Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy												Date: March 2014
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*					R-1 Program Element (Number/Name) PE 0603581N *I (U)LITTORAL COMBAT SHIP*							
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
Total Program Element	3,143.183	374.966	210.217	88.734	-	88.734	109.146	33.481	33.922	34.930	Continuing	Continuing
3096: *Littoral Combat Ship*	815.424	133.995	163.337	88.734	-	88.734	109.146	33.481	33.922	34.930	Continuing	Continuing
3129: *LCS Mission Package Development*	815.409	196.903	42.000	-	-	-	-	-	-	-	-	1,054.312
4018: *Littoral Combat Ship Construction*	1,502.350	34.902	4.880	-	-	-	-	-	-	-	-	1,542.132
9999: *Congressional Adds*	10.000	9.166	-	-	-	-	-	-	-	-	-	19.166

MDAP/MAIS Code:
Other MDAP/MAIS Code(s): 374, 443

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This Program Element (PE) provides funds for detailed design, development, construction, issue resolution, certification, integration, and testing of the Littoral Combat Ship (LCS). LCS is a fast, agile, and networked surface combatant with capabilities optimized to defeat asymmetric threats, and assure naval and joint force access into contested littoral regions. It uses open-systems architecture design, modular weapons, sensor systems, and a variety of manned and unmanned vehicles to expand the battle space and project offensive power into the littoral.

LCS operates with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including littoral anti-submarine warfare (ASW), surface warfare (SUW), and mine countermeasures (MCM). LCS also possesses inherent capabilities, regardless of the mission package installed, including Intelligence, Surveillance, Reconnaissance (ISR), Homeland Defense, Maritime Interdiction/Interception Operations (MIO), Anti-Terrorism/Force Protection (AT/FP), air self-defense, joint littoral mobility, Special Operating Forces (SOF), and logistic support for movement of personnel and supplies. This relatively small, high-speed surface combatant complements the U.S. Navy's Surface Fleet by operating in environments where it is less desirable to employ larger, multi-mission ships. LCS can deploy independently to overseas littoral regions, remain on station for extended periods of time either with a battle group or through a forward-basing arrangement, and is capable of underway replenishment. LCS will operate with Carrier Strike Groups, Surface Action Groups, in groups of other similar ships, or independently for diplomatic and presence missions. Additionally, LCS can operate cooperatively with the U.S. Coast Guard and Allies.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy	Date: March 2014
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603581N *I (U)LITTORAL COMBAT SHIP*

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	429.420	406.389	337.220	-	337.220
Current President's Budget	374.966	210.217	88.734	-	88.734
Total Adjustments	-54.454	-196.172	-248.486	-	-248.486
• Congressional General Reductions	-	-0.043			
• Congressional Directed Reductions	-	-34.358			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-203.771			
• Reprogrammings	-	42.000			
• SBIR/STTR Transfer	-4.641	-			
• Program Adjustments	-	-	-241.402	-	-241.402
• Rate/Misc Adjustments	0.001	-	-7.084	-	-7.084
• Congressional General Reductions Adjustments	-35.314	-	-	-	-
• Congressional Directed Reductions Adjustments	-24.500	-	-	-	-
• Congressional Add Adjustments	10.000	-	-	-	-

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2013	FY 2014
Project: 9999: *Congressional Adds*		
Congressional Add: *LCS MM SBIR (Cong)*	9.166	-
Congressional Add Subtotals for Project: 9999	9.166	-
Congressional Add Totals for all Projects	9.166	-

Change Summary Explanation

FY 2014 changes result from Project Unit 3129 transferred to PE 0603596N and congressional reduction due to inflation. FY 2015 changes result from the Department's decision to reduce contracted services, rephasing requirements to match anticipated expenditures, re-phasing funds to FY 2016 due to delay of Full Ship Shock Trial (FSST) and Project Unit 3129 transferred to PE 0603596N.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014	
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*				Project (Number/Name) 3096 / *Littoral Combat Ship*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
3096: *Littoral Combat Ship*	815.424	133.995	163.337	88.734	-	88.734	109.146	33.481	33.922	34.930	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 374

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The RDT&E portion of the LCS Program is comprised of design and development efforts required to field the LCS Class Ships, including integration with the Mission Packages (MCM, ASW and SUW) activities both pre and post delivery. It includes the design and development effort required to support the introduction and deployment of a Flight 0+ baseline (LCS 3/4 And Follow) with incorporation of lessons learned from the design and construction of USS Freedom (LCS 1) and USS Independence (LCS 2). Additionally, it includes design, development, issue resolution, certification and testing efforts required to support the design baseline for the six year block buy in FY10-15. This baseline will include lessons learned from the LCS 1 through LCS 4.

The LCS design and development phases include platform design and development, experimentation, ship system design and integration, hull platform testing, development of Technical Data Packages (TDPs), total ship system engineering and integration, combat systems and warfare systems certification, and planning and conduct of system testing. These efforts include procurement of combat and warfare system elements and /or simulators to support production representative testing in support of design, development, and certification efforts and ordnance in support of testing.

The RDT&E portion of LCS funding is also comprised of formal Developmental and Operational Assessment testing of the LCS Ships and Mission Packages. Test and Evaluation (T&E) will concentrate on verifying integration and interoperability of employed technologies and systems in the LCS seaframe designs and modular mission packages to achieve the mission capabilities and performance requirements as defined in the LCS program's Flight 0 and Flight 0+ Capabilities Development Documents (CDD). T&E functions will include the evaluation of Critical Technical Parameters (CTP), Measures of Effectiveness (MOE), Measures of Suitability (MOS), and Key Performance Parameters (KPP) for the core seaframe and the focused missions.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: LCS System-of-Systems Development, Engineering & Experimentation	29.954	26.929	20.229
Articles:	-	-	-
Description: Provides for LCS Program systems engineering in support of Flight 0, Flight 0+, the FY10 Block Buy baseline design, and future procurement baseline design, development, certification, and production (including ship system design and integration); combat system and C4I design, integration, and test; aviation (manned and unmanned) integration; modular mine countermeasure (MCM), anti-submarine warfare (ASW), and surface warfare (SUW) mission package (MP) integration; logistics			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
product development; and various systems engineering activities required to perform risk analyses of new design and production technology concepts. ***FY 2013 Accomplishments:*** Flight 0 baseline: Continued Seaframe systems engineering support for USS Independence Post Shakedown Availability (PSA). Resolved emergent design issues identified during Seaframe DT and Special Trials. Provided engineering support in preparation for USS Independence Post Delivery Trials. Provided Seaframe and Mission Systems engineering support for USS Coronado Builders and Acceptance Trials. Provided Seaframe and Mission Systems engineering support to investigate, design, and develop technical solutions for design and production issues identified during USS Coronado Trials. Continued Seaframe and MP integration engineering support for USS Freedom and USS Independence. Conducted systems engineering support for MCM DT, air warfare and surface warfare firing events, sea-keeping trials, and aviation-integration trials for USS Independence. Continued deployment preparations of USS Freedom by supporting engineering solutions discovered and corrected via system engineering process are implemented and tested prior to deployment. Investigated, designed, and developed engineering solutions for design and production issues identified during USS Freedom and USS Independence operations (including testing). Developed solutions for emergent design and production issues highlighted in USS Freedom and USS Independence testing, certification and trials. Engineering analyses included combat system integration, off-board vehicle communications, and watercraft launch, recovery, and handling. Continued completion testing and certification of Seaframe systems on USS Independence. Continued to lead the transition of multiple Science and Technology (S&T) projects into the LCS baseline. Provided engineering support for design incorporation and issue resolution as projects shift from research and development to complete systems onboard both variants. Flight 0+ and FY10 Block Buy baselines: Provided Seaframe systems engineering support for USS Fort Worth Final Contract Trials and PSA and for USS Fort Worth DT. Continued Seaframe and MP integration engineering support for USS Fort Worth and USS Coronado. Investigated, designed, and developed engineering solutions for design and production issues identified during USS Fort Worth operations (including testing). Provided systems engineering support for planning of DT of the SUW mission package DT on USS Fort Worth, tested some of the solutions highlighted on USS Freedom and USS Independence, and supported the integration of these capabilities into their respective Seaframes. Began planning for DT that will be conducted on USS Coronado. Began planning for the Total Ship Survivability Trial (TSST) for USS Fort Worth and USS Coronado. Continued planning for Aluminum Compartmentalization on the Independence Variant to support Live Fire Test and Evaluation (LFT&E) requirements. Continued support for Navy Classification design site including facility, Integrated Digital Environment (IDE) support, and engineering support for drawing review. Continued to lead the transition of multiple Science and Technology projects into the LCS Baseline. Continued the transition from American			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Bureau of Shipping (ABS) to Navy Classification and the stand up of the Navy Design Site for Classification and Systems Engineering support. ***FY 2014 Plans:*** Flight 0 Baseline: Provide systems engineering support for Seaframe and MCM Technical Evaluation (TECHEVAL) and Initial Operational Test and Evaluation (IOT&E) on USS Independence. Provide systems engineering support for the Seaframe and ASW capability integration on USS Freedom. Flight 0+ and FY10 Block Buy Baselines: Provide systems engineering support for Seaframe and SUW MP OT, TECHEVAL, IOT&E, and TSST on USS Fort Worth. Provide systems engineering support for Seaframe DT on USS Coronado. Provide systems engineering support for MP/DT and MCM DT on USS Milwaukee and USS Detroit. Begin planning for TSST on USS Fort Worth and USS Coronado and for FSST on USS Milwaukee and USS Jackson. Conduct the Aluminum Compartmentalization on the Independence Variant to support LFT&E requirements. Provide Seaframe and Mission Systems engineering support to investigate, design, and develop technical solutions for design and production issues identified during USS Independence IOT&E. Provide Seaframe and Mission Systems engineering support for USS Milwaukee and USS Jackson Builders Sea Trials preparations and execution. Continue support for Navy Classification design site including facility, IDE support, and engineering support for drawing review. Develop technical and performance baseline for future ship procurements based on systems design and testing execution. Conduct studies in support of development of future technical and performance baseline design upgrades. ***FY 2015 Plans:*** Flight 0 Baseline: Provide systems engineering support for completion of Seaframe and MCM Technical Evaluation (TECHEVAL) and Initial Operational Test and Evaluation (IOT&E) on USS Independence. Continue systems engineering support for ASW capability integration on USS Freedom. Flight 0+ and FY10 Block Buy Baselines: Provide systems engineering support for Seaframe and SUW MP OT, TECHEVAL, and IOT&E on USS Coronado. Provide systems engineering support for Seaframe and MCM MP OT on USS Milwaukee. Continue engineering support for planning and conduct TSST on LCS 4. Continue FSST planning on LCS 5 and 6. Provide engineering support for DT on USS Milwaukee and USS Jackson. Provide Seaframe and Mission Systems engineering support to investigate, design, and develop technical solutions for design. Provide Seaframe and Mission Systems engineering support for USS Coronado PSA and and USS Milwaukee and USS Jackson USS Detroit IPDA and PSA. Finalize technical and performance baseline for future ship procurements based on			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
systems design and testing execution. Continue conducting studies in support of development of future technical and performance baseline design upgrades.			
Title: LCS Total System Training Architecture	67.512	73.620	19.547
Articles:	-	-	-
Description: LCS is a minimally manned ship. The small crew size, combined with LCS's complex mission, does not allow adequate time for shipboard "on-the-job" training to achieve LCS operational availability. Consequently, LCS uses a Train-to-Qualify (T2Q)/Train-to-Certify(T2C) training process in an off-ship/shore-based virtual ship trainer environment, focused on tactical operations and equipment operations and maintenance training. When completed, the LCS shore-based training capability will satisfy individual, unit, team, and force training and will meet Capability Development Document (CDD) T2Q Key Performance Parameter (KPP) requirements. ***FY 2013 Accomplishments:*** Transitioned and implemented Training Front End Assessment (FEA) output in association the Naval Education and Training Command (NETC) Job Duty Task Analysis (JDTA) Instruction, including LCS 2 task validation, Mission Bay analysis, and courseware and training device development. Through the Training System Executive Agent (TSEA), conducted curriculum design and media analysis, pursued instructor-led and interactive courseware development, coordinated LCS Training Facility Electronic Infrastructure and Infrastructure Integrated Product Team (LTF EII IPT) efforts, executed Learning Management System (LMS) installation and configuration, and continued LCS Training Facility (LTF) San Diego Department of Defense (DoD) Information Assurance (IA) Certification and Accreditation (C&A) Package (DIACAP). Awarded Immersive Virtual Shipboard Environment (IVSE) Courseware Development contracts and delivery order for the Engineering Plant Technician in support of Hull, Mechanical and Electical (HM&E) system operations and Preventative maintenance courses based on data supported by a Job, Duty, Task, and Analysis. Continued Mission Bay Trainer development contract efforts, which culminated in a late CY13 contract award. Through the TSEA, conducted LCS 1 and 2 Rediness Control Officer (RCO) JDTA, to support curriculum design, and began RCO and Engineering Plant Technician Virtual Reality Courseware Development. ***FY 2014 Plans:*** Conduct the Combat Systems JDTA and continue to pursue instructor-led and interactive courseware development, coordinate LCS Training Facility Electronic Infrastructure and Infrastructure Integrated Product Team (LTF EII IPT) efforts, continue development of Learning Management System (LMS) installation and configuration, and continue LCS Training Facility (LTF) San Diego Department of Defense (DoD) Information Assurance (IA) Certification and Accreditation (C&A) Package (DIACAP).			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Continue development of courseware in support of Hull, Mechanical, and Electical (HM&E) system operations and preventative maintenance courses. Execute Phase II of the LCS 1 Integrated Tactical Trainer upgrade. Executing Mission Bay Trainer contract (awarded in CY13) ***FY 2015 Plans:*** Through the TSEA, deliver the Immersive Virtual Shipboard Environment curriculum for the LCS 1 and LCS 2 variants to support the LCS Readiness Control Officer and Engineering Plant Technician T2Q and T2C training. Award delivery order against IVSE to support the T2Q and T2C training for the Combat Systems watchstanders for the LCS 1 and 2 variants. Coordinate and deliver the LCS Training Facility Electronic Infrastructure to the LCS Training Facility (LTF) San Diego. Award the NAVFAC contract in support of the Mayport LCS Training Facility. Complete LCS Training Facility (LTF) San Diego.			
Title: LCS Test & Evaluation	36.529	62.788	48.958
Articles:	-	-	-
Description: Execute formal LCS Developmental Testing and Operational Testing (DT/OT), including Live Fire Test and Evaluation (LFT&E), and procurement of T&E Ordnance. Execute DT and C4I integration, and test; aviation (manned and unmanned) integration; modular mine countermeasure (MCM), anti-submarine warfare (ASW), and surface warfare (SUW) mission package (MP) integration. ***FY 2013 Accomplishments:*** Flight 0 baseline: Continued Seaframe testing on USS Independence, air warfare and surface warfare firing events, aviation integration, and selected sea-keeping trials. Conducted detailed Seaframe DT and MCM Mission Package (MP) testing on USS Independence, and conducted analysis efforts for emergent integration issues. Developed solutions for USS Independence Post Delivery tests and trials including Seaframe DT and Post Shakedown Availability (PSA). Updated the LCS Test and Evaluation Master Plan (TEMP) to reflect revised Acquisition Strategy and program schedule. Flight 0+ and FY10 Block Buy baselines: Conducted advance DT/OT planning for the SUW MP on the LCS 3. Conducted DT/CSSQT testing on the LCS 3. Began planning for aluminum surrogate testing in the areas of multi-hull blast and fire testing to support LFT&E requirements. Also, planned for the Total Ship Survivability Trial (TSST) to be conducted on LCS 3 and LCS 4. ***FY 2014 Plans:*** Flight 0 baseline: Conduct DT/Rough Water trials on USS Independence. Continue Surface Warfare (SUW), Air Defense and Mine Counter Measure (MCM) developmental testing on USS Independence.			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Flight 0+ baseline: Conduct Vertical Takeoff Unmanned Aerial Vehicle (VTUAV) Dynamic Interface testing on LCS 3. Seaframe and SUW DT events for LCS 3 and LCS 4. Conduct Techeval and IOT&E for the Seaframe and SUW MP on LCS 3. Continue planning for LCS 3 and LCS 4 TSST. Conduct TSST on LCS 3. Continue aluminum surrogate testing in the areas of multi-hull blast and fire testing to support LFT&E requirements. Begin blast and fire testing on multi-compartment surrogate test article in support of LFT&E requirements, and conduct small component surrogate testing to address knowledge gaps. Begin planning for FSST on LCS 5 and 6.			
FY 2015 Plans: Flight 0 Baseline: Complete TECHEVAL and Initial Operability Test and Evaluation (IOT&E) on USS Independence with the MCM MP. Flight 0+ Baseline: Conduct SUW MP DT, TECHEVAL, and IOT&E on LCS 4 with the SUW MP. Continue planning and conduct TSST on LCS 4. Continue planning for FSST on LCS 5 and 6. Conduct DT testing on LCS 5 and 6. Complete blast and fire testing on multi-compartment surrogate test article in support of LFT&E requirements.			
Accomplishments/Planned Programs Subtotals	133.995	163.337	88.734

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• 2127: *Littoral Combat Ship*	1,821.001	1,793.014	1,427.049	-	1,427.049	1,423.337	1,470.017	1,504.143	1,067.189	10,691.300	26,634.250
• 1600: *LCS Modules*	25.087	35.966	37.413	-	37.413	24.518	20.139	25.015	19.281	Continuing	Continuing
• 5110: *Outfitting/Post Delivery .*	50.065	68.165	118.282	-	118.282	164.545	204.046	205.954	209.777	1,647.600	2,701.853
• 1320: *LCS Training*	22.220	26.726	9.630	-	9.630	20.002	21.278	19.004	19.394	Continuing	Continuing
• 0944: *LCS Class Support Equipment*	8.566	47.078	36.206	-	36.206	67.109	73.526	78.854	88.111	Continuing	Continuing
• 1601: *MCM Mission Modules*	31.829	34.885	15.270	-	15.270	211.821	158.536	146.157	151.464	Continuing	Continuing
• 1602: *ASW Mission Modules*	-	-	2.729	-	2.729	30.108	47.852	48.562	48.831	Continuing	Continuing
• 1603: *SUW Mission Modules*	30.301	19.481	44.208	-	44.208	39.231	45.907	66.591	70.779	Continuing	Continuing
• 1605: *Remote Minehunting System (RMS)*	-	-	42.276	-	42.276	70.976	67.471	67.708	68.343	-	316.774

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

The LCS program takes an evolutionary approach to acquisition that emphasizes competition as a key to achieving affordability. Initially, two industry teams competed against each other with two distinctly different LCS designs. The decision produced two flights with a vessel from each design: Flight 0 (LCS 1 and LCS 2); and Flight 0+ (LCS 3 and out). The Flight 0+ baseline incorporates lessons learned from the design, construction, and testing of the Flight 0 ships. The Navy conducted a limited competition amongst the existing LCS industry teams or team participants for the award of a contract for the construction of a block buy of up to ten (10) LCS Flight 0+ Class ships, with an objective of competitively awarding a single contract to a single industry team.

By Acquisition Decision Memorandum of December 23, 2010, the USD (AT&L) authorized execution of an alternative acquisition strategy for the FY 2010 through FY 2015 procurement of 20 seaframes through two ten-ship block buy contracts. On December 29, 2010, the Navy awarded two contracts for block buys of up to ten ships, beginning with the award to each contractor of one FY 2010 ship and associated non-recurring engineering, the development of the Technical Data Package (TDP), core class services, and associated data. This was followed by the contractual funding of one ship to each contractor in FY 2011 and two ships each funded in FY 2012 through FY 2015.

E. Performance Metrics

The LCS Program achieved Milestone A and Program Initiation in May 2004 and Milestone B in February 2011. The LCS program conducts annual Defense Acquisition Board In-Process Reviews (DAB IPRs). The first Seaframe and Mission Module integrated program DAB IPR was conducted in January 2013 and will be held in September hereafter.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LCS 1 & 2 Shore Trainers	C/CPAF	LM, BIW : Various	56.536	-		-		-		-		-	Continuing	Continuing	Continuing
Program Office Support	C/CPAF	Various : Various	0.000	9.100	Jan 2013	10.600	Nov 2013	4.460	Nov 2014	-		4.460	Continuing	Continuing	Continuing
Training Development - Support	WR	NAWC TSD : Orlando, FL	3.000	7.413	Nov 2012	9.500	Nov 2013	-		-		-	Continuing	Continuing	Continuing
LCS Courseware Development	C/FFP	Cubic Corp : San Diego, CA	0.000	30.000	Sep 2013	28.100	May 2014	-		-		-	-	58.100	-
LCS1 & LCS2 Bridge Part Task Trainers	C/FFP	Computer Sciences Corp. (CSC) : Falls Church, VA	0.000	4.700	Jul 2013	5.175	May 2014	2.404	May 2015	-		2.404	Continuing	Continuing	Continuing
LCS1 & LCS2 TAO Trainers	C/FFP	Northrop Grumman Corp. : Falls Church, VA	0.000	5.000	Jul 2013	6.000	May 2014	2.107	May 2015	-		2.107	Continuing	Continuing	Continuing
LCS Mission Bay Trainer	C/FFP	TBD : Various	0.000	1.600	Aug 2013	3.500	May 2014	5.576	May 2015	-		5.576	Continuing	Continuing	Continuing
Training Development - Support	WR	Various : Various	0.000	5.359	Jul 2013	4.995	Nov 2013	1.600	Nov 2014	-		1.600	Continuing	Continuing	Continuing
Training Development - Industry	C/CPAF	Lockheed Martin : Various	8.800	2.000	Jun 2013	2.500	May 2014	1.000	May 2015	-		1.000	Continuing	Continuing	Continuing
Training Operations	WR	NSWC DD/CSCS : Various	0.000	2.340	Dec 2012	3.250	Nov 2013	2.400	Nov 2014	-		2.400	-	7.990	-
Class Design Services	SS/CPAF	LM, GD : Various	48.340	-		-		-		-		-	-	48.340	-
Final Design(Flight 0)	C/CPAF	LM, BIW : Various	175.263	-		-		-		-		-	-	175.263	-
Flight 0 C41	WR	PEO C41 : Various	5.506	-		-		-		-		-	-	5.506	-
SH-60B Datalink	C/CPAF	LM, BIW : Various	2.435	-		-		-		-		-	-	2.435	-
Distance Support	WR	NAWC TSD : Orlando, FL	4.900	-		-		-		-		-	-	4.900	-
		Subtotal	304.780	67.512		73.620		19.547		-		19.547	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*	Project (Number/Name) 3096 / *Littoral Combat Ship*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Engineering Support	WR	NSWC/DD : Dahlgren, VA	46.406	6.623	Nov 2012	6.490	Nov 2013	7.521	Nov 2014	-		7.521	Continuing	Continuing	Continuing
Government Engineering Support	WR	NSWC/PC : Panama City, FL	23.142	2.540	Nov 2012	1.854	Nov 2013	0.451	Nov 2014	-		0.451	Continuing	Continuing	Continuing
Government Engineering Support	WR	NUWC : Newport, RI	9.061	0.250	Nov 2012	0.265	Nov 2013	0.098	Nov 2014	-		0.098	Continuing	Continuing	Continuing
Government Engineering Support	WR	NAWC AD : Pax River, VA	19.384	3.149	Nov 2012	1.456	Nov 2013	1.102	Nov 2014	-		1.102	Continuing	Continuing	Continuing
Government Engineering Support	WR	NSWC/CR : Crane, IN	16.051	0.725	Nov 2012	0.625	Nov 2013	0.321	Nov 2014	-		0.321	Continuing	Continuing	Continuing
Government Engineering Support	WR	NSWC/SSES : Philadelphia, PA	49.996	6.749	Nov 2012	9.043	Nov 2013	4.000	Nov 2014	-		4.000	Continuing	Continuing	Continuing
Government Engineering Support	Various	Government Activities : Various	30.828	5.070	Dec 2012	6.596	Oct 2013	5.526	Nov 2014	-		5.526	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPAF	Alion/CSC : Arlington, VA	41.990	4.623	Jan 2013	0.600	Jan 2014	1.210	Nov 2014	-		1.210	Continuing	Continuing	Continuing
Contractor Engineering Support	C/CPAF	Various : Various	18.248	0.225	Jan 2013	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	255.106	29.954		26.929		20.229		-		20.229	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	C/CPAF	Alion/CSC : Arlington, VA	17.490	4.800	Dec 2012	7.931	Dec 2013	5.623	Dec 2014	-		5.623	Continuing	Continuing	Continuing
Test & Evaluation	WR	NSWC/PHD : Port Hueneme, CA	31.671	9.770	Oct 2012	9.652	Oct 2013	5.685	Oct 2014	-		5.685	Continuing	Continuing	Continuing
Test & Evaluation	WR	NSWC/SSES : Philadelphia, PA	37.967	6.023	Oct 2012	11.911	Oct 2013	12.456	Oct 2014	-		12.456	Continuing	Continuing	Continuing
Test & Evaluation	WR	NSWC/PC : Panama City, FL	10.431	2.467	Oct 2012	2.955	Oct 2013	2.410	Oct 2014	-		2.410	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*	Project (Number/Name) 3096 / *Littoral Combat Ship*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation	WR	COMOPTEVFOR : Norfolk, VA	8.139	1.872	Nov 2012	2.845	Nov 2013	1.521	Nov 2014	-		1.521	Continuing	Continuing	Continuing
Test & Evaluation	WR	NSWC/COR : Corona, CA	8.287	2.550	Nov 2012	2.950	Nov 2013	1.451	Nov 2014	-		1.451	Continuing	Continuing	Continuing
Test & Evaluation	WR	Various : Various	51.169	2.929	Dec 2012	10.785	Oct 2013	9.404	Oct 2014	-		9.404	Continuing	Continuing	Continuing
Test & Evaluation	C/CPAF	LM/GD : Various	42.560	3.016	Dec 2012	10.745	Dec 2013	8.756	Dec 2014	-		8.756	Continuing	Continuing	Continuing
Test & Evaluation	WR	PEO C4I : Charleston, SC	5.956	2.852	Oct 2012	2.754	Oct 2013	1.652	Oct 2014	-		1.652	Continuing	Continuing	Continuing
T&E Ordnance	WR	PEO IWS : Various	7.027	0.250	Dec 2012	0.260	Oct 2013	-	Oct 2014	-		-	Continuing	Continuing	Continuing
		Subtotal	220.697	36.529		62.788		48.958		-		48.958	-	-	-

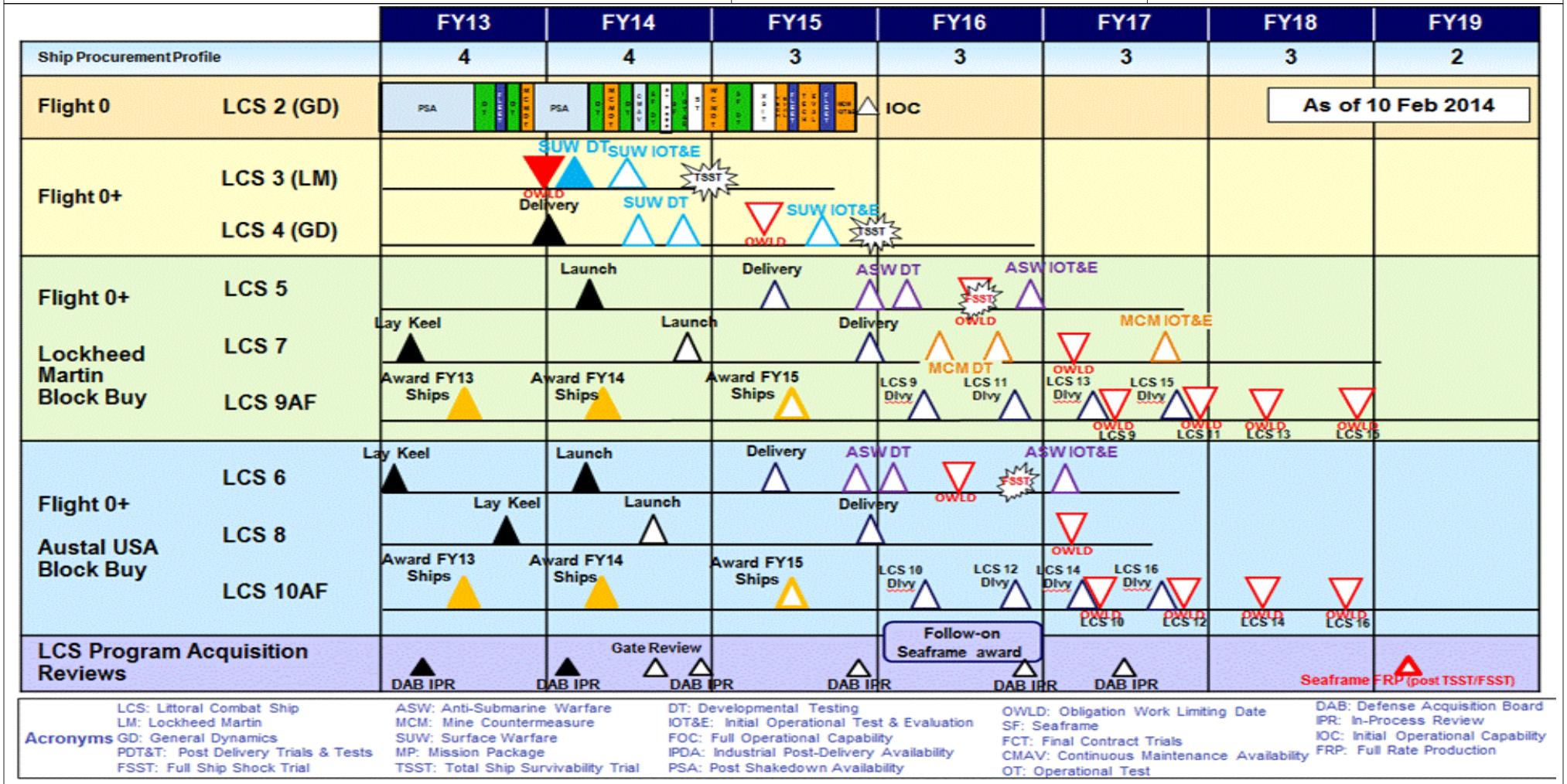
Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support- SEAPORT	C/CPAF	Alion/CSC : Arlington, VA	20.593	-		-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	Various	Various : Various	12.212	-		-		-		-		-	Continuing	Continuing	Continuing
Program Management Support - Design	C/CPAF	Various : Arlington, VA	2.036	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	34.841	-		-		-		-		-	-	-	-

	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	815.424	133.995		163.337		88.734		-		88.734	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*



Acronyms
LCS: Littoral Combat Ship
LM: Lockheed Martin
GD: General Dynamics
PDT&T: Post Delivery Trials & Tests
FSST: Full Ship Shock Trial
ASW: Anti-Submarine Warfare
MCM: Mine Countermeasure
SUW: Surface Warfare
MP: Mission Package
TSST: Total Ship Survivability Trial
DT: Developmental Testing
IOT&E: Initial Operational Test & Evaluation
FOC: Full Operational Capability
IPDA: Industrial Post-Delivery Availability
PSA: Post Shakedown Availability
OWLD: Obligation Work Limiting Date
SF: Seaframe
FCT: Final Contract Trials
CMAV: Continuous Maintenance Availability
OT: Operational Test
DAB: Defense Acquisition Board
IPR: In-Process Review
IOC: Initial Operational Capability
FRP: Full Rate Production

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3096 / *Littoral Combat Ship*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3096				
Post Delivery DT 2: Flight 0: Post Delivery Developmental Testing (DT)	3	2013	3	2013
Post Delivery DT 3: Flight 0: Post Delivery Developmental Testing (DT)	2	2014	3	2014
TECHEVAL: Flight 0: Technical Evaluation(TECHEVAL)	3	2015	3	2015
IOT&E: Flight 0: Initial Operational Test and Evaluation (IOT&E)	4	2015	4	2015
Post Delivery DT 4: Flight 0: Post Delivery Developmental Testing (DT)	1	2015	1	2015
TSST - LCS 3: Total Ship Survivability Trial (TSST) LCS 3	4	2014	1	2015
TSST - LCS 4: Total Ship Survivability Trial (TSST) LCS 4	4	2015	1	2016
FSST - LCS 5: LCS 5 FSST	3	2016	4	2016
FSST - LCS 6: LCS 6 FSST	3	2016	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy												Date: March 2014
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*				Project (Number/Name) 3129 / *LCS Mission Package Development*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
3129: *LCS Mission Package Development*	815.409	196.903	42.000	-	-	-	-	-	-	-	-	1,054.312
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 443

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Program provides focused war fighting capabilities in littoral mine countermeasures, countering small boat threats and littoral anti-submarine warfare to provide assured access to enable the US Joint Force operations in the littorals. A mission package is a combination of warfare mission modules with specialized crew, support equipment, and vehicles including manned helicopters and unmanned maritime systems. They are packaged in a modular fashion so that they can be quickly swapped out pier side. Mission module development includes architectures, interfaces and integration of mission systems. Mission systems integration also includes the procurement of the first mission packages to be used on the Flight 0 Littoral Combat Ships (LCS). The program has an inventory objective of 24 MCM mission packages, 24 SUW mission packages, and 16 ASW mission packages. Mission package procurement and delivery are aligned with the ship delivery schedule, mission area demand signal from the combatant commanders, and the retirement of legacy platforms. This means that 64 interchangeable mission packages will be available for use among the seaframe variants of the LCS class to support global warfighting and peacetime presence requirements.

An incremental development approach to delivering capability allows the continued insertion of mature capabilities throughout the life of the program without the need for modifications to the sea frames. Future mission package increments will be considered when joint warfighting objectives or changing threats create new operational capability requirements that cannot be met by current mission package designs, or when new technological opportunities allow significant progress toward delivering cost effective, enhanced capabilities. Future mission module increments can be tested, constructed, and incorporated into existing mission packages, one of the most important benefits of LCS modular design.

The LCS MCM mission package will counter deep, shallow, and tethered mines in the littoral without putting Sailors in the minefield. When the MCM mission package is embarked, LCS is capable of conducting detect-to-engage operations (hunting, sweeping, and neutralization) against very shallow and deep-water sea mine threats. The MCM mission package provides these capabilities through the use of sensors and weapons deployed from an MH-60S multi-mission helicopter and unmanned off-board vehicles. The MCM package consists of the following systems: Coastal Battlefield Reconnaissance & Analysis (COBRA), Airborne Laser Mine Detection System (ALMDS), System, Remote Multi-Mission Vehicle (RMMV), AQS-20A Mine hunting Sonar, Airborne Mine Neutralization System (AMNS), Unmanned Integrated Sweep System (UISS)(which is comprised of the Unmanned Surface Vehicle (USV) and the Unmanned Surface Sweep System (US3)), Surface Mine Countermeasures (SMCM) Unmanned Undersea Vehicle (UUV) with Low Frequency Broad Band (LFBB), support equipment and support containers. The individual systems are combined into five modules: Organic Airborne Mine Countermeasures (OAMCM) Module, Remote Mine Hunting Module, Unmanned Influence Sweep Module, Coastal Mine Reconnaissance Module and the Buried Mine Module. The Organic Airborne Mine Countermeasures Module provides rapid mine hunting and clearing using the embarked MH-60 helicopter and Mine Countermeasure systems. The Remote Mine Hunting Module uses a Remote Multi-Mission Vehicle (RMMV)

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

and AQS-20A to provide sustained mine hunting and clearing from the surface. The Influence Sweep Module provides endurance bottom sweep capability, the Coastal Mine Reconnaissance Module (CMRM) will allow detection of minefield patterns and obstacles from an embarked Fire Scout VTUAV, and the Buried Mine Module will allow detection of buried mines. When complete, the MCM mission package will provide full capability against floating, tethered, bottom, and buried mines.

The ASW mission package enables LCS to conduct detect-to-engage operations against modern submarines that pose a threat. Specific ASW capabilities include protecting forces in transit, protecting joint operating areas, and establishing ASW barriers.

ASW modules developed to provide the warfighter capabilities that can be employed for ASW area search as well as high value unit escort missions. Module components include a torpedo countermeasures system, a Variable Depth Sonar, and a Multi-Function Towed Array. The Aviation Module offers airborne threat localization and engagement capability through a Fire Scout VTUAV and an MH-60R with MK54 torpedoes. The individual systems are combined into three modules: Torpedo Defense Countermeasure; ASW Escort/Large area Clearance; and Aviation Module.

The SUW mission package increases firepower and offensive/defensive capabilities against large numbers of highly maneuverable, fast, small craft threats, giving LCS the ability to protect the sea lanes and move a force quickly through a choke point or other strategic waterway. With the SUW mission package embarked, LCS has enhanced detection and engagement capability against enemy small craft and similar littoral surface threats.

The SUW mission package is comprised of several modules including the Gun Mission Module (GMM). The GMM is comprised of two high velocity 30mm cannons and is augmented with the ship's 57mm gun to counter close in to mid-range threats. The Aviation Module uses the embarked the MH-60R helicopter with Hellfire missile and the MQ-8B Fire Scout Vertical Take-off and Landing Tactical Unmanned Aerial Vehicle (VTUAV) - for the detection, identification, and classification of surface contacts and to engage long range threats. The Maritime Security Module supports the embarkation of a Visit, Board, Search, and Seizure (VBSS) team. The Surface to Surface Missile Module (SSMM) will provide missile coverage for mid-range threats and small boats.

The LCS Mission Modules Common Equipment consists of enabling products required by all mission packages to provide common hardware interfaces, computer operating environment, communications systems, aviation interface systems and portable development & integration test-sets. Common hardware interfaces include definition, installation and control of mechanical, electrical and cooling requirements common to all mission packages. The Mission Package Computing Environment (MPCE) provides common services and Operating Environment to support all Mission Package Application Software and Open Architecture Products. The Multi-Vehicle Communications System (MVCS) enables the control and data exchange of simultaneous unmanned mission vehicles and the Seaframes. Aviation interface systems include integration and management of data communications, data processing and physical hardware interfaces such as common equipment and containers used by all mission packages. Development and integration test-sets provide a mobile operating environment installed in the Mission Package Portable Control Stations (MP-PCS) to serve as a surrogate Seaframe during mission package development and integration test events at test ranges.

Per the FY14 Appriopriations Act, the LCS Mission Modules Program has been assigned its own PE of 0603596N. Prior year funding is located in PE 0603581N. FY14 funding was transferred to the greatest extent practicable.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: System Engineering	13.478	2.259	-
Articles:	-	-	-
FY 2013 Accomplishments: Supported CPD Development for the MCM Increment 1 and SUW MP Increment 1/2: Incremental KPP development; Net-centric operations; End-to-end (E2E) System of Systems (SoS) Architecture and Net Ready Key Performance Parameter (NR-KPP) update; Identified capabilities and limitations for SUW Increment 2 and MCM MP Increment 1; Supported engineering and programmatic analysis for future capabilities. LCS MM Baselines Development: aligned baseline nomenclatures toward common schema that is aligned with the MM Increments; established functional and allocated baselines for SUW Increment 3, MCM Increment 2, ASW Capability; improve the level of detail contained in the product baselines to define a production-level product baseline; established product baselines for SUW Increment 2 and MCM Increment 1 Capability; supported efforts to authorize/certify MP product baselines. Developed a strategic plan for M&S to include Modeling and Simulation (M&S) tools, which primarily support performance prediction; validating T&E plans; and/or training and stim/sim efforts. Developed FY13 LCS MM System Engineering Technical Review (SETR) Plans through SUW Increment 3, MCM Increment 4, and ASW Capability. Closed Preliminary Design Review (PDR) equivalency report look-ups, incorporated and aligned Software (SW) SETR events with HW SETR planning. Improve and standardize SE inputs to PARM system System Project Directives (SPDs). Tracked lead/lag SE Metrics including requirements volatility; engineering Change volatility; LCS MM Systems Readiness Level (SRL) assessments and improved issue tracking through resolution. Updated mission threads to the Concept of Employment (CONEMP), Naval Mine Warfare Simulation (NMWS), System of System Analysis Tool Set (SOSAT), and other models; coordinated the development of integrated Reliability Block Diagrams (RBDs) to support Reliability Availability and Maintainability (RAM) analyses; verify data, architecture, and mission thread assumptions in RAM model; allocated required reliability improvement to targeted mission systems through the Common Logistic Requirements Document (CLRD); standardied and improved RAM data collection; implemented Failure Reporting, Analysis, and Corrective Action System (FRACAS) and Failure Review Boards (FRBs) Developed draft outline for SEP v2.0 iaw 2011 policy and latest streamlined template; close PDR report/PSR/or other MS B look-ups. Developed and maintained an integrated Future S&T roadmap to comprehensively align with overall LCS MM Program Plans; synergize with LCS S&T and DoD-wide initiatives, and ultimately guide PMS 420 and PEO LCS investments from a strategic perspective. Performed Environment, Safety, and Occupational Health (ESOH) risk/hazard analysis and mitigation tracking; align hazards and MARs to product baseline; completed ESOH risk/hazard analysis and mitigation tracking; developed and implement Hazardous Material Management Program (HMMP).			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Implemented Corrosion Prevention and Control Plan (CPCP): assess and address corrosion issues associated with SUW Increment 1/2 integration, test, and deployment activities; assess and address corrosion issues associated with MCM Increment 1 integration and test events. needs and implement QAP for production systems/sub-systems. Implement an updated problem process (TOR process); develop a PMS 420 Hardware/Software Problem Resolution Process; complete update to the CM Plan with new processes. ***FY 2014 Plans:*** Support Capability Production Document (CPD) for SUW Increment III, MCM Increment II/III development. Provide SE guidance to the TSRs, CCBs, RMB, PPP and RAM-C Working group and others as identified in the LCS MM SEP. Coordinate and provide guidance for all LCS MP SETR events including but not limited to the following: PDR, CDR, SRR, TRR. Provide management oversight for the Configuration Control Board including reviewing and approving ECPs. Negotiate connection agreements with Littoral Combat Ship (LCS) Squadron One (LCSRON) Class IA Manager (IAM) allowing mission packages to operate on LCS. Support all Certification Test and Evaluation (CT&E) events conducted which include MPAS, results will be used to develop revised PRA package/risk deficiency database. Update the LCS Mission Modules Program Protection Plan and the Information Assurance Strategy to support MPCE 2.0 development. Support the SSSTRP and WSESRB Review of mission packages and prepare the closure of findings. Develop MAR package for risk acceptance. Update the PMS 420 System Safety Management Plan (SSMP) Plan. Complete mission package Integration System Hazard Analysis (SHA). Update the PMS 420 Hazardous Material Management Program (HMMP) Plan. Identify and manage ESOH mishap risk maintained within the Program Hazard Tracking Database. Coordinate HSI activities across MPs and integrate MPs with seaframe HSI activities. Monitor the implementation of the PMS 420 MM HSI Plan. Update the following SE documents including: LCS MM SEP; Corrosion Prevention Control Plan (CPCP), PESHE, Life Cycle Signature Support Plan. Continue supporting opportunities for technology transition identified in the S&T Notebook to include at-sea refueling, data mission payload, and lightweight container. Support and track weight against the Weight Management Plan. Leverage modeling and simulation to support CPD development for mission packages. Continue tracking SE Metrics including requirements and engineering change volatility and LCS MM Systems Readiness Level (SRL) assessment. Continue implementation of M&S Plan to certify the following: NMWS M&S in support of MCM IOT&E; ATRT to support SUW MPAS regression testing; SUW MM Increment I/II modeling; ASW modeling for developmental testing. ***FY 2015 Plans:*** N/A			
Title: Program Management	6.108	3.985	-
Articles:	-	-	-
FY 2013 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Supported all efforts associated with Milestone B. Continued PM efforts: business and administrative planning, organizing, directing, coordinating, controlling, and approval actions designated to accomplish overall program objectives that are not associated with specific hardware elements or included in systems engineering. ***FY 2014 Plans:*** Support all efforts associated with Milestone C. Continue PM efforts: business and administrative planning, organizing, directing, coordinating, controlling, and approval actions designated to accomplish overall program objectives that are not associated with specific hardware elements or included in systems engineering. ***FY 2015 Plans:*** N/A			
Title: System Test and Evaluation	26.019	7.706	-
Articles:	-	-	-
FY 2013 Accomplishments: Planned and conducted SUW MP DT phase 1 aboard LCS 1 variant. Completed data analysis and report. SUW MP DT consisted of increasingly stressing scenarios to characterize performance of SUW MP against requirements. SUW Test events included Integrated Tracking Exercise (TRACKEX), 30mm towed sled firing events, & layered defense firing events against small boats and targets utilizing MH-60R, 57mm Gun, & 30mm GMMs. Conducted test planning for SUW MP DT phase 2, TECHEVAL and IOT&E and Operational Test Readiness Review (OTRR) preparation for SUW MP IOT&E. Began 30mm live fire test program to include data analysis, report preparation, and preliminary live fire events. Continue to prepare the SSMM LFT&E plan. MCM MP DT/TECHEVAL/IOT&E will be conducted aboard LCS 2 variant. MCM DT events will include RMS and OAMCM systems, RMMV LH&R, mission scenario events. Conducted test planning, test execution, data analysis, and test reporting for MCM MP DT-B2 Phase 4 Period 1 aboard LCS 2 variant. Conducted test planning, preparation, and documentation for MCM MP TECHEVAL and IOT&E. Conducted initial test planning of the ASW MP on the LCS platform. Conducted National Environmental Policy Act (NEPA) and environmental planning and coordination to support DT/TECHEVAL/OT/FOTE. Conducted and supported certification test and evaluation to include software certification/assessment testing, reporting, and events such as MPRAs, MRAs, Test Readiness Reviews, WSESRB, etc in order to support fleet deployment upon completion of the IOT&E and FOTE events. Conducted planning and preparation of an MDEMO. ***FY 2014 Plans:*** Conduct SUW MP TECHEVAL/IOT&E aboard LCS 1 variant. Complete Planning, and conduct Execution, Data Analysis and Reporting for SUW MP TECHEVAL with increasing stress scenarios to characterize performance of SUW MP against requirements and in preparation and readiness for IOT&E. Complete test planning and OTRR preparation and execute both events for SUW MP IOT&E on LCS 1 variant. Conduct data analysis and reporting for SUW MP TECHEVAL and			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
IOT&E. Conduct SUW MP DT on LCS 2 variant. Begin SUW MP SSMM planning. Commence conduct of SSMM live fire test program and complete GMM live fire test program to include data analysis and report. Conduct MCM MP OAMCM Phase B Operational Assessment. Conduct MCM MP Unmanned Systems Operational Assessment. Complete test planning and OTRR preparation and execute both events for MCM MP TECHEVAL and IOT&E. Conduct data analysis and reporting for MCM MP TECHEVAL and IOT&E. Continue test planning, conduct initial integration test, transition from engineering to DT testing of the ASW MP on the LCS platform; Perform data analysis of initial ASW MP testing. Conduct National Environmental Policy Act (NEPA) and environmental planning and coordination to support DT/TECHEVAL/OT/FOTE. Conduct and Support Certification Test and Evaluation to include software certification/assessment testing, reporting, and events such as MPRAs, MRAs, Test Readiness Reviews, WSESRB, etc and in order to support fleet deployment upon completion of the IOT&E and FOTE events. ***FY 2015 Plans:*** N/A			
Title: Integration, Assemble, Test and Checkout	5.588	3.553	-
Articles:	-	-	-
FY 2013 Accomplishments: Performed Mission Package - Seaframe Integration and Aviation Integration. Seaframe Integration provides services that support the successful integration of the MCM, SUW, and ASW Mission Packages into both variants of LCS seaframes. Mission Package (MP) - Seaframe integration engineering includes: Hardware integration engineering, Software integration engineering, Launch handling & recovery integration engineering, Waterfront integration, Mission Systems and Ship Integration Team (MSSIT), Communications integration, Seaframe studies, and ship modification technical data package development. Aviation Integration: Completed coordination of VTUAV Baseline Integration, INCO, AVCERT & Dynamic Interface LCS 2 & LCS 3. Transitioned VTUAV Baseline from MP R&D to Sea Frame production. Enabled TCDL Data Link Capability (first event will be SUW DT/TECHEVAL on LCS 3). Implemented Tactical Common Data Link radio monitor & control for LCS 1 & LCS 3. Mitigated OAMCM shipboard operating environment and tempo issues and risks. Enabled AMNS and ALMDS loading onto the helo in operational sea states and ship motion. Optimized AVDET, VTUAV PUK & Sup Container/RO-ROs for MP deployment & sustainment. Continued program level Integration, Assembly, Test & Checkout efforts of ECPs required to correct findings from Developmental and Operational test events. ***FY 2014 Plans:*** Perform Mission Package - Seaframe Integration and Aviation Integration. Seaframe Integration provides services that support the successful integration of the MCM, SUW, and ASW Mission Packages into both variants of LCS seaframes. Mission Package (MP) - Seaframe integration engineering includes: Hardware integration			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
engineering, Software integration engineering, Launch handling & recovery integration engineering, Waterfront integration, Mission Systems and Ship Integration Team (MSSIT), Communications integration, Seaframe studies, and ship modification technical data package development. Aviation Integration: Integrating new capabilities of VTUAV onto LCS, such as weapons and radar. Integrate the larger and higher endurance MQ-8C with LCS. Integrate new Mission Package driven payloads onto the VTUAV. Provide HSF or CV-TSC/ PLA functionality as MP solution. Integrate MH-60S SUW enhancements into SUW MP (20mm gun, rockets, radar, data link). Conduct systems engineering for VTUAV and MH-60S ASW enhancements into ASW MP. Conduct systems engineering analysis of alternatives for integrating new Unmanned Aerial Systems into MPs. Continue program level Integration, Assembly, Test & Checkout efforts of ECPs required to correct findings from Developmental and Operational test events. ***FY 2015 Plans:*** N/A			
Title: Training Systems Development	14.311	3.723	-
Articles:	-	-	-
FY 2013 Accomplishments: Continued development of training and training systems for MCM and SUW Mission Module (MM) Detachments. Train to Certify (T2C) capability will be achieved in FY17 after all systems have been delivered, trainers in place and formal training has been developed and accepted. Updated formal curriculum to incorporate findings from program test events, operations and classroom experience. Delivered Common Mission Package Trainer (CMPT) software update to RMMV 4.0 capability. Continued development of CMPT RMMV 6.X and dual RMMV capability. Began integration of updated common visualization software. Delivered MPTS software update to incorporate RMMV 4.0 capability and an initial Gun Console Operator trainer. Continued Mine Warfare Evaluator (MIWE), Remote Vehicle Operator (RVO) and Remote Sensor Operator (RSO) training precursors to LCS MCM MM Fundamentals and Capstone courses. Delivered curriculum for LCS MCM MM Fundamentals, Capstone and Planning curriculum in preparation for FY14 initial RFT. Continued SUW formal training curriculum development for LCS SUW MM Fundamentals, Capstone and Planning Courses necessary to achieve partial RFT in FY15. Performed instructor training on Naval Tactical Training System (NTTS) MCM and SUW watch station trainer capabilities. Completed Information Assurance requirements to integrate with Ship type tactical team trainers and connect to Navy Cooperative Training Environment (NCTE). Continued transition from vendor training to formal SUW Gun Mission Module (GMM) system course. Interim GMM differences training transitioned from NSWC Dahlgren to CSCS Dam Neck. Continued curriculum development for Mission Package Computing Environment (MPCE) and Multi-Vehicle Communications System (MVCS) for delivery to and incorporation into Ship type IT Total Ships Computing Environment (TSCE) training. Funded 12 contract instructors (9 MCM and 3 SUW) for LTF prior to transition to N1 funding coincident with RFT in FY14.			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Conducted initial end to end exercise of MCM detachment to validate training delivery, sailor performance and software tool usability. Performed vendor and interim training for formal MCM, and SUW test events using MCM MP and SUW MP tactical hardware to train sailors. Funded training related detachment travel and provided Vendor and interim formal training to MCM, ASW, and SUW MM replacement Sailors and new MCM and SUW detachments in accordance with CSPPs. ***FY 2014 Plans:*** Achieve partial Ready for Training (RFT) at NETC facility for MCM MM training using Common Mission Package Trainer (CMPT) team trainer and Networked Tactical Trainer System (NTTS) part task trainers. Achieve RFT for GMM Difference course. Full Train to Certify (T2C) capability will be achieved in FY17 after all systems have been delivered, trainers in place and formal training has been developed and accepted. Continue Mine Warfare Evaluator (MIWE), Remote Vehicle Operator (RVO) and Remote Sensor Operator (RSO) training precursors to LCS MCM MM Fundamentals and Capstone courses. Update formal curriculum to incorporate findings from program test events, operations and classroom experience. Update CMPT MCM and SUW integrated team trainer software for delivery of incremental capability to support MM Fundamentals, MM Operations and MM Planning curriculum. Update NTTS watchstation trainer software for delivery of incremental capability and as a result of formal test events lessons learned. Update Information Assurance posture as required to support integrated and Fleet Synthetic Training using Navy Cooperative Training Environment (NCTE). Complete SUW formal training curriculum instruction development for MM Fundamentals, Capstone and Planning Courses necessary to achieve partial RFT in FY15. Fund 16 contract instructors (7 MCM and 9 SUW) for LTF prior to transition to N1 funding coincident with RFT in FY14. Perform vendor and interim training for formal MCM, and SUW test events. Fund training related detachment travel and provide Vendor and interim formal training to MCM, ASW, and SUW MM replacement Sailors and new MCM and SUW detachments in accordance with CSPPs. ***FY 2015 Plans:*** N/A			
Title: Program Technical Data	1.279	0.432	-
Articles:	-	-	-
FY 2013 Accomplishments: Updated Program Technical Data packages in preparation for SUW MP TECHEVAL test events. Continued Integrated Logistics Support efforts for the scheduled test events. Implemented Technical Manual Management Activity to review, and produced and distributed technical documentation. Continued development of Maintenance Figure of Merit (MFOM) to maintenance management that incorporated engineering, failure, technical and provisioning into single model that uses criticality factors to assist prioritization of maintenance management. Implemented MPSF inventory management system (IMS) based on pRFID solution. Provided overarching provision for Program. ***FY 2014 Plans:***			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Update Program Technical Data packages to incorporate findings from SUW MP and MCM MP OT events. Finalize initial Integrated Logistics Support products in support of SUW MP FY14 IOC. Prepare for the MCM MP IOC late FY 14 / early FY 15. Continue Technical Manual Management Activity to review, produce and distribute technical documentation for the program. Continue development of MPSF automated inventory management system (IMS) based on pRFID solution. Start integrated logistics overarching support for the ASW MP and the new increments. Provide overarching provision for Program. ***FY 2015 Plans:*** N/A			
Title: Common Equipment	11.892	3.321	-
Articles:	-	-	-
FY 2013 Accomplishments: Mission Package Computing: Completed MPCE v1.9 First Articles Unit (FAU) hardware evaluation and validation for MCM and SUW Mission Package Application Software (MPAS). Conducted two MPCE v1.9 In-Process Reviews and established hardware tech refresh production baseline. Conducted an MPCE Utility Services (MUS) IPR and MUS Test Readiness Review (TRR). Completed MUS 1.0 backfit on LCS 2. Provided MPCE technical support to MSSIT for Mission Package Console mod definition and retrofit on LCS 3. Conducted INCO for MPCE v1.8 on LCS 4. Provided maintenance deliveries for MPS/MPOE. Completed final versions of the ACSN and ECP for MUS v1.0; received ECP apporval for MUS v1.0. Initiated planning for transition of MPCE software architecture to a Service Oriented Architecture (SOA), in support of the PMS 420 Mission Package Common Software Architecture (CSA) Baseline. Mission Package Communications: Completed MVCS v1.0.0 baseline installation and activities to support MCM MP Operational Test on LCS 2. Conducted MVCS Communications Characterization on LCS 2. Conducted MVCS and RMS PECP Offshore Demonstration testing to validate the integration of MVCS v1.0.0 on RMMV 5.0 and 5.1. Initiated MVCS 1.1 baseline software development to support integration on SMCM UUV and Unmanned Influence Sweep System (UISS). Conducted Demonstration Design Review (DDR) for the Data Mission Payload (DMP) prototype for integration on the Fire Scout air vehicle. Conducted activities to support High Frequency Ground Wave (HFGW) radio Rapid Technology Transition (RTT) effort. Conducted activities to identify anti-jamming requirements for MVCS. ***FY 2014 Plans:*** Mission Package Computing: Continue MPCE v1.9 hardware production and tech refresh activities. INCO of CMPT #3 on LCS 6. Conduct tech refresh for the shore sites (MPPCS #1 and #2) and for LCS 1and LCS 2. Provide maintenance deliveries for MPS/ MPOE. PMS 420 CM delivery of MUS v1.1 will occur. Conduct quarterly IPRs. Continue development activities to evolve MPCE software architecture to a Service Oriented Architecture (SOA), MPCE v2.0, in support of the CSA Baseline. Mission Package			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Communications: Support MCM MPT TechEval with MVCS v1.0.0. Deliver MVCS HW and SW builds v2.6. Support testing of MVCS v1.0.0 on SMCM UUV and UISS. Conduct DMP demonstration on Fire Scout air vehicle. ***FY 2015 Plans:*** N/A			
Title: Mine Countermeasures (MCM) Mission Package	53.804	3.125	-
Articles:	-	-	-
FY 2013 Accomplishments: Initial design for Surface Mine Countermeasures (SMCM) UUV container initiated. Initiated integration of SMCM UUV into MCM MPs. Groomed and conducted MVCS dual control/RGP 4.2 RMMV End-to-End testing to ensure MCM mission package readiness to enter OPEVAL. Conducted KPP modeling analysis. Resolved hardware PTRs identified during MCM Developmental Testing through development of ACSNs. In support of MCM mission package TECHEVAL and OPEVAL, incorporated the following items into MPAS: RMMV RGP V4.2 improvements, correction of software PTRs identified during end-to-end testing. Delivered next MPAS build in support of TECHEVAL and OPEVAL. Performed systems engineering (risk management, information assurance, human systems integration, safety), configuration management, and Integrated Logistics Support. Prepared for and conducted Systems Engineering Technical Reviews (SETR) (SRR/PDR) for MCM MP Increment II. ***FY 2014 Plans:*** Procure USV EDMs. Finalize design for Surface Mine Countermeasures (SMCM) UUV container and procure EDM support container. Design and integration of SMCM UUV into MCM MPs. Conduct MCM mission package TECHEVAL and OPEVAL. Conduct KPP modeling analysis. Resolve hardware PTRs identified during testing through development of ACSNs. Complete the integration of RMMV v4.2.1 with MCM MP Increment I. Prepare for and conduct Systems Engineering Technical Reviews (SETR) (SRR/PDR) for MCM MP Increment III. In support of MCM mission package, incorporate the following items into MPAS: RMMV RGP V4.3 improvements, correction of software PTRs identified during MCM MP testing, and MEDAL EA integration. Perform systems engineering (risk management, information assurance, human systems integration, safety), configuration management, and Integrated Logistics Support. ***FY 2015 Plans:*** N/A			
Title: Anti-Submarine Warfare (ASW) Mission Package	34.024	5.175	-
Articles:	-	1.000	-
FY 2013 Accomplishments:			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Completed System Requirement Review (SRR). Updated CDD, DRMPs, CONOPs, DODAFs, MM Specs, DOORS, TPMs, TEMP, & TSN. Whiteship Final Report complete. LHRE-2 CDR complete. LWT RFI complete. LCS-3 TDP (50% drawings) complete. LCS-4 Feasibility Study complete. Initiated final LCS-3/4 TDPs (SPECs). Initiating Functional Allocations for SFR scheduled for Q1FY13. Initiated SW Integration and Design for SSR/PDR scheduled for 2QFY14. Initiated LCS-1 TDP TEMPALT. Initiatiated LCS-1 SCD & Test Planning for LCS-1 ASW MP At Sea Test in 4QFY14. Draft CONEMP completed. Continuing development of the ASW Mission Modules (MM) that were transitioned from IWS 5 and NUWC Newport, including ASW Escort capability and Torpedo Defense. Initiated development of the Common Mission Management/Decision Support system required for the integration of the ASW MMs, including manned and unmanned aircraft integration. Initiated detailed LCS ASW Mission Module systems engineering and integration plans. Developed Ship integration plan and required shipboard integration mods. Conducted component and system level testing and related predictive performance modeling and simulation. Managed and administered required Systems Engineering Technical Reviews (SETR), and required systems Certification Reviews. Conducting risk mitigation efforts necessary to cost effectively minimize residual risk to mission module and overall program performance. Conducted technology demonstrations to benchmark technology system performance and related potential to mitigate current risks and acknowledged capability gaps. Initiated efforts to provide a common ship-to-air integration and test of Helo Support Function (HSF) Mission Package Application Software (MPAS) to ensure availability of capability for planned ASW Mission Package activities. Established helicopter interface requirements, integrate, and demonstrate end-to-end capability. Conducting ASW MP ILS planning to include development of ASW MP Reliability Growth Plan. Reviewed environmental impacts and assess testing requirements to ensure NEPA compliance. Conducting studies and analyses on emerging technologies for incorporation into future ASW MP increments.			
FY 2014 Plans: Conduct a Critical Design Review (CDR) that focuses on the transition of the final system design, development, and integration of ASW MP Increment II ASW Escort and Torpedo Defense mission modules. Conduct required systems engineering technical reviews to ensure system design meets the total CDD requirement. Conduct component and system level testing and related predictive performance modeling and simulation to establish system and module performance and reliability baselines. Provide developmental engineering support for logistical engineering data and technical documentation. Continue Mission Module development and LCS integration to include Mission Module level at-sea testing. ASW Increment 2 final development, integration and test. Award competitive contract(s) for EDM/Production Representative Article (PRA) set of ASW Escort/Torpedo Defense systems to support IOT&E in FY16. Maintain configuration control of ASW MP data, hardware, and software. Collect data and perform analysis associated with the ASW MP Reliability, Maintainability, and Availability (RMA) program. Provide Find/Fix/ Repair for technical issues associated with Mission Package Application Software (MPAS) identified during integration and developmental testing and conduct necessary regression testing on proposed fixes. Initiate environmental testing on Mission Package (MP) Increment 2 and incorporate required Engineering Change Proposals (ECP) into the Technical Data Package			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
(TDP). Provide developmental engineering support, equipment, and documentation for logistical engineering data and technical publications to include training (ship's crew and Mission Package Support Facility (MPSF) personnel), maintenance and provisioning. Conduct mission package certification, obtain Information Assurance (IA) approvals, and conduct land based test events with each seaframe manufacturer prior to conducting formal shipboard test events. Support the planning and preparations for FY15 Developmental Test (DT) of ASW MP Increment 2. Conduct studies and analyses on emerging technologies for incorporation into future ASW MP Increments. ***FY 2015 Plans:*** N/A			
Title: Surface Warfare (SUW) Mission Package	28.439	8.349	-
Articles:	-	-	-
FY 2013 Accomplishments: Continue design and development of SSMM Increment 1. Initiated Longbow Hellfire alternative for SSMM Inc 1. Begin SSMM Increment 1 and missile environmental confidence testing focusing on shock, vibe, Electromagnetic Environmental Effects (E3), temperature, and salt spray. Procure Griffin B-Block II missiles to support developmental testing, procure seven GMS prototypes to support flight testing. Procured three SSMM Increment 1 launch systems to support flight testing and procure four suites of BMS hardware and software to support flight testing. Generate SSMM Increment 2 MEP requirements and architecture. Conducted Critical Design Reviews (CDRs) that focuses on the GMM and MSM. Find/Fix/Repair technical issues associated with GMM and MPAS identified during STF and DT/OT events. Maintained configuration control of SUW MP data, hardware, and software. Collected data and performed analysis associated with the SUW MP Reliability, Maintainability, and Availability (RMA) program. Conducted combat system certification, MP certification, obtain WSESRB/SSSTRP approval, IA approvals, and conduct land based test events with each seaframe manufacturer prior to conducting shipboard events. Supported formal testing of the SUW MP for LCS 1 variant. ***FY 2014 Plans:*** SSMM Inc 1 formal technical data package will be finalized. Continue SSMM Increment II development. Initiate developmental testing to categorize modifications to the current MPAS baseline. Initiate modifications to MPAS to support continued SSMM Increment II development. Conduct appropriate systems engineering technical reviews to ensure missile system design meets the total CDD requirement. Continue planning the SSMM Increment II environmental confidence level testing. Continue development of the detailed launcher design that supports the SSMM Increment II concept. Complete DT/OT/IOT&E for the Gun Mission Module onboard LCS 1 & 2 variants. Find/Fix/Repair technical issues associated with GMM and MPAS identified during STF and DT/OT events. Maintain configuration control of SUW MP data, hardware, and software. Collect data and perform analysis associated with the SUW MP Reliability, Maintainability, and Availability (RMA) program. Conduct combat system certification, MP certification, obtain WSESRB/SSSTRP approval, IA approvals, and conduct shipboard test events with each seaframe			

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
manufacturer. Support formal testing of the SUW MP for LCS 1 variant OT events, STF from LCS 2 variant, DT from LCS 2 variant, and OT from LCS 2 variant. ***FY 2015 Plans:*** N/A			
Title: Reliability, Availability and Maintainability	1.961	0.372	-
Articles:	-	-	-
FY 2013 Accomplishments: Monitored Reliability Growth and updated plans as necessary. Continued with RAM efforts to provide multiple excursions that consider multiple MPs and multiple ships within a single area of responsibility (AOR) to identify major contributors to MP RAM model; continued to refine RAM model assumptions based on actual data and conducted multiple sensitivity analysis to quantify the effect of alternate sparing philosophies (i.e., more onboard spares, complete spare system, etc.) based on mission module availability. Drafted MCM and SUW MP RAM-C Analysis Report and RAM-C Rationale Report. Performed modeling of MCM MP Increment 1 and SUW MP Increment 2 in support of development of sustainment requirements for the respective CPDs. The following tasks were deferred to FY14: Determine the maintenance throughput capability for the mission systems at the Mission Package Support Facility/Mission Module Readiness Center (MPSF/MMRC) depot. Commence the introduction of the ASW MP into the program RAM model. Develop a Failure Reporting Analysis, Corrective Action System (FRACAS) tailored to the mission module system of systems to include MPCE/MVCS hardware and software failures and modes. Incorporate more cost data into RAM-C analysis. ***FY 2014 Plans:*** Continue to monitor Reliability Growth and update plans as necessary. Continue to refine RAM model assumptions based on actual data and conduct multiple sensitivity analysis to quantify the effect of alternate sparing philosophies (i.e. more onboard spares, complete spare system, etc.) based on mission module availability. Determine the maintenance throughput capability for the mission systems at the Mission Package Support Facility/Mission Module Readiness Center (MPSF/MMRC) depot. Refine modeling of ASW MP. Continue utilizing FRACAS to feed back product and process improvements to the Systems Engineering and ILS organizations. ***FY 2015 Plans:*** N/A			
Accomplishments/Planned Programs Subtotals	196.903	42.000	-

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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• 2127: *Littoral Combat Ship*	1,821.001	1,793.014	1,427.049	-	1,427.049	1,423.337	1,470.017	1,504.143	1,067.189	10,691.300	26,634.250
• 1600: *LCS Common Mission Modules Equipment*	25.087	35.966	37.413	-	37.413	24.518	20.139	25.015	19.281	Continuing	Continuing
• 0443: *Aircraft Procurement, Navy*	110.402	-	-	-	-	-	-	-	-	-	643.533
• 5110: *Outfitting/Post Delivery*	50.065	68.165	118.282	-	118.282	164.545	204.046	205.954	209.777	1,647.600	2,701.853
• 1320: *LCS Training Equipment*	22.220	26.726	9.630	-	9.630	20.002	21.278	19.004	19.394	Continuing	Continuing
• 0944: *LCS Class Support Equipment*	8.566	47.078	36.206	-	36.206	67.109	73.526	78.854	88.111	Continuing	Continuing
• 1601: *LCS MCM Mission Modules*	31.829	34.885	15.270	-	15.270	211.821	158.536	146.157	151.464	Continuing	Continuing
• 1602: *LCS ASW Mission Modules.*	-	-	2.729	-	2.729	30.108	47.852	48.562	48.831	Continuing	Continuing
• 1603: *LCS SUW Mission Modules*	30.301	19.481	44.208	-	44.208	39.231	45.907	66.591	70.779	Continuing	Continuing
• 1605: *Remote Minehunting System (RMS)*	-	-	42.276	-	42.276	70.976	67.471	67.708	68.343	Continuing	Continuing

Remarks

D. Acquisition Strategy

The LCS Mission Module Acquisition Strategy is employing an incremental procurement approach to allow for the rapid introduction of additional capabilities as system technology matures. This phased plan provides incremental fielding of capability through the introduction of mature programs of record into the respective Mission Packages until the full baseline capability defined in the Capability Development Document (CDD) is reached.

E. Performance Metrics

Milestone Reviews

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.1 System Engineering	WR	NSWC PC : Panama City, FL	5.547	1.597	Oct 2012	0.461	Oct 2013	-		-		-	-	7.605	-
1.1 System Engineering	WR	NSWC DD : Dahlgren, VA	5.800	1.228	Oct 2012	0.516	Oct 2013	-		-		-	-	7.544	-
1.1 System Engineering	C/CPFF	Northrop Grumman : Bethpage, NY	9.980	1.196	Dec 2012	0.495	Oct 2013	-		-		-	-	11.671	-
1.1 System Engineering	WR	SPAWAR PAC : San Diego, CA	2.450	1.134	Nov 2012	0.703	Oct 2013	-		-		-	-	4.287	-
1.1 System Engineering	WR	NUWC NPT : Newport, RI	2.300	1.207	Oct 2012	0.026	Oct 2013	-		-		-	-	3.533	-
1.1 System Engineering	C/CPFF	CACI : Fairfax, VA	3.000	0.137	Dec 2012	-		-		-		-	-	3.137	-
1.1 System Engineering	C/CPFF	AAC : Uniontown, PA	0.000	6.979	Jan 2013	-		-		-		-	-	6.979	-
1.1 System Engineering	WR	NSWC PHD : Port Hueneme, CA	1.362	-		0.039	Oct 2013	-		-		-	-	1.401	-
1.1 System Engineering	WR	NSWC Carderock : Bethesda, MD	0.000	-	Nov 2012	0.178	Oct 2013	-		-		-	-	0.178	-
1.1 System Engineering	C/CPFF	JHU/APL : Laurel, MD	0.000	-	Jan 2013	-		-		-		-	-	-	-
1.1 System Engineering	WR	NUWC KPT : Keyport, WA	0.000	-		0.140	Oct 2013	-		-		-	-	0.140	-
1.1 System Engineering	WR	CDSA Dam Neck : Virginia Beach, VA	0.000	-		0.005	Oct 2013	-		-		-	-	0.005	-
1.1 System Engineering	WR	NSWC Corona : Corona, CA	0.000	-		0.053	Oct 2013	-		-		-	-	0.053	-
1.1.7 System Engineering RAM-C Project	WR	Various : Various	1.500	-		-		-		-		-	-	1.500	-
1.4 Integration, Assembly, Test and Check	WR	NAWC AD : Patuxent River, MD	1.134	0.486	Nov 2012	0.358	Oct 2013	-		-		-	-	1.978	-
1.4 Integration, Assembly, Test and Checkout	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.857	Dec 2012	0.671	Oct 2013	-		-		-	-	1.528	-
1.4 Integration, Assembly, Test and Check	WR	SPAWAR PAC : San Diego, CA	1.229	1.204	Nov 2012	-		-		-		-	-	2.433	-

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.4 Integration, Assembly, Test and Check	WR	NUWC NPT : Newport, RI	0.944	0.202	Oct 2012	-		-		-		-	-	1.146	-
1.4 Integration, Assembly, Test and Check	WR	NSWC PC : Panama City, FL	2.000	0.128	Oct 2012	0.095	Oct 2013	-		-		-	-	2.223	-
1.4 Integration, Assembly, Test and Check	WR	SUPSHIP Gulfcoast : Pascagoula, MS	1.500	0.543	Jan 2013	-		-		-		-	-	2.043	-
1.4 Integration, Assembly, Test and Check	WR	SUPSHIP Bath : Bath, ME	1.500	0.550	Jan 2013	-		-		-		-	-	2.050	-
1.4 Integration, Assembly, Test and Check	WR	NSWC DD : Dahlgren, VA	4.792	0.768	Oct 2012	0.766	Oct 2013	-		-		-	-	6.326	-
1.4 Integration, Assembly, Test and Checkout	WR	NSWC PHD : Port Hueneme, CA	0.000	0.850	Oct 2012	-		-		-		-	-	0.850	-
1.4 Integration, Assembly, Test and Checkout	WR	NSWC Crane : Crane, Indiana	0.000	-	Nov 2012	-		-		-		-	-	-	-
1.4 Integration, Assembly, Test and Checkout	WR	NSWC Carderock : Bethesda, MD	0.000	-	Oct 2012	1.505	Oct 2013	-		-		-	-	1.505	-
1.4 Integration, Assembly, Test and Checkout	C/CPFF	CACI : Fairfax, VA	0.000	-	Dec 2012	-		-		-		-	-	-	-
1.4 Integration, Assembly, Test and Checkout	Sub Allot	CECOM Bldg 1207 : Various	0.000	-	Nov 2012	0.158	Oct 2013	-		-		-	-	0.158	-
1.12 Common Equipment Development	WR	NSWC PC : Panama City, FL	78.962	5.364	Oct 2012	1.226	Oct 2013	-		-		-	-	85.552	-
1.12 Common Equipment Development	C/CPFF	Northrop Grumman : Bethpage, NY	18.727	3.001	Dec 2012	0.627	Oct 2013	-		-		-	-	22.355	-
1.12 Common Equipment Development	WR	NUWC NPT : Newport, RI	7.829	0.840	Nov 2012	0.064	Oct 2013	-		-		-	-	8.733	-
1.12 Common Equipment Development	WR	NSWC DD : Dahlgren, VA	1.921	2.687	Oct 2012	0.402	Oct 2013	-		-		-	-	5.010	-
1.12 Common Equipment Development	WR	NAVAIR PMA266 : Patuxent River, MD	6.500	-		-		-		-		-	-	6.500	-
1.12 Common Equipment Development	C/CPFF	AAC : Uniontown, PA	0.000	-	Jan 2013	0.483	Oct 2013	-		-		-	-	0.483	-

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.12 Common Equipment Development	WR	PMW 760 : Various	0.000	-	Nov 2012	-		-		-		-	-	-	-
1.12 Common Equipment Development	WR	SPAWAR PACIFIC : San Diego, CA	0.000	-	Nov 2012	0.521	Oct 2013	-		-		-	-	0.521	-
1.12 Common Equipment Development	C/CPFF	ARL/UT : Austin, TX	0.000	-	Dec 2012	-		-		-		-	-	-	-
1.13 MCM MP	WR	NSWC PC : Panama City, FL	132.896	9.265	Oct 2012	1.546	Oct 2013	-		-		-	-	143.707	-
1.13 MCM MP	WR	NSWC CD : Little Creek, VA	6.000	-		-		-		-		-	-	6.000	-
1.13 MCM MP	Sub Allot	PMS 406 : Various	0.000	5.999	Oct 2012	-		-		-		-	-	5.999	-
1.13 MCM MP	C/CPFF	Lockheed Martin : Riviera Beach, FL	0.000	38.540	Oct 2012	0.526	Oct 2013	-		-		-	-	39.066	-
1.13 MCM MP	C/CPFF	Raytheon : Tewksbury, MA	0.000	-		1.052	Oct 2013	-		-		-	-	1.052	-
1.14 ASW MP	Sub Allot	PEO IWS5 : Various	0.000	10.734	Nov 2012	1.830	Oct 2013	-		-		-	-	12.564	-
1.14 ASW MP	WR	NUWC NPT : Newport, RI	0.000	11.000	Oct 2012	1.297	Oct 2013	-		-		-	-	12.297	-
1.14 ASW MP	TBD	Various : Various	153.473	10.070	Dec 2012	-		-		-		-	-	163.543	-
1.14 ASW MP	WR	NSWC Dam Neck : Virginia Beach, VA	0.000	0.920	Dec 2012	0.130	Oct 2013	-		-		-	-	1.050	-
1.14 ASW MP	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	1.300	Dec 2012	1.057	Oct 2013	-		-		-	-	2.357	-
1.14 ASW MP	C/CPFF	SPA : Washington, DC	0.000	-		0.169	Oct 2013	-		-		-	-	0.169	-
1.14 ASW MP	Sub Allot	TBD Activity Placeholder : TBD	0.000	-		-		-		-		-	-	-	-
1.14 ASW MP	WR	NSWC PCD : Panama City, FL	0.000	-		-		-		-		-	-	-	-
1.14 ASW MP	WR	NSWC DD : Dahlgren, VA	0.000	-		0.182	Oct 2013	-		-		-	-	0.182	-
1.14 ASW MP	C/CPFF	CACI : Arlingrton, VA	0.000	-		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.14 ASW MP	WR	NUWC KPT : Keyport, WA	0.000	-		0.064	Oct 2013	-		-		-	-	0.064	-
1.14 ASW MP	WR	SSC PAC : San Diego, CA	0.000	-		-		-		-		-	-	-	-
1.14 ASW MP	WR	Lockheed Martin : Riviera Beach, FL	0.000	-		0.447	Oct 2013	-		-		-	-	0.447	-
1.15 SUW MP	WR	NSWC DD : Dahlgren, VA	185.800	13.769	Oct 2012	6.018	Oct 2013	-		-		-	-	205.587	-
1.15 SUW MP	WR	NSWC PHD : Port Hueneme, CA	8.500	2.558	Oct 2012	0.177	Oct 2013	-		-		-	-	11.235	-
1.15 SUW MP	WR	SPAWAR PACIFIC : San Diego, CA	2.142	1.117	Oct 2012	-		-		-		-	-	3.259	-
1.15 SUW MP	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	10.995	Dec 2012	1.568	Oct 2013	-		-		-	-	12.563	-
1.15 SUW MP	WR	NAWC WD : Ridgecrest, CA	0.000	-	Dec 2012	-		-		-		-	-	-	-
1.15 SUW MP	WR	NSWC CD : Crane, IN	0.000	-		-		-		-		-	-	-	-
1.15 SUW MP	WR	NSWC Corona : Corona, CA	0.000	-		-		-		-		-	-	-	-
1.15 SUW MP	WR	NSWC PC : Panama City, FL	0.000	-		0.074	Oct 2013	-		-		-	-	0.074	-
1.15 SUW MP	WR	PEO IWS 3 : Various	0.000	-		0.526	Oct 2013	-		-		-	-	0.526	-
1.16 MP-PCS Equipment	WR	Various : Various	3.547	-		-		-		-		-	-	3.547	-
1.19 Pre-Production Engineering	WR	Various : Various	8.425	-		-		-		-		-	-	8.425	-
1.20 Irregular Warfare Module	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	-		-		-		-		-	-	-	-
1.20 Irregular Warfare Module	WR	SPARWAR PAC : San Diego, CA	0.000	-		-		-		-		-	-	-	-
		Subtotal	659.760	147.225		26.155		-		-		-	-	833.140	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Support ($ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
1.1.10 Reliability, Maintainability, and Availability	C/CPFF	CACI : Fairfax, VA	0.000	-		-		-		-		-	-	-	-
1.1.10 Reliability, Maintainability, and Availability	WR	NSWC PC : Panama City, FL	0.000	0.881	Dec 2012	-		-		-		-	-	0.881	-
1.1.10 Reliability, Maintainability, and Availability	WR	NUWC, NPT : Newport, RI	0.000	-		-		-		-		-	-	-	-
1.1.10 Reliability, Maintainability, and Availability	C/BA	NSWC, Dahlgren : Dahlgren, VA	0.000	1.080	Dec 2012	-		-		-		-	-	1.080	-
1.5 Training Systems Development	WR	NAWC TSD : Orlando, FL	9.820	4.579	Jan 2013	-		-		-		-	-	14.399	-
1.5 Training Systems Development	WR	NSWC PC : Panama City, FL	15.538	1.215	Oct 2012	0.613	Oct 2013	-		-		-	-	17.366	-
1.5 Training Systems Development	WR	NSWC PHD : Port Hueneme, CA	5.400	1.054	Dec 2012	-		-		-		-	-	6.454	-
1.5 Training Systems Development	C/CPFF	AAC : Uniontown, PA	7.800	3.010	Jan 2013	2.307	Oct 2013	-		-		-	-	13.117	-
1.5 Training Systems Development	C/CPFF	CACI : Fairfax, VA	0.000	0.576	Nov 2012	-		-		-		-	-	0.576	-
1.5 Training Systems Development	WR	CSCS : Dahlgren, VA	1.240	0.843	Jan 2013	-		-		-		-	-	2.083	-
1.5 Training Systems Development	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	1.934	Dec 2012	0.703	Oct 2013	-		-		-	-	2.637	-
1.5 Training Systems Development	WR	CNSF : San Diego, CA	1.000	1.100	Dec 2012	-		-		-		-	-	2.100	-
1.5 Training Systems Development	WR	NSWC, Dahlgren : Dahlgren, VA	0.000	-		0.053	Oct 2013	-		-		-	-	0.053	-
1.5 Training Systems Development	WR	NUWC, Newport : Newport, RI	0.000	-		-		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.5 Training Systems Development	WR	JHU/APL : Laurel, MD	0.000	-		-		-		-		-	-	-	-
1.5 Training Systems Development	C/BA	CDSA, Dam Neck : Dam Neck, VA	0.000	-		0.046	Oct 2013	-		-		-	-	0.046	-
1.6 Program Technical Data	WR	NSWC PC : Panama City, FL	1.082	0.279	Nov 2012	0.266	Oct 2013	-		-		-	-	1.627	-
1.6 Program Technical Data	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.750	Dec 2012	0.081	Oct 2013	-		-		-	-	0.831	-
1.6 Program Technical Data	WR	CACI : Fairfax, VA	0.000	0.250	Dec 2012	-		-		-		-	-	0.250	-
1.6 Program Technical Data	WR	NUWC KPT : Keyport, WA	0.000	-		0.084	Oct 2013	-		-		-	-	0.084	-
		Subtotal	41.880	17.551		4.153		-		-		-	-	63.584	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.3 System Test and Evaluation	WR	NSWC PCD : Panama City, FL	27.165	9.844	Nov 2012	3.663	Oct 2013	-		-		-	-	40.672	-
1.3 System Test and Evaluation	WR	NSWC DD : Dahlgren, VA	29.000	5.513	Nov 2012	3.001	Oct 2013	-		-		-	-	37.514	-
1.3 System Test and Evaluation	WR	NUWC NPT : Newport, RI	6.200	-	Nov 2012	-		-		-		-	-	6.200	-
1.3 System Test and Evaluation	WR	NSWC PHD : Port Hueneme, CA	10.718	5.852	Oct 2012	0.403	Oct 2013	-		-		-	-	16.973	-
1.3 System Test and Evaluation	WR	SPAWAR PAC : San Diego, CA	4.713	0.984	Nov 2012	-		-		-		-	-	5.697	-
1.3 System Test and Evaluation	WR	COMOPTEVFOR : Norfolk, VA	2.835	0.248	Nov 2012	0.421	Oct 2013	-		-		-	-	3.504	-
1.3 System Test and Evaluation	WR	PMA 266 : Patuxent River, MD	0.000	0.344	Jan 2013	-		-		-		-	-	0.344	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.3 System Test and Evaluation	C/BA	Silver Ships : Theodore, AL	0.000	0.550	Jan 2013	-		-		-		-	-	0.550	-
1.3 System Test and Evaluation	C/BA	CNSF : Norfolk, VA	0.000	0.264	Nov 2012	-		-		-		-	-	0.264	-
1.3 System Test and Evaluation	C/BA	NAWC WD : Point Mugu, CA	0.000	2.420	Nov 2012	-		-		-		-	-	2.420	-
1.3 System Test and Evaluation	C/BA	NSWC Corona : Corona, CA	0.000	-		0.219	Oct 2013	-		-		-	-	0.219	-
		Subtotal	80.631	26.019		7.707		-		-		-	-	114.357	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Acquisition Workforce	Various	Various : Various	1.047	-		-		-		-		-	-	1.047	-
1.2 Program Management	C/CPFF	CACI : Fairfax, VA	32.091	3.175	Nov 2012	3.985	Oct 2013	-		-		-	-	39.251	-
1.2 Program Management	WR	NSWC PCD : Panama City, FL	0.000	1.453	Oct 2012	-		-		-		-	-	1.453	-
1.2 Program Management	WR	NSWC DD : Dahlgren, VA	0.000	1.480	Oct 2012	-		-		-		-	-	1.480	-
		Subtotal	33.138	6.108		3.985		-		-		-	-	43.231	-

	Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	815.409	196.903		42.000		-		-		-	-	1,054.312	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
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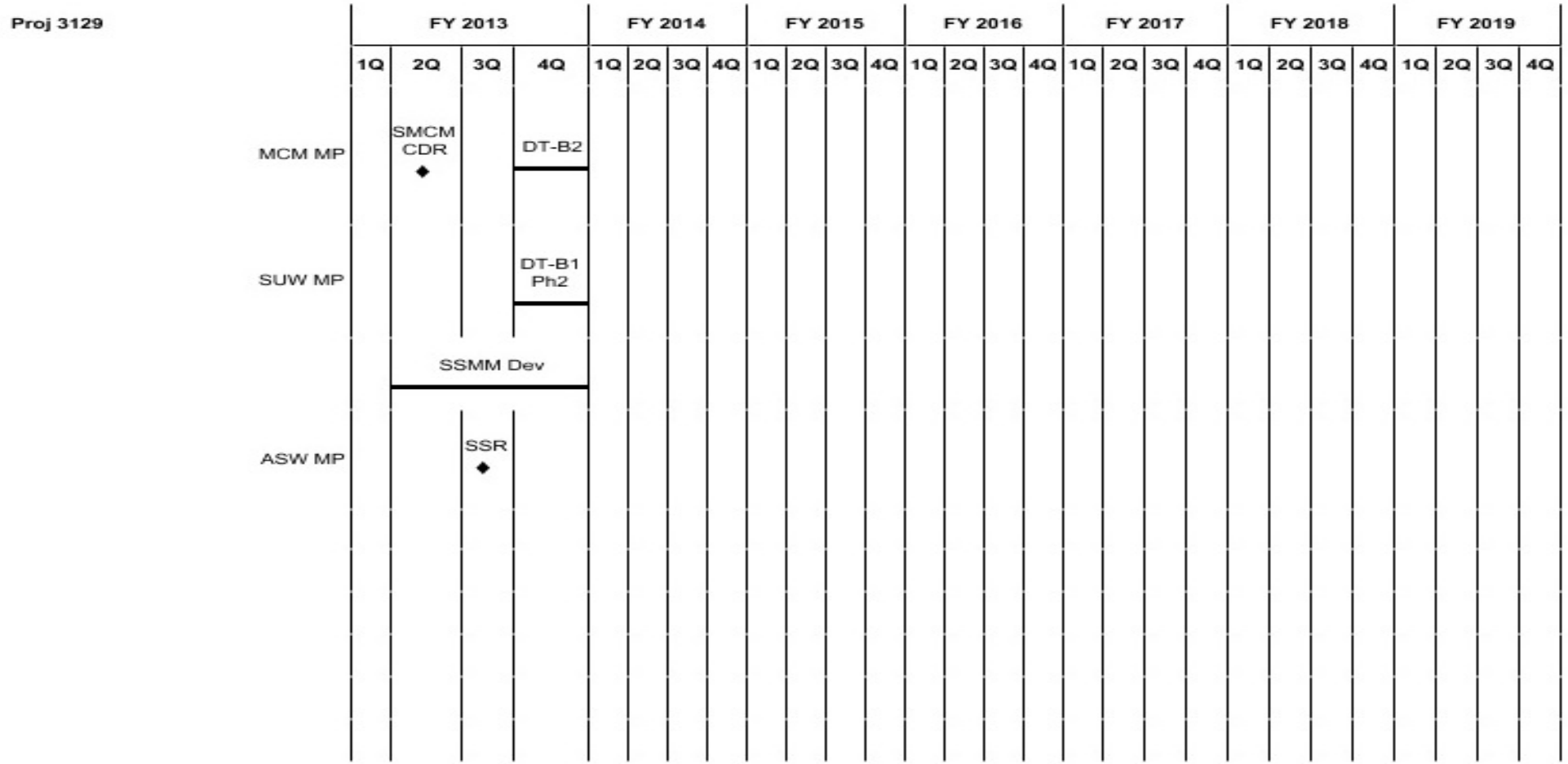

2015PB - 0603581N - 3129

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
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Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3129				
MCM MP: MCM MP Increment I DT-B2 Phase 4 (Independence Variant)	4	2013	4	2013
MCM MP: MCM - SMCM UUV CDR	2	2013	2	2013
SUW MP: SUW MP Increment I & II DT-B1 Phase 2 (Freedom Variant)	4	2013	4	2013
SUW MP: SUW MM SSMM Development	2	2013	4	2013
ASW MP: ASW MP Increment II SSR	3	2013	3	2013

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy												Date: March 2014
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COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
4018: *Littoral Combat Ship Construction*	1,502.350	34.902	4.880	-	-	-	-	-	-	-	-	1,542.132
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 374

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Littoral Combat Ship (LCS) is a fast, agile, and networked surface combatant with capabilities optimized to defeat asymmetric threats, and assure naval and joint force access into contested littoral regions. It uses open-systems-architecture design, modular weapons, sensor systems, and a variety of manned and unmanned vehicles to expand the battle space and project offensive power into the littoral. LCS operates with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including littoral anti-submarine warfare (ASW), surface warfare (SUW), and mine countermeasures (MCM). LCS also possesses inherent capabilities, regardless of mission package installed, including Intelligence Surveillance Reconnaissance (ISR), homeland defense, Maritime Interdiction/Interception Operations (MIO), anti-terrorism/force protection (AT/FP), air self-defense, joint littoral mobility, and Special Operating Forces (SOF) and logistic support for movement of personnel and supplies. This relatively small, high-speed surface combatant will complement the U.S. Navy's AEGIS fleet by operating in environments where it is less desirable to employ larger, multi-mission ships. It can deploy independently to overseas littoral regions, remain on station for extended periods of time either with a battle group or through a forward-basing arrangement, and is capable of underway replenishment. It will operate with Carrier Strike Groups, Surface Action Groups, in groups of other similar ships, or independently for diplomatic and presence missions. Additionally, it can operate cooperatively with the U.S. Coast Guard and Allies. The LCS construction phase includes the construction of two LCS Flight 0 Class Ships, one each of two designs, and includes Government Furnished Equipment (GFE) for ships systems, Final System Design (FSD), Detail Design, introduction of final interface requirements for integration with mission packages from the Mission Systems and Ship Integration Team (MSSIT), and Outfitting and Post Delivery (OF/PD).

Data as of Feb 2014:
USS Freedom (LCS 1)
Basic Construction: 521.0
Change Orders: 0.5
GFE: 12.0
Other: 3.5
Total Cost*: 537.0

USS Independence (LCS 2)
Basic Construction: 635.0
Change Orders: 3.5

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GFE: 7.0
Other: 7.5
Total Cost*: 653.0

* Does not include OF/PD and FSD/MSSIT.

Non End Cost Item: FSD/MSSIT 25.0 (LCS1), 54.0 (LCS2) Non End Cost Item: OF/PD 120.3 (LCS1), 145.6 (LCS2);FSD/MSSIT costs for USS Freedom and USS Independence are not true construction costs and are costs associated with design completion.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Outfitting and Post Delivery	34.902	4.880	-
Articles:	-	-	-

Description: Provides for the completion of ship outfitting to include: (a) ship provisioning and fuel, (b) initial load-out of repair parts, spares, and test equipment in accordance with allowance list, (c) provision of technical manuals and required drawings, (d) installation and validation of PMS and EOSS, and (e) crew training and completion of ship system certification requirements. Implements instrumentation packages and validates structural, sea keeping, and hydrodynamic performance. Provides emergent support during the execution of Post Delivery Test & Trials (PDT&T) and Post-Shakedown Availability (PSA). Incorporates Engineering Change Proposals (ECPs) to correct trial card deficiencies, and mission critical upgrades (as required).

FY 2013 Accomplishments:
For USS Freedom (LCS 1): Completed PSA 2 to accomplish engineering changes, mission critical upgrades, and correction of trial cards and seaframe discrepancies identified during PDT&T. Utilized window of opportunity in January 2013 to accomplish engineering changes, mission critical upgrades to include the steel stern ramp installation, and correction of trial card discrepancies prior to deployment.

For USS Independence (LCS 2): Complete PSA 1 to accomplish dry-docking, engineering changes, mission critical upgrades, and correction of trial cards and seaframe discrepancies identified during PDT&T. Continued PSA 2 planning to include engineering and design efforts, work package development, and procurement of long-lead materials. Begin PSA 2 to accomplish engineering changes, mission critical upgrades, and correction of trial cards and seaframe discrepancies identified during PDT&T.

FY 2014 Plans:
For USS Independence (LCS 2): Conduct Special Trials (ST) and provide technical support for the Board of Inspection and Survey (INSURV). Complete PSA 2 to accomplish engineering changes, mission critical upgrades, and correction of trial cards and seaframe discrepancies identified during PDT&T.

FY 2015 Plans:

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
N/A			
Accomplishments/Planned Programs Subtotals	34.902	4.880	-

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• 2127: *Littoral Combat Ship*	1,821.001	1,793.014	1,427.049	-	1,427.049	1,423.337	1,470.017	1,504.143	1,067.189	10,691.300	26,634.250
• 1600: *LCS Modules*	25.087	35.966	37.413	-	37.413	24.518	20.139	25.015	19.281	-	542.263
• 5110: *Outfitting/Post Delivery*	50.065	68.165	118.282	-	118.282	164.545	204.046	205.954	209.777	1,647.600	2,701.853
• 1320: *LCS Training*	27.291	36.145	27.748	-	27.748	28.832	31.032	31.538	32.138	Continuing	Continuing
• 0944: *LCS Class Support Equipment*	8.566	47.078	53.469	-	53.469	44.940	50.800	58.794	67.998	Continuing	Continuing
• 1601: *MCM Mission Modules*	31.829	34.885	15.270	-	15.270	211.821	158.536	146.157	151.464	-	749.962
• 1602: *ASW Mission Modules*	-	-	2.729	-	2.729	30.108	47.852	48.562	48.831	-	178.082
• 1603: *SUW Mission Modules*	30.301	19.481	44.208	-	44.208	39.231	45.907	66.591	70.779	-	316.498
• 1605: *Remote Minehunting System (RMS)*	-	-	42.276	-	42.276	70.976	67.471	67.708	68.343	-	316.774
• 3129: *LCS Mission Package Development*	196.903	42.000	-	-	-	-	-	-	-	-	238.903

Remarks

D. Acquisition Strategy

The LCS program takes an evolutionary approach to acquisition that emphasizes competition as a key to achieving affordability. Initially, two industry teams competed against each other with two distinctly different LCS designs. The decision produced two flights with a vessel from each design: Flight 0 (LCS 1 and LCS 2); and Flight 0+ (LCS 3 and out). The Flight 0+ baseline incorporates lessons learned from the design, construction, and testing of the Flight 0 ships. The Navy conducted a limited competition amongst the existing LCS industry teams or team participants for the award of a contract for the construction of a block buy of up to ten (10) LCS Flight 0+ Class ships, with an objective of competitively awarding a single contract to a single industry team. By Acquisition Decision Memorandum of December 23, 2010, the USD (AT&L) authorized execution of an alternative acquisition strategy for the FY 2010 through FY 2015 procurement of 20 seaframes through two ten-ship block buy contracts. On December 29, 2010, the Navy awarded two contracts for block buys of up to ten ships, beginning with the award to each contractor of one FY 2010 ship and associated non-recurring engineering, the development of the Technical Data Package (TDP), core class services, and associated data. This was followed by the contractual funding of one ship to each contractor in FY 2011 and two ships each funded in FY 2012 through FY 2015.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
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E. Performance Metrics

The LCS Program achieved Milestone A and Program Initiation in May 2004 and Milestone B in February 2011. The LCS program conducts annual Defense Acquisition Board In-Process Reviews (DAB IPRs). The first Seaframe and Mission Module integrated program DAB IPR was conducted in January 2013 and will be held in September hereafter.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
LCS Ship 1 Construction	C/CPAF	Lockheed Martin : Moorestown, NJ	521.000	-		-		-		-		-	-	521.000	521.000
LCS Ship 1 Change Orders	C/CPAF	Lockheed Martin : Moorestown, NJ	0.500	-		-		-		-		-	-	0.500	0.500
LCS Ship 1 GFE	C/CPAF	Lockheed Martin : Moorestown, NJ	12.000	-		-		-		-		-	-	12.000	12.000
LCS Ship 2 Construction	C/CPAF	General Dynamics : Bath, ME	635.000	-		-		-		-		-	-	635.000	635.000
LCS Ship 2 Change Orders	C/CPAF	General Dynamics : Bath, ME	3.500	-		-		-		-		-	-	3.500	3.500
LCS Ship 2 GFE	C/CPAF	General Dynamics : Bath, ME	7.000	-		-		-		-		-	-	7.000	7.000
LCS Ship 1 FSD/MSSIT	C/CPAF	Lockheed Martin : Moorestown, NJ	25.000	-		-		-		-		-	-	25.000	25.000
LCS Ship 2 FSD/MSSIT	C/CPAF	General Dynamics : Bath, ME	54.000	-		-		-		-		-	-	54.000	54.000
Initial Outfitting/Logistics	Various	Various : Various	21.601	-		-		-		-		-	-	21.601	21.601
Test and Trials	WR	Various : Various	40.425	0.300	Nov 2012	0.400	Nov 2013	-		-		-	-	41.125	-
Post Delivery ECP	C/CPAF	Lockheed Martin - General Dynamics : Various	47.457	0.400	Oct 2012	0.700	Nov 2013	-		-		-	-	48.557	57.457
PSA/PSA Planning/ INSURV/OPTAR	WR	Various : Various	123.186	34.202	Oct 2012	3.780	Mar 2014	-		-		-	-	161.168	-
		Subtotal	1,490.669	34.902		4.880		-		-		-	-	1,530.451	-

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	WR	SUPSHIP : Various	0.460	-		-		-		-		-	-	0.460	-
Other Program Costs	WR	Various : Various	11.000	-		-		-		-		-	-	11.000	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*	Project (Number/Name) 4018 / *Littoral Combat Ship Construction*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	11.460	-		-		-		-		-	-	11.460	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Acquisition Workforce	Various	Various : Various	0.221	-		-		-		-		-	-	0.221	-
		Subtotal	0.221	-		-		-		-		-	-	0.221	-

	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1,502.350	34.902		4.880		-		-		-	-	1,542.132	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 4018 / *Littoral Combat Ship Construction*

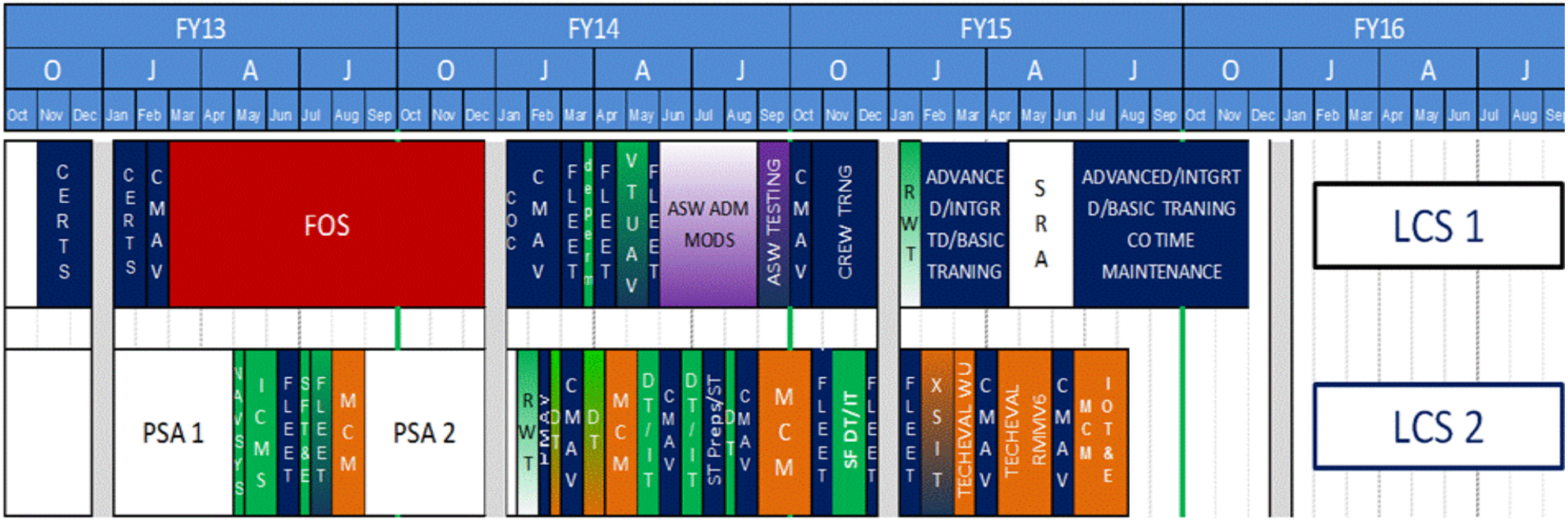

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603581N / *(U)LITTORAL COMBAT SHIP*	**Project (Number/Name)** 4018 / *Littoral Combat Ship Construction*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 4018				
LCS 2 PSA 2	4	2013	2	2014
LCS 2 Final Contract Trials/ Special Trials	4	2014	4	2014

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy												Date: March 2014
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*				Project (Number/Name) 9999 / *Congressional Adds*			
COST ($ in Millions)	**Prior Years**	**FY 2013**	**FY 2014**	**FY 2015 Base**	**FY 2015 OCO #**	**FY 2015 Total**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**Cost To Complete**	**Total Cost**
9999: *Congressional Adds*	10.000	9.166	-	-	-	-	-	-	-	-	-	19.166
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 374

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Provides resources to support both LCS Mission Package Development.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014
Congressional Add: LCS MM SBIR (Cong)	9.166	-
FY 2013 Accomplishments: Continued development of a next generation LCS test bed, which supports development, demonstration, testing and evaluation of critical technologies to enable rapid introduction of advance warfighting capabilities and workload reduction initiatives required by the LCS mission packages. Deliverables: Delivered LCS Universal Gateway (UGW) to be included as part of the ONR FY13 Limited Technology Experimentation (LTE) which validate data / information flow between two secured enclaves: Mission Package Command and Control (C2) system and LCS combat system.		
FY 2014 Plans: N/A		
Congressional Adds Subtotals	9.166	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Congressional Adds.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*	Project (Number/Name) 9999 / *Congressional Adds*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.18 Technology Insertion	C/CPFF	AAC : Uniontown, PA	0.204	-		-		-		-		-	-	0.204	-
1.18 Technology Insertion	C/CPFF	Lockheed Martin : Riveria Beach, FL	1.617	-		-		-		-		-	-	1.617	-
1.18 Technology Insertion	WR	NSWC DD : Dahlgren, VA	0.118	0.273	Jul 2013	-		-		-		-	-	0.391	-
1.18 Technology Insertion	WR	NSWC PC : Panama City, FL	0.523	1.198	Jul 2013	-		-		-		-	-	1.721	-
1.18 Technology Insertion	WR	NSWC NPT : Rhode Island	0.435	0.327	Jul 2013	-		-		-		-	-	0.762	-
1.18 Technology Insertion	C/CPFF	Adaptive Methods : Centreville, VA	0.200	-		-		-		-		-	-	0.200	-
1.18 Technology Insertion	C/CPFF	Progeny : Manassas, VA	6.000	6.034	Aug 2013	-		-		-		-	-	12.034	-
1.18 Technology Insertion	C/CPFF	TBD : TBD	0.383	0.979	Oct 2013	-		-		-		-	-	1.362	-
1.18 Technology Insertion	WR	NSWC KPT : Keyport, WA	0.125	-		-		-		-		-	-	0.125	-
1.18 Technology Insertion	WR	SSC PAC : San Diego, CA	0.260	0.355	Jul 2013	-		-		-		-	-	0.615	-
		Subtotal	9.865	9.166		-		-		-		-	-	19.031	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.2 Program Management	C/CPFF	CACI : Fairfax, VA	0.135	-		-		-		-		-	-	0.135	-
		Subtotal	0.135	-		-		-		-		-	-	0.135	-

	Prior Years	FY 2013 Cost	FY 2013 Award Date	FY 2014 Cost	FY 2014 Award Date	FY 2015 Base Cost	FY 2015 Base Award Date	FY 2015 OCO Cost	FY 2015 OCO Award Date	FY 2015 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	10.000	9.166		-		-		-		-	-	19.166	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0603581N / *(U)LITTORAL COMBAT SHIP*	Project (Number/Name) 9999 / *Congressional Adds*	

	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks