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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2013 Navy	<b>DATE:</b> February 2012
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<b>APPROPRIATION/BUDGET ACTIVITY</b>				<b>R-1 ITEM NOMENCLATURE</b>							
1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				PE 0101226N: <i>Submarine Acoustic War Dev</i>							
<b>COST (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	6.620	6.360	1.434	-	1.434	1.553	3.376	3.417	3.238	Continuing	Continuing
1265: <i>Sub Defensive Warfare</i>	6.620	6.360	1.434	-	1.434	1.553	3.376	3.417	3.238	Continuing	Continuing

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

This project develops a Submarine Defensive Warfare System (SDWS) to improve the effectiveness and survivability of all U.S. Submarine classes.

This project funds the Next Generation Countermeasure (NGCM) efforts which entail simulating and determining the effectiveness of new technologies and capabilities developed under the Future Naval Capabilities (FNC), Small Business and Innovative Research (SBIR), and other Research, Development, Test & Evaluation (RDT&E) initiatives. New and emerging hardware and software are rigorously evaluated in a representative acoustic environment, through both digital and hardware-in-the-loop simulations, to determine their readiness for inserting this technology into the NGCM.

The key new capabilities are adaptive countermeasure (ACM) with a full duplex and mobility.

Funding provides In-Service Engineering Agent and Technical Direction Agent hardware/software support for in-service CSA MK 2 and CSA MK 3 systems, including obsolete unit-level Technical Refresh. Additionally, CSA MK 3 system-level modernization (TACLAN integration/Technical Insertion) has been initiated.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>
Previous President's Budget	6.815	6.360	6.438	-	6.438
Current President's Budget	6.620	6.360	1.434	-	1.434
Total Adjustments	-0.195	-	-5.004	-	-5.004
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.160	-			
• Program Adjustments	-	-	-5.000	-	-5.000
• Rate/Misc Adjustments	-	-	-0.004	-	-0.004
• Congressional General Reductions Adjustments	-0.035	-	-	-	-

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APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0101226N: Submarine Acoustic War Dev	
<b>Change Summary Explanation</b> Funding: NGCM deferred beyond the FYDP (\$5M FY13 reduction); \$.004 FY13 reduction based on rate adjustment. Technical: Impacts from reduction not yet determined. Schedule: Reduction will result in 5-7 year delay in NGCM program.		

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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 0101226N: Submarine Acoustic War Dev				PROJECT 1265: Sub Defensive Warfare			
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
1265: Sub Defensive Warfare	6.620	6.360	1.434	-	1.434	1.553	3.376	3.417	3.238	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
This project develops a Submarine Defensive Warfare System (SDWS) to improve the effectiveness and survivability of all U.S. Submarine classes. This project funds the Next Generation Countermeasure (NGCM) efforts which entail simulating and determining the effectiveness of new technologies and capabilities developed under the Future Naval Capabilities (FNC), Small Business and Innovative Research (SBIR), and other Research, Development, Test & Evaluation (RDT&E) initiatives. New and emerging hardware and software are rigorously evaluated in a representative acoustic environment, through both digital and hardware-in-the-loop simulations, to determine their readiness for inserting this technology into the NGCM.The key new capabilities are adaptive countermeasure (ACM) with a full duplex and mobility. Funding provides In-Service Engineering Agent and Technical Direction Agent hardware/software support for in-service CSA MK 2 and CSA MK 3 systems, including obsolete unit-level Technical Refresh. Additionally, CSA MK 3 system-level modernization (TACLAN ntegration/ Technical Insertion) has been initiated.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: Sub Defensive Warfare								6.620	6.360	1.434	
								Articles: 0	5	0	
FY 2011 Accomplishments: - Completed baselining the Test and Evaluation Master Plan (TEMP). - Conducted System Requirements Review (SRR), Preliminary Design Review (PDR) and Critical Design Review (CDR). - Refined NGCM-to-CSA interface requirements. - NGCM contractors started internal Contractor Testing (CT) to refine designs.											
FY 2012 Plans: - Integration of Technology Insertions. - Conduct Critical Design Reviews (CDRs). - FY12 units are for 5 Special Test Units (STUs) from each developer.											
FY 2013 Plans: - Continue Integration of Technology Insertions. - Start Contractor Testing.											
Accomplishments/Planned Programs Subtotals								6.620	6.360	1.434	

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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 0101226N: Submarine Acoustic War Dev	PROJECT 1265: Sub Defensive Warfare	

**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN/221000/221005: <i>Submarine Acoustic Warfare</i>	18.438	20.554	21.489	0.000	21.489	22.488	25.891	26.198	29.164	Continuing	Continuing

**D. Acquisition Strategy**

This project develops a Submarine Defensive Warfare System (SDWS) to improve the effectiveness and survivability of all U.S. Submarine classes. The integration of technology insertion into the Next Generation Countermeasure (NGCM) and the NGCM-Capable CSA MK3 system will continue through FY15. The development and procurement will be through a full and open competition for a cost-plus-fixed-fee contract which delivers NGCM Engineering Development Models (EDMs) to the Navy. The NGCM development contracts awarded in 1Q-2011. NGCM contractor's testing and the Development Testing involving the Navy will be in FY13-15.

**E. Performance Metrics**

Milestone Reviews

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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 0101226N: Submarine Acoustic War Dev				PROJECT 1265: Sub Defensive Warfare					
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
WAF ANALYSIS SYSTEM ENGINEERING	WR	NUWC:NEWPORT, RI	10.000	1.436	Dec 2011	0.185	Dec 2012	-		0.185	Continuing	Continuing	Continuing
NGCM SYSYTEM ENGINEERING	WR	NUWC:NEWPORT, RI	13.064	0.500	Dec 2011	0.253	Dec 2012	-		0.253	Continuing	Continuing	Continuing
NGCM DEVELOPMENT 1	C/CPAF	Argon ST:Fairfax, VA	5.218	1.990	Feb 2012	0.383	Dec 2012	-		0.383	Continuing	Continuing	Continuing
NGCM DEVELOPMENT 2	C/CPAF	Ultra:Braintree, MA	5.218	1.991	Feb 2012	0.383	Dec 2012	-		0.383	0.000	7.592	
NGCM SYSTEM ENGINEERING	WR	NUWC:KEPORT, WA	1.020	0.118	Dec 2011	0.100	Dec 2012	-		0.100	Continuing	Continuing	Continuing
Subtotal			34.520	6.035		1.304		-		1.304			
Remarks NGCM Development contracts awarded 12/22/2010 to Argon ST and Ultra.													
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
ACQUISITION WORKFORCE	Various	Not Specified:Not Specified	0.036	-		-		-		-	0.000	0.036	0.036
TRAVEL	WR	NAVSEA:Washington, DC	0.425	0.075	Nov 2011	0.030	Oct 2012	-		0.030	Continuing	Continuing	Continuing
PROGRAM MANAGEMENT SUPPORT	C/CPAF	TECH MARINE:BURKE, VA	0.800	0.250	Feb 2012	0.100	Nov 2012	-		0.100	Continuing	Continuing	Continuing
Subtotal			1.261	0.325		0.130		-		0.130			
			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			35.781	6.360		1.434		-		1.434			
Remarks													

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Navy		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0101226N: <i>Submarine Acoustic War Dev</i>	<b>PROJECT</b> 1265: <i>Sub Defensive Warfare</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Navy		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0101226N: <i>Submarine Acoustic War Dev</i>	<b>PROJECT</b> 1265: <i>Sub Defensive Warfare</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>Proj 1265</b>				
COUNTERMEASURE (CM) EFFECTIVENESS/WEAPON ANALYSIS FACILITY (WAF) VULNERABILITY	1	2011	4	2017
CONTRACT AWARD	1	2011	1	2011
TEST & EVALUATION MASTER PLAN (TEMP)	1	2011	3	2013
PRELIMINARY DESIGN REVIEW (PDR)	4	2011	4	2011
CRITICAL DESIGN REVIEW (CDR)	3	2012	3	2012
CONTRACTOR TESTING	1	2014	4	2016
DEVELOPMENTAL TESTING (DT)	1	2017	4	2017