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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204413N: <i>Amphibious Tactical Supt Units</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	4.315	5.214	8.435	-	8.435	4.621	4.344	3.179	3.258	Continuing	Continuing
2231: <i>LCU Replacement</i>	4.315	5.214	8.435	-	8.435	4.621	4.344	3.179	3.258	Continuing	Continuing

A. Mission Description and Budget Item Justification

TECHNOLOGY TRANSITION: Provides for research efforts on Landing Craft Air Cushioned (LCAC) Future Naval Capabilities to transfer technologies to functional uses on current LCACs. Current technology initiatives include the following: sustainability/readiness/performance analysis; LCAC communications improvements; development and qualification of Full Authority Digital Engine Controller (FADEC) for LCAC engines; new torque meter design for ETF40B engines and fuel efficiency trials; active shaft balancing system; fuel efficiency initiatives.

Landing Craft, Utility Replacement (LCU(R)) Capabilities Based Assessment (CBA) will define mission, identify and evaluate capabilities, identify and assess potential solutions, and evaluate operational risk in order to provide recommendations for validation authority for high speed, high capacity assault craft replacement.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	4.357	5.214	5.571	-	5.571
Current President's Budget	4.315	5.214	8.435	-	8.435
Total Adjustments	-0.042	-	2.864	-	2.864
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.020	-			
• Program Adjustments	-	-	2.953	-	2.953
• Rate/Misc Adjustments	-	-	-0.089	-	-0.089
• Congressional General Reductions Adjustments	-0.022	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Added funds to complete LCU(R) CBA.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0204413N: Amphibious Tactical Supt Units				PROJECT 2231: LCU Replacement			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2231: LCU Replacement	4.315	5.214	8.435	-	8.435	4.621	4.344	3.179	3.258	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Current technology initiatives include the following: sustainability/readiness/performance analysis; LCAC communications improvements; development and qualification of FADEC for LCAC engines; new torque meter design for ETF40B engines and fuel efficiency trials; active shaft balancing system; fuel efficiency initiatives.											
LCU (R): CBA for replacement program; LCU biofuels testing.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: LCU Replacement								4.315	5.214	8.435	
Articles:								0	0	0	
FY 2011 Accomplishments: Began redevelopment of FADEC for LCAC engines; delivered approved plan for redesign of ETF40B engine torque meters; began redesign of torque meters; conducted LCU biofuels test.											
FY 2012 Plans: Complete development and achieve qualification of FADEC; initiate LCU(R) CBA process; conduct sea trials for LCAC fuel efficiency, active shaft balancing system and FADEC; redesign of tester for Digital Electronic Sequencing Unit (DESU);											
FY 2013 Plans: Conduct analysis and testing of new commercial non-skid products; research commercial products for low cost skirt fasteners; research commercial wireless radios and corrosion improvements for Halon bottles; complete LCU(R)CBA											
Accomplishments/Planned Programs Subtotals								4.315	5.214	8.435	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• OPN 0970: Amphibious Tactical Support Units	2.628	0.000	16.645	0.000	16.645	14.431	8.273	6.692	6.806	5.400	60.875
• OPN 0981/1: Items < \$5M	17.105	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.105
• SCN 5139: LCAC SLEP	82.576	84.076	47.930	0.000	47.930	82.282	83.990	85.498	87.687	64.239	618.278

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D. Acquisition Strategy TECHNOLOGY TRANSFER - RDT&E efforts commenced in FY06. Multiple contracts and Field Activities are involved through FY17 to complete the various projects.		
E. Performance Metrics FY11 - Began development of FADEC. Delivered approved plan for redesign of ETF40B engine torque meters; began redesign of ETF40B engine torque meters; testing of torque meters. Began redevelopment of full authority digital engine controller. Conducted LCU biofuels testing. FY12 - Complete development and achieve qualification of FADEC; complete LCAC fuel efficiency sea trials; conduct active shaft balancing system sea trial; begin redesign of tester for Digital Electronic Sequencing Unit (DESU); research commercial products available for solar powered battery chargers and wireless radios for use on LCACs FY12 - Begin LCU(R) CBA process; FY13 -conduct analysis of new commercial non-skid products for LCAC use and conduct at sea testing of new non-skid product on LCAC 91; research commercial products available for low cost skirt fasteners for use on LCACs FY13 - Complete LCU(R) CBA process		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy											DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0204413N: Amphibious Tactical Supt Units				PROJECT 2231: LCU Replacement					
Product Development (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Component Development	WR	NSWC CD:Philadelphia, PA	4.570	1.702	Mar 2012	1.253	Mar 2013	-		1.253	4.027	11.552		
Systems Engineering	WR	NSWC CD:Philadelphia, PA	1.908	1.000	Mar 2012	4.394	Mar 2013	-		4.394	3.800	11.102		
Subtotal			6.478	2.702		5.647		-		5.647	7.827	22.654		
Remarks FY12 - Systems Engineering contains \$700K for LCU Replacement efforts FY13 - Systems Engineering contains \$3,373K for LCU Replacement efforts														
Support (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Development Support	WR	NSWC PCD:Panama City, FL	2.451	1.645	May 2012	2.321	Apr 2013	-		2.321	6.080	12.497		
Subtotal			2.451	1.645		2.321		-		2.321	6.080	12.497		
Remarks FY12 - Development Support contains \$300K for LCU Replacement efforts FY13 - Development Support contains \$627K for LCU Replacement efforts														
Test and Evaluation (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Developmental T & E	WR	Various:Various	0.287	-		-		-		-	0.000	0.287		
Operational T & E	WR	NSWC PCD:Panama City, FL	0.365	0.216	Mar 2012	0.196	Feb 2013	-		0.196	0.673	1.450		
Test Assets	WR	NSWC PCD:Panama City, FL	0.474	0.221	Mar 2012	0.155	Feb 2013	-		0.155	0.425	1.275		
Subtotal			1.126	0.437		0.351		-		0.351	1.098	3.012		

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Management Services (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Support	WR	Various:Various	0.726	-		-		-		-	0.420	1.146	
Program Management Support	WR	NSWC PCD:Panama City, FL	0.596	0.430	Jun 2012	0.116	Jun 2013	-		0.116	1.000	2.142	
Travel	WR	NAVSEA:Not Specified	0.064	-		-		-		-	0.000	0.064	
DAWDF	MIPR	OSD:Not Specified	0.011	-		-		-		-	0.000	0.011	
Subtotal			1.397	0.430		0.116		-		0.116	1.420	3.363	

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	11.452	5.214		8.435		-		8.435	16.425	41.526	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy		DATE: February 2012
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 2231</i>				
LCAC Technology Initiatives	1	2011	4	2017
LCU (R) CBA	2	2012	4	2013