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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy	Date: February 2018
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Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605220N I (U) <i>Ship to Shore Connector (SSC)</i>
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COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	353.530	12.588	22.410	1.444	-	1.444	2.089	0.000	0.000	0.000	0.000	392.061
3133: <i>Ship to Shore Connectors Contract Design</i>	4.144	4.065	9.003	1.106	-	1.106	2.089	0.000	0.000	0.000	0.000	20.407
3137: <i>SSC Construction</i>	349.386	8.523	13.407	0.338	-	0.338	0.000	0.000	0.000	0.000	0.000	371.654

Program MDAP/MAIS Code:
Project MDAP/MAIS Code(s): 303

A. Mission Description and Budget Item Justification

Note: This effort was previously funded under PE 0604567N under projects 3133 and 3137 (FY 2014 and prior).

This PE directly funds and supports the detail design, development, construction, issue resolution, certification, integration and testing of the Ship to Shore Connector (SSC). The lead craft (Craft 100) will be maintained as a test and training platform throughout its life cycle.

SSC is an air-cushioned landing craft intended to transport personnel, weapon systems, equipment, and cargo from amphibious vessels to shore in assault and non-assault operations. 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 craft, including Service Life Extension Program(SLEP) which began to degrade below the Required Operational Capability/Projected Operational Environment (ROC/POE) requirement beginning in 2015. SSC addresses this capability gap.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019 Base</u>	<u>FY 2019 OCO</u>	<u>FY 2019 Total</u>
Previous President's Budget	11.088	22.410	1.494	-	1.494
Current President's Budget	12.588	22.410	1.444	-	1.444
Total Adjustments	1.500	0.000	-0.050	-	-0.050
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.500	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Rate/Misc Adjustments	0.000	0.000	-0.050	-	-0.050

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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605220N I (U) <i>Ship to Shore Connector (SSC)</i>	
<u>Change Summary Explanation</u> Added additional FY 17 funds for critical engineering change proposal associated with the command, control, communications, computers and navigation (C4N) system.		

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)				Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3133: Ship to Shore Connectors Contract Design	4.144	4.065	9.003	1.106	-	1.106	2.089	0.000	0.000	0.000	0.000	20.407
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 303												
A. Mission Description and Budget Item Justification 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 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. SSC provides the functional replacement for the LCAC craft, which begin reaching end of extended service life in 2015. For FY15 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.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Title: Ship to Shore Connectors Contract Design							4.065	9.003	1.106	0.000	1.106	
Articles:							-	-	-	-	-	
FY 2018 Plans: Continue Class T&E Program and commence execution of Post Delivery Test & Trials (PDT&T) on CRAFT 100, including Integrated Developmental Test/Operational Test and LFT&E to support VAR II. Post Delivery Test & Trials (PDT&T) will consist of planning and execution of 27 test events to validate first of class certification and performance requirements, characterize the craft operational envelope, provide confidence to certify the craft readiness for IOT&E, and to verify SSC production and performance to support an Full Rate Production Decision (FRPD). PDT&T tests will support the reliability growth program by conducting 240 hours of on-cushion operations and providing craft level failure data for use with the reliability growth model. The initiation of integrated Developmental and Operational Test and the continuation of LFT&E Events will support DOT&E's recommendation for Full Rate Production.												
FY 2019 Base Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018	
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)				Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Continue Class T&E Program and conclude execution of PDT&T, integrated Developmental and Operational Test and LFT&E Events . Finalize preparation for Initial Operational Test & Evaluation to support DOT&E's recommendation for Full Rate Production.											
FY 2019 OCO Plans: N/A											
FY 2018 to FY 2019 Increase/Decrease Statement: Decrease due to planned phasing of testing events.											
Accomplishments/Planned Programs Subtotals							4.065	9.003	1.106	0.000	1.106
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• RD TEN 3137: SSC Construction	8.523	13.407	0.338	-	0.338	0.000	0.000	0.000	0.000	0.000	371.125
• SCN 5112: Ship to Shore Connector	128.067	217.654	334.775	-	334.775	507.903	504.691	523.312	472.608	1,633.776	4,716.716
Remarks											
D. Acquisition Strategy											
The Test and Training craft (Craft 100) and Craft 101 have been executed on contract. Craft 100 will be procured and constructed with RD TEN. LCAC 101 was awarded with RD TEN and transferred to SCN for completion. The Detail Design and Construction contract includes options for construction of an additional seven SCN craft, all of which have been awarded (LCAC 102-108). Detail Design and Construction contract for LCAC 102-108 ends in FY16. Crafts authorized for FY17-19 will be awarded on a new contract.											
E. Performance Metrics											
Continue Operation Testing (Phases C and D)											
Continue Follow on SCN Craft Production Testing											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy													Date: February 2018		
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)				Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design					
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Post Delivery Test & Trials	Various	NSWC PCD : Various	0.000	1.000	Sep 2017	5.300	Apr 2018	0.823	Oct 2018	-		0.823	0.000	7.123	-
Developmental Test & Evaluation	Various	SUPSHIP/ TEXTRON : Various	0.624	0.000		0.600	Apr 2018	0.000		-		0.000	0.000	1.224	Continuing
Operational Test & Evaluation	Various	Various : Various	1.767	1.531	Sep 2017	1.544	May 2018	0.283	Jul 2019	-		0.283	0.000	5.125	Continuing
Live Fire Test & Evaluation	Various	Various : Various	1.753	1.534	Sep 2017	1.559	May 2018	0.000		-		0.000	0.000	4.846	Continuing
Subtotal			4.144	4.065		9.003		1.106		-		1.106	0.000	18.318	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			4.144	4.065		9.003		1.106		-		1.106	0.000	18.318	N/A
Remarks															

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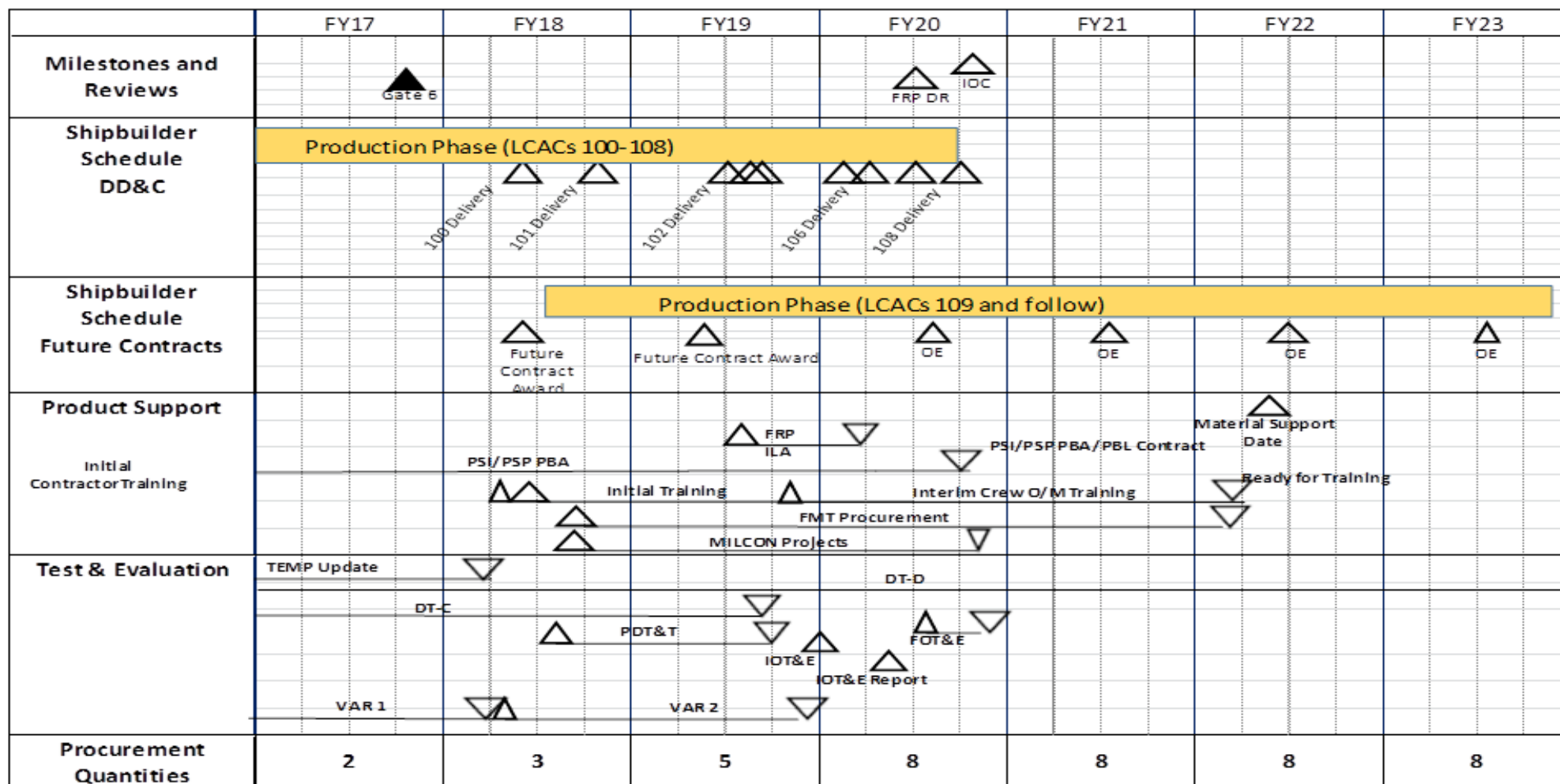
Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy

Date: February 2018

Appropriation/Budget Activity
1319 / 5

R-1 Program Element (Number/Name)
PE 0605220N / (U)Ship to Shore Connector
(SSC)

Project (Number/Name)
3133 / Ship to Shore Connectors Contract
Design



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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)	Project (Number/Name) 3133 / Ship to Shore Connectors Contract Design

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 3133				
Post Delivery Test & Trials (PDT&T)	3	2018	4	2019
Initial Operational Test and Evaluation (IOT&E)	4	2019	1	2020
Full Rate Production (FRP) Program Review (PR)	3	2020	3	2020

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018		
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)				Project (Number/Name) 3137 / SSC Construction			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
3137: SSC Construction	349.386	8.523	13.407	0.338	-	0.338	0.000	0.000	0.000	0.000	0.000	371.654
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: 303												
A. Mission Description and Budget Item Justification												
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. The lead craft will be maintained as a test and training platform throughout its life cycle. 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 craft, which began reaching end of extended service life in 2015. Funding for this effort was previously executed under PE 0604567N.												
TEST AND TRAINING CRAFT 100 (in \$ million):												
Plans/Basic Construction:.....255.476 - (FY19 0.000)												
Change Orders:.....13.618 - (FY19 0.000)												
Electronic:.....8.407 - (FY19 0.000)												
HM&E:.....29.823 - (FY19 0.000)												
Other Support:.....36.623 - (FY19 0.338)												
Ordnance:.....0.008 - (FY19 0.000)												
Post Delivery/Outfitting:.....4.000 - (FY19 0.000)												
Total:.....347.955 - (FY19 0.338)												
NOTE - The SSC Construction project unit prior year column (FY11-15) total funding is \$343.278 million for the SSC program. In the prior years FY11-14, the program was funded in PE 0604567N Ship Contract Design/Live Fire T&E. Funds breakout is as follows:												
LCAC 100												
PE 0604567N 279.863 million FY11-14												
PE 0605220N 39.715 million FY15												
LCAC 101												
PE 0604567N 23.700 million FY13-14												

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy										Date: February 2018	
Appropriation/Budget Activity 1319 / 5				R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)				Project (Number/Name) 3137 / SSC Construction			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)											
				FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total			
Title: SSC Construction				8.523	13.407	0.338	0.000	0.338			
Articles:				-	-	-	-	-			
FY 2018 Plans: Deliver craft 100. Continue Production Support and Test & Evaluation efforts. Begin Post Delivery Test and Trials (PDT&T) for craft 100.											
FY 2019 Base Plans: Complete Post Delivery Test and Trials (PDT&T)and associated tasking for CRAFT 100.											
FY 2019 OCO Plans: N/A											
FY 2018 to FY 2019 Increase/Decrease Statement: Decrease reflects construction phasing of Craft 100.											
Accomplishments/Planned Programs Subtotals				8.523	13.407	0.338	0.000	0.338			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• RD TEN 3133: Ship to Shore Connectors Contract Design	4.065	9.003	1.106	-	1.106	2.089	0.000	0.000	0.000	0.000	20.407
• SCN 5112: Ship to Shore Connector	128.067	217.654	334.775	-	334.775	507.903	504.691	523.312	472.608	1,633.776	4,716.716
Remarks											
D. Acquisition Strategy											
The Test and Training craft (Craft 100) and Craft 101 have been executed on contract. Craft 100 will be procured and constructed with RD TEN. LCAC 101 was awarded with RD TEN and transferred to SCN for completion. The Detail Design and Construction contract includes options for construction of an additional seven SCN craft, all of which have been awarded (LCAC 102-108). Detailed Design and Construction contract for LCAC 102-108 ends in FY16. Crafts authorized for FY17-19 will be awarded on a new contract.											
E. Performance Metrics											
Deliver Test and Training Craft 100.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy **Date:** February 2018

Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)	Project (Number/Name) 3137 / SSC Construction
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Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	3.070	0.734	Jul 2017	0.000		0.000		-		0.000	0.000	3.804	-
Test & Trng Craft Detail Design/Construction	C/FPIF	Textron : New Orleans, LA	28.305	2.407	Jul 2017	5.493	Apr 2018	0.000		-		0.000	0.000	36.205	-
Test & Trng Craft Government Furnished Equipment (GFE)	Various	Various : Various	0.210	0.050	Oct 2016	0.000		0.000		-		0.000	0.000	0.260	-
Test & Trng Craft Change Orders	C/FPIF	Textron : New Orleans, LA	7.822	0.000		0.000		0.000		-		0.000	0.000	7.822	-
Prior Year - PE 0604567N	Various	Not Specified : Not Specified	272.356	0.000		0.000		0.000		-		0.000	0.000	272.356	-
Subtotal			311.763	3.191		5.493		0.000		-		0.000	0.000	320.447	N/A

Remarks

Change Order total is \$13.069. \$5.776 is prior to FY15 and is included in Prior Year PE 0604567N total of \$272.356. Funding prior to FY15 for GFE, BASIC, and Other are also included in Prior Year PE 0604567N total of \$272.356

Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	0.322	Oct 2016	0.835	Apr 2018	0.338	Oct 2018	-		0.338	0.000	1.495	-
Test & Trng Craft Integrated Logistics Support	WR	NSWC : Various	1.516	2.392	Oct 2016	0.000		0.000		-		0.000	0.000	3.908	-
T&T Post Delivery/ Outfitting	Various	SupShip Gulf Coast/ Textron : Various	0.000	0.375	Mar 2017	3.625	Apr 2018	0.000		-		0.000	0.000	4.000	-
Prior Year - PE 0604567N	Various	Not Specified : Not Specified	6.149	0.000		0.000		0.000		-		0.000	0.000	6.149	-
Subtotal			7.665	3.089		4.460		0.338		-		0.338	0.000	15.552	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy												Date: February 2018			
Appropriation/Budget Activity 1319 / 5						R-1 Program Element (Number/Name) PE 0605220N / (U)Ship to Shore Connector (SSC)				Project (Number/Name) 3137 / SSC Construction					
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	1.578	0.000		3.154	Apr 2018	0.000		-		0.000	0.000	4.732	-
Prior Year - PE 0604567N	Various	Not Specified : Not Specified	2.268	0.000		0.000		0.000		-		0.000	0.000	2.268	-
Subtotal			3.846	0.000		3.154		0.000		-		0.000	0.000	7.000	N/A
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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	2.891	0.000		0.000		0.000		-		0.000	0.000	2.891	-
Travel	Various	Various : Various	0.220	0.049	Oct 2016	0.045	Apr 2018	0.000		-		0.000	0.000	0.314	-
Test & Trng Craft Government Engineering Support	WR	Various : Various	0.213	2.194	Oct 2016	0.255	Apr 2018	0.000		-		0.000	0.000	2.662	-
Prior Year - PE 0604567N	Various	Not Specified : Not Specified	22.788	0.000		0.000		0.000		-		0.000	0.000	22.788	-
Subtotal			26.112	2.243		0.300		0.000		-		0.000	0.000	28.655	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			349.386	8.523		13.407		0.338		-		0.338	0.000	371.654	N/A
Remarks															

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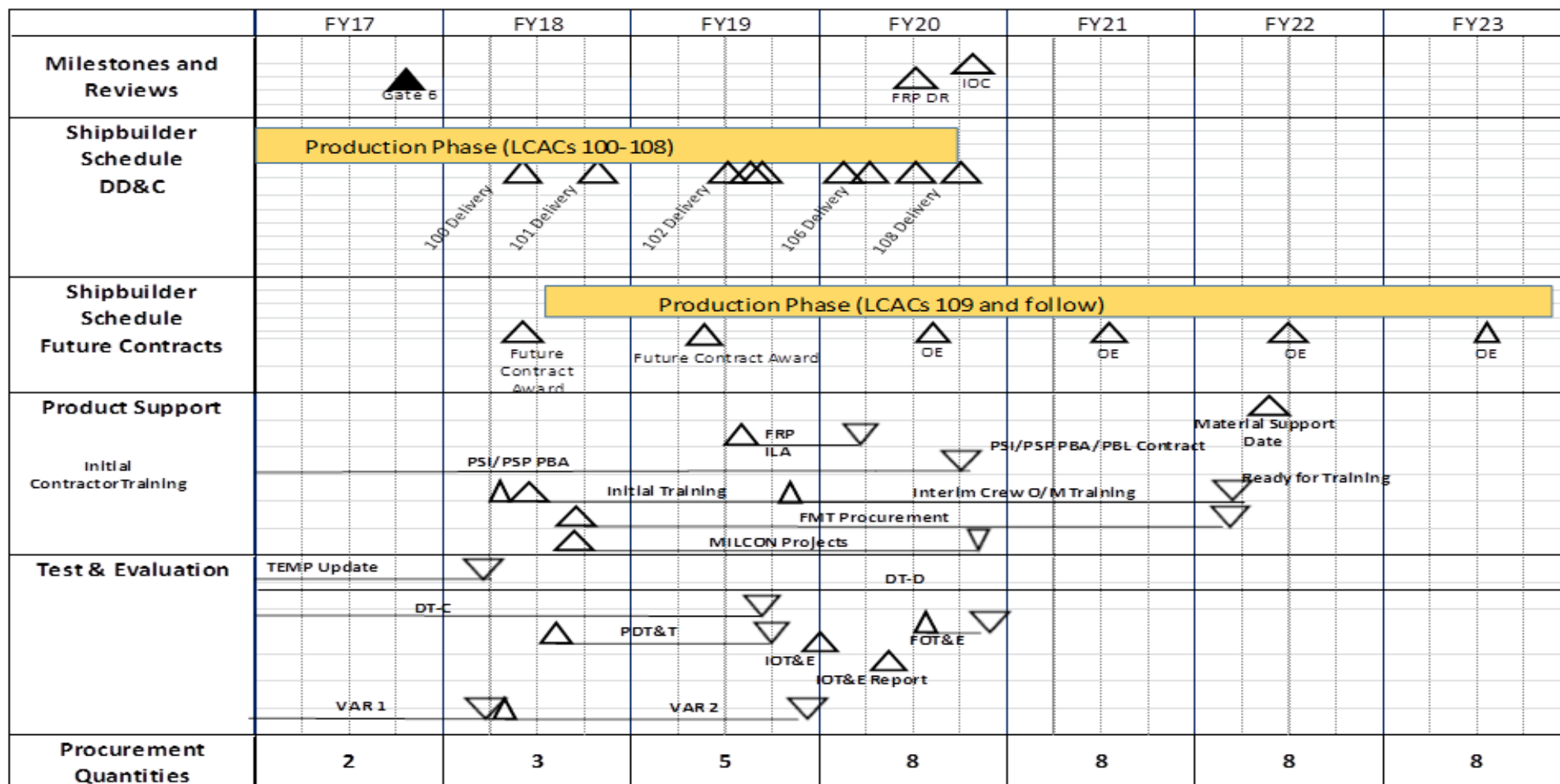
Exhibit R-4, RDT&E Schedule Profile: PB 2019 Navy

Date: February 2018

Appropriation/Budget Activity
1319 / 5

R-1 Program Element (Number/Name)
PE 0605220N / (U)Ship to Shore Connector
(SSC)

Project (Number/Name)
3137 / SSC Construction



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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0605220N / (U) <i>Ship to Shore Connector</i> (SSC)	Project (Number/Name) 3137 / SSC Construction	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 3137</i>				
LCAC 100 - Test and Training Craft Delivery	2	2018	3	2018
Post Delivery Test and Trials (PDT&T)	3	2018	4	2019