERCIAL BROADBAND SATELLITE PROGRAM (CBSP-FLV)	1	1,663
AN/SSN-6(V)X BLOCK 4, NAVIGATION SENSOR SYSTEM INTERFACE (NAVSSI)	1	3,278
AN/SPS-73(V)X LITE SYSTEM	2	3,661
Subtotal		91,008

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

Ship Type: CARRIER REPLACEMENT PROGRAM

	FY 2008	
	QTY	COST
c. Other ELECTRONICS		
	0	13,486
Subtotal		13,486
Total ELECTRONICS		346,423

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CARRIER REPLACEMENT PROGRAM	**FY 2008**	
	QTY	**COST**
ORDNANCE		
a. P-35 Items		
ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)	1	498,631
DUAL BAND RADAR (DBR) (SPY-3 AND VSR)	1	242,597
ADVANCED AIRCRAFT RECOVERY SYSTEM (AAG)	1	102,907
PHALANX BLOCK 1B MK 15 MOD 23, WEAPONS SYSTEM	3	18,301
AN/SQQ-34, CARRIER-TACTICAL SUPPORT CENTER	1	7,131
IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)	1	3,692
MK29 GUIDED MISSILE LAUNCHING SYSTEM (GMLS) EVOLVED SEA SPARROW MISSILE (ESSM)	2	13,575
AVIATION DATA MANAGEMENT AND CONTROL SYSTEM (ADMACS)	1	7,437
INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)	1	6,000
MK 49 GUIDED MISSILE LAUNCHING SYSTEM (GMLS), P/O MK 31 ROLLING AIRFRAME MISSILE (RAM)	2	13,935
Subtotal		914,206
b. Major Items		
LANDING SIGNAL OFFICER DISPLAY SYSTEM (LSODS)	1	1,689
MORIAH BLOCK 2	1	1,445
SHIP TEST AND INTEGRATION PROGRAMS	1	3,163

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CARRIER REPLACEMENT PROGRAM

	FY 2008 QTY	FY 2008 COST
JET BLAST DEFLECTORS (JBD)	1	1,441
JOINT STRIKE FIGHTER AUTONOMIC LOGISTICS INFORMATION SYSTEM (JSF ALIS)	1	1,441
Subtotal		9,179
c. Other ORDNANCE		
	0	7,253
Subtotal		7,253
Total ORDNANCE		930,638

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CARRIER REPLACEMENT PROGRAM

	FY 2008 QTY	FY 2008 COST
HM&E		
a. P-35 Items		
Subtotal		0
b. Major Items		
HM&E ENGINEERING SERVICES	0	19,080
INTEGRATED LOGISTICS SUPPORT	0	2,493
LIFE RAFTS	0	2,252
SUPSHIP MATERIAL AND GFE	0	2,438
TEST & INTEGRATION	0	6,901
TRUCKS (FORKLIFTS)	0	500
Subtotal		33,664
c. Other HM&E		
	0	2,307
Subtotal		2,307
Total HM&E		35,971

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **INTEGRATED STRIKE PLANNING & EXECUTION SYSTEMS (ISP&E)**
PARM Code: **PMA 281**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Provides Carrier Air Wing Strike Planning, Tomahawk Planning, and Tomahawk Command and Control Systems as part of an Integrated Intelligence Center (CVIC). The ISP&E Programs of Record include the Tomahawk Command and Control System (TC2S), Joint Mission Planning System (JMPS) and Digital Camera Receiving System (DCRS).

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST
Major Hardware	1	363
Spares		32
Tech Data Documentation		149
Systems Engineering		11,408
Technical Engineering Services		813
Other		1,249
Total		14,014

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	BAE SAIC LM BRANDES	FFP CDFF	JUN-10		1	363

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	48	15	JUN-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

Integrated Strike Planning and Execution Systems (ISP&E) provides Strike planning, Tomahawk planning and control equipment as part of an integrated Carrier Intelligence Center (CVIC). Additional hardware includes the Joint Mission Planning System (JMPS), Tomahawk Command and Control Systems (TC2S), and Digital Camera receiving Station (DCRS). The ISP&E installation is planned as an alternate installation using Customer Contract Teams (CCT). The ISP&E GFE (hardware and software) is procured in advance of ship installation to permit system-of-system integration testing and operational verification testing in advance of the ship installation.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/USQ-T46X(V)X, BATTLE FORCE TACTICAL TRAINING SYSTEM (BFTT)**
PARM Code: **PEO IWS 7C**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

BFTT is a highly flexible, interactive unit and group/force level tactical combat training system. The mission of the system is to provide training capabilities for fleet personnel to achieve and maintain combat readiness.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST
Major Hardware	1	4,288
Spares		129
Tech Data Documentation		0
Systems Engineering		712
Technical Engineering Services		474
Other Costs		1,018
Total		6,621

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Various	VARIOUS	MAR-11		1	4,288

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	28	24	MAY-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/USQ-123(V) , COMMUNICATIONS DATA LINK-SYSTEM (CDL-S)**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The CDL-S Blk 1 system is an enhanced capability and technology upgrade to the Common High Bandwidth Data Link-Surface Terminal (CHBDL-ST) system. It provides a full duplex, microwave digital data link between shipboard processors and airborne sensors. CVN 78 is for a single link system.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	2,500
Spares		161
Systems Engineering		300
Technical Engineering Services		130
Other Costs		220
Total		3,311

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	2,500

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	30	20	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
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(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **CANES**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

CANES will provide the Navy tactical/non-tactical information environment and infrastructure necessary to enable hosting, extended services reach-back and reach-forward, and relay functions. These capabilities will support real time and non-real time tactical/non-tactical edge connected, connectionless, and ad-hoc voice, video and data information exchange requirements. CANES is the technology replacement for the following existing afloat networks: Combined Enterprise Regional Information Exchange System-Maritime (CENTRIXS-M), limited shipboard Internal Voice (IC), Integrated Shipboard Networking System (ISNS), Sensitive Compartmented Information (SCI) Networks, to include the Top Secret enclave, and Video Information exchange System (VIXS). CANES will incrementally collapse Unclassified, Secret, Secret-Releasable, and SCI enclaves. CANES Increment 1 is the current POR for CVN 78.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	18,602
Spares		125
Tech Data Documentation		136
Systems Engineering		2,650
Technical Engineering Services		426
Other Costs		2,030
Total		23,969

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	18,602

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	TBD	9	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/USG-2, COOPERATIVE ENGAGEMENT CAPABILITY (CEC)**
PARM Code: **CVN 78 IWS 6.0**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

CEC significantly improves battle force air and missile defense capabilities by coordinating battle force air defense sensors into a single, near real-time, composite track picture capable of fire control quality. CEC is a sensor netting system which distributes sensor data from each CEC equipped ship, aircraft, and/or Cooperating Unit (CU), to all other CUs in the battle force through a real-time, line of sight, high data rate sensor and engagement data distribution network. CEC is highly resistant to jamming and provides accurate grid locking between CUs. Each CU independently employs high capacity parallel processing and advanced algorithms to combine all distributed sensor data into a high quality track picture that is the same for all CUs. CEC data is presented as a superset of the best sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapons system. The software costs for CVN 78 are estimated on DDG 1000 leveraging and integration required for CVN 78. The CVN 78 will use version Alpha.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	4,745
Spares		390
Tech Data Documentation		0
Systems Engineering		672
Technical Engineering Services		314
Other Costs		1,109
Total		7,230

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Raytheon	CPIF	TBD	OPTION	1	4,745

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	21	18	APR-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **DIGITAL MODULAR RADIO (DMR) ULTRA HIGH FREQUENCY/VERY HIGH FREQUENCY LINE OF SIGHT (EHF/VHF LOS) SATCOM**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

DMR-VHF/UHF LOS/SATCOM is an open architecture system that allows transmission and reception of UHF and VHF RF signals. The DMR replaces many legacy systems, including some crypto, Line Of Sight (LOS) and Satellite Communications (SATCOM) components.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST
Major Hardware	1	9,930
Spares		50
Tech Data Documentation		31
Systems Engineering		652
Tech Engineering Services		305
Other Costs		761
Total		11,729

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	VARIOUS	VARIOUS	JUL-08		1	9,930

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	TBD	19	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **HIGH FREQUENCY RADIO GROUP (HFRG)**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

HFRG provides broadband High Frequency Radio Frequency capability to transmit (2-30MHz) and receive (10KHz-30MHz).

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	1,478
Spares		40
Ancillary Hardware		0
System Engineering		550
Tech Engineering Services		1,195
Other Costs		163
Total		3,426

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	1,478

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	TBD	12	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/UPX-29(V), INTERROGATOR FRIEND OR FOE (IFF) W/MK XII**
PARM Code: **PMA 213**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

IFF is an approved and fully supported centralized Mark XII Interrogator system. It uses one receiver transmitter that synchronizes video with up to four radar sweeps. It supplies synthetic video (symbology) to, and accepts requests from, as many as 22 remote locations. It provides digital target reporting to the combat systems/weapon systems computer via full scan, sectored, and/or pop-up interrogations. It provides instantaneous target reporting at requested range and azimuth through the use of an electronically-steered Antenna Group OE-120/UPX or OE-120A/UPX. It provides electronically evaluated Mode 4 target reporting directly to operators and over the combat systems/weapon system computer interface. It provides full redundancy so identification capabilities are retained in case of main processor, main antenna, or main receiver/transmitter failure.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	6,171
Spares		84
Systems Engineering		936
Other Costs		744
Ancillary Equipment		72
Technical Engineering Services		289
Total		8,296

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Northrop Grumman-BAE Systems	SS / FP	TBD		1	6,171

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	15	24	JUN-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/SPN-41(V), INSTRUMENT LANDING SYSTEM (ILS)**
PARM Code: **PMA 213**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPN-41 Transmitting Set is used as the ship's Instrument Control Landing System (ICLS) to provide azimuth and elevation alignment information; thus, assisting the pilot with landing the aircraft. When the aircraft is within 0.75 miles of the ship, the Landing Signal Officer (LSO) directs the pilot for a safe landing.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	1,709
Ancillary Hardware		5
Systems Engineering		463
Technical Engineering Services		112
Other Costs		1,056
Total		3,345

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	VARIOUS	VARIOUS	APR-10		1	1,709

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	15	40	FEB-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **SPN-46, AUTOMATIC CARRIER LANDING SYSTEM**
PARM Code: **PMA 213**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

AN/SPN-46 (V)3 provides Precision Approach Landing System (PALS) used for non-clear weather aircraft landings on board carriers.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	6,562
Systems Engineering		1,157
Technical Engineering Services		0
Other Costs		3,272
Total		10,991

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	VARIOUS	VARIOUS	APR-08		1	6,562

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	AUG-15	24	64	APR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **COMMON C2 SYSTEM**
PARM Code: **PEO IWS 1FM4A**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Common C2 system provides combat management capabilities for multi-mission requirements including Ship Protection against air, surface, and subsurface threats using both own-ship and remote data in support of capstone requirements.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST
Major Hardware	1	12,945
Spares		1,014
Tech Data Documentation		738
Technical Engineering Services		1,961
Systems Engineering		9,034
Other Costs		62,041
Total		87,733

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	RAYTHEON/GEN DYNAMICS	FFP	JAN-10	NEW	1	12,945

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	34	24	NOV-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **SHIP SIGNAL EXPLOITATION SPACE (SSES/SI) COMMUNICATIONS**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

SSES/SI Comms supports the overall mission of the SSES Information Warfare System. Its capabilities include: SI Message Processing equipment, Navy Order Wire (NOW) system, HF Receiver suite equipped with a Frequency Shift Key (FSK) modification and various crypto-logical equipment.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	1,189
Spares		0
Systems Engineering		778
Technical Engineering Services		2,046
Other Costs		172
Total		4,185

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Various	TBD	TBD		1	1,189

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	29	18	OCT-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/TPX-42A(V)14, CARRIER AIR TRAFFIC CONTROL CENTER - DIRECT ALTITUDE AND IDENTIFY READOUT (CATCC-DAIR)**
PARM Code: **PMA 213**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

CATCC-DAIR is an automatic beacon and radar that when integrated with an air traffic control radar, provides numeric and symbolic displays of position, identity, and altitude of aircraft in the terminal airspace on an operator's Plane Position Indicator (PPI) display.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	3,007
Spares		228
Systems Engineering		1,622
Technical Engineering Services		42
Other Costs		624
Total		5,523

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	3,007

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	54	24	MAR-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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(Dollars in Thousands)

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **TURNKEY RADIO COMMUNICATIONS SYSTEM (RCS)**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Turnkey RCS 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 undergo total integration and testing prior to delivery to the shipbuilder.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	3,113
Tech Data Documentation		1,020
Systems Engineering		7,139
Technical Engineering Services		4,382
Other Costs		2,024
Total		17,678

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	VARIOUS	VARIOUS	TBD		1	3,113

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	28	0	MAY-13

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

Hardware includes only Non-2Z Cog items to support integration efforts.

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **NAVY MULTI-BAND TERMINAL (NMT)**
PARM Code: **PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Advanced Extremely High Frequency (AEHF) Navy Multi-band Terminal (NMT) will be used to receive signals from the Advanced EHF satellites which is a follow-on to the DoD's highly secure, highly protected MILSTAR communications satellite system.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST
Major Hardware	1	4,896
Spares		329
Tech Data Documentation		55
Systems Engineering		170
Technical Engineering Services		240
Other		378
Total		6,068

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	4,896

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	28	18	NOV-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **ELECTRONIC SURVEILLANCE SUITE, SEWIP BLOCK 2 (EWS)**
PARM Code: **PEO IWS 2E**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

EWS is the Navy's primary electronic warfare system used on all surface combatants, amphibs, auxiliaries, and carriers. It provides operational capability for early detection, analysis, threat warning, and protection from anti-ship missiles. The SEWIP Block 2 configuration installed on all CV/CVNs provide passive capability

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	17,942
Ancillary Equipment		180
Spares		812
System Engineering		3,251
Technical Engineering Services		2,231
Other Costs		3,394
Total		27,810

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	17,942

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	TBD	36	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **ELECTROMAGNETIC AIRCRAFT LAUNCHING SYSTEM (EMALS)**
PARM Code: **PMA 251**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

EMALS is an advanced technology electrically generated launching system that uses a moving electromagnetic field to propel aircraft to launch speed. EMALS is made up of four primary sub-systems: energy storage, power conditioning, launch engine, and control system. Benefits over the current C13 steam catapults include reduced weight and volume, greater launching flexibility for future aircraft, improved control, and reduced manning workload requirements.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST
Major Hardware	1	453,124
Tech Data Documentation		804
Systems Engineering		28,555
Other Costs		16,148
Total		498,631

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	General Atomics	TBD	JUL-09		1	453,124

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	52	TBD	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

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Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **DUAL BAND RADAR (DBR) (SPY-3 AND VSR)**
PARM Code: **IWS2RA**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The DBR suite performs horizon and volume search functions during which the system can detect stealthy targets in sea-land clutter, provide periscope detection, and counter battery functions. The dual band approach (wave form integration) has the ability to provide improved performance in adverse environments, demonstrate avoidance of multi-radar track-to-track correlation and provides for reduced software development and maintenance. The SPY-3 function provides an affordable, high-performance radar for the ship's defense. SPY-3 greatly enhances ship defense capability against all surface and air threats envisioned in the littoral environment. VSR provides a solid state active phased array with low signature and a three-dimensional air search capability. The VSR function also provides long range above the horizon surveillance, detection, and tracking of high diving targets, and provides the SPY-3 with timely cueing and aircraft marshalling assistance.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	181,471
Hardware CAPS/CACS		23,000
Spares		2,500
Systems Engineering		9,800
Technical Engineering Services		5,300
Other Costs		20,526
Total		242,597

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Raytheon	TBD	SEP-08		1	204,471

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	VARIOUS	34	NOV-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

The hardware cost includes $181.471M for the VSR/MFR hardware cost as well as $23M for the Common Array Power Systems (CAPS) & Common Array Cooling System (CACS).

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **ADVANCED AIRCRAFT RECOVERY SYSTEM (AAG)**
PARM Code: **PMA 251**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

AAG provides an upgraded ability to recover all existing and projected aircraft carrier based air vehicles. The AAG system will replace the Mark 7 arresting gear system and consists of six primary systems; energy absorption subsystem, energy storage subsystem, dynamic control subsystem, thermal management subsystem, cross deck pendant, and the control subsystem.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	73,236
Spares		7,658
Ancillary Equipment		1,947
Tech Data Documentation		1,720
Systems Engineering		3,787
Technical Engineering Services		4,355
Other Costs		10,204
Total		102,907

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	General Atomics	TBD	TBD		1	73,236

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	54	18	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **PHALANX BLOCK 1B MK 15 MOD 23, WEAPONS SYSTEM**
PARM Code: **IWS 3B**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Phalanx is a high fire rate gun weapon system that automatically acquires, tracks and destroys Anti-Ship cruise missiles, Helos, Aircraft, and all types of Surface threats.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	3	15,306
Ancillary Equipment		194
Systems Engineering		1,221
Technical Engineering Services		1,054
Other Costs		526
Total		18,301

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Raytheon	FFP	NOV-07		3	5,102

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	39	22	AUG-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AN/SQQ-34, CARRIER-TACTICAL SUPPORT CENTER**
PARM Code: **PEO IWS 5E**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

CV-TSC provides for carrier organic Anti-submarine Warfare (ASW), Mine Warfare (MIW), Surface Warfare (SUW), and other composite warfare area sensor data processing, tactical command and control, and organic/battle-group aircraft mission support. CV-TSC supports both ship self defense and embarked Destroyer Squadron (DESRON) missions. This system is Open Architecture Computing Environment (OACE), Joint Fires Network (JFN), and FORCEnet compliant, and includes redesign to maximize introduction of expected transformational technologies such as Multi-Modal Watch-station (MMWS), Tactically Integrated Sensors (TIS), advanced sensors & sensor processing, high speed bandwidth network, Excomm systems, net-centric warfare components, etc. The CVN 78 system provides rollover CVN-70/CVN-77 CV-TSC system with required MH-60R upgrades required to meet ASW objectives and requirements across the peace time/crisis/war continuum.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	2,995
Spares		125
Systems Engineering		1,930
Technical Engineering Services		460
Other Costs		1,621
Total		7,131

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	TBD		1	2,995

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	26	18	JAN-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **IMPROVED FRESNEL LENS OPTICAL LANDING SYSTEM (IFLOLS)**
PARM Code: **PMA 251**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The IFLOLS is the primary visual landing aide displaying glide path, and trend information to fixed wing pilots on final approach from 1.5 nautical miles to touchdown. It is centered between two fixed green datum reference bars. This stabilized "meatball" indicates to the pilot his position above, below, or on ideal glide slope by ball displacements above or below the datum reference.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	1,793
Spares		0
System Engineering		846
Technical Engineering Services		360
Other Costs		693
Total		3,692

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	APR-09	NEW	1	1,793

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	26	30	JAN-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **MK29 GUIDED MISSILE LAUNCHING SYSTEM (GMLS) EVOLVED SEA SPARROW MISSILE (ESSM)**
PARM Code: **PEO IWS 3**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The MK 29 Mod (GMLS) is a launcher only configuration integrated with the C2 system and will provide CVN 78 with a cost effective means of employing the initial ESSM capability. This configuration consists of a launching system and does not include operator workstations; all workstations and operator interactions necessary for system operation including but not limited to power application to the GMLS and control and safety/status monitoring of loaded cells is assumed to exist at the combat system level.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	2	6,785
Spares		530
Ancillary Equipment		327
Tech Data Documentation		56
Systems Engineering		1,503
Technical Engineering Services		515
Other Costs		3,859
Total		13,575

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Raytheon	FP	MAR-11	NEW	2	3,393

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	30	24	MAR-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **AVIATION DATA MANAGEMENT AND CONTROL SYSTEM (ADMACS)**
PARM Code: **PMA 251**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

ADMACS is a virtual, seamless, data sharing, knowledge based data system that provides interface for all aviation data systems. It is a tactical real-time information management system maintaining data integrity throughout the ship spaces that manage aircraft launch and recovery operations on board the carrier. ADMACS includes data from launch and recovery equipment, air traffic control, aviation maintenance, landing signaling officer, etc. The CVN 78 version is ADMACS Block 3.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	4,802
Tech Data Documentation		209
Systems Engineering		563
Technical Engineering Services		1,012
Other		851
Total		7,437

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	TBD	TBD	JUN-12	NEW	1	4,802

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	26	12	JUL-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

CVN 78 None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **INTEGRATED LAUNCH AND RECOVERY TELEVISION SYSTEM (ILARTS)**
PARM Code: **PMA 251**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The primary purpose of the ILARTS system is to simultaneously monitor and record aircraft recoveries and launches aboard aircraft carriers during both day and night operations. This system also provides the LSO with information on aircraft lineup during recovery and is used both as a pilot debriefing medium and as a detailed accident analysis tool. ILARTS consists of six cameras in different locations aboard ship that are connected to a closed circuit television system.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	1	3,501
Systems Engineering		1,371
Technical Engineering Services		191
Other		937
Total		6,000

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	VARIOUS	FP	NOV-10	NEW	1	3,501

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	19	36	FEB-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 PRESIDENT'S BUDGET
May 2009

Ship Type: **CARRIER REPLACEMENT PROGRAM**
Equipment Item: **MK 49 GUIDED MISSILE LAUNCHING SYSTEM (GMLS), P/O MK 31 ROLLING AIRFRAME MISSILE (RAM)**
PARM Code: **PEO IWS 3B**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The MK 49 Rolling Airframe Missile Weapon System is a lightweight, low cost, high power system for anti-ship missile defense against current and evolving threats. The Block 1 upgrade adds the capability of infrared, all-the-way missile guidance while maintaining the original dual-mode (RF/IR) capability. The Helos, Aircraft, and Surface (HAS) upgrade enables the engagement of asymmetric threats. The CVN 78 system provides refurbished MK 49 Guided Missile Launching Systems upgraded to MK 49 Mod 3.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**	
	QTY	**COST**
Major Hardware	2	6,816
Spares		121
Ancillary Equipment		1,591
Tech Data Documentation		30
Systems Engineering		1,897
Technical Engineering Services		332
Other Costs		3,148
Total		13,935

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	CVN 78	Raytheon	FP	JUN-08		2	3,408

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	CVN 78	SEP-15	31	24	FEB-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

None

NOTE:

Exhibit P-10, Advance Procurement Requirements Analysis (Funding)									Date: **May 2009**				
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / 2 / Other Warships / BLI 2001**							P-1 Line Item Nomenclature **CARRIER REPLACEMENT PROGRAM**						
Weapon System **CVN 79**									First System Completion Date September-19				
($ in Millions)													
	PLT	When Req'd	Prior Years	FY 08	FY 09	FY10							
End Item Qty													
Plans (Detailed)	Up to 36				55.4	83.7							
Nuclear Propulsion Equipment	36-96		52.8	123.5	945.3	355.0							
Basic	36-66				209.9	45.7							
Total AP			52.8	123.5	1,210.6	484.4							

Description:

Plans funding is required to support the CVN 79 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 (GFE) funding is required to fund a shipset of reactor plant components. The complexity, size and early shipyard need dates for reactor plant equipment make them among the longest lead items for CVN 79.

Basic funding is required for both procurement of the longest lead non-reactor plant propulsion and electric plant contractor furnished equipment necessary to support an efficient CVN 79 construction schedule.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)											Date: **May 2009**		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / 2 / Other Warships / BLI 2001**								Weapon System **CVN 79**		P-1 Line Item Nomenclature **CARRIER REPLACEMENT PROGRAM**			
(TOA $ in Millions)													
End Item	PLT	QPA	Unit Cost	FY10 Qty	FY10 Contract Forecast Date	FY10 Cost Request							
Plans (Detailed)	Up to 36				October-09	83.7							
Nuclear Propulsion Equipment	36-96				October-09	355							
Basic	36-66				October-09	45.7							
Total AP						484.4							

Exhibit P-10, Advance Procurement Funding

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40) FY 2010 President's Budget	DATE: May 2009
APPROPRIATION/BUDGET ACTIVITY **SHIPBUILDING AND CONVERSION, NAVY/BA#2 OTHER WARSHIPS**	P-1 LINE ITEM NOMENCLATURE **Virginia Class Submarine** **BLI: 2013**

	PRIOR YR	FY2008	FY2009	FY2010							
QUANTITY	9	1	1	1							
End Cost	22728.4	2641.1	2856.7	2756.7							
Less Advance Procurement	6337.6	667.3	756.0	710.5							
Less Cost to Complete	1650.6	0	0	0							
Less EOQ	395.9	190.2		81.9							
Full Funding TOA	14344.4	1783.6	2100.7	1964.3							
Plus Advance Procurement	7467.8	1281.7	798.8	1346.4							
Plus Cost to Complete	1382.1	109.0	81.0	0							
Plus EOQ	586.1	0	592.6	613.3							
Total Obligational Authority	23780.3	3174.3	3573.1	3924.0							
Plus Cost to Complete	0	0	0	45.6							
Plus Outfitting and Post Delivery	156.0	82.4	93.5	75.8							
Total	23936.3	3256.7	3666.6	4045.4							
Unit Cost (Ave. End Cost)	2525.4	2641.1	2856.7	2756.7							

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 ships; 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; the capability to establish covertly an expeditionary force on land; and the maritime strength to destroy enemy naval forces and interdict seaborne commerce.

NOTE:

These VA Class Exhibits reflect a FY04-08 Multi-Year Procurement (MYP) strategy with Economic Ordering Quantity (EOQ) in FY04-FY06, and a MYP strategy with EOQ in FY09-FY10.

Characteristics:		**Armament:**	**Major Electronics:**
Hull		Torpedo Tubes	Command, Control, Communications and Intelligence System
Length overall	377'	Vertical Launch Tubes	- Open System Architecture
Beam	34'		- Twenty-three Subsystems
Displacement	7830 Tons		
Draft	32'		

Production Status:	**FY09**	**FY10**
Multi Year Procurement Contract	SSN 784	SSN 785
Contract Award Date	12/08	12/08
Months to Completion		
a) Award to Delivery	68 months	67 months
b) Construction Start to Delivery	65 months	64 months
Option Award Date	12/08	12/08
Start of Construction Date	03/09	03/10
Delivery Date	08/14	08/15
Completion of Fitting Out	08/14	08/15
Obligation Work Limiting Date	07/15	07/16

CLASSIFICATION; UNCLASSIFIED | P-5 EXHIBIT

APPROPRIATION: SHIPBUILDING AND CONVERSION, NAVY | **WEAPON SYSTEM COST ANALYSIS (EXHIBIT P-5)** | FY 2010 President's Budget

(Dollars in Thousands) | May 2009

BUDGET ACTIVITY: 2 | **P-1 ITEM NOMENCLATURE**

Other Warships | **Virginia Class Submarine**

	FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		FY 2010	
ELEMENT OF COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
PLAN COSTS	1	55,084	1	63,710	1	65,112	1	68,296	1	72,903	1	114,805	1	98,882
BASIC CONST/CONVERSION		1,447,569		1,455,472		1,529,768		1,692,622		1,656,089		1,775,064		1,702,521
CHANGE ORDERS		37,057		44,680		45,893		51,000		50,240		49,102		52,878
TECHNOLOGY INSERTION		0		0		0		47,206		89,700		111,267		81,323
ELECTRONICS		211,483		211,320		219,091		226,582		238,695		263,351		262,829
PROPULSION EQUIPMENT		430,600		431,337		435,000		445,000		456,000		462,931		474,000
HM&E		52,598		24,849		55,561		44,699		46,752		48,901		51,557
OTHER COST		20,232		24,907		27,994		29,033		30,713		31,300		32,709
TOTAL SHIP ESTIMATE		2,254,623		2,256,275		2,378,419		2,604,438		2,641,092		2,856,721		2,756,699
LESS ADVANCE PROCUREMENT FY01														
LESS ADVANCE PROCUREMENT FY02		431,109												
LESS ADVANCE PROCUREMENT FY03		200,751		431,337										
LESS ADVANCE PROCUREMENT FY04				169,184		435,000								
LESS ADVANCE PROCUREMENT FY05						186,864		445,000						
LESS ADVANCE PROCUREMENT FY06								200,874		456,520				
LESS ADVANCE PROCUREMENT FY07										210,795		462,931		
LESS ADVANCE PROCUREMENT FY08												293,043		474,749
LESS ADVANCE PROCUREMENT FY09														235,776
LESS EOQ FY04				63,551		63,551		63,294		63,294				
LESS EOQ FY05						78,234		77,876		79,676				
LESS EOQ FY06								49,418		47,192				
LESS EOQ FY09														81,857
LESS COST TO COMPLETE FY08		24,000												
LESS COST TO COMPLETE FY09		60,000												
LESS COST TO COMPLETE FY10		26,906		18,702										
NET P-1 LINE ITEM		1,511,857		1,573,501		1,614,770		1,767,976		1,783,615		2,100,747		1,964,317

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

Fiscal Year: 2010 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	FY2010		
	A. Award Date	Dec-08		
	B. Contract Type and Share Line	FPI		Multi Year Procurement with EOQ.
	C. Request for Proposals:			
	Start/Issue:	Feb-08		
	Complete/Response:	May-08		
IV.	Escalation			
	Base Date	N/A		
	Escalation Target Date	N/A		
	Escalation Termination Date	N/A		
	Escalation Requirement ($K)	N/A		
	Labor/Material Split	N/A		
	Allowable Overhead Rate	N/A		
V.	Other Basic (Reserves/Miscellaneous)	Amount		
	Item	N/A		

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

EXHIBIT P-27
May 2009
FY 2010 President's Budget
BLI: 201300

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

*Note: The Delivery Dates shown above for the SSN779 - 791 reflect the Construction Contract Delivery Dates. The shipbuilder has formally transmitted and the Program Manager has concurred in the following revised dates:

SSN 779	Aug-09
SSN 780	Apr-10
SSN 781	Jul-11
SSN 782	Apr-12
SSN 783	Apr-13

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

Ship Type:
VIRGINIA CLASS

	FY08		FY09		FY10	
	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
ELECTRONICS EQUIPMENT	1		1		1	
a. P-35 Items						
1. Sonar, Combat Control & Architecture		$104,665		$100,696		$96,842
2. ESM		$25,824		$28,045		$28,206
3. Photonics Masts		$16,817		$18,538		$18,678
4. UMMs		$9,457		$10,553		$10,664
5. ECS Recurring		Note 1		$22,825		$23,519
Subtotal		$156,763		$180,657		$177,909
b. Major Items						
1. SRWS		$4,672		Note 2		Note 2
2. System Level Activities		$21,318		$31,669		$31,898
3. AN/BPS-16		$5,416		$5,524		$5,584
4. Navigation		$3,255		$3,258		$3,262
5. AN/UYQ-70		$11,798		Note 3		Note 3
6. ECS Non Recurring		$7,832		$7,897		$7,955
7. CWITT		$15,805		$18,635		$20,342
8. NPES SE&I		$11,402		$15,087		$15,197
Subtotal		$81,498		$82,070		$84,238
c. Other Electronics						
1. Misc Electronics		$434		$624		$682
Subtotal		$434		$624		$682
TOTAL ELECTRONICS		$238,695		$263,351		$262,829

Notes:
(1) In FY08, Exterior Communications Systems (ECS) Recurring is included in Basic Construction
(2) In FY09 and beyond, SRWS will be integrated into the Sonar subsystem and is included in Sonar, Combat Control & Architecture
(3) In FY09 and beyond, AN/UYQ-70 displays will be procured by VIRGINIA Class PARMs instead of the SHAPM and are included in Sonar, Combat Control & Architecture, ESM, Photonics Masts and ECS Recurring.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: SONAR, COMBAT, CONTROL & ARCHITECTURE May 2009
FY 2010 President's Budget
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.

Quantity of 1 per hull

II. CURRENT FUNDING:

SHIP:	FY08	FY09	FY10
MAJOR HARDWARE	$79,647	$80,988	$78,002
TECH ENGINEERING SERVICES	$4,409	$2,652	$2,701
OTHER COSTS	$20,609	$17,056	$16,139
TOTAL	$104,665	$100,696	$96,842

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE	CONTRACT TYPE	NEW / OPTION
08	SSN783	LM, Manassas	1 Shipset	$51,900	Mar-08	SS/CPIF	Option
09	SSN784	LM, Manassas	1 Shipset	$42,646	Aug-09	SS/CPIF	New
10	SSN785	LM, Manassas	1 Shipset	$43,294	Oct-09	SS/CPIF	Option

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
08	SSN783	Apr-13	28	32	Apr-08
09	SSN784	Aug-14	28	32	Aug-09
10	SSN785	Aug-15	28	32	Aug-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: ELECTRONIC SUPPORT MEASURES SUBSYSTEM May 2009
FY 2010 President's Budget
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.

Quantity of 1 per hull

II. CURRENT FUNDING:

SHIP:	FY08	FY09	FY10
MAJOR HARDWARE	$19,582	$21,266	$21,388
TECH ENGINEERING SERVICES	$1,098	$1,192	$1,199
OTHER COSTS	$5,144	$5,587	$5,619
TOTAL	$25,824	$28,045	$28,206

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE	CONTRACT TYPE	NEW / OPTION
08	SSN783	LM, Syracuse	1 Shipset	$19,582	Nov-08	SS / FP	New
09	SSN784	LM, Syracuse	1 Shipset	$21,266	Feb-10	SS / FFP	New
10	SSN785	LM, Syracuse	1 Shipset	$21,388	Feb-10	SS / FFP	Option

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
08	SSN783	Apr-13	28	24	Dec-08
09	SSN784	Aug-14	28	24	Apr-10
10	SSN785	Aug-15	28	24	Apr-11

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: PHOTONICS MAST May 2009
FY 2010 President's Budget
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.

Quantity of 1 per hull

II. CURRENT FUNDING:

SHIP:	FY08	FY09	FY10
MAJOR HARDWARE	$12,241	$12,813	$12,910
TECH ENGINEERING SERVICES	$565	$577	$581
OTHER COSTS	$4,011	$5,148	$5,187
TOTAL	$16,817	$18,538	$18,678

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE	CONTRACT TYPE	NEW / OPTION
08	SSN783	Kollmorgen, Northampton	1 Shipset	$12,241	Sep-08	SS / FP/ CPFF	New
09	SSN784	Kollmorgen, Northampton	1 Shipset	$12,813	Jul-09	SS / FFP	New
10	SSN785	Kollmorgen, Northampton	1 Shipset	$12,910	Dec-10	SS / FFP	Option

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
08	SSN783	Apr-13	28	24	Dec-08
09	SSN784	Aug-14	28	24	Apr-10
10	SSN785	Aug-15	28	24	Apr-11

V. COMPETITION/SECOND SOURCE INITIATIVES
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: UNIVERSAL MODULAR MAST May 2009
FY 2010 President's Budget
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.

Quantity of 1 per hull
II. CURRENT FUNDING:

SHIP:	FY08	FY09	FY10
MAJOR HARDWARE	$6,828	$7,048	$7,352
TECH ENGINEERING SERVICES	$1,300	$1,825	$1,866
OTHER COSTS	$1,329	$1,680	$1,446
TOTAL	$9,457	$10,553	$10,664

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE	CONTRACT TYPE	NEW / OPTION
08	SSN783	Kollmorgen, Northampton	1 Shipset	$6,828	Oct-07	SS / FP	Option
09	SSN784	Kollmorgen, Northampton	1 Shipset	$7,048	Oct-08	SS / FP	Option
10	SSN785	Kollmorgen, Northampton	1 Shipset	$7,352	Oct-09	SS / FP	Option

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
08	SSN783	Apr-13	42	27	Oct-07
09	SSN784	Aug-14	42	27	Nov-08
10	SSN785	Aug-15	42	27	Nov-09

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35 EXHIBIT P-35
ITEM: EXTERIOR COMMUNICATION SYSTEM RECURRING May 2009
FY 2010 President's Budget
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. Exterior Communications Systems (ECS) is an integration effort with multiple Government-Off-The-Shelf (GOTS) components providing the core ECS capability. The GOTS components of ECS will be provided using existing contracts. For the ECS integration effort, Stanley Associates (North Charleston, SC) is prime for fabrication and production. This P-35 covers the procurement requirements for the following: ECS GOTS equipment; fabrication/production; systems engineering; system test & evaluation; training; data; technical engineering services; spares and repair parts; and program management. This system provides the capability for seamless, transparent, secure connectivity for information exchange between submarine users and the Global Command and Communications System (GCCS).

Quantity of 1 per hull

II. CURRENT FUNDING:

SHIP:	FY09	FY10
MAJOR HARDWARE	$15,257	$15,696
TECH ENGINEERING SERVICES	$2,575	$2,653
OTHER COSTS	$4,993	$5,170
TOTAL	$22,825	$23,519

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE	CONTRACT TYPE	NEW / OPTION
09	SSN784	Stanley Associates, North Charleston	1 Shipset	$15,257	Apr-09	Competitive/IDIQ	Option
10	SSN785	Stanley Associates, North Charleston	1 Shipset	$15,696	Apr-10	Competitive/IDIQ	Option

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
09	SSN784	Aug-14	28	9	Jul-11
10	SSN785	Aug-15	28	9	Jul-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

UNCLASSIFIED
CLASSIFICATION

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

Ship Type:
VIRGINIA CLASS

	FY08 QTY	FY08 TOTAL COST	FY09 QTY	FY09 TOTAL COST	FY10 QTY	FY10 TOTAL COST
HM&E EQUIPMENT	1		1		1	
a. P-35 Items						
1. Propulsor		$29,826		$31,657		$33,582
b. Major Items						
1. CSA MK2		$1,320		$1,360		$1,420
c. Other						
1. HM&E Installation and testing		$8,279		$8,444		$8,825
2. T&E		$6,327		$6,440		$6,730
3. SUPSHIP responsible material		$1,000		$1,000		$1,000
Subtotal		$15,606		$15,884		$16,555
TOTAL HM&E		$46,752		$48,901		$51,557

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET

P-35
ITEM: PROPULSOR

EXHIBIT P-35
May 2009
FY 2010 President's Budget
BLI: 201300

I. DESCRIPTION/CHARACTERISTICS/PURPOSE

The propulsor consists of Ni-Al-bronze blades and a large steel and income 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:

Quantity of 1 per hull

SHIP:	FY08	FY09	FY10
MAJOR HARDWARE	25,745	26,527	28,237
TECH ENGINEERING SERVICES	4,081	5,130	5,345
OTHER COSTS			
TOTAL	29,826	31,657	33,582

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	CONTRACTOR	QTY	HARDWARE UNIT COST	CONTRACT AWARD DATE	CONTRACT TYPE	NEW / OPTION
08	SSN783	BAE Systems	1 Shipset	14,617	May-07	FP	Option
09	SSN784	BAE Systems	1 Shipset	15,200	May-08	FP	New
10	SSN785	BAE Systems	1 Shipset	15,840	Mar-09	FP	Option

IV. DELIVERY DATA:

FY	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
08	SSN783	Apr-13	26	36	May-07
09	SSN784	Aug-14	26	36	May-08
10	SSN785	Aug-15	26	36	Mar-09

V. COMPETITION/SECOND SOURCE INITIATIVES:
N/A

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)														FY 2010 President's Budget May 2009
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy / BA 02 / BLI 201300		FY 2010 President's Budget						P-1 Line Item Nomenclature VIRGINIA CLASS SUBMARINE						
Weapon System VIRGINIA Class Submarines									First System (BY1) Completion Date Various					
($ in Millions)														
BLI: 201300	PLT	When Req'd	Prior Years	FY08	FY09	FY10								
NUCLEAR PROPULSION PLANT EQUIPMENT (1)	30-72	Various	4822.2	877.0	484.0	878.0								
ELECTRONICS EQUIPMENT (2)	37-43	Various	127.4	11.4	11.9	24.3								
NON-NUCLEAR PROPULSION PLANT EQUIPMENT			626.6	14.9	15.5	30.9								
*Heat Exchanger	18	Various	17.7											
Propulsor (3)	36	Various	145.5	14.9	15.5	30.9								
*Main Condensers	66	Various	33.0											
*Switchboards Elec	18	Various	20.8											
Main Propulsion Complex (4)	46	Various	355.7											
Pumps & Valves	18	Various	53.9											
LONG LEAD-TIME CFE (5)	24 - 42	Various	1259.4	378.4	208.4	413.2								
DETAIL DESIGN/DESIGN TRANSFER/SHIPBUILDER INTEGRATION			480.6											
ADVANCE CONSTRUCTION (6)			148.3		79.0									
OTHER (7)			3.2											
EOQ (8)			586.1		592.6	613.3								
Total AP			8053.9	1281.7	1391.4	1959.7								

*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 required for construction of nuclear attack submarines, and ensure production capability that supports projected production quantities. To support the VIRGINIA Class' innovative and more efficient modular construction method, reactor plant components must be delivered earlier in the construction process than previous submarine classes. Under the new method, the VIRGINIA Class reactor plant will be assembled and tested before being mounted in 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 and associated pre cable kits 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.

(4) **Main Propulsion Complex AP** was funded with AP as a GFE procurement to satisfy in-yard need dates for the FY02 and prior SSNs. Beginning with the FY03 / SSN778 the Main Propulsion Complex (MPC) have been negotiated as CFE in the 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.

(6) **Advance Construction** $79M FY09 Congressional Plus up for the FY11 SSNs for more efficient transition from low rate production to increased production (2 ships/year). Funding provided for long lead time material, economic order quantity quantity material purchases and advance construction activity at the shipyards or their manufacturing facilities to support an efficient and affordable construction schedule.

(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.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)					FY 2010 President's Budget May 2009
Appropriation (Treasury) Code/CC/BA/SBA/Item Control Number 1711 Shipbuilding and Conversion, Navy / BA 02 / BLI 201300			Weapon System VIRGINIA Class Submarines		P-1 Line Item Nomenclature
(TOA, $ in Millions)			**FY10**		
	PLT	QPA	Qty	Contract Forecast Date	Total Cost Request
BLI: 201300 End Item					
NUCLEAR PROPULSION PLANT EQUIPMENT (1)	30-72	2 Shipset	2 Shipsets	1st Qtr	878.0
ELECTRONICS EQUIPMENT (2)	37-43	2 Shipset	2 Shipset	various	24.3
PROPULSOR (3)	36	2 Shipset	2 Shipset	various	30.9
LONG LEAD-TIME CFE (4)	24 - 42	2 Shipset	2 Shipset	various	413.2
EOQ (5)		various	various	various	613.3
Total AP					1959.7

Description:

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

(2) **Electronics Equipment AP** is required to fund 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 and associated pre cable kits 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.

(4) **Long Lead-Time CFE AP** is required to fund long lead time contractor furnished material including the Weapons Handling Module, Reactor Plant Module and Main Propulsion Complex (MPC) . These components are required early in the construction phase to meet the delivery schedule.

(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.

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 2 Other Warships

P-1 LINE ITEM NOMENCLATURE
CVN REFUELING OVERHAULS
BLI: 2086

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
QUANTITY	3	0	1	0						
End Cost	9,626.1	0.0	3,850.7	0.0						
Less Advance Procurement	2,886.3	0.0	431.6	0.0						
Less Transfer	128.1	0.0	0.0	0.0						
Less Subsequent Year FF	2,203.2	0.0	2,827.3	0.0						
Plus Subsequent Year FF	950.5	0.0	0.0	1,563.6						
Full Funding TOA	4,536.6	0.0	591.8	1,563.6						
Plus Advance Procurement	2,161.3	295.3	21.3	211.8						
Total Obligational Authority	6,697.9	295.3	613.1	1,775.4						
Plus Outfitting / Plus Post Delivery	205.2	20.1	52.0	15.4						
Total	6,903.1	315.4	665.1	1,790.8						
Unit Cost (Ave. End Cost)	3,208.7	0.0	3,850.7	0.0						

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 23 plus years of ship life using only the normal maintenance cycle.

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

Production Status	**FY06**	**FY09**
Contract Plans	05/01	11/06
Award Planned (Month)	11/05	09/09
Months to Complete		
a) Award to Delivery	43 months	39 months
b) Construction Start to Delivery	43 months	39 months
Delivery Date	06/09	12/12
Completion of Fitting Out	07/09	02/13
Obligation Work Limiting Date	06/10	01/14

Armament
FY06 CVN 70:
MK49 GMLS w/HAS
AN/SPQ-9B Radar
Tactical Support Center

FY09 CVN 71:
NSSMS MK 57 Mods ESSM Upgrade
AN/SPS-48G(V)1 ROAR
AN/SPS-49A(V)1 Radar
AN/SPQ-9B Radar

Major Electronics:
Cooperative Engagement Capability
C4ISR
Integrated Combat Direction System
Naval Warfare Strike Planning Center (NSWPC)
Cooperative Engagement Capability
C4ISR
Ship Self Defense System MK2
Naval Warfare Strike Planning Center (NSWPC)

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

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**BLI: 2086**
Other Warships	**CVN REFUELING OVERHAULS**	

	FY 2006		**FY 2009**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	1	44,559	1	38,183
BASIC CONST/CONVERSION		2,637,192		3,238,688
ELECTRONICS		174,309		226,357
PROPULSION EQUIPMENT		95,203		113,986
HM&E		39,052		61,503
OTHER COST		64,714		73,421
ORDNANCE		64,297		98,555
TOTAL SHIP ESTIMATE		3,119,326		3,850,693
LESS ADVANCE PROCUREMENT FY01		24,770		
LESS ADVANCE PROCUREMENT FY02		73,349		
LESS ADVANCE PROCUREMENT FY03		217,271		
LESS ADVANCE PROCUREMENT FY04		214,403		
LESS ADVANCE PROCUREMENT FY05		331,460		
LESS ADVANCE PROCUREMENT FY06				19,744
LESS ADVANCE PROCUREMENT FY07				116,645
LESS ADVANCE PROCUREMENT FY08				295,263
LESS SUBSEQUENT FULL FUNDING FY07		950,466		
LESS SUBSEQUENT FULL FUNDING FY10				1,563,602
LESS SUBSEQUENT FULL FUNDING				1,263,678
NET P-1 LINE ITEM:		1,307,607		591,761

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
CVN 70	RCOH	NGNN	2006	NOV-05	NOV-05	JUN-09
CVN 71	RCOH	NGNN	2009	SEP-09	SEP-09	DEC-12

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)	FY 2009	
	QTY	COST
ELECTRONICS		
a. P-35 Items		
C4ISR	1	68,677
INTEGRATED COMMUNICATION NETWORK (ICAN / DDCN & IVCN)	1	51,355
SSDS MK2 (FORMERLY ICDS)	1	44,686
NAVAL STRIKE WARFARE PLANNING CENTER (NSWPC - FORMERLY CVIC)	1	10,021
COOPERATIVE ENGAGEMENT CAPABILITY (CEC - AN/USG-2)	1	10,811
IFF INTERROGATOR SET (AN/UPX-29)	1	5,492
AN/SPN46 OVERHAUL/UPGRADE	1	7,497
AN/TPX-42(V)14 UPGRADE	1	4,491
BATTLE FORCE TACTICAL TRAINER (BFTT)	1	5,087
Subtotal		208,117
b. Major Items		
AN/SPN-41	1	1,313
READY ROOM MODIFICATION	1	2,989
AN/SPN-43C	1	2,023
Subtotal		6,325
c. Other ELECTRONICS		
MISCELLANEOUS ELECTRONICS, TEST & CERTIFICATIONS		11,915
Subtotal		11,915
Total ELECTRONICS		226,357

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)

	FY 2009 QTY	FY 2009 COST
ORDNANCE		
a. P-35 Items		
AVIATION EQUIPMENT & SUPPORT	1	33,084
AN/SPQ-9B RADAR	1	7,386
AN/SPS-49(V)5 UPGRADE/REPAIR	1	7,630
NATO SEASPARROW MISSILE SYSTEM	1	29,633
AN/SPS-48G (V1) ROAR	1	9,995
ADVANCED SENSOR DISTRIBUTION SYSTEM (ASDS)	1	3,020
Subtotal		90,748
b. Major Items		
AN/SPS-73 (V12) SURFACE NAVIGATION RADAR	1	1,917
Subtotal		1,917
c. Other ORDNANCE		
MISCELLANEOUS ORDNANCE, TEST & CERTIFICATIONS		5,890
Subtotal		5,890
Total ORDNANCE		98,555

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)	FY 2009	
	QTY	COST
HM&E		
a. P-35 Items		
JP-5 ELECTRIC VALVE OPERATOR ASSEMBLY	1	3,292
02N2 SYSTEM	1	3,432
AIRCRAFT ELECTRICAL SERVICING SYSTEM	52	12,297
TG AUTOMATIC VOLTAGE REGULATOR	1	3,393
Subtotal		22,414
b. Major Items		
CIRCUIT 27 TV	1	1,162
JP-5 ELECTRIC VALVE OPERATOR UPGRADE	1	1,811
JP-5 IN-LINE SAMPLER	1	1,269
LESLIE PILOT REPLACEMENT	1	1,302
Subtotal		5,544
c. Other HM&E		
MISCELLANEOUS HM&E, ENGINEERING, TEST & CERTIFICATIONS		33,545
Subtotal		33,545
Total HM&E		61,503

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **C4ISR**
PARM Code: **SPAWAR PMW 750**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Provides an integrated communications infrastructure to support both tactical and non-tactical applications in all warfare and support areas, an improved shipboard RF distribution system and multiband antennas, and capabilities for the control and monitoring of RF assets introducing network automation and provide interoperable communications for joint operations. It will interconnect forces of the Battle Group (BG)/Amphibious Readiness Group (ARG) and connects the BG/ARG with expeditionary forces and the Commander-in-Chief Command Complex (CCC) ashore crossing all available media including Ultra High Frequency (UHF), Super High Frequency (SHF), Extremely High Frequency (EHF), commercial satellite links, and new medium-to-high data rate HF and UHF line of sight (LOS) links. C4ISR includes RCS, weather, navigational, signal exploitation, and command and control equipments.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	30,360
Spares		0
Engr/ILS/Mgmt Spt		0
Software		1,488
Systems Engineering		13,831
ILS		950
Systems Test & Evaluation		3,326
Training		270
Data		1,563
Technical Engineering Services / Ship Installation		15,326
Initial Spares and Repair Parts		975
Program Management		588
Total		68,677

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	VARIOUS	VARIOUS	VARIOUS	VARIOUS	1 Shipset	30,360

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	VARIOUS	VARIOUS	

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **INTEGRATED COMMUNICATION NETWORK (ICAN / DDCN & IVCN)**
PARM Code: **NAVSEA 05Z5, NAVSEA 062R6**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The ICAN (Integrated Communication and Audio Network) System consisting of four (4) subsystems under the ICAN Header: IVN (Integrated Voice Network), MCMS (Machinery Control Monitoring System), Navigation Critical Distribution System (NAVCRIT) Network, and Announcing Systems.

IVN: An Integrated Communications System that provides the ship's Internal Command and Control Communications. In addition, IVN provides connectivity to other onboard systems such as Announcing Systems, Sound Powered Circuits, Secure / NonSecure off-ship Communications, SATCC and HYDRA.

MCMS: Machinery Control Monitoring System: Control and monitoring of approximately 3500 machinery signals for various HM&E auxiliary systems (e.g. JP5, firemain, IC/SM panels) for aircraft carriers. Utilizes the Machinery Control Network for signals.

Machinery Control Network: The core network that provides communication services and transport for the MCMS system and part of the backbone that rides over the FOCP. It consists of five network switches, associated racks, and cabling.

FOCP: Fiber Optic Cable Plant is an integrated optical fiber distribution system that provides fiber interconnections.

NAVCRIT Network: The Navigation Critical Distribution System is a switched network providing communication services and transport for the NAV Standard Message, which is originated in the NAVSSI (Naval Sensor System Interface) system. The NAVCRIT Distribution consists of three backbone switches and eight I/0 controllers to convert digital NAV data for analog outputs. It will use the FOCP to the maximum extent for connectivity.

SCS: Ship Control System provides control and display of rudder position, Engine and Propeller Order Telegraph functions. The SCS provides data for heading, speed, and rudder angles through NAVCRIT Network from NAVSSI. The SCS interfaces to an Electronic Chart Display Information System.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	22,069
Engr/ILS/Mgmt Spt		0
Software		2,780
Systems Engineering		8,528
ILS		3,668
Systems Test & Evaluation		6,257
Training		543
Data		1,363
Technical Engineering Services / Ship Installation		4,869
Initial Spares and Repair Parts		1,174
Program Management		104
Total		51,355

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	VARIOUS	VARIOUS	VARIOUS		1 SHIPSET	22,069

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	26	24	OCT-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **SSDS MK2 (FORMERLY ICDS)**
PARM Code: **PEO IWS - 1A1C**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

SSDS MK2 provides primary support for force/ownship 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 2009 QTY	FY 2009 COST
Major Hardware	1	9,716
Spares		0
Engr/ILS/Mgmt Spt		0
Technical Support Services		0
Software		12,461
Systems Engineering		6,564
ILS		1,523
Systems Test & Evaluation		6,017
Training		398
Data		2,913
Technical Engineering Services / Ship Installation		2,037
Initial Spares and Repair Parts		745
Program Management		2,312
Total		44,686

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	RAYTHEON/LOCKHEED MARTIN	CPFF/FFP	SEP-08		1 SHIPSET	9,716

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	26	OCT-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

CVN 71 RCOH FY 10 is moving to the "Open Architecture" SSDS Suite.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **NAVAL STRIKE WARFARE PLANNING CENTER (NSWPC - FORMERLY CVIC)**
PARM Code: **NAVAIR PMA281**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The NSWPC improves Carrier Air Wing capability for mission planning, targeting and rehearsal using the next generation of Precision Guided Munitions (PGMs) by integrating mission planning, imagery processing and targeting systems within the Carrier Intelligence Center (CVIC).

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	719
Software		0
System Engineering		7,132
ILS		149
System T & E		941
Data		0
Technical Engineering Services / Ship Installation		1,062
Program Management		18
Total		10,021

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	VARIOUS	FFP CPFF	JAN-10	OPTION	1 SHIPSET	719

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	18	12	JUN-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **COOPERATIVE ENGAGEMENT CAPABILITY (CEC - AN/USG-2)**
PARM Code: **PEO IWS - 6NA**

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 quality 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 engagement 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 2009**	
	QTY	**COST**
Major Hardware	1	4,500
Spares		0
Engr/ILS/Mgmt Spt		0
Software		0
Systems Engineering		841
Systems Test & Evaluation		3,359
Training		416
Technical Engineering Services / Ship Installation		732
Initial Spares and Repair Parts		450
Program Management		146
Other Cost		367
Total		10,811

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	TBD	TBD	JUL-08	NEW	1 SHIPSET	4,500

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	32	18	OCT-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
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(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **IFF INTERROGATOR SET (AN/UPX-29)**
PARM Code: **NAVAIR PMA 2133**

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 (IFF) operational performance beyond that provided by a standard MK XII System for combat identification. The transponder set receives interrogation signals from air, surface and land IFF-equipped units and automatically replies with a coded response signal that provides ownership position and identification.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	4,352
Spares		0
Engr/ILS/Mgmt Spt		0
Technical Support Services		0
Software		170
Systems Engineering		486
ILS		104
Technical Engineering Services/ Ship Installation		205
Initial Spares and Repair Parts		45
Program Management		75
Other Cost		55
Total		5,492

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	LITTON & BAE	SS/FP	DEC-07	NEW	1 SHIPSET	4,352

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	29	30	JAN-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AN/SPN46 OVERHAUL/UPGRADE**
PARM Code: **PMA 2131**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Precision approach landing system used for non-clear weather aircraft landings on carriers. Provides electronic guidance to aircraft and allows them to land in all weather conditions with no limitations due to low ceiling or visibility.

II. CURRENT FUNDING:

P-35 Category	FY 2009 QTY	FY 2009 COST
Major Hardware	1	4,832
Technical Engineering Services		0
Systems Engineering		601
ILS		226
Technical Engineering Services / Ship Installation		1,710
Program Management		99
Other Support		29
Total		7,497

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	TBD	TBD	NOV-07	NEW	1 SHIPSET	4,832

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	36	DEC-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
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Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AN/TPX-42(V)14 UPGRADE**
PARM Code: **PMA 2133**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Carrier Air Traffic Control Center Direct Altitude and Identity Readout System.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	3,217
Software		152
Systems Engineering		282
ILS		265
Systems Test & Evaluation		244
Technical Engineering Services / Ship Installation		90
Initial Spares and Repair Parts		171
Program Management		54
Other Costs		16
Total		4,491

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	NAWCAD	IDIQS	NOV-07		1 SHIPSET	3,217

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	36	24	DEC-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
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(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
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Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **BATTLE FORCE TACTICAL TRAINER (BFTT)**
PARM Code: **IWS 7C**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

System provides capability for coordinated shipboard combat system team & Battle Group / Battle Force training.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	1,239
Technical Data and Documentation		
Spares		11
System Engineering		
Technical Engineering Services		797
Other Costs		
Software		235
ILS		204
System Test & Evaluation		2248
Training		109
Data		144
Program Management		100
Total		5,087

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
2009	CVN 71 RCOH	VARIOUS	VARIOUS			1 SHIPSET	1,239

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
2009	CVN 71 RCOH	DEC-12	30	24	JUN-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
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(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **JP-5 ELECTRIC VALVE OPERATOR ASSEMBLY**
PARM Code: **NSWC CARDEROCK**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

JP-5 manifold actuators that distribute and control the flow of aircraft fuel to the JP-5 fueling stations.

II. CURRENT FUNDING:

P-35 Category	FY 2009 QTY	FY 2009 COST
Major Hardware	1	2,510
Spares		0
Engr/ILS/Mgmt Spt		0
Technical Support Services		0
Schedule B Services		0
Systems Engineering		564
ILS		46
Systems Test & Evaluation		80
Technical Engineering Services / Ship Installation		6
Initial Spares and Repair Parts		86
Total		3,292

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	TARGET ROCK	FFP	AUG-03		1 SHIPSET	2,510

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	34	9	MAY-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **02N2 SYSTEM**
PARM Code: **NSWC CARDEROCK (SSES)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Replace one Cryogenic O2N2 plant with Gaseous Membrane Nitrogen Generator & Vacuum Swing Absorber 02 generator

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	2,140
Spares		0
Engr/ILS/Mgmt Spt		0
Technical Support Services		0
System Engineering		329
ILS		145
System T & E		65
Data		105
Technical Engineering Services / Ship Installation		195
Initial Spares and Repair Parts		400
Program Management		53
Total		3,432

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	VARIOUS	FFP	NOV-07	SEE NOTE	1 SHIPSET	2,140

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	36	24	DEC-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

NSWCCD will exercise Options on current contracts with PCI & RIX for VSA & GNG procurements. A new contract will be required to procure the N2 Storage Flasks.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AIRCRAFT ELECTRICAL SERVICING SYSTEM**
PARM Code: **NSWCCD-SSES 9344**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Joint Strike Fighter (JSF) requires 270VDC electrical power for maintenance and pre-flight operations. This type of power is not currently available on CVN-68 class aircraft carriers.

This SCD will equip CVN 68 class ships with 270VDC Aircraft Electrical Servicing System Power. In addition the obsolete components now part of the AESS will be replaced with new equipment.

This upgrade will allow the CVN 68 class to support JSF and Legacy aircraft with new equipment without excessive space and weight requirements.

II. CURRENT FUNDING:

P-35 Category	FY 2009 QTY	FY 2009 COST
Major Hardware	52	6,904
Systems Engineering		385
Data		290
Technical Engineering Services / Ship Installation		4,568
Program Management		150
Total		12,297

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	VARIOUS	FP	AUG-09		52	133

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	30	9	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

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(Dollars in Thousands)

P-35 EXHIBIT
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Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **TG AUTOMATIC VOLTAGE REGULATOR**
PARM Code: **NAVSSES**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Digital, variable frequency voltage regulator (replacement for analog static voltage regulator for power generators - SSTG and CTG).

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	3,212
Spares		25
Technical Engineering Services		156
Total		3,393

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	NORTHROP GRUMMAN ES		MAY-04	NEW OPTION PENDING	1 SHIPSET	3,212

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	39	18	MAR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
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May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AVIATION EQUIPMENT & SUPPORT**
PARM Code: **NAVAIR PMA 251**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Provides procurement and engineering support for launch and recovery equipment, ISIS/ADMACS, Moriah, ILARTS, mission pods, jet blast deflectors, MAPA-C, crosscheck, aviation maintenance facility, weapons compatibility, aircraft spotting, aviation servicing facilities, visual, and marking and lighting.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	21,259
Engr/ILS/Mgmt Spt		0
Software		752
Systems Engineering		3,167
ILS		397
Systems Test & Evaluation		172
Training		117
Data		362
Technical Engineering Services / Ship Installation		6,053
Initial Spares and Repair Parts		31
Other Costs		774
Total		33,084

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	VARIOUS	VARIOUS	VARIOUS	VARIOUS	1 SHIPSET	21,259

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	21	39	DEC-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AN/SPQ-9B RADAR**
PARM Code: **PEO IWS - 2RI**

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 (PPI) consoles.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	5,677
Spares		0
Engr/ILS/Mgmt Spt		0
Technical Support Services		0
Software		118
Systems Engineering		188
ILS		232
Systems Test & Evaluation		139
Data		115
Technical Engineering Services / Ship Installation		448
Initial Spares and Repair Parts		350
Program Management		119
Total		7,386

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	NORTHROP GRUMMAN ES	FFP	AUG-08		1 SHIPSET	5677

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	24	DEC-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AN/SPS-49(V)5 UPGRADE/REPAIR**
PARM Code: **PEO IWS 2.RI**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPS-49 Radar is a narrow beam, very long range, two dimensional air search radar. This is the primary air search radar for the ship. The AN/SPS-49 offers greatly improved operational performance (range, bearing, and altitude), reliability, and maintainability.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	5,734
Engr/ILS/Mgmt Spt		0
Technical Support Services		0
Systems Engineering		631
ILS		240
Data		180
Technical Engineering Services / Ship Installation		95
Initial Spares and Repair Parts		500
Program Management		250
Total		7,630

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	NSWC Crane	n/a	MAY-08		1 SHIPSET	5,734

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	30	JUN-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NONE

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **NATO SEASPARROW MISSILE SYSTEM**
PARM Code: **PEO IWS 3D**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The NSSMS Mk 57 Mod 13 is a COTS upgrade of the legacy systems originally installed on CVN 71, consisting of new procurement computers/displays, refurb/overhaul of legacy equipment (Radars/launchers), and an upgrade to the GMLS for ESSM compatibility. The NSSMS Is a medium range self defense missile system capable of defeating near/mid-term air/surface threats.

II. CURRENT FUNDING:

P-35 Category	FY 2009 QTY	FY 2009 COST
Major Hardware	1	24,865
Software		555
Systems Engineering		1,243
ILS		250
Data		166
Technical Engineering Services / Ship Installation		1,405
Initial Spares and Repair Parts		1,149
Total		29,633

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	RAYTHEON	FFP	JAN-08		1 SHIPSET	24,865

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	24	DEC-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

n/a

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **AN/SPS-48G (V1) ROAR**
PARM Code: **PEO IWS 2RI11**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Long range three dimensional (3D) radar used to search, detect and provide space-stabilized, three-coordinate (range, bearing, height) data. Funding provides for procurement of an Antenna and ROAR Kit (SCD 2498) for the AN/SPS-48G(V)1 upgrade.

II. CURRENT FUNDING:

P-35 Category	FY 2009 QTY	FY 2009 COST
Major Hardware	1	7,700
Software		300
Systems Engineering		800
ILS		100
Systems Test & Evaluation		10
Data		100
Technical Engineering Services / Ship Installation		300
Initial Spares and Repair Parts		485
Program Management		200
Total		9,995

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	ITT GILFILLAN	CPFF / FFP	SEP-08		1 SHIPSET	7,700

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	24	DEC-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

None - Sole Source

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **CVN-68 CLASS NUCLEAR REFUELING COMPLEX OVERHAUL (RCOH)**
Equipment Item: **ADVANCED SENSOR DISTRIBUTION SYSTEM (ASDS)**
PARM Code: **IWS 2RI**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

ASDS provides the distribution of RADAR sensor data and video to RADAR displays on board the Ship.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	1,228
Software		146
Systems Engineering		407
ILS		174
Systems Test and Evaluation		152
Data		24
Technical Engineering Services / Ship Installation		654
Initial Spares and Repair Parts		35
Program Management		200
Total		3,020

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY-09	CVN 71 RCOH	FRONTIER ELECTRONIC SYS.	IDIQ	OCT-09		1 SHIPSET	1,228

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY-09	CVN 71 RCOH	DEC-12	24	12	DEC-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

CLASSIFICATION:	UNCLASSIFIED												
Exhibit P-10, Advance Procurement Requirements Analysis (Funding)									Date: **May 2009**				
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / 2 / Other Warships / BLI 2086**							P-1 Line Item Nomenclature **CVN REFUELING OVERHAULS**						
Weapon System **CVN 72 RCOH**			First System Award Date and Completion Date						Interval Between Systems				
	PLT	When Req'd	Prior Years	FY08	FY09	FY10							
CVN 72 RCOH			0	0	21.3	211.8							
Plans			0	0	1.7	12.0							
Basic			0	0	4.2	119.8							
Other			0	0	0.4	6.0							
Propulsion Equipment			0	0	14.6	69.0							
HM&E			0	0	0.0	0.5							
Electronics			0	0	0.1	2.5							
Ordnance			0	0	0.3	2.0							
Total AP			0	0	21.3	211.8							

Description:

CVN 72 RCOH Funding is required to procure long lead items and fund long lead efforts critical to supporting the contract award. Efforts will include work package planning, integration, shipchecks, drawings, GFE engineering & hardware procurements. The advance planning contracts are funded under Basic in each fiscal year.

CLASSIFICATION:	UNCLASSIFIED								
Exhibit P-10, Advance Procurement Requirements Analysis (Budget Justification)								Date: **May 2009**	
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / 2 / Other Warships / BLI 2086**				Weapon System				P-1 Line Item Nomenclature **CVN REFUELING OVERHAULS**	
(TOA $ in Millions)				**FY10**					
	PLT	QPA	Unit Cost	Qty	Contract Forecast Date	Total Cost Request			
Plans						12.0			
Basic		1 Shipset			February 2010	119.8			
Other						6.0			
Propulsion Equipment						69.0			
HM&E						0.5			
Electronics						2.5			
Ordnance						2.0			
Total AP						211.8			

Description:

Plans Advance Planning Support & AWP development, Shipcheck & Shipcheck Oversight, Government Furnished Information Development, Technical Oversight/Authority

Basic Prime Contractor (Advance Planning & Execution), Misc. Onload-Offload Costs, Ship's Force Work Package Material Procurement, Customer Contracted Teams (CCTs), GFE FARMOUT, and Technical Support

Other Program Management Plans, Budget Development, Work Package Review, Crew Berthing, IDE, Logistic Plans & Review, Cost Estimating, & Studies

Propulsion Equipment Nuclear Component Procurement & Technical Support Services

HM&E HM&E GFI / GFE & Technical Support Services

Electronics Electronics GFI / GFE & Technical Support Services

Ordnance Ordnance GFI / GFE & Technical Support Services

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 2 Other Warships

P-1 LINE ITEM NOMENCLATURE
SSBN ERO
BLI: 2113

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010				
QUANTITY	3	1	1	0				
End Cost	939.6	238.8	263.2	39.7				
Less Advance Procurement	225.4	36.2	42.0	39.7				
Less Cost to Complete	0.0	16.2	0.0	0.0				
Full Funding TOA	714.2	186.3	221.2	0.0				
Plus Advance Procurement	266.9	42.4	39.2	0.0				
Total Obligational Authority	981.1	228.8	260.4	0.0				
Plus Cost to Complete	0.0	0.0	16.2	0.0				
Plus Outfitting / Plus Post Delivery	3.3	2.0	4.2	1.2				
Total	984.2	230.8	280.8	1.2				
Unit Cost (Ave. End Cost)	313.2	238.8	263.2	0.0				

MISSION:

SSBN ERO: This funding provides for Engineered Refueling Overhauls of OHIO Class (TRIDENT, SSBN 726) Strategic 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 upgraded; 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.

NOTES:

FY04 Congressional direction created a new SSBN Engineered Refueling Overhaul (ERO) budget line.
Starting in FY10, SSBN ERO funding was transferred from SCN to OMN,OPN, and WPN accounts.

Characteristics:

Length Overall	560'		**Armament:**	**Major Electronics:**
Max Beam	42'		D-5 Missiles	PBS-15H Radar
Displacement	18,750 TONS		Torpedo Tubes	BQQ-6 Passive Sonar
Draft	36.25'			BQS-13 Active Sonar
				CCS Mk2 Combat Data System

	FY08	**FY09**
Production Status:	**SSBN 733**	**SSBN 734**
Contract Award Date	02/06	02/07
Months to Completion		
a) Contract Award to Delivery	50	50
b) Construction Start to Delivery	27	27
Delivery Date	05/10	04/11
Completion of Fitting Out	05/10	04/11
Obligation Work Limiting Date	04/11	03/12

WEAPON SYSTEM COST ANALYSIS (EXHIBIT P-5)

(Dollars in Thousands)

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. H235/H236 BLI: 2113**
Other Warships	**SSBN ERO**	

	FY 2008		**FY 2009**		**FY 2010**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	1	30,754	1	34,197		32,288
BASIC CONST/CONVERSION		167,803		183,241		
ORDNANCE		40,217		45,736		7,454
TOTAL SHIP ESTIMATE		238,774		263,174		39,742
LESS ADVANCE PROCUREMENT FY06		4,475				
LESS ADVANCE PROCUREMENT FY07		31,716		5,282		
LESS ADVANCE PROCUREMENT FY08				36,731		5,718
LESS ADVANCE PROCUREMENT FY09						34,024
LESS COST TO COMPLETE FY09		16,244				
NET P-1 LINE ITEM:		186,339		221,161		0

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimate - Basic/Escalation

Ship Type: SSBN ERO

I.	Design/Schedule	Start/Issue	Complete /Response	Reissue	Complete /Response
	Issue date for TLR				
	Issue date for TLS				
	Preliminary Design				
	Contract Design				
	Detail Design				
	Request for Proposals				
	Design Agent				

II.	Classification of Cost Estimate	CLASS D - BUDGET QUALITY ESTIMATE (CONVERSION/MODERNIZATION/ERO)			
III.	Basic Construction/Conversion	SSBN 733	SSBN 734	SSBN 735	SSBN 736
	A. Actual Award Date	FEB-06	FEB-07	MAY-08	MAY-09
	B. Contract Type (and Share Line if applicable)	N/A	N/A	N/A	N/A
IV.	Escalation				
	Escalation Termination Date				
	Escalation Requirement				
	Labor/Material Split				
	Allowable Overhead Rate				

SHIPBUILDING AND CONVERSION, NAVY

SHIP PRODUCTION SCHEDULE

DATE:

May 2009

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
SSBN	733	PUGET SOUND NAVAL SHIPYARD	08	FEB-06	FEB-08	MAY-10
SSBN	734	NORFOLK NAVAL SHIPYARD	09	FEB-07	JAN-09	APR-11
SSBN	735	PUGET SOUND NAVAL SHIPYARD	10	MAY-08	JAN-10	APR-12

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: TRIDENT SSBN	**FY 2008**		**FY 2009**		**FY 2010**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**
ORDNANCE						
a. P-35 Items						
LAUNCHER & HANDLING	0	0	0	0	0	0
FIRE CONTROL	0	0	0	0	0	0
NAVIGATION	0	0	0	0	0	0
INSTRUMENTATION & MISSILE CHECKOUT	0	0	0	0	0	0
Subtotal		0		0		0
b. Major Items						
Subtotal		0		0		0
c. Other ORDNANCE						
SYSTEM INTEGRATION/ERO SITP	1	24,213	1	29,202	1	6,466
ADVANCE PLANNING	0	596	0	1,090	0	988
SHIPYARD INSTALLATION	1	9,589	1	11,544	0	0
DASO SUPPORT	1	5,350	1	3,600	0	0
ERO EQUIPMENT	1	469	1	300	0	0
Subtotal		40,217		45,736		7,454
Total ORDNANCE		40,217		45,736		7,454

Exhibit P-10, Advance Procurement Requirements Analysis (Funding)						Date: May 2009							
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy/BA 01/Other Warships/BLI 211						P-1 Line Item Nomenclature SSBN EROs							
OHIO (SSBN 726) Class Submarines Submarine Refueling Overhauls (ERO): SSBN 734 (FY09), SSBN 735 (FY10), SSBN 736 (FY11				First System Award Date	Mar-03	First System Completion Date	Mar-07						
($ in Millions)		When	Prior										
	PLT	Req'd	Years	FY08	FY09	FY10							
End Item Qty													
PLANS - FY07 ERO (1)		Various	32.9	-	-	-							
PLANS - FY08 ERO (1)		Various	30.8	-	-	-							
PLANS - FY09 ERO (1)		Various	3.9	30.3	-	-							
PLANS - FY10 ERO (1)		Various	-	4.7	27.6	-							
PLANS - FY11 ERO (1)		Various	-	-	4.0	-							
EQUIPMENT PROCUREMENT - FY07 ERO (2)		Various	28.1	-	-	-							
EQUIPMENT PROCUREMENT - FY08 ERO (2)		Various	5.4	-	-	-							
EQUIPMENT PROCUREMENT - FY09 ERO (2)		Various	1.4	6.4	-	-							
EQUIPMENT PROCUREMENT - FY10 ERO (2)		Various	-	1.0	6.4	-							
EQUIPMENT PROCUREMENT - FY11 ERO (2)		Various	-	-	1.2	-							
TOTAL AP			102.5	42.4	39.2	-							

(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) **Equipment Procurement:** Required to provide Norfolk Naval Shipyard with handling, installation and checkout support equipment and also provide long-lead TRIDENT II (D5) Strategic Weapons Systems (SWS) subsystem replacement shipboard equipment essential to ensuring the operability and maintainability of the TRIDENT II SWS and, by implementing necessary modifications to existing SWS hardware, guaranteeing the homogeneity of all D5 subsystems aboard all 14 TRIDENT II SSBNs.

Note: Starting in FY10, SSBN ERO funding was transferred from SCN to OMN, OPN, and WPN accounts.

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE:
May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 2 Other Warships

P-1 LINE ITEM NOMENCLATURE
DDG 1000
BLI: 2119

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
QUANTITY	2	0	1	0						
End Cost	6,634.2	0.0	2,738.3	0.0						
Less Advance Procurement	1,010.2	0.0	149.8	0.0						
Less Subsequent Year Full Funding	2,757.0	0.0	1,084.2	0.0						
Less Subsequent Year Cost to Complete	309.6	0.0	0.0	0.0						
Plus Subsequent Year Full Funding	0.0	2,757.0	0.0	1,084.2						
Full Funding TOA	2,557.3	2,757.0	1,504.3	1,084.2						
Plus Advance Procurement	1,010.2	149.8	0.0	0.0						
Total Obligational Authority	3,567.5	2,906.9	1,504.3	1,084.2						
Plus Outfitting / Plus Post Delivery	0.0	0.0	0.0	4.3						
Total	3,567.5	2,906.9	1,504.3	1,088.5						
Unit Cost (Ave. End Cost)	3,317.1	0.0	2,738.3	0.0						

MISSION:

Mission: This Budget Submission is based on the DDG 1000 Baseline 5.3 design for a DDG 1000 of 14,564 tons displacement with two Advanced Gun Systems (AGS) including a total magazine capacity of 600 rounds. DDG 1000, a multi-mission surface combatant, is the centerpiece of the U.S. Navy's future surface fleet transformation and will serve as a versatile asset in the context of future Naval Strategy. Armed with an array of Sea Strike weapons, DDG 1000 will provide the Joint Force Commander with precision strike and volume fires. Designed with sustainable payload, multi-spectral stealth and optimal manning, DDG 1000 will take the fight to the enemy with unprecedented striking power, sustainability, survivability and information dominance.

Note:

1. This budget reflects truncation of the DDG 1000 program following the FY09 ship.

Characteristics:		Weapons:	Sensors:	Integrated Power System:	Aviation:
Hull		2 Advanced Gun Systems 155mm	Dual Band Radar System	2 Main Gas Turbine Generators	MH60R (Capacity for 2)
Length Overall	610'	80 Mk 57 Vertical Launch cells	Acoustic Sensor Suite	2 Auxiliary Gas Turbine Generators	3 VTUAVs
Beam	80.7'	2 57mm Close-In Gun Systems	EO / IR System	2 Propulsion Motors	
Displacement (LT)	14,564				Boats:
Draft (Navigation)	27.6'				2 7m RHIBs
Speed	30 kts				(Sized for 2 11m RHIBs)
Installed Power	78.4 MW				
Crew Size	142				
Hull	Wave-piercing tumblehome				
Superstructure	Composite structure				

	FY07	**FY07**	**FY09**
Production Status:	DDG 1000	DDG 1001	DDG 1002
Contract Award Date	02/08	02/08	TBD
Months to Completion			
a) Contract Award to Delivery	62 months	75 months	71 months
b) Construction Start to Delivery	54 months	54 months	53 months
Delivery Date	04/13	05/14	TBD
Completion of Fitting Out	TBD	TBD	TBD
Obligation Work Limiting Date	03/14	06/15	TBD

CLASSIFICATION:
UNCLASSIFIED

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

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**BLI: 2119**
Other Warships	**DDG 1000**	

	FY 2007		**FY 2009**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	2	1,076,044	1	171,364
BASIC CONST/CONVERSION		2,699,390		1,283,467
CHANGE ORDERS		195,795		65,957
ELECTRONICS		1,856,650		773,120
HM&E		82,437		43,467
OTHER COST		113,630		66,558
ORDNANCE		610,283		334,355
TOTAL SHIP ESTIMATE		6,634,229		2,738,288
LESS ADVANCE PROCUREMENT FY05		304,048		
LESS ADVANCE PROCUREMENT FY06		706,240		
LESS ADVANCE PROCUREMENT FY08				149,830
LESS SUBSEQUENT YEAR FULL FUNDING FY08		2,757,037		
LESS SUBSEQUENT YEAR FULL FUNDING FY10				1,084,161
LESS SUBSEQUENT YEAR COST TO COMPLETE FY10		309,636		
NET P-1 LINE ITEM		2,557,268		1,504,297

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimate - Basic/Escalation

Ship Type: DDG 1000

I.	Design/Schedule	Start/Issue	Complete /Response	Reissue	Complete /Response
	Issue date for TLR				
	Issue date for TLS				
	Preliminary Design				
	Contract Design				
	Detail Design				
	Request for Proposals				
	Design Agent				
	ISSUE DATE FOR ORD	11/97 (DD-21)	5/04 (DD(X))		
	PRELIMINARY DESIGN REVIEW (PDR)	1/04	3/04		
	CRITICAL DESIGN REVIEW (CDR)	6/05	9/05		
	MILESTONE B	11/05	11/05		
	REQUEST FOR PROPOSALS (LEAD SHIPS)	1/06	4/06		
	DAB REVIEW (LEAD SHIP CONSTRUCTION)	10/06	10/06		
II.	Classification of Cost Estimate	CLASS C BUDGET ESTIMATE			
III.	Basic Construction/Conversion	0701	0702	0901	
	A. Actual Award Date	FEB-08	FEB-08	TBD	
	B. Contract Type (and Share Line if applicable)	CPAF/IF	CPAF/IF	TBD	
IV.	Escalation	N/A FORWARD PRICED			
	Escalation Termination Date				
	Escalation Requirement				
	Labor/Material Split				
	Allowable Overhead Rate				
V.	Other Basic(Reserves/Miscellaneous)	Amount			

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
DDG 1000	1000	BIW	07	FEB-08	FEB-09	APR-13
DDG 1000	1001	NGSS	07	FEB-08	NOV-09	MAY-14
DDG 1000	1002	TBD	09	TBD	TBD	TBD

Note: The DDG 1000/1001 information reflects the original construction contract award (Feb 08) and delivery (Apr 13 for General Dynamics(GD)/Bath Iron Works (BIW); May 14 for Northrop Grumman Shipbuilding (NGSB)) dates for both the DDG 1000 and DDG 1001 contracts. The start of construction and delivery dates for the DDG 1001 and DDG 1002 will be re-evaluated as part of the contract negotiations resulting from the Memorandum of Agreement (MOA) between the Navy, GD/BIW and NGSB which was signed on 7 April 2009.

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: DDG 1000	FY 2007		FY 2009	
	QTY	COST	QTY	COST
ELECTRONICS				
a. P-35 Items				
EXCOMMS (SHIPSET)	2	272,313	1	115,720
INTEGRATED UNDERSEA WARFARE (IUSW) SYSTEM	2	97,165	1	37,041
DUAL BAND RADAR (DBR)	2	539,452	1	230,509
COMMON ARRAY POWER SYSTEM (CAPS)	2	85,931	1	37,400
TOTAL SHIP COMPUTING ENVIRONMENT (TSCE)	2	214,085	1	86,044
ELECTRO-OPTICAL / INFRARED (EO/IR)	2	55,713	1	15,836
IDENTIFICATION FRIEND OR FOE (IFF)	2	21,944	1	8,357
COMMON ARRAY COOLING SYSTEM (CACS)	2	16,022	1	6,949
SHIP CONTROL SYSTEM (SCS)	2	100,626	1	44,790
COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	2	13,025	1	7,504
Subtotal		1,416,276		590,150
b. Major Items				
Subtotal		0		0
c. Other ELECTRONICS				
MISSION SYSTEM ENGR INTEGR & TEST (MSEIT)	0	440,374	0	182,970
Subtotal		440,374		182,970
Total ELECTRONICS		1,856,650		773,120

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: DDG 1000	FY 2007		FY 2009	
	QTY	COST	QTY	COST
ORDNANCE				
a. P-35 Items				
ADVANCED GUN SYSTEM (AGS)	4	384,590	2	232,807
VERTICAL LAUNCHING SYSTEM (VLS) MK 57 4-CELL MODULES	40	154,655	20	65,915
CLOSE-IN GUN SYSTEM (CIGS)	4	64,037	2	35,633
Subtotal		603,282		334,355
b. Major Items				
Subtotal		0		0
c. Other ORDNANCE				
	0	7,001	0	0
Subtotal		7,001		0
Total ORDNANCE		610,283		334,355

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: DDG 1000	FY 2007		FY 2009	
	QTY	COST	QTY	COST
HM&E				
a. P-35 Items				
MAIN TURBINE GENERATOR (MTG)	4	78,125	2	42,367
Subtotal		78,125		42,367
b. Major Items				
RIGID HULL INFLATABLE BOAT (RHIB)	4	2,200	2	1,100
Subtotal		2,200		1,100
c. Other HM&E				
	0	2,112	0	0
Subtotal		2,112		0
Total HM&E		82,437		43,467

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **EXCOMMS (SHIPSET)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

EXCOMMs are part of the DDG-1000 C3I Segment and consists of a set of seven (7) external communications elements. The EXCOMM Elements support the DDG-1000 system in achieving its mission by providing communications between DDG-1000 and other land, air, and sea based platforms as well as pier-side communications. These EXCOMM elements provide the voice, data, and video communications between DDG-1000 and the external world at sea as well as when in port. The 7 elements are: Satellite Communications (SATCOMs), Line of Sight (LOS), Common Data Link-Navy (CDL-N), Information Security (INFOSEC), Common Array Element (CAE), Cooperative Engagement Capability (CEC) and Integrated Communications Controller Software (ICCS). *Government legacy systems include: Distributed Common Ground System, Navy (DCGS-N), Cooperative Engagement Capability (CEC), Communication Terminals, AN/WSC-6(V)9 Shipboard Terminal, Common Link Integrated Processor (CLIP), Automated Digital Network System (ADNS), Global Broadcast Service (GBS), Communications Data Link System (CDLS), & Naval Modular Automated Communications System (NAVMACS).

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	82,458	1	43,639
Technical Support Services		20,606		10,752
Government Legacy Systems* (POR)		41,844		21,834
Other Costs (NRE)		127,405		39,495
Total		272,313		115,720

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	41,229
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	43,639

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	33	26	MAY-08
FY09	DDG-1000	DEC-14	41	22	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **COOPERATIVE ENGAGEMENT CAPABILITY (CEC)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Cooperative Engagement Capability (CEC) is a sensor network with Integrated Fire Control capability that significantly improves Battle Force air and missile defense capabilities by coordinating measurement data from Battle Force air search sensors on CEC-equipped units into a single, real-time, composite cooperating unit (CU), to all other CUs in the Battle Force through a real-time, line of sight, high data rate sensor and engagement data distribution network. CEC is highly resistant to jamming and provides accurate grid locking (relative spatial positioning) between CUs. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a high quality track picture which is the same for all CUs. CEC data is presented as a superset of the best air and missile defense sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapon system. CEC significantly improves Battle Force defense in depth, including both local and area defense capabilities against current and future air missile threats.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	9,000	1	4,561
System Engineering		0		415
Technical Engineering Services		885		0
Software		1,400		1,400
Logistics Support		300		164
Technical Support Services		1,440		964
Total		13,025		7,504

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG 1000	RAYTHEON	CPAF/IF	MAY-08		2	4,500
FY09	DDG 1000	RAYTHEON	CPAF/IF	TBD		1	4,561

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG 1000	APR-13	24	18	OCT-09
FY09	DDG 1000	DEC-14	24	18	JUN-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **INTEGRATED UNDERSEA WARFARE (IUSW) SYSTEM**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The IUSW suite supports DDG-1000 in achieving Undersea and Surface Dominance with the capability to detect and track hostile surface vessels, submarines, and moored volume mines. It supports the Sensor Systems Segment in accomplishing its Integrated Air and Surface Dominance (IASD) and Integrated Undersea Dominance (IUSD) objectives by providing the capability to conduct Anti-Submarine Warfare (ASW), Torpedo Defense (TD) and Mine Warfare (MIW) missions. Military Operations Other than War (MOOTW) objectives, such as Search and Rescue (SAR) (locating downed aircraft and vessels in the ocean) are also supported. There are four major subcomponents: Bow Array Component, Towed Array Component, Towed Torpedo Countermeasures Component, and Software.

II. CURRENT FUNDING:

P-35 Category	FY 2007 QTY	FY 2007 COST	FY 2009 QTY	FY 2009 COST
Major Hardware	2	49,034	1	24,090
Technical Support Services		3,878		2,024
Other Costs (NRE)		44,253		10,927
Total		97,165		37,041

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	24,517
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	24,090

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	37	24	MAR-08
FY09	DDG-1000	DEC-14	37	24	NOV-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **DUAL BAND RADAR (DBR)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Dual Band Radar element supports the DDG-1000 system in achieving Integrated Air and Surface Dominance with the capability to neutralize hostile surface vessels and aircraft at short ranges. The DBR is comprised of X-Band (AN/SPY-3) and S-Band Radar arrays integrated through a common signal data processor offering surface and horizon search capabilities and 3-D air search radar capabilities in both bands. The X-Band portion also has two navigation modes (high power and lower power) for use in piloting and marine navigation.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	362,942	1	174,150
Technical Support Services		30,468		17,894
Other Costs (NRE)		146,042		38,465
Total		539,452		230,509

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	181,471
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	174,150

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	35	24	MAY-08
FY09	DDG-1000	DEC-14	36	24	DEC-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **COMMON ARRAY POWER SYSTEM (CAPS)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Common Array Power System (CAPS) provides electrical power for the Dual Band Radar (DBR), Identification of Friend or Foe (IFF), EW/Cryptology and External Communications (EXCOMMs) Elements. The CAPS is a distributed power system designed to operate from the ship-supplied medium voltage distribution Integrated Power System's (IPS) 13.8 kV AC power source. The CAPS consists of two Power Distribution Units (PDUs) and six Power Conversion Units (PCUs).

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	52,898	1	28,090
Technical Support Services		4,700		2,300
Other Costs (NRE)		28,333		7,010
Total		85,931		37,400

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	26,449
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	28,090

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	38	21	MAY-08
FY09	DDG-1000	DEC-14	42	21	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **TOTAL SHIP COMPUTING ENVIRONMENT (TSCE)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Total Ship Computing Environment (TSCE) Segment provides all computing resources and associated software to the DDG-1000 System. It is a single computing environment for Ship, Combat and Support Systems. The TSCE provides a common middleware platform upon which all application/functional software can build and execute. The segment applications software, combined with TSCE hardware and software infrastructure represent the majority of the computing resources and associated software for the DDG-1000 System.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	156,458	1	75,627
Technical Support Services		17,604		8,488
Other Costs (NRE)		40,023		1,929
Total		214,085		86,044

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	78,229
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	75,627

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	38	21	MAY-08
FY09	DDG-1000	DEC-14	42	21	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

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(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **ELECTRO-OPTICAL / INFRARED (EO/IR)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Electro-Optical / Infrared (EO/IR) Sensor Suite Element is composed of both the hardware and software components required to detect and range on specified targets and report track data to C2. The EO / IR sensor suite consists of five (5) gimbaled EO sensors located on the cardinal faces of the deckhouse and associated electronics in Electronic Modular Enclosures (EMEs). Also included are Detect and Tracking Software components that provide embedded control and generate tracks for the C2 system and Mine Like Object (MLO) Detection algorithm.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	24,408	1	11,830
Technical Support Services		2,023		1,032
Other Costs (NRE)		29,282		2,974
Total		55,713		15,836

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	12,204
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	11,830

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	37	22	MAY-08
FY09	DDG-1000	DEC-14	41	22	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **IDENTIFICATION FRIEND OR FOE (IFF)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Identification Friend or Foe (IFF) sensor element supports the DDG-1000 Ship System segment in accomplishing Anti-Air Warfare (AAW) and Anti-Surface Warfare (ASUW) missions. The IFF Sensor Element is a cooperative "challenge and reply" system that assists in the rapid identification, tracking and control of friendly platforms. IFF is comprised of three hardware components to include the Interrogator component, the Transponder component and the Electronically Scanned Antenna (ESA) component, as well as software.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	12,358	1	5,989
Technical Support Services		1,470		462
Other Costs (NRE)		8,116		1,906
Total		21,944		8,357

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	6,179
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	5,989

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	30	29	MAY-08
FY09	DDG-1000	DEC-14	34	24	FEB-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
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Ship Type: **DDG 1000**
Equipment Item: **COMMON ARRAY COOLING SYSTEM (CACS)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Common Array Cooling System (CACS) provides liquid cooling for the Dual Band Radar (DBR) and External Communications (EXCOMMs) arrays. CACS is a distributed cooling system consisting of three Cooling Equipment Units (CEUs). Each CEU operates an independent coolant loop used to transport, monitor and control coolant flow to the DBR and EXCOMMs Equipment. CEUs consist of redundant pumps, a heat exchanger and filtration system. It is designed to provide liquid coolant to the DBR and EXCOMM equipment and dissipate heat to the ship-supplied chilled water.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	2	10,524	1	5,589
Other Costs (NRE)		5,498		1,360
Total		16,022		6,949

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	5,262
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	5,589

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	39	20	MAY-08
FY09	DDG-1000	DEC-14	43	20	SEP-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

CACS Technical Services are incorporated into DBR Technical Services

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
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May 2009

Ship Type: **DDG 1000**
Equipment Item: **SHIP CONTROL SYSTEM (SCS)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Flight 1 Ship Controls System (SCS) element is a system of hardware and software items that provide hierarchical and integrated ship control by the DDG-1000 crew. The SCS software architecture allows for various levels of automation for monitoring, control, reporting and configuration of SCS equipment and operations to support mission and low manning concepts. From workstation positions on the ship bridge or in the ship mission centers, the SCS coordinates, controls and monitors the navigation, hull, electric plant, machinery plant and damage control functions on the DDG-1000.

II. CURRENT FUNDING:

P-35 Category	FY 2007 QTY	FY 2007 COST	FY 2009 QTY	FY 2009 COST
Major Hardware	2	78,174	1	37,229
Technical Support Services		6,254		2,979
Other Costs (NRE)		16,198		4,582
Total		100,626		44,790

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		2	39,087
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		1	37,229

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	28	31	MAY-08
FY09	DDG-1000	DEC-14	24	24	DEC-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **ADVANCED GUN SYSTEM (AGS)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Advanced Gun System is a fully automated, single barrel, 155mm, vertically loaded, stabilized gun mount that is capable of storing, initializing/programming, loading and firing projectiles and propelling charges. Its primary mission is Land Attack Warfare in support of ground and expeditionary forces beyond the Line of Sight in the DDG-1000 system's littoral engagement area where precise, rapid-response, high-volume, long-range fire support is required. Each DDG-1000 will carry two complete AGS systems - Mount 61 and 62. The above deck configurations are identical but each has a slightly different below deck configuration. Presently, the only projectile used in AGS is the Long Range Land Attack Projectile (LRLAP). It is a long-range, GPS guided round that delivers a unitary High Explosive (HE) payload at a controlled burst height above a target or during contact with a range of 20 to 83nm.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	4	176,390	2	152,050
Technical Support Services		8,934		6,143
Other Costs (NRE)		199,266		74,614
Total		384,590		232,807

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	BAE	CPAF/IF	APR-08		4	44,098
FY09	DDG-1000	BAE	TBD	TBD		2	76,025

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	21	39	APR-08
FY09	DDG-1000	DEC-14	21	39	DEC-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
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Ship Type: **DDG 1000**
Equipment Item: **VERTICAL LAUNCHING SYSTEM (VLS) MK 57 4-CELL MODULES**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The MK 57 VLS is a general purpose, operationally unmanned launching system capable of stowing, preparing, and launching missiles in support of DDG-1000 mission areas including: land attack warfare, integrated air and surface dominance, and integrated undersea dominance. The MK57 VLS provides the capability for rapid launch of missiles into a 360-degree hemispherical volume above and about the ship. The encanistered missiles are stowed within the launching systems below-deck cells. DDG-1000 will have 80 total cells grouped into 20 four cell modules. Flight 1 missiles to be carried include: Enhanced SeaSparrow Missile (ESSM), Standard Missile-2 (SM-2) Blk III, Tomahawk Land Attack Missile (TLAM) Blk III/IV, and Vertical Launch Anti-Submarine Rocket (VLA).

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	40	87,052	20	57,595
Technical Support Services		11,204		8,320
Other Costs (NRE)		56,399		0
Total		154,655		65,915

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Raytheon	CPAF/IF	MAY-08		40	2,176
FY09	DDG-1000	Raytheon	CPAF/IF	TBD		20	2,880

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	30	29	MAY-08
FY09	DDG-1000	DEC-14	30	24	JUN-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **CLOSE-IN GUN SYSTEM (CIGS)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Close-In Gun System (CIGS) is a modification of a fully developed system fielded in Foreign Navys and selected through comprehensive trade study process. The CIGS supports the DDG-1000 system in achieving Integrated Air and Surface Dominance with the capability to neutralize hostile surface vessels and aircraft at short ranges. CIGS also supports the Military Operations Other than War (MOOTW) missions, such as performing maritime interdiction, conducting maritime law enforcement, and supporting hostage rescue. Two (2) CIGS will be mounted on the aft end of the hanger. The MK 110 57mm gun fires salvos at 220 rounds/minute from a dual compartment magazine. The standard ammunition is the Bofors 6-mode Prefragmented, Programmable, Proximity fuzed (3P) ammunition which provides range of up to 14.9km with fuzing options allowing three proximity modes as well as settings for time, impact, and armor piercing modes.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	4	48,331	2	23,179
Technical Support Services		5,142		2,454
Other Costs (NRE)		10,564		10,000
Total		64,037		35,633

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	BAE	CPAF/IF	APR-08		4	12,083
FY09	DDG-1000	BAE	TBD	TBD		2	11,590

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	30	30	APR-08
FY09	DDG-1000	DEC-14	27	24	SEP-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **DDG 1000**
Equipment Item: **MAIN TURBINE GENERATOR (MTG)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Main Turbine Generator Set (MTG) shall be capable of being utilized as the prime power source on the DDG-1000 Destroyer for electrical power applications (propulsion, ship services, and combat systems loads). The DDG-1000 baseline includes two MTGs. The minimum output power from each MTG shall be 35.25MWm, at 3600 rpm power turbine speed at the standard rating conditions defined in the American Bureau of Shipbuilding (ABS) Naval Vessel Rules (NVR).

II. CURRENT FUNDING:

P-35 Category	**FY 2007**		**FY 2009**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware	4	73,262	2	37,500
Technical Support Services		1,485		1,440
Other Costs (NRE)		3,378		3,427
Total		78,125		42,367

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	DDG-1000	Rolls-Royce	FFP	MAR-07	New	4	18,316
FY09	DDG-1000	Rolls-Royce	FFP	NOV-09	Option	2	18,750

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	DDG-1000	APR-13	24	24	APR-09
FY09	DDG-1000	DEC-14	24	24	DEC-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY10 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 2 Other Warships

P-1 LINE ITEM NOMENCLATURE
DDG-51
BLI: 2122 / SUBHEAD NO. 1224

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010				
QUANTITY	62	0	0	1				
End Cost	57,174.0	47.7	0.0	2,240.3				
Less Advance Procurement	1,324.7	0.0	0.0	199.4				
Less Pending Advance Procurement FY09	0.0	0.0	0.0	128.6				
Less FY96 Funding for MYP	99.3	0.0	0.0	0.0				
Less FY97 Funding for MYP	63.1	0.0	0.0	0.0				
Less Cost to Complete	731.4	0.0	0.0	0.0				
Less Escalation	48.2	0.0	0.0	0.0				
Less FY00 Transfer	32.5	0.0	0.0	0.0				
Less FY01 Supplemental	151.0	0.0	0.0	0.0				
Less FY02 Transfer Funds (Sec. 8130)	17.5	0.0	0.0	0.0				
Less FY03 Transfer	13.3	0.0	0.0	0.0				
Less FY06 Hurricane Supplemental	249.6	0.0	0.0	0.0				
Less FY06 Transfer	4.2	0.0	0.0	0.0				
Full Funding TOA	54,439.2	47.7	0.0	1,912.3				
Plus Advance Procurement (1)	1,324.7	0.0	328.0	329.0				
Plus F.F. for MYP	162.4	0.0	0.0	0.0				
Plus Cost to Complete	731.4	0.0	0.0	0.0				
Total Obligational Authority	56,657.7	47.7	199.4	2,241.3				
Plus FY00 Transfer	32.5	0.0	0.0	0.0				
Plus FY01 Supplemental	151.0	0.0	0.0	0.0				
Plus FY02 Transfer Funds (Sec. 8130)	17.5	0.0	0.0	0.0				
Plus FY03 Transfer	13.3	0.0	0.0	0.0				
Plus FY06 Hurricane Supplemental	249.6	0.0	0.0	0.0				
Plus FY06 Transfer	4.2	0.0	0.0	0.0				
Plus Outfitting / Plus Post Delivery	1,741.1	102.8	129.6	166.3				
Plus FY06 Outfitting Hurricane Supplemental	1.4	0.0	0.0	0.0				
Plus Escalation	48.2	0.0	0.0	0.0				
Total	58,916.6	150.5	329.0	2,407.6				
Unit Cost (Ave. End Cost)	922.2	0.0	0.0	2,240.3				

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) as scenarios as well as open ocean conflict providing or augmenting power projection and forward presence requirements, and escort operations at Sea.

Note (1) FY 2009 reflects an increase of $128.6M in Advance Procurement which will be requested through an upcoming transfer/reprogramming.

Characteristics:		Production Status:	1001	
Hull	FLIGHT IIA	Contract Plans		
Length overall	471'	Award Planned (Month)	MAR 10	
Beam	59'	Months to Complete		
Displacement	9217 TONS	a) Award to Delivery	TBD	
		b) Construction Start to Delivery	TBD	
Armament:		Commissioning Date	TBD	
AEGIS WEAPON SYSTEM (SPY-1D(V))		Completion of		
VLS MK41/SM-2		Fitting-Out	TBD	
5"62 Gun				
Tomahawk (TTWCS)		Major Electronics:		
MK 32 MOD 7 Torpedo Tubes		AN/SQQ-89 (V) 15	EXCOMM	MIDS
CIWS / ESSM		AN/SLQ-32	MK 12 IFF	
CEC		AN/USQ-82(GEDMS)	SSEE	

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

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 1224 BLI: 2122**
Other Warships	**DDG-51**	

	FY 2003		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2007**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	2	88,973	3	76,404	3	79,165		30,000		106,130
BASIC CONST/CONVERSION		1,057,763		1,624,088		1,714,953				16,463
CHANGE ORDERS		49,334		79,948		83,156				
ELECTRONICS		350,522		476,850		494,563				
HM&E		37,639		47,990		48,714				
OTHER COST		50,162		56,066		57,064		20,757		56,984
ORDNANCE		823,357		984,749		1,056,092		96,690		174,770
TOTAL SHIP ESTIMATE		2,457,750		3,346,095		3,533,707		147,447		354,347
LESS:										
Less FY06 Hurricane Supplemental		53,400		33,214		45,423				
Less Advance Procurement FY99		3,687		2,708						
Less Advance Procurement FY01		70,800		77,000		60,000				
Less Advance Procurement FY02		64,442		50,000						
NET P-1 LINE ITEM:		2,265,421		3,183,173		3,428,284		147,447		354,347

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

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 1224 BLI: 2122**
Other Warships	**DDG-51**	

	FY 2008		**FY 2009**		**FY 2010**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS		12,169			1	95,882
BASIC CONST/CONVERSION		35,573				849,103
CHANGE ORDERS						42,455
ELECTRONICS						292,115
HM&E						39,639
OTHER COST						70,558
ORDNANCE						850,515
TOTAL SHIP ESTIMATE		47,742				2,240,267
LESS:						
Less Pending Advance Procurement FY09						128,597
Less Advance Procurement FY09						199,403
NET P-1 LINE ITEM:		47,742				1,912,267

SHIPBUILDING AND CONVERSION, NAVY

FY10 President's Budget

Analysis of Ship Cost Estimate - Basic/Escalation

May 2009

Ship Type: DDG

I.	**Design/Schedule**	**Start/Issue**	**Complete /Response**	**Reissue**	**Complete /Response**
	Issue date for TLR	6/83			
	Issue date for TLS				
	Preliminary Design	3/82	12/82		
	Contract Design	5/83	6/84		
	Detail Design				
	Request for Proposals				
	Design Agent	BIW			
II.	**Classification of Cost Estimate**	CLASS C BUDGET ESTIMATE			
III.	**Basic Construction/Conversion**	FY 2002-2005	**FY 2008**	**FY 2009**	**FY2010**
	A. Actual Award Date	09/02	N/A	N/A	TBD
	B. Contract Type (and Share Line if applicable)	MULTIYEAR PROCUREMENT /FIXED PRICE INCENTIVE	N/A	N/A	FPI
	C. RFP Response Date				TBD
IV.	**Escalation**				
	Escalation Termination Date				
	Escalation Requirement	SHIPBUILDING CONTRACTS ARE FORWARD PRICED.			
	Labor/Material Split				
	Allowable Overhead Rate				
	BASE DATE				
V.	**Other Basic(Reserves/Miscellaneous)**	**Amount**			

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
DDG	105	NGSB	03	SEP-02	APR-05	JUN-09
DDG	106	BIW	03	SEP-02	NOV-04	SEP-08
DDG	107	NGSB	04	SEP-02	FEB-06	MAY-10
DDG	108	BIW	04	SEP-02	DEC-05	JUN-09
DDG	109	BIW	04	SEP-02	JUL-06	FEB-10
DDG	110	NGSB	05	SEP-02	MAY-07	OCT-10
DDG	111	BIW	05	SEP-02	APR-07	NOV-10
DDG	112	BIW	05	SEP-02	FEB-08	JUL-11
DDG	113	NGSB	10	MAR-10	TBD	TBD

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: DDG-51 AEGIS DESTROYERS	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
ELECTRONICS						
a. P-35 Items						
SQQ 89 ASW					1	74,960
SLQ-32 EW					1	12,030
USQ 82 GEDMS					1	13,331
EXCOMM					1	59,247
Subtotal						159,568
b. Major Items						
NAVIGATION SYSTEM					1	2,423
MK-12 IFF					1	8,307
SLQ 25 NIXIE					1	2,101
SRQ 4 LAMPS III					1	5,764
SSEE					1	26,144
MIDS					1	5,362
CEC BLK II					1	12,639
Subtotal						62,740
c. Other ELECTRONICS						
MISC. ELECTRONICS					1	69,807
Subtotal						69,807
Total ELECTRONICS						292,115

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: DDG-51 AEGIS DESTROYERS	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
HM&E						
a. P-35 Items						
STC 2 IVCS					1	12,601
Subtotal						12,601
b. Major Items						
Subtotal						0
c. Other HM&E						
MISC. HM&E					1	27,038
Subtotal						27,038
Total HM&E						39,639

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: DDG-51 AEGIS DESTROYERS	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
ORDNANCE						
a. P-35 Items						
AEGIS WEAPON SYSTEM (MK-7)					1	373,659
VLS MK 41					1	94,628
MK 45 LWG					1	40,232
MK 37 TOMAHAWK					1	44,363
PHALANX					1	14,101
Subtotal						566,983
b. Major Items						
MK 32 SVTT					1	3,835
ELECTRO-OPTICAL SYSTEM					1	6,303
MK 160 GFCS					1	14,536
SPS 67 RADAR					1	16,840
ESSM					1	937
Subtotal						42,451
c. Other ORDNANCE						
MISC. ORDNANCE					1	241,081
Subtotal						241,081
Total ORDNANCE						850,515

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY2010 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **SQQ 89 ASW**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Detect, classify, localize and track submerged submarines under all environmental conditions at long range from ASW ships, using bottom reflected and convergence zone acoustic paths.

II. CURRENT FUNDING:

P-35 Category	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
Major Hardware					1	35,059
Ancillary Equipment						357
Spares						572
System Engineering						23,629
Technical Engineering Services						1,668
Other Costs						13,675
Total						74,960

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	LOCKHEED MARTIN	TBD	TBD		1	35,059

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	14	24	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Competitive

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **SLQ-32 EW**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

SLQ-32A(V)2 provides the DDG 51 Class Destroyers with the electronic warfare capability of automatically detecting, sorting, classifying, tracking, engaging and continually displaying emitter and platform densities. Included in the ship's electronic warfare suite is the MK 53 Decoy Launching System, which is an automated rapid response Decoy Deploying System for use in countering Anti-Ship Missiles (ASMs).

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 QTY	FY 2010 COST
Major Hardware					1	8,152
Spares						99
Technical Engineering Services						1,040
Other Costs						2,739
Total						12,030

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	RAYTHEON/CRANE	TBD	TBD		1	8,152

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	16	24	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Sole Source

NOTE:

AN/SLQ-32 shared restoration between Raytheon and NSWC/Crane

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **USQ 82 GEDMS**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

A general purpose, modular, shipboard data transfer system that provides high speed, reliable and survivable data from source systems to user systems automatically or on demand. In comparison to AN/USQ-82 (FODMS) (on DDG 79 - DDG 110), Gig-E Data Multiplex System (GEDMS), introduced on DDG 111, provides 10 times the bandwidth, approximately one-half the latency, increased data rate, and added ability for fast Ethernet type interfaces.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**		**FY 2009**		**FY 2010**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware					1	4,981
Technical Data and Documentation						78
Spares						192
System Engineering						2,710
Technical Engineering Services						2,158
Other Costs						3,212
Total						13,331

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	COMPETITIVE	TBD	TBD		1	4,981

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	25	18	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Competitive

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **EXCOMM**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Exterior Communication System (EXCOMM) provides voice, data, teletypewriter (TTY), continuous wave (CW), and other communication services on designated frequencies from VLF to UHF for tactical and record requirements. It includes all external radio communication devices aboard the ship.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 QTY	FY 2010 COST
Major Hardware					1	31,015
Technical Data and Documentation						188
Spares						207
System Engineering						3,958
Technical Engineering Services						2,844
Assembly & Integration						12,488
Other Costs						8,547
Total						59,247

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	VARIOUS	TBD	VAR		1	31,015

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	15	9*	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Numerous contract arrangements (sole source/competitive)

NOTE:

Contract Data note: There are numerous components and contracts resulting in various award dates.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **STC 2 IVCS**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

A solid state integrated voice communication system (IVCS) for application with the AEGIS combat system.

II. CURRENT FUNDING:

P-35 Category	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
Major Hardware					1	5,692
Spares						125
System Engineering						1,055
Technical Engineering Services						532
Other Costs						5,197
Total						12,601

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	L3 COMMUNICATIONS	TBD	TBD		1	5,692

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	30	16	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Sole Source

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **AEGIS WEAPON SYSTEM (MK-7)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

AEGIS is a fast reaction, high firepower, all weather weapon system incorporating a high degree of system availability and effectiveness. It consists of a multi-function phase/plane array radar, high powered illuminators, advanced missile guidance and fully digitizalized and integrated combat ship control for radar, weapons and command and decision. An Operational Readiness Test System performs continuous on-line assessment and fault detection.

II. CURRENT FUNDING:

P-35 Category	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
Major Hardware					1	224,804
System Integration						57,953
Navy Project Mgmt						53,520
Logistics Support						12,290
Spares						7,248
Technical Engineering Services						17,844
Technical Support Services						0
Total						373,659

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	LOCKHEED MARTIN/RAYTHEON	TBD	TBD		1	224,804

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	16	54	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Sole Source

NOTE:

Contract Data Notes:

Antenna and Signal Processors - Contractor: Lockheed Martin

Spy Transmitter and Fire Control System Transmitter - Contractor: Raytheon

Director/Director Controller - Competitive contract

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **VLS MK 41**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The VLS is a Missile Launching System which provides Surface Combatants with a launcher to carry, prepare for launch and fire, Anti-Air Warfare, Strike/Surface Warfare, and Anti-Submarine Warfare weapons. The Flight IIA MK-41 VLS Launchers consist of twelve modules comprised of eight cells each.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**		**FY 2010**	
	QTY	**COST**	**QTY**	**COST**
Major Hardware			1	58,448
Ancillary Equip.				1,389
Tech Data/Doc				488
Spares				578
Technical Engineering Services				6,132
System Engineering				18,213
Other Costs				9,380
Total				94,628

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	LOCKHEED MARTIN/BAE	TBD	TBD		1	58,448

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	18	50	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Sole Source

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **MK 45 LWG**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The 5" 62 caliber MK 45 Mod 4 Gun is a digitized high energy system with the capability to automatically select, load, and fire different types of 5"/62 caliber projectiles.

II. CURRENT FUNDING:

P-35 Category	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
Major Hardware					1	28,325
System Engineering						1,132
Technical Engineering Services						900
Other Costs						9,875
Total						40,232

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	BAE AD/MCNALLY	TBD	TBD		1	28,325

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	18	24	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:
Contract Data notes:
Gun Mount contract: BAE Armament Division - Sole Source
Lower Hoist contract: McNally - Sole Source

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **MK 37 TOMAHAWK**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Tactical Tomahawk Weapon Control System (TTWCS) is an open system architecture of work stations, processors, printers, fiber optic Local Area Network (LAN) and the Navy Standard Mass Measurement storage device which provides target data management, engagement planning, weapon selection and initiation and launch functions for the TOMAHAWK cruise missile.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**		**FY 2009**		**FY 2010**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware					1	25,896
System Engineering						5,045
Technical Engineering Services						4,145
Other Costs						9,277
Total						44,363

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	COMPETITIVE	TBD	TBD		1	25,896

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	19	8	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Competitive

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY10 President's Budget
May 2009

Ship Type: **DDG-51 AEGIS DESTROYERS**
Equipment Item: **PHALANX**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

A fast reaction terminal defense against both low-flying, high speed, anti-ship missiles and high speed maneuvering surface targets. The system is an automatic, self-contained unit consisting of search and track radar, digitalized fire control and a 20 mm M61A1 gun all mounted in a single above deck structure requiring a minimum of interference with other ship systems.

II. CURRENT FUNDING:

P-35 Category	**FY 2008**		**FY 2009**		**FY 2010**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware	0	0	0	0	1	10,904
System Engineering		0		0		674
Technical Engineering Services		0		0		1,236
Other Costs		0		0		1,287
Total		0		0		14,101

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	DDG 51	RAYTHEON	TBD	TBD		1	10,904

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY10	DDG 51	TBD	25	22	TBD

V. COMPETITION/SECOND SOURCE INITIATIVES:

Sole Source

NOTE:

Shared restoration between Raytheon and NSWC-L

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)														FY 2010 President's Budget May 2009
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number 1711 Shipbuilding and Conversion, Navy / BA 02 / BLI 212200	FY 2010 President's Budget							P-1 Line Item Nomenclature DDG-51 CLASS						
Weapon System DDG-51									First System (BY1) Completion Date Various					
($ in Millions)														
BLI: 212200	PLT	When Req'd	Prior Years	FY08	FY09	FY10								
ADVANCE PLANNING (1)	various	various			**14.3**									
SHIPBUILDER CLASS STANDARD (CSE) EQUIPMENT (2)					**130.7**	**329.0**								
Main Reduction Gear	various	various			67.3									
Ship Service Gas Turbine Generators	various	various			31.0									
Controllable Pitch Propellers	various	various			7.1									
Machinery Control System	various	various			11.2									
Propulsion Shafting	various	various			9.4									
Universal Engine Controller	various	various			4.7									
GFE - ELECTRONICS (3)					**4.9**									
IFF (OE-120A Antenna)	various	Apr-09			1.6									
EXCOMM (High Frequency Radio Group) (HFRG)	various	Mar-09			3.3									
GFE - ORDNANCE (4)					**162.1**									
AEGIS Weapon System	various	various			85.0									
Vertical Launch System	various	various			76.0									
Tomahawk	various	Apr-09			1.1									
Combat System Engineering (5)	various	various			**16.0**									
Total AP					**328.0**	**329.0**								

Note - FY 2009 reflects an increase of $128.6M in Advance Procurement which will be requested through an upcoming transfer/reprogramming.

Description:

(1) **Advance Planning AP** is required to fund production planning and procurement management for the restart of the program in FY10.

(2) **Shipbuilder CSE AP** is required to satisfy in-yard need dates for ship production.

(3) **GFE Electronics AP** is required to satisfy in-yard need dates for ship production and to avoid costs associated with production line shutdown.

(4) **GFE Ordnance AP** is required to satisfy in-yard need dates for ship production and to avoid costs associated with production line shutdown.

(5) **Combat System Engineering AP** is required to fund ship integration engineering for restart of the program in FY10.

Exhibit P-10, Advance Procurement Requirements Analysis (Page 2 - Budget Justification)					FY 2010 President's Budget May 2009
Appropriation (Treasury) Code/CC/BA/SBA/Item Control Number 1711 Shipbuilding and Conversion, Navy / BA 02 / BLI 212200			Weapon System DDG 51 Class		P-1 Line Item Nomenclature
(TOA, $ in Millions)			**FY10**		
	PLT	QPA	Qty	Contract Forecast Date	Total Cost Request
BLI: 212200 End Item					
SHIPBUILDER CLASS STANDARD (CSE) EQUIPMENT		Shipsets	Shipsets	2nd Qtr	329.0
Total AP					329.0

Description:

Shipbuilder CSE AP is required to satisfy in-yard need dates for ship production.

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE:
May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 2 Other Warships

P-1 LINE ITEM NOMENCLATURE
LITTORAL COMBAT SHIP (LCS)
BLI: 2127

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						TOTAL PROG
QUANTITY	0	0	2	3						
End Cost	500.0	0.1	1,017.0	1,380.0						
Full Funding TOA	500.0	0.1	1,017.0	1,380.0						
Total Obligational Authority	500.0	0.1	1,017.0	1,380.0						
Plus Outfitting / Plus Post Delivery	0.0	0.0	0.0	0.0						
Total	500.0	0.1	1017.0	1380.0						
Unit Cost (Ave. End Cost)	0.0	0.0	508.5	460.0						

MISSION:

Provides for the design, construction, integration and testing of the Littoral Combat Ship (LCS), including Ordnance, Government Furnished Equipment (GFE), Program Office and Change Order Costs. LCS will be a fast, agile, and networked surface combatant with capabilities optimized to defeat asymmetric threats, and assure naval and joint force access into contested littoral regions. It will use open-systems-architecture design, modular weapons, and sensor systems, and a variety of manned and unmanned vehicles to expand the battle space and project offensive power into the littoral. LCS will operate with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including littoral anti-submarine warfare (ASW), anti-surface warfare (SUW), and mine countermeasures (MCM). LCS will also possess inherent capabilities, regardless of mission package installed, including Intelligence Surveillance Reconnaissance (ISR), homeland defense, Maritime Interdiction/Interception Operations (MIO), anti-terrorism/force protection (AT/FP), air self-defense, joint littoral mobility, and Special Operating Forces (SOF) and logistic support for movement of personnel and supplies. This relatively small, high-speed surface combatant will complement the U.S. Navy's AEGIS fleet, by operating in environments where it is less desirable to employ larger, multi-mission ships. It will have the capability to deploy independently to overseas littoral regions, remain on station for extended periods of time either with a battle group or through a forward-basing arrangement and will be capable of underway replenishment. It will operate with Carrier Strike Groups, Surface Action Groups, in groups of other similar ships, or independently for diplomatic and presence missions. Additionally, it will have the capability to operate cooperatively with the U.S. Coast Guard and Allies.

NOTES:

The FY 2009 Appropriations Act authorizes the use of material/funding from the FY 2006 terminated ships to be used in conjunction with FY 2009 funds for the procurement of FY 2009 LCS ships. The unit cost values above do not reflect the FY 2006 funds and materials to be used to complete LCS FY 2009 ships.

The FY 2009 Appropriations Act rescinded $337 million FY 2008 SCN funds.

Characteristics:	LM	GD				
Overall Length:	115m	127m				
Max Beam:	18m	30m				
Displacement:	3089 mt	2842 mt				
	FY 06	**FY 09**	**FY09**	**FY10**	**FY10**	**FY10**
Production Status:	Terminated for	LCS 3	LCS 4	LCS 5	LCS 6	LCS 7
Contract Award Date	convenience	03/09	05/09	11/09	11/09	11/09
Months to Completion	12-Apr-07					
a) Contract Award to Delivery	and	41 months	41 months	41 months	41 months	41 months
b) Construction Start to Delivery	1-Nov-07	32 months	32 months	32 months	32 months	32 months
Delivery Date		8/12	9/12	4/13	6/13	8/13
Completion of Fitting Out		11/12	12/12	7/13	9/13	11/13
Obligation Work Limiting Date		10/13	11/13	6/14	8/14	10/14

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

BUDGET ACTIVITY: 2	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 1281 BLI: 2127**
Other Warships	**LITTORAL COMBAT SHIP (LCS)**	

	FY 2008		**FY 2009**		**FY 2010**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS			2		3	52,000
BASIC CONST/CONVERSION		106				1,121,821
CHANGE ORDERS						75,000
ELECTRONICS						35,784
HM&E						1,779
OTHER COST						61,000
ORDNANCE						32,616
NET P-1 LINE ITEM:		106		1,016,952		1,380,000

Note:

Award of the FY 2009 ships represents Phase I of a competitive two-phased acquisition approach to procure FY 2009/FY 2010 LCS, with Phase II including award of up to three (3) additional LCS Class ships. The FY 2009 award amounts are considered source selection information (see FAR 2.101 and 3.104) and will be available following award of the FY 2010 LCS. In addition, the FY 2009 value does not include the FY 2006 funds and materials to be used to complete LCS FY 2009 ships.

SHIPBUILDING AND CONVERSION, NAVY

FY 2010 President's Budget

Analysis of Ship Cost Estimate - Basic/Escalation

DATE:

Ship Type: LITTORAL COMBAT SHIP

May 2009

I.	Design/Schedule	Start/Issue	Complete /Response	Reissue	Complete /Response
	Issue date for TLR	N/A	N/A	N/A	N/A
	Issue date for TLS	N/A	N/A	N/A	N/A
	Preliminary Design	7/03	12/03	N/A	N/A
	Contract Design	5/04	12/04	N/A	N/A
	Detail Design	DEC 04/OCT 05	JUN 07/OCT 07	N/A	N/A
	Request for Proposals	N/A	05/09 FOR FY10 SHIPS	N/A	N/A
	Design Agent	LOCKHEED MARTIN - GENERAL DYNAMICS	LOCKHEED MARTIN - GENERAL DYNAMICS	N/A	N/A

II.	**Classification of Cost Estimate**	FY10 - CONGRESSIONAL COST CAP		
III.	**Basic Construction/Conversion**	**2008**	**2009**	**2010**
	A. Actual Award Date	N/A	03/09, 05/09	11/09
	B. Contract Type (and Share Line if applicable)	N/A	FPI	FPI
IV.	**Escalation**			
	Escalation Termination Date			
	Escalation Requirement			
	Labor/Material Split			
	Allowable Overhead Rate			
V.	**Other Basic(Reserves/Miscellaneous)**	**Amount**		

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LCS 3	901	LOCKHEED MARTIN	09	MAR-09	DEC-09	AUG-12
LCS 4	902	GENERAL DYNAMICS	09	MAY-09	JAN-10	SEP-12
LCS 5	1001	TBD	10	NOV-09	AUG-10	APR-13
LCS 6	1002	TBD	10	NOV-09	OCT-10	JUN-13
LCS 7	1003	TBD	10	NOV-09	DEC-10	AUG-13

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LITTORAL COMBAT SHIP	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
ELECTRONICS						
a. P-35 Items						
AN/WSC-6E(V)9 Super High Frequency (SHF) Radio					3	9,450
Subtotal						9,450
b. Major Items						
Electronic Key Management System (EKMS)/CRYPTO SYSTEM					3	1,914
Common Data Link Management System (CDLMS) W/CDLMS SOFTWARE VERSION 3.X					3	1,684
AN/URC-141 (C) MIDS on Ship (MOS)					3	5,553
AN/USQ-172(V)5 Global Command and Control System - Maritime (GCCS-M) /COMPOSE 3.X					3	1,591
DS-Logistics Maintenance Automated Information System (LMAIS) Bar Code Supply (BCS) Navy Tactical Command Support System (NTCSS)					3	1,059
AN/WLD-1 RADIO RACKS Multi-Vehicle Communication System (MVCS)					3	4,535
AN/WSN-7 Ring Laser Gyro Navigator Control Display Unit (RLGN-CDU)					3	1,655
G-PNTS Navigation Sensor System Interface (NAVSSI)					3	3,519
NETFIRES RADIO					3	1,800
Subtotal						23,310
c. Other ELECTRONICS						
OTHER ELECTRONICS					3	3,024
Subtotal						0
Total ELECTRONICS						35,784

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LITTORAL COMBAT SHIP	**FY 2008**		**FY 2009**		**FY 2010**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**
ORDNANCE						
a. P-35 Items						
SEARAM					3	27,281
Subtotal						27,281
b. Major Items						
Visual Landing Aid (VLA) includes Wave Off Light System (WOLS),Stablized Glide Scope Indicator (SGSI), and Flight Deck Status and Signaling System (FDSSS)					3	4,210
ORDNANCE HANDLING EQPT					3	1,125
Subtotal						5,335
c. Other ORDNANCE						
Subtotal						0
Total ORDNANCE						32,616

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LITTORAL COMBAT SHIP	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
HM&E						
a. P-35 Items						
Subtotal						0
b. Major Items						
CHEM/BIO/RADIOLOGICAL					3	234
AN/SRC-59 Shipwide Interior Wireless Communication System (SIWCS)					3	1,146
SMALL PULPER					3	399
Subtotal						1,779
c. Other HM&E						
Subtotal						0
Total HM&E						1,779

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LITTORAL COMBAT SHIP**
Equipment Item: **AN/WSC-6E(V)9 SHF**
PARM Code: **3Z**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/WSC-6E(V)9 Super High Frequency (SHF) radio provides joint interoperable high capability voice, data, and video communications for combatants and Flag-capable ships. It provides the required global connectivity among Fleet units, joint forces, allied and NATO forces, and Naval C4I commands.

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 QTY	FY 2010 COST
Major Hardware					3	9,060
Spares						100
Technical Support Services						290
Total						9,450

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	LCS 5/6/7	HARRIS	FFP	JUN-10	OPTION	3	3020

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
FY10	LCS 5/6/7	APR-13	10	20	OCT-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

Current sole-source contracts

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LITTORAL COMBAT SHIP**
Equipment Item: **SEARAM**
PARM Code: **3P**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

II. CURRENT FUNDING:

P-35 Category	FY 2008 QTY	FY 2008 COST	FY 2009 QTY	FY 2009 COST	FY 2010 QTY	FY 2010 COST
Major Hardware					3	20,840
Ancillary Equipment						1,432
Technical Data and Documentation						131
Spares						350
System Engineering						1,901
Technical Engineering Services						1,736
Other Costs						891
Total						27,281

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY10	LCS 5/6/7	RAYTHEON	SS/FFP	NOV-10	OPTION	3	6,946

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEAD TIME	REQUIRED AWARD DATE
FY10	LCS 5/6/7	APR-13	10	22	AUG-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A - SEARAM is a Sole Source Firm Fixed Price (SS/FFP) procurement.

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 3 Amphibious Ships

P-1 LINE ITEM NOMENCLATURE
LPD-17
BLI: 3036 / SUBHEAD NO. 2317/2316/1317/1316

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010
QUANTITY	8	1	1	0
End Cost	11,785.9	1,686.8	1,852.5	0.0
Less Advance Procurement	864.8	296.2	49.7	0.0
Less Cost to Complete	1,671.3	0.0	0.0	0.0
Less Transfers	251.0	0.0	0.0	0.0
Less Subsequent Cost to Complete	17.1	0.0	0.0	0.0
Less Hurricane Supplemental	1,630.9	0.0	0.0	0.0
Less Subsequent Full Funding	0.0	0.0	872.4	0.0
Full Funding TOA	7,350.8	1,390.6	930.4	0.0
Plus Advance Procurement	1,161.0	49.7	0.0	184.6
Plus Cost to Complete	1,537.9	66.0	33.1	99.3
Plus Transfers	251.0	0.0	0.0	0.0
Plus Hurricane Supplemental	1,630.9	0.0	0.0	0.0
Plus Subsequent Full Funding	0.0	0.0	0.0	872.4
Total Obligational Authority	11,931.6	1,506.3	963.5	1,156.3
Plus Outfitting / Plus Post Delivery	355.0	95.2	69.7	75.6
Plus Hurricane Supplemental (Outfitting/Post Delivery)	28.4	0.0	0.0	0.0
Total	12,315.0	1,601.5	1,033.2	1,231.9
Unit Cost (Ave. End Cost)	1,473.2	1,686.8	1,917.5	0.0

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:

Length Overall:	208.5M (684')
Max Beam:	31.9M (105')
Displacement:	25.3L MT (24.9K LT)
Draft:	7M (23')

Armament:	Major Electronics:
RAM Missile System	C4ISR
SPQ-9B	SSDS
AN/SPS-48E	CEC
30MM MK 46 Gun System	MK 12 AIMS IFF
50 Cal Machine Gun	AN/SLQ-32
	BFTT

	FY08	**FY09**
Production Status:	LPD 25	LPD 26
Contract Award Date	12/07	12/09
Months to Completion		
a) Contract Award to Delivery	60 months	59 months
b) Construction Start to Delivery	44 months	47 months
Delivery Date	12/12	11/14
Completion of Fitting Out	05/13	06/15
Obligation Work Limiting Date	04/14	05/16

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

BUDGET ACTIVITY: 3	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 2317/2316/1317/1316 BLI: 3036**
Amphibious Ships	**LPD-17**	

	FY 2003		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2008**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	1		1		1		1		1	
BASIC CONST/CONVERSION		1,239,695		1,269,386		1,271,639		1,302,082		1,276,159
CHANGE ORDERS		21,900		14,385		16,409		28,640		45,566
ELECTRONICS		165,204		136,647		103,955		140,437		225,755
HM&E		41,530		36,239		5,685		44,020		51,951
OTHER COST		11,264		5,065		5,000		5,000		9,963
ORDNANCE		52,115		41,400		43,849		47,428		77,418
TOTAL SHIP ESTIMATE		1,531,708		1,503,122		1,446,537		1,567,607		1,686,812
LESS HURRICANE SUPPLEMENTAL		324,260		225,460		237,610		210,950		
LESS ADVANCE PROCUREMENT FY01		402,756		63,749		7,184		6,865		
LESS ADVANCE PROCUREMENT FY02		154,249								
LESS ADVANCE PROCUREMENT FY04						133,939				
LESS ADVANCE PROCUREMENT FY07										296,236
LESS COST TO COMPLETE FY07						17,400				
LESS COST TO COMPLETE FY08						65,999				
LESS COST TO COMPLETE FY09		33,082								
LESS COST TO COMPLETE FY10				16,844		16,498				
LESS SUBSEQUENT COST TO COMPLETE								17,067		
NET P-1 LINE ITEM:		617,361		1,197,069		967,907		1,332,725		1,390,576

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

BUDGET ACTIVITY: 3	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 2317/2316/1317/1316 BLI: 3036**
Amphibious Ships	**LPD-17**	

	FY 2009	
ELEMENT OF COST	**QTY**	**COST**
PLAN COSTS	1	
BASIC CONST/CONVERSION		1,417,362
CHANGE ORDERS		44,470
ELECTRONICS		239,162
HM&E		55,138
OTHER COST		10,505
ORDNANCE		85,835
TOTAL SHIP ESTIMATE		1,852,472
LESS ADVANCE PROCUREMENT FY08		49,651
LESS SUBSEQUENT FULL FUNDING FY10		872,392
NET P-1 LINE ITEM:		930,429

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimate - Basic/Escalation

Ship Type: LPD 17

I.	Design/Schedule	Start/Issue	Complete /Response	Reissue	Complete /Response		
	Issue date for TLR		SEP 1988				
	Issue date for TLS						
	Preliminary Design	JAN 1993	NOV 1993				
	Contract Design	DEC 1993	MAR 1996				
	Detail Design	DEC 1996	JUL 2002				
	Request for Proposals						
	Design Agent						
II.	Classification of Cost Estimate	CLASS C					
III.	Basic Construction/Conversion	FY03 (001)	FY04 (001)	FY05 (001)	FY06 (001)	FY08 (001)	FY 09 (001)
	A. Actual Award Date	NOV 2003	JUN 2006	JUN 2006	NOV 2006	DEC 2007	DEC 2009
	B. Contract Type (and Share Line if applicable)	FPIF/AF	FPIF/AF	FPIF/AF	FPIF/AF	FPIF/AF	FPIF/AF
	C. RFP Response Date	JAN 2003	MAY 2004	MAY 2004	JUN 2005	JUN 2006	TBD
IV.	Escalation						
	Escalation Termination Date						
	Escalation Requirement						
	Labor/Material Split						
	Allowable Overhead Rate						
	BASE DATE	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED	FORWARD PRICED
V.	Other Basic(Reserves/Miscellaneous)	Amount					

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LPD 0301	21	NGSS	03	NOV-03	MAR-04	AUG-09
LPD 0401	22	NGSS	04	JUN-06	JUL-06	MAY-11
LPD 0501	23	NGSS	05	JUN-06	MAR-07	MAY-12
LPD 0601	24	NGSS	06	NOV-06	AUG-07	DEC-11
LPD 0801	25	NGSS	08	DEC-07	APR-08	DEC-12
LPD 0901	26	NGSS	09	DEC-09	DEC-10	NOV-14

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
ELECTRONICS										
a. P-35 Items										
C4ISR	1	60,885	1	63,726	1	53,468	1	60,424	1	70,776
SSDS MARK 2	1	18,733	1	18,800	1	18,010	1	17,195	1	25,139
CEC (FY 96-00 INCLUDED IN SSDS MK2)	1	6,844	1	7,010	1	7,809	1	6,751	1	6,918
MK 12 AIMS IFF	1	5,455	1	5,316	1	5,665	1	5,853	1	7,150
AN/SLQ-32(V)2 (REFURB)	1	5,165	1	5,797	1	5,635	1	5,571	1	5,677
BATTLE FORCE TACTICAL TRAINER	1	2,100	1	2,122	1	2,968	1	2,998	1	2,935
Subtotal		99,182		102,771		93,555		98,792		118,595
b. Major Items										
NULKA	1	1,256	1	1,427	1	1,411	1	1,529	1	1,978
AMPHIB ASSAULT DIR SYSTEM	1	3,460	1	3,536	0	3,154	1	2,965	1	2,958
NIXIE	1	579	1	1,146	1	1,146	1	902	1	1,140
RADIAC	1	43	1	47	1	52	1	57	1	63
AN/SPQ-14(FY 96-00 INCLUDED IN SSDS MK2)	1	966	1	1,812	1	1,041	1	1,082	1	1,182
AN/UQN-4(FATHOMETE)	1	190	1	190	1	199	1	203	1	215
AN/WSN-7(RLGN)	0	0	1	2,327	1	2,675	1	3,276	1	4,438
DCAMS	0	230	0	230	0	230	0	230	1	230
AN/WSN-8A DEML	0	295	0	211	0	211	0	211	1	253
Subtotal		7,019		10,926		10,119		10,455		12,457
c. Other ELECTRONICS										
MISCELLANEOUS ELECTRONICS	0	59,003	0	22,950	0	281	0	31,190	0	94,703
Subtotal		59,003		22,950		281		31,190		94,703
Total ELECTRONICS		165,204		136,647		103,955		140,437		225,755

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17

	FY 2009	
	QTY	COST
ELECTRONICS		
a. P-35 Items		
C4ISR	1	83,471
SSDS MARK 2	1	29,372
CEC (FY 96-00 INCLUDED IN SSDS MK2)	1	8,170
MK 12 AIMS IFF	1	8,427
AN/SLQ-32(V)2 (REFURB)	1	6,794
BATTLE FORCE TACTICAL TRAINER	1	3,454
Subtotal		139,688
b. Major Items		
NULKA	1	2,393
AMPHIB ASSAULT DIR SYSTEM	1	3,480
NIXIE	1	1,364
RADIAC	1	70
AN/SPQ-14(FY 96-00 INCLUDED IN SSDS MK2)	1	1,383
AN/UQN-4(FATHOMETE)	1	238
AN/WSN-7(RLGN)	1	5,120
DCAMS	1	255
AN/WSN-8A DEML	1	281
Subtotal		14,584
c. Other ELECTRONICS		
MISCELLANEOUS ELECTRONICS	0	84,890
Subtotal		84,890
Total ELECTRONICS		239,162

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
HM&E										
a. P-35 Items										
Subtotal		0		0		0		0		0
b. Major Items										
BOATS	3	968	3	918	3	918	3	937	3	1,011
CCTV, SITE 400	1	359	1	376	1	381	1	385	3	399
TRUCK, FORKLIFT	14	1,004	14	1,004	14	1,026	14	989	14	1,068
CHEMICAL WARFARE DETECTOR	1	177	1	201	1	183	1	93	1	270
MILITARY PAYROLL SYSTEM (NAVY CASH SYSTEM & NSIPS)	1	605	1	614	1	624	1	653	1	644
INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)	1	593	1	416	1	405	1	280	1	415
OILY WATER SEPARATOR	1	8	1	232	1	224	1	221	1	227
PLASTIC WASTE PROCESSING EQP	1	189	1	228	0	224	1	224	1	231
Subtotal		3,903		3,989		3,985		3,782		4,265
c. Other HM&E										
MISCELLANEOUS HM&E	0	37,627	0	32,250	0	1,700	0	40,238	0	47,686
Subtotal		37,627		32,250		1,700		40,238		47,686
Total HM&E		41,530		36,239		5,685		44,020		51,951

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	FY 2009	
	QTY	COST
HM&E		
a. P-35 Items		
Subtotal		0
b. Major Items		
BOATS	3	1,121
CCTV, SITE 400	3	442
TRUCK, FORKLIFT	14	1,184
CHEMICAL WARFARE DETECTOR	1	299
MILITARY PAYROLL SYSTEM (NAVY CASH SYSTEM & NSIPS)	1	714
INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS)	1	460
OILY WATER SEPARATOR	1	252
PLASTIC WASTE PROCESSING EQP	1	256
Subtotal		4,728
c. Other HM&E		
MISCELLANEOUS HM&E	0	50,410
Subtotal		50,410
Total HM&E		55,138

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LPD 17	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
ORDNANCE										
a. P-35 Items										
RAM MISSILE SYSTEM	2	23,894	2	12,663	2	19,074	2	19,106	2	28,159
AN/SPS--48E	1	13,325	1	15,888	1	14,139	1	15,047	1	16,102
SPQ-9B	1	6,573	1	6,911	1	7,711	1	7,729	1	8,180
Subtotal		43,792		35,462		40,924		41,882		52,441
b. Major Items										
50 CAL MACHINE GUN	0	67	0	67	0	67	0	67	0	67
FLIGHT CTRL & INSTRUMENT LANDING SYS W/ HELICOPTER OPERATIONS SUR\	1	744	1	1,664	1	1,478	1	1,934	1	2,004
MK46 GUN BARRELS	2	1,138	2	2,024	2	1,020	2	732	2	811
ORDNANCE HANDLING EQUIPMENT	0	368	1	350	1	360	1	360	0	427
AN/SPS-73	0	0	0	0	0	0	0	0	1	2,854
Subtotal		2,317		4,105		2,925		3,093		6,163
c. Other ORDNANCE										
MISCELLANEOUS ORDNANCE	0	6,006	0	1,833	0	0	0	2,453	0	18,814
Subtotal		6,006		1,833		0		2,453		18,814
Total ORDNANCE		52,115		41,400		43,849		47,428		77,418

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

Ship Type: LPD 17	**FY 2009**	
	QTY	**COST**
ORDNANCE		
a. P-35 Items		
RAM MISSILE SYSTEM	2	32,220
AN/SPS--48E	1	18,453
SPQ-9B	1	9,369
Subtotal		60,042
b. Major Items		
50 CAL MACHINE GUN	0	74
FLIGHT CNTRL & INSTRUMENT LANDING SYS WITH HELICOPTER OPERATIONS SURVEILLANCE SYS & DY	1	2,222
MK46 GUN BARRELS	1	899
ORDNANCE HANDLING EQUIPMENT	0	473
AN/SPS-73	1	3,258
Subtotal		6,926
c. Other ORDNANCE		
MISCELLANEOUS ORDNANCE	0	18,867
Subtotal		18,867
Total ORDNANCE		85,835

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **C4ISR**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
To prove the link between the ship, the command hierarchy and other units of the operating forces.

II. CURRENT FUNDING:

P-35 Category	**FY 2003**		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2008**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware	1	29,914	1	29,823	1	27,155	1	31,300	1	35,589
Spares		1,507		1,357		962		971		1,073
Ancillary Equipment		415		425		501		514		500
Documentation and Systems Engineering		705		3,102		1,612		2,848		2,896
Software		750		578		571		619		1,140
Technical Engineering		2,710		2,783		3,178		3,174		3,257
Other Appropriate Costs		5,106		4,857		4,938		4,377		5,433
Turnkey		19,778		20,801		14,551		16,621		20,888
Total		60,885		63,726		53,468		60,424		70,776

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	VARIOUS	VARIOUS	VAR	VAR	1	35,589
FY 09	LPD 26	VARIOUS	VARIOUS	VAR	VAR	1	41,973

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	VAR	VAR	VAR
FY 09	LPD 26	NOV-14	VAR	VAR	VAR

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **C4ISR**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
To prove the link between the ship, the command hierarchy and other units of the operating forces.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	41,973
Spares		1,265
Ancillary Equipment		590
Documentation and Systems Engineering		3,415
Software		1,344
Techincal Engineering		3,841
Other Appropriate Costs		6,408
Turnkey		24,635
Total		83,471

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	VARIOUS	VARIOUS	VAR	VAR	1	35,589
FY 09	LPD 26	VARIOUS	VARIOUS	VAR	VAR	1	41,973

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	VAR	VAR	VAR
FY 09	LPD 26	NOV-14	VAR	VAR	VAR

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **SSDS MARK 2**
PARM Code:

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.

II. CURRENT FUNDING:

P-35 Category	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
Major Hardware	1	11,250	1	11,249	1	11,250	1	12,530	1	10,650
Systems Engineering		1,833		937		600		741		600
Technical Data and Documentation		1,102		0		0		0		0
Technical Engineering		402		402		402		402		402
Spares		808		587		587		587		587
Other Appropriate Costs		3,338		5,625		5,171		2,935		12,900
Total		18,733		18,800		18,010		17,195		25,139

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	FFP	TBD	JAN-08	1	10,650
FY 09	LPD 26	RAYTHEON	CP	TBD	4 OPTION YEARS	1	12,443

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	17	13	JUN-10
FY 09	LPD 26	NOV-14	17	13	JUL-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **SSDS MARK 2**
PARM Code:

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.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	12,443
Systems Engineering		701
Technical Data and Documentation		0
Technical Engineering		470
Spares		686
Other Appropriate Costs		15,072
Total		29,372

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	FFP	TBD	JAN-08	1	10,650
FY 09	LPD 26	RAYTHEON	CP	TBD	4 OPTION YEARS	1	12,443

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	17	13	JUN-10
FY 09	LPD 26	NOV-14	17	13	JUL-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **CEC (FY 96-00 INCLUDED IN SSDS MK2)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

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

II. CURRENT FUNDING:

P-35 Category	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
Major Hardware	1	5,264	1	5,571	1	5,868	1	4,698	1	4,888
Systems Engineering		467		577		600		500		500
Technical Data and Documentation		35		37		40		0		0
Technical Engineering		205		216		216		300		300
Spares		395		314		395		395		395
Other Appropriate Costs		478		295		690		858		835
Total		6,844		7,010		7,809		6,751		6,918

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	FFP	TBD		1	4,888
FY 09	LPD 26	RAYTHEON	FFP	TBD		1	5,773

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	24	18	JUN-09
FY 09	LPD 26	NOV-14	24	18	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **CEC (FY 96-00 INCLUDED IN SSDS MK2)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
Cooperative Engagement Capability (CEC) coordinates all anti-warfare sensors into single, real time, fire control quality composite track which improves battle force air defense.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	5,773
Systems Engineering		590
Technical Data and Documentation		0
Technical Engineering		354
Spares		466
Other Appropriate Costs		987
Total		8,170

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	FFP	TBD		1	4,888
FY 09	LPD 26	RAYTHEON	FFP	TBD		1	5,773

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	24	18	JUN-09
FY 09	LPD 26	NOV-14	24	18	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **MK 12 AIMS IFF**
PARM Code:

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 ownership position and identification.

II. CURRENT FUNDING:

P-35 Category	**FY 2003**		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2008**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware	1	3,651	1	3,510	1	4,089	1	4,218	1	5,428
Ancillary Equipment		35		96		128		130		132
Systems Engineering		420		1,210		601		600		600
Technical Data and Documentation		273		0		0		0		0
Technical Engineering		238		55		195		240		290
Spares		308		65		65		65		65
Other Appropriate Costs		530		380		587		600		635
Total		5,455		5,316		5,665		5,853		7,150

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	BAE & NORTHROP GRUMMAN	FFP	TBD	NEW	1	5,428
FY 09	LPD 26	BAE & NORTHROP GRUMMAN	FFP	TBD	NEW	1	6,397

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	6	30	DEC-09
FY 09	LPD 26	NOV-14	6	30	JAN-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **MK 12 AIMS IFF**
PARM Code:

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 ownership position and identification.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	6,397
Ancillary Equipment		156
Systems Engineering		707
Technical Data and Documentatior		0
Technical Engineering		342
Spares		77
Other Appropriate Costs		748
Total		8,427

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	BAE & NORTHROP GRUMMAN	FFP	TBD	NEW	1	5,428
FY 09	LPD 26	BAE & NORTHROP GRUMMAN	FFP	TBD	NEW	1	6,397

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	6	30	DEC-09
FY 09	LPD 26	NOV-14	6	30	JAN-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **AN/SLQ-32(V)2 (REFURB)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
The AN/SLQ-32(V)2 is a passive electronics countermeasure system.

II. CURRENT FUNDING:

P-35 Category	**FY 2003**		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2008**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware	1	2,585	1	4,328	1	4,496	1	4,342	1	4,424
Ancillary Equipment		150		158		165		165		168
Systems Engineering		0		16		0		0		0
Technical Data and Documentation		6		6		6		6		7
Technical Engineering		315		327		17		17		17
Spares		85		132		137		137		140
Other Appropriate Costs		2,024		830		814		904		921
Total		5,165		5,797		5,635		5,571		5,677

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	BOA-FFP	TBD		1	4,424
FY 09	LPD 26	RAYTHEON	BOA-FFP	TBD		1	5,294

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	24	JUN-09
FY 09	LPD 26	NOV-14	18	24	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **AN/SLQ-32(V)2 (REFURB)**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:
The AN/SLQ-32(V)2 is a passive electronics countermeasure system.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	5,294
Ancillary Equipment		201
Systems Engineering		0
Technical Data and Documentation		8
Technical Engineering		20
Spares		168
Other Appropriate Costs		1,103
Total		6,794

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	BOA-FFP	TBD		1	4,424
FY 09	LPD 26	RAYTHEON	BOA-FFP	TBD		1	5,294

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	24	JUN-09
FY 09	LPD 26	NOV-14	18	24	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **BATTLE FORCE TACTICAL TRAINER**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/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 Str. BFTT interfaces to and/or provides integrated training capability for the primary combat system elements onboard LPD 17 Class ships.

II. CURRENT FUNDING:

P-35 Category	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
Major Hardware	1	1,501	1	1,526	1	2,432	1	2,432	1	2,274
Systems Engineering		0		50		105		105		60
Technical Data and Documentatior		175		55		0		0		0
Technical Engineering		75		135		240		270		255
Spares		25		26		26		26		26
Other Appropriate Costs		324		330		165		165		320
Total		2,100		2,122		2,968		2,998		2,935

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	AP LABS	FFP	TBD		1	2,274
FY09	LPD 26	AP LABS	FFP	TBD		1	2,676

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	7	NOV-10
FY09	LPD 26	NOV-14	18	7	DEC-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **BATTLE FORCE TACTICAL TRAINER**
PARM Code:

I. DESCRIPTION/CHARACTERISTICS/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 Str. BFTT interfaces to and/or provides integrated training capability for the primary combat system elements onboard LPD 17 Class ships.

II. CURRENT FUNDING:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	2,676
Systems Engineering		71
Technical Data and Documentatior		0
Technical Engineering		300
Spares		31
Other Appropriate Costs		376
Total		3,454

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	AP LABS	FFP	TBD		1	2,274
FY09	LPD 26	AP LABS	FFP	TBD		1	2,676

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	7	NOV-10
FY09	LPD 26	NOV-14	18	7	DEC-12

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **RAM MISSILE SYSTEM**
PARM Code:

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:

P-35 Category	FY 2003		FY 2004		FY 2005		FY 2006		FY 2008	
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
Major Hardware	2	8,304	2	8,304	2	10,861	1	10,620	1	15,747
Ancillary Equipment		0		0		485		485		1,191
Systems Engineering		1,051		0		3,799		3,899		6,096
Technical Engineering		1,457		1,483		25		25		25
Spares		0		0		121		121		121
Other Appropriate Costs		13,082		2,876		3,783		3,956		4,979
Total		23,894		12,663		19,074		19,106		28,159

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	FFP	TBD	APR-09	1	15,747
FY 09	LPD 26	RAYTHEON	FFP	TBD	APR-09	1	18,018

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	22	24	FEB-09
FY 09	LPD 26	NOV-14	22	24	MAR-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **RAM MISSILE SYSTEM**
PARM Code:

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:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	18,018
Ancillary Equipment		1,363
Systems Engineering		6,975
Technical Engineering		29
Spares		138
Other Appropriate Costs		5,697
Total		32,220

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	RAYTHEON	FFP	TBD	APR-09	1	15,747
FY 09	LPD 26	RAYTHEON	FFP	TBD	APR-09	1	18,018

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	22	24	FEB-09
FY 09	LPD 26	NOV-14	22	24	MAR-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **AN/SPS--48E**
PARM Code:

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:

P-35 Category	**FY 2003**		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2008**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware	1	9,205	1	9,908	1	9,465	1	10,550	1	11,183
Ancillary Equipment		135		120		450		120		127
Systems Engineering		710		338		496		513		500
Technical Data and Documentation		150		35		35		0		40
Technical Engineering		532		415		415		415		682
Spares		400		200		200		200		212
Other Appropriate Costs		2,193		4,872		3,078		3,249		3,358
Total		13,325		15,888		14,139		15,047		16,102

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	ITT/G	FFP/CPFF	TBD		1	11,183
FY 09	LPD 26	ITT/G	FFP/CPFF	TBD		1	12,816

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	27	MAR-09
FY 09	LPD 26	NOV-14	18	27	APR-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **AN/SPS--48E**
PARM Code:

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:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	12,816
Ancillary Equipment		146
Systems Engineering		573
Technical Data and Documentation		46
Technical Engineering		782
Spares		243
Other Appropriate Costs		3,847
Total		18,453

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	ITT/G	FFP/CPFF	TBD		1	11,183
FY 09	LPD 26	ITT/G	FFP/CPFF	TBD		1	12,816

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	27	MAR-09
FY 09	LPD 26	NOV-14	18	27	APR-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **SPQ-9B**
PARM Code:

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:

P-35 Category	**FY 2003**		**FY 2004**		**FY 2005**		**FY 2006**		**FY 2008**	
	QTY	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
Major Hardware	1	5,225	1	4,805	1	5,512	1	5,819	1	5,947
Systems Engineering		591		531		291		271		273
Technical Data and Documentatior		62		62		100		100		100
Technical Engineering		285		530		440		500		508
Spares		228		100		107		109		111
Other Appropriate Costs		182		883		1,261		930		1,241
Total		6,573		6,911		7,711		7,729		8,180

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 25	NORTHROP GRUMMAN	FFP	TBD		1	5,947
FY 09	LPD 26	NORTHROP GRUMMAN	FFP	TBD		1	6,811

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 25	DEC-12	18	24	JUN-09
FY 09	LPD 26	NOV-14	18	24	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LPD 17**
Equipment Item: **SPQ-9B**
PARM Code:

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:

P-35 Category	**FY 2009**	
	QTY	**COST**
Major Hardware	1	6,811
Systems Engineering		313
Technical Data and Documentatior		115
Technical Engineering		582
Spares		127
Other Appropriate Costs		1,421
Total		9,369

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY 08	LPD 0801 25	NORTHROP GRUMMAN	FFP	TBD		1	5,947
FY 09	LPD 0901 26	NORTHROP GRUMMAN	FFP	TBD		1	6,811

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY 08	LPD 0801 25	DEC-12	18	24	JUN-09
FY 09	LPD 0901 26	NOV-14	18	24	JUL-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

CLASSIFICATION:	UNCLASSIFIED												
Exhibit P-10, Advance Procurement Requirements Analysis (Funding)									Date: **May 2009**				
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / BA 03 / Amphibious Ships / BLI 3036**							P-1 Line Item Nomenclature **BLI 3036 LPD-17**						
Weapon System			First System (BY1) Award Date and Completion Date **DECEMBER 2010**						Interval Between Systems				
BLI	PLT	When Req'd	Prior Years	FY08	FY09	FY10							
Basic Construction			0.0	49.7	0.0	184.6							
Total AP			0.0	49.7	0.0	184.6							

Description:

FY 2008 Basic Construction procures Long Lead Time Material (LLTM) for LPD 26.

FY 2010 Basic Construction procures Long Lead Time Material (LLTM) for LPD 27.

CLASSIFICATION:	UNCLASSIFIED								
Exhibit P-10, Advance Procurement Requirements Analysis (Budget Justification)								Date: **May 2009**	
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / BA 03 / Amphibious Ships / BLI 3036**					Weapon System			P-1 Line Item Nomenclature **BLI 3036 LPD-17**	
(TOA $ in Millions)				**FY10**					
	PLT	QPA	Unit Cost	Qty	Contract Forecast Date	Total Cost Request			
Basic Construction	Various				JAN-10	184.6			
Description:									

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 3 Amphibious Ships

P-1 LINE ITEM NOMENCLATURE
LHA REPLACEMENT
BLI: 3041 / SUBHEAD NO. 1387/1388

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
QUANTITY	1	0	0	0						
End Cost	3,077.0	0.0	0.0	0.0						
Less Advance Procurement	297.7	0.0	0.0	0.0						
Less Cost to Complete	14.3	0.0	0.0	0.0						
Less Hurricane Supplemental	202.0	0.0	0.0	0.0						
Less Subsequent Cost to Complete	66.1	0.0	0.0	0.0						
Less Subsequent Full Funding	1,365.8	0.0	0.0	0.0						
Full Funding TOA	1,131.1	1,365.8	0.0	0.0						
Plus Advance Procurement	297.7	0.0	177.8	0.0						
Plus Cost to Complete	0.0	0.0	14.3	0.0						
Plus Hurricane Supplemental	202.0	0.0	0.0	0.0						
Total Obligational Authority	1,630.8	1,365.8	192.1	0.0						
Plus Outfitting / Plus Post Delivery	0.0	0.0	0.0	0.0						
Total	1,630.8	1,365.8	192.1	0.0						
Unit Cost (Ave. End Cost)	3,077.0	0.0	0.0	0.0						

MISSION:

Provide functional replacement for the LHA 1 Class ships which are reaching the end of their extended service lives. Ensure that the Amphibious Fleet remains capable of Expeditionary Warfare well into the 21st Century and provide for an affordable and sustainable amphibious ship development program. Provide forward presence and power projection as an integral part of Joint, interagency, and multinational maritime expeditionary forces. Operate for sustained periods in transit to and operations in an Amphibious Objective Area to include the embarkation, deployment, and landing of a Marine Landing Force in an assault by helicopters and tilt rotors, supported by Joint Strike Fighters.

Characteristics:		Armament:	Major Electronics:
Length Overall:	844'	NATO Sea Sparrow Missile System	AN/SLQ-32 (V)2
Max Beam:	106'	Rolling Airframe Missile (RAM)	C4ISR
Displacement:	45,594T	AN/SPS-49	BFTT
Draft:	29'1	AN/SPS-48	CEC P3I
		CIWS	SSDS MK II 4B

	FY07
Production Status:	LHA 6
Contract Award Date	06/07
Months to Completion	
a) Contract Award to Delivery	70 months
b) Construction Start to Delivery	62 months
Delivery Date	04/13
Completion of Fitting Out	11/13
Obligation Work Limiting Date	10/14

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

BUDGET ACTIVITY: 3	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 1387/1388 BLI: 3041**
Amphibious Ships	**LHA REPLACEMENT**	

	FY 2007	
ELEMENT OF COST	**QTY**	**COST**
PLAN COSTS	1	191,000
BASIC CONST/CONVERSION		2,224,147
CHANGE ORDERS		130,000
ELECTRONICS		265,162
HM&E		56,632
OTHER COST		92,787
ORDNANCE		117,249
TOTAL SHIP ESTIMATE		3,076,977
LESS ADVANCE PROCUREMENT FY05		149,278
LESS ADVANCE PROCUREMENT FY06		148,398
LESS COST TO COMPLETE FY09		14,310
LESS SUBSEQUENT COST TO COMPLETE		66,085
LESS HURRICANE SUPPLEMENTAL		202,000
LESS SUBSEQUENT FULL FUNDING		1,365,785
NET P-1 LINE ITEM:		1,131,121

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimate - Basic/Escalation

Ship Type: LHA REPLACEMENT

I.	**Design/Schedule**	**Start/Issue**	**Complete /Response**	**Reissue**	**Complete /Response**
	Issue date for TLR				
	Issue date for TLS				
	Preliminary Design	MAY 2004	AUG 2005		
	Contract Design	MAY 2004	AUG 2005		
	Detail Design	FEB 2006	APR 2009		
	Request for Proposals				
	Design Agent				
II.	**Classification of Cost Estimate**	CLASS C			
III.	**Basic Construction/Conversion**	**FY07**			
	A. Actual Award Date	JUNE 2007			
	B. Contract Type (and Share Line if applicable)	FPI (50/50 O/R)			
	C. RFP Response Date	MARCH 2006			
IV.	**Escalation**	FORWARD PRICED			
	Escalation Termination Date				
	Escalation Requirement				
	Labor/Material Split				
	Allowable Overhead Rate				
V.	**Other Basic(Reserves/Miscellaneous)**	**Amount**			

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LHA (R)	6	NGSB	07	JUN-07	FEB 08	APR-13

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LHA REPLACEMENT

	FY 2007	
	QTY	COST
ELECTRONICS		
a. P-35 Items		
AN/SLQ-32	1	11,826
C4ISR	1	125,176
CEC	1	9,857
SSDS	1	40,457
BFTT	1	10,873
IVN	1	14,824
MK-12 IFF	1	7,335
AN/SRC-55	1	4,054
AN/TPX-42 ATC	1	4,648
AN/SPN-35C	1	4,459
AN/WSN-7 RLGN	1	4,309
Subtotal		237,818
b. Major Items		
AN/SLQ-25	2	2,003
AN/SPN-43C	1	2,305
AN/SPN-41A	1	2,700
MK70 SWBD W/ MK443 SWBD	1	1,409
ANNOUNCING SYSTEMS	1	1,800
DIGITAL PHOTO LAB	1	1,230
CADRT	1	1,744
MK 53 NULKA MOD 3	1	3,490
Subtotal		16,681
c. Other ELECTRONICS		
MISCELLANEOUS ELECTRONICS	0	10,663
Subtotal		10,663
Total ELECTRONICS		265,162

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LHA REPLACEMENT

	FY 2007	
	QTY	COST
ORDNANCE		
a. P-35 Items		
AN/SPS-48	1	15,552
AN/SPS-49A(V)1	1	11,521
CIWS MK15 MOD22	2	11,631
AN/SPQ-9B	1	9,135
NATO SEASPARROW	2	26,490
RAM	2	24,151
Subtotal		98,480
b. Major Items		
AN/SPQ-14 (LHA6)/LRADDS (LHA 7)	1	2,899
Subtotal		2,899
c. Other ORDNANCE		
AVIATION SUPPORT	0	5,218
MISC ORDNANCE	0	3,530
TOTAL SHIP TEST PROGRAM	0	7,122
Subtotal		15,870
Total ORDNANCE		117,249

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: LHA REPLACEMENT

	FY 2007	
	QTY	COST
HM&E		
a. P-35 Items		
Subtotal		0
b. Major Items		
EQUIPMENT & ENGINEERING	0	45,078
SUPSHIP MATERIAL/SERVICES	0	3,995
TEST & INSTRUMENTATION	0	7,559
Subtotal		56,632
c. Other HM&E		
Subtotal		0
Total HM&E		56,632

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/SLQ-32**
PARM Code: **3P (PEO IWS)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SLQ-32A(V)2 is the Anti-Ship Missile Defense (ASMD) electronic warfare system that provides a family of modular shipborne electronic warfare equipments. The Electronic Support Measures (ESM) part of the system automatically detects, sorts, classifies, and continuously displays signals within their frequency band.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	9,758
Spares		130
Engr/ILS/Mgmt Spt		399
Software & Programming		667
Other Costs		872
Total		11,826

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	RAYTHEON	CPAF	JUL-05	OPTION	1	9,758

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	30	SEPT-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **C4ISR**
PARM Code: **3Z (SPAWAR)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Command, Control, Communication, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) system provides the link between the ship, the command hierarchy and other units of the operation force. C49SR consist of NTCSS, TBMCS, GCCS-M, MOS, CDLMS, SVDS, IA, SCI NETWORKS, ISNS, CENTRIXS, TCS, NAVMACS, ADNS, NAVSSI, DMR, CDL-S, SHF, EHF, GBS, DWTS, EPLRS, HFIP(BFEM), HFRG, HF SAR, HSFB, MCCP, UHF SATCOM, SINCGARS, SMQ-11, TVS, TSS, TV-DTS, NITES, UASS, SSEE INC E, JTT, ARC-210, SI COMMS, RCS Integration, C4I Design Integration, Distributed Systems Integration, DCGS-N.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	84,105
Spares		3,458
Engr/ILS/Mgmt Spt		24,106
Engineering Spt		2,626
Test & Cert		3,871
Other Costs		7,010
Total		125,176

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	VARIOUS	VARIOUS	VAR	VARIOUS	1	84,105

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	VARIOUS	VARIOUS	VARIOUS

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:
There are multiple systems under C4ISR with varying delivery dates and leadtimes.

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **CEC**
PARM Code: **3P (PEO IWS 2E)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/USG-2 Cooperative Engagement Capability (CEC) significantly improves Battle Force Anti-Air Warfare (AAW) capability (CEC) 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:

P-35 Category	FY 2007 QTY	FY 2007 COST
Major Hardware	1	4,300
Spares		215
Engr/ILS/Mgmt Spt		541
Software & Programming		4,096
Engineering Spt		705
Total		9,857

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	RAYTHEON	CPAF	JAN-06	NEW	1	4,300

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	18	SEPT-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **SSDS**
PARM Code: **3X - PEO IWS 1A5**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The SSDS MK2 provides selected ships with greater capability to defend themselves against Anti-Ship Cruise Missile (ASCM) attacks.

II. CURRENT FUNDING:

P-35 Category	FY 2007 QTY	FY 2007 COST
Major Hardware	1	9,387
Spares		699
Engr/ILS/Mgmt Spt		3,355
Technical Support Services		12,066
Schedule B Services		500
Software & Programming		13,550
Test & Cert		900
Total		40,457

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	RAYTHEON	CPAF	NOV-07	NEW	1	9,387

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	18	SEPT-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **BFTT**
PARM Code: **3V (PEO IWS 1B)**

I. DESCRIPTION/CHARACTERISTICS/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.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	6,026
Spares		263
Engr/ILS/Mgmt Spt		1,305
Software & Programming		1,088
Other Costs		2,191
Total		10,873

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	VARIOUS	VARIOUS	VAR	BOTH	1	6,026

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	12	MAR-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:
MULTIPLE CONTRACTS WITH MULTIPLE AWARD DATES

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **IVN**
PARM Code: **WC (SEA 05W)**

I. DESCRIPTION/CHARACTERISTICS/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:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	12,443
Engr/ILS/Mgmt Spt		944
Other Costs		1,335
Tech Data & Doc		102
Total		14,824

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	AVAYA	FFP	OCT-10	NEW	1	12,443

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	9	7	DEC-11

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **MK-12 IFF**
PARM Code: **WA (NAVAIR PMA -213)**

I. DESCRIPTION/CHARACTERISTICS/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:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	4,602
Spares		733
Engr/ILS/Mgmt Spt		1,040
Software & Programming		200
Other Costs		760
Total		7,335

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	VARIOUS	VARIOUS	VAR	OPTION	1	4,602

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	24	VARIOUS

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/SRC-55**
PARM Code: **WC (SEA 05W)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Provides critical wireless voice communication nets in support of shipboard operations.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	2,553
Spares		34
Engr/ILS/Mgmt Spt		964
Technical Support Services		503
Total		4,054

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	M/A COM	FFP/IDIQ	NOV-08	NEW	1	2,553

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	23	6	NOV-10

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/TPX-42 ATC**
PARM Code: **WA (NAVAIR PMA-213)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/TPX42A(V)14 system is designed to provide improved flight data processing, tracking and display capabilities for Air Traffic Control centers. They provide air traffic controllers with identity, altitude and current status on aircraft within 50 NMI of the aviation capable platform. IFF and radar targets are automatically tracked by the system and can be electronically handed off Ship Self Defense System.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	3,099
Spares		158
Engr/ILS/Mgmt Spt		653
Software & Programming		219
Other Costs		519
Total		4,648

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	NAWC-AD	N/A	MAR-06	N/A	1	3,099

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	24	MAR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/SPN-35C**
PARM Code: **WA (NAVAIR PMA-213)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Precision approach radar used for aircraft recovery during adverse weather conditions and night conditions.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	2,925
Engr/ILS/Mgmt Spt		841
Other Costs		693
Total		4,459

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	NAWC-AD	N/A	JUL-05	N/A	1	2,925

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	24	MAR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/WSN-7 RLGN**
PARM Code: **4L (PEO IWS 6)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

Provides realtime navigation data for use by navigation and combat systems.

II. CURRENT FUNDING:

P-35 Category	FY 2007 QTY	FY 2007 COST
Major Hardware	1	2,020
Spares		663
Engr/ILS/Mgmt Spt		883
Software & Programming		102
Other Costs		641
Total		4,309

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	SPERRY MARINE	FFP/CPFF	MAY-07	NEW	1	2,020

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	24	MAR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/SPS-48**
PARM Code: **WX (PEO IWS 2.B)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The AN/SPS-48 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:

P-35 Category	FY 2007 QTY	FY 2007 COST
Major Hardware	1	11,373
Spares		226
Engr/ILS/Mgmt Spt		921
Software & Programming		666
Other Costs		2,366
Total		15,552

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	ITT/GILFILLAN	FFP/CPFF	SEP-06	OPTION	1	11,373

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	30	SEPT-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

Refurbished Item

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/SPS-49A(V)1**
PARM Code: **WX (PEO IWS 2B)**

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 2007**	
	QTY	**COST**
Major Hardware	1	7,315
Spares		475
Engr/ILS/Mgmt Spt		469
Other Costs		3,262
Total		11,521

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	NWSC CRANE	N/A	JUL-05	N/A	1	7,315

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	30	SEPT-07

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

Refurbished Item;

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **CIWS MK15 MOD22**
PARM Code: **3D (PEO IWS 3)**

I. DESCRIPTION/CHARACTERISTICS/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:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	2	9,482
Spares		736
Engr/ILS/Mgmt Spt		844
Other Costs		569
Total		11,631

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	RAYTHEON	FFP	OCT-08	OPTION	2	4,741

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	19	22	NOV-09

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

Overhaul/Conversion effort

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **AN/SPQ-9B**
PARM Code: **WX (PEO IWS 2.B)**

I. DESCRIPTION/CHARACTERISTICS/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:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	1	6,806
Spares		428
Engr/ILS/Mgmt Spt		1,086
Software & Programming		135
Other Costs		680
Total		9,135

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	NGES	SS/FFP	FEB-06	NEW	1	6,806

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	18	SEP-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
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Ship Type: **LHA REPLACEMENT**
Equipment Item: **NATO SEASPARROW**
PARM Code: **Y1 (NATO NSSMS)**

I. DESCRIPTION/CHARACTERISTICS/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 in an eight cell type launcher.

II. CURRENT FUNDING:

P-35 Category	**FY 2007**	
	QTY	**COST**
Major Hardware	2	14,301
Spares		870
Engr/ILS/Mgmt Spt		4,928
Software & Programming		2,196
Other Costs		4,195
Total		26,490

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	RAYTHEON	FOP	DEC-06	NEW	2	7,151

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	24	MAR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

N/A

NOTE:

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **LHA REPLACEMENT**
Equipment Item: **RAM**
PARM Code: **3D (PEO IWS 3B)**

I. DESCRIPTION/CHARACTERISTICS/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 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:

P-35 Category	FY 2007 QTY	FY 2007 COST
Major Hardware	2	13,896
Spares		119
Engr/ILS/Mgmt Spt		6,508
Other Costs		3,628
Total		24,151

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
FY07	LHA (R)	RAYTHEON	FFP	MAR-07	NEW	2	6,948

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
FY07	LHA (R)	APR-13	37	24	MAR-08

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:
LHA 6: First launcher refurbished and delivered to NGSB Nov 2008; 2nd launcher to be refurbished and delivered to NGSB Jan 2010

CLASSIFICATION:	UNCLASSIFIED												
Exhibit P-10, Advance Procurement Requirements Analysis (Funding)									Date: **May 2009**				
Appropriation (Treasury)Code/CC/BA/BSA/Item Control Number **SHIPBUILDING AND CONVERSION, NAVY / BA 03 / Amphibious Ships / BLI 3041**							P-1 Line Item Nomenclature **BLI 3041 LHA REPLACEMENT**						
Weapon System **LHA 7**			First System (BY1) Award Date and Completion Date						Interval Between Systems				
BLI	PLT	When Req'd	Prior Years	FY08	FY09	FY10							
Basic Construction			0.0	0.0	73.9	0.0							
Other Support			0.0	0.0	1.0	0.0							
HM&E			0.0	0.0	1.2	0.0							
Electronics			0.0	0.0	44.4	0.0							
Ordnance			0.0	0.0	57.3	0.0							
Total AP			0.0	0.0	177.8	0.0							

Description:

Basic Construction Procurement of Long Lead Time Contractor Furnished Equipment

Other Support Program Office and ILS support

HM&E Ship Design Manager engineering support

Electronics SSDS, TACAN, CEC, IFF, BFTT, NULKA, SLQ-32, C4ISR, TPX-42

Ordnance NSSMS, SPQ-9B, SPS-73, LRADDS engr, Chem Bio engr, SPS 49, CIWS, RAM, VSTOL OLS, Weapons Support and engr

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 3 Amphibious Ships

P-1 LINE ITEM NOMENCLATURE
JOINT HIGH SPEED VESSEL (JHSV)
BLI: 3043 / SUBHEAD NO.

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
QUANTITY	0	0	1	1						
End Cost	0.0	0.0	174.3	178.0						
Full Funding TOA	0.0	0.0	174.3	178.0						
Total Obligational Authority	0.0	0.0	174.3	178.0						
Plus Outfitting / Plus Post Delivery	0.0	0.0	0.0	0.0						
Total	0.0	0.0	174.3	178.0						
Unit Cost (Ave. End Cost)	0.0	0.0	174.3	178.0						

MISSION:

Future joint forces will be responsive, deployable, agile, versatile, lethal, survivable, and sustainable. The nation will need lift assets that can provide for assured access, decrease predictability and dwell time, and have the capacity to quickly deliver troops and equipment together in a manner that provides for unit integrity. Joint High Speed Vessel (JHSV) will provide combatant commanders high-speed intra-theater sealift mobility with inherent cargo handling capability and the agility to achieve positional advantage over operational distances. Not limited to major ports, the JHSV will be able to operate in austere port environments. The Joint High Speed Vessel is one of three programs in the Department's "Capital Account Pilot Program."

Note: The FY 2009 requirement is $181.3M. An additional $7M will be requested through the Omnibus reprogramming to fully fund the requirement.

Characteristics:		Armament:	Major Electronics:
Length Overall:	103M (338FT)	N/A	C4ISR
Max Beam:	28.5M (93.5FT)		
Displacement:	2359LT		
Draft:	3.8M (12.5FT)		

	FY09	**FY10**
Production Status:	JHSV 0901	JHSV 1001
Contract Award Date	09/09	09/10
Months to Completion		
a) Contract Award to Delivery	40 months	40 months
b) Construction Start to Delivery	24 months	24 months
Delivery Date	01/13	01/14
Completion of Fitting Out	04/13	04/14
Obligation Work Limiting Date	03/14	03/15

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

BUDGET ACTIVITY: 3	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. BLI: 3043**
Amphibious Ships	**JOINT HIGH SPEED VESSEL (JHSV)**	

	FY 2007		**FY 2008**		**FY 2009**		**FY 2010**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS					1		1	
BASIC CONST/CONVERSION						145,910		151,730
CHANGE ORDERS						7,650		4,550
ELECTRONICS						11,590		12,008
HM&E						5,540		5,390
OTHER COST						3,570		4,278
NET P-1 LINE ITEM:						174,260		177,956

Note: The FY 2009 requirement is $181.3M. An additional $7M will be requested through the Omnibus reprogramming to fully fund the requirement

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimate - Basic/Escalation

Ship Type: JHSV

I.	Design/Schedule	Start/Issue	Complete /Response	Reissue	Complete /Response
	Issue date for TLR				
	Issue date for TLS				
	Preliminary Design	JAN 2007			JULY 2008
	Contract Design	JAN 2007			JULY 2008
	Detail Design	NOV 2008			
	Request for Proposals				
	Design Agent				
II.	Classification of Cost Estimate	CLASS C			
III.	Basic Construction/Conversion	FY09 JHSV 0901	FY10 JHSV 1001		
	A. Actual Award Date	SEP 2009	SEP 2010		
	B. Contract Type (and Share Line if applicable)	FPI (50/50)	FPI (50/50)		
IV.	Escalation				
	Escalation Termination Date				
	Escalation Requirement	FWD PRICE	FWD PRICE		
	Labor/Material Split				
	Allowable Overhead Rate				
V.	Other Basic(Reserves/Miscellaneous)	Amount			

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
JHSV	0901	AUSTAL	2009	SEP-09	JAN-11	JAN-13
JHSV	1001	AUSTAL	2010	SEP-10	JAN-12	JAN-14

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: JOINT HIGH SPEED VESSEL	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
ELECTRONICS						
a. P-35 Items						
C4ISR	0	0	1	9,190	1	9,499
Subtotal		0		9,190		9,499
b. Major Items						
VISUAL LANDING AIDE SUITE	0	0	1	1,949	1	2,042
MISC ELECTRONICS	0	0	0	451	0	467
Subtotal		0		2,400		2,509
c. Other ELECTRONICS						
Subtotal		0		0		0
Total ELECTRONICS		0		11,590		12,008

SHIPBUILDING AND CONVERSION, NAVY

Analysis of Ship Cost Estimates - Major Equipment

(Dollars in Thousands)

Ship Type: JOINT HIGH SPEED VESSEL	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
HM&E						
a. P-35 Items						
Subtotal		0		0		0
b. Major Items						
ENGINEERING SERVICES	0	0	0	3,767	0	3,611
SUPSHIP MATERIAL SERVICES	0	0	0	720	0	700
LOGISTICS SUPPORT SERVICES	0	0	0	388	0	432
TEST AND INSTRUMENTATION	0	0	0	665	0	647
Subtotal		0		5,540		5,390
c. Other HM&E						
Subtotal		0		0		0
Total HM&E		0		5,540		5,390

SHIPBUILDING AND CONVERSION, NAVY
MAJOR SHIP COMPONENT FACT SHEET
(Dollars in Thousands)

P-35 EXHIBIT
FY 2010 President's Budget
May 2009

Ship Type: **JOINT HIGH SPEED VESSEL**
Equipment Item: **C4ISR**
PARM Code: **3Z (SPAWAR)**

I. DESCRIPTION/CHARACTERISTICS/PURPOSE:

The Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) system provides the line between the ship, the command hierarchy and other units of operation force. The C4ISR Suite consists of a Network Suite (ISNS, ADNS and CENTRIXS-M), CBSP, Fleet Broadcast, UHF SATCOM Antenna, UHF-VHF LOS Suite and UHF SATCOM Radios, TVS-TVT, IA and RCS.

II. CURRENT FUNDING:

P-35 Category	FY 2008		FY 2009		FY 2010	
	QTY	COST	QTY	COST	QTY	COST
Major Hardware	0	0	1	5,437	1	5,611
Spares		0		589		613
System Engineering		0		2,072		2,105
Technical Engineering Services		0		433		348
Other Costs		0		659		822
Total		0		9,190		9,499

III. CONTRACT DATA:

PROGRAM YEAR	SHIP TYPE	PRIME CONTRACTOR	CONTRACT TYPE	AWARD DATE	NEW /OPTION	QTY	HARDWARE UNIT COST
09	JHSV 0901	AUSTAL	VARIOUS	VAR	VARIOUS	1	5,347
10	JHSV 1001	AUSTAL	VARIOUS	VAR	VARIOUS	1	5,611

IV. DELIVERY DATE:

PROGRAM YEAR	SHIP TYPE	EARLIEST SHIP DELIVERY DATE	MONTHS REQUIRED BEFORE DELIVERY	PRODUCTION LEADTIME	REQUIRED AWARD DATE
09	JHSV 0901	JAN-13	VARIOUS	VARIOUS	VARIOUS
10	JHSV 1001	JAN-14	VARIOUS	VARIOUS	VARIOUS

V. COMPETITION/SECOND SOURCE INITIATIVES:

NOTE:
Multiple systems comprise the C4ISR with varying delivery dates and leadtimes.

BUDGET ITEM JUSTIFICATION SHEET (P-40)	DATE
FY 2010 President's Budget Cycle	May 2009

APPROPRIATION/BUDGET ACTIVITY	P-1 LINE ITEM NOMENCLATURE
SHIPBUILDING AND CONVERSION, NAVY/BA 5 Auxiliaries, Craft and Prior Year Program Costs	OUTFITTING
	SUBHEAD NO. 8560 BLI: 5110

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010							
Full Funding TOA-Outfitting	453.7	137.8	140.9	136.8							
Full Funding TOA-Post Delivery	390.9	234.7	282.6	249.0							
Full Funding TOA-First Destination	10.9	4.3	4.8	5.4							
Total Obligational Authority	855.5	376.9	428.3	391.2							

MISSION:

Outfitting funds are used to acquire on board repair parts, other secondary items, equipage, recreation items, precommissioning 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, a 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 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 Transportation 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.

CLASSIFICATION:	UNCLASSIFIED																	
BUDGET ITEM JUSTIFICATION SHEET(P-29) FY10/11 PB Cycle													DATE May 2009					
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560								
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010					
CVN	77	01	JAN-01	SEP-98	MAY-09	MAY-09	JUNE-09	DEC-09	APR-10	45372	28949	5413	0					
									CVN Total	**45372**	**28949**	**5413**	**0**					
CVN-RCOH	70	06	NOV-05	NOV-05	JUN-09	JUL-09	JUL-09	NOV-09	JUN-10	55082	19347	9719	50					
CVN-RCOH	71	09	SEP-09	SEP-09	DEC-12	FEB-13	MAR-13	MAY-13	JAN-14	0	0	630	15346					
									CVN-RCOH Total	**55082**	**19347**	**10349**	**15396**					
DDG	99	01	MAR-98	DEC-02	JAN-06	MAY-06	FEB-07	MAY-07	DEC-07	17551	4	0	0					
DDG	100	01	MAR-98	JAN-03	DEC-06	MAY-07	JAN-08	APR-08	AUG-08	15647	44	0	0					
DDG KATRINA	100	01	MAR-98	JAN-03	DEC-06	MAY-07	JAN-08	APR-08	AUG-08	1700	0	0	0					
DDG	101	01	MAR-98	JUL-03	SEP-06	JAN-07	AUG-07	AUG-07	DEC-07	17448	23	0	0					
DDG	102	02	JUL-02	FEB-04	MAY-07	OCT-07	JUN-08	SEP-08	DEC-08	16246	219	0	0					
DDG	103	02	SEP-02	MAY-04	OCT-08	MAR-09	SEP-09	DEC-09	FEB-10	7600	4501	1554	311					
DDG	104	02	SEP-02	OCT-04	FEB-08	JUN-08	MAR-09	JUN-09	JUL-09	11506	4682	177	0					
DDG	105	03	SEP-02	APR-05	MAY-09	SEP-09	APR-10	AUG-10	AUG-10	2228	5413	5140	316					
DDG	106	03	SEP-02	MAY-05	SEP-08	FEB-09	SEP-09	DEC-09	JAN-10	5941	6854	2278	123					
DDG	107	04	SEP-02	FEB-06	FEB-10	JUN-10	JAN-11	APR-11	MAY-11	396	0	8587	2894					
DDG	108	04	SEP-02	DEC-05	JUL-09	OCT-09	JUN-10	SEP-10	SEP-10	396	6206	7723	316					
DDG	109	04	SEP-02	JUL-06	FEB-10	MAY-10	JAN-11	APR-11	APR-11	0	411	9585	3306					
DDG	110	05	SEP-02	MAY-07	OCT-10	JAN-11	JUL-11	OCT-11	DEC-11	0	0	5025	9833					
DDG	111	05	SEP-02	APR-07	NOV-10	MAR-11	SEP-11	DEC-11	FEB-12	0	0	7046	8886					
DDG	112	05	SEP-02	FEB-08	JUL-11	NOV-11	JUL-12	SEP-12	OCT-12	0	0	404	9198					
									DDG Total	**96659**	**28357**	**47519**	**35183**					
DDG 1000	1000	07	FEB-08	FEB-09	APR-13	TBD	TBD	TBD	MAR-14	0	0	0	4335					
									DDG 1000 Total	**0**	**0**	**0**	**4335**					
LCAC SLEP	31	07	MAR-07	MAR-08	APR-09	MAY-09	OCT-09	NOV-09	JAN-11	161	134	0	0					
LCAC SLEP	33	07	MAR-07	JUL-08	JUL-09	AUG-09	DEC-09	JAN-10	JAN-11	295	0	0	0					
LCAC SLEP	36	07	MAR-07	SEP-08	JAN-10	FEB-10	FEB-10	MAR-10	JAN-11	161	134	0	0					
LCAC SLEP	48	07	MAR-07	OCT-08	OCT-09	NOV-09	NOV-09	DEC-09	JAN-11	161	134	0	0					
LCAC SLEP	50	07	MAR-07	MAR-08	MAR-09	APR-09	JUN-09	JUL-09	SEP-09	161	134	0	0					
LCAC SLEP	69	07	MAR-07	DEC-08	DEC-09	DEC-09	JAN-10	JAN-10	JAN-11	161	134	0	0					
LCAC SLEP	30	08	APR-09	MAY-09	JUL-10	AUG-10	NOV-10	DEC-10	AUG-12	0	0	235	0					

CLASSIFICATION:	UNCLASSIFIED																		
BUDGET ITEM JUSTIFICATION SHEET(P-29) FY10/11 PB Cycle													DATE May 2009						
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
LCAC SLEP	41	08	APR-09	DEC-09	FEB-11	MAR-11	APR-11	MAY-11	AUG-12	0	0	235	0						
LCAC SLEP	46	08	APR-09	JAN-10	MAR-11	APR-11	APR-11	MAY-11	AUG-12	0	0	235	0						
LCAC SLEP	53	08	APR-09	JUN-10	AUG-11	SEP-11	SEP-11	OCT-11	AUG-12	0	0	236	0						
LCAC SLEP	56	08	APR-09	SEP-09	NOV-10	DEC-10	FEB-11	MAR-11	AUG-12	0	0	236	0						
LCAC SLEP	59	09	APR-09	MAR-10	MAR-11	SEP-11	SEP-11	OCT-11	AUG-13	0	0	0	208						
LCAC SLEP	62	09	APR-09	MAY-10	MAY-11	SEP-11	SEP-11	OCT-11	AUG-13	0	0	0	208						
LCAC SLEP	67	09	SEP-09	MAR-11	MAR-12	APR-12	APR-12	MAY-12	AUG-13	0	0	0	208						
LCAC SLEP	70	09	SEP-09	MAR-11	MAR-12	APR-12	APR-12	MAY-12	AUG-13	0	0	0	208						
LCAC SLEP	71	09	SEP-09	AUG-11	AUG-12	SEP-12	SEP-12	OCT-12	AUG-13	0	0	0	208						
LCAC SLEP	79	09	APR-09	SEP-10	SEP-11	NOV-11	NOV-11	DEC-11	AUG-13	0	0	0	208						
									LCAC SLEP Total	**1100**	**670**	**1177**	**1248**						
LHD	8	02	APR-02	MAY-03	APR-09	OCT-09	DEC-09	MAY-10	SEP-10	26156	7973	4027	1758						
LHD KATRINA	8	02	APR-02	MAY-03	MAY-09	OCT-09	FEB-10	JUN-10	SEP-10	200	0	0	0						
									LHD Total	**26356**	**7973**	**4027**	**1758**						
LPD	17	96	DEC-96	JUN-00	JUL-05	MAR-06	MAY-07	JUL-07	FEB-08	30578	178	0	0						
LPD	18	99	DEC-98	FEB-02	DEC-06	JUL-07	MAY-08	JUL-08	SEP-08	28053	458	0	0						
LPD KATRINA	18	99	DEC-98	FEB-02	DEC-06	JUL-07	MAY-08	JUL-08	SEP-08	500	0	0	0						
LPD	19	00	FEB-00	JUL-01	SEP-07	MAR-08	SEP-08	MAR-09	JUN-09	28169	1647	0	0						
LPD KATRINA	19	00	FEB-00	JUL-01	SEP-07	MAR-08	SEP-08	MAR-09	JUN-09	1200	0	0	0						
LPD	20	00	MAY-00	OCT-02	SEP-08	JUN-09	NOV-09	JAN-10	JAN-10	19870	8518	1522	635						
LPD KATRINA	20	00	MAY-00	OCT-02	SEP-08	JUN-09	NOV-09	JAN-10	JAN-10	1100	0	0	0						
LPD	21	03	NOV-03	MAR-04	AUG-09	DEC-09	JUL-10	SEP-10	NOV-10	14547	8513	8491	1444						
LPD	22	04	JUN-06	JUL-06	MAY-11	OCT-11	MAY-12	JUL-12	SEP-12	0	0	14272	16178						
LPD	23	05	JUN-06	MAR-07	MAY-12	OCT-12	MAY-13	JUL-13	SEP-13	0	0	10834	15942						
LPD	24	06	NOV-06	AUG-07	DEC-11	MAY-12	DEC-12	FEB-13	APR-13	0	0	0	16050						
									LPD Total	**124017**	**19314**	**35119**	**50249**						
VIRGINIA	775	99	SEP-98	AUG-98	JUN-06	JUN-06	JAN-07	JUL-08	SEP-09	15960	930	0	0						
VIRGINIA	776	01	SEP-98	OCT-99	DEC-06	DEC-06	MAY-08	MAR-09	SEP-09	14278	1378	63	0						
VIRGINIA	777	02	SEP-98	APR-01	FEB-08	FEB-08	JAN-09	MAR-10	SEP-10	13498	1145	1121	263						

CLASSIFICATION:	UNCLASSIFIED																	
BUDGET ITEM JUSTIFICATION SHEET(P-29) FY10/11 PB Cycle												DATE May 2009						
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560								
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010					
VIRGINIA	778	03	AUG-03	OCT-02	AUG-08	AUG-08	AUG-09	FEB-10	OCT-10	9741	3374	22	1228					
VIRGINIA	779	04	JAN-04	MAR-04	APR-10	APR-10	JUN-10	JUN-11	OCT-11	4062	5140	6821	1304					
VIRGINIA	780	05	JAN-04	FEB-05	APR-11	APR-11	MAY-11	NOV-11	OCT-12	0	7243	1704	5252					
VIRGINIA	781	06	JAN-04	FEB-06	APR-12	APR-12	MAY-12	NOV-12	MAR-13	0	4	7477	4190					
VIRGINIA	782	07	JAN-04	FEB-07	APR-13	APR-13	JAN-13	JUL-13	MAR-14	0	0	4526	3037					
VIRGINIA	783	08	JAN-04	FEB-08	APR-14	APR-14	OCT-13	MAY-14	MAR-15	0	0	647	257					
									VIRGINIA Total	**57539**	**19214**	**22381**	**15531**					
SSGN	726	03	NOV-03	NOV-03	DEC-05	DEC-05	N/A	N/A	DEC-07	4583	3	0	0					
SSGN	728	03	APR-04	NOV-03	APR-06	APR-06	N/A	N/A	DEC-07	4532	166	0	0					
SSGN	727	04	JAN-05	JAN-05	DEC-06	DEC-06	N/A	N/A	OCT-08	4372	237	0	0					
SSGN	729	05	OCT-05	OCT-05	NOV-07	DEC-07	N/A	N/A	SEP-09	5812	288	34	0					
									SSGN Total	**19299**	**694**	**34**	**0**					
SSBN ERO	730	05	MAR-03	NOV-04	MAR-07	MAR-07	N/A	N/A	FEB-08	1406	123	0	0					
SSBN ERO	731	06	MAY-04	JAN-06	MAY-08	MAY-08	N/A	N/A	APR-09	1326	849	38	0					
SSBN ERO	732	07	FEB-05	NOV-06	FEB-09	FEB-09	N/A	N/A	JAN-10	557	561	1430	24					
SSBN ERO	733	08	FEB-06	FEB-08	MAY-10	MAY-10	N/A	N/A	APR-11	0	505	1682	419					
SSBN ERO	734	09	FEB-07	JAN-09	APR-11	APR-11	N/A	N/A	MAR-12	0	0	1025	732					
									SSBN ERO Total	**3289**	**2038**	**4175**	**1175**					
SSN ERO	698	03	OCT-02	MAR-04	MAR-07	MAR-07	N/A	N/A	FEB-08	2332	15	0	0					
SSN ERO	699	04	OCT-03	SEP-04	DEC-06	DEC-06	N/A	N/A	NOV-07	1387	0	0	0					
SSN ERO	717	04	OCT-03	MAR-06	APR-09	APR-09	N/A	N/A	MAR-10	1449	290	18	0					
									SSN ERO Total	**5168**	**305**	**18**	**0**					
PUBS	N/A	05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19776	10681	9666	10132					
									PUBS Total	**19776**	**10681**	**9666**	**10132**					
YON	0328	07	DEC-06	FEB-07	JUN-09	AUG-09	N/A	N/A	JUL-10	0	35	37	0					
									YON Total	**0**	**35**	**37**	**0**					
YP	0703	06	JUN-07	MAY-07	OCT-09	DEC-09	N/A	N/A	NOV-10	0	215	247	0					
YP	0704	06	JUN-07	JUL-07	DEC-09	FEB-10	N/A	N/A	JAN-11	0	0	397	0					
YP	0705	07	DEC-07	FEB-09	FEB-10	APR-10	N/A	N/A	MAR-11	0	0	334	96					

CLASSIFICATION:	UNCLASSIFIED																		
BUDGET ITEM JUSTIFICATION SHEET(P-29) FY10/11 PB Cycle													DATE May 2009						
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
YP	0706	08	JUN-08	JUN-09	JUN-10	AUG-10	N/A	N/A	JUL-11	0	0	0	601						
YP	0707	09	MAR-09	SEP-09	OCT-10	DEC-10	N/A	N/A	NOV-11	0	0	0	601						
YP	0708	09	MAR-09	NOV-09	FEB-11	APR-11	N/A	N/A	MAR-12	0	0	0	509						
									YP Total	**0**	**215**	**978**	**1807**						
									Full Funding TOA-Outfitting Total	**453657**	**137792**	**140893**	**136814**						

CLASSIFICATION:	UNCLASSIFIED																		
BUDGET ITEM JUSTIFICATION SHEET(P-30) FY10/11 PB Cycle													DATE May 2009						
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
CVN	77	01	JAN-01	SEP-98	MAY-09	MAY-09	JUNE-09	DEC-09	APR-10	0	5543	42628	0						
									CVN Total	**0**	**5543**	**42628**	**0**						
CVN-RCOH	70	06	NOV-05	NOV-05	JUN-09	JUL-09	JUL-09	NOV-09	JUN-10	0	760	41649	0						
									CVN-RCOH Total	**0**	**760**	**41649**	**0**						
DDG	102	02	JUL-02	FEB-04	MAY-07	OCT-07	JUN-08	SEP-08	DEC-08	24889	11020	0	0						
DDG	103	02	SEP-02	MAY-04	OCT-08	MAR-09	SEP-09	DEC-09	FEB-10	0	16174	24140	0						
DDG	104	02	SEP-02	OCT-04	FEB-08	JUN-08	MAR-09	JUN-09	JUL-09	4913	22443	4505	0						
DDG	105	03	SEP-02	APR-05	MAY-09	SEP-09	APR-10	AUG-10	AUG-10	0	7326	15671	11762						
DDG	106	03	SEP-02	MAY-05	SEP-08	FEB-09	SEP-09	DEC-09	JAN-10	0	17194	18167	0						
DDG	107	04	SEP-02	FEB-06	FEB-10	JUN-10	JAN-11	APR-11	MAY-11	0	0	3158	34190						
DDG	108	04	SEP-02	DEC-05	JUL-09	OCT-09	JUN-10	SEP-10	SEP-10	0	266	12358	20408						
DDG	109	04	SEP-02	JUL-06	FEB-10	MAY-10	JAN-11	APR-11	APR-11	0	0	4083	34641						
DDG	110	05	SEP-02	MAY-07	OCT-10	JAN-11	JUL-11	OCT-11	DEC-11	0	0	0	10644						
DDG	111	05	SEP-02	APR-07	NOV-10	MAR-11	SEP-11	DEC-11	FEB-12	0	0	0	19520						
									DDG Total	**29802**	**74423**	**82082**	**131165**						
LCAC SLEP	26	04	MAR-04	OCT-04	MAR-07	APR-07	MAY-07	JUN-07	DEC-08	354	0	0	0						
LCAC SLEP	28	04	MAR-04	JAN-05	JUN-07	JUL-07	AUG-07	SEP-07	DEC-08	411	0	0	0						
LCAC SLEP	39	04	MAR-04	MAR-05	SEP-07	OCT-07	NOV-07	DEC-07	DEC-08	318	0	0	0						
LCAC SLEP	40	04	MAR-04	JUN-05	DEC-07	JAN-08	FEB-08	DEC-08	DEC-08	0	543	0	0						
LCAC SLEP	37	05	APR-05	MAY-05	SEP-07	NOV-07	DEC-07	JAN-08	JAN-09	620	0	0	0						
LCAC SLEP	42	05	APR-05	MAY-05	MAR-07	APR-07	JUN-07	JUL-07	JAN-09	150	0	0	0						
LCAC SLEP	43	05	APR-05	MAY-06	MAR-08	APR-08	JUL-08	SEP-08	JAN-09	0	237	0	0						
LCAC SLEP	45	05	APR-05	FEB-06	JUL-07	AUG-07	SEP-07	OCT-07	JAN-09	0	318	0	0						
LCAC SLEP	47	05	APR-05	JUL-06	MAR-08	APR-08	AUG-08	SEP-08	JAN-09	0	206	0	0						
LCAC SLEP	29	06	AUG-06	MAR-07	APR-08	MAY-08	NOV-08	DEC-08	SEP-10	0	232	0	0						
LCAC SLEP	32	06	AUG-06	SEP-07	SEP-08	OCT-08	APR-09	MAY-09	SEP-10	0	0	363	0						
LCAC SLEP	34	06	AUG-06	FEB-07	OCT-09	NOV-09	NOV-09	DEC-09	SEP-10	0	0	0	313						
LCAC SLEP	54	06	AUG-06	MAR-07	AUG-08	OCT-08	MAY-09	JUN-09	SEP-10	0	363	0	0						
LCAC SLEP	68	06	AUG-06	MAY-07	APR-09	MAY-09	JUL-09	AUG-09	SEP-10	0	0	363	0						

CLASSIFICATION:	UNCLASSIFIED																		
BUDGET ITEM JUSTIFICATION SHEET(P-30) FY10/11 PB Cycle													DATE May 2009						
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
LCAC SLEP	31	07	MAR-07	MAR-08	APR-09	MAY-09	OCT-09	NOV-09	JAN-11	0	0	0	313						
LCAC SLEP	33	07	MAR-07	JUL-08	JUL-09	AUG-09	DEC-09	JAN-10	JAN-11	0	0	0	313						
LCAC SLEP	36	07	MAR-07	SEP-08	JAN-10	FEB-10	FEB-10	MAR-10	JAN-11	0	0	0	314						
LCAC SLEP	48	07	MAR-07	OCT-08	OCT-09	NOV-09	NOV-09	DEC-09	JAN-11	0	0	0	314						
LCAC SLEP	69	07	MAR-07	DEC-08	DEC-09	DEC-09	JAN-10	JAN-10	JAN-11	0	0	0	314						
									LCAC SLEP Total	**1853**	**1899**	**726**	**1881**						
LHD	8	02	APR-02	MAY-03	MAY-09	OCT-09	DEC-09	MAY-10	SEP-10	0	0	8774	29925						
									LHD Total	**0**	**0**	**8774**	**29925**						
LPD	17	96	DEC-96	JUN-00	JUL-05	MAR-06	MAY-07	JUL-07	FEB-08	149824	1119	0	0						
LPD KATRINA	17	96	DEC-96	JUN-00	JUL-05	MAR-06	MAY-07	JUL-07	FEB-08	25600	0	0	0						
LPD	18	99	DEC-98	FEB-02	DEC-06	JUL-07	MAY-08	JUL-08	SEP-08	32967	23833	0	0						
LPD	19	00	FEB-00	JUL-01	SEP-07	MAR-08	SEP-08	MAR-09	JUN-09	21849	43919	0	0						
LPD	20	00	MAY-00	OCT-02	SEP-08	JUN-09	NOV-09	JAN-10	JAN-10	732	6825	25204	0						
LPD	21	03	NOV-03	MAR-04	AUG-09	DEC-09	JUL-10	SEP-10	NOV-10	0	167	9357	25306						
									LPD Total	**230972**	**75863**	**34561**	**25306**						
VIRGINIA	775	99	SEP-98	AUG-98	JUN-06	JUN-06	JAN-07	JUL-08	SEP-09	70134	4606	0	0						
VIRGINIA	776	01	SEP-98	OCT-99	DEC-06	DEC-06	MAY-08	MAR-09	SEP-09	26590	31304	4943	0						
VIRGINIA	777	02	SEP-98	APR-01	FEB-08	FEB-08	JAN-09	MAR-10	SEP-10	1693	24265	29410	4100						
VIRGINIA	778	03	AUG-03	OCT-02	AUG-08	AUG-08	AUG-09	FEB-10	OCT-10	0	3032	33917	1877						
VIRGINIA	779	04	JAN-04	MAR-04	APR-10	APR-10	JUN-10	JUN-11	OCT-11	0	0	2727	48520						
VIRGINIA	780	05	JAN-04	FEB-05	APR-11	APR-11	MAY-11	NOV-11	OCT-12	0	0	210	5541						
VIRGINIA	781	06	JAN-04	FEB-06	APR-12	APR-12	MAY-12	NOV-12	MAR-13	0	0	0	217						
									VIRGINIA	**98417**	**63207**	**71207**	**60255**						
SSGN	726	03	NOV-03	NOV-03	DEC-05	DEC-05	N/A	N/A	DEC-07	14656	0	0	0						
SSGN	728	03	MAR-04	APR-04	APR-06	APR-06	N/A	N/A	MAR-08	5231	69	0	0						
SSGN	727	04	JAN-05	JAN-05	DEC-06	DEC-06	N/A	N/A	OCT-08	9989	3121	0	0						
SSGN	729	05	OCT-05	OCT-05	NOV-07	DEC-07	N/A	N/A	SEP-09	0	9852	1000	0						
									SSGN Total	**29876**	**13042**	**1000**	**0**						

CLASSIFICATION:	UNCLASSIFIED																		
BUDGET ITEM JUSTIFICATION SHEET(P-30) FY10/11 PB Cycle													DATE May 2009						
APPROPRIATION/BUDGET ACTIVITY SHIPBUILDING AND CONVERSION, NAVY/BA 5										P-1 LINE ITEM NOMENCLATURE OUTFITTING BLI: 5110/SUBHEAD NO. 8560									
Ship Type	HULL NO	PROG YEAR	Contract Award	Start of Constr.	DEL DATE	CFO DATE	PSA START	PSA FINISH	OWLD	PRIOR YEARS	FY 2008	FY 2009	FY 2010						
YP	0703	06	JUN-07	MAY-07	OCT-09	DEC-09	N/A	N/A	NOV-10	0	0	0	256						
YP	0704	06	JUN-07	JUL-07	DEC-09	FEB-10	N/A	N/A	JAN-11	0	0	0	256						
YP Total										**0**	**0**	**0**	**512**						
Full Funding TOA-Post Delivery Total										**390920**	**234737**	**282627**	**249044**						
Full Funding TOA-Outfitting Total										**453657**	**137792**	**140893**	**136814**						
Full Funding TOA-First Destination Total										**10947**	**4324**	**4785**	**5380**						
Total Obligational Authority Total										**855524**	**376853**	**428305**	**391238**						
LESS HURRICANE KATRINA Total										**30300**	**0**	**0**	**0**						
NET P-1 Total										**825224**	**376853**	**428305**	**391238**						

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 5 Auxiliaries, Craft and Prior Year Program Costs

P-1 LINE ITEM NOMENCLATURE
SERVICE CRAFT
BLI: 5113 / SUBHEAD NO. 1552

(Dollars in Millions)	Prior Year	FY 2008	FY 2009	FY 2010						
QUANTITY	10	4	5	1						
End Cost	92.3	32.7	48.0	3.7						
Full Funding TOA	92.3	32.7	48.0	3.7						
Total Obligational Authority	92.3	32.7	48.0	3.7						
Plus Outfitting / Plus Post Delivery	0	0.3	1.0	2.4						
Total	92.3	32.9	49.0	6.1						
Unit Cost (Ave. End Cost)	9.2	8.2	9.8	6.1						

MISSION:

New construction service craft to acquire oil barges (YONs), harbor tugs (YTBs/YTs) and yard patrol craft (YPs).

Characteristics:
Hull Various - Multiple Craft

Armament:
N/A

Production Status:
Various - Multiple Contracts

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

BUDGET ACTIVITY: 5	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 1552 BLI: 5113**
Auxiliaries, Craft and Prior Year Program Costs	**SERVICE CRAFT**	

	FY 2006		**FY 2007**		**FY 2008**		**FY 2009**		**FY 2010**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	5		5		4		5		1	
BASIC CONST/CONVERSION		41,431		44,584		29,599		45,063		3,694
CHANGE ORDERS		1300		418		418		879		
HM&E		861		1,388		1,631		1,000		
OTHER COST		1,244		1,055		1,024		1,031		
NET P-1 LINE ITEM:		44,836		47,445		32,672		47,973		3,694

FY 2006		**FY 2007**		**FY 2008**		**FY 2009**		**FY 2010**	
1-YT	11,105	3-YT	28,000	2-YON	8,000	1-YON	4,950	1-YON	3,694
1-TWR	7,800	1-YON	4,290	1-YT	12,250	2-YT	23,578	1	
1-YON	3,636	1-YP	13,741	1-YP	12,422	2-YP	19,445		
2-YP	22,295	0-YC	1,414	4	32,672	5	47,973		
5	44,836	5	47,445						

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

EXHIBIT P-27
FY 2010 President's Budget
DATE:
May 2009

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
YON	0328	SUNDIAL MARINE	07	Dec-06	FEB-07	JUN-09
YON	0330	MAY BANK INDUSTRIES	08	JUN-08	JAN-09	JUN-09
YON	0331	MAY BANK INDUSTRIES	08	JUN-08	MAY-09	DEC-09
YON	0332	TBD	09	SEP-09	JAN-10	JAN-11
YON	1001	TBD	10	JAN-10	JAN-11	JAN-12
YP	0703	C&G BOAT WORKS	06	JUN-07	MAY-07	Oct-09
YP	0704	C&G BOAT WORKS	06	JUN-07	JUL-07	Dec-09
YP	0705	C&G BOAT WORKS	07	DEC-07	FEB-09	FEB-10
YP	0706	C&G BOAT WORKS	08	JUN-08	JUN-09	JUN-10
YP	0707	C&G BOAT WORKS	09	MAR-09	SEP-09	OCT-10
YP	0708	C&G BOAT WORKS	09	MAR-09	NOV-09	FEB-11
YT	0802	PACIFIC TUG BOAT SERV	07	AUG-07	SEP-08	JAN-10
YT	0803	PACIFIC TUG BOAT SERV	07	AUG-07	NOV-08	MAY-10
YT	0804	PACIFIC TUG BOAT SERV	07	AUG-07	JAN-09	AUG-10
YT	0805	PACIFIC TUG BOAT SERV	08	MAR-08	DEC-09	FEB-11
YT	0806	TBD	09	JUN-09	MAR-10	DEC-12
YT	0807	TBD	09	JUN-09	MAR-10	DEC-12
TWR	01249	TBD	06	JUL-09	SEP-09	SEP-10

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget

DATE: May 2009

APPROPRIATION/BUDGET ACTIVITY
SHIPBUILDING AND CONVERSION, NAVY/BA 5 Auxiliaries, Craft and Prior Year Program Costs

P-1 LINE ITEM NOMENCLATURE
LCAC SLEP
BLI: 5139 / SUBHEAD NO. 1576

(Dollars in Millions)	PRIOR YR	FY 2008	FY 2009	FY 2010						
QUANTITY	30	5	6	3						
End Cost	605.6	97.8	110.6	63.9						
Less Advance Procurement	27.9	0.0	0.0	0.0						
Less Transfer	1.5	0.0	0.0	0.0						
Less Cost to Complete	14.0	0.0	0.0	0.0						
Less Hurricane Supplemental	19.8	0.0	0.0	0.0						
Full Funding TOA	542.4	97.8	110.6	63.9						
Plus Advance Procurement	27.9	0.0	0.0	0.0						
Plus Transfer Cost	1.5	0.0	0.0	0.0						
Plus Cost to Complete	14.0	0.0	0.0	0.0						
Plus Hurricane Supplemental	19.8	0.0	0.0	0.0						
Total Obligational Authority	605.6	97.8	110.6	63.9						
Plus Outfitting / Plus Post Delivery	6.1	2.6	1.9	3.1						
Total	611.7	100.8	112.9	67.0						
Unit Cost (Ave. End Cost)	20.9	19.6	18.4	21.3						

MISSION:

Landing Craft Air Cushion (LCAC) transports weapon systems, equipment, cargo and personnel of the assault elements of the Marine Air/Ground Task Force from ship to shore and across the beach. The LCAC Service Life Extension Program (SLEP) extends the craft service life from twenty years to thirty years. For FY2000 through FY2003, the program replaces the existing buoyancy box with the latest configuration. The new hull incorporates four modifications: 1) additional internal compartmentation to increase cargo carrying capacity, 2) a modified fuel system to increase range, 3) improved skirt attachments to reduce maintenance and 4) deep skirt to improve performance and maximize safety. The SLEP will also include the C4N electronic suite replacement as well as a modified set of TF40B engines, designated ETF40B. For FY2004 and beyond, the buoyancy box will no longer be replaced. Instead, the four modifications above will be installed on existing buoyancy boxes which will be refurbished rather than replaced. All other aspects of the program will remain unchanged. 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. SLEP configuration Full Mission Trainer Upgrades are also included in each Fiscal Year through FY08 as part of the SLEP Program.

Characteristics:		Armament:
Hull	Air Cushion	None
Length Overall	88ft	
Beam	47ft	
Displacement	150 tons	
Draft	None (rides on cushion of air)	

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

BUDGET ACTIVITY: 5	**P-1 LINE ITEM NOMENCLATURE**	**SUBHEAD NO. 1576 BLI: 5139**
Auxiliaries, Craft and Prior Year Program Costs	**LCAC SLEP**	

	FY 2006		**FY 2007**		**FY 2008**		**FY 2009**		**FY 2010**	
ELEMENT OF COST	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**	**QTY**	**COST**
PLAN COSTS	5		6		5		6		3	
BASIC CONST/CONVERSION		48,206		53,387		47,023		55,368		28,000
ELECTRONICS		6,467		11,672		9,138		8,737		6,157
HM&E		41,024		40,501		37,020		42,071		25,300
OTHER COST		2,941		4,665		4,649		4,411		4,400
TOTAL SHIP ESTIMATE		98,638		110,225		97,830		110,587		63,857
NET P-1 LINE ITEM:		98,638		110,225		97,830		110,587		63,857

SHIPBUILDING AND CONVERSION, NAVY
SHIP PRODUCTION SCHEDULE

SHIP TYPE	HULL NUMBER	SHIPBUILDER	FISCAL YEAR AUTHORIZED	CONTRACT AWARD	START OF CONSTRUCTION	DELIVERY DATE
LCAC SLEP	MULTIPLE	L3 TITAN	06	AUG-06	MAR-07	OCT-09
LCAC SLEP	MULTIPLE	L3 TITAN	07	MAR-07	MAR-08	JAN-10
LCAC SLEP	MULTIPLE	TBD	08	MAY & JUN-09	MAY-09	AUG-11
LCAC SLEP	MULTIPLE	TBD	09	MAY & JUN-09	MAY-10	AUG-12
LCAC SLEP	MULTIPLE	TBD	10	JUL-10	MAR-11	APR-13

NOTE:
The FY08 and 09 reflect planned contract awards for the East Coast (MAY-09) and the West Coast (JUN-09).

BUDGET ITEM JUSTIFICATION SHEET (P-40)
FY 2010 President's Budget — May 2009

Shipbuilding and Conversion, Navy/BA 5 — Auxiliaries, Craft and Prior Year Program Costs — BLI 530000 Completion of PY Shipbuilding Programs

	Prior Year	FY 2008	FY 2009	FY 2010						
Cost To Complete										
Virginia Class				45.6						
LPD 17 Class				99.3						
DDG 1000				309.6						
Hurricane Supplemental Funding										
DDG 51 Class	249.6									
LPD 17 Class	1,419.9									
LCAC SLEP	15.6									
Infrastructure Contracts	146.0									
Total	1,831.1			454.5						

Note: General Provision 8077 of FY2009 DOD Appropriations Act directs that funds appropriated for the Completion of Prior Year Shipbuilding Programs be merged with and be available for the same purposes as the appropriation to which transferred.

COST TO COMPLETE

Virginia Class Submarine:
Funds are required for completion of prior year ships of the VA Class Program (SSNs 779 and 780). Funds are required for completion of Virginia Class construction contracts due to increased labor and material costs and higher than expected costs for Special Hull Treatment (SHT).

LPD 17:
This requirement is due to a number of factors that have occurred since LPD 17 class ships were appropriated. Factors include: changing/shrinking industrial base, ship quantities, higher overhead rates, worker attrition rates, and labor inefficiency. Funds are required for cost impacts resulting from the Pension Protection Act of 2006 for LPDs 22 and 23.

In addition, $66M is requested for contract incentives for the LPD 17 program. This requirement results from the April 2009 SWAP II Memorandum of Agreement between the Navy and Northrop Grumman Shipbuilding. Allocation by ship will be based upon future negotiations.

DDG 1000:
Funds are required for completion of the two lead DDG 1000 Zumwalt ships.

APPROPRIATION: SHIPBUILDING AND CONVERSION

BUDGET ACTIVITY: 5

COMPLETION OF PRIOR YEAR PROGRAM

PROGRAM	FY 2008 TOT COST	FY 2009 TOT COST	FY 2010 TOT COST
VIRGINIA CLASS SUBMARINE			45,608
			45,608
LPD 17 Class			99,342
			99,342
DDG 1000			309,636
			309,636
TOTAL			454,586