Defense Acquisition Management
Information Retrieval
(DAMIR)

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-374

LCS

As of June 30, 2004

Table of Contents

Program Information

Designation And Nomenclature (Popular Name)

Littoral Combat Ship (LCS)

DoD Component

Navy

Responsible Office

Responsible Office

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Date Assigned March 1, 2004

References

SAR Baseline (Planning Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated May 27, 2004

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated May 27, 2004

Mission and Description

The Littoral Combat Ship (LCS) will be optimized for flexibility in the littorals as a system of systems that are both manned and unmanned, mission reconfigurable, and deployed in LCS. It will focus on three primary anti-access mission areas: Littoral Surface Warfare operations emphasizing prosecution of small boats, mine warfare, and littoral anti-submarine warfare. Its high speed and ability to operate at economical loiter speeds will enable fast and calculated response to small boat threats, mine laying and quiet diesel submarines. LCS employment of networked sensors for Intelligence, Surveillance, and Reconnaissance (ISR) in support of Special Operations Forces (SOF) will directly enhance littoral mobility. Its shallow draft will allow easier excursion into shallower areas for both mine countermeasures and small boat prosecution. Using LCS against these asymmetic threats will enable Joint Commanders to concentrate multi-mission combatants on primary missions like precision strike, battle group escort and theater air defense.
(U) The LCS Acquisition Strategy is structured in two Flights. Flight 0 consists of accelerated procurement of four platforms and comprises two different hull types and materials. The first ship of each different design is R&D (ship 1 RDT&E in FY 05, ship 2 SCN in FY 06, ship 3 RDT&E in FY 06, ship 4 SCN in FY 08). Flight 1 consists of three SCN

platforms and mission modules in FY 08 and five platforms and mission modules in FY 09.

Executive Summary

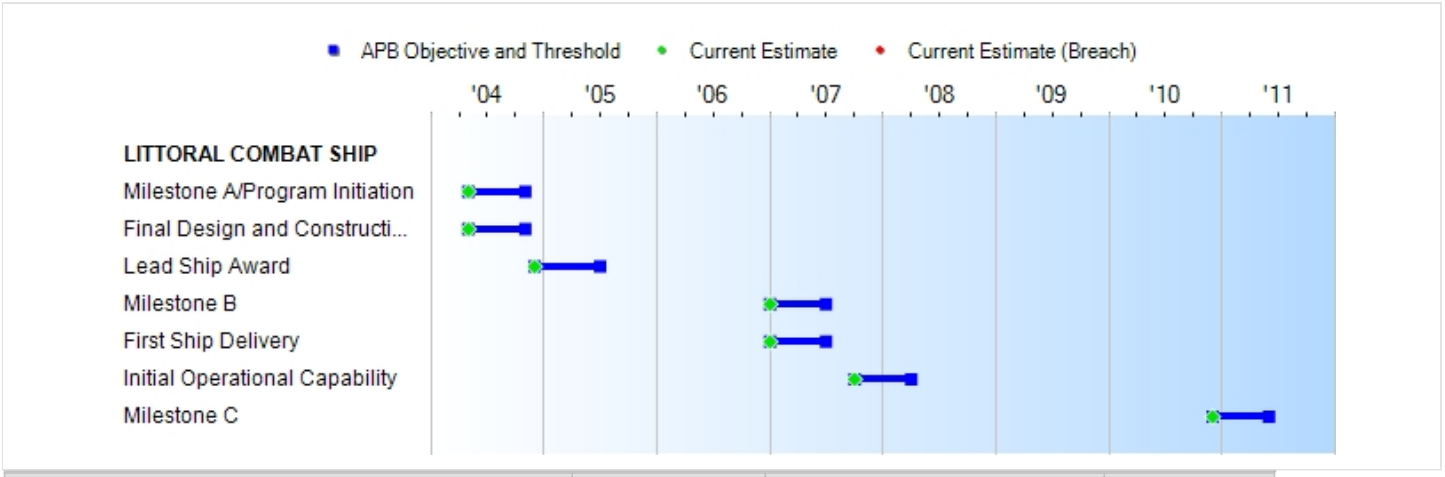
This is the initial SAR for the Littoral Combat Ship Program. This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code. The LCS Program achieved Milestone A/Program Initiation on May 27 2004. On May 27 2004, two Final System Design contracts with options for Detail Design and Construction were awarded to Lockheed Martin and General Dynamics - Bath Iron Works.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☑
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate
Milestone A/Program Initiation	MAY 2004	MAY 2004	NOV 2004	MAY 2004
Final Design and Construction Contract Award	MAY 2004	MAY 2004	NOV 2004	MAY 2004
Lead Ship Award	DEC 2004	DEC 2004	JUL 2005	DEC 2004
Milestone B	JAN 2007	JAN 2007	JUL 2007	JAN 2007
First Ship Delivery	JAN 2007	JAN 2007	JUL 2007	JAN 2007
Initial Operational Capability	OCT 2007	OCT 2007	APR 2008	OCT 2007
Milestone C	DEC 2010	DEC 2010	JUN 2011	DEC 2010

Change Explanations

None

Memo

None

Performance

Characteristics	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Demonstrated Performance	Current Estimate	
Sprint Speed (kts)	50	50	40	TBD	45	(Ch-1)
Navigational Draft (ft)	10	10	20	TBD	13	(Ch-1)
Range at Transit Speed (includes payload)	4,300 nm @ 20 kt s	4,300 nm @ 20 kts	3,500 nm @ 18 kts	TBD	3,550 nm @18 kts	(Ch-1)
Mission Package Payload (Weight)	210 MT (130 MT) mission package/80 MT mission package fuel)	210 MT (130 MT) mission package/80 MT mission package fuel)	180 MT (105 MT mission package/75 MT mission package fuel)	TBD	180 MT (105 MT mission package/75 MT mission package fuel)	(Ch-1)
Interoperability Information Exchange Requirements (IER)	Achieve 100% of top-level IERs	Achieve 100% of top-level IERs	Achieve 100% of critical top-level IERs	TBD	Achieve 100% of critical top-level IERs	(Ch-1)
Core Crew Manning (# Core Crew Members)	15	15	50	TBD	44 Core	(Ch-1)
Focused Mission Execution	Demonstrate separate DTE scenari os in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapon s and sensor systems) to the sea frame	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	TBD	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	

Change Explanations

(Ch-1) The current estimate reflects contractors' current estimates for these performance parameters:

Sprint Speed from 50 Knots to 45 Knots
Navigational Draft from 10 Feet to 13 feet
Range at Transit Speed from 4,300 nautical miles at 20 knots to 3,550 nautical miles at 18 knots
Mission Package Payload from 210 MT(130MT Mission Package) to 215 MT (140 mission package)
Interoperability achieve 100% of top level Information Exchange Requirements (IER) to Achieve 100% of top level critical Information Exchange Requirements (IER).
Core Crew Manning from 15 Core Crew to 44 Core Crew

Memo

ACRONYM LIST:
KTS - Knots
NM -Nautical Miles
MT- Metric Tons
DTE - Detect to Engage
MIW - Mine Warfare
SUW - Surface Warfare
ASW - Anti-Submarine Warfare

Track To Budget

RDT&E			
APPN 1319	PE 0603581N	(Navy)	Project 33096
	Littoral Combat Ship (LCS)/LCS Development		
APPN 1319	PE 0603581N	(Navy)	Project 34018
	Littoral Combat Ship (LCS)/Littoral Combat Ship Construction		

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	BY2004 $M				TY $M		
Appropriation	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	SAR Baseline Plan Est	Current APB Concept Objective	Current Estimate
RDT&E	1172.7	1172.7	1290.0	1172.7	1211.7	1211.7	1211.7
Procurement	--	--	--	--	--	--	--
MILCON	--	--	--	--	--	--	--
Acq O&M	--	--	--	--	--	--	--
Total	1172.7	1172.7	1290.0	1172.7	1211.7	1211.7	1211.7

Quantity	SAR Baseline Plan Est	Current APB Concept	Current Estimate
RDT&E	2	2	2
Procurement	0	--	0
Total	2	2	2

Funding Summary

Appropriation and Quantity Summary

JUN 2004 Exception SAR (TY $M)

Appropriation	Prior	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	To Complete	Total
RDT&E	35.3	166.2	342.3	409.3	231.3	26.0	1.3	0.0	1211.7
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
JUN 2004 Total	35.3	166.2	342.3	409.3	231.3	26.0	1.3	0.0	1211.7
	--	--	--	--	--	--	--	--	--

Quantity	Prior	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	To Complete	Total
Development	0	0	0	0	0	0	0	0	2
Production	0	0	0	0	0	0	0	0	0
JUN 2004 Total	0	0	0	0	0	0	0	0	2

Annual Funding By Appropriation

Annual Funding TY$
0002 | | RDT&E

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
2003	--	--	--	--	--	--	35.3
2004	--	--	--	--	--	--	166.2
2005	--	--	--	--	--	--	342.3
2006	--	--	--	--	--	--	409.3
2007	--	--	--	--	--	--	231.3
2008	--	--	--	--	--	--	26.0
2009	--	--	--	--	--	--	1.3
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1211.7**

Annual Funding BY$
0002 | | RDT&E

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2004 $M	Non End Item Recurring Flyaway BY 2004 $M	Non Recurring Flyaway BY 2004 $M	Total Flyaway BY 2004 $M	Total Support BY 2004 $M	Total Program BY 2004 $M
2003	--	--	--	--	--	--	35.5
2004	--	--	--	--	--	--	164.8
2005	--	--	--	--	--	--	334.7
2006	--	--	--	--	--	--	393.8
2007	--	--	--	--	--	--	218.6
2008	--	--	--	--	--	--	24.1
2009	--	--	--	--	--	--	1.2
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1172.7**

Low Rate Initial Production

None

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

Unit Cost History

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	MAY 2004	N/A	N/A	MAY 2004
Milestone B	JAN 2007	N/A	N/A	JAN 2007
Milestone C	DEC 2010	N/A	N/A	DEC 2010
IOC	OCT 2007	N/A	N/A	OCT 2007
Total Cost (TY $M)	1211.7	N/A	N/A	1211.7
Total Quantity	2	N/A	N/A	2
Prog. Acq. Unit Cost (PAUC)	605.850	N/A	N/A	605.850

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1211.7	--	--	1211.7
Previous Changes				
Economic	0.0	--	--	0.0
Quantity	0.0	--	--	0.0
Schedule	0.0	--	--	0.0
Engineering	0.0	--	--	0.0
Estimating	0.0	--	--	0.0
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	0.0	--	--	0.0
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Total Changes	0.0	--	--	0.0
CE - Cost Variance	1211.7	--	--	1211.7
CE - Cost & Funding	1211.7	--	--	1211.7

Summary Base Year 2004 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1172.7	--	--	1172.7
Previous Changes				
Economic	0.0	--	--	0.0
Quantity	0.0	--	--	0.0
Schedule	0.0	--	--	0.0
Engineering	0.0	--	--	0.0
Estimating	0.0	--	--	0.0
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	0.0	--	--	0.0
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	--	--	--	--
Other	--	--	--	--
Support	--	--	--	--
Subtotal	--	--	--	--
Total Changes	0.0	--	--	0.0
CE - Cost Variance	1172.7	--	--	1172.7
CE - Cost & Funding	1172.7	--	--	1172.7

Previous Estimate:

Contracts

General Contract Memo

A contract for LCS Preliminary Design, Firm Fixed Price (FFP) was awarded to Lockheed Martin on 17 July 2003. The cost for the preliminary design was $10.5M. A contract option was exercised on May 27, 2004 for LCS Final Design, Cost Plus Award Fee (CPAF) at a cost of $47.6M. A second contract for LCS Preliminary Design, Firm Fixed Price (FFP) was awarded to General Dynamics, Bath Iron Works on 17 July 2003. The cost for the preliminary design was $9.6M. A contract option was exercised on May 27, 2004 for LCS Final Design (CPAF) at a cost of $89.9M. Cost Performance Reporting will be in July and will be included in the next report.

Appropriation: RDT&E	
Contract Name	**LCS Design & Const**
Contractor	Bath Iron Works
Contractor Location	Bath , ME 04530
Contract Number, Type	N00024-03-C-2310, FFP/CPAF
Award Date	July 17, 2003
Definitization Date	May 27, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
9.6	N/A	1	89.9	N/A	1	89.9	89.9

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP/CPAF contract.

Contract Comments

None

Appropriation: RDT&E	
Contract Name	**LCS Design & Const**
Contractor	Lockheed Martin
Contractor Location	Moorestown , NJ 08057
Contract Number, Type	N00024-03-C-2311, FFP/CPAF
Award Date	July 17, 2003
Definitization Date	May 27, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
10.5	N/A	1	58.1	N/A	1	58.1	58.1

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP/CPAF contract.

Contract Comments

None

Deliveries and Expenditures

Deliveries To Date	Plan	Actual	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	0	--
Total Program Quantities Delivered	0	0	2	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1211.7	Years Appropriated	2
Expenditures To Date	0.0	Percent Years Appropriated	28.57%
Percent Expended	0.00%	Appropriated to Date	201.5
Total Funding Years	7	Percent Appropriated	16.63%

Operating and Support Cost

None

Defense Acquisition Management
Information Retrieval
(DAMIR)

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-374

LCS

As of December 31, 2004

Table of Contents

Program Information

Designation And Nomenclature (Popular Name)

Littoral Combat Ship (LCS)

DoD Component

Navy

Responsible Office

Responsible Office

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Naval Sea Systems Command
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Date Assigned March 1, 2004

References

SAR Baseline (Planning Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated May 27, 2004

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated May 27, 2004

Mission and Description

The Littoral Combat Ship (LCS) will be optimized for flexibility in the littorals as a system of systems that are both manned and unmanned, mission reconfigurable, and deployed in LCS. It will focus on three primary anti-access mission areas: Littoral Surface Warfare operations emphasizing prosecution of small boats, mine warfare, and littoral anti-submarine warfare. Its high speed and ability to operate at economical loiter speeds will enable fast and calculated response to small boat threats, mine laying and quiet diesel submarines. LCS employment of networked sensors for Intelligence, Surveillance, and Reconnaissance (ISR) in support of Special Operations Forces (SOF) will directly enhance littoral mobility. Its shallow draft will allow easier excursion into shallower areas for both mine countermeasures and small boat prosecution. Using LCS against these asymmetric threats will enable Joint Commanders to concentrate multi-mission combatants on primary missions such as precision strike, battle group escort and theater air defense.

Executive Summary

This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code.

Completed Final Systems Design and awarded Detail Design and Construction contract option for LCS Flight 0 Ship 1 to Lockheed Martin on December 15, 2004.

Final Design phase of second LCS design with General Dynamics, Bath Iron Works, continues and is on schedule to be awarded as Detail Design and Construction contract option in FY 2006.

The LCS Acquisition Strategy is structured in Flights. Flight 0 consists of accelerated procurement of four platforms (seaframes) and concurrent mission package development and procurement. The seaframe portion of flight 0 consists of two different designs (hull types and materials). The first ship of each different design is R&D (ship 1 (A1) RDT&E in FY05, ship 2 (A2) SCN in FY07, ship 3 (B1) RDT&E in FY06, ship 4 (B2) SCN in FY07). Flight 1 begins with SCN procurement in FY08.

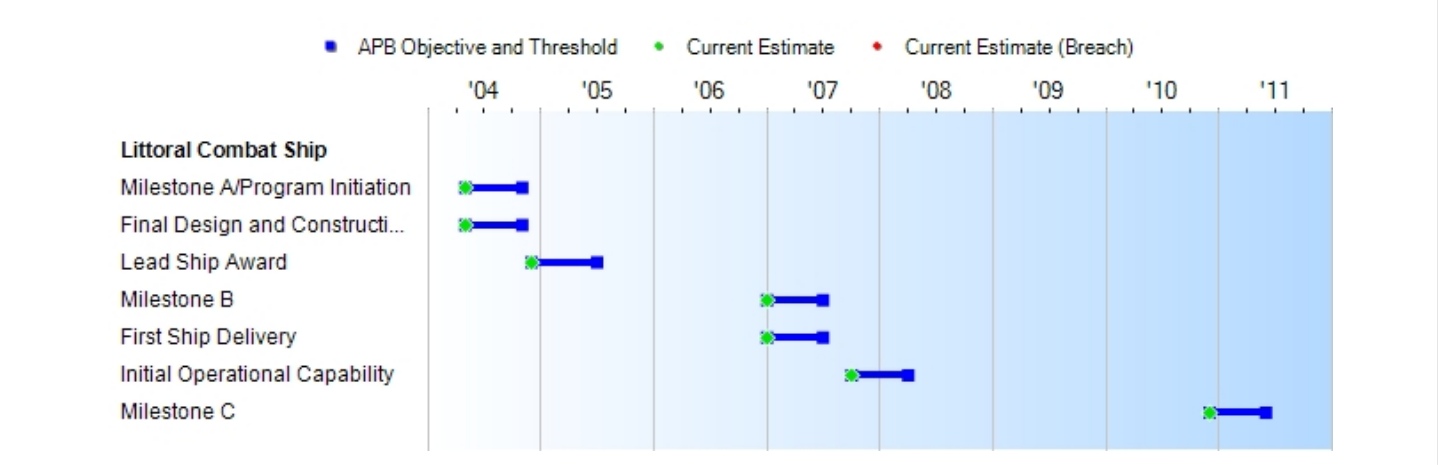
There are no significant software-related issues on this program at this time.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☑
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Milestones	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate
Milestone A/Program Initiation	MAY 2004	MAY 2004	NOV 2004	MAY 2004
Final Design and Construction Contract Award	MAY 2004	MAY 2004	NOV 2004	MAY 2004
Lead Ship Award	DEC 2004	DEC 2004	JUL 2005	DEC 2004
Milestone B	JAN 2007	JAN 2007	JUL 2007	JAN 2007
First Ship Delivery	JAN 2007	JAN 2007	JUL 2007	JAN 2007
Initial Operational Capability	OCT 2007	OCT 2007	APR 2008	OCT 2007
Milestone C	DEC 2010	DEC 2010	JUN 2011	DEC 2010

Change Explanations

None

Memo

Change Explanations:
None

Performance

Characteristics	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Demonstrated Performance	Current Estimate
Sprint Speed (kts)	50	50	40	TBD	45
Navigational Draft (ft)	10	10	20	TBD	13
Range at Transit Speed (includes payload)	4,300 nm @ 20 kt s	4,300 nm @ 20 kts	3,500 nm @ 18 kts	TBD	3,550 nm @ 18 kts
Mission Package Payload (Weight)	210 MT (130 MT) mission package/80 MT mission package fuel)	210 MT (130 MT) mission package/80 MT mission package fuel)	180 MT (105 MT mission package/75 MT mission package fuel)	TBD	180 MT (105 MT) mission package/75 MT mission package fuel)
Interoperability Informatin Exchange Requirements (IER)	Achieve 100% of top-level IERs	Achieve 100% of top-level IERs	Achieve 100% of critical top-level IERs	TBD	Achieve 100% of top-level IERs designated as critical
Core Crew Manning (# Core Crew Members)	15	15	50	TBD	44 Core Crew Members
Focused Mission Execution	Demonstrate separate DTE scenari os in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapon s and sensor systems) to the sea frame	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	TBD	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe

Acronyms

ASW - Anti-Submarine Warfare
DTE - Detect to Engage
KTS - Knots
MIW - Mine Warfare
MT - Metric Tons
NM - Nautical Miles
SUW - Surface Warfare

Change Explanations

None

Memo

None

Track To Budget

RDT&E			
	PE 0602581N		Project 33096
	Littoral Combat Ship/Littoral Combat Ship		
	PE 0602581N		Project 33129
	Littoral Combat Ship/LCS Mission Package Development		
	PE 0602581N		Project 34018
	Littoral Combat Ship/Littoral Combat Ship Construction		
	PE 0603581N		Project 33096
	Littoral Combat Ship/Littoral Combat Ship Development		
	PE 0603581N		Project 33129
	Littoral Combat Ship/LCS Mission Package Development		
	PE 0603581N		Project 34018
	Littoral Combat Ship/Littoral Combat Ship Construction		

Procurement			
APPN 1810	BA 01	(Navy)	ICN 0204228
	LCS Modules		
APPN 1611	BA 02	(Navy)	ICN 212700
	Littoral Combat Ship		

General Memo

Project 33129, LCS Mission Package Development is a new project beginning in FY06.

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2004 $M				TY $M		
	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	SAR Baseline Plan Est	Current APB Concept Objective	Current Estimate
RDT&E	1172.7	1172.7	1290.0	1259.7	1211.7	1211.7	1313.7
Procurement	--	--	--	--	--	--	--
MILCON	--	--	--	--	--	--	--
Acq O&M	--	--	--	--	--	--	--
Total	1172.7	1172.7	1290.0	1259.7	1211.7	1211.7	1313.7

Quantity	SAR Baseline Plan Est	Current APB Concept	Current Estimate
RDT&E	2	2	2
Procurement	0	--	0
Total	2	2	2

Funding Summary

Appropriation and Quantity Summary

FY2006 President's Budget / December 2004 SAR (TY$ M)

Appropriation	Prior	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total
RDT&E	193.6	452.6	497.0	100.7	54.7	15.1	0.0	0.0	0.0	1313.7
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MILCON	0.0	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	0.0
PB2006 Total	193.6	452.6	497.0	100.7	54.7	15.1	0.0	0.0	0.0	1313.7
	--	--	--	--	--	--	--	--	--	--

Quantity	Prior	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	2
Production	0	0	0	0	0	0	0	0	0	0
PB2006 Total	0	0	0	0	0	0	0	0	0	2

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
2003	--	--	--	--	--	--	35.3
2004	--	--	--	--	--	--	158.3
2005	--	--	--	--	--	--	452.6
2006	--	--	--	--	--	--	497.0
2007	--	--	--	--	--	--	100.7
2008	--	--	--	--	--	--	54.7
2009	--	--	--	--	--	--	15.1
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1313.7**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2004 $M	Non End Item Recurring Flyaway BY 2004 $M	Non Recurring Flyaway BY 2004 $M	Total Flyaway BY 2004 $M	Total Support BY 2004 $M	Total Program BY 2004 $M
2003	--	--	--	--	--	--	35.6
2004	--	--	--	--	--	--	156.5
2005	--	--	--	--	--	--	438.6
2006	--	--	--	--	--	--	472.0
2007	--	--	--	--	--	--	93.7
2008	--	--	--	--	--	--	49.8
2009	--	--	--	--	--	--	13.5
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1259.7**

Appropriation changed from Research & Development, Other (R&D) 0002 to Research, Development, Test & Evaluation (RDT&E) 1319.

Low Rate Initial Production

None

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

Unit Cost History

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	MAY 2004	N/A	N/A	MAY 2004
Milestone B	JAN 2007	N/A	N/A	JAN 2007
Milestone C	DEC 2010	N/A	N/A	DEC 2010
IOC	OCT 2007	N/A	N/A	OCT 2007
Total Cost (TY $M)	1211.7	N/A	N/A	1313.7
Total Quantity	2	N/A	N/A	2
Prog. Acq. Unit Cost (PAUC)	605.850	N/A	N/A	656.850

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1211.7	--	--	1211.7
Previous Changes				
Economic	0.0	0.0	--	0.0
Quantity	0.0	0.0	--	0.0
Schedule	0.0	0.0	--	0.0
Engineering	0.0	0.0	--	0.0
Estimating	0.0	0.0	--	0.0
Other	0.0	0.0	--	0.0
Support	0.0	0.0	--	0.0
Subtotal	0.0	0.0	--	0.0
Current Changes				
Economic	+13.1	--	--	+13.1
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+88.9	--	--	+88.9
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+102.0	--	--	+102.0
Total Changes	+102.0	0.0	--	+102.0
CE - Cost Variance	1313.7	--	--	1313.7
CE - Cost & Funding	1313.7	--	--	1313.7

Summary Base Year 2004 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1172.7	--	--	1172.7
Previous Changes				
Economic	0.0	0.0	--	0.0
Quantity	0.0	0.0	--	0.0
Schedule	0.0	0.0	--	0.0
Engineering	0.0	0.0	--	0.0
Estimating	0.0	0.0	--	0.0
Other	0.0	0.0	--	0.0
Support	0.0	0.0	--	0.0
Subtotal	0.0	0.0	--	0.0
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+87.0	--	--	+87.0
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+87.0	--	--	+87.0
Total Changes	+87.0	0.0	--	+87.0
CE - Cost Variance	1259.7	--	--	1259.7
CE - Cost & Funding	1259.7	--	--	1259.7

Previous Estimate: June 2004

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+13.1
Adjustment for Current and Prior Inflation. (Estimating)	-3.4	-3.5
Adjustment to Seaframe pricing for fully funded ships in year of award and refinement of Mission Package composition and projected costs. (Estimating)	+10.2	+5.2
Removed Flight 1 Concept Studies (Estimating)	-1.9	-2.0
Added Post-Delivery and Outfitting (Estimating)	+82.1	+89.2
RDT&E Subtotal	+87.0	+102.0

Contracts

Appropriation: RDT&E	
Contract Name	**LCS Design & Const**
Contractor	Bath Iron Works (G.D.)
Contractor Location	Bath , ME 04530
Contract Number, Type	N00024-03-C-2310/5, FFP/CPAF
Award Date	July 17, 2003
Definitization Date	May 27, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
9.6	N/A	0	78.8	N/A	0	78.8	78.8

	Cost Variance	Schedule Variance
Previous Cumulative Variances	--	--
Cumulative Variances To Date	-0.2	-2.7
Net Change	-0.2	-2.7

Cost And Schedule Variance Explanations

Unfavorable Cost Variance of negative $.2M was driven primarily by evaluation of efforts associated with the Navy directed revised specification requirements.

Unfavorable Schedule Variance of negative $2.7M was driven by schedule delays in the base contract that occurred as the program assessed the impact of navy directed revised specification requirements.

Contract Comments

A contract for LCS Preliminary Design, Firm Fixed Price (FFP) was awarded to General Dynamics, Bath Iron Works on July 17, 2003. The cost for the preliminary design was $9.6M. A contract option was exercised on May 27, 2004 for the LCS Final Design, Cost Plus Award Fee at a price of $78.8M. The option for Detail Design and Construction is scheduled to be awarded in December 2005.

The change from Initial to Current contract price reflects completion of the Preliminary Design contract and award of the option for Final Systems Design with a contract price of $78.8M.

Changed quantity from 1 to 0. Quantity will be added upon award of Detail Design and Construction option in FY06.

Appropriation: RDT&E	
Contract Name	**LCS Design & Const**
Contractor	Lockheed Martin
Contractor Location	Moorestown , NJ 08057
Contract Number, Type	N00024-03-C-2311/4, FFP/CPAF
Award Date	
Definitization Date	May 27, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
10.5	N/A	0	50.1	N/A	0	50.1	50.1

	Cost Variance	Schedule Variance
Previous Cumulative Variances	--	--
Cumulative Variances To Date	-0.1	-2.9
Net Change	-0.1	-2.9

Cost And Schedule Variance Explanations

Unfavorable Cost Variance of negative $.1M was driven primarily by evaluation of efforts associated with the Navy directed revised specification requirements.

Unfavorable Schedule Variance of negative $2.9M were being driven by schedule delays in the base contract that occurred as the program assessed the impact of navy directed revised specification requirements.

Contract Comments

A contract for LCS Preliminary Design, Firm Fixed Price (FFP) was awarded to Lockheed Martin on July 17, 2003. The cost for the preliminary design was $10.5M. A contract option was exercised on May 27, 2004 for the LCS Final Design, Cost Plus Award Fee. The price of the contract is $50.1M.

The change from Initial to Current contract price reflects completion of Preliminary Design contract and award of option for Final Systems Design. Contract price is $50.1M.

Quantity changed from 1 to 0. Quantity reported on Effort #7.

Appropriation: RDT&E	
Contract Name	**LCS Dtl Dsgn & Construct**
Contractor	Lockheed Martin
Contractor Location	Moorestown , NJ 08057
Contract Number, Type	N00024-03-C-2311/7, CPAF
Award Date	December 15, 2004
Definitization Date	December 15, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
188.2	N/A	1	188.2	N/A	1	188.2	188.2

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this CPAF contract.

Contract Comments

The contract option for Detail Design and Construction was awarded to Lockheed Martin on December 15, 2004. This option is Cost Plus Award Fee, at a price of $188.2M.

Deliveries and Expenditures

Deliveries To Date	Plan	Actual	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	0	--
Total Program Quantities Delivered	0	0	2	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1313.7	Years Appropriated	3
Expenditures To Date	169.6	Percent Years Appropriated	42.86%
Percent Expended	12.91%	Appropriated to Date	646.2
Total Funding Years	7	Percent Appropriated	49.19%

Operating and Support Cost

None

Defense Acquisition Management
Information Retrieval
(DAMIR)

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-374

LCS

As of December 31, 2005

Table of Contents

Program Information

Designation And Nomenclature (Popular Name)

Littoral Combat Ship (LCS)

DoD Component

Navy

Responsible Office

Responsible Office

CAPT Donald Babcock
Naval Sea Systems Command
1333 Issac Hull Avenue, S.E.
Wash Navy Yard, DC 20376-2202
donald.e.babcock1@navy.mil

Phone 202-781-2132
Fax 202-781-4778
DSN Phone 326-2132
DSN Fax --
Date Assigned March 1, 2004

References

SAR Baseline (Planning Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated May 27, 2004

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated May 27, 2004

Mission and Description

The Littoral Combat Ship (LCS) will be optimized for flexibility in the littorals as a system of systems that are both manned and unmanned, mission reconfigurable, and deployed in LCS. It will focus on three primary anti-access mission areas: Littoral Surface Warfare operations emphasizing prosecution of small boats, mine warfare, and littoral anti-submarine warfare. Its high speed and ability to operate at economical loiter speeds will enable fast and calculated response to small boat threats, mine laying and quiet diesel submarines. LCS employment of networked sensors for Intelligence, Surveillance, and Reconnaissance (ISR) in support of Special Operations Forces (SOF) will directly enhance littoral mobility. Its shallow draft will allow easier excursion into shallower areas for both mine countermeasures and small boat prosecution. Using LCS against these asymmetric threats will enable Joint Commanders to concentrate multi-mission combatants on primary missions such as precision strike, battle group escort and theater air defense.

Executive Summary

This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code.

The first ship of the Littoral Combat Ship (LCS) Class, LCS 1 has been named USS FREEDOM. LCS 1, awarded to Lockheed Martin, is currently under construction in Marinette, WI. Key events of 2005 include the start of fabrication and the keel laying which occurred 2 June 2005. LCS 1 will be homeported in San Diego, CA.

General Dynamics, Bath Iron Works, completed the Final Design phase for the second ship of the LCS Class with a successful Final Contract Design Review in August 2005 and was awarded the contract option to begin Detail Design and Construction on 14 October 2005. Keel Laying is scheduled for 19 January 2006.

The LCS Acquisition Strategy is structured in Flights. The original plan was to build four Flight 0 ships, two of each design and to begin a Flight 1, new design, in FY08. The results of analysis conducted in 2005 concluded that the existing designs were sufficiently meeting the program expectations and requirements. It was therefore determined to continue to build these two existing designs through at least FY09. The LCS acquisition strategy has been revised to address this restructuring as well as acknowledging the two ships added by Congress in the FY06 Appropriation Bill.

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

Threshold Breaches

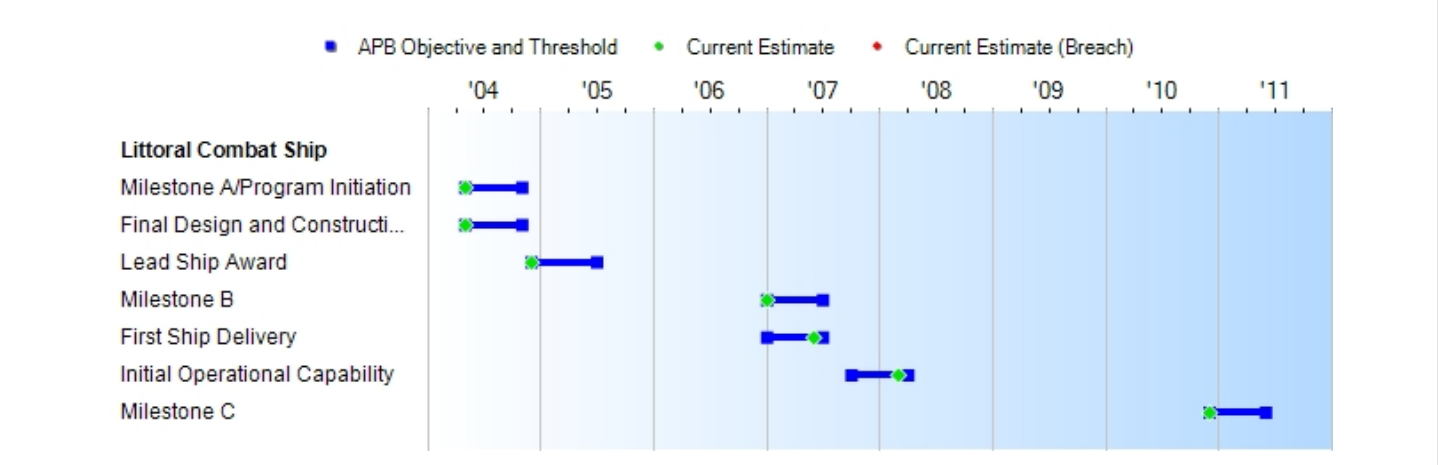
APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☑
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☑
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

There is a breach in the RDT&E Current Estimate from the established Acquisition Program Baseline (APB) cost threshold caused by the change in the Acquisition Strategy to defer a Flight 1 decision and to continue Flight 0 through at least FY09. A Program Deviation Report (PDR) has been provided and the APB has been updated to reflect the new program estimates. The APB is expected to be approved before submission of this SAR to Congress.

Schedule



Milestones	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	
Milestone A/Program Initiation	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Final Design and Construction Contract Award	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Lead Ship Award	DEC 2004	DEC 2004	JUL 2005	DEC 2004	
Milestone B	JAN 2007	JAN 2007	JUL 2007	JAN 2007	
First Ship Delivery	JAN 2007	JAN 2007	JUL 2007	JUN 2007	(Ch-1)
Initial Operational Capability	OCT 2007	OCT 2007	APR 2008	MAR 2008	(Ch-2)
Milestone C	DEC 2010	DEC 2010	JUN 2011	DEC 2010	

Change Explanations

(Ch-1) First Ship Delivery changed from JAN 2007 to JUN 2007. Reduction gear and diesel engine manufacturing and factory acceptance test delays have created subsequent ship builder construction impacts not entirely solvable through work arounds.

(Ch-2) Initial Operational Capability (IOC) changed from OCT 2007 to MAR 2008. Shift in IOC is attributed to change of First Ship Delivery date.

Memo

None

Performance

Characteristics	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Demonstrated Performance	Current Estimate	
Sprint Speed (kts)	50	50	40	TBD	42	(Ch-1)
Navigational Draft (ft)	10	10	20	TBD	13.45	(Ch-2)
Range at Transit Speed (includes payload)	4,300 nm @ 20 kt s	4,300 nm @ 20 kts	3,500 nm @ 18 kts	TBD	3,550 nm @ 18 kts	
Mission Package Payload (Weight)	210 MT (130 MT) mission package/80 MT mission package fuel)	210 MT (130 MT) mission package/80 MT mission package fuel)	180 MT (105 MT mission package/75 MT mission package fuel)	TBD	180 MT (105 MT) mission package/75 MT mission package fuel)	
Interoperability Informatin Exchange Requirements (IER)	Achieve 100% of top-level IERs	Achieve 100% of top-level IERs	Achieve 100% of critical top-level IERs	TBD	Achieve 100% of top-level IERs designated as critical	
Core Crew Manning (# Core Crew Members)	15	15	50	TBD	44 Core Crew Members	
Focused Mission Execution	Demonstrate separate DTE scenari os in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapon s and sensor systems) to the sea frame	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	TBD	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	

Acronyms

ASW - Anti-Submarine Warfare
DTE - Detect to Engage
FT - Feet
KTS - Knots
MIW - Mine Warfare
MT - Metric Tons
NM - Nautical Miles

SUW - Surface Warfare

Change Explanations

(Ch-1) Sprint Speed revised from 45kts to 42kts based on increased ship weight.

(Ch-2) Navigational Draft changed from 13 ft to 13.45 ft based on increased ship weight.

Memo

None

Track To Budget

RDT&E				
APPN 1319		PE 0603581N	(Navy)	Project 3096
	Littoral Combat Ship/Littoral Combat Ship Development			
APPN 1319		PE 0603581N	(Navy)	Project 3129
	Littoral Combat Ship/LCS Mission Package Development			
APPN 1319		PE 0603581N	(Navy)	Project 4018
	Littoral Combat Ship/Littoral Combat Ship Construction			

Procurement				
APPN 1810	BA 01		(Navy)	ICN 0204
	LCS Modules			
APPN 1611	BA 02		(Navy)	ICN 2127
	Littoral Combat Ship			

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2004 $M				TY $M		
	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	SAR Baseline Plan Est	Current APB Concept Objective	Current Estimate
RDT&E	1172.7	1172.7	1290.0	**1595.9** [1]	1211.7	1211.7	1701.9
Procurement	--	--	--	--	--	--	--
MILCON	--	--	--	--	--	--	--
Acq O&M	--	--	--	--	--	--	--
Total	1172.7	1172.7	1290.0	1595.9	1211.7	1211.7	1701.9

[1] **APB Breach**

Quantity	SAR Baseline Plan Est	Current APB Concept	Current Estimate
RDT&E	2	2	2
Procurement	0	--	0
Total	2	2	2

A Low Rate Initial Production (LRIP) decision has not been made for this program.

Funding Summary

Appropriation and Quantity Summary

FY2007 President's Budget / December 2005 SAR (TY$ M)

Appropriation	Prior	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total
RDT&E	646.2	580.7	304.4	120.3	38.1	12.2	0.0	0.0	1701.9
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
PB2007 Total	646.2	580.7	304.4	120.3	38.1	12.2	0.0	0.0	1701.9
PB2006 Total	646.2	497.0	100.7	54.7	15.1	0.0	0.0	0.0	1313.7
Delta	0.0	83.7	203.7	65.6	23.0	12.2	0.0	0.0	388.2

Quantity	Prior	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total
Development	0	0	0	0	0	0	0	0	2
Production	0	0	0	0	0	0	0	0	0
PB2007 Total	0	0	0	0	0	0	0	0	2
PB2006 Total	0	0	0	0	0	0	0	0	2
Delta	0	0	0	0	0	0	0	0	0

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
2003	--	--	--	--	--	--	35.3
2004	--	--	--	--	--	--	160.1
2005	--	--	--	--	--	--	450.8
2006	--	--	--	--	--	--	580.7
2007	--	--	--	--	--	--	304.4
2008	--	--	--	--	--	--	120.3
2009	--	--	--	--	--	--	38.1
2010	--	--	--	--	--	--	12.2
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1701.9**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2004 $M	Non End Item Recurring Flyaway BY 2004 $M	Non Recurring Flyaway BY 2004 $M	Total Flyaway BY 2004 $M	Total Support BY 2004 $M	Total Program BY 2004 $M
2003	--	--	--	--	--	--	35.6
2004	--	--	--	--	--	--	157.0
2005	--	--	--	--	--	--	430.9
2006	--	--	--	--	--	--	542.5
2007	--	--	--	--	--	--	278.3
2008	--	--	--	--	--	--	107.7
2009	--	--	--	--	--	--	33.4
2010	--	--	--	--	--	--	10.5
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1595.9**

Low Rate Initial Production

None

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

Unit Cost History

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	MAY 2004	N/A	N/A	MAY 2004
Milestone B	JAN 2007	N/A	N/A	JAN 2007
Milestone C	DEC 2010	N/A	N/A	DEC 2010
IOC	OCT 2007	N/A	N/A	MAR 2008
Total Cost (TY $M)	1211.7	N/A	N/A	1701.9
Total Quantity	2	N/A	N/A	2
Prog. Acq. Unit Cost (PAUC)	605.850	N/A	N/A	850.950

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1211.7	--	--	1211.7
Previous Changes				
Economic	+13.1	--	--	+13.1
Quantity	0.0	--	--	0.0
Schedule	0.0	--	--	0.0
Engineering	0.0	--	--	0.0
Estimating	+88.9	--	--	+88.9
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	+102.0	--	--	+102.0
Current Changes				
Economic	+18.7	--	--	+18.7
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+369.5	--	--	+369.5
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+388.2	--	--	+388.2
Total Changes	+490.2	--	--	+490.2
CE - Cost Variance	1701.9	--	--	1701.9
CE - Cost & Funding	1701.9	--	--	1701.9

Summary Base Year 2004 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1172.7	--	--	1172.7
Previous Changes				
Economic	0.0	--	--	0.0
Quantity	0.0	--	--	0.0
Schedule	0.0	--	--	0.0
Engineering	0.0	--	--	0.0
Estimating	+87.0	--	--	+87.0
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	+87.0	--	--	+87.0
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	--	--	--
Engineering	--	--	--	--
Estimating	+336.2	--	--	+336.2
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+336.2	--	--	+336.2
Total Changes	+423.2	--	--	+423.2
CE - Cost Variance	1595.9	--	--	1595.9
CE - Cost & Funding	1595.9	--	--	1595.9

Previous Estimate: December 2004

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+18.7
Adjustment for Current and Prior Inflation. (Estimating)	-14.9	-15.7
Adjustment to seaframe pricing (Estimating)	+89.7	+97.4
Adjustment to program development to reflect postponement of Flight 1. (Estimating)	+98.6	+107.7
Adjustment to Mission Module development to reflect postponement of Flight 1. (Estimating)	+162.8	+180.1
RDT&E Subtotal	+336.2	+388.2

Contracts

Appropriation: RDT&E	
Contract Name	**LCS Final System Design**
Contractor	Bath Iron Works (G.D.)
Contractor Location	Bath , ME 04530
Contract Number, Type	N00024-03-C-2310, CPAF
Award Date	May 27, 2004
Definitization Date	May 27, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
78.8	N/A	0	99.5	N/A	0	120.8	120.8

	Cost Variance	Schedule Variance
Previous Cumulative Variances	--	--
Cumulative Variances To Date (11/30/2005)	-0.1	-2.5
Net Change	-0.1	-2.5

Cost And Schedule Variance Explanations

NOTE: CONTRACT COST AND PERFORMANCE DATA CONTAINED IN THIS SECTION IS CONSIDERED BUSINESS SENSITIVE AND FOR OFFICIAL USE ONLY.

This is first report for this contact.

The full impact to LCS vendors due to Hurricane Katrina is still being assessed by the Prime and Government.

Unfavorable Net Cost Variance of negative $.1M is considered insignificant.

Unfavorable Net Schedule Variance of negative $2.5M is primarily attributable to the Vendor for Aluminum (Pierce) in New Orleans, who was adversely affected by Hurricane Katrina and currently have only a single burning machine online at their facility, which has delayed the delivery of aluminum.

Contract Comments

December 2004 SAR incorrectly reflected the Preliminary Design (PD) effort which has been changed to the Final System Design (FSD) effort. The change of Initial Contract Price value from $9.6M for PD to $78.8M for FSD reflects the funding and tasking associated with this contract. Current contract value of $99.5M reflects contract scope changes associated with design and engineering development changes associated with Naval Vessel Rules and the inclusion of common interface development. General Dynamics continues this Final Design effort in support of LCS 2.

Appropriation: RDT&E	
Contract Name	**LCS Dtl Dsgn & Construct**
Contractor	Lockheed Martin
Contractor Location	Moorestown , NJ 08057
Contract Number, Type	N00024-03-C-2311, CPAF/CPIF
Award Date	December 15, 2004
Definitization Date	December 15, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
188.2	N/A	1	170.7	N/A	1	263.8	263.8

	Cost Variance	Schedule Variance
Previous Cumulative Variances	--	--
Cumulative Variances To Date	-18.1	-12.9
Net Change	-18.1	-12.9

Cost And Schedule Variance Explanations

NOTE: CONTRACT COST AND PERFORMANCE DATA CONTAINED IN THIS SECTION IS CONSIDERED BUSINESS SENSITIVE AND FOR OFFICIAL USE ONLY.

The contract option for Detail Design and Construction was awarded on December 15, 2004 and did not report variances. This is the first variance report for this contract.

The full impact to LCS vendors due to Hurricane Katrina is still being assessed by the Prime and Government.

The Unfavorable Net Cost Variance of negative $18.2M was driven by additional construction costs of Module 861 by Bollinger Shipyard (which required manufacturing of cradles and fixtures, by Marinette Marine, to receive Module 861 was an unplanned cost), additional steel cost, and weld training in accordance with Tech Pub 248 as required by Naval Vessel Rules.

The Unfavorable Net Schedule Variance of negative $12.9M is attributable to late release of detailed drawings in areas such as the Propulsion Plant, Electrical Cable and Wireways, and the Hull Structure causing late ordering/receipt of material, late American Bureau of Shipping (ABS) approval of design changes in areas such as Sliding Doors, Quick Acting Weathertight Aluminum Door, late delivery of reduction gears and diesel engines, and the Ship Service Switchboard, and delays in Factory Acceptance Tests for the Fire Control System (FCS-RAM).

Contract Comments

Lockheed Martin has successfully met all contract milestones on time, including start fabrication on 1 February, 2005 and keel laying on 2 June, 2005.

Current Contract Price, less than Initial Contract Price, is attributed to CAIV trades made and the transfer of Contractor Furnished Equipment (CFE) to Government Furnished Equipment (GFE), partially offset by the cost of implementing Naval Vessel Rules resulting in a net adjustment of $17.5M.

Lockheed Martin requested and the LCS Program Office approved an Over Target Baseline of $24.8M. The Over-Target Baseline (OTB) was established in October 2005 for this effort.

Deliveries and Expenditures

Deliveries To Date	Plan	Actual	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	0	--
Total Program Quantities Delivered	0	0	2	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1701.9	Years Appropriated	4
Expenditures To Date	553.7	Percent Years Appropriated	50.00%
Percent Expended	32.53%	Appropriated to Date	1226.9
Total Funding Years	8	Percent Appropriated	72.09%

Operating and Support Cost

None

Defense Acquisition Management
Information Retrieval
(DAMIR)

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-374

LCS

As of December 31, 2006

Table of Contents

Program Information

Designation And Nomenclature (Popular Name)

Littoral Combat Ship (LCS)

DoD Component

Navy

Responsible Office

Responsible Office

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Date Assigned February 26, 2007

References

SAR Baseline (Planning Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated May 27, 2004

Approved APB

DAE Approved Acquisition Program Baseline (APB) dated May 27, 2004

Mission and Description

The Littoral Combat Ship (LCS) will be optimized for flexibility in the littorals as a system of systems that are both manned and unmanned, mission reconfigurable, and deployed in LCS. It will focus on three primary anti-access mission areas: Littoral Surface Warfare operations emphasizing prosecution of small boats, mine warfare, and littoral anti-submarine warfare. Its high speed and ability to operate at economical loiter speeds will enable fast and calculated response to small boat threats, mine laying and quiet diesel submarines. LCS employment of networked sensors for Intelligence, Surveillance, and Reconnaissance (ISR) in support of Special Operations Forces (SOF) will directly enhance littoral mobility. Its shallow draft will allow easier excursion into shallower areas for both mine countermeasures and small boat prosecution. Using LCS against these asymmetric threats will enable Joint Commanders to concentrate multi-mission combatants on primary missions such as precision strike, battle group escort and theater air defense.

Executive Summary

This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code. Flight 0 RDT&E funds procurement of two LCS Seaframes (LCS 1 and LCS 2) (including outfitting, post delivery and initial spares), four Mission Packages and associated LCS development costs.

The first ship of the Littoral Combat Ship (LCS) Class, LCS 1, USS FREEDOM is under contract with Lockheed Martin and is being built by Marinette Marine in Marinette, WI. Key events of 2006 include the successful launch of USS FREEDOM on September 23, 2006 and the award of the contract option for LCS 3, to be built by Bollinger Shipyard in Lockport, LA. LCS 1 is approximately 70% complete as of Jan 07.

There is a breach to the Schedule as established in the APB. First Ship Delivery (LCS 1) and Initial Operating Capability delays are a result of contractor performance and lead ship challenges.

Cost performance on LCS 1 has declined significantly below acceptable levels. In addition, the estimated price to government for LCS 3 (scheduled to start fabrication at Bollinger shipyards in Lockport, LA in February 2007) has increased significantly. As a result, the Navy determined it is not prudent to start fabrication on LCS 3 without a full understanding of costs and cost drivers.

On January 12, 2007, NAVSEA issued a Stop Work Order to Lockheed Martin for LCS 3. Construction on LCS 1 continues.

On March 15, 2007, the Secretary of the Navy announced that he is prepared to lift the stop work order for construction of LCS 3, contingent upon the Navy and Lockheed Martin reaching agreement on a renegotiated contract. A mid April 2007, deadline has been set for Lockheed Martin to decide if it will agree to the new contract terms.

The second ship of the Littoral Combat Ship Class, LCS 2, has been named USS INDEPENDENCE. LCS 2 is under contract to General Dynamics, Bath Iron Works and is being constructed by Austal Shipyard in Mobile, AL. Key events of 2006 include Keel Laying, on January 19, 2006 and the award of the contract option for LCS 4, also to be built by Austal Shipyard in Mobile, AL. LCS 2 is approximately 40% complete as of Jan 07.

The LCS Acquisition Strategy is structured in Flights. The original plan was to build four Flight 0 ships, two of each design and to begin a Flight 1, new design, in FY08.

The Department has developed an LCS 1-4 financing plan and has forwarded to OSD for concurrence. The Department is also developing a revision to the LCS 5 and beyond acquisition strategy.

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

Threshold Breaches

APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☑
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☑
	APUC	☐

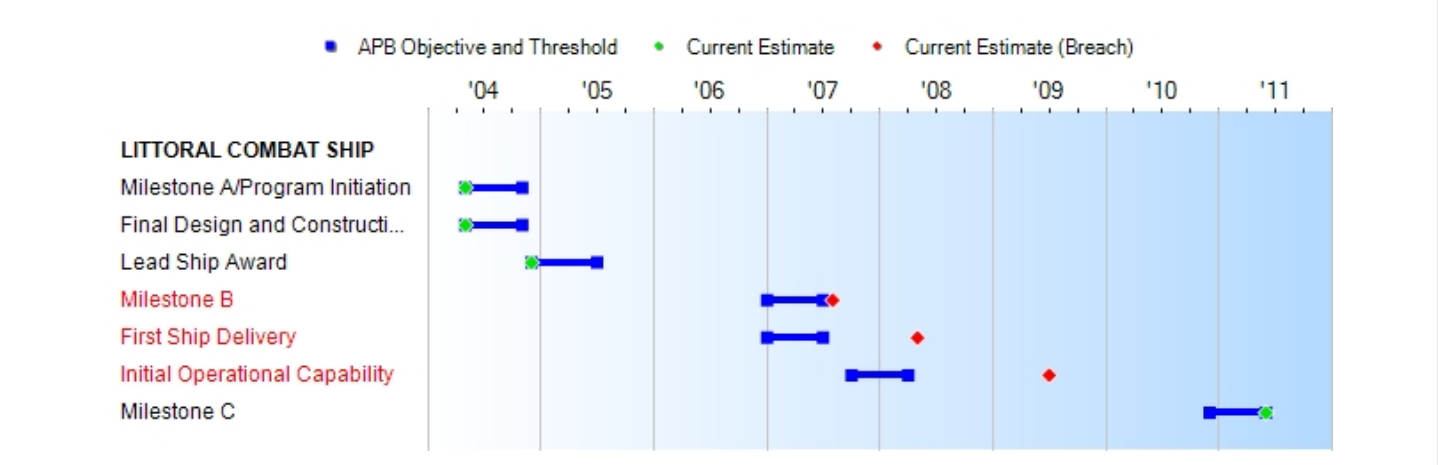
Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

There is a breach in the RDT&E Current Estimate from the established Acquisition Program Baseline (APB) cost threshold caused cost growth in LCS 1 and 2 and by the change in the Acquisition Strategy to defer a Flight 1 decision and to continue Flight 0 through at least FY09. A Program Deviation Report (PDR) has been provided and the APB will be updated to reflect the new program estimates. The APB is expected to be approved by the Milestone Decision Authority at Milestone B.

There is a breach to the Schedule as established in the APB. First Ship Delivery and Initial Operating Capability delays are being affected by lead ship design changes and reduction gear and diesel engine manufacturing and factory acceptance test delays which created subsequent ship builder construction impacts. LCS 1 design is now 98% complete, pending the results of ship certification test and trials planned for later this year. A PDR will be provided and the APB will be updated to reflect the new program estimates.

Schedule



Milestones	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	
Milestone A/Program Initiation	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Final Design and Construction Contract Award	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Lead Ship Award	DEC 2004	DEC 2004	JUL 2005	DEC 2004	
Milestone B	JAN 2007	JAN 2007	JUL 2007	**AUG 2007**[1]	(Ch-1)
First Ship Delivery	JAN 2007	JAN 2007	JUL 2007	**MAY 2008**[1]	(Ch-2)
Initial Operational Capability	OCT 2007	OCT 2007	APR 2008	**JUL 2009**[1]	(Ch-2)
Milestone C	DEC 2010	DEC 2010	JUN 2011	JUN 2011	(Ch-3)

[1] **APB Breach**

Acronyms

IOC - Initial Operational Capability

Change Explanations

(Ch-1) Milestone B changed from JAN 2007 to AUG 2007 (exact date to be scheduled by OSD). Shift is needed to incorporate the results of Navy and Industry program assessment currently in progress, Secretary of the Navy's financing plan for LCS 1-4 and the revision to the LCS 5 and beyond acquisition strategy.

(Ch-2) First Ship Delivery and Initial Operational Capability (IOC) changed from JUN 2007 and MAR 2008 to MAY 2008 and JUL 2009 respectively. Lead ship design changes and reduction gear and diesel engine manufacturing and factory acceptance test delays have created subsequent ship builder construction impacts not solvable through work arounds. Also contributing to the change is the significant amount of out of sequence work required to achieve successful on-time launch of LCS 1, leading to significant out of sequence work in the post launch period. The Program Managers assessment is that likely delays in execution of the test program will delay delivery until after the ice period in the Great Lakes.

(Ch-3) Milestone C Date changed from DEC 2010 to JUN 2011 to better reflect the planned IOC date of LCS 1 and LCS 5 and beyond Acquisition Strategy.

Memo

None

Performance

Characteristics	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Demonstrated Performance	Current Estimate	
Sprint Speed (kts)	50	50	40	TBD	40	(Ch-1)
Navigational Draft (ft)	10	10	20	TBD	14	(Ch-2)
Range at Transit Speed (includes payload)	4,300 nm @ 20 kt s	4,300 nm @ 20 kts	3,500 nm @ 18 kts	TBD	2,650 nm @ 18 kts	(Ch-3)
Mission Package Payload (Weight)	210 MT (130 MT) mission package/80 MT mission package fuel)	210 MT (130 MT) mission package/80 MT mission package fuel)	180 MT (105 MT mission package/75 MT mission package fuel)	TBD	180 MT (105 MT) mission package/75 MT mission package fuel)	
Interoperability Informatin Exchange Requirements (IER)	Achieve 100% of top-level IERs	Achieve 100% of top-level IERs	Achieve 100% of critical top-level IERs	TBD	Achieve 100% of top-level IERs designated as critical	
Core Crew Manning (# Core Crew Members)	15	15	50	TBD	40 Core Crew Members	(Ch-4)
Focused Mission Execution	Demonstrate separate DTE scenari os in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapon s and sensor systems) to the sea frame	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	TBD	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	

Acronyms

ASW - Anti-Submarine Warfare
DTE - Detect to Engage
FT - Feet
KTS - Knots
MIW - Mine Warfare
MT - Metric Tons
NM - Nautical Miles

SUW - Surface Warfare

Change Explanations

(Ch-1) Sprint speed revised from 42kts to 40kts based on increased ship weight.

(Ch-2) Navigational Draft changed from 13.45 ft to 14 ft based on previously reporting mean draft vice navigational draft.

(Ch-3) Range at Transit Speed revised from 3,550 nm to 2,650 nm based on increased ship weight.

(Ch-4) Core Crew manning revised from 44 Core Crew to 40 Core Crew based on accepted LCS manning model.

Memo

None

Track To Budget

RDT&E				
APPN 1319		PE 0603581N	(Navy)	Project 3096
	Littoral Combat Ship/Littoral Combat Ship Development			
APPN 1319		PE 0603581N	(Navy)	Project 3129
	Littoral Combat Ship/LCS Mission Package Development			
APPN 1319		PE 0603581N	(Navy)	Project 4018
	Littoral Combat Ship/Littoral Combat Ship Construction			

Procurement			
APPN 1810	BA 01	(Navy)	ICN 0204
	LCS Modules		
APPN 1611	BA 02	(Navy)	ICN 2127
	Littoral Combat Ship		

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2004 $M				TY $M		
	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	SAR Baseline Plan Est	Current APB Concept Objective	Current Estimate
RDT&E	1172.7	1172.7	1290.0	**1791.8** [1]	1211.7	1211.7	1938.9
Procurement	--	--	--	--	--	--	--
MILCON	--	--	--	--	--	--	--
Acq O&M	--	--	--	--	--	--	--
Total	1172.7	1172.7	1290.0	1791.8	1211.7	1211.7	1938.9

[1] **APB Breach**

This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code.

Quantity	SAR Baseline Plan Est	Current APB Concept	Current Estimate
RDT&E	2	2	2
Procurement	0	--	0
Total	2	2	2

A Low Rate Initial Production (LRIP) decision has not been made for this program.

Funding Summary

Appropriation and Quantity Summary

FY2008 President's Budget / December 2006 SAR (TY$ M)

Appropriation	Prior	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	To Complete	Total
RDT&E	1230.2	329.4	160.4	96.4	49.5	45.0	28.0	0.0	0.0	1938.9
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MILCON	0.0	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	0.0
PB2008 Total	1230.2	329.4	160.4	96.4	49.5	45.0	28.0	0.0	0.0	1938.9
PB2007 Total	1226.9	304.4	120.3	38.1	12.2	0.0	0.0	0.0	0.0	1701.9
Delta	3.3	25.0	40.1	58.3	37.3	45.0	28.0	0.0	0.0	237.0

Quantity	Prior	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	To Complete	Total
Development	0	0	0	0	0	0	0	0	0	2
Production	0	0	0	0	0	0	0	0	0	0
PB2008 Total	0	0	0	0	0	0	0	0	0	2
PB2007 Total	0	0	0	0	0	0	0	0	0	2
Delta	0	0	0	0	0	0	0	0	0	0

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
2003	--	--	--	--	--	--	35.3
2004	--	--	--	--	--	--	160.1
2005	--	--	--	--	--	--	450.8
2006	--	--	--	--	--	--	584.0
2007	--	--	--	--	--	--	329.4
2008	--	--	--	--	--	--	160.4
2009	--	--	--	--	--	--	96.4
2010	--	--	--	--	--	--	49.5
2011	--	--	--	--	--	--	45.0
2012	--	--	--	--	--	--	28.0
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1938.9**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2004 $M	Non End Item Recurring Flyaway BY 2004 $M	Non Recurring Flyaway BY 2004 $M	Total Flyaway BY 2004 $M	Total Support BY 2004 $M	Total Program BY 2004 $M
2003	--	--	--	--	--	--	35.6
2004	--	--	--	--	--	--	156.9
2005	--	--	--	--	--	--	430.4
2006	--	--	--	--	--	--	542.4
2007	--	--	--	--	--	--	298.7
2008	--	--	--	--	--	--	142.1
2009	--	--	--	--	--	--	83.5
2010	--	--	--	--	--	--	42.0
2011	--	--	--	--	--	--	37.4
2012	--	--	--	--	--	--	22.8
Subtotal	**2**	**--**	**--**	**--**	**--**	**--**	**1791.8**

Low Rate Initial Production

None

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

Unit Cost History

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	MAY 2004	N/A	N/A	MAY 2004
Milestone B	JAN 2007	N/A	N/A	AUG 2007
Milestone C	DEC 2010	N/A	N/A	JUN 2011
IOC	OCT 2007	N/A	N/A	JUL 2009
Total Cost (TY $M)	1211.7	N/A	N/A	1938.9
Total Quantity	2	N/A	N/A	2
Prog. Acq. Unit Cost (PAUC)	605.850	N/A	N/A	969.450

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1211.7	--	--	1211.7
Previous Changes				
Economic	+31.8	--	--	+31.8
Quantity	0.0	--	--	0.0
Schedule	0.0	--	--	0.0
Engineering	0.0	--	--	0.0
Estimating	+458.4	--	--	+458.4
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	+490.2	--	--	+490.2
Current Changes				
Economic	+8.4	--	--	+8.4
Quantity	--	--	--	--
Schedule	+76.1	--	--	+76.1
Engineering	+73.0	--	--	+73.0
Estimating	+79.5	--	--	+79.5
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+237.0	--	--	+237.0
Total Changes	+727.2	--	--	+727.2
CE - Cost Variance	1938.9	--	--	1938.9
CE - Cost & Funding	1938.9	--	--	1938.9

Summary Base Year 2004 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1172.7	--	--	1172.7
Previous Changes				
Economic	0.0	--	--	0.0
Quantity	0.0	--	--	0.0
Schedule	0.0	--	--	0.0
Engineering	0.0	--	--	0.0
Estimating	+423.2	--	--	+423.2
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	+423.2	--	--	+423.2
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	+66.6	--	--	+66.6
Engineering	+64.3	--	--	+64.3
Estimating	+65.0	--	--	+65.0
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+195.9	--	--	+195.9
Total Changes	+619.1	--	--	+619.1
CE - Cost Variance	1791.8	--	--	1791.8
CE - Cost & Funding	1791.8	--	--	1791.8

Previous Estimate: December 2005

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	+8.4
Re-phasing work to reflect postponement of Flight 1 (Schedule)	+66.6	+76.1
Additional scope for Flight 0 training and testing (Engineering)	+25.5	+29.3
Additional scope for Mission Module development (Engineering)	+38.8	+43.7
Adjustment for Current and Prior Inflation. (Estimating)	-6.1	-6.5
Revised estimates for Congressional small business innovative research (SBIR) adjustments (Estimating)	-11.0	-11.7
Increased estimate for program development of Flight 0 operational evaluation planning and postponement of Flight 1 (Estimating)	+70.6	+86.1
Decreased estimate for Mission Module development (Estimating)	-12.5	-14.3
Increased Seaframe pricing (Estimating)	+24.0	+25.9
RDT&E Subtotal	+195.9	+237.0

Contracts

Appropriation: RDT&E	
Contract Name	**LCS Dtl Dsgn & Construct**
Contractor	G.D. Bath Iron Works
Contractor Location	Bath , ME 04530
Contract Number, Type	N00024-03-C-2310/8, CPAF/CPIF
Award Date	October 14, 2005
Definitization Date	October 14, 2005

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
223.2	N/A	1	230.0	N/A	1	325.5	398.9

	Cost Variance	Schedule Variance
Previous Cumulative Variances	--	--
Cumulative Variances To Date	-3.4	-3.9
Net Change	-3.4	-3.9

Cost And Schedule Variance Explanations

Unfavorable Net Cost Variance of negative $3.3M is caused by the need for additional GD/Austal Systems Engineering resources, and the negative impact on construction efficiency due to a high personnel turnover rate at Austal caused by Hurricane Katrina.

Unfavorable Net Schedule Variance of negative $1.4M reflects the scope of fabrication and assembly being greater than anticipated, delivery of electrical drawings later than planned, impacts of build specification changes, and high personnel turnover.

Contract Comments

Changes to Contract Target Price are due to scope adjustments for Naval Vessel Rules (NVR), Mission System Ship Integration Team (MSSIT), and the finalization of the Build Specification.

General Dynamics requested and Navy approved and Over Target Baseline (OTB) for LCS 2 of $315M (cost) in February 2007. This OTB has been implemented and is reported in this SAR.

Program Managers and Contractors Estimate as shown are price to government which accounts for award fee. Contractors EAC is $315.5M.

Appropriation: RDT&E	
Contract Name	**LCS Dtl Dsgn & Construct**
Contractor	Lockheed Martin
Contractor Location	Moorestown , NJ 08057
Contract Number, Type	N00024-03-C-2311/7, CPAF/CPIF
Award Date	December 15, 2004
Definitization Date	December 15, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
188.2	N/A	1	214.1	N/A	1	325.0	376.9

	Cost Variance	Schedule Variance
Previous Cumulative Variances	--	--
Cumulative Variances To Date	-72.8	-24.6
Net Change	-72.8	-24.6

Cost And Schedule Variance Explanations

The Unfavorable Net Cost Variance of negative $54.7M was driven by lead ship design changes and resequencing work to accommodate the late main propulsion reduction gears and the significant impact on hull structure, deck house structure and foundation work complicated by the drive to launch.

The Unfavorable Net Schedule Variance of negative $11.7M is primarily attributable to effect of late delivery of the main propulsion reduction gears to Marinette Marine causing less than optimal sequencing of ship construction work. Additional impacts caused by late receipt and approval of the final shock analysis of the water jets, late delivery of the Reconfigurable Space 1/Reconfigurable Space 2 sliding watertight doors, and late mission space loading hatch design.

Contract Comments

Changes to Contract Target Price are due to scope adjustments for Naval Vessel Rules (NVR), Mission System Ship Integration Team (MSSIT), and the finalization of the Build Specification.

Program Managers and Contractors Estimate as shown are price to government which accounts for contractor investment and award fee. Contractor EAC is $350.4M.

Cost performance on LCS 1 has declined significantly below acceptable levels. In addition, the estimated price to government (PTG) for LCS 3 (scheduled to start fabrication at Bollinger shipyards in Lockport, LA in February 2007) has increased significantly. As a result, the Navy determined it is not prudent to start fabrication on LCS 3 without a full understanding of costs and cost drivers.

On 12 January 2007, NAVSEA issued a Stop Work Order to Lockheed Martin for LCS 3. Construction on LCS 1 continues. A full root cause analysis was completed to develop a full understanding of costs and cost drivers for all four LCS ships.

Lockheed Martin requested an Over Target Baseline (OTB) for LCS 1 of $394.9 (cost) on March 9, 2007. This OTB has not yet been approved by the Navy.

Deliveries and Expenditures

Deliveries To Date	Plan	Actual	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	0	--
Total Program Quantities Delivered	0	0	2	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	1938.9	Years Appropriated	5
Expenditures To Date	1105.0	Percent Years Appropriated	50.00%
Percent Expended	56.99%	Appropriated to Date	1559.6
Total Funding Years	10	Percent Appropriated	80.44%

Operating and Support Cost

None

Defense Acquisition Management
Information Retrieval
(DAMIR)

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-374

LCS

As of December 31, 2007

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Program Information

Designation And Nomenclature (Popular Name)

Littoral Combat Ship (LCS)

DoD Component

Navy

Responsible Office

Responsible Office

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DSN Phone 326-2132
DSN Fax --
Date Assigned February 26, 2007

References

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Executive Summary

This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code. Flight 0 RDT&E funds procurement of two LCS Seaframes (LCS 1 and LCS 2) (including outfitting, post delivery and initial spares), four Mission Packages and associated LCS development costs.

The LCS Acquisition Strategy is structured in Flights. The original plan was to build four Flight 0 ships, two of each design and to begin a Flight 1, new design, in FY08. The results of analysis conducted in 2005 concluded that the existing designs were sufficiently meeting the program expectations and requirements. It was therefore determined to continue to build these two existing designs through at least FY09. The LCS Seaframes procured during FY08 and FY09 are designated Flight 0+ and will incorporate the existing designs from the incumbent industry teams along with some Engineering Change Proposals, improved production techniques and material improvements discovered as a result of the construction and testing of LCS 1 and 2.

The first ship of the Littoral Combat Ship (LCS) Class, LCS 1, USS FREEDOM is under contract with Lockheed Martin and is being constructed by Marinette Marine in Marinette, WI.

The second ship of the Littoral Combat Ship Class, LCS 2, USS INDEPENDENCE is under contract to General Dynamics, Bath Iron Works and is being constructed by Austal Shipyard in Mobile, AL.

Cost growth identified in 2007 on LCS 1-4 resulted in a detailed Navy assessment of program cost and structure and acquisition strategy for ships 5 and beyond.

Negotiations to restructure the Lockheed Martin contract due to cost growth were unsuccessful, and on April 12, 2007, the contract option for construction on LCS 3 was terminated in part for convenience. The Lockheed Martin estimation of termination cost of this effort is still in negotiation with Defense Contract Management Agency (DCMA) Philadelphia as the Terminating Contract Office. The termination proposal is due one year from termination and is expected April 2008. LCS 1 will continue as a cost plus effort.

The General Dynamics contract for LCS 2 and 4 was continuously monitored for cost growth and the decision to negotiate a possible contract restructuring with General Dynamics was made on September 7, 2007. NAVSEA terminated LCS 4 on November 1, 2007, in part, for the convenience of the Government. The termination proposal is due one year from termination and is expected November 2008. LCS 2 will continue as a cost plus effort.

As planned, the Navy will continue the procurement of both Flight 0 designs through FY08 and FY09, but at a reduced quantity. This reflects the urgent operational need for this ship. On January 24, 2008 the Defense Acquisition Executive (DAE) reviewed and approved the revised LCS Acquisition Strategy for the FY08 and FY09 ships. An additional result of the LCS program restructuring is the scheduling of a Milestone A' in approximately June 2008 with a Milestone B decision deferred until FY10.

LCS Mine Warfare (MIW) pre-commissioning units presided at the first LCS MIW Mission Package Rollout Ceremony on September 14, 2007 at the Naval Surface Warfare Center (NSWC) in Panama City, Panama City, Fl.

As a part of the approved LCS 1-4 financing plan, the decision was forwarded and approved to cancel the procurement of the two FY07 appropriated ships and to make the $519M appropriated for the 2 FY07 ships available for reprogramming actions. Congress approved $345M to fund LCS through CY07 FY07 from the Above Threshold Reprogramming (ATR) and Omnibus Reprogramming actions. FY08 Appropriations Conference appropriated $337M for one (1) ship (to be combined with the materials purchased from the terminated ships) and added $81M to FY08 R&D toward the completion of LCS 1 & 2 and rescinded $81M of the remaining FY07 SCN funds. The FY08 Appropriations Conference also zeroed the LCS Mission Module OPN procurement funding, eliminating one MIW mission package and one Surface Warfare (SUW) mission package indicating it was due to buying Mission Packages ahead of need due to changes in the ship procurement profile.

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

Threshold Breaches

APB Breaches		
Schedule		☑
Performance		☐
Cost	RDT&E	☑
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
Unit Cost	PAUC	☑
	APUC	☐

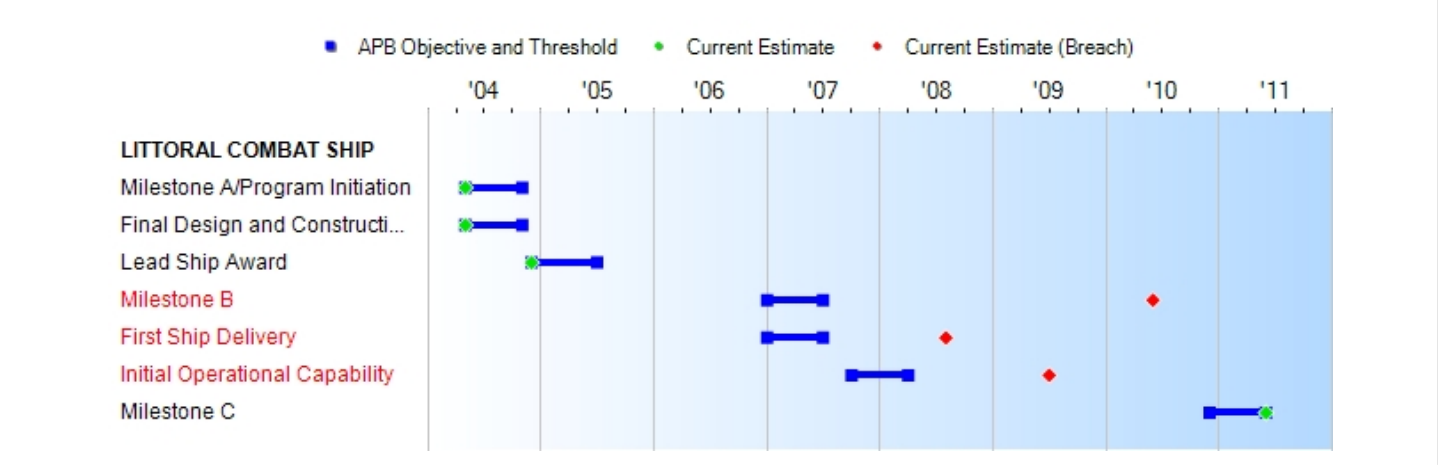
Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Explanation of Breach

There is a breach in the RDT&E Current Estimate from the established Acquisition Program Baseline (APB) cost threshold caused by cost growth in LCS 1 and LCS 2 and by the change in the Acquisition Strategy to continue procurement of Flight 0+ through at least FY09. The APB will be updated to reflect the new program estimates. The APB is expected to be approved by the Milestone Decision Authority at Milestone A Prime.

There is a breach in the Schedule as established in the APB. First Ship Delivery is being delayed by the large amount of unplanned work, rework, and out of sequence tasks being performed in addition to unanticipated labor resources required to support shipyard efforts.

Schedule



Milestones	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	
Milestone A/Program Initiation	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Final Design and Construction Contract Award	MAY 2004	MAY 2004	NOV 2004	MAY 2004	
Lead Ship Award	DEC 2004	DEC 2004	JUL 2005	DEC 2004	
Milestone B	JAN 2007	JAN 2007	JUL 2007	**JUN 2010**[1]	(Ch-1)
First Ship Delivery	JAN 2007	JAN 2007	JUL 2007	**AUG 2008**[1]	(Ch-2)
Initial Operational Capability	OCT 2007	OCT 2007	APR 2008	**JUL 2009**[1]	
Milestone C	DEC 2010	DEC 2010	JUN 2011	JUN 2011	

[1] **APB Breach**

Acronyms

OTS - Over Target Schedule

Change Explanations

(Ch-1) Milestone B changed from AUG 2007 to JUN 2010 (exact date to be scheduled by OSD). Shift in date reflects revised Acquisition Strategy. Milestone A Prime will be held 3rd Quarter 2008 to address nearterm acquisition and program requirements, prior to award of FY08/09 ships. Milestone A Prime date will be determined by OSD.

(Ch-2) First Ship Delivery changed from MAY 2008 to AUG 2008. Change in Delivery date due to production and test issues associated with Electric Plant and Propulsion Shafting.

Memo

None

Performance

Characteristics	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Demonstrated Performance	Current Estimate
Sprint Speed (kts)	50	50	40	TBD	40
Navigational Draft (ft)	10	10	20	TBD	14
Range at Transit Speed (includes payload)	4,300 nm @ 20 kt s	4,300 nm @ 20 kts	3,500 nm @ 18 kts	TBD	4000 nm @ 14 kts (Ch-1)
Mission Package Payload (Weight)	210 MT (130 MT) mission package/80 MT mission package fuel)	210 MT (130 MT) mission package/80 MT mission package fuel)	180 MT (105 MT mission package/75 MT mission package fuel)	TBD	180 MT (105 MT) mission package/75 MT mission package fuel)
Interoperability Informatin Exchange Requirements (IER)	Achieve 100% of top-level IERs	Achieve 100% of top-level IERs	Achieve 100% of critical top-level IERs	TBD	Achieve 100% of top-level IERs designated as critical
Core Crew Manning (# Core Crew Members)	15	15	50	TBD	40 Core Crew Members
Focused Mission Execution	Demonstrate separate DTE scenari os in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapon s and sensor systems) to the sea frame	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe	TBD	Demonstrate separate DTE scenarios in MIW, SUW and ASW to confirm successful integration of each focused mission package (weapons and sensor systems) to the seaframe

Acronyms

ASW - Anti-Submarine Warfare
DTE - Detect to Engage
FT - Feet
KPP - Key Performance Parameter
KTS - Knots
MIW - Mine Warfare
MT - Metric Tons

NM - Nautical Miles
SUW - Surface Warfare

Change Explanations

(Ch-1) Range at Transit Speed revised from 2,650 nm @ 18 kts to 4000 nm @ 14 kts. This reflects a change to the approved KPP by JROCM Memo 019-08 dtd January 18, 2008 revising Threshold to 3500nm @ 14 kts and Objective to 4300nm @ 16 kts.

Memo

None

Track To Budget

RDT&E				
APPN 1319	BA 04	PE 0603581N	(Navy)	Project 3096
	Littoral Combat Ship/Littoral Combat Ship Development			
APPN 1319	BA 04	PE 0603581N	(Navy)	Project 3129
	Littoral Combat Ship/LCS Mission Package Development			
APPN 1319	BA 04	PE 0603581N	(Navy)	Project 4018
	Littoral Combat Ship/Littoral Combat Ship Construction			

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

Appropriation	BY2004 $M				TY $M		
	SAR Baseline Plan Est	Current APB Concept Objective/Threshold		Current Estimate	SAR Baseline Plan Est	Current APB Concept Objective	Current Estimate
RDT&E	1172.7	1172.7	1290.0	**2595.2** [1]	1211.7	1211.7	2848.6
Flyaway	--	--	--	2595.2	--	--	2848.6
Recurring	--	--	--	1073.6	--	--	1172.8
Non Recurring	--	--	--	1521.6	--	--	1675.8
Support	--	--	--	0.0	--	--	0.0
Procurement	--	--	--	--	--	--	--
MILCON	--	--	--	--	--	--	--
Acq O&M	--	--	--	--	--	--	--
Total	1172.7	1172.7	1290.0	2595.2	1211.7	1211.7	2848.6

[1] **APB Breach**

This SAR is for Flight 0 RDT&E only in accordance with Section 2432, Title 10, U.S. Code.

Quantity	SAR Baseline Plan Est	Current APB Concept	Current Estimate
RDT&E	2	2	2
Procurement	0	--	0
Total	2	2	2

A Low Rate Initial Production (LRIP) decision has not been made for this program.

Funding Summary

Appropriation and Quantity Summary

FY2009 President's Budget / December 2007 SAR (TY$ M)

Appropriation	Prior	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	To Complete	Total
RDT&E	1894.2	304.1	336.0	219.8	58.0	36.5	0.0	0.0	2848.6
Procurement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
PB2009 Total	1894.2	304.1	336.0	219.8	58.0	36.5	0.0	0.0	2848.6
PB2008 Total	1559.6	160.4	96.4	49.5	45.0	28.0	0.0	0.0	1938.9
Delta	334.6	143.7	239.6	170.3	13.0	8.5	0.0	0.0	909.7

Quantity	Prior	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	To Complete	Total
Development	2	0	0	0	0	0	0	0	2
Production	0	0	0	0	0	0	0	0	0
PB2009 Total	2	0	0	0	0	0	0	0	2
PB2008 Total	0	0	0	0	0	0	0	0	2
Delta	2	0	0	0	0	0	0	0	0

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
2003	--	--	--	35.3	35.3	--	35.3
2004	--	--	--	160.1	160.1	--	160.1
2005	1	222.8	--	228.0	450.8	--	450.8
2006	1	313.3	--	270.8	584.1	--	584.1
2007	--	421.9	--	242.0	663.9	--	663.9
2008	--	116.8	--	187.3	304.1	--	304.1
2009	--	46.0	--	290.0	336.0	--	336.0
2010	--	52.0	--	167.8	219.8	--	219.8
2011	--	--	--	58.0	58.0	--	58.0
2012	--	--	--	36.5	36.5	--	36.5
Subtotal	**2**	**1172.8**	**--**	**1675.8**	**2848.6**	**--**	**2848.6**

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

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2004 $M	Non End Item Recurring Flyaway BY 2004 $M	Non Recurring Flyaway BY 2004 $M	Total Flyaway BY 2004 $M	Total Support BY 2004 $M	Total Program BY 2004 $M
2003	--	--	--	35.6	35.6	--	35.6
2004	--	--	--	156.9	156.9	--	156.9
2005	1	212.7	--	217.7	430.4	--	430.4
2006	1	290.3	--	250.9	541.2	--	541.2
2007	--	382.3	--	219.3	601.6	--	601.6
2008	--	103.8	--	166.5	270.3	--	270.3
2009	--	40.1	--	252.7	292.8	--	292.8
2010	--	44.4	--	143.4	187.8	--	187.8
2011	--	--	--	48.6	48.6	--	48.6
2012	--	--	--	30.0	30.0	--	30.0
Subtotal	**2**	**1073.6**	**--**	**1521.6**	**2595.2**	**--**	**2595.2**

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

Fiscal Year	Quantity	End Item Recurring Flyaway (Aligned with Quantity) BY 2004 $M
2003	--	--
2004	--	--
2005	1	551.8
2006	1	521.8
2007	--	--
2008	--	--
2009	--	--
2010	--	--
2011	--	--
2012	--	--
Subtotal	**2**	**1073.6**

Low Rate Initial Production

	Initial Estimate	Current Estimate
Approval Date		
Approved Quantity		
Reference	N/A	N/A
Start Year		
End Year		

A Low Rate Initial Production (LRIP) decision has not been made for this program.

Foreign Military Sales

None

Nuclear Cost

None

Unit Cost

Unit Cost Report

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

Unit Cost History

Not required for Pre-Milestone B programs in accordance with Section 2433, Title 10, USC.

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	MAY 2004	N/A	N/A	MAY 2004
Milestone B	JAN 2007	N/A	N/A	JUN 2010
Milestone C	DEC 2010	N/A	N/A	JUN 2011
IOC	OCT 2007	N/A	N/A	JUL 2009
Total Cost (TY $M)	1211.7	N/A	N/A	2848.6
Total Quantity	2	N/A	N/A	2
Prog. Acq. Unit Cost (PAUC)	605.850	N/A	N/A	1424.300

Cost Variance

Summary Then Year $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1211.7	--	--	1211.7
Previous Changes				
Economic	+40.2	--	--	+40.2
Quantity	0.0	--	--	0.0
Schedule	+76.1	--	--	+76.1
Engineering	+73.0	--	--	+73.0
Estimating	+537.9	--	--	+537.9
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	+727.2	--	--	+727.2
Current Changes				
Economic	-0.3	--	--	-0.3
Quantity	--	--	--	--
Schedule	+71.3	--	--	+71.3
Engineering	+43.7	--	--	+43.7
Estimating	+795.0	--	--	+795.0
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+909.7	--	--	+909.7
Total Changes	+1636.9	--	--	+1636.9
CE - Cost Variance	2848.6	--	--	2848.6
CE - Cost & Funding	2848.6	--	--	2848.6

Summary Base Year 2004 $M				
	RDT&E	Proc	MILCON	Total
SAR Baseline (Plan Est)	1172.7	--	--	1172.7
Previous Changes				
Economic	0.0	--	--	0.0
Quantity	0.0	--	--	0.0
Schedule	+66.6	--	--	+66.6
Engineering	+64.3	--	--	+64.3
Estimating	+488.2	--	--	+488.2
Other	0.0	--	--	0.0
Support	0.0	--	--	0.0
Subtotal	+619.1	--	--	+619.1
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	+60.9	--	--	+60.9
Engineering	+38.5	--	--	+38.5
Estimating	+704.0	--	--	+704.0
Other	--	--	--	--
Support	--	--	--	--
Subtotal	+803.4	--	--	+803.4
Total Changes	+1422.5	--	--	+1422.5
CE - Cost Variance	2595.2	--	--	2595.2
CE - Cost & Funding	2595.2	--	--	2595.2

Previous Estimate: December 2006

RDT&E	$M	
Current Change Explanations	**Base Year**	**Then Year**
Revised escalation indices. (Economic)	N/A	-0.3
Adjustment for Flight 0 schedule change with additional effort (Schedule)	+60.9	+71.3
Revised estimates for Congressional small business innovative research (SBIR) adjustments (Estimating)	-11.7	-13.5
Revised estimate for program development of Flight 0/0+ planning and execution (Estimating)	+36.8	+42.3
Revised estimate for Mission Module development and phasing due to maturation of Mission Module definition (Estimating)	+235.0	+271.2
Revised estimate for Seaframe pricing due to cost growth and post delivery work (Estimating)	+445.0	+496.1
Additional scope for Mission Module development (Engineering)	+35.9	+40.7
Additional scope for Seaframe capability development (Engineering)	+2.6	+3.0
Adjustment for current and prior escalation. (Estimating)	-1.1	-1.1
RDT&E Subtotal	+803.4	+909.7

Contracts

Appropriation: RDT&E	
Contract Name	**LCS Dtl Dsgn & Construct**
Contractor	G.D. Bath Iron Works
Contractor Location	Bath , ME 04530
Contract Number, Type	N00024-03-C-2310/8, CPAF/CPIF
Award Date	October 14, 2005
Definitization Date	October 14, 2005

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
223.2	N/A	1	230.0	N/A	1	458.1	494.0

	Cost Variance	Schedule Variance
Previous Cumulative Variances	-3.4	-3.9
Cumulative Variances To Date (1/25/2008)	-56.0	-28.2
Net Change	-52.6	-24.3

Cost And Schedule Variance Explanations

NOTE: CONTRACT COST AND PERFORMANCE DATA CONTAINED IN THIS SECTION IS CONSIDERED BUSINESS SENSITIVE, COMPANY PROPRIETARY, AND FOR OFFICIAL USE ONLY.

Unfavorable Net Cost Variance is attributable to unplanned increases in aluminum fabrication labor, increased outsourcing, increases in material (Gear boxes, shafting), watercraft launch and recovery rework, shock analysis of foundations, and relocation of work scope from Austal to Bath Iron Works (BIW) (increased cost).

Unfavorable Net Schedule Variance includes not realizing efficiencies from work force expansion and training. Delayed material receipt and shock testing, and design changes and rework affected labor schedule performance in the Main Deck and Aft Hull assembly and propulsion areas.

Contract Comments

NOTE: CONTRACT COST AND PERFORMANCE DATA CONTAINED IN THIS SECTION IS CONSIDERED BUSINESS SENSITIVE, COMPANY PROPRIETARY, AND FOR OFFICIAL USE ONLY.

Program Managers and Contractors Estimate as shown are price to government which accounts for award fee. Contractors EAC is $448.9M as of month end December 2007 Cost Performance Report (CPR).

General Dynamics submitted a request for a second Over Target Baseline/Over Target Schedule (OTB/OTS) in February 2008. This OTB/OTS has not yet been approved by the Navy.

The General Dynamics contract for LCS 2 and 4 was continuously monitored for cost growth and the decision to negotiate a possible contract restructuring with General Dynamics was made on September 7, 2007. NAVSEA terminated LCS 4 on November 1, 2007, in part, for the convenience of the Government. LCS 2 will continue as a cost plus effort.

Appropriation: RDT&E	
Contract Name	**LCS Dtl Dsgn & Construct**
Contractor	Lockheed Martin
Contractor Location	Moorestown , NJ 08057
Contract Number, Type	N00024-03-C-2311/7, CPAF/CPIF
Award Date	December 15, 2004
Definitization Date	December 15, 2004

Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
188.2	N/A	1	224.9	N/A	1	470.3	471.0

	Cost Variance	Schedule Variance
Previous Cumulative Variances	-72.8	-24.6
Cumulative Variances To Date (1/29/2008)	-0.9	-3.0
Net Change	+71.9	+21.6

Cost And Schedule Variance Explanations

NOTE: CONTRACT COST AND PERFORMANCE DATA CONTAINED IN THIS SECTION IS CONSIDERED BUSINESS SENSITIVE, COMPANY PROPRIETARY, AND FOR OFFICIAL USE ONLY.

On November 21, 2007 the Lockheed Martin requested Over Target Baseline (OTB) and Over Target Schedule (OTS) for LCS 1 of $459.1M (cost) was approved by the LCS Program Office and has been implemented.

The Favorable Net Cost Variance is primarily attributable to successful implementation of the OTB and OTS and as the focus on LCS 1 shifts from construction to testing and working toward a 2008 delivery.

The Favorable Net Schedule Variance of is primarily attributable to successful implementation of the OTB and OTS and as the focus on LCS 1 shifts from construction to testing and working toward a 2008 delivery.

Contract Comments

NOTE: CONTRACT COST AND PERFORMANCE DATA CONTAINED IN THIS SECTION IS CONSIDERED BUSINESS SENSITIVE, COMPANY PROPRIETARY, AND FOR OFFICIAL USE ONLY.

Changes to Contract Target Price are due to scope adjustments for Mission System Ship Integration Team (MSSIT), and the costs associated with rework.

Program Managers and Contractors Estimate as shown are price to government which accounts for contractor investment and award fee. Contractor EAC is $493.4M as of month end December 2007 Cost Performance Report (CPR), before subtracting $33M investment.

Negotiations to restructure the Lockheed Martin contract were unsuccessful, and on April 12, 2007, the contract option for construction on LCS 3 was terminated in part for convenience. Negotiations to restructure the Lockheed Martin contract were unsuccessful, and on April 12, 2007, the contract option for construction on LCS 3 was terminated in part for convenience. LCS 1 will continue as a cost plus effort.

The Over Target Baseline (OTB) requested Lockheed Martin for LCS 1 of $394.9 (cost) on March 9, 2007. This OTB was not implemented due to program restructuring. On November 21, 2007 the Lockheed Martin requested OTB and Over Target Schedule (OTS) for LCS 1 of $459.1M (cost) was approved by the LCS Program Office and has been implemented.

Deliveries and Expenditures

Deliveries To Date	Plan	Actual	Total Quantity	Percent Delivered
Development	0	0	2	0.00%
Production	0	0	0	--
Total Program Quantities Delivered	0	0	2	0.00%

Expenditures and Appropriations (TY $M)			
Total Acquisition Cost	2848.6	Years Appropriated	6
Expenditures To Date	1599.8	Percent Years Appropriated	60.00%
Percent Expended	56.16%	Appropriated to Date	2198.3
Total Funding Years	10	Percent Appropriated	77.17%

Operating and Support Cost

None