

# **Selected Acquisition Report (SAR)**

RCS: DD-A&T(Q&A)823-542



# LPD 17 San Antonio Class Amphibious Transport Dock (LPD 17)

As of December 31, 2012

Defense Acquisition Management Information Retrieval (DAMIR)

### **Table of Contents**

Program Information	
Responsible Office	
References	
Mission and Description	
Executive Summary	
Threshold Breaches	
Schedule	
Performance	
Track To Budget	
Cost and Funding	
Low Rate Initial Production	
Foreign Military Sales	
Nuclear Cost	
Unit Cost	
Cost Variance	
Contracts	
Deliveries and Expenditures	
Operating and Support Cost	

### **Program Information**

### **Program Name**

LPD 17 San Antonio Class Amphibious Transport Dock (LPD 17)

### **DoD Component**

Navy

# **Responsible Office**

#### Responsible Office

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LPD 17 Amphibious Transport Dock Fax -

Ship Program Office (PMS317) DSN Phone 326-0159

PEO Ships DSN Fax -

Washington, DC 20376-2401

darren.plath@navy.mil Date Assigned August 27, 2012

#### References

#### SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 17, 1996

### Approved APB

Navy Acquisition Executive (NAE) Approved Acquisition Program Baseline (APB) dated September 18, 2011

# **Mission and Description**

The LPD 17 Class Amphibious Transport Dock Ship is the functional replacement for the LPD 4, LSD 36, LKA 113, and LST 1179 Classes of Amphibious Ships for 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 the primary amphibious warfare mission.

### **Executive Summary**

The LPD 17 program successfully completed a challenging year, delivering three ships within a twelve-month timeframe. Requirements remain stable; and the program office continues to focus on improving product reliability.

LPD 22 (USS SAN DIEGO) was commissioned at her namesake city in May 2012; and LPD 23 (USS ANCHORAGE) was commissioned without ceremony shortly after her delivery in September 2012. The formal ceremony will be held in May 2013; and both ships are currently undergoing planned availabilities in preparation for transfer to the in-service amphibious program office. LPD 24 (USS ARLINGTON) rounded out the trio of deliveries and was accepted by the Navy in December 2012. Commissioning is planned for April 2013 in the ship's homeport.

The in-service LPD 17 class ships continue to receive positive feedback from the sailors and marines assigned to them as they conduct overseas deployments, actively participate in joint and multi-national exercises, and support special events such as the Bicentennial of the War of 1812.

Follow-on Test and Evaluation (FOT&E) has been completed; Commander, Operational Test and Evaluation Force (COTF) issued their FOT&E report on August 6, 2012; and survivability was resolved as "Satisfactory."

The detail design and construction contract for LPD 27 was awarded to Huntington Ingalls Industries (HII) on July 27, 2012; and construction has commenced. The Initial Baseline Review (IBR) to baseline the production plan and establish the Earned Value Management (EVM) baseline is planned for Spring 2013.

As of December 31, 2012, HII production efforts on LPDs 25 and 26 were 91% and 25%, respectively. LPD 25 (SOMERSET) will be the last LPD 17 class ship constructed at HII's Avondale facility with delivery planned for Summer 2013.

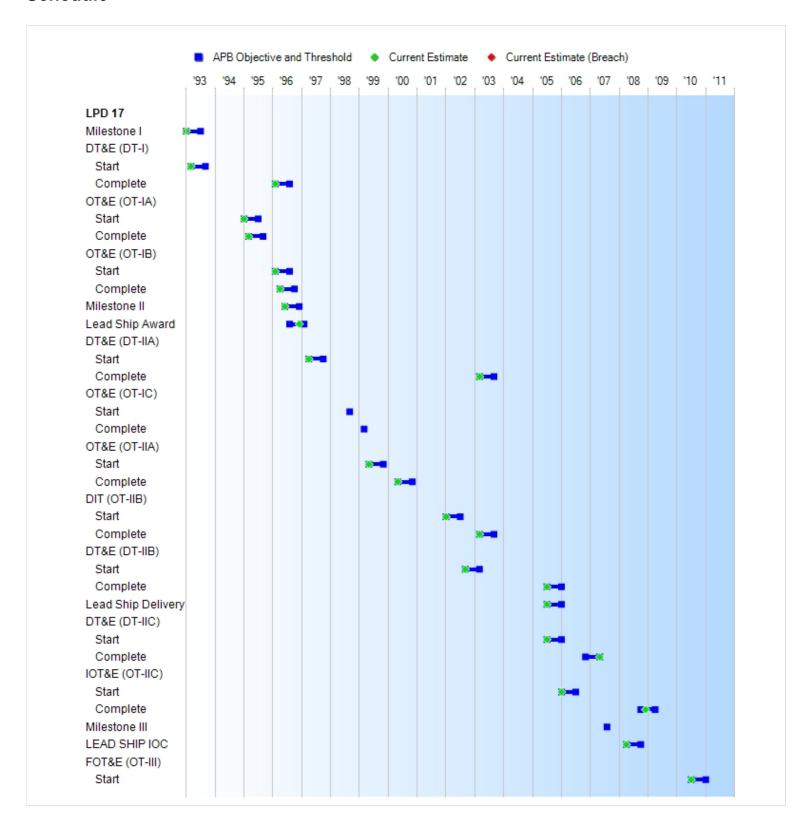
The Navy continues to monitor the planned closure of HII's Avondale facility. An effort to partially mitigate the impact of that closure on the workforce was officially executed in September 2012 as the Navy entered into a cooperative education agreement with the Delgado Community College Foundation providing funding for the school's advanced manufacturing programs at the Avondale shipyard. Under the agreement, the Navy will support a four-year program to maintain and expand the science, technology, engineering, and math related aspects of the apprenticeship program.

There are no significant software-related issues with this program at this time.

# **Threshold Breaches**

APB Breaches								
RDT&E								
Procurement								
MILCON								
Acq O&M								
PAUC								
APUC								
<b>Curdy Breache</b>	S							
Baseline								
PAUC	None							
APUC	None							
Baseline								
PAUC	None							
APUC	None							
	RDT&E Procurement MILCON Acq O&M  PAUC APUC  Curdy Breache Baseline PAUC APUC Baseline PAUC PAUC							

### **Schedule**



Milestones	SAR Baseline Dev Est	Curre Devel Objective	Current Estimate	
Milestone I	JAN 1993	JAN 1993	JUL 1993	JAN 1993
DT&E (DT-I)				
Start	MAR 1993	MAR 1993	SEP 1993	MAR 1993
Complete	FEB 1996	FEB 1996	AUG 1996	FEB 1996
OT&E (OT-IA)				
Start	JAN 1995	JAN 1995	JUL 1995	JAN 1995
Complete	MAR 1995	MAR 1995	SEP 1995	MAR 1995
OT&E (OT-IB)				
Start	FEB 1996	FEB 1996	AUG 1996	FEB 1996
Complete	APR 1996	APR 1996	OCT 1996	APR 1996
Milestone II	JUN 1996	JUN 1996	DEC 1996	JUN 1996
Lead Ship Award	AUG 1996	AUG 1996	FEB 1997	DEC 1996
DT&E (DT-IIA)				
Start	SEP 1996	APR 1997	OCT 1997	APR 1997
Complete	AUG 1998	MAR 2003	SEP 2003	MAR 2003
OT&E (OT-IC)				
Start	SEP 1998	N/A	N/A	N/A
Complete	MAR 1999	N/A	N/A	N/A
OT&E (OT-IIA)				
Start	JUN 2003	MAY 1999	NOV 1999	MAY 1999
Complete	SEP 2003	MAY 2000	NOV 2000	MAY 2000
DIT (OT-IIB)				
Start	N/A	JAN 2002	JUL 2002	JAN 2002
Complete	N/A	MAR 2003	SEP 2003	MAR 2003
DT&E (DT-IIB)				
Start	SEP 1998	SEP 2002	MAR 2003	SEP 2002
Complete	JUN 2002	JUL 2005	JAN 2006	JUL 2005
Lead Ship Delivery	JUN 2002	JUL 2005	JAN 2006	JUL 2005
DT&E (DT-IIC)				
Start	JUL 2002	JUL 2005	JAN 2006	JUL 2005
Complete	JAN 2004	NOV 2006	MAY 2007	MAY 2007
IOT&E (OT-IIC)				
Start	N/A	JAN 2006	JUL 2006	JAN 2006
Complete	N/A	OCT 2008	APR 2009	DEC 2008
Milestone III	AUG 2007	N/A	N/A	N/A
LEAD SHIP IOC	JAN 2004	APR 2008	OCT 2008	APR 2008
FOT&E (OT-III)				
Start	JAN 2011	JUL 2010	JAN 2011	JUL 2010

### **Acronyms And Abbreviations**

**DIT - Design Integration Testing** 

DT - Developmental Test

DT&E - Developmental Test and Evaluation

FOT&E - Follow-on Operational Test and Evaluation

IOC - Initial Operational Capability

IOT&E - Initial Operational Test and Evaluation

N/A - Not Applicable

**OT - Operational Test** 

OT&E - Operational Test and Evaluation

### **Change Explanations**

None

### **Performance**

Characteristics	SAR Baseline Dev Est	Devel	ent APB lopment e/Threshold	Demonstrated Performance	Current Estimate
Mobility					
Sustained Speed (Kts)	23	23	21.5	24	24
Endurance ((NM)(K) @ Kts)	10/22	10/22	9.5/20	10.6/20	10.6/20
Amphibious Warfare Embarkation (Net)					
Troops	750	750	650	720	720
Vehicles (Sq Ft)(k)	25	25	22	22	22
Cargo (Cubic Feet)(k)	25	25	22	34	34
Bulk Fuel (Gals)(k)	325	325	250	307	307
LCAC	2	2	1(+1)	2	2
VTOL Land/Launch Spots (CH-46 orCH- 53E or MV-22)	4/3/2	4/3/2	4/2/2	4/2/2	4/2/2
VTOL Maint/Storage (CH-46 or CH-53E or MV-22)	3/1/1	3/1/1	2/1/1	2/1/1	2/1/1
Ship To Shore Capability (LCAC)					
Sustained Operations (reload 6 LCACs) (mins)	220	220	285	274	274
Operational Availability (Ao)	.90	.90	.80	.92	.85

Requirements Source: Operational Requirements Document (ORD) Revision 3 dated April 8, 1996

# **Acronyms And Abbreviations**

Gals - gallons

K/k - Thousands

Kts - Knots

LCAC - Landing Craft Air Cushion

mins - minutes

NM - Nautical Miles

Sq Ft - square feet

VTOL - Vertical Take-Off and Landing

### **Change Explanations**

(Ch-1) Operational availability current estimate changed from .82 to .85 to reflect data as of December 2012.

#### Memo

Demonstrated performance for Sustained Speed and Vehicles (Sq Ft) reflect performance during LPD 17 Builder's Trials (BT).

Demonstrated performance for Troops, Cargo (Cubic Feet), LCAC, and VTOL Land/Launch Spots reflect measurements taken during LPD 17 Sail Away Trials.

Demonstrated performance for Bulk Fuel, VTOL Maint/Storage, and Sustained Operations reflect performance during LPD 17 Class Initial Operational Test and Evaluation (IOT&E) events.

Demonstrated performance for Operational Availability reflects performance cited in the LPD 17 class Operational Evaluation (OPEVAL) report dated January 2010.

# **Track To Budget**

RDT&E				
APPN 1319	BA 05	PE 0604311N	(Navy)	
	Project 2283	LPD 17 Class Systems Integration	(Shared)	(Sunk)
Procurement				
APPN 1611	BA 01	PE 0204411N	(Navy)	
	ICN 0946 ICN 0981	LPD Class Support Equipment Items Less Than \$5M	(Shared) (Shared)	
APPN 1611	BA 03	PE 0204411N	(Navy)	
	ICN 3036	LPD-17		
APPN 1611	BA 05	PE 0204411N	(Navy)	
	ICN 5110 ICN 5300	Outfitting Completion of Prior Year Shipbuilding Programs	(Shared) (Shared)	(Sunk)

Funding in BA 01 / ICN 0981 and BA 01 / ICN 0946 is for non-acquisition related efforts and is not included in the Acquisition Program Baseline (APB) objective.

# **Cost and Funding**

# **Cost Summary**

### **Total Acquisition Cost and Quantity**

	BY1996 \$M			BY1996 \$M		TY \$M	
Appropriation	SAR Baseline Dev Est	Curren Develor Objective/1	pment	Current Estimate	SAR Baseline Dev Est	Current APB Development Objective	Current Estimate
RDT&E	78.7	111.3	122.4	116.1	77.8	114.0	120.1
Procurement	8939.4	14347.1	15781.8	14104.5	10684.0	18714.0	18722.2
Flyaway	8939.4			14104.5	10684.0		18722.2
Recurring	8939.4			14039.1	10684.0		18606.4
Non Recurring	0.0			65.4	0.0		115.8
Support	0.0			0.0	0.0		0.0
Other Support	0.0			0.0	0.0		0.0
Initial Spares	0.0			0.0	0.0		0.0
MILCON	0.0	0.0		0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0		0.0	0.0	0.0	0.0
Total	9018.1	14458.4	N/A	14220.6	10761.8	18828.0	18842.3

Confidence Level for Current APB Cost 95% - Eight ships have been delivered to the fleet; and the remaining three ships are under fixed price contracts.

Quantity	SAR Baseline Dev Est	Current APB Development	Current Estimate
RDT&E	0	0	0
Procurement	12	11	11
Total	12	11	11

# **Cost and Funding**

### **Funding Summary**

# Appropriation and Quantity Summary FY2014 President's Budget / December 2012 SAR (TY\$ M)

Appropriation	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
RDT&E	120.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120.1
Procurement	18280.4	140.3	45.0	68.1	102.9	54.1	31.4	0.0	18722.2
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2014 Total	18400.5	140.3	45.0	68.1	102.9	54.1	31.4	0.0	18842.3
PB 2013 Total	18387.3	140.3	76.2	54.7	54.5	32.1	74.0	0.0	18819.1
Delta	13.2	0.0	-31.2	13.4	48.4	22.0	-42.6	0.0	23.2

Program funding and production quantities listed in this SAR are consistent with the FY 2014 President's Budget (PB). The FY 2014 PB did not reflect the enacted DoD appropriation for FY 2013, nor sequestration; it reflected the President's requested amounts for FY 2013.

Quantity	Undistributed	Prior	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	0
Production	0	11	0	0	0	0	0	0	0	11
PB 2014 Total	0	11	0	0	0	0	0	0	0	11
PB 2013 Total	0	11	0	0	0	0	0	0	0	11
Delta	0	0	0	0	0	0	0	0	0	0

# **Cost and Funding**

# **Annual Funding By Appropriation**

**Annual Funding TY\$** 

1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1990							0.5
1991							4.9
1992							1.2
1993							10.3
1994							28.0
1995							10.8
1996							9.2
1997							4.3
1998							12.9
1999							1.3
2000							2.3
2001							0.2
2002							0.5
2003							5.6
2004							3.1
2005							7.4
2006							8.5
2007							4.8
2008							0.3
2009							
2010							4.0
Subtotal							120.1

Annual Funding BY\$
1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1996 \$M	Non End Item Recurring Flyaway BY 1996 \$M	Non Recurring Flyaway BY 1996 \$M	Total Flyaway BY 1996 \$M	Total Support BY 1996 \$M	Total Program BY 1996 \$M
1990							0.6
1991							5.4
1992							1.3
1993							10.8
1994							28.7
1995							10.9
1996							9.1
1997							4.2
1998							12.5
1999							1.2
2000							2.2
2001							0.2
2002							0.5
2003							5.1
2004							2.7
2005							6.4
2006							7.1
2007							3.9
2008							0.2
2009							
2010							3.1
Subtotal							116.1

Annual Funding TY\$
1611 | Procurement | Shipbuilding and Conversion, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1996	1	1051.9			1051.9		1051.9
1997							
1998		96.0			96.0		96.0
1999	1	653.2			653.2		653.2
2000	2	1557.6			1557.6		1557.6
2001		592.3			592.3		592.3
2002		418.1			418.1		418.1
2003	1	1240.8			1240.8		1240.8
2004	1	1655.3			1655.3		1655.3
2005	1	1314.2			1314.2		1314.2
2006	1	3305.3			3305.3		3305.3
2007		471.2			471.2		471.2
2008	1	1603.1			1603.1		1603.1
2009	1	1033.1			1033.1		1033.1
2010		1235.4			1235.4		1235.4
2011		58.8			58.8		58.8
2012	1	1994.1			1994.1		1994.1
2013		140.3			140.3		140.3
2014		45.0			45.0		45.0
2015		14.4		53.7	68.1		68.1
2016		65.2		37.7	102.9		102.9
2017		29.7		24.4	54.1		54.1
2018		31.4			31.4		31.4
Subtotal	11	18606.4		115.8	18722.2		18722.2

**Annual Funding BY\$** 

# 1611 | Procurement | Shipbuilding and Conversion, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway BY 1996 \$M	Non End Item Recurring Flyaway BY 1996 \$M	Non Recurring Flyaway BY 1996 \$M	Total Flyaway BY 1996 \$M	Total Support BY 1996 \$M	Total Program BY 1996 \$M
1996	1	1024.9			1024.9		1024.9
1997							
1998		90.1			90.1		90.1
1999	1	603.5			603.5		603.5
2000	2	1403.4			1403.4		1403.4
2001		515.9			515.9		515.9
2002		362.1			362.1		362.1
2003	1	1015.9			1015.9		1015.9
2004	1	1307.8			1307.8		1307.8
2005	1	994.2			994.2		994.2
2006	1	2415.4			2415.4		2415.4
2007		329.3			329.3		329.3
2008	1	1084.0			1084.0		1084.0
2009	1	678.5			678.5		678.5
2010		785.1			785.1		785.1
2011		36.3			36.3		36.3
2012	1	1205.3			1205.3		1205.3
2013		83.2			83.2		83.2
2014		26.2			26.2		26.2
2015		8.2		30.7	38.9		38.9
2016		36.5		21.2	57.7		57.7
2017		16.3		13.5	29.8		29.8
2018		17.0			17.0		17.0
Subtotal	11	14039.1		65.4	14104.5		14104.5

The LPD 17 class program closeout costs are reflected in the non-recurring flyaway cost spread over FY 2015-2017.

Cost Quantity Information
1611 | Procurement | Shipbuilding and Conversion, Navy

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 1996 \$M
1996	1	1813.2
1997		
1998		
1999	1	1162.4
2000	2	2348.4
2001		
2002		
2003	1	1319.7
2004	1	1248.9
2005	1	1132.0
2006	1	1217.2
2007		
2008	1	1295.6
2009	1	1235.3
2010		
2011		
2012	1	1266.4
2013		
2014		
2015		
2016		
2017		
2018		
Subtotal	11	14039.1

# **Low Rate Initial Production**

	Initial LRIP Decision	Current Total LRIP
Approval Date	6/17/1996	6/17/1996
<b>Approved Quantity</b>	12	12
Reference	ADM	ADM
Start Year	1996	1996
End Year	2015	2015

The Current Total LRIP Quantity is more than 10% of the total production quantity due to the Acquisition Decision Memorandum (ADM) dated June 17, 1996 approving 12 LRIP ships which is standard for shipbuilding programs.

# **Foreign Military Sales**

None

# **Nuclear Cost**

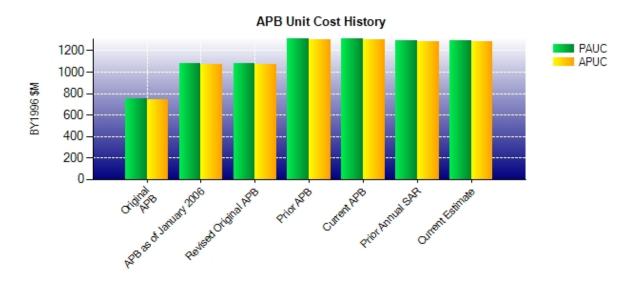
None

# **Unit Cost**

# **Unit Cost Report**

	BY1996 \$M	BY1996 \$M	
Unit Cost	Current UCR Baseline (SEP 2011 APB)	Current Estimate (DEC 2012 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	14458.4	14220.6	
Quantity	11	11	
Unit Cost	1314.400	1292.782	-1.64
Average Procurement Unit Cost (APUC	C)		
Cost	14347.1	14104.5	
Quantity	11	11	
Unit Cost	1304.282	1282.227	-1.69
	BY1996 \$M	BY1996 \$M	
Unit Cost	BY1996 \$M  Revised  Original UCR  Baseline (OCT 2005 APB)	BY1996 \$M  Current Estimate (DEC 2012 SAR)	BY % Change
Unit Cost  Program Acquisition Unit Cost (PAUC)	Revised Original UCR Baseline (OCT 2005 APB)	Current Estimate	
	Revised Original UCR Baseline (OCT 2005 APB)	Current Estimate	
Program Acquisition Unit Cost (PAUC)	Revised Original UCR Baseline (OCT 2005 APB)	Current Estimate (DEC 2012 SAR)	
Program Acquisition Unit Cost (PAUC) Cost	Revised Original UCR Baseline (OCT 2005 APB)	Current Estimate (DEC 2012 SAR)	
Program Acquisition Unit Cost (PAUC) Cost Quantity	Revised Original UCR Baseline (OCT 2005 APB)  12955.2 12 1079.600	Current Estimate (DEC 2012 SAR)	% Change
Program Acquisition Unit Cost (PAUC)  Cost Quantity Unit Cost	Revised Original UCR Baseline (OCT 2005 APB)  12955.2 12 1079.600	Current Estimate (DEC 2012 SAR)	% Change
Program Acquisition Unit Cost (PAUC) Cost Quantity Unit Cost Average Procurement Unit Cost (APUC)	Revised Original UCR Baseline (OCT 2005 APB)  12955.2 12 1079.600	Current Estimate (DEC 2012 SAR)  14220.6 11 1292.782	% Change

# **Unit Cost History**



		BY1996 \$M		TY:	\$M
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUN 1996	751.508	744.950	896.817	890.333
APB as of January 2006	OCT 2005	1079.600	1070.200	1283.233	1273.642
Revised Original APB	OCT 2005	1079.600	1070.200	1283.233	1273.642
Prior APB	DEC 2010	1314.400	1304.282	1711.636	1701.273
Current APB	SEP 2011	1314.400	1304.282	1711.636	1701.273
Prior Annual SAR	DEC 2011	1297.209	1286.655	1710.827	1699.909
Current Estimate	DEC 2012	1292.782	1282.227	1712.936	1702.018

### **SAR Unit Cost History**

### **Current SAR Baseline to Current Estimate (TY \$M)**

Initial PAUC	Changes							PAUC	
Dev Est	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Est
896 817	90,000	-52 844	83 245	0.000	508 118	187 600	0.000	816 119	1712 936

### **Current SAR Baseline to Current Estimate (TY \$M)**

Initial APUC	Changes							APUC	
Dev Est	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Est
800 333	80 082	-53 /33	82 601	0.000	504 845	187 600	0.000	211 625	1702 018

890.333 89.982 -53.433 82.691 0.000 504.845 187.600 0.000 811.685

#### 1702.018

# **SAR Baseline History**

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone I	JAN 1993	JAN 1993	N/A	JAN 1993
Milestone II	JUL 1995	JUN 1996	N/A	JUN 1996
Milestone III	OCT 2003	AUG 2007	N/A	N/A
IOC	OCT 2003	N/A	N/A	N/A
Total Cost (TY \$M)	59.1	10761.8	N/A	18842.3
Total Quantity	N/A	12	N/A	11
Prog. Acq. Unit Cost (PAUC)	N/A	896.817	N/A	1712.936

# **Cost Variance**

Summary Then Year \$M									
	RDT&E	Proc	MILCON	Total					
SAR Baseline (Dev Est)	77.8	10684.0		10761.8					
Previous Changes									
Economic	+0.2	+888.7		+888.9					
Quantity		-1478.1		-1478.1					
Schedule	+6.1	+909.6		+915.7					
Engineering									
Estimating	+36.0	+5631.2		+5667.2					
Other		+2063.6		+2063.6					
Support									
Subtotal	+42.3	+8015.0		+8057.3					
Current Changes									
Economic		+101.1		+101.1					
Quantity									
Schedule									
Engineering									
Estimating		-77.9		-77.9					
Other									
Support									
Subtotal		+23.2		+23.2					
Total Changes	+42.3	+8038.2		+8080.5					
CE - Cost Variance	120.1	18722.2		18842.3					
CE - Cost & Funding	120.1	18722.2		18842.3					

Summary Base Year 1996 \$M								
	RDT&E	Proc	MILCON	Total				
SAR Baseline (Dev Est)	78.7	8939.4		9018.1				
Previous Changes								
Economic								
Quantity		-1325.1		-1325.1				
Schedule	+4.8	+410.1		+414.9				
Engineering								
Estimating	+32.6	+4596.8		+4629.4				
Other		+1532.0		+1532.0				
Support								
Subtotal	+37.4	+5213.8		+5251.2				
Current Changes								
Economic								
Quantity								
Schedule		-1.3		-1.3				
Engineering								
Estimating		-47.4		-47.4				
Other								
Support								
Subtotal		-48.7		-48.7				
Total Changes	+37.4	+5165.1		+5202.5				
CE - Cost Variance	116.1	14104.5		14220.6				
CE - Cost & Funding	116.1	14104.5		14220.6				

Previous Estimate: December 2011

Procurement	\$N	1
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+101.1
Schedule variance associated with realignment of program closeout funding. (Schedule)	-1.3	0.0
Adjustment for current and prior escalation. (Estimating)	-56.6	-91.4
Miscellaneous adjustments to post delivery and outfitting budgets. (Estimating)	+10.3	+14.6
Revised estimates reflect actual costs. (Estimating)	-1.1	-1.1
Procurement Subtotal	-48.7	+23.2

#### Contracts

### Appropriation: Procurement

Contract Name LPD 25

Contractor Huntington Ingalls Industries

Contractor Location 1000 Access Road

Pascagoula, MS 39567-0149

Contract Number, Type N00024-06-C-2222/25, FPIF

Award Date December 21, 2007
Definitization Date December 21, 2007

I	nitial Cor	ntract Price (	(\$M)	Current C	Current Contract Price (\$M) Estimated Price At Comp			ice At Completion (\$M)
7	Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
	1212.8	1349.9	1	1216.0	1353.0	1	1353.0	1353.0

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/17/2013)	-117.0	-65.0
Previous Cumulative Variances	-78.1	-112.4
Net Change	-38.9	+47.4

### **Cost And Schedule Variance Explanations**

The unfavorable net change in the cost variance is due to the requirement for additional efforts above the original plan and budget in multiple crafts. Rework in some crafts has also been a contributing factor.

The favorable net change in the schedule variance is due to a more thorough shipbuilder focus on manning levels and craft performance, which has resulted in the attainment of increased compartment releases and recovery of some of the lost schedule.

#### **Contract Comments**

This contract is more than 90% complete; therefore, this is the final report for this contract.

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the incorporation of engineering change proposals.

LPD 25 ship construction is being performed at Huntington Ingalls Industries, Avondale Operations.

LPD 25 is under a fixed price incentive contract so the Navy's total liability is capped at the contract ceiling. Funding has been budgeted to cover the liability. Efforts to achieve a higher launch completion level, which is the most optimal and cost-effective, and review of river height projections at Avondale resulted in an adjustment to LPD 25's delivery date.

### **Appropriation: Procurement**

Contract Name LPD 26

Contractor Huntington Ingalls Industries

Contractor Location 1000 Access Road

Pascagoula, MS 39567-0149

Contract Number, Type N00024-06-C-2222/26, FPIF

Award Date April 01, 2011
Definitization Date April 01, 2011

Initial Contract Price (\$M)		Current Contract Price (\$M)		Estimated Price At Completion (\$M)			
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
1487.2	1690.0	1	1509.0	1715.0	1	1565.0	1516.0

Variance	Cost Variance	Schedule Variance
Cumulative Variances To Date (2/17/2013)	-52.7	-35.5
Previous Cumulative Variances	-5.3	+25.4
Net Change	-47.4	-60.9

### **Cost And Schedule Variance Explanations**

The unfavorable net change in the cost variance is due to an insufficient labor mix which has led to craft inefficiency and resulted in the need for rework. The shipbuilder is conducting additional training to mitigate the risk of future rework and improve the skill mix across the labor force. Overruns in overhead have also contributed to the unfavorable cost variance.

The unfavorable net change in the schedule variance is due to a shortage of skilled labor in the hull and pipe trades. Additionally, weather has impacted schedule performance as some material staging areas do not have adequate shelter. The schedule variance is being measured against the shipbuilder's internal Performance Management Baseline (PMB), which reflects a November 2015 delivery date. LPD 26 delivery date is projected for February 2016.

#### **Contract Comments**

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the incorporation of engineering change proposals and negotiation of a contract price adjustment to cover the Navy's share of corporate office and general insurance expenses following completion of the spin-off of Northrop Grumman's shipbuilding division.

LPD 26 construction is being performed at Huntington Ingalls Industries, Pascagoula Operations.

The contractor's estimate includes contract clauses associated with restructuring costs related to the closure of Avondale and deferred depreciation expenses from Hurricane Katrina insurance claims. The associated cost will be incorporated into the Program Manager's estimate upon negotiation of those clauses.

# **Deliveries and Expenditures**

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	0	0	0	
Production	8	8	11	72.73%
Total Program Quantities Delivered	8	8	11	72.73%

Expenditures and Appropriations (TY \$M)				
Total Acquisition Cost	18842.3	Years Appropriated	24	
Expenditures To Date	15234.8	Percent Years Appropriated	82.76%	
Percent Expended	80.85%	Appropriated to Date	18540.8	
Total Funding Years	29	Percent Appropriated	98.40%	

The above data is current as of 2/28/2013.

### **Operating and Support Cost**

#### **LPD 17**

### **Assumptions and Ground Rules**

#### Cost Estimate Reference:

Cost element data was pulled from the Operating and Support Cost Analysis Model (OSCAM) within the Navy's Visibility and Management of Operating and Support Costs (VAMOSC) system. Date of the most recent Program Office estimate is May 1, 2013.

#### Sustainment Strategy:

The cost elements include all personnel, equipment, supplies, software, and services including support associated with operating, modifying, maintaining, supplying, training, and supporting the LPD 17 program. The LPD 17 program is an 11-ship class with a 40-year expected service life. Life cycle engineering and support contracts are in place to support sustainment efforts.

#### Antecedent Information:

The LPD 4 class is one of the four amphibious ship classes being functionally replaced by the LPD 17 class.

Unitized O&S Costs BY1996 \$M				
Cost Element	LPD 17 Average Annual Cost per LPD Class Hull	LPD 4 (Antecedent) Average Annual Cost per LPD Class Hull		
Unit-Level Manpower	16.1	12.3		
Unit Operations	2.5	3.9		
Maintenance	9.8	8.6		
Sustaining Support	0.8	0.9		
Continuing System Improvements	1.3	2.4		
Indirect Support	8.1	8.3		
Other	0.0	0.0		
Total	38.6	36.4		

#### **Unitized Cost Comments:**

The cost element data was pulled from the Operating and Support Cost Analysis Model (OSCAM) within the Navy's Visibility and Management of Operating and Support Costs (VAMOSC) system. The cost element estimates are based on all data available in OSCAM for each class.

	Total O&S Cost \$M				
	Current Development APB Objective/Threshold	Current Estimate			
	LPD 17		LPD 17	LPD 4 (Antecedent)	
<b>Base Year</b>	0.0	0.0	16984.0	16016.0	
<b>Then Year</b>	0.0	N/A	41260.0	38253.0	

#### Total O&S Costs Comments:

Date of most recent Program Office estimate is May 1, 2013.

The total operating and support cost estimates for both the LPD 17 class and LPD 4 class are based on 11 ships over the same 40-year life cycle timeframe.

The increase in the total Operating and Support cost estimate from the previous report is driven by the inclusion of indirect costs in this year's report.

### **Disposal Costs**

The estimate for total disposal costs for the LPD 17 class is \$56.1M (Base Year FY96 dollars).