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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2015 Navy	<b>Date:</b> March 2014
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<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy I BA 7: Operational Systems Development</i>					<b>R-1 Program Element (Number/Name)</b> PE 0204575N / <i>Elect Warfare Readiness Supt</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	195.717	17.867	19.563	22.067	-	22.067	31.510	36.636	40.644	44.229	Continuing	Continuing
2263: <i>Information Warfare System</i>	195.717	17.867	19.563	22.067	-	22.067	31.510	36.636	40.644	44.229	Continuing	Continuing

# The FY 2015 OCO Request will be submitted at a later date.

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

Research, assess, and develop information warfare capabilities.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>
Previous President's Budget	19.843	19.563	31.320	-	31.320
Current President's Budget	17.867	19.563	22.067	-	22.067
Total Adjustments	-1.976	-	-9.253	-	-9.253
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.492	-			
• Rate/Misc Adjustments	0.001	-	-9.253	-	-9.253
• Congressional General Reductions Adjustments	-1.485	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy										Date: March 2014		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0204575N / <i>Elect Warfare Readiness Supt</i>				Project (Number/Name) 2263 / <i>Information Warfare System</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
2263: <i>Information Warfare System</i>	195.717	17.867	19.563	22.067	-	22.067	31.510	36.636	40.644	44.229	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
# The FY 2015 OCO Request will be submitted at a later date.												
Note Funding for this Project Code will be managed by BSO 60 starting in FY14.												
A. Mission Description and Budget Item Justification Information Operations (IO) Counter Measure Capability Research and Development: Develops software to account for antenna modeling, weather calculations, radio frequency modeling, signals mapping and terrain modeling for warfighter use in configuring optimal Electronic Attack (EA) from afloat.  Maritime Cryptologic Systems for the 21st Century (MCS-21) Systems Development and Support: Develops and fields spiral EA and cyber capabilities against Fleet Forces Command prioritized signals, networks, and target sets. EA capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne and surface IO platforms (Classic Troll, Banshee and Ships Signal Exploitation Equipment Increment E and Increment F). Also included is the Navy's investment in Integrated Communications and Data System proof of concept system and PACSAIL research project.  Research, Analysis and Research and Development Technical Support: Conducts vulnerability analysis and reverse engineering on emerging threats and targets and provides specialized technical, engineering and management capabilities to the program management office. (Specific details held at a higher classification level)  Computer Network Operations: Funds development and testing of computer networks for modeling, simulation, and tailoring of Cyber capabilities. Develops specific Cyber tools, techniques, and operators in support of Fleet Cyber Command and Commander, TENTH Fleet requirements. (Specific development details held at a higher classification level). Conducts vulnerability analyses and reverse engineering on improvised explosive devices (Specific details held at a higher classification level)												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2013	FY 2014	FY 2015	
<b>Title:</b> Electronic Warfare / Information Operations (IO) Countermeasure Capability Research & Development  <b>Articles:</b>									5.355	4.086	15.682	
									-	-	-	
<b>Description:</b> Information Operations (IO) Counter Measure Capability Research and Development: Develops and tests IO Countermeasure capabilities across various platforms. Develops specific waveforms to attack adversary systems. Develops and uses modeling and simulation techniques to prototype and test emergent waveforms.												
<b>FY 2013 Accomplishments:</b>												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
<p>* Continued Modeling and Simulation Lab (Applied/projected level of effort)</p> <p>* Continued Information Warfare/Information Operations (IW/IO) EA capability development (Details held at higher classification level)</p> <p><b>FY 2014 Plans:</b></p> <p>* Develop and test IO Countermeasures capabilities across various platforms.</p> <p>* Develop specific waveforms to attack adversary systems.</p> <p>* Develop and use modeling and simulations techniques to prototype and test emergent waveforms.</p> <p>* Continue Modeling and Simulation Lab (Applied/projected level of effort).</p> <p>* Continue Information Warfare (IW)/Information Operations (IO) Electronic Attack (EA) capability development (Details held at a higher classification level).</p> <p>* Continue Waveform Weapon Development.</p> <p><b>FY 2015 Plans:</b></p> <p>* Develop and test IO Countermeasures capabilities across various platforms.</p> <p>* Develop specific waveforms to attack adversary systems.</p> <p>* Develop and use modeling and simulations techniques to prototype and test emergent waveforms.</p> <p>* Continue Modeling and Simulation Lab (Applied/projected level of effort).</p> <p>* Continue Information Warfare (IW)/Information Operations (IO) Electronic Attack (EA) capability development (Details held at a higher classification level).</p> <p>* Continue Waveform Weapon Development.</p>				
<p><b>Title:</b> Electronic Warfare Readiness/MCS-21 Systems Development</p> <p><b>Articles:</b></p> <p><b>Description:</b> Maritime Cryptologic Systems for the 21st Century Systems Development: Develops and fields spiral EA and cyber capabilities against Fleet Forces Command prioritized signals, networks and target sets. Capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne and surface Information Operations platforms (Classic Troll, Banshee and Ships Signal Exploitation Equipment Increment E and Increment F).</p> <p><b>FY 2013 Accomplishments:</b></p> <p>*Continued IW/IO EA capability development &amp; integration (Details held at higher classification level)</p> <p><b>FY 2014 Plans:</b></p> <p>* Develop and field spiral EA and cyber capabilities against Fleet Forces Command prioritized signals, networks and targets sets. Capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne, and surface IP platforms (Classic Troll, Banshee, and Ships Exploitation Increment E and Increment F).</p>		3.659 -	0.637 -	0.424 -

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Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0204575N / Elect Warfare Readiness Supt	Project (Number/Name) 2263 / Information Warfare System		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2013	FY 2014	FY 2015
* Continue IW/IO EA capability development & integration (Details held at higher classification level). * Continue Research and Analysis (Details held at higher classification level). <b>FY 2015 Plans:</b> * Develop and field spiral EA and cyber capabilities against Fleet Forces Command prioritized signals, networks and targets sets. Capabilities will be integrated into a software architecture baseline that is deployed on subsurface, airborne, and surface IP platforms (Classic Troll, Banshee, and Ships Exploitation Increment E and Increment F). * Continue IW/IO EA capability development & integration (Details held at higher classification level). * Continue Research and Analysis (Details held at higher classification level).				
Title: Electronic Warfare/Research, Analysis and R&D Technical Support  Articles:  Description: Research, Analysis and Research and Development Technical Support: Conducts vulnerability analysis and reverse engineering on emerging threats and targets and provides specialized technical, engineering and management capabilities to the program management office. (Specific details held at a higher classification level)  FY 2013 Accomplishments: * Continued Technical and intelligence related studies and contractor engineering, technical and management capabilities. * Continued Research and Analysis (Details held at higher classification level)  FY 2014 Plans: *Conduct vulnerability analysis and reverse engineering on emerging threats and targets and provide specialized technical, engineering and management capabilities to the program management office. (Specific details held at a higher classification level). *Technical and intelligence related studies and contractor engineering, technical and management capabilities. *Research and Analysis (Details held at higher classification level).  FY 2015 Plans: *Conduct vulnerability analysis and reverse engineering on emerging threats and targets and provide specialized technical, engineering and management capabilities to the program management office. (Specific details held at a higher classification level). *Technical and intelligence related studies and contractor engineering, technical and management capabilities. *Research and Analysis (Details held at higher classification level).		3.567 -	5.696 -	2.107 -
Title: Electronic Warfare/Computer Network Operations (CNO)  Articles:		5.286 -	9.144 -	3.854 -

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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>								<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	
<p><b>Description:</b> Computer Network Operations (CNO): Funds development and testing of computer networks for modeling, simulation, and tailoring of Cyber capabilities. Develops specific Cyber tools, techniques, and operators in support of Fleet Cyber Command and Commander, TENTH Fleet requirements. (Specific development details held at a higher classification level)</p> <p><b>FY 2013 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>* Continued Research and Development at the Integrated Testing Facility</li> <li>* Continued Computer Network Attack Capabilities Development (Details held at higher classification level)</li> <li>* Continued Demonstration of Advanced Computer Network Operations Concept (Details held at higher classification level)</li> </ul> <p><b>FY 2014 Plans:</b></p> <ul style="list-style-type: none"> <li>*Develop Cyber tools, techniques, and operators in support of Fleet Cyber Command and Commander, TENTH Fleet requirements. (Specific development details held at a higher classification level).</li> <li>*CNO Research and Development Integration Testing Facility.</li> <li>*Computer Network Attack Capabilities (Details held at a higher classification level).</li> <li>*Demonstration of Advanced Computer Network Operations Concept (Details held at a higher classification level).</li> </ul> <p><b>FY 2015 Plans:</b></p> <ul style="list-style-type: none"> <li>Develop Cyber tools, techniques, and operators in support of Fleet Cyber Command and Commander, TENTH Fleet requirements. (Specific development details held at a higher classification level).</li> <li>*CNO Research and Development Integration Testing Facility.</li> <li>*Computer Network Attack Capabilities (Details held at a higher classification level).</li> <li>*Demonstration of Advanced Computer Network Operations Concept (Details held at a higher classification level).</li> </ul>											
<b>Accomplishments/Planned Programs Subtotals</b>								17.867	19.563	22.067	
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• RD TEN/0604270N/1742: <i>Electronic Warfare</i> <i>Technical Development</i>	1.702	1.352	1.652	-	1.652	1.642	1.665	1.596	-	Continuing	Continuing
<b>Remarks</b>											

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<b>D. Acquisition Strategy</b> These programs are designated non-ACAT and operate under streamlined acquisition. This designation supports a streamlined acquisition process using the Advanced Concept Technology Demonstration documentation of the Defense Acquisition Guidance.		
<b>E. Performance Metrics</b> Measures include quality and impact of new ideas and approaches, the success of the technology application in satisfying Combatant Commanders and Fleet requirements, and successful cost effective transition of the capability into operational systems. The goal of these investments is to provide to Commanders non-kinetic options to influence adversaries and prevent escalation of crises. Due to the nature and classification of these efforts, qualitative measures are used. It is the intent through the development of modeling and simulation scenarios and capabilities to develop quantitative metrics. The success of this depends heavily on the insight obtained via various intelligence community efforts.		

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PE 0204575N: *Elect Warfare Readiness Supt*  
Navy

R-1 Line #187

**R-1 Program Element (Number/Name)**  
PE 0204575N / *Elect Warfare Readiness*  
*Supt*

<b>Project (Number/Name)</b>	2263 / <i>Information Warfare System</i>
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