

# UNCLASSIFIED

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2020 Navy **Date:** March 2019

<b>Appropriation/Budget Activity</b> 1319: Research, Development, Test & Evaluation, Navy / BA 4: Advanced Component Development & Prototypes (ACD&P)					<b>R-1 Program Element (Number/Name)</b> PE 0604454N / (U)LX(R)							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	84.268	9.431	5.549	12.500	-	12.500	12.289	3.027	3.096	3.161	Continuing	Continuing
2474: LPD Flight II Design & Total Integration	84.268	9.431	5.549	12.500	-	12.500	12.289	3.027	3.096	3.161	Continuing	Continuing

## **A. Mission Description and Budget Item Justification**

The FY 2018 Defense Appropriations Act authorized the procurement of LPD 30. Per signed Acquisition Decision Memorandum, LPD 17 Flight II will meet the Capabilities Development Document for LX(R) and shall subsume all previous LX(R) efforts. LPD 30 will be the first ship of LPD 17 Flight II.

LPD 17 Flight II is expected to functionally replace LSD-41 Class ships and LSD-49 Class ships for embark, transport, control, insert, sustainment, and extract of Marine Air-Ground Task Force elements and supporting forces by helicopters, landing craft, and amphibious vehicles. Efforts are required to continue pursuing affordability initiatives. Efforts also include Gate and Milestone (MS) reviews/documentation, Capability Development Document (CDD), Indicative/Preliminary/Contract Design (ID/PD/CD), accelerated detail design of LPD 30 and development of logistics and Test & Evaluation documentation. In addition, this program element includes the Live Fire Test & Evaluation (LFT&E) and Operational Evaluation (OPEVAL) tests required for the lead ship. Program is on track to support FY 2027 retirement of LSDs.

FY 2012-FY 2014 LX(R) efforts previously budgeted in PE 0603564N.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
Previous President's Budget	9.578	5.549	12.694	-	12.694
Current President's Budget	9.431	5.549	12.500	-	12.500
Total Adjustments	-0.147	0.000	-0.194	-	-0.194
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.147	0.000			
• Program Adjustments	0.000	0.000	-0.145	-	-0.145
• Rate/Misc Adjustments	0.000	0.000	-0.049	-	-0.049

## **Change Summary Explanation**

The FY 2018 Defense Appropriations Act contained language authorizing the procurement of LPD 30. This has accelerated the production of the first LPD 17 Class Flight II (formerly LXR) ship from FY 2020 to FY 2018.

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy										Date: March 2019		
Appropriation/Budget Activity 1319 / 4					R-1 Program Element (Number/Name) PE 0604454N / (U)LX(R)				Project (Number/Name) 2474 / LPD Flight II Design & Total Integration			
COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
2474: LPD Flight II Design & Total Integration	84.268	9.431	5.549	12.500	-	12.500	12.289	3.027	3.096	3.161	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

2474 - LPD 17 Flight II is expected to functionally replace LSD-41 Class ships and LSD-49 Class ships for embark, transport, control, insert, sustainment, and extract of Marine Air-Ground Task Force elements and supporting forces by helicopters, landing craft, and amphibious vehicles. Efforts are required to continue pursuing affordability initiatives. Efforts also include Gate and Milestone (MS) reviews/documentation, Capability Development Document (CDD), Indicative/Preliminary/Contract Design (ID/PD/CD), accelerated detail design of LPD 30 and development of logistics and Test & Evaluation documentation. In addition, this program element includes the Live Fire Test & Evaluation (LFT&E) and Operational Evaluation (OPEVAL) tests required for the lead ship. Program is on track to support FY 2027 retirement of LSDs.

FY 2012-FY 2014 LX(R) efforts previously budgeted in PE 0603564N.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
<b>Title:</b> LX(R) DESIGN/TOTAL SHIP INTEGRATION	9.431	5.549	12.500	0.000	12.500
<b>Articles:</b>	-	-	-	-	-
<b>FY 2019 Plans:</b> Conduct a peer review and a program review decision meeting with the Milestone Decision Authority in support of lead ship Detailed Design and Construction (DD&C) contract award. Continue affordability initiatives and development of Cost Reduction Initiatives (CRIs) for follow on ships. Continue to attend and contribute to T&E Working-level Integrated Product Team (WIPT) meetings with stakeholders. Continue to work with Naval Warfare Centers on Integrated Topside Integration activities to mitigate Electromagnetic Environmental Effects (E3) risks and Enterprise Air Search Radar (EASR) integration analysis.					
<b>FY 2020 Base Plans:</b> Begin Live Fire Test & Evaluation Efforts and update TEMP. Continue affordability initiatives and development of Cost Reduction Initiatives (CRIs) for follow on ships. Procure High Temperature Superconducting (HTS) degaussing cable to support prototyping development for installation on LPD 28 for a full ship demonstration to					

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2020 Navy				<b>Date:</b> March 2019	
<b>Appropriation/Budget Activity</b> 1319 / 4		<b>R-1 Program Element (Number/Name)</b> PE 0604454N / (U)LX(R)		<b>Project (Number/Name)</b> 2474 / LPD Flight II Design & Total Integration	

  

<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>  support LPD 17 Flight II design changes. Continue to work with Naval Warfare Centers on Integrated Topside Integration activities to mitigate (E3) risks and EASR integration analysis.  <b>FY 2020 OCO Plans:</b> N/A  <b>FY 2019 to FY 2020 Increase/Decrease Statement:</b> \$6.951 million increase due to additional test and systems integration efforts to include EASR.	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020 Base</b>	<b>FY 2020 OCO</b>	<b>FY 2020 Total</b>
<b>Accomplishments/Planned Programs Subtotals</b>	9.431	5.549	12.500	0.000	12.500

  

<b>C. Other Program Funding Summary (\$ in Millions)</b>												
	<u><b>Line Item</b></u>	<u><b>FY 2018</b></u>	<u><b>FY 2019</b></u>	<u><b>FY 2020 Base</b></u>	<u><b>FY 2020 OCO</b></u>	<u><b>FY 2020 Total</b></u>	<u><b>FY 2021</b></u>	<u><b>FY 2022</b></u>	<u><b>FY 2023</b></u>	<u><b>FY 2024</b></u>	<u><b>Cost To Complete</b></u>	<u><b>Total Cost</b></u>
	• SCN/3010: LPD Flight II	1,800.000	350.000	247.100	-	247.100	1,590.900	0.000	1,738.892	0.000	0.000	5,740.892
<b>Remarks</b>												
<b>D. Acquisition Strategy</b> Sole Source to Huntington Ingalls Industries.												
<b>E. Performance Metrics</b> Performance metrics are included in the CDD.												

**UNCLASSIFIED**

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy												Date: March 2019			
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604454N / (U)LX(R)				Project (Number/Name) 2474 / LPD Flight II Design & Total Integration					
Product Development (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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
Design/Systems Integration	C/CPIF	CSC, Alion, ICI : Washington, DC	25.923	1.644	Jun 2018	1.847	Nov 2018	3.800	Oct 2019	-		3.800	Continuing	Continuing	Continuing
Design/Systems Integration	WR	NSWC Carderock/ SSES Philadelphia : NSWC Beth, MD/ SSES Philadelphia, PA	18.522	2.078	Jan 2018	1.809	Oct 2018	6.560	Oct 2019	-		6.560	Continuing	Continuing	Continuing
Design/Systems Integration	WR	NSWC Dahlgren : Dahlgren, VA	1.877	0.560	Jun 2018	0.415	Oct 2018	0.985	Oct 2019	-		0.985	Continuing	Continuing	Continuing
Design/Systems Integration	WR	PEO C4I, PEO IWS : Washington, DC	4.694	1.170	Jan 2018	0.982	Oct 2018	0.555	Oct 2019	-		0.555	Continuing	Continuing	Continuing
Design/Systems Integration	WR	NAWC Lakehurst : Lakehurst, NJ	1.197	0.404	Apr 2018	0.193	Oct 2018	0.350	Oct 2019	-		0.350	Continuing	Continuing	Continuing
Design/Systems Integration	C/BA	NSWC, Panama City : Panama City, FL	0.850	0.275	Jan 2018	0.000		0.000		-		0.000	0.000	1.125	-
Design/Systems Integration	WR	NSWC, Port Hueneme : Port Hueneme, CA	0.848	0.300	Jun 2018	0.122	Oct 2018	0.000		-		0.000	Continuing	Continuing	Continuing
Design/Systems Integration	C/CPFF	HII, General Dynamics : Various	29.891	3.000	Aug 2018	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Design/Systems Integration	WR	NAVSEALOGCEN : Mechanicsburg, PA	0.466	0.000		0.181	Oct 2018	0.000		-		0.000	0.000	0.647	-
Subtotal			84.268	9.431		5.549		12.250		-		12.250	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 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 and Evaluation	C/BA	COTF : Norfolk, VA	0.000	0.000		0.000		0.250	Oct 2019	-		0.250	0.000	0.250	-
Subtotal			0.000	0.000		0.000		0.250		-		0.250	0.000	0.250	N/A

**UNCLASSIFIED**

<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2020 Navy</b>										<b>Date:</b> March 2019			
<b>Appropriation/Budget Activity</b> 1319 / 4					<b>R-1 Program Element (Number/Name)</b> PE 0604454N / (U)LX(R)					<b>Project (Number/Name)</b> 2474 / LPD Flight II Design & Total Integration			
	<b>Prior Years</b>	<b>FY 2018</b>		<b>FY 2019</b>		<b>FY 2020 Base</b>		<b>FY 2020 OCO</b>		<b>FY 2020 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	84.268	9.431		5.549		12.500		-		12.500	Continuing	Continuing	N/A
<b>Remarks</b>													

**UNCLASSIFIED**

<b>Exhibit R-4, RDT&amp;E Schedule Profile: PB 2020 Navy</b>			<b>Date:</b> March 2019		
<b>Appropriation/Budget Activity</b> 1319 / 4		<b>R-1 Program Element (Number/Name)</b> PE 0604454N / (U)LX(R)		<b>Project (Number/Name)</b> 2474 / LPD Flight II Design & Total Integration	

Fiscal Year	2018				2019				2020				2021				2022				2023				2024			
Quarter	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
<b>Acquisition Milestones</b>		RFP Issue ▲			Lead Ship Detail Design & Const. Award ▲				Lead Ship Start of Const. ▲				1 <sup>st</sup> Follow Ship Start of Const. ▲								2 <sup>nd</sup> Follow Ship Award ▲							
<b>T&amp;E Milestones*</b>		DT&E Begins ▲							LFT&E Begins ▲								OT&E Begins ▲											
<b>Technical Reviews</b>		SETR PDR ▲				PRR ▲																						

\*Note: LPD 28 and LPD 29 will be used to conduct test events as they incorporate some LPD Flight II changes prior to the lead Flight II Ship. LPD 28, LPD 29 and LPD 30 each incorporate LX(R) changes across three ships.

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2020 Navy			<b>Date:</b> March 2019
<b>Appropriation/Budget Activity</b> 1319 / 4	<b>R-1 Program Element (Number/Name)</b> PE 0604454N / (U)LX(R)	<b>Project (Number/Name)</b> 2474 / LPD Flight II Design & Total Integration	

**Schedule Details**

<b>Events by Sub Project</b>	<b>Start</b>		<b>End</b>	
	<b>Quarter</b>	<b>Year</b>	<b>Quarter</b>	<b>Year</b>
<b><i>Proj 2474</i></b>				
Begin Developmental Test and Evaluation Phase	2	2018	2	2018
System Engineering Technical Review/Preliminary Design Review	3	2018	3	2018
RFP Release	4	2018	4	2018
Lead Ship Detail Design & Construction Award	2	2019	2	2019
Production Readiness Review	4	2019	4	2019
Lead Ship Start of Construction	2	2020	2	2020
Begin Live Fire Test and Evaluation Phase	2	2020	2	2020
First Follow Ship Contract Award	1	2021	1	2021
First Follow Ship Start of Construction	4	2021	4	2021
Operational Test & Evaluation Begins	1	2022	1	2022
Second Follow Ship Contract Award	1	2023	1	2023