

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	23.537	37.368	39.398	0.000	39.398	51.800	55.056	56.149	54.046	Continuing	Continuing
2263: Information Warfare System	23.537	37.368	39.398	0.000	39.398	51.800	55.056	56.149	54.046	Continuing	Continuing
A. Mission Description and Budget Item Justification											
Information Operations(IO) Mission Management: Develops command and control mechanism for remote use of Electronic Attack(EA)assets to include frequency, antenna alignment and weapon firing data transfer. Develops a modeling and simulation laboratory for the program office to use in the development, intended effect, and risk reduction of new EA capabilities.											
B. Program Change Summary (\$ in Millions)											
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total						
Previous President's Budget	24.206	37.524	0.000	0.000	0.000						
Current President's Budget	23.537	37.368	39.398	0.000	39.398						
Total Adjustments	-0.669	-0.156	39.398	0.000	39.398						
• Congressional General Reductions		-0.156									
• Congressional Directed Reductions		0.000									
• Congressional Rescissions	0.000	0.000									
• Congressional Adds		0.000									
• Congressional Directed Transfers		0.000									
• Reprogrammings	0.000	0.000									
• SBIR/STTR Transfer	-0.669	0.000									
• Program Adjustments	0.000	0.000	39.398	0.000	39.398						
Change Summary Explanation											
Technical: N/A											
Schedule: N/A											
FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.											

UNCLASSIFIED

R-1 Line Item #175

Page 1 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204575N: <i>Elect Warfare Readiness Supt</i>				PROJECT 2263: <i>Information Warfare System</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2263: <i>Information Warfare System</i>	23.537	37.368	39.398	0.000	39.398	51.800	55.056	56.149	54.046	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>Information Operations(IO) Mission Management: Develops command and control mechanism for remote use of Electronic Attack(EA)assets to include frequency, antenna alignment and weapon firing data transfer. Develops a modeling and simulation laboratory for the program office to use in the development, intended effect, and risk reduction of new EA capabilities.</p> <p>IO Counter Measure(CM) Capability Research & Development. Develops software to account for antenna modeling, weather calculations, Radio Frequency (RF) modeling, signals mapping and terrain modeling for warfighter use in configuring optimal EA from afloat.</p> <p>MCS-21 Systems Development & Support: Develops and fields spiral EA capabilities against Fleet Forces Command prioritized signals 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 SSEE-Inc E/ F.) Also included is the Navy's investment in ICADS proof of concept system.</p> <p>Research, Analysis & R&D Technical Spt. Conducts vulnerability analysis and reverse engineering on emerging threats and targets and provides specialized technical, engineering and management support to the program management office. (Specific details held at a higher classification level.)</p> <p>Computer Network Operations (CNO): Funds development and testing of adversary target networks for modeling, simulation, and tailoring of CNO capabilities. Develops specific CNO capabilities to be used against adversary networks. Supports Electronic Target Folder database which provides a means of sharing and storing common CNO data. Studies unique adversary CNO vulnerabilities for exploitation. (Specific development details held at a higher classification level.)</p> <p>Increasing emphasis on Ballistic Missile Defense/High Value Units (BMD/HVU) and Red Flash will provide additional and/or enhanced IO capabilities to enable OPLANs and support Major Combat Operations (MCO) scenarios. This effort leverages and continues the development of Computer Network Attack (CNO) capabilities and also provides for the delivery of two MCS21 mobile/ground components. (Specific development and capability details are held at a higher classification level.)</p>											
B. Accomplishments/Planned Program (\$ in Millions)											

UNCLASSIFIED

R-1 Line Item #175

Page 2 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt		PROJECT 2263: Information Warfare System		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Information Warfare System/Information Operation Mission Management		3.585	3.797	3.869	0.000	3.869
IO Mission Management: Develops command and control mechanism for remote use of Electronic Attack assets to include frequency, antenna alignment and weapon firing data transfer. Develops a modeling and simulation laboratory for the program office to use in the development, intended effect, and risk reduction of new EA capabilities.						
FY 2009 Accomplishments: Conducted the following tasks on the following requirements: RF Propagation Modeling IO Mission Management Remote Control Antenna Modeling Terrain Modeling						
FY 2010 Plans: Continue the following programs task requirements: RF Propagation Modeling Mission Planning Optimization & Tasking Services (MPOTS) Contractor Engineering Support						
FY 2011 Base Plans: Continue the following programs task requirements: RF Propagation Modeling MPOTS Contractor Engineering Support						
Electronic Warfare/Information Operation Counter Measure Capability Research & Development		2.126	5.628	7.650	0.000	7.650

UNCLASSIFIED

R-1 Line Item #175

Page 3 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt	PROJECT 2263: Information Warfare System			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
IO CM Capability Research & Development. Develops and test 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 FY 2009 Accomplishments: Conducted: Modeling & Simulation Lab IW/IO EA capability development (Details held at higher classification level) FY 2010 Plans: Continue: Modeling & Simulation Lab (Applied/projected level of effort) IW/IO EA capability development (Details held at higher classification level) Waveform Weapon Development FY 2011 Base Plans: Continue: Modeling & Simulation Lab (Applied/projected level of effort) IW/IO EA capability development (Details held at higher classification level) Waveform Weapon Development					
Electronic Warfare Readiness Support/MCS-21 Systems Development & Support MCS-21 Systems Development & Support: Develops and fields spiral EA capabilities against Fleet Forces Command prioritized signals 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 SSEE-Inc E/ F.) Also included is the Navy's investment in ICADS proof of concept system.	6.785	13.321	15.219	0.000	15.219

UNCLASSIFIED

R-1 Line Item #175

Page 4 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt	PROJECT 2263: Information Warfare System			
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Conducted: EA Systems Development (Details held at higher classification level) EA antenna development - Spiral capability upgrade delivery of Photonics antenna IW/IO EA capability development (Details held at higher classification level) ICADS (Details held at higher classification level) Testing					
FY 2010 Plans: Continue: EA Systems Development (Details held at higher classification level) EA antenna development - Spiral capability upgrade of Photonics antenna IW/IO EA capability development & integration (Details held at higher classification level) Contractor Systems Engineering & OPS Development Support Testing					
FY 2011 Base Plans: Continue: EA Systems Development (Details held at higher classification level) EA antenna development - Spiral capability upgrade of Photonics antenna IW/IO EA capability development & integration (Details held at higher classification level) Contractor Systems Engineering & OPS Development Support Testing					
Electronic Warfare/ Research, Analysis & R&D Technical Support Research, Analysis & R&D Technical Spt. Conducts vulnerability analysis and reverse engineering on emerging threats and targets and provides specialized technical, engineering and management support to the program management office. (Specific details held at a higher classification level.)	5.471	6.758	6.829	0.000	6.829

UNCLASSIFIED

R-1 Line Item #175

Page 5 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt		PROJECT 2263: Information Warfare System	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Conducted: Technical and intelligence related studies and contractor engineering, technical & management support Research & Analysis (Details held at higher classification level)					
FY 2010 Plans: Continue: Technical and intelligence related studies and contractor engineering, technical & management support Navy IO Architecture process development Research & Analysis (Details held at higher classification level)					
FY 2011 Base Plans: Continue: Technical and intelligence related studies and contractor engineering, technical & management support Navy IO Architecture process development Research & Analysis (Details held at higher classification level)					
Electronic Warfare/ Computer Network Operations (CNO) Computer Network Operations (CNO): Funds development and testing of adversary target networks for modeling, simulation, and tailoring of CNO capabilities. Develops specific CNO capabilities to be used against adversary networks. Supports Electronic Target Folder database which provides a means of sharing and storing common CNO data. Studies unique adversary CNO vulnerabilities for exploitation. (Specific development details held at a higher classification level.)	5.570	7.864	5.831	0.000	5.831

UNCLASSIFIED

R-1 Line Item #175

Page 6 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt		PROJECT 2263: Information Warfare System	
B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: Conducted: CNO R&D Integrated Testing Facility Computer Network Attack Capabilities Development (Details held at higher classification level) Demonstration of Advanced Computer Network Operations Concept (Details held at higher classification level) FY 2010 Plans: Continue: CNO R&D Integrated Testing Facility Computer Network Attack Capabilities Development (Details held at higher classification level) Demonstration of Advanced Computer Network Operations Concept (Details held at higher classification level) FY 2011 Base Plans: Continue: CNO R&D Integrated Testing Facility Computer Network Attack Capabilities Development (Details held at higher classification level) Demonstration of Advanced Computer Network Operations Concept (Details held at higher classification level)					
Accomplishments/Planned Programs Subtotals	23.537	37.368	39.398	0.000	39.398

UNCLASSIFIED

R-1 Line Item #175

Page 7 of 16

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt				PROJECT 2263: Information Warfare System			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• RD TEN/0604270N/1742: Electronic Warfare Technical Development	5.300	5.000	5.100	0.000	5.100	5.200	5.300	5.400	5.600	0.000	26.900
D. Acquisition Strategy											
These programs are designated non-ACAT and operate under streamlined acquisition. This designation supports a streamlined acquisition process using the Advanced Concept Technology Demonstration (ACTD) documentation of the Defense Acquisition Guidance.											
E. Performance Metrics											
The Navy Offensive Cyber and Information Warfare Program (NOCIWP) discovers adversary vulnerabilities, develops capabilities to exploit these vulnerabilities, and transitions these capabilities for operational use. Investments are made in high risk/high payoff non kinetic opportunities and result in technologies and capabilities that provide unique, innovative, life-saving, and potentially cost saving applications into Department of Navy and Department of Defense classified acquisition and intelligence programs. Measures include quality and impact of new ideas and approaches, the success of the technology application in satisfying COCOM 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.											

UNCLASSIFIED

R-1 Line Item #175

Page 8 of 16

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development					R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt					PROJECT 2263: Information Warfare System				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
Primary Hardware Development	Various/ Various	Various Various	14.428	3.100	Sep 2010	2.600	Sep 2011	0.000		2.600	Continuing	Continuing	Continuing	
Ancillary Hardware Development	Various/ Various	Various Various	9.150	2.100	Sep 2010	1.350	Sep 2011	0.000		1.350	Continuing	Continuing	Continuing	
Systems Engineering	Various/ Various	Applied Research Laboratory University Park, PA	0.340	0.360	Nov 2009	0.370	Nov 2010	0.000		0.370	Continuing	Continuing	Continuing	
Systems Engineering	Various/ Various	ARGON Fairfax, VA	3,420.000	0.435	Oct 2009	0.445	Nov 2010	0.000		0.445	0.000	3,420.880	Continuing	
Systems Engineering	Various/ Various	NRL Washington, DC	1.405	1.205	Nov 2009	0.785	Nov 2010	0.000		0.785	0.000	3.395	Continuing	
Subtotal			3,445.323	7.200		5.550		0.000		5.550				
Remarks														
Support (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	Various/ Various	ARGON Fairfax, VA	8.753	1.075	Oct 2009	1.200	Oct 2010	0.000		1.200	Continuing	Continuing	Continuing	
Software Development			58.980	3.797	Dec 2009	3.869	Dec 2010	0.000		3.869	Continuing	Continuing	Continuing	

UNCLASSIFIED

R-1 Line Item #175

Page 9 of 16

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010																																																																																																																																							
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>					R-1 ITEM NOMENCLATURE PE 0204575N: <i>Elect Warfare Readiness Supt</i>				PROJECT 2263: <i>Information Warfare System</i>																																																																																																																																									
Support (\$ in Millions) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th rowspan="2">Cost Category Item</th> <th rowspan="2">Contract Method & Type</th> <th rowspan="2">Performing Activity & Location</th> <th rowspan="2">Total Prior Years Cost</th> <th colspan="2">FY 2010</th> <th colspan="2">FY 2011 Base</th> <th colspan="2">FY 2011 OCO</th> <th>FY 2011 Total</th> <th rowspan="2">Cost To Complete</th> <th rowspan="2">Total Cost</th> <th rowspan="2">Target Value of Contract</th> </tr> <tr> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> <th>Award Date</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td></td> <td>Various/ Various</td> <td>L3 Communications New York, NY</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Development Support</td> <td>Various/ Various</td> <td>NRL Washington, DC</td> <td align="right">0.250</td> <td align="right">0.260</td> <td align="center">Nov 2009</td> <td align="right">0.270</td> <td align="center">Nov 2010</td> <td align="right">0.000</td> <td></td> <td align="right">0.270</td> <td align="right">0.000</td> <td align="right">0.780</td> <td align="center">Continuing</td> </tr> <tr> <td>Development Support</td> <td>Various/ Various</td> <td>Classified Classified</td> <td align="right">0.795</td> <td align="right">3.649</td> <td align="center">Nov 2009</td> <td align="right">4.455</td> <td align="center">Nov 2010</td> <td align="right">0.000</td> <td></td> <td align="right">4.455</td> <td align="right">0.000</td> <td align="right">8.899</td> <td align="center">Continuing</td> </tr> <tr> <td>Software Development</td> <td>Various/ Various</td> <td>ARL University Park, PA</td> <td align="right">1.000</td> <td align="right">1.000</td> <td align="center">Nov 2009</td> <td align="right">1.100</td> <td align="center">Nov 2010</td> <td align="right">0.000</td> <td></td> <td align="right">1.100</td> <td align="right">0.000</td> <td align="right">3.100</td> <td align="center">Continuing</td> </tr> <tr> <td>Software Development</td> <td>Various/ Various</td> <td>ARGON Fairfax, VA</td> <td align="right">1.765</td> <td align="right">5.324</td> <td align="center">Nov 2009</td> <td align="right">7.869</td> <td align="center">Nov 2010</td> <td align="right">0.000</td> <td></td> <td align="right">7.869</td> <td align="right">0.000</td> <td align="right">14.958</td> <td align="center">Continuing</td> </tr> <tr> <td>Software Development</td> <td>Various/ Various</td> <td>NRL Washington, DC</td> <td align="right">0.620</td> <td align="right">0.650</td> <td align="center">Oct 2009</td> <td align="right">0.675</td> <td align="center">Oct 2010</td> <td align="right">0.000</td> <td></td> <td align="right">0.675</td> <td align="right">0.000</td> <td align="right">1.945</td> <td align="center">Continuing</td> </tr> <tr> <td>Software Development</td> <td>Various/ Various</td> <td>Classified Classified</td> <td align="right">5.570</td> <td align="right">7.864</td> <td align="center">Oct 2009</td> <td align="right">7.831</td> <td align="center">Oct 2010</td> <td align="right">0.000</td> <td></td> <td align="right">7.831</td> <td align="right">0.000</td> <td align="right">21.265</td> <td align="center">Continuing</td> </tr> <tr> <td align="right" colspan="3">Subtotal</td><td align="right">77.733</td> <td align="right">23.619</td> <td></td> <td align="right">27.269</td> <td></td> <td align="right">0.000</td> <td></td> <td align="right">27.269</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>														Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost		Various/ Various	L3 Communications New York, NY												Development Support	Various/ Various	NRL Washington, DC	0.250	0.260	Nov 2009	0.270	Nov 2010	0.000		0.270	0.000	0.780	Continuing	Development Support	Various/ Various	Classified Classified	0.795	3.649	Nov 2009	4.455	Nov 2010	0.000		4.455	0.000	8.899	Continuing	Software Development	Various/ Various	ARL University Park, PA	1.000	1.000	Nov 2009	1.100	Nov 2010	0.000		1.100	0.000	3.100	Continuing	Software Development	Various/ Various	ARGON Fairfax, VA	1.765	5.324	Nov 2009	7.869	Nov 2010	0.000		7.869	0.000	14.958	Continuing	Software Development	Various/ Various	NRL Washington, DC	0.620	0.650	Oct 2009	0.675	Oct 2010	0.000		0.675	0.000	1.945	Continuing	Software Development	Various/ Various	Classified Classified	5.570	7.864	Oct 2009	7.831	Oct 2010	0.000		7.831	0.000	21.265	Continuing	Subtotal			77.733	23.619		27.269		0.000		27.269			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract																																																																																																																																					
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost																																																																																																																																								
	Various/ Various	L3 Communications New York, NY																																																																																																																																																
Development Support	Various/ Various	NRL Washington, DC	0.250	0.260	Nov 2009	0.270	Nov 2010	0.000		0.270	0.000	0.780	Continuing																																																																																																																																					
Development Support	Various/ Various	Classified Classified	0.795	3.649	Nov 2009	4.455	Nov 2010	0.000		4.455	0.000	8.899	Continuing																																																																																																																																					
Software Development	Various/ Various	ARL University Park, PA	1.000	1.000	Nov 2009	1.100	Nov 2010	0.000		1.100	0.000	3.100	Continuing																																																																																																																																					
Software Development	Various/ Various	ARGON Fairfax, VA	1.765	5.324	Nov 2009	7.869	Nov 2010	0.000		7.869	0.000	14.958	Continuing																																																																																																																																					
Software Development	Various/ Various	NRL Washington, DC	0.620	0.650	Oct 2009	0.675	Oct 2010	0.000		0.675	0.000	1.945	Continuing																																																																																																																																					
Software Development	Various/ Various	Classified Classified	5.570	7.864	Oct 2009	7.831	Oct 2010	0.000		7.831	0.000	21.265	Continuing																																																																																																																																					
Subtotal			77.733	23.619		27.269		0.000		27.269																																																																																																																																								
Remarks																																																																																																																																																		

UNCLASSIFIED

R-1 Line Item #175

Page 10 of 16

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204575N: <i>Elect Warfare Readiness Supt</i>				PROJECT 2263: <i>Information Warfare System</i>						
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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 Test & Evaluation	WR	NAWC China Lake, CA	4.311	0.514	Sep 2010	0.477	Sep 2011	0.000		0.477	Continuing	Continuing	Continuing	
Subtotal			4.311	0.514		0.477		0.000		0.477				
Remarks														
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 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	
Research, Studies and Vulnerability Analysis	WR	NRL Washington, DC	7.157	3.079	Sep 2010	2.978	Sep 2011	0.000		2.978	Continuing	Continuing	Continuing	
Contractor Engineering and Program Management Support	Various/ Various	Classified Classified	0.900	2.956	Sep 2010	3.124	Sep 2011	0.000		3.124	Continuing	Continuing	Continuing	
Acquisition Workforce Fund 2009	Various/ Various	Various Various	0.117	0.000		0.000		0.000		0.000	Continuing	Continuing	Continuing	
Subtotal			8.174	6.035		6.102		0.000		6.102				
Remarks														

UNCLASSIFIED

R-1 Line Item #175

Page 11 of 16

UNCLASSIFIED

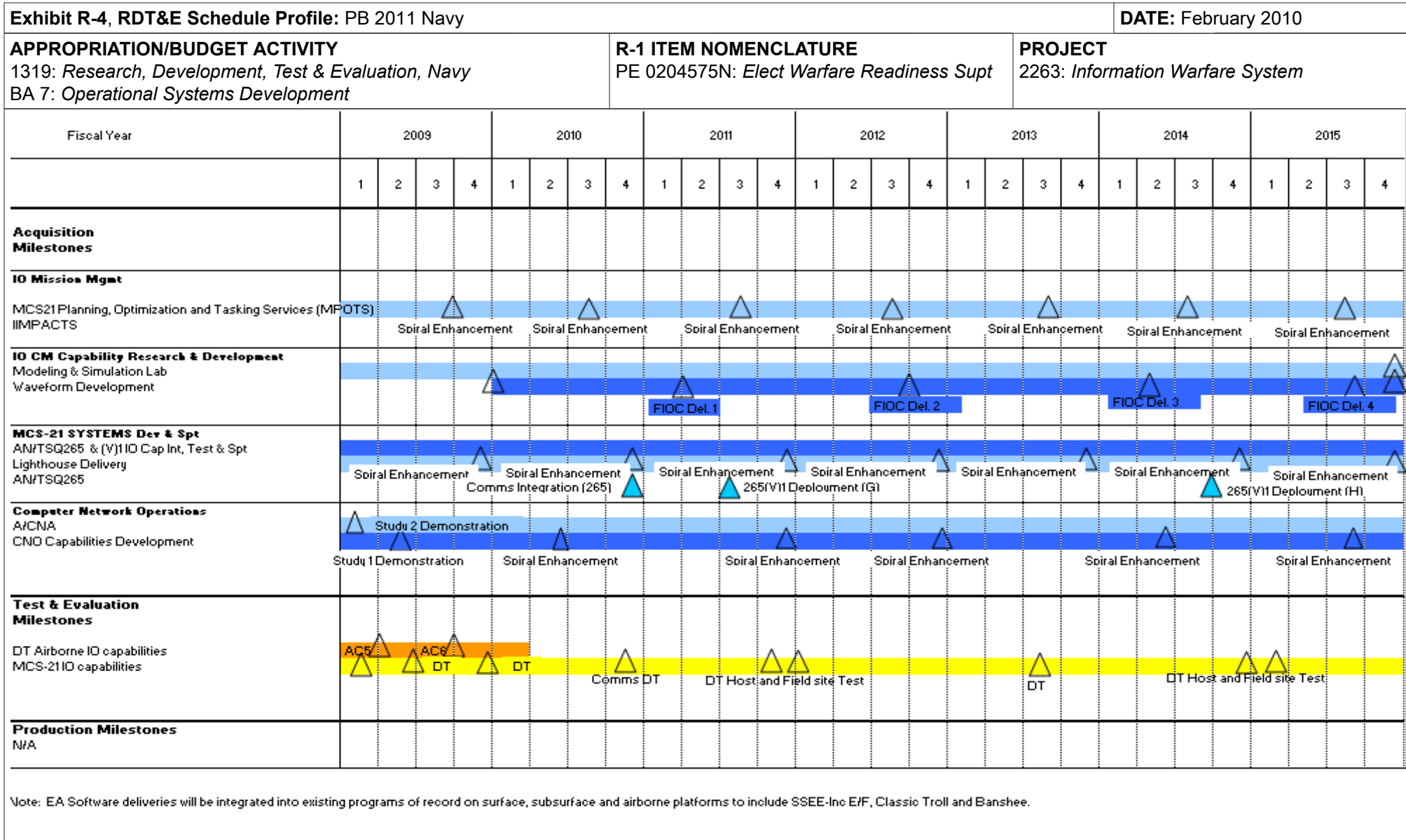
Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy							DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0204575N: <i>Elect Warfare Readiness Supt</i>			PROJECT 2263: <i>Information Warfare System</i>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"></div> <div style="width: 20%; text-align: center;"> Total Prior Years Cost </div> <div style="width: 10%; text-align: center;"> FY 2010 </div> <div style="width: 10%; text-align: center;"> FY 2011 Base </div> <div style="width: 10%; text-align: center;"> FY 2011 OCO </div> <div style="width: 10%; text-align: center;"> FY 2011 Total </div> <div style="width: 10%; text-align: center;"> Cost To Complete </div> <div style="width: 10%; text-align: center;"> Total Cost </div> <div style="width: 10%; text-align: center;"> Target Value of Contract </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 25%;">Project Cost Totals</div> <div style="width: 20%; text-align: center;">3,535.541</div> <div style="width: 10%; text-align: center;">37.368</div> <div style="width: 10%; text-align: center;"></div> <div style="width: 10%; text-align: center;">39.398</div> <div style="width: 10%; text-align: center;">0.000</div> <div style="width: 10%; text-align: center;">39.398</div> <div style="width: 10%; text-align: center;"></div> <div style="width: 10%; text-align: center;"></div> </div>									
Remarks									

UNCLASSIFIED

R-1 Line Item #175

Page 12 of 16

UNCLASSIFIED



UNCLASSIFIED

R-1 Line Item #175

Page 13 of 16

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204575N: <i>Elect Warfare Readiness Supt</i>	PROJECT 2263: <i>Information Warfare System</i>	

Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
MCS21 Planning, Optimization, and Tasking Services (MPOTS)	1	2009	4	2015
IMPACTS (Sprial Enhancement) #1	3	2009	3	2009
IMPACTS (Sprial Enhancement) #2	3	2010	3	2010
IMPACTS (Sprial Enhancement) #3	3	2011	3	2011
IMPACTS (Sprial Enhancement) #4	3	2012	3	2012
IMPACTS (Sprial Enhancement) #5	3	2013	3	2013
IMPACTS (Sprial Enhancement) #6	3	2014	3	2014
IMPACTS (Sprial Enhancement) #7	3	2015	3	2015
Modeling and Simulation Lab	1	2009	4	2015
Waveform Development	1	2010	4	2015
FIOC Delivery #1	2	2011	2	2011
FIOC Delivery #2	3	2012	3	2012
FIOC Delivery #3	2	2014	2	2014
FIOC Delivery #4	3	2015	3	2015
AN/TSQ265 & (V) 1 IO Cap Int, Test and Spt	1	2009	4	2015
Lighthouse Delivery #1	4	2009	4	2009
Lighthouse Delivery #2	4	2010	4	2010
Lighthouse Delivery #3	4	2011	4	2011

UNCLASSIFIED

R-1 Line Item #175

Page 14 of 16

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0204575N: Elect Warfare Readiness Supt		PROJECT 2263: Information Warfare System	
	Start		End	
Event	Quarter	Year	Quarter	Year
Lighthouse Delivery #4	4	2012	4	2012
Lighthouse Delivery #5	4	2013	4	2013
Lighthouse Delivery #6	4	2014	4	2014
Lighthouse Delivery #7	4	2015	4	2015
AN/TSQ265 #1	4	2010	4	2010
AN/TSQ265 #2	3	2011	3	2011
AN/TSQ265 #3	3	2014	3	2014
A/CNA	1	2009	4	2015
CNO Capabilities Development Studies	1	2009	2	2009
CNO Spiral Enhancements #1	2	2010	2	2010
CNO Spiral Enhancements #2	4	2011	4	2011
CNO Spiral Enhancements #3	4	2012	4	2012
CNO Spiral Enhancements #4	2	2014	2	2014
CNO Spiral Enhancements #5	3	2015	3	2015
DT Airborne IO Capabilities	1	2009	4	2009
MCS21 IO Capabilities (Test) #1	1	2009	4	2009
MCS21 IO Capabilities (Test) #2	4	2010	4	2010
MCS21 IO Capabilities (Test) #3	4	2011	4	2011
MCS21 IO Capabilities (Test) #4	1	2012	1	2012
MCS21 IO Capabilities (Test) #5	3	2013	3	2013

UNCLASSIFIED

R-1 Line Item #175

Page 15 of 16

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0204575N: <i>Elect Warfare Readiness Supt</i>	PROJECT 2263: <i>Information Warfare System</i>		

Event	Start		End	
	Quarter	Year	Quarter	Year
MCS21 IO Capabilities (Test) #6	4	2014	4	2014
MCS21 IO Capabilities (Test) #7	1	2015	1	2015

UNCLASSIFIED

R-1 Line Item #175

Page 16 of 16