Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy											Date: February 2015	
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 0603596N *I (U)LCS Mission Modules*							
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	105.682	176.948	206.149	-	206.149	125.761	57.067	46.582	39.463	Continuing	Continuing
3129: *LCS Mission Package Development*	0.000	105.682	176.948	206.149	-	206.149	125.761	57.067	46.582	39.463	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element (PE) provides funds for detailed design, development, issue resolution, certification, integration, and testing of the Littoral Combat Ship (LCS) Mission Modules (MM). LCS is a fast, agile, and networked surface combatant with capabilities optimized to defeat asymmetric threats, and ensure 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.

The LCS MMs provide tailored warfighting capability for one at a time of the three focused mission areas:

MCM - provides capability to conduct minehunting (detection, localization, classification, identification, and neutralization) and mine sweeping operations for mine threats.
SUW - provides capability to conduct enhanced-range coordinated detection, tracking, classification, identification, and neutralization of groups of attacking, multiple, small boat threats, and to conduct maritime security missions.
ASW - provides capability to detect, classify, localize, and prosecute enemy submarines; counter diesel submarine threats in the littoral shallow waters and their associated deep water approaches; and to provide an escort capability for forces transiting through submarine threat areas.

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	161.771	196.948	139.227	-	139.227
Current President's Budget	105.682	176.948	206.149	-	206.149
Total Adjustments	-56.089	-20.000	66.922	-	66.922
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-20.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-49.000	-			
• SBIR/STTR Transfer	-7.089	-			
• Program Adjustments	-	-	68.076	-	68.076
• Rate/Misc Adjustments	-	-	-1.154	-	-1.154

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy	Date: February 2015
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 0603596N *I (U)LCS Mission Modules*

Change Summary Explanation

FY16 increase, $36.4M, is a result of a realignment from OPN to RDTE,N to support completion of the ASW MM Advanced Development Model (ADM). Prior reductions impact the program's ability to achieve IOC for the ASW Mission Module in Q4FY16. In order to restore the ASW MM profile, the program had FY16 OPN (BLI 1602) realigned to RDTE,N to support an FY16 operational assessment of the ADM system and possible deployment on LCS-1 in FY16. The funding supports weight reduction efforts, and design and development of the Engineering Development Model (EDM) hardware: Variable Depth Sonar (VDS), Launch, Handling, Recovery Equipment (LHRE), and Multi-Function Towed Array (MFTA), Torpedo Defense Modules, and test spares.

FY16 increase of $10M supports Surface to Surface Mission Modules efforts for inclusion into the SUW MP.

FY16 increase of $4.2M supports Knifefish MCM UUV integration and procurement efforts previously delayed due to budgetary constraints.

FY16 increase of $17.3M for mission package integration.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy									Date: February 2015			
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0603596N / *(U)LCS Mission Modules*				Project (Number/Name) 3129 / *LCS Mission Package Development*			
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
3129: *LCS Mission Package Development*	-	105.682	176.948	206.149	-	206.149	125.761	57.067	46.582	39.463	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

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 ensured 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), 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) 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.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603596N / *(U)LCS Mission Modules*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

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 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.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: System Engineering	5.213	17.447	9.633	-	9.633
Articles:	-	-	-	-	-
FY 2014 Accomplishments:					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Supported Capability Production Document (CPD) for SUW Increment III, MCM Increment II/III development. Provided SE guidance to the TSRs, CCBs, RMB, PPP and RAM-C Working group and others as identified in the LCS MM SEP. Coordinated and provide guidance for all LCS MP SETR events including but not limited to the following: PDR, CDR, SRR, TRR. Provided management oversight for the Configuration Control Board including reviewing and approving ECPs. Negotiated connection agreements with Littoral Combat Ship (LCS) Squadron One (LCSRON) Class IA Manager (IAM) allowing mission packages to operate on LCS. Supported all Certification Test and Evaluation (CT&E) events conducted which include MPAS, results will be used to develop revised PRA package/risk deficiency database. Updated the LCS Mission Modules Program Protection Plan and the Information Assurance Strategy to support MPCE 2.0 development. Supported the SSSTRP and WSESRB Review of mission packages and prepare the closure of findings. Developed MAR package for risk acceptance. Updated the PMS 420 System Safety Management Plan (SSMP) Plan. Completed mission package Integration System Hazard Analysis (SHA). Updated the PMS 420 Hazardous Material Management Program (HMMP) Plan. Identified and manage ESOH mishap risk maintained within the Program Hazard Tracking Database. Coordinated HSI activities across MPs and integrate MPs with seaframe HSI activities. Monitored the implementation of the PMS 420 MM HSI Plan. Updated the following SE documents including: LCS MM SEP; Corrosion Prevention Control Plan (CPCP), PESHE, Life Cycle Signature Support Plan. Continued supporting opportunities for technology transition identified in the S&T Notebook to include at-sea refueling, data mission payload, and lightweight container. Supported and track weight against the Weight Management Plan. Leveraged modeling and simulation to support CPD development for mission packages. Continued tracking SE Metrics including requirements and engineering change volatility and LCS MM Systems Readiness Level (SRL) assessment. Continued 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: Conduct six (6) System Engineering Technical Reviews (SETR) as follows: MCM Increment III System Requirements Review (SRR), Preliminary Design Review (PDR) and Critical Design Review (CDR), MCM Increment IV SRR, Surface-to-Surface Missile Module (SSMM) CDR, and Antisubmarine Warfare (ASW) Mission Package CDR to ensure that each system under review can proceed into development, module integration, and test. Assess each Configuration Item within each system under review to ensure each product has been captured in an appropriate detailed design documents. Establish the initial Production Baseline for each system/module under review.					

Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Develop and accredit all modeling and simulation tools required to support ASW Escort, and Torpedo Defense mission modules and Surface-to-Surface Missile Module. The modeling and simulation tools for ASW and SSMM will support integration, certification, and training of the Mission Package Application Software (MPAS) for both ASW MP and SUW MP Increment IV. Develop and/or update SE documentation in support of Milestone C: Systems Engineering Plan; Information Assurance Strategy; Program Protection Plan; Programmatic Environmental, Safety, and Health Evaluation (PESHE); Clinger Cohen Act. Continue to align LCS MM requirements and development plans toward the Incremental KPP approach and in support of Net-Centric operations: Support CPD Development for the MPs; MP Department of Defense Architecture Framework (DoDAF)Architectures. Continue the implementation of LCS MM M&S strategic plan to support performance prediction; validation of T&E plans; and/or training and stim/sim efforts. Continue Safety/ESOH risk/hazard analysis and mitigation tracking: Align hazards and MARs to product baseline; ESOH risk/hazard analysis and mitigation; Implement DoD/DoN ESOH related directives and initiatives affecting the program to SE Team. Continue to provide HSI subject matter expert into development and implementation of MP common systems, i.e. CSA, MPCC, feedback process; assess and address HSI issues associated with Mission Packages; evaluate manpower and workload policies affected by new technology implementation; align MP HSI tasks and activities to MP SETR events; track and mitigate MP HSI risks and issues; update and implement the PMS 420HSIP. Continue Implementation of the Corrosion Prevention and Control Plan (CPCP). Continue to provide Configuration Management for the PMS 420 LCS MM Program: identify and control Mission Package configurations via the PMS420 CCB; manage Test Observation Report (TOR); capture and track problems found during integration testing, Navy Core Testing (NCT), and ship visits. Continue to update the MP Reliability, Availability, Maintainability-Cost (RAM-C) Report (which comprises the RAM-C Analysis Report and the RAM-C Rationale Report) to assess LCS MP RAM metrics, influence design					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
of MP hardware and support-system design, and help determine the optimal mix of hardware design, support-system design, and lifecycle cost. Coordinate with and assist the PMS 420 APMs and LSEs with the scheduling, planning, and execution of SETRs. Verify that the LCS MPCE, the MMs, and MVCS are compliant with DoD and DON IA policies, and that such compliance is stated in their respective program Information Assurance Strategies, PRA artifacts, and other program documentation. Conduct analysis to determine the methodology and engineering design efforts required to create a federated architecture of Mission Package Application Software (MPAS) with the focus on integration into future LCS seaframes. ***FY 2016 Base Plans:*** Develop and/or update SE documentation in support of Milestone C: Systems Engineering Plan; Information Assurance Strategy; Program Protection Plan; PESHE; Clinger Cohen Act, Life Cycle Mission Data Plan Continue to align LCS MM requirements and development plans toward the Incremental KPP approach and in support of Net-Centric operations: Support CPD Development for the MPs:; MP DODAF Architectures. Continue the implementation a LCS MM M&S strategic plan to support performance prediction; validation of T&E plans; and/or training and stim/sim efforts. Continue Safety/ESOH risk/hazard analysis and mitigation tracking: Align hazards and MARs to product baseline; ESOH risk/hazard analysis and mitigation; Implement DoD/DoN ESOH related directives and initiatives affecting the program to SE Team. Continue to provide HSI subject matter expert into development and implementation of MP common systems, i.e. CSA, MPCC, feedback process; assess and address HSI issues associated with Mission Packages; evaluate manpower and workload policies affected by new technology implementation; align MP HSI tasks and activities to MP SETR events; track and mitigate MP HSI risks and issues; update and implement the PMS 420HSIP.					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Continue Implementation of the Corrosion Prevention and Control Plan (CPCP). Continue to provide Configuration Management for the PMS 420 LCS MM Program: identify and control Mission Package configurations via the PMS420 CCB; manage Test Observation Report (TOR); capture and track problems found during integration testing, Navy Core Testing (NCT), and ship visits. Continue to update the MP Reliability, Availability, Maintainability-Cost (RAM-C) Report (which comprises the RAM-C Analysis Report and the RAM-C Rationale Report) to assess LCS MP RAM metrics, influence design of MP hardware and support-system design, and help determine the optimal mix of hardware design, support-system design, and lifecycle cost. Coordinate with and assist the PMS 420 APMs and LSEs with the scheduling, planning, and execution of SETRs. Verify that the LCS MPCE, the MMs, and MVCS are compliant with DoD and DON IA policies, and that such compliance is stated in their respective program Information Assurance Strategies, PRA artifacts, and other program documentation. ***FY 2016 OCO Plans:*** N/A					
Title: Program Management	0.483	4.545	4.252	-	4.252
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Supported all efforts associated with Milestone C. 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 2015 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 2016 Base Plans:					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
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 2016 OCO Plans:*** N/A					
Title: System Test and Evaluation	18.756	34.144	30.871	-	30.871
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Conducted SUW MP TECHEVAL/IOT&E aboard LCS 1 variant. Completed Planning, and conducted 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. Completed test planning and OTRR preparation and executed both events for SUW MP IOT&E on LCS 1 variant. Conducted data analysis and reporting for SUW MP TECHEVAL. Conducted SUW MP DT on LCS 2 variant. Began SUW MP SSMM planning. Commenced conduct of SSMM live fire test program and completed GMM live fire test program to include data analysis and report. Conducted MCM MP AMCM Phase B Operational Assessment. Conducted MCM MP Unmanned Systems Operational Assessment. Continued test planning and OTRR preparation to support execution of both events for MCM MP TECHEVAL and IOT&E. Conducted data analysis and reporting for MCM MP TECHEVAL and IOT&E. Continued test planning, conducted initial integration test, transition from engineering to DT testing of the ASW MP on the LCS platform; Performed data analysis of initial ASW MP testing. Conducted National Environmental Policy Act (NEPA) and environmental planning and coordination to support DT/TECHEVAL/IOT&E. Conducted 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 DT/TECHEVAL/IOT&E events. ***FY 2015 Plans:*** Conduct SUW MP IOT&E aboard LCS 2 variant. Begin planning for integration testing of VTUAV with the SUW MP. Continue SUW MP SSMM planning. Conduct SSMM live fire test program to include data analysis and reporting. Complete test planning and OTRR for MCM MP TECHEVAL and IOT&E. Complete MCM MP DT and conduct TECHEVAL and IOT&E on LCS 2 variant. Continue test planning for DT testing of the ASW MP on the LCS platform. 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					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
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. ***FY 2016 Base Plans:*** Continue planning and executing SSMM live fire test program. This includes additional planning, testing, data analysis, and reporting for the Longbow/Hellfire missile in a module to be installed in LCS weapons zone. Complete test planning and begin execution for MCM MP DT, TECHEVAL and IOT&E on LCS 1 variant. This is the first time that the MCM MP would undergo operational testing onboard the LCS 1 variant. This completes the Increment 1 IOT&E for the MCM MP across both seaframe variants. Conduct and Support Certification Test and Evaluation to include software certification/assessment testing, reporting, and events such as MPRAs, MRAs, MRRs, Test Readiness Reviews, WSESRB, etc in order to support test events and Fleet deployment upon completion of the IOT&E. ***FY 2016 OCO Plans:*** N/A					
Title: Integration, Assemble, Test and Checkout	1.031	14.638	8.375	-	8.375
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Performed Mission Package - Seaframe Integration and Aviation Integration. Seaframe Integration provided 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: Continued to integrate new capabilities of VTUAV onto LCS, such as weapons and radar. Integrated the larger and higher endurance MQ-8C with LCS. Integrated new Mission Package driven payloads onto the VTUAV. Provided HSF or CV-TSC/PLA functionality as MP solution. Integrated MH-60S SUW enhancements into SUW MP (20mm gun, missiles, radar, data link). Conducted systems engineering for VTUAV and MH-60S ASW enhancements into ASW MP. Conducted systems engineering analysis of alternatives for integrating new Unmanned Aerial Systems into MPs. Continued program level Integration, Assembly, Test & Checkout efforts of ECPs required to correct findings from Developmental and Operational test events. ***FY 2015 Plans:***					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
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 interface validation and validation assessments for LCS 7 through 12 prior to delivery. Integration assessment reports to support MCM MP TECHEVAL and IOT&E on LCS 2. Integration assessment reports to support deployment of LCS 3 with SUW MP. Engineering studies and seaframe modifications to support SUW MP TECHEVAL and IOT&E on LCS 4. Engineering studies and seaframe modifications to support ASW MP TECHEVAL and IOT&E on LCS 5 and 6. Aviation Integration provides services that support the successful integration of aviation assets of the MCM, SUW, and ASW Mission Packages into both variants of LCS seaframes. Hardware engineering for Aviation Support Containers, including roll-on/roll-off (RO/RO) Cabinets and Mezzanine. Hardware Engineering for VTUAV Global Command and Control System (GCCS) back-fits. Improve communications for TCDL within Combat to the Mission Packages. Software Engineering for the continued development of the Helo Support Function (HSF) and Mission Package Application Software (MPAS) with Aviation assets. Support and integration of VTUAV modifications including Advanced Precision Kill Weapon System and Radar RDC. Continue program level Integration, Assembly, Test & Checkout efforts of ECPs required to correct findings from Developmental and Operational test events.					
FY 2016 Base 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. Aviation Integration provides services that support the successful integration of aviation assets of the MCM, SUW, and ASW Mission Packages into both variants of LCS seaframes. FY16 will include efforts to continue: Seaframe Change Management and Execution using AIT; integrating SUW Incr. III with SSMM MP onto both of the variants; integrating MCM Incr. I and II on Freedom variant; ICD 2.0 and IDS 2.0 configuration management; integrating UISS MM into laydown plan and weight/stability analysis for MCM MP; integrating Knifefish MM into laydown plan and weight/stability analysis for MCM MP; supporting TECHEVAL and IOT&E on ASW MP on Freedom variant; begin integrating ASW MP on INDY variant; and continue to expand role of MSSIT for FIT checks and IV&V checks.					
FY 2016 OCO Plans:					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
Title: Training Systems Development	4.550	16.839	15.915	-	15.915
Articles:	-	-	-	-	-

FY 2014 Accomplishments:

Achieved 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. Continued Mine Warfare Evaluator (MIWE), Remote Vehicle Operator (RVO) and Remote Sensor Operator (RSO) training precursors to LCS MCM MM Fundamentals and Capstone courses. Updated interim and formal curriculum to incorporate findings from program test events, operations and classroom experience. Updated CMPT MCM and SUW integrated team trainer software for delivery of incremental capability to support MM Fundamentals, MM Operations and MM Planning curriculum. Updated Information Assurance posture as required to support integrated training using Fleet Synthetic Training in the Navy Cooperative Training Environment (NCTE). Continued SUW formal training curriculum instruction development for MM Fundamentals, Capstone and Planning Courses necessary to achieve partial RFT in FY15. Performed vendor and interim training for formal MCM, SUW, and ASW test events. 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 2015 Plans:

Continue development of training and training systems for MCM, SUW and ASW Mission Module Detachments in accordance with NTSPs. Perform vendor and interim training for formal MCM, SUW, and ASW test events. Fund training related detachment and replacement Sailor travel for vendor and interim formal training in accordance with CSPPs.

Transition MCM and SUW tactical team training to NETC facilities and achieve initial capability at LCS Training facility for MCM and SUW tactical team training. Update formal curriculum to incorporate findings from program test events, operations and classroom experience. Update formal curriculum to incorporate findings from program test events, operations and classroom experience. Continue analysis of MCM and SUW training to validate effective training delivery and identify changes necessary to deliver training that will achieve Train to Certify KPP. Complete analysis to determine initial ASW training and trainer requirements and begin development of ASW Training and trainers. Continue initial LCS ASW training using SQQ-89 courses. Achieve RFT of LCS SUW MM CAPSTONE course at LTF. Achieve RFT of MK-50 GMM differences course at Dam Neck. Develop curriculum and system changes to support incremental capability fielding plan.

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Commence update of Common Mission Package Trainer (CMPT) for ASW and development of LCS ASW MM Fundamentals and CAPSTONE courses with a plan to achieve RFT in FY16. Train to Certify (T2C) capability will be achieved in FY19 after all systems have been delivered, trainers in place and formal training has been developed and accepted. ***FY 2016 Base Plans:*** Continue development of training and training systems for MCM, SUW and ASW Mission Module Detachments in accordance with NTSPs. Perform vendor and interim training for formal MCM, SUW, and ASW test events. Fund training related detachment and replacement Sailor travel for vendor and interim formal training in accordance with CSPPs. Achieve initial capability at LCS Training facility for MCM and SUW mission bay training. Update formal curriculum to incorporate findings from program test events, operations and classroom experience. Update formal curriculum to incorporate findings from program test events, operations and classroom experience. Continue analysis of MCM and SUW training to validate effective training delivery and identify changes necessary to deliver training that will achieve Train to Certify KPP. Complete analysis to determine initial ASW training and trainer requirements and begin development of ASW Training and trainers. Continue initial LCS ASW training using SQQ-89 courses. Achieve RFT of LCS SUW MM Fundamentals and CAPSTONE courses at LTF. Commence training sailors at LTF Mission Bay Trainer which is expected to RFT late FY15. Achieve RFT of MK-50 GMM differences course at Dam Neck. Develop curriculum and system changes to support incremental capability fielding plan. Complete development of Common Mission Package Trainer (CMPT) for ASW software and Achieve RFT for LCS ASW MM Fundamentals and CAPSTONE courses. Train to Certify (T2C) capability will be achieved in FY19 after all systems have been delivered, trainers in place and formal training has been developed and accepted. ***FY 2016 OCO Plans:*** N/A					
Title: Program Technical Data	0.244	1.845	2.071	-	2.071
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Updated Program Technical Data packages to incorporate findings from SUW MP and MCM MP OT events. Finalized the initial Integrated Logistics Support products in support of SUW MP FY14 IOC. Prepared for the MCM MP IOC late FY14 / early FY15. Continued Technical Manual Management Activity to review, produce and distribute technical documentation for the program. Continued development of MPSF automated inventory					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
management system (IMS) based on pRFID solution. Started integrated logistics overarching support for the ASW MP and the new increments. Provided overarching provision for Program. ***FY 2015 Plans:*** Update Program Technical Data packages to incorporate findings from SUW TECHEVAL and IOT&E test events. Finalize initial Integrated Logistics Support products in support of MCM MP TECHEVAL and IOT&E. Continue Technical Manual Management Activity to review, produce, and distribute technical documentation for the program. Complete development and begin implementation of MPSF automated inventory management system (IMS) based on pRFID solution. Prepare for inclusion of ASW into IMS. Start integrated logistics overarching support for the follow-on mission package increments. Provide overarching provisioning for Program. Develop the ASW MP and Surface-to-Surface Missile Module (SSMM) provisioning documentation to include: Allowance Parts Lists (APL) maintenance and development of Preliminary Allowance List (PALs) or Allowance Equipage Lists (AELs) as required for the ASW and SUW MPs. Updates existing provisioning packages as a result of Engineering Change Proposals (ECP) assessment or approvals. ***FY 2016 Base Plans:*** Finalize the technical data packages for the ASW MP. Coordinate and manage Acquisition Logistics engineering tasks. Update the reliability models including reliability growth, uopdate the performance Based Logistics (PBL) strategy to reflect development and intial implementation of the ASW MP, Surface-to-Surface Missle Module (SSMM) and follow on MCM mission modules. Update program technical data packages to incorporate findings frrom MCM TECHEVAL and IOT&E events conducted in FY15. ***FY 2016 OCO Plans:*** N/A					
Title: Common Equipment	4.876	7.447	12.366	-	12.366
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Mission Package Computing: Continued MPCE v1.9 hardware production and tech refresh activities. INCO of CMPT #3 on LCS 6. Prepared tech refresh for the shore sites (MPPCS #1 and #2) and for LCS 1and LCS 2. Provided maintenance deliveries for MPS/MPOE. PMS 420 CM delivery of MUS v1.0.1p occurred. Conducted quarterly IPRs. Continued development activities to evolve MPCE software architecture to a Service Oriented Architecture (SOA), MPCE v2.0, in support of the CSA Baseline. Mission Package Communications: Supported					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
MCM MPT TECHEVAL workups with MVCS v1.0.0. Prepared for the delivery of MVCS HW and SW builds v2.6. Supported testing of MVCS v1.0.0 on SMCM UUV and UISS. ***FY 2015 Plans:*** Conduct technology insertion for MPCE on LCS 1-4, Common Mission Packaget Trainer (CMPT) and Mission Package Portable Control Station (MPPCS). Continue development activities to evolve MPCE software architecture to a Service Oriented Architecture (SOA), MPCE v2.0, in support of the Common Software Architecture (CSA) Baseline. Update MUS Design Documentation to align with MPCE 2.0 System Subsystem Specification (SSS). Mission Package Communications: Perform post-RTT modifications to HFGW hardware and software. Develop required logistics documentation for the HFGW radio. Complete MVCS v2.0.0. Integrate MVCS into MPCE, and support CSA requirements. Support MVCS installation on UISS. Conduct and support testing of MVCS on SMCM UUV. Implement anti-jamming Requirements for MVCS. ***FY 2016 Base Plans:*** MPCE v1.9 - Continue hardware tech refresh activities at MP development sites and ship set deliveries for ships in accordance with Ship Project Directives (SPDs); - MPS/MPOE, Develop new software release of MPS/MPOE for MPAS integration on as required basis. Continue integration of Common Software Architecture (CSA) into the ASW MP. Continue evolving the MPCE software architecture to a Service Oriented Architecture (SOA), MPCE 2.0. Complete MPCE 2.0 System Subsystem Spec (SSS) documenting the merge of CSA SSS requirements with the MPCE SSS. Conduct tech refresh/insertion studies needed to sustain incremental MPCE capability upgrades. Identify technology refresh cycles and the hardware required to meet current requirements while addressing obsolescence and future MPCE SSS requirements. MVCS v1.2.0, develop software changes to support UISS and SMCM UUV integration and complete definition of requirements to integrate High Frequency Ground Wave (HFGW) radio. ***FY 2016 OCO Plans:*** N/A					
Title: Mine Countermeasures (MCM) Mission Package	16.769	19.443	18.211	-	18.211
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Procured USV EDMs. Finalized design for Surface Mine Countermeasures (SMCM) UUV container and procured EDM support container. Designed and integrated the SMCM UUV into MCM MPs. Conducted MCM mission package TECHEVAL and OPEVAL. Conducted KPP modeling analysis. Resolved hardware PTRs					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
identified during testing through development of ACSNs. Complete the integration of RMMV v4.2.1 with MCM MP Increment I. Prepared for and conducted Systems Engineering Technical Reviews (SETR) (SRR/PDR) for MCM MP Increment III. In support of MCM mission package, incorporated the following items into MPAS: RMMV RGP V4.3 improvements, correction of software PTRs identified during MCM MP testing, and MEDAL EA integration. Performed systems engineering (risk management, information assurance, human systems integration, safety), configuration management, and Integrated Logistics Support efforts.					
FY 2015 Plans: Design, develop, and deliver UISS EDMs. Initiate integration of UISS into MCM MPs. Conduct grooming and preparations for MCM mission package TECHEVAL and OPEVAL for increment I. Resolve hardware PTRs identified during testing through development of ACSNs. Prepare for and conduct Systems Engineering Technical Reviews (SETR) (SRR/PDR/CDR) for MCM MP Increment III. Initiate LCS Freedom Class MCM MP increment II integration and test. In support of MCM mission package, incorporate the following items into MPAS: Correction of software PTRs identified during MCM MP testing, and initiate UISS software integration. Perform systems engineering (risk management, information assurance, human systems integration, safety), configuration management, and Integrated Logistics Support.					
FY 2016 Base Plans: For MCM MP Increment 1, resolve hardware PTRs and TORs identified during OPEVAL through development of ACSNs and ECPs. Conduct Increment I developmental testing on LCS Freedom Class and resolve discrepancies. For MCM MP Increment II, integrate COBRA/VTUAV, AQS-20 P3I and Net-Centric Sensor Analysis for MIW (NSAM) into MCM MP. Conduct Developmental testing on an LCS platform. For MCM MP Increment III, conduct contractor testing of UISS EDMs and Surface Mine Countermeasures (SMCM) UUVs. Prepare for and conduct Systems Engineering Technical Reviews (SETR) System Functional Review and System Requirements Review (SFR/SRR). Develop Influence Mine Sweep and Buried Minehunting Mission Module Specifications. In support of MCM mission package, incorporate the following items into MCM MPAS: Correction of software PTRs identified during MCM MP OPEVAL, integration of MEDAL EA and NSAM software, and upgrade MPAS Operating Systems to maintain IA compliance. Perform systems engineering (risk management, information assurance, human systems integration, safety), configuration management, and Integrated Logistics Support.					
FY 2016 OCO Plans:					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
Title: Anti-Submarine Warfare (ASW) Mission Package	23.985	20.835	50.357	-	50.357
Articles:	1	-	-	-	-

FY 2014 Accomplishments:

Conducted a System Functional Review (SFR) which defined system requirements and functional performance requirements. Conducted required systems engineering technical reviews to ensure system design meets the total CDD requirement. Conducted component and system level testing and related predictive performance modeling and simulation to establish system and module performance and reliability baselines. Provided developmental engineering support for logistical engineering data and technical documentation. Continued Mission Module development and LCS integration to include Mission Module level at-sea testing.

Completed the preliminary ASW System Subsystem Specification (SSS) and draft Mission Module SSS. SSS conditionally approved by Technical Scope Review board on 15 July. Completed DoDAF products and Interface Requirements Specification.

Collected data and performed analyses associated with the ASW MP Reliability, Maintainability, and Availability (RMA) program. Successfully completed the Combat Management System (CMS) testing at Lockheed Martin (LM) Moorestown Mission System Integration Center (MSIC). Provided Find/Fix/Repair for technical issues associated with Mission Package Application Software (MPAS) identified during integration and developmental testing and conducted necessary regression testing on proposed fixes. Provided 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. Conducted mission package certification, obtained Information Assurance (IA) approvals (i.e. IATT for LBIT), and conducted land based test events. Supported the planning and preparations for the pre Developmental Test (DT) of ASW MP ADM. Conducted studies and analyses on emerging technologies for incorporation into future ASW MP Increments.

Completed and executed Ship Control Document #14658 to support modifications required to install the ASW MP Advanced Development Model (ADM) on LCS 1 to conduct testing in 4QFY14.

Released solicitation requesting white papers on project concepts to support release of a Request for Proposal (RFP) for the Rapid Technology Insertion (RTI) process, which will solicit technology solutions to enhance the

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
successful completion of the primary Littoral Combat Ships (LCS) missions. Reviewed 12 whitepapers submitted in responses to the solicitation. Kicked off and completed NAVAIR study. ***FY 2015 Plans:*** Prepare detailed Technical Data Package (TDPs) for Mission Module Engineering Development Model (EDM) weight reduction Preliminary Design Reviews (PDR) Q3 FY15 and execute the Mission Package PDR event in Q4FY15. Build ASW Mission Package (MP) Mission Modules (MM) in accordance with approved Preliminary Design. Initiate the development of a draft ASW Mission Package Capabilities Production Document (CPD) (Q2 FY15) and provide engineering, modeling and analysis support to refine/clarify Capabilities Development Document (CDD) Key Performance Parameters (KPPs) and Additional Attributes (AAs) is staffed though JROC review and approval process. Initiate the PEO LCS Rapid Technology Insertion (RTI) ASW Mission Package Weight Reduction Initiative (RFP # N66604-14-R-1120) proposal evaluation and make Phase I Base Contract awards Q2 FY15. Execute Base Contract Transition Study and then exercise Phase II Options (Q3/Q4 FY15) to initiate procurement of test asset articles and to address ship integration issues to support ASW Mission Package LCS embarkation. Continue Light Weight Tow (LWT) torpedo countermeasure mission module wet end and system control software development. Support development of LWT over boarding and retrieval system. Support LCS shipboard integration and initiate Technical Data Package (TDP) development. Continue Escort Mission Module acoustic processing, aviation integration support software, and Mission Package Application Software (MPAS) development to support testing and software certification in Q4/FY15 and follow on Advance Development Model shipboard testing Q2 FY16. Initiate mission module and mission package level Land Based Integration Test (LBIT) end-to-end (E2E) integration testing, including events at PAX River SAIL for Aviation integration, LM and GD CMS integration, and performance validation testing in support of ASW MP operational assessment in FY16. Execute ASW MP Detachment training in preparation for shipboard testing in Q2 FY16. Plan, prepare and perform Safety and Hazard analysis, Environmental Analysis, HSI Evaluations, and Reliability Assessment. Update current LCS 1 Temporary Alteration/Non-Permanent Change (TEMPALT/NPC) to support ASW Mission Package embarkation on LCS-1 in FY16. Oversee and support execution (Q3 FY15) of shipboard industrial work in accordance with ASW MP TEMPALT/NPC					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Initiate and complete engineering and design development (Q4 FY15) for FREEDOM variant SHIPALT/PC TDP to enable embarkation of the ASW Mission Package. ***FY 2016 Base Plans:*** Prepare detailed Technical Data Package (TDP) for Mission Package Critical Design Review (CDR) and execute the CDR event in Q2 FY16. Award Option to the RFP solicitation which will provides Integration, Fleet Experimentation, and Test of the systems obtained in FY15 through award of Option 1 contracts under RFP # N66604-14-R-1120. Complete mission module and mission package level Land Based Integration Test (LBIT) end-to-end (E2E) integration testing (Q1 FY16). Perform Find, Fix, and Repair (FFR) of identified hardware and software issues prior to the ADM operational assessment test event. Develop FY16 testing objectives, conduct performance prediction modeling and prepare test plans to support the execution of an ASW Mission Package operational testing of the Advance Development Model (ADM) (Q2 FY16) to be followed by a potential deployment to WESTPAC. Oversee and support execution (Q2/Q3 FY16) of shipboard industrial work in accordance with ASW Mission Package Ship Alteration Permanent Change (SHIPALT/PC) Technical Data Package (TDP) and any additional Mission Module installation ECPs as necessary to support ASW ADM Mission Package installation and deployment for the designated FREEDOM variant. Initiate and complete engineering and design development (Q3 FY16) for INDEPENDENCE variant SHIPALT/PC TDP to enable embarkation of the ASW Mission Package. Closeout ASW Mission Package Engineering Development Model (EDM)/weight reduction PDR by completing engineering efforts to resolve or adjudicate PDR (Q4 FY15) Request for Action (RFA). Prepare detailed Technical Data Package (TDP) for Mission Package Critical Design Review (CDR) and execute the CDR event in Q3 FY16. Complete development of a draft ASW Mission Package Capabilities Production Document (CPD) (Q1 FY16) and provide engineering, modeling, and analysis support to OPNAV as CPD is staffed though JROC review and approval process. Continue management of PEO LCS Rapid Technology Insertion (RTI) initiative Phase II (EDM Assessment) and complete procurement of test asset fabrication and integration to support continuation of Phase II component and system level validation testing and ASW Mission Package / Ship integration. Continue to develop final ship integration approaches to support LCS Ship Alteration Permanent Change (SHIPALT/PC) Technical Data Package (TDP) development.					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Complete Light Weight Tow (LWT) torpedo countermeasure mission module wet end and system control software development. Complete procurement of test assets and acquire necessary test spares to support Q3 FY17 ship integration. Continue to compile system and package level Reliability and Maintenance (RAM-C) data to support reliability engineering and a prioritized initial spares list. Complete acquisition of initial component and system spares (Q1 FY16) to support continued system developmental testing and an Operational Assessment. Continue development of initial ASW Mission Package system operator training materials and course curriculum to support Train to Qualify and Train to Certify requirements. Support development and exploitation of component and system level modeling and simulation capabilities to enable high fidelity virtual reality training. Continue Escort Mission Module acoustic processing, aviation integration support software, and Mission Package Application Software (MPAS) development and maturation to support IOT&E software certification Q3 FY17 and follow on shipboard testing FY18. ***FY 2016 OCO Plans:*** N/A					
Title: Surface Warfare (SUW) Mission Package	27.926	36.772	51.269	-	51.269
Articles:	-	-	-	-	-
FY 2014 Accomplishments: SSMM Inc 1 formal technical data package will be finalized. Continued SSMM Increment I development. Initiated developmental testing to categorize modifications to the current MPAS baseline. Initiated modifications to MPAS to support continued SSMM Increment I development. Conducted appropriate systems engineering technical reviews to ensure missile system design meets the total CDD requirement. Continued planning the SSMM Increment I environmental confidence level testing. Continued development of the detailed launcher design that supports the SSMM Increment I concept. Completed DT/OT/IOT&E for the Gun Mission Module onboard LCS 1 variant. Completed STF and DT of the Gun Mission Module on USS Independence (LCS 2) variant. Participated in RIMPAC on USS Independence (LCS 2). 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 perform 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 shipboard test events with each seaframe manufacturer. Supported 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:***					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Conduct SSMM Inc 1 Critical Design Review (CDR). Continue developmental testing to categorize modifications to the current MPAS baseline. Continue modifications to MPAS to support continued SSMM Increment II development. Continue planning the SSMM Increment II environmental confidence level testing. Continue development of the detailed launcher design that supports the SSMM Increment II concept. 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 manufacturer. Support DT from LCS 2 variant, and OT from LCS 2 variant. ***FY 2016 Base Plans:*** Continue developmental testing to categorize modifications to the current MPAS baseline. Continue modifications to MPAS to support continued SSMM development. Complete planning and execute the SSMM environmental confidence level testing. Execute engineering and developmental testing of SSMM Continue development of the detailed launcher design that supports the SSMM concept. Find/Fix/Repair technical issues associated with SSMM and MPAS identified during STF and DT events. ***FY 2016 OCO Plans:*** N/A					
Title: Reliability, Availability and Maintainability	1.849	2.993	2.829	-	2.829
Articles:	-	-	-	-	-
FY 2014 Accomplishments: Continued to monitor Reliability Growth and update plans as necessary. Continued 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. Determined the maintenance throughput capability for the mission systems at the Mission Package Support Facility/Mission Module Readiness Center (MPSF/MMRC) depot. Refined modeling of ASW MP. Continued utilizing FRACAS to feed back product and process improvements to the Systems Engineering and ILS organizations. ***FY 2015 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. Refine modeling of MCM, SUW, and ASW MPs. Continue utilizing FRACAS to feed back product					

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B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
and process improvements to the Systems Engineering and ILS organizations. Draft RAM-C Analysis Report as necessary. Update RAM-C Rationale Report as necessary. ***FY 2016 Base Plans:*** Continue the systematically management and elimination of failures and failure modes through identification, classification, analysis and removal or mitigation. Continue the refinement of the MCM, SUW, and ASW RAM models by integration actual data collected during mission package TECHEVAL and Initial Operational Test and Evaluation (IOT&E) 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. Conduct reliability testing of the ASW MP and Surface-to-Surface Missile Module (SSMM). Conduct root cause analysis and recommend corrective action on all discovered failure modes. Continue utilizing FRACAS to feedback MCM, SUW and MCM product and process improvements to the Systems Engineering and ILS organizations. Update RAM-C Rationale Report as necessary. ***FY 2016 OCO Plans:*** N/A					
Accomplishments/Planned Programs Subtotals	105.682	176.948	206.149	-	206.149

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• 2127: *Littoral Combat Ship*	1,793.014	1,427.049	1,423.337	-	1,423.337	1,470.017	1,504.143	1,067.189	1,088.533	10,691.300	27,722.783
• 1600: *LCS Common Mission Modules Equipment*	35.966	37.413	25.472	-	25.472	24.015	13.281	16.215	17.453	Continuing	Continuing
• 5110: *Outfitting/Post Delivery*	68.165	118.282	164.545	-	164.545	204.046	205.954	209.777	179.500	1,647.600	2,881.353
• 1320: *LCS Training Equipment*	26.726	9.630	20.002	-	20.002	21.278	19.004	19.394	-	Continuing	Continuing
• 0944: *LCS Class Support Equipment*	47.078	36.206	67.109	-	67.109	73.526	78.854	88.111	-	Continuing	Continuing
• 1601: *LCS MCM Mission Modules*	34.885	15.270	102.171	-	102.171	152.230	140.682	146.087	68.727	Continuing	Continuing
• 1602: *LCS ASW Mission Modules.*	-	2.729	36.410	-	36.410	54.331	54.231	54.541	55.529	Continuing	Continuing
• 1603: *LCS SUW Mission Modules*	19.481	44.208	25.468	-	25.468	35.872	38.345	39.336	40.491	Continuing	Continuing
• 1605: *Remote Minehunting System (RMS)*	-	42.276	88.961	-	88.961	73.554	67.683	68.318	42.684	Continuing	Continuing

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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost

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

Program Completed Milestone B January 2014
Conducted the SUW MP TECHEVAL/IOT&E aboard LCS 1 variant.
Conducted SUW MP DT on LCS 2 variant

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy			Date: February 2015
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.1 System Engineering	WR	NSWC PC : Panama City, FL	0.000	1.081	Oct 2013	3.517	Oct 2014	2.000	Oct 2015	-		2.000	Continuing	Continuing	Continuing
1.1 System Engineering	WR	NSWC DD : Dahlgren, VA	0.000	0.405	Oct 2013	2.574	Oct 2014	1.000	Oct 2015	-		1.000	Continuing	Continuing	Continuing
1.1 System Engineering	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	2.097	Oct 2013	4.461	Dec 2014	2.500	Dec 2015	-		2.500	Continuing	Continuing	Continuing
1.1 System Engineering	WR	SPAWAR PAC : San Diego, CA	0.000	0.850	Oct 2013	3.581	Oct 2014	1.500	Jan 2016	-		1.500	Continuing	Continuing	Continuing
1.1 System Engineering	WR	NUWC NPT : Newport, RI	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.1 System Engineering	C/CPFF	CACI : Fairfax, VA	0.000	0.319	Oct 2013	0.828	Dec 2014	1.000	Jan 2016	-		1.000	Continuing	Continuing	Continuing
1.1 System Engineering	C/CPFF	AAC : Uniontown, PA	0.000	-		0.637	Dec 2014	-		-		-	-	0.637	-
1.1 System Engineering	WR	NSWC PHD : Port Hueneme, CA	0.000	-		0.765	Nov 2014	-		-		-	-	0.765	-
1.1 System Engineering	WR	NSWC Carderock : Bethesda, MD	0.000	0.174	Oct 2013	0.956	Oct 2014	0.400	Nov 2015	-		0.400	-	1.530	-
1.1 System Engineering	C/CPFF	JHU/APL : Laurel, MD	0.000	0.287	Oct 2013	0.127	Dec 2014	-		-		-	-	0.414	-
1.4 Integration, Assembly, Test and Check	WR	NAWC AD : Patuxent River, MD	0.000	0.108	Oct 2013	1.175	Oct 2014	0.300	Oct 2015	-		0.300	Continuing	Continuing	Continuing
1.1 System Engineering	C/CPFF	Lockheed Martin : Riviera Beach, FL	0.000	-		-		1.233	Dec 2015	-		1.233	-	1.233	-
1.4 Integration, Assembly, Test and Checkout	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.086	Oct 2013	0.587	Dec 2014	0.575	Dec 2015	-		0.575	-	1.248	-
1.4 Integration, Assembly, Test and Check	WR	SPAWAR PAC : San Diego, CA	0.000	-		-		0.580	Dec 2015	-		0.580	Continuing	Continuing	Continuing
1.4 Integration, Assembly, Test and Check	WR	NUWC NPT : Newport, RI	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.4 Integration, Assembly, Test and Check	WR	NSWC PC : Panama City, FL	0.000	0.106	Oct 2013	0.294	Oct 2014	0.300	Oct 2015	-		0.300	Continuing	Continuing	Continuing
1.4 Integration, Assembly, Test and Check	WR	SUPSHIP Gulfcoast : Pascagoula, MS	0.000	-		-		2.500	Jan 2016	-		2.500	Continuing	Continuing	Continuing

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.4 Integration, Assembly, Test and Check	WR	SUPSHIP Bath : Bath, ME	0.000	-		-		1.495	Mar 2016	-		1.495	Continuing	Continuing	Continuing
1.4 Integration, Assembly, Test and Check	WR	NSWC DD : Dahlgren, VA	0.000	0.112	Oct 2013	2.937	Oct 2014	0.300	Oct 2015	-		0.300	Continuing	Continuing	Continuing
1.4 Integration, Assembly, Test and Checkout	WR	NSWC PHD : Port Hueneme, CA	0.000	-		0.658	Oct 2014	0.320	Dec 2015	-		0.320	-	0.978	-
1.4 Integration, Assembly, Test and Checkout	WR	NSWC Crane : Crane, Indiana	0.000	0.144	Oct 2013	1.469	Oct 2014	0.280	Nov 2015	-		0.280	-	1.893	-
1.4 Integration, Assembly, Test and Checkout	WR	NSWC Carderock : Bethesda, MD	0.000	0.285	Oct 2013	6.392	Oct 2014	0.300	Nov 2015	-		0.300	-	6.977	-
1.4 Integration, Assembly, Test and Checkout	C/CPFF	CACI : Fairfax, VA	0.000	0.118	Oct 2013	0.832	Dec 2014	0.950	Jan 2016	-		0.950	-	1.900	-
1.4 Integration, Assembly, Test and Checkout	Sub Allot	CECOM Bldg 1207 : Various	0.000	0.073	Oct 2013	0.294	Oct 2014	0.475	Jan 2016	-		0.475	-	0.842	-
1.12 Common Equipment Development	WR	NSWC PC : Panama City, FL	0.000	2.217	Oct 2013	2.105	Oct 2014	6.582	Oct 2015	-		6.582	Continuing	Continuing	Continuing
1.12 Common Equipment Development	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.736	Oct 2013	0.392	Dec 2014	0.745	Jan 2016	-		0.745	Continuing	Continuing	Continuing
1.12 Common Equipment Development	WR	NUWC NPT : Newport, RI	0.000	0.279	Oct 2013	0.343	Oct 2014	0.550	Oct 2015	-		0.550	Continuing	Continuing	Continuing
1.12 Common Equipment Development	WR	NSWC DD : Dahlgren, VA	0.000	0.561	Oct 2013	0.343	Oct 2014	0.600	Oct 2015	-		0.600	Continuing	Continuing	Continuing
1.12 Common Equipment Development	WR	NAVAIR PMA266 : Patuxent River, MD	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.12 Common Equipment Development	C/CPFF	AAC : Uniontown, PA	0.000	0.306	Oct 2013	2.747	Dec 2014	1.701	Jan 2016	-		1.701	-	4.754	-
1.12 Common Equipment Development	WR	PMW 760 : Various	0.000	0.233	Oct 2013	0.245	Nov 2014	-		-		-	-	0.478	-
1.12 Common Equipment Development	WR	SPAWAR PACIFIC : San Diego, CA	0.000	0.372	Oct 2013	0.783	Nov 2014	0.950	Dec 2015	-		0.950	-	2.105	-
1.12 Common Equipment Development	Sub Allot	PMW 760 : San Diego, CA	0.000	-		-		0.238	Nov 2015	-		0.238	-	0.238	-

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.12 Common Equipment Development	C/CPFF	ARL/UT : Austin, TX	0.000	0.171	Oct 2013	0.490	Dec 2014	-		-		-	-	0.661	-
1.12 Common Equipment Development	C/CPFF	Progeny : Manassas, VA	0.000	-		-		1.000	Jan 2016	-		1.000	-	1.000	-
1.13 MCM MP	WR	NSWC PC : Panama City, FL	0.000	8.358	Oct 2013	11.211	Oct 2014	2.211	Oct 2015	-		2.211	Continuing	Continuing	Continuing
1.13 MCM MP	WR	NSWC CD : Little Creek, VA	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.13 MCM MP	Sub Allot	PMS 406 : Various	0.000	3.629	Oct 2013	8.232	Dec 2014	16.000	Jan 2016	-		16.000	-	27.861	-
1.13 MCM MP	Sub Allot	PMS 495 : Various	0.000	-		-		-		-		-	-	-	-
1.13 MCM MP	C/CPFF	Lockheed Martin : Riviera Beach, FL	0.000	4.782	Oct 2013	-		-		-		-	-	4.782	-
1.14 ASW MP	Sub Allot	PEO IWS5 : Various	0.000	17.402	Oct 2013	7.918	Oct 2014	13.700	Jan 2016	-		13.700	-	39.020	-
1.14 ASW MP	WR	NUWC NPT : Newport, RI	0.000	5.407	Oct 2013	3.672	Oct 2014	13.188	Oct 2015	-		13.188	-	22.267	-
1.14 ASW MP	TBD	Various : Various	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.14 ASW MP	WR	NSWC Dam Neck : Virginia Beach, VA	0.000	0.802	Oct 2013	0.587	Oct 2014	0.807	Oct 2015	-		0.807	-	2.196	-
1.14 ASW MP	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.374	Oct 2013	1.273	Dec 2014	3.500	Jan 2016	-		3.500	-	5.147	-
1.14 ASW MP	C/CPFF	SPA : Washington, DC	0.000	-		0.587	Jun 2015	0.600	Dec 2015	-		0.600	-	1.187	-
1.14 ASW MP	Sub Allot	EDM Contractor : TBD	0.000	-		2.568	Oct 2014	16.800	Jan 2016	-		16.800	-	19.368	-
1.14 ASW MP	WR	NSWC PCD : Panama City, FL	0.000	-		0.117	Oct 2014	-		-		-	-	0.117	-
1.14 ASW MP	WR	NSWC DD : Dahlgren, VA	0.000	-		0.196	Oct 2014	0.250	Nov 2015	-		0.250	-	0.446	-
1.14 ASW MP	C/CPFF	CACI : Arlingrton, VA	0.000	-		0.343	Dec 2014	0.258	Jan 2016	-		0.258	-	0.601	-
1.14 ASW MP	WR	NUWC KPT : Keyport, WA	0.000	-		0.441	Oct 2014	0.154	Nov 2015	-		0.154	-	0.595	-

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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.14 ASW MP	WR	SSC PAC : San Diego, CA	0.000	-		3.133	Oct 2014	1.100	Dec 2015	-		1.100	-	4.233	-
1.15 SUW MP	WR	NSWC DD : Dahlgren, VA	0.000	11.350	Oct 2013	9.361	Oct 2014	9.500	Oct 2015	-		9.500	Continuing	Continuing	Continuing
1.15 SUW MP	WR	NSWC PHD : Port Hueneme, CA	0.000	4.009	Oct 2013	5.128	Oct 2014	12.000	Dec 2015	-		12.000	Continuing	Continuing	Continuing
1.15 SUW MP	WR	SPAWAR PACIFIC : San Diego, CA	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.15 SUW MP	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	8.700	Oct 2013	19.884	Dec 2014	20.000	Dec 2015	-		20.000	-	48.584	-
1.15 SUW MP	Sub Allot	PEO IWS 3 : Various	0.000	-		-		7.319	Dec 2015	-		7.319	-	7.319	-
1.15 SUW MP	WR	NAWC WD : Ridgecrest, CA	0.000	3.868	Oct 2013	1.958	Oct 2014	2.000	Jan 2016	-		2.000	-	7.826	-
1.15 SUW MP	WR	NSWC CD : Crane, IN	0.000	-		0.196	Oct 2014	0.200	Dec 2015	-		0.200	-	0.396	-
1.15 SUW MP	WR	NSWC Corona : Corona, CA	0.000	-		0.245	Oct 2014	0.250	Nov 2015	-		0.250	-	0.495	-
1.16 MP-PCS Equipment	WR	Various : Various	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
1.19 Pre-Production Engineering	WR	Various : Various	0.000	-		-		-		-		-	-	-	-
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	-		-		-		-		-	-	-	-
1.1.7 System Engineering RAM-C Project	WR	Various : Various	0.000	-		-		-		-		-	-	-	-
		Subtotal	0.000	79.801		116.582		150.211		-		150.211	-	-	-

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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.5 Training Systems Development	WR	NAWC TSD : Orlando, FL	0.000	0.803	Oct 2013	2.007	Oct 2014	0.750	Jan 2016	-		0.750	Continuing	Continuing	Continuing
1.5 Training Systems Development	WR	NSWC PC : Panama City, FL	0.000	0.486	Oct 2013	1.615	Oct 2014	2.500	Nov 2015	-		2.500	Continuing	Continuing	Continuing
1.5 Training Systems Development	WR	NSWC PHD : Port Hueneme, CA	0.000	0.728	Oct 2013	1.266	Oct 2014	1.500	Nov 2015	-		1.500	Continuing	Continuing	Continuing
1.5 Training Systems Development	C/CPFF	AAC : Uniontown, PA	0.000	0.738	Oct 2013	3.500	Dec 2014	3.500	Jan 2016	-		3.500	Continuing	Continuing	Continuing
1.5 Training Systems Development	C/CPFF	CACI : Fairfax, VA	0.000	0.370	Oct 2013	0.734	Dec 2014	1.250	Jan 2016	-		1.250	-	2.354	-
1.5 Training Systems Development	WR	CSCS : Dahlgren, VA	0.000	0.853	Oct 2013	1.713	Oct 2014	-		-		-	Continuing	Continuing	Continuing
1.5 Training Systems Development	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.204	Oct 2013	1.084	Dec 2014	0.350	Jan 2016	-		0.350	-	1.638	-
1.5 Training Systems Development	WR	CNSF : San Diego, CA	0.000	0.370	Oct 2013	0.734	Oct 2014	0.900	Dec 2015	-		0.900	Continuing	Continuing	Continuing
1.5 Training Systems Development	WR	NSWC, Dahlgren : Dahlgren, VA	0.000	-		0.269	Oct 2014	0.275	Oct 2015	-		0.275	-	0.544	-
1.5 Training Systems Development	WR	NUWC, Newport : Newport, RI	0.000	-		1.224	Oct 2014	0.070	Oct 2015	-		0.070	-	1.294	-
1.5 Training Systems Development	WR	JHU/APL : Laurel, MD	0.000	-		0.979	Nov 2014	0.500	Feb 2016	-		0.500	-	1.479	-
1.5 Training Systems Development	Sub Allot	Various : Various	0.000	-		-		1.520	Oct 2015	-		1.520	-	1.520	-
1.5 Training Systems Development	C/BA	CDSA, Dam Neck : Dam Neck, VA	0.000	-		1.713	Oct 2014	2.800	Oct 2015	-		2.800	-	4.513	-
1.6 Program Technical Data	WR	NSWC PC : Panama City, FL	0.000	-		0.629	Oct 2014	-		-		-	Continuing	Continuing	Continuing
1.6 Program Technical Data	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	0.133	Oct 2013	0.942	Dec 2014	2.071	Jan 2016	-		2.071	-	3.146	-
1.6 Program Technical Data	WR	CACI : Fairfax, VA	0.000	0.110	Oct 2013	0.274	Dec 2014	-		-		-	-	0.384	-

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Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.1.10 Reliability, Maintainability, and Availability	C/CPFF	CACI : Fairfax, VA	0.000	0.178	Oct 2013	0.734	Dec 2014	0.921	Jan 2016	-		0.921	Continuing	Continuing	Continuing
1.1.10 Reliability, Maintainability, and Availability	WR	NSWC PC : Panama City, FL	0.000	0.708	Oct 2013	0.881	Oct 2014	0.217	Nov 2015	-		0.217	Continuing	Continuing	Continuing
1.1.10 Reliability, Maintainability, and Availability	WR	NUWC, NPT : Newport, RI	0.000	0.074	Oct 2013	1.129	Oct 2014	0.116	Oct 2015	-		0.116	Continuing	Continuing	Continuing
1.1.10 Reliability, Maintainability, and Availability	C/BA	NSWC, Dahlgren : Dahlgren, VA	0.000	0.890	Oct 2013	0.250	Oct 2014	0.233	Nov 2015	-		0.233	-	1.373	-
1.1.10 Reliability, Maintainability, and Availability	WR	NAVSEALOGCEN : Norfolk, VA	0.000	-		-		0.731	Oct 2015	-		0.731	-	0.731	-
1.1.10 Reliability, Maintainability, and Availability	C/CPFF	Northrop Grumman : Bethpage, NY	0.000	-		-		0.152	Dec 2015	-		0.152	-	0.152	-
1.1.10 Reliability, Maintainability, and Availability	WR	CDSA Dam Neck : Virginia Beach, VA	0.000	-		-		0.116	Oct 2015	-		0.116	-	0.116	-
1.1.10 Reliability, Maintainability, and Availability	WR	NSWC PHD : Port Hueneme, CA	0.000	-		-		0.343	Nov 2015	-		0.343	-	0.343	-
		Subtotal	0.000	6.645		21.677		20.815		-		20.815	-	-	-

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.3 System Test and Evaluation	WR	NSWC PCD : Panama City, FL	0.000	6.146	Nov 2013	12.308	Oct 2014	9.000	Nov 2015	-		9.000	-	27.454	-
1.3 System Test and Evaluation	WR	NSWC DD : Dahlgren, VA	0.000	3.250	Nov 2013	7.348	Oct 2014	6.000	Oct 2015	-		6.000	-	16.598	-

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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
1.3 System Test and Evaluation	WR	NUWC NPT : Newport, RI	0.000	0.485	Nov 2013	0.743	Oct 2014	0.800	Oct 2015	-		0.800	-	2.028	-
1.3 System Test and Evaluation	WR	NSWC PHD : Port Hueneme, CA	0.000	5.160	Nov 2013	7.768	Oct 2014	8.500	Dec 2015	-		8.500	-	21.428	-
1.3 System Test and Evaluation	WR	SPAWAR PAC : San Diego, CA	0.000	0.808	Nov 2013	1.150	Nov 2014	1.300	Jan 2016	-		1.300	-	3.258	-
1.3 System Test and Evaluation	WR	COMOPTEVFOR : Norfolk, VA	0.000	0.546	Nov 2013	1.148	Nov 2014	1.300	Jan 2016	-		1.300	-	2.994	-
1.3 System Test and Evaluation	WR	PMA 266 : Patuzent River, MD	0.000	0.226	Nov 2013	0.352	Dec 2014	0.400	Dec 2015	-		0.400	-	0.978	-
1.3 System Test and Evaluation	C/BA	Silver Ships : Theodore, AL	0.000	0.355	Nov 2013	0.548	Dec 2014	-		-		-	-	0.903	-
1.3 System Test and Evaluation	C/BA	CNSF : Norfolk, VA	0.000	0.161	Nov 2013	0.250	Nov 2014	-		-		-	-	0.411	-
1.3 System Test and Evaluation	C/BA	NAWC WD : Point Mugu, CA	0.000	1.617	Nov 2013	2.333	Nov 2014	3.000	Jan 2016	-		3.000	-	6.950	-
1.3 System Test and Evaluation	C/BA	NSWC Corona : Corona, CA	0.000	-		0.196	Nov 2014	0.571	Dec 2015	-		0.571	-	0.767	-
		Subtotal	0.000	18.754		34.144		30.871		-		30.871	-	83.769	-

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Acquisition Workforce	Various	Various : Various	0.000	-		-		-		-		-	-	-	-
1.2 Program Management	C/CPFF	CACI : Fairfax, VA	0.000	0.482	Nov 2013	4.545	Dec 2014	2.873	Jan 2016	-		2.873	-	7.900	-
1.2 Program Management	WR	NSWC PCD : Panama City, FL	0.000	-		-		-		-		-	-	-	-
1.2 Program Management	WR	NSWC DD : Dahlgren, VA	0.000	-		-		-		-		-	-	-	-
1.2 Program Management	FFRDC	Mitre : McLean, VA	0.000	-		-		1.379	Nov 2015	-		1.379	-	1.379	-
		Subtotal	0.000	0.482		4.545		4.252		-		4.252	-	9.279	-

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	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	105.682		176.948		206.149		-		206.149	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy		Date: February 2015
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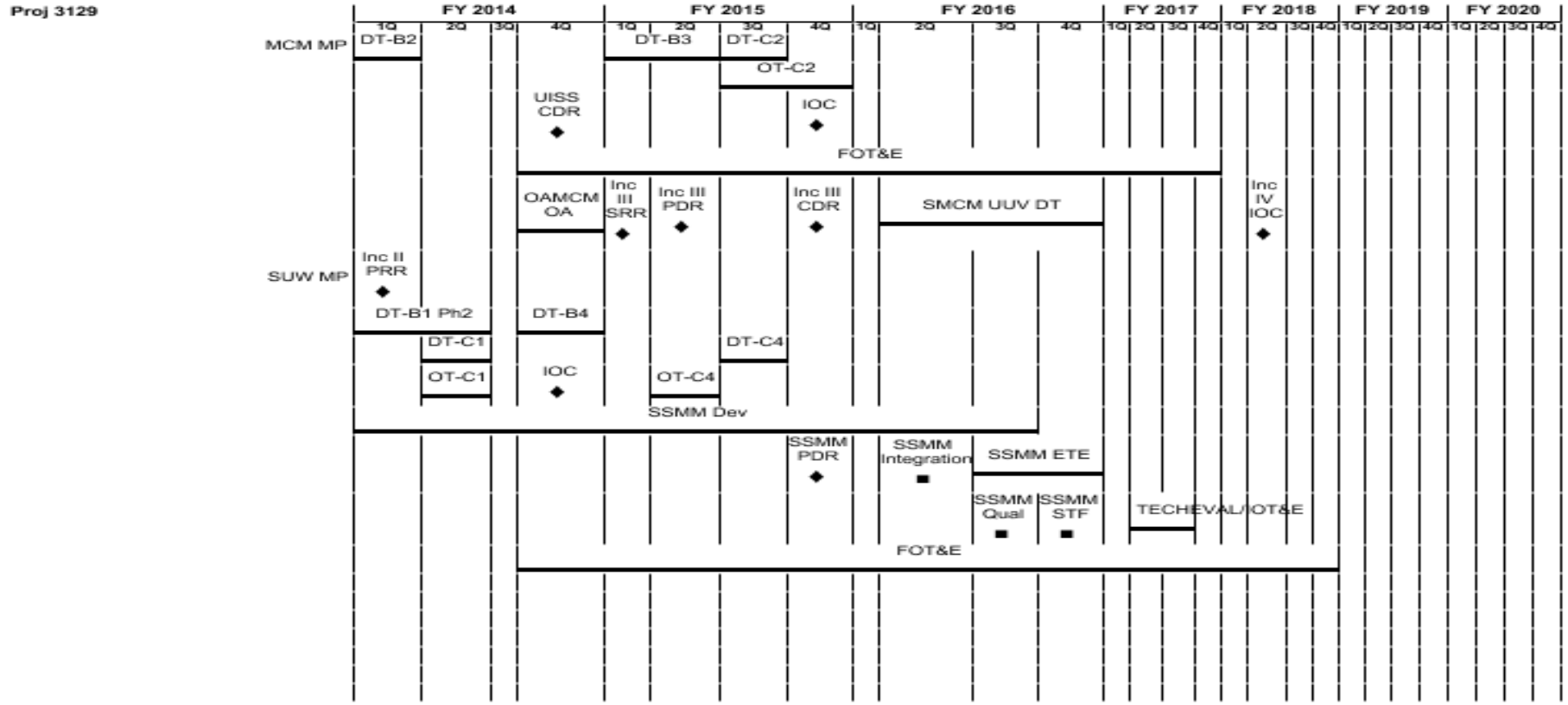

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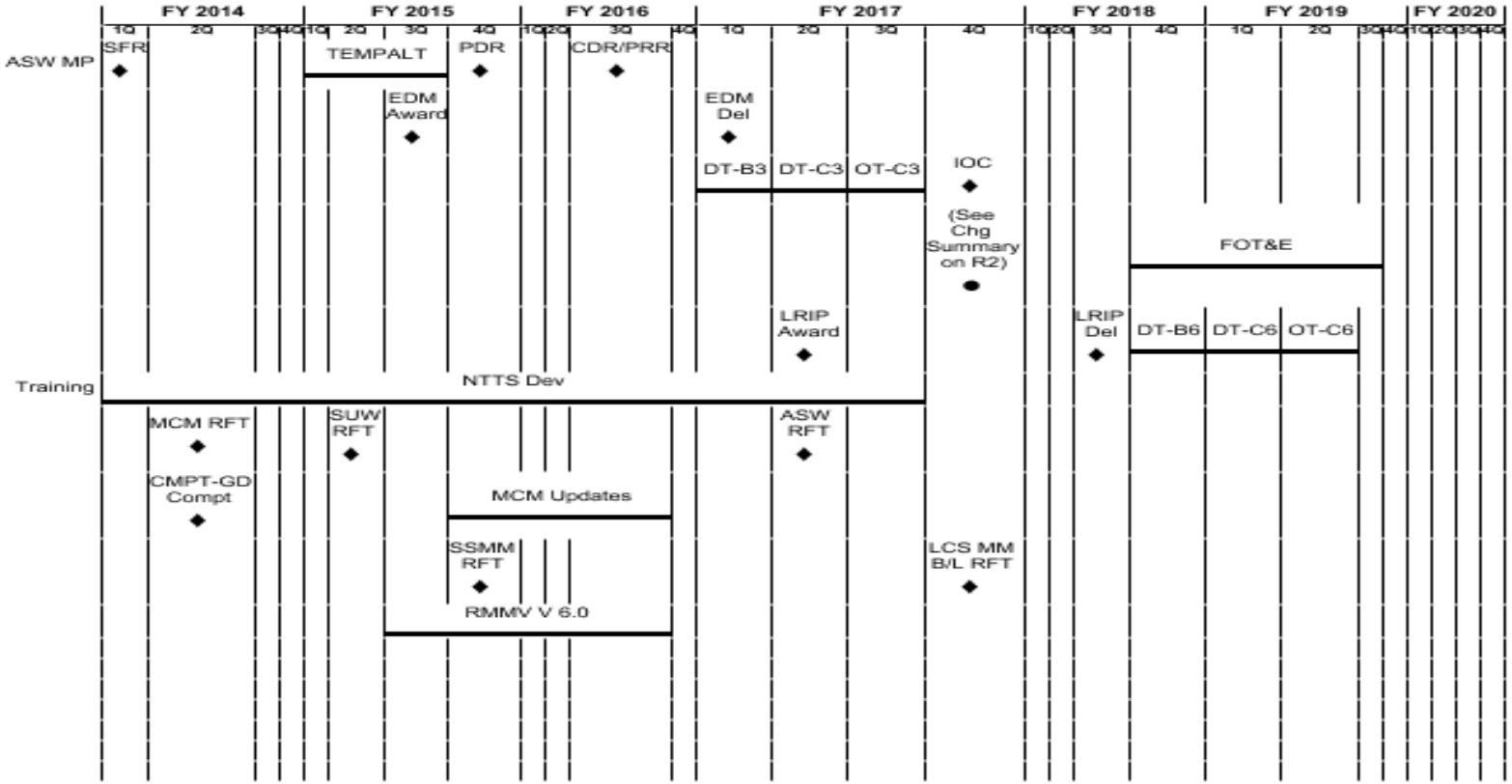

2016PB - 0603596N - 3129

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603596N / *(U)LCS Mission Modules*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 3129				
MCM MP: MCM MP Increment I DT-B3 (Freedom Variant)	1	2015	2	2015
MCM MP: MCM MP Increment I DT-B2 Phase 4 (Independence Variant)	1	2014	1	2014
MCM MP: MCM MP Increment I TECHEVAL DT-C2 (Independence Variant)	3	2015	3	2015
MCM MP: MCM MP Increment I IOT&E OT-C2 (Independence Variant)	3	2015	4	2015
MCM MP: MCM MP Increment I IOC	4	2015	4	2015
MCM MP: MCM - UISS CDR	4	2014	4	2014
MCM MP: MCM MP FOT&E	4	2014	4	2017
MCM MP: MCM MP OAMCM Operational Assessment (Independence Variant)	4	2014	4	2014
MCM MP: MCM MP Increment III Delta SRR	1	2015	1	2015
MCM MP: MCM MP Increment III Delta PDR	2	2015	2	2015
MCM MP: MCM MP Increment III Delta CDR	4	2015	4	2015
MCM MP: MCM Increment IV Developmental Testing	2	2016	4	2016
MCM MP: MCM MP Increment IV IOC	2	2018	2	2018
SUW MP: SUW MP Increment II PRR (MSM)	1	2014	1	2014
SUW MP: SUW MP Increment I & II DT-B1 Phase 2 (Freedom Variant)	1	2014	2	2014
SUW MP: SUW MP Increment I & II DT-B4 (Independence Variant)	4	2014	4	2014
SUW MP: SUW MP Increment I & II TECHEVAL DT-C1 (Freedom Variant)	2	2014	2	2014
SUW MP: SUW MP Increment I & II TECHEVAL DT-C4 (Independence Variant)	3	2015	3	2015
SUW MP: SUW MP Increment I & II IOT&E OT-C1 (Freedom Variant)	2	2014	2	2014
SUW MP: SUW MP Increment I & II IOT&E OT-C4 (Independence Variant)	2	2015	2	2015
SUW MP: SUW MP Increment I & II IOC	4	2014	4	2014
SUW MP: SUW MM SSMM Development	1	2014	3	2016

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603596N / *(U)LCS Mission Modules*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
SUW MP: SUW MM SSMM PDR	4	2015	4	2015
SUW MP: SUW MM (SSMM End-to-End Testing)	3	2016	4	2016
SUW MP: Surface-to-Surface Missle Module Functional Integration Test (FIT) on LCS	2	2016	2	2016
SUW MP: SSMM Qualification Testing Complete	3	2016	3	2016
SUW MP: SSMM Structural Test Fire	4	2016	4	2016
SUW MP: SSMM TECHEVAL/IOT&E	2	2017	3	2017
SUW MP: SUW MP FOT&E	4	2014	4	2018
Page 2				
ASW MP: ASW MP Increment II SFR	1	2014	1	2014
ASW MP: ASW MP Increment II PDR	4	2015	4	2015
ASW MP: LCS-1 TEMPALT TDP (for OA Test)	1	2015	3	2015
ASW MP: ASW MP Increment II CDR/PRR	3	2016	3	2016
ASW MP: ASW MP Increment II EDM/PRA Award	3	2015	3	2015
ASW MP: ASW MP Increment II EDM 1 Delivery	1	2017	1	2017
ASW MP: ASW MP Increment II DT-B3 (Freedom Variant)	1	2017	1	2017
ASW MP: ASW MP Increment II TECHEVAL DT-C3 (Freedom Variant)	2	2017	2	2017
ASW MP: ASW MP Increment II IOT&E OT-C3 (Freedom Variant)	3	2017	3	2017
ASW MP: ASW MP Increment II IOC	4	2017	4	2017
ASW MP: (See Change Summary on R2)	4	2017	4	2017
ASW MP: Independence Variant Testing	4	2018	3	2019
ASW MP: ASW MP Increment II DT-B6 (Independence Variant)	4	2018	4	2018
ASW MP: ASW MP Increment II TECHEVAL DT-C6 (Independence Variant)	1	2019	1	2019
ASW MP: ASW MP Increment II IOT&E OT-C6 (Independence Variant)	2	2019	2	2019
ASW MP: ASW MP Increment II LRIP 1 Award	2	2017	2	2017
ASW MP: ASW MP Increment LRIP 1 Delivery	3	2018	3	2018
Training: NTTS (MPTS) HW/SW Development	1	2014	3	2017

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity 1319 / 4	**R-1 Program Element (Number/Name)** PE 0603596N / *(U)LCS Mission Modules*	**Project (Number/Name)** 3129 / *LCS Mission Package Development*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Training: MCM LTF Initial Ready For Training	2	2014	2	2014
Training: SUW LTF Initial Ready For Training	2	2015	2	2015
Training: ASW LTF Initial Ready For Training	2	2017	2	2017
Training: CMPT - GD Tactical Team Trainer Integration Complete	2	2014	2	2014
Training: MCM Courseware Update (MCM UUV, RMMV & UISS IOC)	4	2015	3	2016
Training: SUW Courseware Update (SSMM IOC)	4	2015	4	2015
Training: Initial LCS MM Baseline Final Ready for Training	4	2017	4	2017
Training: MCM Annual Training Update (RMMV v6.0)	3	2015	3	2016