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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E							
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	673.689	165.909	187.421	48.470	-	48.470	40.275	35.376	34.322	34.540	Continuing	Continuing
1803: Ship Contract Design	85.858	15.900	3.579	2.639	-	2.639	2.588	3.234	3.205	3.276	Continuing	Continuing
2465: LHA(R) FLT Design and Total Ship Integration	184.027	25.114	30.813	10.561	-	10.561	8.785	2.493	4.376	4.532	Continuing	Continuing
3133: Ship to Shore Connectors Contract Design	94.901	0.780	0.069	-	-	-	-	-	-	-	-	95.750
3137: SSC Construction	124.255	111.917	87.388	-	-	-	-	-	-	-	-	323.560
3179: CVN-79 Total Ship Integration	132.321	9.844	11.927	15.441	-	15.441	15.095	17.466	14.646	14.983	Continuing	Continuing
3369: Hybrid Electric Drive	0.000	-	-	7.949	-	7.949	7.304	7.416	7.577	7.624	Continuing	Continuing
3374: MPF(F)	0.000	-	-	8.454	-	8.454	1.768	0.793	0.482	-	-	11.497
4007: CVN 21 LFT&E	52.327	2.354	3.645	3.426	-	3.426	4.735	3.974	4.036	4.125	Continuing	Continuing
9999: Congressional Adds	0.000	-	50.000	-	-	-	-	-	-	-	-	50.000
MDAP/MAIS Code: Other MDAP/MAIS Code(s): 333, 303, 223												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This Program Element (PE) directly supports the Navy's Shipbuilding Plan by providing for the development of engineering, programmatic and acquisition documentation including ship specifications (including performance specifications) and contractual documentation associated with acquisition of Navy ships. This PE also supports the Congressionally mandated Live Fire Test and Evaluation (LFT&E) program for new ship designs.												
Contract Design has traditionally been the engineering development of the technical and contractual definition of the ship design (including ship specifications and drawings) to a level of detail sufficient for shipbuilders to make a sound estimate of the construction cost and schedule. Additionally, the contract design package developed under this PE has provided the technical baseline from which the Navy selects the shipbuilder who then develops the detail design package required to support the construction and eventual delivery of the ship. This PE also supports the development of design methodologies/tools which facilitate and optimize the transition from ship design documents to efficient production of new ships and ship conversions, and supports engineering planning and ship affordability studies.												

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Under Acquisition Reform for new design ships, traditional distinct phasing of the design process has been replaced with a continuous concurrent engineering Integrated Product and Process Development (IPPD) process extending through and after contract award. This serves to maintain the focus of multi-discipline teams consisting of the government, shipbuilder, system programs, and suppliers. Government/Industry Integrated Product Team(s) (IPTs) will utilize the IPPD process to develop the design in an Integrated Product and Data Environment (IPDE). The design approach is part of an acquisition strategy that is based on commercial practices and incorporates a phased technical definition.						
Project 3374 (Maritime Prepositioning Force (Future))(MPF(F)) was previously funded in the National Sealift Defense Fund Appropriation (BA 04 PE 0408042N, Project 3110 (MPF(F))). This project in FY 2015 and later is a continuation of efforts and is not a new start.						
NDSF BA 04 Project 3110 MPF(F) prior year amounts: FY 2013: \$3.952M; FY 2014: \$18.681M						
B. Program Change Summary (\$ in Millions)		FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget		196.737	155.254	123.970	-	123.970
Current President's Budget		165.909	187.421	48.470	-	48.470
Total Adjustments		-30.828	32.167	-75.500	-	-75.500
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-17.833			
• Congressional Rescissions		-	-			
• Congressional Adds		-	50.000			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-4.315	-			
• Program Adjustments		-	-	-74.216	-	-74.216
• Rate/Misc Adjustments		0.002	-	-1.284	-	-1.284
• Congressional Recision Adjustments		-10.000	-	-	-	-
• Congressional General Reductions		-16.515	-	-	-	-
Adjustments						
Congressional Add Details (\$ in Millions, and Includes General Reductions)						
Project: 9999: Congressional Adds						
Congressional Add: LHA(R) FLT Design and Total Ship Integration						
Congressional Add Subtotals for Project: 9999						
Congressional Add Totals for all Projects						
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Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604567N I Ship Contract Design/ Live Fire T&E	
<u>Change Summary Explanation</u> Cost/Funding: Reduced FY 13 funding for Sequestration reductions. Projects 1803, 2465, 3179, 3369, 4007: Reduced FY 15 funding due to the Department's decision to reduce contracted services. Projects 2465 and 3369: The FY 2015 funding for these two projects was reduced to properly phase program requirements in accordance with expenditures. Technical: Moved Hybrid Electric Drive efforts previously under project 1803 to new project 3369 starting in FY 2015. Realigned Ship to Shore Connectors projects 3133 and 3137 efforts to PE 0605220N in FY15 and out. Began funding new project 3374 (MPF(F)) which was previously funded in the NDSF Appropriation (BA 04 PE 0408042N, Project 3110 (MPF(F))		

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 1803 / Ship Contract Design			
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
1803: Ship Contract Design	85.858	15.900	3.579	2.639	-	2.639	2.588	3.234	3.205	3.276	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
DDG Modernization: The major effort is the engineering development of the technical and contractual definition of the ship's design (e.g. ship specifications and drawings), with sufficient details for the planning yard to make a sound estimate of cost and schedule. It also serves as the technical definition from which the planning yard develops the detailed design and testing package required to build and test the ship. It provides the Navy with a digital, ship design knowledge base, including lessons learned, required to ensure that a proper development, analysis and evaluation can be conducted of any current or future planned.												
Another area this project funds is the development of specific Navy ship criteria and standards for newly developed technologies. Additionally, as new laws are passed, new safety regulations and environmental criteria are developed and other legal/Congressional requirements identified, this project funds the translation into Navy ship design criteria and standards. This project also funds the translation of the traditional Ship Specifications into performance-based criteria, which supports the development of design methodologies/tools which facilitate and optimize the transition from ship design documents to ship alterations. This project also supports ship survivability studies, superstructure integrity analysis, developmental and operational testing, gun weapon system software integration and next generation Machinery Control System (MCS) software integration.												
DON Energy Initiative - Hybrid Electric Drive: This project includes an increment for the DON Energy Initiative related to the DDG 51 Hybrid Electric Drive to reduce DDG 51 Class ship energy consumption and increase mission effectiveness through longer time on station. This project supports propulsion at low ship speeds without the need for LM 2500 main engines. Fuel savings from the Hybrid Electric Drive system will be achieved by utilizing fewer gas turbines for propulsion and ship service power generation while also loading gas turbines generators at a more efficient operating load. Provides critical foundation for SECNAV and CNO objectives to achieve greater Navy-wide energy security. Beginning in FY 2015, Hybrid Electric Drive moves to project 3369 in this program element.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Ship Contract Design									4.826	3.579	2.639	
									Articles: -	-	-	
FY 2013 Accomplishments:												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>		Project (Number/Name) 1803 / <i>Ship Contract Design</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
For DDGs, specific efforts include, but are not limited to Engineering Analysis, developmental and operational test events and planning, feasibility studies, structural analysis for hull integrity, and topside analysis related to the next generation Advanced Capability Build and next generation MCS software integration. CG Class specific efforts include aluminum cracking studies, superstructure repair planning, sustainment studies and new alteration development to ensure CGs are able to reach expected service life. Another area this project funds is the development of specific Navy ship criteria and standards for newly developed technologies. Additionally, as new laws are passed, new safety regulations and environmental criteria are developed and other legal/Congressional requirements identified, this project funds the translation into Navy ship design criteria and standards. This project also funds the translation of the traditional Ship Specifications into performance-based criteria, which supports the development of design methodologies/tools which facilitate and optimize the transition from ship design documents to ship alterations. FY 2014 Plans: For DDGs, specific efforts include, but are not limited to Engineering Analysis, developmental and operational test events and planning, feasibility studies, structural analysis for hull integrity, and topside analysis related to the next generation Advanced Capability Build and next generation MCS software integration. CG Class specific efforts include aluminum cracking studies, superstructure repair planning, sustainment studies and new alteration development to ensure CGs are able to reach expected service life. Another area this project funds is the development of specific Navy ship criteria and standards for newly developed technologies. Additionally, as new laws are passed, new safety regulations and environmental criteria are developed and other legal/Congressional requirements identified, this project funds the translation into Navy ship design criteria and standards. This project also funds the translation of the traditional Ship Specifications into performance-based criteria, which supports the development of design methodologies/tools which facilitate and optimize the transition from ship design documents to ship alterations. FY 2015 Plans: N/A					
Title: DON Energy Initiative Articles: Description: This project is a DON Energy Initiative related to the DDG 51 Hybrid Electric Drive (HED) to reduce DDG 51 Class ship energy consumption and increase mission effectiveness through longer time on station. Beginning in FY 2015, Hybrid Electric Drive moves to project 3369 in this program element. FY 2013 Accomplishments:			11.074 2.000	- -	- -

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Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 1803 / Ship Contract Design				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
MCS integration development, initiate environmental qualification testing, initiate training, Integrated Logistic Support (ILS), and ship integration design development.												
FY 2014 Plans: N/A												
FY 2015 Plans: N/A												
Accomplishments/Planned Programs Subtotals										15.900	3.579	2.639
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	
• OPN 0900: DDG Modernization	407.707	285.994	338.569	-	338.569	427.258	491.224	719.671	669.440	Continuing	Continuing	
• OPN 0960: CG Modernization	80.868	10.539	-	-	-	-	87.990	113.260	106.778	-	1,622.583	
• WPN 4223: CG Modernization	1.589	1.943	-	-	-	-	19.365	19.713	-	-	190.559	
• OPN 0140: Hybrid Electric Drive	-	-	22.704	-	22.704	41.562	42.430	43.302	44.260	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
A full and open competition with a Fixed Price Incentive Fee Contract awarded for the development, qualification, and delivery of the Engineering Development Models (EDM) Hybrid Electric Drive (HED) and the initial HED production shipsets for the DDG 51 Fleet modernization Program.												
E. Performance Metrics												
CG: Aluminum sensitization study to determine the lifetime until sensitization for aluminum alloys and stress and buckling analysis of the CG 52 Class ship structure, and develop proposed fatigue fixes in the high stress areas to produce a technical report with modifications or improvements to the ship that may be necessary to preclude cracking in the areas of concern. Evaluation of composite patch and development of composite patch installation procedures as a method for repairing cracks. Development of ultrasonic impact treatment guidance as a method for repairing cracks. Evaluation of different coating that can prevent cracking and different aluminum alloys that are sensitization resistant.												
DDG Modernization: DT/OT for ACB12/TI12 DDGM. Additional efforts for DDG Mod include design and development for next generation MCS software integration, and the design/development of a technical correction/solution for stanchion cracking at frame 299 Flight IIA.												

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Hybrid Electric Drive (HED) DON Energy Initiative: Successful completion of Engineering Development Model (EDM) and complete fielding of First Article (FA) including contract award, design, manufacturing, and delivery. Successful completion of Factory Acceptance Test (FAT) and performance testing in Land Based Engineering Site (LBES). Commencement, completion, delivery and installation of Low Rate Initial Production (LRIP) units. Achieve fuel efficiency and increase on-station time.		

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Appropriation/Budget Activity
1319 / 5

Project (Number/Name) 1803 / Ship Contract Design

- CG Baseline 2 Mod Design (CG53-58)
- CG Baseline 3 Mod Design (CG59-64)
- CG Baseline 4 Mod Design (CG65-73)
- DDG Technical Insertion 12 Mod Design
- DDG Technical Insertion 16 Mod Design
- Hybrid Electric Drive (HED) Engineering
- HED EDM Award
- HED EDM Delivery
- HED LRIP

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Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 2465 / LHA(R) FLT Design and Total Ship Integration			
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
2465: LHA(R) FLT Design and Total Ship Integration	184.027	25.114	30.813	10.561	-	10.561	8.785	2.493	4.376	4.532	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 333												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project provides the contract design, development and testing efforts for the Amphibious Assault Ship Replacement Program LHA(R). The LHA (R) is a ship construction program designed to: (1) provide a functional replacement for the Amphibious Assault Ships which begin reaching the end of their extended service lives between FY11 and FY15 (2) be a key platform in the Amphibious Readiness Group (ARG) of the future and (3) provide for an affordable and sustainable amphibious ship development program. LHA(R) ships will provide forward presence and power projection as an integral part of Joint, inter-agency, and multi-national maritime expeditionary forces. Additionally, LHA(R) will be designed to operate for sustained periods in transit to and operations in an Amphibious Objective Area to include the embarkation, deployment, and landing of a Marine Landing Force in an assault by helicopters and tilt rotors (MV-22) supported by Joint Strike Fighters (F-35B).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: LHA (R) FLT 0 Design and Total Ship Integration - LHA 6									5.335	10.846	4.796	
									Articles: -	-	-	
FY 2013 Accomplishments:												
LHA 6 Continued Development Testing (DT-B1) and Operational Test and Evaluation (OT&E) preparations.												
LHA 6 Continued evaluating the interoperability data supporting Key Performance Parameters (KPP).												
LHA 6 Continued Vulnerability Assessment Report (VAR).												
LHA 6 Continued Total Ship Survivability Trial (TSST) preparations.												
LHA 6 Initiated Test and Evaluation Master Plan (TEMP) Rev B.												
LHA 6 Initiated LHA Class Reliability Maintainability and Availability (RMA).												
FY 2014 Plans:												
LHA 6 Complete Development Testing (DT-B1/B2)												
LHA 6 Initiate Development Testing (DT-B3)												
LHA 6 Complete Test and Evaluation Master Plan (TEMP) Rev B.												
LHA 6 Continue Operational Test and Evaluation (OT&E).												
LHA 6 Continue evaluating the interoperability data supporting Key Performance Parameters (KPP).												
LHA 6 Continue Vulnerability Assessment Report (VAR).												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014		
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E	Project (Number/Name) 2465 / LHA(R) FLT Design and Total Ship Integration		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
LHA 6 Continue Total Ship Survivability Trial (TSST) preparations. LHA 6 Continue LHA Class Reliability Maintainability and Availability (RMA). FY 2015 Plans: LHA 6 Continue Development Testing (DT-B3). LHA 6 Continue Operational Test and Evaluation (OT&E). LHA 6 Continue evaluating the interoperability data supporting Key Performance Parameters (KPP). LHA 6 Continue Vulnerability Assessment Report (VAR). LHA 6 Continue Total Ship Survivability Trial (TSST) preparations. LHA 6 Continue LHA Class Reliability Maintainability and Availability (RMA).				
Title: LHA (R) FLT 1 Design and Total Ship Integration - LHA 8 FY 2013 Accomplishments: LHA 8 Completed Gate 3 Review. LHA 8 Completed Preliminary Design/Requirements Trade Studies LHA 8 Continued Capability Development Document (CDD) and Concepts of Operations (CONOPS) preparations. LHA 8 Continued Early Industry Involvement; reviewed industry deliverables. LHA 8 Continued development of Milestone Documents. LHA 8 Continued Operational Test and Evaluation (OT&E) preparations. LHA 8 Initiated Test and Evaluation Master Plan (TEMP) Rev B. LHA 8 Initiated Contract Design. LHA 8 Continued Operational Assessment efforts for FLT 1. LHA 8 Initiated Vulnerability Assessment Report (VAR). FY 2014 Plans: LHA 8 Complete Capability Development Document (CDD) and Concepts of Operations (CONOPS). LHA 8 Continue Contract Design. LHA 8 Continue Early Industry Involvement. LHA 8 Continue development of Milestone Documents. LHA 8 Complete Operational Assessment efforts. LHA 8 Continue Operational Test and Evaluation (OT&E) preparations. LHA 8 Complete Test and Evaluation Master Plan (TEMP) Rev B. LHA 8 Continue Vulnerability Assessment Report (VAR).		Articles: 19.779 -	19.967 -	5.765 -

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy							Date: March 2014				
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E			Project (Number/Name) 2465 / LHA(R) FLT Design and Total Ship Integration				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2013	FY 2014	FY 2015		
LHA 8 Continue Gate Reviews, and Defense Acquisition Board (DAB) Program Reviews.											
FY 2015 Plans: LHA 8 Conduct Milestone Documentation, Gate Reviews and Defense Acquisition Board (DAB) Program Reviews. LHA 8 Continue Operational Test and Evaluation (OT&E) preparations. LHA 8 Continue Vulnerability Assessment Report (VAR). LHA 8 Complete Contract Design. LHA 8 Issue Advance Procurement RFP. LHA 8 Award Advance Procurement Contract.											
Accomplishments/Planned Programs Subtotals							25.114	30.813	10.561		
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
• SCN/3041: LHA (R) Ships	156.478	37.700	29.093	-	29.093	280.236	1,569.309	2,348.811	-	-	4,421.627
• RDT&E/2465C: LHA (R) FLT Design/Total Ship Integration (Cong. Add LHA 8 Design Efforts)	-	50.000	-	-	-	-	-	-	-	-	50.000
Remarks											
D. Acquisition Strategy											
Acquisition strategy signed February 7, 2005 approved strategy for sole source to Northrop Grumman Shipbuilding (NGSB) (Now Huntington Ingalls Industries, Inc.) to incorporate previous LHD engineering, design and producibility lessons-learned into LHA(R). Advanced Procurement (AP) contract for Long Lead-Time Material (LLTM) procurement and engineering support awarded July 05 with continuation of these efforts in FY06 prior to award of Detail Design and Construction (DD&C) contract on 1 June 2007. The AP contract was subsumed by the FPI DD&C contract.											
LHA 7 DD&C contract awarded on May 31, 2012.											
LHA 8 reincorporates the well deck. AP starts in 2015 to support FY17 DD&C award.											
E. Performance Metrics											
Successfully achieve Initial Operational Capability, successfully complete Operational Test and Milestone Reviews.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 2465 / LHA(R) FLT Design and Total Ship Integration					
Product Development (\$ 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
Ship Design	WR	NSWC : Various	97.925	-		-		-		-		-	-	97.925	-
Ship Design	C/CPFF	HII : Pascagoula, MS	5.019	-		-		-		-		-	Continuing	Continuing	Continuing
Ship Design	TBD	TBD : Various	4.105	19.779	Dec 2012	14.420	Feb 2014	3.259	Dec 2014	-		3.259	5.007	46.570	-
Special Studies	WR	NSWC : Panama City, FL	4.800	-		-		-		-		-	-	4.800	-
Subtotal			111.849	19.779		14.420		3.259		-		3.259	-	-	-
Test and Evaluation (\$ 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
Developmental Test & Evaluation	WR	JITC : Fort Huachuca, AZ	3.593	0.331	Dec 2012	0.307	Feb 2014	0.041	Dec 2014	-		0.041	0.200	4.472	-
Operational Test & Evaluation	WR	OPTEVFOR/ MCOTEA : Norfolk, VA/Quantico, VA	8.845	1.000	Dec 2012	5.659	Feb 2014	4.729	Dec 2014	-		4.729	7.296	27.529	-
Live Fire Test & Evaluation	WR	NSWC : Carderock, MD	48.513	1.904	Dec 2012	6.080	Feb 2014	1.509	Dec 2014	-		1.509	4.038	62.044	-
Subtotal			60.951	3.235		12.046		6.279		-		6.279	11.534	94.045	-
Management Services (\$ 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
Program Management	C/CPFF	Various : Various	10.784	2.000	Dec 2012	4.247	Feb 2014	0.973	Dec 2014	-		0.973	1.000	19.004	-
Travel	Various	Navsea Travel : Washington, DC	0.432	0.100	Dec 2012	0.100	Jun 2014	0.050	Jun 2015	-		0.050	0.090	0.772	-
Defense Acquisition Workforce	Various	Various : Various	0.011	-		-		-		-		-	-	0.011	-
Subtotal			11.227	2.100		4.347		1.023		-		1.023	1.090	19.787	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy										Date: March 2014				
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	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	184.027	25.114		30.813		10.561		-		10.561	-	-	-	
Remarks														

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy			Date: March 2014		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E			Project (Number/Name) 2465 / LHA(R) FLT Design and Total Ship Integration

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Proj 2465																												
LHA 6 Developmental Testing																												
LHA 6 Operational Testing																												
LHA 6 Vulnerability Assessment Report (VAR)																												
LHA 8 Preliminary Design/Requirements Trade Studies																												
LHA 8 Capability Development Document (CDD) Update																												
LHA 8 Contract Design																												
LHA 8 Early Industry Involvement																												
LHA 8 Gate Reviews																												
LHA 8 Operational Assessment Efforts																												
LHA 8 Issue Advance Procurement RFP																												
LHA 8 Award Advance Procurement Contract																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>	Project (Number/Name) 2465 / <i>LHA(R) FLT Design and Total Ship Integration</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2465				
LHA 6 Developmental Testing	1	2013	1	2016
LHA 6 Operational Testing	1	2013	4	2016
LHA 6 Vulnerabilty Assessment Report (VAR)	1	2013	2	2017
LHA 8 Preliminary Design/Requirements Trade Studies	1	2013	4	2013
LHA 8 Capability Development Document (CDD) Update	1	2013	2	2014
LHA 8 Contract Design	1	2013	4	2015
LHA 8 Early Industry Involvement	1	2013	3	2015
LHA 8 Gate Reviews	1	2013	3	2015
LHA 8 Operational Assessment Efforts	1	2013	4	2014
LHA 8 Issue Advance Procurement RFP	1	2015	1	2015
LHA 8 Award Advance Procurement Contract	4	2015	4	2015

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design			
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
3133: Ship to Shore Connectors Contract Design	94.901	0.780	0.069	-	-	-	-	-	-	-	-	95.750
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 303												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
Note: Funding for this project unit effort is realigned to PE 0605220N in FY15 and out.												
Ship to Shore Connector (SSC) - This project provides the Preliminary and Contract design and Class test efforts for the SSC Program. The SSC program provides the capability to rapidly move assault forces with the littoral operational environment to accomplish Unified Command Plan (UCP) missions and ensures the Joint Force Commander's (JFCDR's) ability to conduct amphibious operations and operate over the high water mark, including movement over ice, mud, rivers, swamps and marshes. SSC provides the functional replacement for the LCAC crafts, which begin reaching extended service life in 2015. This project provided for the FY12 and prior tasks that supported the Systems Development and technical data package required for the solicitation for detail design, construction and test of the initial article. For FY13 and beyond, this project will provide for Class Test and Evaluation of components and systems, as well as all programmatic effort and support activities necessary for the development and execution of Class T&E plans and programs. The Test and Training craft (Craft 100) and first production craft (Craft 101), which will be operationally fielded, are funded in RDT&E under Project 3137, in this PE through FY14 and realigned to PE 0605220N in FY15 and out.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Ship to Shore Connector (Contract Des)									0.780	0.069	-	
									Articles: -	-	-	
FY 2013 Accomplishments: Executed Class Test and Evaluation program including Test Planning and Coordination, Interoperability Testing, Vulnerability Assessment Report (VAR), Live Fire Test and Evaluation (LFT&E) Paper Studies, Surrogate tests, conducted Operational Test Readiness Review and Operational Assessment (OA), TEMP and LFT&E Management plan updates and LFT&E Document Coordination.												
FY 2014 Plans: Continue Class Test and Evaluation program including Test Planning and Coordination, Interoperability Testing, Vulnerability Assessment Report (VAR), Live Fire Test and Evaluation (LFT&E) Paper Studies, Surrogate tests, TEMP and LFT&E Management plan updates and LFT&E Document Coordination.												
FY 2015 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>				Project (Number/Name) 3133 / <i>Ship to Shore Connectors Contract Design</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Under PE0605220N project 3133 will continue Class Test and Evaluation program including Test Planning and Coordination, Interoperability Testing, Vulnerability Assessment Report (VAR), and Modeling and Simulation and Live Fire Test and Evaluation (LFT&E) component surrogate tests.												
Accomplishments/Planned Programs Subtotals										0.780	0.069	-
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	
• RD TEN 0604567N: <i>SSC Construction/3137</i>	111.917	87.388	-	-	-	-	-	-	-	-	323.560	
• SCN 5112: <i>Ship to Shore Connector</i>	-	-	123.233	-	123.233	258.123	278.807	442.362	627.315	2,258.573	3,988.413	
• RD TEN 0605220N: <i>Ship to Shore Connector</i>	-	-	67.815	-	67.815	7.812	7.061	3.163	1.147	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
The Test and Training craft (Craft 100) and first production craft (Craft 101) will be procured and constructed with RDT&E funds. The Detail Design and Construction contract includes options for construction of an additional seven craft, if exercised.												
E. Performance Metrics												
Continue Test and Evaluation Master Plan (TEMP) updates. Continue Developmental Testing Phase B and Operational Testing Phase B.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design					
Product Development (\$ 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
Ship Design	C/CPFF	CSC : Washington	14.330	-		-		-		-		-	-	14.330	-
Preliminary/Contract Design	Various	Various : Various	31.140	-		-		-		-		-	-	31.140	-
System Engineering	Various	Various : Various	6.241	-		-		-		-		-	-	6.241	-
Subtotal			51.711	-		-		-		-		-	-	51.711	-
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
Developmental Support	WR	NSWC PCD : Panama City, FL	4.636	-		-		-		-		-	-	4.636	-
Software Development	Various	Various : Various	2.219	-		-		-		-		-	-	2.219	-
Integrated Logistics Support	WR	NSWC : Various	3.365	-		-		-		-		-	-	3.365	-
Studies & Analyses	TBD	Various : Various	5.711	-		-		-		-		-	-	5.711	-
Subtotal			15.931	-		-		-		-		-	-	15.931	-
Test and Evaluation (\$ 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
Developmental Test & Evaluation	Various	Various : Various	0.427	-		-		-		-		-	-	0.427	-
Operational Test & Evaluation	Various	Various : Various	1.943	0.314	Nov 2012	0.069	Dec 2013	-		-		-	-	2.326	-
Live Fire Test & Evaluation	Various	Various : Various	5.331	0.466	Nov 2012	-		-		-		-	-	5.797	-
Subtotal			7.701	0.780		0.069		-		-		-	-	8.550	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design					
Management Services (\$ 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
Contractor Engineering Support	C/CPFF	CSC/Alion : Washington, DC	9.323	-		-		-		-		-	-	9.323	-
Government Engineering Support	WR	NSWC : Various	3.689	-		-		-		-		-	-	3.689	-
Program Management Support	Various	Various : Various	6.120	-		-		-		-		-	-	6.120	-
Travel	Various	NAVSEA Travel : Washington, DC	0.300	-		-		-		-		-	-	0.300	-
Defense Acquisition Workforce	Various	Various : Various	0.126	-		-		-		-		-	-	0.126	-
Subtotal			19.558	-		-		-		-		-	-	19.558	-
			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			94.901	0.780		0.069		-		-		-	-	95.750	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy			Date: March 2014		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>			Project (Number/Name) 3133 / <i>Ship to Shore Connectors Contract Design</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Proj 3133																												
Development Test/Operational Test B (DT/OT-B)																												
Capabilities Production Document (CPD)																												
Critical Design Review (CDR)																												
Operational Assessment (OA)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>	Project (Number/Name) 3133 / <i>Ship to Shore Connectors Contract Design</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3133</i>				
Development Test/Operational Test B (DT/OT-B)	1	2013	1	2015
Capabilities Production Document (CPD)	4	2013	4	2014
Critical Design Review (CDR)	2	2014	2	2014
Operational Assessment (OA)	3	2014	3	2014

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3137 / SSC Construction			
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
3137: SSC Construction	124.255	111.917	87.388	-	-	-	-	-	-	-	-	323.560
Quantity of RDT&E Articles	1.000	1.000	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 303												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
Note: Funding for this project unit effort is realigned to PE 0605220N in FY15 and out.												
This project funds the Ship to Shore Connector (SSC) Engineering & Manufacturing Development phase which includes Detail Design and Construction, Product Support, Government Furnished Equipment (GFE), Program support, and Outfitting and Post Delivery for the first two craft. The lead craft will be maintained as a test and training platform throughout its life cycle. The second craft (Craft 101) will be available to support IOT&E as needed, but will be a fleet asset after delivery. The SSC program provides the capability to rapidly move assault forces within the littoral operational environment to accomplish Unified Command Plan (UCP) missions, and ensures the Joint Force Commander's (JFCDR's) ability to conduct amphibious operations and operate over the high water mark, including movement over ice, mud, rivers, swamps and marshes. The SSC program provides the functional replacement for the LCAC crafts, which begin reaching extended service life in 2015. Below reflects total program funding in project 3137 between PE 0604567N and PE 0605220N.												
TEST AND TRAINING CRAFT 100:												
Plans/Basic Construction: TOTAL 226.6 (FY15 31.0)												
Change Orders: TOTAL 13.9 (FY15 3.8)												
Electronics TOTAL 9.2 (FY15 .3)												
HM&E: TOTAL 27.9 (FY15 1.3)												
Other Support: TOTAL 43.5 (FY15 7.9)												
Ordnance Total 0.05 (FY15 0.05)												
Post Delivery/Outfitting: TOTAL 2.0 (FY15 0.0)												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E	Project (Number/Name) 3137 / SSC Construction		
Ship Total: TOTAL 323.2 (FY15 44.4)					
CRAFT 101: Basic Construction TOTAL 51.0 (FY15 14.7) Change Orders: TOTAL 2.2 (FY15 1.1) Electronics: TOTAL: 2.2 (FY15 .4) HM&E TOTAL: 3.7 (FY15 0.8) Other Support TOTAL: 14.1(FY15 3.0) Ordnance TOTAL 0.05 (FY15 0.05) Post Delivery/Outfitting TOTAL 2.0 (FY15 0.0) Ship Total: TOTAL 75.3 (FY15 20.0)					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2013	FY 2014	FY 2015
Title: SSC Construction			111.917	87.388	-
Articles:			1.000	-	-
FY 2013 Accomplishments: Commenced Detail Design and Construction planning efforts; awarded contract option for Craft 101 and commence LLTM procurement and production planning.					
FY 2014 Plans: Continue Detail Design and Construction planning efforts; continue Test and Training Craft 100 and Craft 101 LLTM procurement and production planning, conduct a Production Readiness Review and begin construction of the Test and Training Craft 100 and Craft 101.					
FY 2015 Plans: Under PE0605220N project 3137 will continue planning and construction activities for Test and Training Craft 100 and Craft 101.					
Accomplishments/Planned Programs Subtotals			111.917	87.388	-

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E	Project (Number/Name) 3137 / SSC Construction	

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
• RD TEN 0604567N: SSC Contract Design (3133)	0.780	0.069	-	-	-	-	-	-	-	-	95.750
• SCN 5112: Ship to Shore Connector	-	-	123.233	-	123.233	258.123	278.807	442.362	627.315	2,258.373	3,988.213
• RD TEN 0605220N: Ship to Shore Connector	-	-	67.815	-	67.815	7.812	7.061	3.163	1.147	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Test and Training craft (Craft 100) and first production craft (Craft 101) will be procured and constructed with RDT&E funds. The Detail Design and Construction contract includes options for construction of an additional seven craft, if exercised.

E. Performance Metrics

Conduct Production Readiness Review

Commence Construction of Test and Training Craft 100 and Craft 101

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3137 / SSC Construction					
Product Development (\$ 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
Test & Trng Craft Ship Design	C/CPFF	Various : Various	8.291	3.250	Oct 2012	5.810	Nov 2013	-		-		-	-	17.351	-
Test & Trng Craft Detail Design/Construction	C/FPIF	Textron : New Orleans, LA	102.089	61.840	Oct 2012	30.510	Dec 2013	-		-		-	-	194.439	-
Test & Trng Craft Government Furnished Equipment (GFE)	Various	Various : Various	2.763	3.940	Oct 2012	3.500	Nov 2013	-		-		-	-	10.203	-
Test & Trng Craft Change Orders	C/FPIF	Textron : New Orleans, LA	0.000	1.554	Oct 2012	8.460	Nov 2013	-		-		-	-	10.014	-
Craft 101 Ship Design	C/CPFF	Alion : Washington, DC	0.000	2.900	Oct 2012	-		-		-		-	-	2.900	-
Craft 101 LLTM & Construction Planning	C/FPIF	Textron : New Orleans, LA	0.000	16.510	Dec 2012	19.550	Dec 2013	-		-		-	-	36.060	-
Craft 101 Government Furnished Equipment	Various	Various : Various	0.000	1.413	Mar 2013	1.300	Nov 2013	-		-		-	-	2.713	-
Craft 101 Change Orders	C/FPIF	Textron : New Orleans, LA	0.000	-		1.080	Dec 2013	-		-		-	-	1.080	-
Subtotal			113.143	91.407		70.210		-		-		-	-	274.760	-
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
Test & Trng Craft Studies and Analysis	Various	Various : Various	0.000	3.060	Oct 2012	3.272	Nov 2013	-		-		-	-	6.332	-
Craft 101 Studies and Analysis	Various	Various : Various	0.000	1.760	Oct 2012	1.856	Nov 2013	-		-		-	-	3.616	-
Test & Trng Craft Integrated Logistics Support	WR	NSWC : Various	1.722	3.250	Oct 2012	-		-		-		-	-	4.972	-
Craft 101 Integrated Logistics Support	WR	NSWC : Various	0.000	-		5.100	Nov 2013	-		-		-	-	5.100	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy													Date: March 2014		
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3137 / SSC Construction					
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
Subtotal			1.722	8.070		10.228		-		-		-	-	20.020	-
Test and Evaluation (\$ 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
Test & Trng Craft Construction Test Program	Various	Various : Various	0.212	1.850	Oct 2012	1.250	Nov 2013	-		-		-	-	3.312	-
Subtotal			0.212	1.850		1.250		-		-		-	-	3.312	-
Management Services (\$ 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
Test & Trng Craft Contractor Engineering Support	C/CPFF	CSC/Alion : Washington DC	8.252	5.090	Jun 2013	3.930	Jun 2014	-		-		-	-	17.272	-
Travel	Various	Various : Various	0.096	0.060	Oct 2012	0.060	Nov 2013	-		-		-	-	0.216	-
Test & Trng Craft Government Engineering Support	WR	Various : Various	0.830	3.250	Oct 2012	0.910	Nov 2013	-		-		-	-	4.990	-
Craft 101 Contractor Engineering Services	WR	CSC/Alion : Washington DC	0.000	2.190	Mar 2013	0.600	Mar 2014	-		-		-	-	2.790	-
Craft 101 Government Engineering Serivces	WR	Various : Various	0.000	-		0.200	Oct 2014	-		-		-	-	0.200	-
Subtotal			9.178	10.590		5.700		-		-		-	-	25.468	-
			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			124.255	111.917		87.388		-		-		-	-	323.560	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy							Date: March 2014			
Appropriation/Budget Activity 1319 / 5			R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E			Project (Number/Name) 3137 / SSC Construction				
	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										

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy			Date: March 2014		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>			Project (Number/Name) 3137 / <i>SSC Construction</i>

	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Proj 3137																												
Test and Training Craft Detail Design																												
Craft 101 Option Award																												
Craft 101 LLTM & Plng																												
Capabilities Production Document (CPD)																												
Critical Design Review (CDR)																												
Production Readiness Review (PRR)																												
Test and Training Craft Construction (Start Fab)																												
Craft 101 Construction																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>	Project (Number/Name) 3137 / <i>SSC Construction</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3137</i>				
Test and Training Craft Detail Design	1	2013	3	2014
Craft 101 Option Award	1	2013	1	2013
Craft 101 LLTM & Plng	1	2013	1	2013
Capabilities Production Document (CPD)	4	2013	4	2014
Critical Design Review (CDR)	2	2014	2	2014
Production Readiness Review (PRR)	3	2014	3	2014
Test and Training Craft Construction (Start Fab)	3	2014	1	2017
Craft 101 Construction	4	2014	4	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>				Project (Number/Name) 3179 / <i>CVN-79 Total Ship Integration</i>			
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
3179: <i>CVN-79 Total Ship Integration</i>	132.321	9.844	11.927	15.441	-	15.441	15.095	17.466	14.646	14.983	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 223												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
Development and related testing of CVN 78 Class aircraft carrier specific technologies, the infusion of the ship technology base into existing and future aircraft carriers, and the potential realization of subsystem design capabilities not currently feasible. This project also funds the Contract Design efforts for the CVN 79. This project transitions the minimum sustaining technologies required to address obsolescence, critical survivability shortfalls as identified in CVN 78 Class testing, future requirements, and technologies which did not mature in time to support the CVN 78. All systems developed in this project have the potential to support emerging requirements and other promising systems technologies for insertion into new aircraft carrier designs. The emphasis is directed toward developing ship hull, mechanical, propulsion, electrical, aviation, warfare systems, and combat support systems, sub-systems and components to maintain aircraft carrier affordability, manpower requirements, survivability, and operational capabilities and to meet the requirements of existing and pending regulations and statutes critical to the operation of future aircraft carriers. This project also encompasses those tasks required to develop the contract data package necessary to support CVN 79 procurement, including, but not limited to, engineering support, programmatic and program support, logistics support, modeling and simulation, manpower and program related studies, and design support systems, such as the Integrated Digital Environment. In addition, this project focuses on significant procurement and life cycle cost reduction compared to the first ship of the class. Cost reductions are sought, developed and implemented in the areas of design, labor and material.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: CVN-79 Total Ship Integration									9.844	11.927	15.441	
Articles:									-	-	-	
FY 2013 Accomplishments: Developed and submitted cost reduction ideas into Business Case Analyses (BCAs) and implemented BCAs into the cost model, thereby reducing the overall procurement cost of the ship. Provided program management, engineering and logistics support for the development of technical and logistics data required to provide life cycle support for electromechanical actuators used by multiple systems (ex. Jet Blast Deflectors and Integrated Catapult Control Station). Continued to provide engineering and technical assistance for the Underway Replenishment System. Supported the development of operational and functional requirements for the voice interior communication systems for the CVN 79. Provided design integration management and engineering support. Reviewed ship specifications to identify cost reduction initiatives related to ship design.												
FY 2014 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3179 / CVN-79 Total Ship Integration				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Conduct an analysis of GFE obsolescence prior to installation on the ship. Other projects include continuation of affordability efforts through analysis of build practices and identification of optimized build strategies based on lessons learned from CVN 78. Continuation of super lift reviews will identify further opportunities to move work out of the dry-dock and back onto the platen or component fabrication shops, reducing construction time and cost.												
Conduct an analysis of warfare system GFE. Projects in this area include the following: GFI review and comment (Schedule A-C input), Aviation LI-ION battery locker requirements analysis and aviation fuels operational sequencing system review. Continue efforts to fully integrate all aviation and land combat systems on ship with increased efficiency to support the warfighter.												
FY 2015 Plans: Continue to identify and implement cost reduction measures. Integrate the unique maintenance, storage and handling requirements to deploy with the F-35C. Assess design, equipment, and system changes between CVN 78 and CVN 79 to identify candidate equipment and / or systems that may require Follow-on Test and Evaluation. Complete the CVN 78 Class shock and vibration testing. Address design and construction issues based on the results of CVN 78 testing. Continue to manage fact-of-life and obsolescence changes on government furnished equipment systems.												
Accomplishments/Planned Programs Subtotals										9.844	11.927	15.441
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	
• RDTEN / 0605312N: Project Units 2208, 4004	87.573	74.638	-	-	-	-	-	-	-	-	1,709.785	
• RDTEN / 0603570N: Propulsion Plant Development (PU 2692)	58.193	57.499	60.459	-	60.459	-	-	-	-	-	1,526.813	
• SCN / 2001: Carrier Replacement Program	490.960	917.553	1,300.000	-	1,300.000	2,876.183	2,290.837	2,849.342	1,864.514	Continuing	Continuing	
• SCN / 5300: Completion of Prior Year Shipbuilding Programs	-	588.100	663.000	-	663.000	124.000	-	-	-	-	1,375.100	
• RDTEN / 0604112N: Project Units 2208, 4004	-	-	43.613	-	43.613	38.373	35.662	34.156	25.650	Continuing	Continuing	
• OMN / 1B2B: CVN 78 Ford Class Training (12BJ0)	-	-	4.907	-	4.907	12.872	2.396	-	-	-	20.175	
Remarks												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>	Project (Number/Name) 3179 / <i>CVN-79 Total Ship Integration</i>
<u>D. Acquisition Strategy</u> The CVN 78 is the first ship of the CVN 78 Class of aircraft carriers designed to replace USS ENTERPRISE and the ships of the NIMITZ Class. The CVN 78 class will feature a new nuclear propulsion and electrical generation/distribution system, new electromagnetic aircraft launching system (EMALS), advanced arresting gear (AAG) system, all electric auxiliaries, warfare system improvements, survivability enhancements, improved weapons handling, and improved aircraft servicing. These design features will result in lower manpower and total ownership costs as compared to the NIMITZ Class. Additionally, the following war fighting benefits will be realized: increased sortie generation rate, improved ship self-defense capability, increased launch and recovery capability/flexibility, increased operational availability, and increased flexibility to support future upgrades. <u>E. Performance Metrics</u> Successfully complete system development efforts for designated new and modified shipboard system, including developmental test and evaluation documents. Successfully complete design related activities associated with integration of new and modified shipboard systems into the ship, including developmental test and evaluation documentation. Successfully perform system design and analysis studies. Successfully support design integration and analysis. Successfully complete or support feasibility and tradeoff studies on new and modified shipboard systems, technologies, and proposed modifications. Studies shall include requirements and engineering analysis; identification of subsystem, integration, and logistics impacts; cost estimates; analysis of construction schedule impacts; and conduct/ support of shipchecks. Successfully provide Manpower Workload Analysis associated with design and policy activities, and with integration of new and modified system/equipment. Successfully complete the development of multiple Business Case Analyses (BCAs) that demonstrate technology, process, requirements and/or infrastructure improvements that will reduce the man hours (or equivalent material costs) for CVN 79 Construction.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3179 / CVN-79 Total Ship Integration					
Product Development (\$ 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
Total Ship Integration	C/CPAF	HII : VA	78.574	4.155	Nov 2012	3.121	Nov 2013	5.411	Nov 2014	-		5.411	Continuing	Continuing	Continuing
Total Ship Integration	WR	NSWC CARDEROCK : MD	10.668	0.163	Nov 2012	0.711	Nov 2013	0.579	Oct 2014	-		0.579	Continuing	Continuing	Continuing
Total Ship Integration	WR	NSWC DAHLGREN : VA	7.794	1.080	Oct 2012	1.052	Nov 2013	1.669	Oct 2014	-		1.669	Continuing	Continuing	Continuing
Total Ship Integration	WR	NAWCAD PAX RIVER : MD	3.231	0.527	Oct 2012	1.185	Nov 2013	3.286	Oct 2014	-		3.286	Continuing	Continuing	Continuing
Total Ship Integration	WR	SPAWAR : SD	3.193	0.400	Nov 2012	0.288	Nov 2013	0.320	Oct 2014	-		0.320	Continuing	Continuing	Continuing
Total Ship Integration	C/CPFF	NAVSEA SEAPORT : DC	16.491	2.287	Jan 2013	4.021	Nov 2013	1.448	Dec 2014	-		1.448	Continuing	Continuing	Continuing
Total Ship Integration	C/CPAF	RAYTHEON : MA	5.458	0.772	Nov 2012	1.549	Dec 2013	2.127	Dec 2014	-		2.127	Continuing	Continuing	Continuing
Total Ship Integration	WR	SSC CHARLESTON : SC	0.266	0.460	Nov 2012	-		-		-		-	-	0.726	-
Total Ship Integration	C/CPFF	SAIC : VA	1.445	-		-		0.101	Dec 2014	-		0.101	-	1.546	-
Subtotal			127.120	9.844		11.927		14.941		-		14.941	-	-	-
Test and Evaluation (\$ 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
Operational Test & Evaluation	C/CPFF	FISC : VA	0.176	-		-		0.197	Nov 2014	-		0.197	-	0.373	-
Developmental Test & Evaluation	WR	NSWC CARDEROCK : MD	4.721	-		-		-		-		-	-	4.721	-
Developmental Test & Evaluation	WR	NUWC NEWPORT : RI	0.123	-		-		-		-		-	-	0.123	-
Developmental Test & Evaluation	WR	NSWC DAHLGREN : VA	0.000	-		-		0.303	Oct 2014	-		0.303	-	0.303	-
Subtotal			5.020	-		-		0.500		-		0.500	-	5.520	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy												Date: March 2014			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E						Project (Number/Name) 3179 / CVN-79 Total Ship Integration			

Management Services (\$ 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	Award Date	Cost To Complete	Total Cost	Target Value of Contract
Defense Acquisition Workforce	Various	Various : Misc	0.181	-		-		-		-		-		-	0.181	-
Subtotal			0.181	-		-		-		-		-		-	0.181	-

	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	132.321	9.844		11.927		15.441		-		15.441	-	-	-

Remarks

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

Date: March 2014

Appropriation/Budget Activity

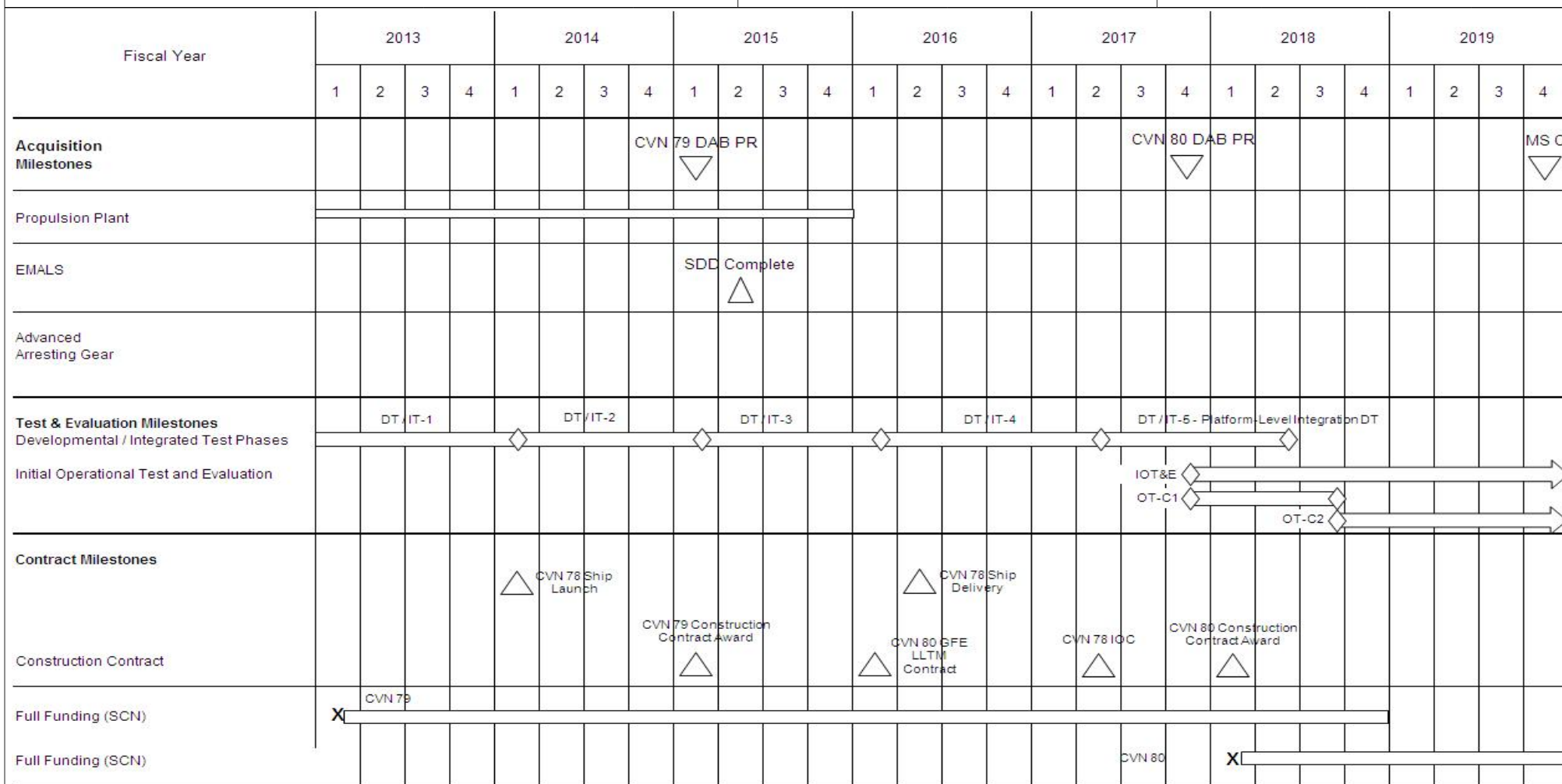
1319 / 5

R-1 Program Element (Number/Name)

PE 0604567N / Ship Contract Design/ Live Fire T&E

Project (Number/Name)

3179 / CVN-79 Total Ship Integration



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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>	Project (Number/Name) 3179 / <i>CVN-79 Total Ship Integration</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 3179				
CVN 79 DAB PR	1	2015	1	2015
CVN 80 DAB PR	4	2017	4	2017
Milestone C	4	2019	4	2019
Propulsion Plant	1	2013	4	2015
DT/IT -1 - Development Test / Integrated Test Phase 1	1	2013	1	2014
DT/IT -2	1	2014	1	2015
DT/IT -3	1	2015	1	2016
DT/IT -4	1	2016	2	2017
DT/IT -5 - Platform-Level Integration DT Period	2	2017	2	2018
IOT&E - Initial Operational Test & Evaluation	4	2017	4	2019
OT -C1 - Initial Operational Test & Evaluation - Phase C1	4	2017	3	2018
OT -C2	3	2018	4	2019
CVN 78 Ship Launch	1	2014	1	2014
CVN 78 Ship Delivery	2	2016	2	2016
CVN 78 Initial Operational Capability (IOC)	2	2017	2	2017
CVN 79 Construction Contract Award	1	2015	1	2015
CVN 80 GFE LLTM Contract Award	1	2016	1	2016
CVN 80 Construction Contract Award	1	2018	1	2018
CVN 79 SCN Full Funding	1	2013	4	2018
CVN 80 SCN Full Funding	1	2018	4	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3369 / Hybrid Electric Drive			
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
3369: Hybrid Electric Drive	-	-	-	7.949	-	7.949	7.304	7.416	7.577	7.624	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project includes the DON Energy Initiative related to the DDG 51 Hybrid Electric Drive to reduce DDG 51 Class ship energy consumption and increase mission effectiveness through longer time on station. This project supports propulsion at low ship speeds without the need for LM 2500 main engines. Fuel savings from the Hybrid Electric Drive system will be achieved by utilizing fewer gas turbines for propulsion and ship service power generation while also loading gas turbines generators at a more efficient operating load. Provides critical foundation for SECNAV and CNO objectives to achieve greater Navy-wide energy security.												
Note: FY 2013 funding for this effort is resourced under project 1803 in this program element.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2013	FY 2014	FY 2015
Title: DON Energy Initiative Articles: Description: This project is a DON Energy Initiative related to the DDG 51 Hybrid Electric Drive (HED) to reduce DDG 51 Class ship energy consumption and increase mission effectiveness through longer time on station. FY 2013 Accomplishments: N/A FY 2014 Plans: N/A FY 2015 Plans: Complete MCS integration development and environmental qualification testing. Continued training, integrated logistics support (ILS), and ship integration design development (efforts continued from those resourced under project 1803)										-	-	7.949
										-	-	-
Accomplishments/Planned Programs Subtotals										-	-	7.949
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	
• OPN 0140: Hybrid Electric Drive	-	-	22.704	-	22.704	41.562	42.430	43.302	44.260	Continuing	Continuing	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014	
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>				Project (Number/Name) 3369 / <i>Hybrid Electric Drive</i>			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2015</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Complete</u>	<u>Total Cost</u>
Remarks											
D. Acquisition Strategy											
A full and open competition with a Fixed Price Incentive Fee Contract awarded for the development, qualification, and delivery of the Engineering Development Models (EDM) Hybrid Electric Drive (HED) and the initial HED production shipsets for the DDG 51 Fleet Modernization Program.											
E. Performance Metrics											
Successful completion of Engineering Development Model (EDM) and complete fielding of First Article (FA) including contract award, design, manufacturing, and delivery. Successful completion of Factory Acceptance Test (FAT) and performance testing in Land Based Engineering Site (LBES). Commencement, completion, delivery and installation of Low Rate Initial Production (LRIP) units. Achieve fuel efficiency and increase on-station time.											

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E	Project (Number/Name) 3369 / Hybrid Electric Drive	

Fiscal Year	2013				2014				2015				2016				2017				2018				2019			
Acquisition Milestones - Project 3369	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Hybrid Electric Drive Contract Design & Production																												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 3374 / MPF(F)			
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
3374: MPF(F)	-	-	-	8.454	-	8.454	1.768	0.793	0.482	-	-	11.497
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note												
Before 2015, Project 3374 (MPF(F)) was funded in the NDSF Appropriation (BA 04 PE 0408042N, Project 3110 (Maritime Prepositioning Force (Future))). This project in FY 2015 and later is a continuation of efforts and is not a new start. NDSF BA 04 Project 3110 MPF(F) prior year amounts: FY 2013: \$3.952M; FY 2014: \$18.681M												
A. Mission Description and Budget Item Justification												
Project 3374 - Maritime Prepositioning Force (Future) - MPF(F) - Concept studies, preliminary, contract designs and technology development and testing leading to detail design, and construction award of ship systems for the initial operational capability milestone achievement that will provide a highly flexible, operational and logistics support capability to enable Expeditionary Maneuver Warfare concepts and to meet required operational capabilities with respect to Force Closure, Amphibious Task Force Integration, Sustainment and Reconstitution/Redeployment.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: Engineering and Acquisition Support Articles: FY 2013 Accomplishments: N/A FY 2014 Plans: N/A FY 2015 Plans: FY15 - Continue tracking execution of Test and Evaluation schedule to Test and Evaluation Master Plan (TEMP) - Continue Initial Operational Test and Evaluation (IOT&E)for MLP Core Capability Set (CCS) - Initiate IT&E Phase B2 for Afloat Forward Staging Base (AFSB) - Continue engineering research on feasibility of transferring Office of Naval Research Technologies to MLP - Continue development of AFSB Developmental Test Program - Continue development of AFSB Operational Test Program - Continue development of AFSB Live Fire Test Program									-	-	8.454	
									-	-	-	

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy								Date: March 2014			
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>				Project (Number/Name) 3374 / <i>MPF(F)</i>			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
- Perform MLP Follow-On Operational Test & Evaluation (FOT&E)for MLP Core Capability Set (CCS)								FY 2013	FY 2014	FY 2015	
Accomplishments/Planned Programs Subtotals								-	-	8.454	
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
• NDSF/0401: <i>MPF MLP Acquisition</i>	140.315	22.617	-	-	-	-	-	-	-	-	162.932
• SCN/3039: <i>AFSB</i>	-	579.300	-	-	-	-	613.000	-	-	-	1,192.300
• SCN/5110: <i>AFSB/MLP Outfitting/Post Delivery</i>	-	-	21.648	-	21.648	35.633	16.451	5.770	-	-	79.502
• NDSF/5000: <i>MLP Outfitting/Post Delivery</i>	32.048	33.282	-	-	-	-	-	-	-	-	65.330
Remarks											
D. Acquisition Strategy											
MPF(F) - The department deferred the MPF(F) outside the FYDP. However, in order to supplement the current maritime prepositioning force, and to provide in theater capability to support resupplying a Maritime Expeditionary Brigade, the Department is procuring 4 MLPs in the current FYDP; 2 MLPs in FY11, 1 MLP modified to an MLP AFSB variant configuration in FY12, and 1 AFSB Variant in FY14.											
E. Performance Metrics											
Annual Program Review											

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Appropriation/Budget Activity
1319 / 5

Project (Number/Name)
3374 / MPF(F)

R-1 Program Element (Number/Name)
PE 0604567N / Ship Contract Design/ Live
Fire T&E

[illegible]

2015OSD - 0604567N - 3374 NOTE: Prior to FY15 - Data in NDSF PE 0408042N Project 3110

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 4007 / CVN 21 LFT&E			
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
4007: CVN 21 LFT&E	52.327	2.354	3.645	3.426	-	3.426	4.735	3.974	4.036	4.125	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 223												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
This project encompasses Live Fire Test and Evaluation (LFT&E) efforts for the CVN 78 Class. Title 10, US Code, Section 2366, CVN 21 Operational Requirements Document (ORD) and the CVN 78 Class Test and Evaluation Master Plan (TEMP) 1610, prescribe requirements for LFT&E. The purpose of LFT&E is to evaluate covered systems in a realistic combat environment before proceeding beyond low-rate initial production. Since the application of the survivability testing required by 10 USC 2366 to a CVN 78 Class ship would be unreasonably expensive and impractical, the Secretary of Defense waived the live fire testing requirement in 2004 and submitted a certification of that determination to Congress. The CVN 78 Class LFT&E Management Plan details the testing, modeling and simulation, and engineering analyses that are being used to determine whether CVN 78 Class ships will be able to survive and carry out their missions against the threat weapons identified in the Surface Ship Capstone System Threat Assessment Report (CSTAR) that are likely to be encountered in combat. The results of these tests and analyses are documented in periodic Vulnerability Assessment Reports (VARs).												
The CVN 78 Class VAR 3 was completed in the summer of 2007 and the CVN 78 Class VAR 4 is scheduled to be completed in FY 15.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
Title: CVN 21 LFT&E									2.354	3.645	3.426	
									Articles: -	-	-	
FY 2013 Accomplishments:												
Complete adjudication of final comments and updates to the CVN 78 Class LFT&E Management Plan, Revision B and route for signature. Continued the Damage Scenario-Based Engineering Analyses (DSBEAs), the Ship Vulnerability Model (SVM) analyses and the analysis documentation for VAR 4. Work with Huntington Ingalls Industries, Newport News Shipbuilding (HII-NNS) to increase the fidelity of the CVN 78 full-ship structural Finite Element Model (FEM) in support of the Modeling and Simulation (M&S) Analytical Bridge studies of the scaled Underwater Explosive (UNDEX) test events.												
FY 2014 Plans:												
Complete the DSBEAs for VAR 4. These analyses assess the vulnerability of the detail design of the CVN 78 Class to selected LFT&E threat weapons as well as the capabilities of the ship design to facilitate the crew's ability to contain damage and restore mission capability after the weapon hits. Continue the SVM analyses, which includes determining the probabilities of ship and / or mission losses resulting from hits by each of the ORD or LFT&E threat weapons and conducting detailed analyses of each result												

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>				Project (Number/Name) 4007 / <i>CVN 21 LFT&E</i>				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) where there is a high probability of ship or mission loss to identify the equipment and / or systems that are the main contributors to the vulnerability. Begin documenting the DSBEA and SVM analyses and results in VAR 4. Complete the enhancements to the CVN 78 full-ship structural FEM, which includes adding structural details, refining the mesh size in the areas of interest and conducting quality assurance checks. FY 2015 Plans: Complete the SVM analyses and document the findings and results in the draft VAR 4. Distribute the draft VAR 4 for review, adjudicate comments, update and finalize, and route for signature. Using the enhanced CVN 78 full-ship structural FEM, commence the M&S Analytical Bridge studies of the CVN 78's response to UNDEX events. These studies will be used to establish a bridge from the results of the surrogate live-fire tests of scaled models of selected ship sections to the analytical results of the full-ship CVN 78 to similar UNDEX events. These studies will also be used for Verification and Validation of the M&S tools, leading to increased confidence in the M&S results. Begin planning for the CVN 78 Total Ship Survivability Trial (TSST), which will be a full-ship, full-crew validation of previous DSBEA assessments of the capabilities of the ship design to facilitate the crew's ability to contain the damage and restore mission capability after the weapon hits.										FY 2013	FY 2014	FY 2015
Accomplishments/Planned Programs Subtotals										2.354	3.645	3.426
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	
• RDTEN / 0603512N: <i>Project Units 2208, 4004</i>	87.573	74.638	-	-	-	-	-	-	-	-	1,709.785	
• RDTEN / 0603570N: <i>Propulsion Plant Development (PU 2692)</i>	58.193	57.499	60.459	-	60.459	-	-	-	-	-	1,526.813	
• SCN / 2001: <i>Carrier Replacement Program</i>	490.960	917.553	1,300.000	-	1,300.000	2,876.183	2,290.837	2,849.342	1,864.514	Continuing	Continuing	
• SCN / 5300: <i>Completion of Prior Year Shipbuilding Programs</i>	-	588.100	663.000	-	663.000	124.000	-	-	-	-	1,375.100	
• RDTEN / 0604112N: <i>Project Units 2208, 4004</i>	-	-	43.613	-	43.613	38.373	35.662	34.156	25.650	Continuing	Continuing	
• OMN / 1B2B: <i>CVN 78 Ford Class Training (12BJ0)</i>	-	-	4.907	-	4.907	12.872	2.396	-	-	-	20.175	
Remarks												

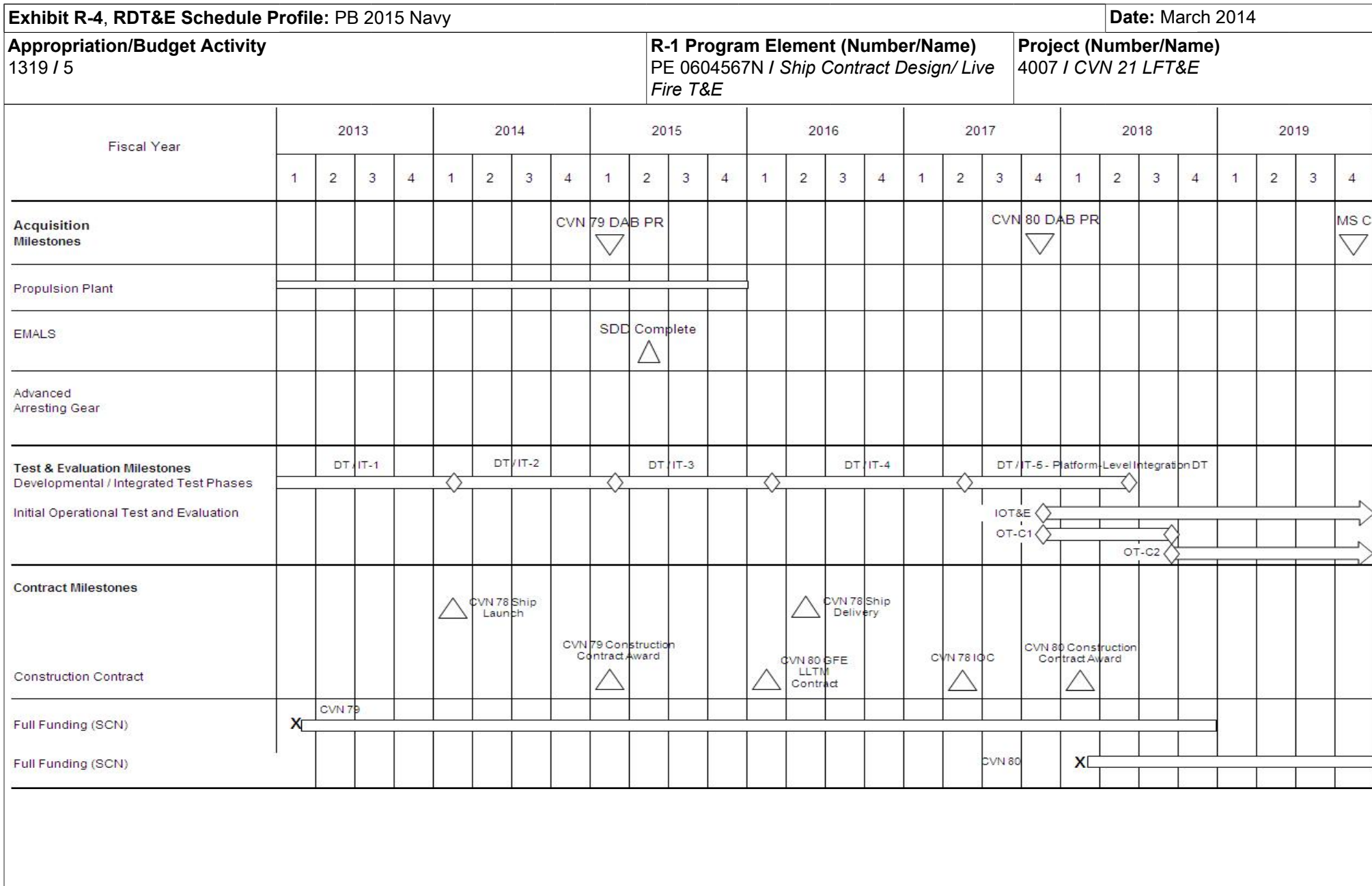
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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E	Project (Number/Name) 4007 / CVN 21 LFT&E
D. Acquisition Strategy The CVN 78 is the first ship of the CVN 78 Class of aircraft carriers designed to replace USS ENTERPRISE and the ships of the NIMITZ Class. The CVN 78 will feature a new nuclear propulsion and electrical generation/distribution system, new electromagnetic aircraft launching system (EMALS), advanced arresting gear (AAG) system, all electric auxiliaries, warfare system improvements, survivability enhancements, improved weapons handling, and improved aircraft servicing. These design features will result in lower manpower and total ownership costs as compared to the NIMITZ Class. Additionally, the following war fighting benefits will be realized: increased sortie generation rate, improved ship self-defense capability, increased launch and recovery capability/flexibility, increased operational availability, and increased flexibility to support future upgrades.		
E. Performance Metrics Complete: (1) the adjudication of final comments and updates to the CVN 78 Class LFT&E Management Plan, Revision B and route for signature; (2) the refinement of the CVN 78 structural FEM, in support of the Analytical Bridge analyses; and (3) the analyses and documentation for VAR 4 and route for signature.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy													Date: March 2014		
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 4007 / CVN 21 LFT&E					
Test and Evaluation (\$ 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
Live Fire Test & Evaluation	WR	NSWC Carderock : MD	43.713	1.415	Nov 2012	2.605	Nov 2013	2.466	Nov 2014	-		2.466	Continuing	Continuing	Continuing
Live Fire Test & Evaluation	C/CPAF	HII : VA	8.604	0.900	Dec 2012	0.994	Nov 2013	0.960	Nov 2014	-		0.960	Continuing	Continuing	Continuing
Live Fire Test & Evaluation	WR	NSWC Dahlgren : VA	0.000	0.039	Apr 2013	0.046	Dec 2013	-		-		-	-	0.085	-
Subtotal			52.317	2.354		3.645		3.426		-		3.426	-	-	-
Management Services (\$ 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
Defense Acquisition Workforce	TBD	Various : Various	0.010	-		-		-		-		-	-	0.010	-
Subtotal			0.010	-		-		-		-		-	-	0.010	-
			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			52.327	2.354		3.645		3.426		-		3.426	-	-	-
Remarks															

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604567N / <i>Ship Contract Design/ Live Fire T&E</i>	Project (Number/Name) 4007 / CVN 21 LFT&E	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 4007				
CVN 79 DAB PR	1	2015	1	2015
CVN 80 DAB PR	4	2017	4	2017
Milestone C	4	2019	4	2019
Propulsion Plant	1	2013	4	2015
DT/IT -1 Development Test / Integrated Test Phase 1	1	2013	1	2014
DT/IT -2	1	2014	1	2015
DT/IT -3	1	2015	1	2016
DT/IT -4	1	2016	2	2017
DT/IT -5 - Platform-Level Integration DT Period	2	2017	2	2018
IOT&E - Intial Operation Test & Evaluation	4	2017	4	2019
OT - C1 - Initial Operational Test & Evaluation - Phase C1	4	2017	3	2018
OT - C2 - Intial Operational Test & Evaluation - Phase C2	3	2018	4	2019
CVN 78 Ship Launch	1	2014	1	2014
CVN 78 Ship Delivery	2	2016	2	2016
CVN 78 Initial Operational Capability (IOC)	2	2017	2	2017
CVN 79 Construction Contract Award	1	2015	1	2015
CVN 80 GFE LLTM Contract	1	2016	1	2016
CVN 80 Construction Contract Award	1	2018	1	2018
CVN 79 SCN Full Funding	1	2013	4	2018
CVN 80 SCN Full Funding	1	2018	4	2019

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				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	-	-	50.000	-	-	-	-	-	-	-	-	50.000
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 333												
# The FY 2015 OCO Request will be submitted at a later date.												
A. Mission Description and Budget Item Justification												
The LHA(R) program recapitalizes the aging Amphibious Assault Ships (LHA & LHD). LHA(R) Flight 1, the second increment of the LHA(R) program, will: continue using the LHD-1/LHA-6 hull form; reincorporate a well deck; have a smaller island, as compared to LHD-1/LHA-6, to improve flight deck operations; maintain the Flight 0 aviation capability to the maximum extent possible - making only those trades necessary to accommodate a well deck. LHA(R) ships contribute to the Navy and integrated joint warfighting force by providing sustained military forward presence and crisis response capability far from the Continental United States with little or no reliance on host governments for basing and logistics. Independently, or as part of a larger force, the LHA(R) ship enables Sailors and Marines to operate for sustained periods while conducting amphibious and/or expeditionary operations to include: embarking, transporting, controlling, inserting, sustaining and extracting elements of a Marine Air-Ground Task Force and supporting forces.												
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2013	FY 2014			
Congressional Add: LHA(R) FLT Design and Total Ship Integration								-	50.000			
FY 2013 Accomplishments: N/A												
FY 2014 Plans: LHA 8 Conduct, with industry, specification reading sessions of proposed contract design												
LHA 8 Initiate expanded Early Industry Involvement to develop each competitors cost estimate												
LHA 8 Initiate systematic review to identify major cost drivers and cost reduction opportunities												
LHA 8 Initiate vendor studies and break out analysis to identify cost savings												
Base FY 2015 Plans:												
LHA 8 Conduct, with industry, specification reading sessions of final contract design												
LHA 8 Complete expanded Early Industry Involvement to develop each competitors cost basis												
LHA 8 Complete systematic review to identify major cost drivers and cost reduction opportunities												
LHA 8 Complete vendor studies and break out analysis to identify cost savings												
LHA 8 Issue Advance Procurement RFP												
LHA 8 Award Advance Procurement Contract												
Congressional Adds Subtotals								-	50.000			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014	
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0604567N / Ship Contract Design/ Live Fire T&E				Project (Number/Name) 9999 / Congressional Adds			
C. Other Program Funding Summary (\$ in Millions)											
			<u>FY 2015</u>	<u>FY 2015</u>	<u>FY 2015</u>					<u>Cost To</u>	
<u>Line Item</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>Complete</u>	<u>Total Cost</u>
• SCN/3041: LHA (R) Ships	156.478	37.700	29.093	-	29.093	280.236	1,569.309	2,348.811	-	-	10,645.468
• RDT&E/2465: LHA (R) FLT	25.114	30.813	10.561	-	10.561	8.785	2.493	4.376	4.532	Continuing	Continuing
<i>Design and Total Ship Integration</i>											
Remarks											
D. Acquisition Strategy											
Acquisition Strategy document currently in development.											
E. Performance Metrics											
Identify LHA 8 major cost drivers and cost savings initiatives.											