

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: <b>FEBRUARY 2006</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY / BA-4</b>				R-1 ITEM NOMENCLATURE 0603755N/SHIP SELF DEFENSE			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	13.240	9.447	8.897	11.392	12.579	13.678	13.727
2133/QRCC/RAWG	3.577	3.488	3.491	3.555	3.564	3.670	3.715
2184 Force AAW Coord. Tech. (FACT)	9.663	5.959	1.989	2.005	3.006	10.008	10.012
3160 Ocean Surveillance	0.000	0.000	3.417	5.832	6.009	0.000	0.000
<b>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>  This program incorporates efforts dedicated to the enhancement of ship defense against Anti-Air Warfare (AAW) and other evolving threats. Its primary focus is on the development of technologies, systems, and procedures necessary to defeat the evolving Anti-Ship Cruise Missile (ASCM) threat and then expands to allow for application of these technologies in other warfighting areas. These projects focus on ship defense improvements through the development of advanced concepts and capabilities that will enhance both defense in depth of ships in a force and self defense of individual ships in a littoral war-fighting environment. Quick Reaction Combat Capability (QRCC), Project 2133, provides advanced concepts and technology developments for the multi-sensor integration of ship detection equipment, integration and coordination of ship self defense weapons, and coordination of hardkill and softkill assets to improve individual ship self defense capabilities against the ASCM threat. The Requirements and Analysis Working Group (RAWG) provides independent analysis for a variety of combat system trade-offs, ship class performance studies, and force protection strategic plan development. Force Anti-Air Warfare Coordination Technology (FACT), Project 2184, demonstrates AAW concepts and capabilities that will enhance the AAW warfighting ability of ships and aircraft and enable the coupling of the Force into a single, distributed weapon system through more effective use of tactical data, and force sensors and weapons. During FY06, the Innovation Team will begin to expand the offensive counter air (OCA) capabilities developed for the Joint Targeting Attack and Assessment Capability (JTAAC) utilizing electro-optical (EO) and infrared (IR) sensors to include other sensors. During FY07-FY09, under the Ocean Surveillance Initiative, Project 3160, the Innovation Team will continue leveraging their expertise in resolving complex warfighter issues as well as the end to end capability realized in previous products to develop a prototype focused on creating a coherent and consistent surface track picture. JTAAC brought innovative technology to offensive counter air and the Ocean Surveillance Initiative will extend those advancements to the maritime offensive counter air and surface track picture domains.							

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Exhibit R-2, RDTEN Budget Item Justification  
(Exhibit R-2, page 1 of 25)

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EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>FEBRUARY 2006</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>				PROJECT NUMBER AND NAME 2133/Quick Reaction Combat Capability/Req and Analysis W/G			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	3.577	3.488	3.491	3.555	3.564	3.670	3.715
RDT&E Articles Qty							

**A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

Quick Reaction Combat Capability (QRCC) provides advanced concepts and technology developments for the multi-sensor integration of ship detection equipment, integration and coordination of ship self defense weapons, and coordination of hardkill and softkill assets to improve individual ship self defense capabilities against the Anti-Ship Cruise Missile (ASCM) threat. The funding for the Self Defense Test Ship is for the dry-docking and overhaul of the Self Defense Test Ship to extend the service life for another 4 years. The Requirements and Analysis Working Group (RAWG) provides independent analysis for a variety of combat system trade-offs, ship class performance studies, and force protection strategic plan development.

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**Exhibit R-2, RDTE Budget Item Justification**  
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EXHIBIT R-2a, RDT&E Project Justification (Page 1)			DATE: <b>FEBRUARY 2006</b>																
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>	PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE	PROJECT NUMBER AND NAME 2133/Quick Reaction Combat Capability/Requirements and Analysis Working Grp																	
<b>B. Accomplishments/Planned Program</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th><th style="width: 25%;"></th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">3.577</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	3.577	0.000	0.000		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07																
Accomplishments/Effort/Subtotal Cost	3.577	0.000	0.000																
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 50px;">The RAWG will provide POM/PR process analysis, ship class, and component systems capabilities in support of Resource Manager's POM /PR budget process. The RAWG will provide analysis for a variety of combat systems trade-off and force protection strategic development. The RAWG will continue to respond to the PEO and OPNAV sponsors emergent tasking and participate and attend PRA working group meetings.</div>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th><th style="width: 25%;"></th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">3.488</td><td style="text-align: center;">0.000</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	0.000	3.488	0.000		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07																
Accomplishments/Effort/Subtotal Cost	0.000	3.488	0.000																
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 50px;">The RAWG will analyze Ship Self Defense PRA capabilities. Analysis will include baseline PRA requirements, excursions based on raid size, environment, and other operational considerations. The RAWG will respond to the PEO and OPNAV sponsors emergent tasking and participate and attend PRA working group meetings.</div>																			
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Accomplishments/Effort/Subtotal Cost	0.000	0.000	3.491																
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 50px;">The RAWG will continue leadership and management of the Common ASCM Threat Characterization process for PEO IWS. The RAWG will continue to analyze Ship Self Defense PRA capabilities and respond to the PEO and OPNAV sponsors emergent tasking and participate and attend PRA working group meetings.</div>																			

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>FEBRUARY 2006</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N / BA-4</b>	0603755N/SHIP SELF DEFENSE	2133 Quick Reaction Combat Capability/Requirements and Analysis Working Group

  

**C. PROGRAM CHANGE SUMMARY:**

	FY 2005	FY 2006	FY 2007
Funding:			
FY 2006 President Budget	3.584	3.542	3.526
FY 2007 President Budget	3.577	3.488	3.491
Total Adjustments	-0.007	-0.054	-0.035
Summary of Adjustments			
Other general provisions	-0.005	-0.001	-0.009
Programmatic Changes	-0.002	-0.053	-0.042
Revised rates & inflation indices	0.000	0.000	0.016
Subtotal	-0.007	-0.054	-0.035

  

Schedule:

N/A

  
  

Technical:

N/A

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	FEBRUARY 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-4	0603755N/SHIP SELF DEFENSE	2133 Quick Reaction Combat Capability/Requirements and Analysis Working Group	
<p>D. OTHER PROGRAM FUNDING SUMMARY: N/A</p> <p>E. ACQUISITION STRATEGY: N/A</p> <p>F. MAJOR PERFORMERS:</p> <p>Dahlgren/ NSWCDD - Responsible for overall combat systems performance analysis for Navy ship classes.</p>			

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Exhibit R-3 Cost Analysis (page 1)										DATE: <b>FEBRUARY 2006</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>			PROGRAM ELEMENT 0603755N/SHIP SELF DEFENSE			PROJECT NUMBER AND NAME 2133 Quick Reaction Combat Capability/Requirements and Analysis Working Group								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development													0.000	
Ancillary Hardware Development													0.000	
Component Development													0.000	
Ship Integration													0.000	
Ship Suitability													0.000	
Systems Engineering	WX	Dahlgren, NSWC DD	4.256	3.577	10/04	3.488	10/05	3.491	10/06			Continuing	Continuing	
Training Development													0.000	
Licenses													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal Product Development			4.256	3.577		3.488		3.491				Continuing	Continuing	
Remarks:														
Development Support													0.000	
Software Development													0.000	
Training Development													0.000	
Integrated Logistics Support													0.000	
Configuration Management													0.000	
Technical Data													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal Support			0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:														

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Exhibit R-2, RD TEN Budget Item Justification  
(Exhibit R-2, page 6 of 25)

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Exhibit R-3 Cost Analysis (page 2)										DATE: <b>FEBRUARY 2006</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDTE&amp;E, N / BA-4</b>			PROGRAM ELEMENT 0603755N/SHIP SELF DEFENSE			PROJECT NUMBER AND NAME 2133 Quick Reaction Combat Capability/Requirements and Analysis Working Group								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation			0.000										0.000	
Live Fire Test & Evaluation													0.000	
Test Assets													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:														
Contractor Engineering Support													0.000	
Government Engineering Support													0.000	
Program Management Support													0.000	
Travel													0.000	
Labor (Research Personnel)													0.000	
SBIR Assessment													0.000	
Subtotal Management			0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:														
Total Cost			4.256	3.577		3.488		3.491		0.000		Continuing	14.812	
Remarks:														

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Exhibit R-2, RDTE Budget Item Justification  
(Exhibit R-2, page 7 of 25)

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EXHIBIT R4, Schedule Profile: <b>NOT APPLICABLE</b>																							DATE: <b>FEBRUARY 2006</b>					
<b>N/A</b>																												
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
<b>RDT&amp;E, N / BA-4</b>					0603755N/SHIP SELF DEFENSE												2133 QRCC/RAWG											
Fiscal Year	2005				2006				2007				2008				2009				2010				2011			
	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
Acquisition Milestones																												
Test & Evaluation Milestones																												
Production Milestones																												
Deliveries																												

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## CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE:			
NOT APPLICABLE						FEBRUARY 2006			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT			PROJECT NUMBER AND NAME				
RDT&E, N / BA-4		0603755N/SHIP SELF DEFENSE			2133 Quick Reaction Combat Cap/Req & Analysis Working Grp				
Schedule Profile		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Prototype Phase									
System Design Review (SDR)									
Milestone II (MSII)									
Contract Preparation									
Software Specification Review (SSR)									
Preliminary Design Review (PDR)									
System Development									
Critical Design Review (CDR)									
Quality Design and Build									
Test Readiness Review (TRR)									
Developmental Testing (DT-IIA)									
Eng Dev Model (EDM) Radar Delivery - Lab									
Software Delivery 1XXSW									
Preproduction Readiness Review (PRR)									
EDM Radar Delivery - Flt Related									
Milestone C (MS C)									
Operational Testing (OT-IIA)									
Start Low-Rate Initial Production I (LRIP I)									
Software Delivery 2XXSW									
Developmental Testing (DT-IIB1)									
Developmental Testing (DT-IIB2)									
Start Low-Rate Initial Production II									
Operational Testing (OT-IIB)									
Developmental Testing (DT-IIC)									
Functional Configuration Audit (FCA)									
Low-Rate Initial Production I Delivery									
Technical Evaluation (TECHEVAL)									
Physical Configuration Audit									
Operational Evaluation (OT-IIC) (OPEVAL)									
Low-Rate Initail Production II Delivery									
IOC									
Full Rate Production (FRP) Decision									
Full Rate Production Start									
First Deployment									

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Exhibit R-2, RD TEN Budget Item Justification  
(Exhibit R-2, page 9 of 25)

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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>FEBRUARY 2006</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>		PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE			PROJECT NUMBER AND NAME 2184 Force AAW Coordination Technology			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		9.663	5.959	1.989	2.005	3.006	10.008	10.012
RDT&E Articles Qty		n/a	n/a	n/a	n/a	n/a	n/a	n/a

### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Force Anti-Air Warfare Technology (FACT) Program is an advanced development effort designed to demonstrate Force Anti-Air Warfare (AAW) concepts and capabilities that will significantly improve our Force defense in depth, including both local area and self defense capabilities against current and future AAW threats. FACT improvements are designed to enhance the AAW warfighting ability of ships and aircraft and to enable coupling of the Force into a single, AAW distributed weapon system and towards more effective use of tactical data and the cooperative use of all the force sensors and weapons. These capabilities will provide the ship defense flexibility needed to meet the threat brought about by increasing numbers of highly sophisticated weapons held by potentially hostile third world countries. FACT defines requirements and develops prototype systems or modifications to existing systems to test new concepts for the coordination of Force operations. FACT is a model Sea Enterprise effort that consistently delivers advanced war-fighting capability that addresses current Fleet shortfalls and needs quickly and cost effectively. Some examples of prototype systems now in production are AN/SPS-48C Detection Data Converter, AN/SPS-48E Environmental Control Feature, Shipboard Gridlock System Automatic Correlation (SGS/AC) and Dial-a-Track Quality (Link-11 Quality Selection). Other FACT developments nearing production stages are the Automatic Identification System (Auto-ID) and the Multi-Frequency Link-11 capability; Dual Net Multi-Frequency Link-11 (DNMFL); Force Threat Evaluation Weapons Assignment (FTEWA); and the prototype Area Air Defense Commander (AADC) and the Joint Targeting Attack and Assessment Capability (JTAAC). During FY06, the Innovation Team will begin to expand the offensive counter air (OCA) capabilities developed for JTAAC utilizing electro-optical (EO) and infrared (IR) sensors to include other sensors. This effort will be a complement to the JTAAC, leveraging the technologies and end to end capability realized by JTAAC to inform future maritime offensive counter air efforts. The Team will continue development and transition of the JTAAC initiative and begin the follow-on FACT initiative in FY10.

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>	PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE	PROJECT NUMBER AND NAME 2184 Force AAW Coordination Technology																	
<b>B. Accomplishments/Planned Program</b>																			
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	FY05	FY06	FY07																
Accomplishments/Effort/Subtotal Cost	9.663	5.959	1.989																
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 60px;">On going development of current FACT initiative and support continuing development/demonstration and transition of JTAAC within the USN. Conduct critical FACT initiative proof of concept experiments. Provide top level programmatic support, technical analysis and assist in the development processes, procedures and documentation that impact the execution of the FACT program requirements.</div>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 10%; text-align: center;">FY05</td><td style="width: 10%; text-align: center;">FY06</td><td style="width: 10%; text-align: center;">FY07</td><td style="width: 40%;"></td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table>						FY05	FY06	FY07		Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000		RDT&E Articles Quantity				
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RDT&E Articles Quantity																			
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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>	PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE	PROJECT NUMBER AND NAME 2184 Force AAW Coordination Technology

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2005	FY 2006	FY 2007
FY 2006 President's Budget	5.818	6.050	7.408
FY 2007 President's Budget	9.663	5.959	1.989
Total Adjustments	3.845	-0.091	-5.419
Summary of Adjustments			
Other general provisions	-0.154	-0.091	-0.012
Programmatic Changes	3.999		-5.420
Revised rates & inflation indices			0.013
Subtotal	3.845	-0.091	-5.419

Schedule:

Not Applicable.

  
  
  

Technical:

Not Applicable.

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<p>D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>E. ACQUISITION STRATEGY: Not Applicable</p> <p>F. MAJOR PERFORMERS: APL/Laurel, MD 11/02</p>		

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Exhibit R-3 Cost Analysis (page 1)										DATE: <b>FEBRUARY 2006</b>				
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Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	CPFF	APL/Laurel, MD	89.873	9.663	11/04	5.959	11/05	1.989	11/06			CONT	CONT	
Systems Engineering		SPAWAR, S.D.	0.150										0.150	
Systems Engineering		SPAWAR NORFOLK	0.417										0.417	
Systems Engineering		PUGET SOUND BOSTON	0.029										0.029	
Systems Engineering	GSA	GRCI	0.204										0.204	
Miscellaneous		Unknown	0.187										0.187	
Pontoon Barrier		Unknown	0.961										0.961	
Licenses													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
<b>Subtotal Product Development</b>			91.821	9.663		5.959		1.989				CONT	CONT	
Remarks:														
Development Support													0.000	
Software Development													0.000	
Integrated Logistics Support		NSWC/PHD	0.175										0.175	
Integrated Logistics Support		NSLC Mech, PA	0.005										0.005	
Integrated Logistics Support	GSA	AMERIND	0.111										0.111	
Technical Data		NSWC/DD/ Dahlgren, VA	0.150										0.150	
GFE													0.000	
Award Fees													0.000	
Subtotal Support			0.441	0.000		0.000		0.000		0.000		0.000	0.441	
Remarks:														

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Exhibit R-2, RDTEEN Budget Item Justification  
(Exhibit R-2, page 14 of 25)

# UNCLASSIFIED

## CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: <b>FEBRUARY 2006</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME								
<b>RDT&amp;E, N / BA-4</b>			0603755N/SHIP SELF DEFENSE			2184 Force AAW Coordination Technology								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation														
Operational Test & Evaluation	CPFF	APL/Laurel, MD	2.629	0.000		0.000		0.000				CONT	CONT	
Live Fire Test & Evaluation													0.000	
Test Assets													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal T&E			2.629	0.000		0.000		0.000				CONT	CONT	
Remarks:														
Contractor Engineering Support	CPAF	RGE, SPRINGFIELD, VA	0.006										0.006	
Contractor Engineering Support	CPFF	SPA,FAIRFAX, VA	0.100										0.100	
Contractor Engineering Support	CPFF	LOGICON, FALLS CHUR, VA	0.060											
Contractor Engineering Support	GSA	STRATEGIC INSIGHT, VA	0.189											
Program Management Support	GSA	DSR, FAIRFAX, VA	0.590										0.590	
Program Management Support	<b>GSA/CPFF</b>	DELTA ARLINGTON VA	0.261	0.000		0.000		0.000				CONT	CONT	
Travel													0.000	
Labor (Research Personnel)													0.000	
Subtotal Management			1.206	0.000		0.000		0.000				CONT	CONT	
Remarks:														
<b>Total Cost</b>			96.097	9.663		5.959		1.989		0.000		CONT	CONT	
Remarks:														

R-1 SHOPPING LIST - Item No. 70

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification  
(Exhibit R-2, page 15 of 25)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R4, Schedule Profile:																								DATE:				FEBRUARY 2006							
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-4												0603755N/SHIP SELF DEFENSE												2184 Force AAW Coordination Technology											
Fiscal Year					2005				2006				2007				2008				2009				2010				2011						
					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			
Support GWOT Operations					Continued △																														
Support Transtion on JTAAC								Begin △																											
Begin Follow-On FACT Initiative																						Begin △													

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**UNCLASSIFIED**

**Exhibit R-2, RD TEN Budget Item Justification**  
(Exhibit R-2, page 17 of 25)

R-1 SHOPPING LIST - Item No. 70

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>FEBRUARY 2006</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>		PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE			PROJECT NUMBER AND NAME 3160 Ocean Surveillance Initiative			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost				3.417	5.832	6.009		
RDT&E Articles Qty			n/a	n/a	n/a	n/a	n/a	n/a

### A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Innovation Program is an advanced development effort designed to demonstrate Force concepts and capabilities which significantly improve our Force defense in depth, including both local area and self defense capabilities against current and future threats. The Innovation Team has consistently provided the warfighter innovative products which resolve current complex warfighter issues quickly and cost effectively. The Innovation Team will begin expanding its focus to include maritime offensive counter air. Under the auspices of the Ocean Surveillance Initiative, this innovation cell plans to leverage technologies that they developed in the JTAAC to provide a prototype which will create a coherent surface track picture in a large area of operations (AO) enabling sustained situational understanding. Their focus will be optimizing sensor selection and configuration to reliably detect, track, and classify ships in the AO with an objective goal of attaining a tactically significant probability of detection, continuous track, and correct classification down to small and medium sized vessels in sea state 5. The Ocean Surveillance Initiative is a complement to JTAAC. The Ocean Surveillance Initiative is the natural progression for the USN to leverage the JTAAC offensive counter air end to end capability to the maritime domain.

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>FEBRUARY 2006</b>																																														
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>	PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE	PROJECT NUMBER AND NAME 3160 Ocean Surveillance Initiative																																															
<b>B. Accomplishments/Planned Program</b>																																																	
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 15%;">FY05</td><td style="width: 15%;">FY06</td><td style="width: 15%;">FY07</td><td style="width: 25%;"></td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td style="text-align: center;">3.417</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">On-going development of an Ocean Surveillance Initiative prototype which will leverage the end to end capability realized by JTAAC and have the objective goal of attaining a tactically significant probability of detection, continuous track, and correct classification of small and medium sized vessels at sea state 5. Conduct critical experiments in support of the Ocean Surveillance Initiative. Provide top level programmatic support, technical analysis and assist in the development processes, procedures and documentation that impact the execution of the Ocean Surveillance Initiative.</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"><tr><td style="width: 30%;"></td><td style="width: 15%;">FY05</td><td style="width: 15%;">FY06</td><td style="width: 15%;">FY07</td><td style="width: 25%;"></td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td style="text-align: center;">0.000</td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 70px; margin-top: 20px;"></div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"><tr><td style="width: 30%;"></td><td style="width: 15%;">FY05</td><td style="width: 15%;">FY06</td><td style="width: 15%;">FY07</td><td style="width: 25%;"></td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td></td><td></td><td></td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 70px; margin-top: 20px;"></div>						FY05	FY06	FY07		Accomplishments/Effort/Subtotal Cost			3.417		RDT&E Articles Quantity						FY05	FY06	FY07		Accomplishments/Effort/Subtotal Cost			0.000		RDT&E Articles Quantity						FY05	FY06	FY07		Accomplishments/Effort/Subtotal Cost					RDT&E Articles Quantity				
	FY05	FY06	FY07																																														
Accomplishments/Effort/Subtotal Cost			3.417																																														
RDT&E Articles Quantity																																																	
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	FY05	FY06	FY07																																														
Accomplishments/Effort/Subtotal Cost																																																	
RDT&E Articles Quantity																																																	

R-1 SHOPPING LIST - Item No. 70

UNCLASSIFIED

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>FEBRUARY 2006</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>	PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE	PROJECT NUMBER AND NAME 3160 Ocean Surveillance Initiative

**C. PROGRAM CHANGE SUMMARY:**

	FY 2005	FY 2006	FY 2007
FY 2006 President's Budget	0.000	0.000	0.000
FY 2007 President's Budget	0.000	0.000	3.417
Total Adjustments	0.000	0.000	3.417
Summary of Adjustments			
Programmatic Changes			3.393
Revised rates & inflation indices			0.024
Subtotal			3.417

Schedule:

Not Applicable.

  
  
  

Technical:

Not Applicable.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>FEBRUARY 2006</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-4</b>	PROGRAM ELEMENT NUMBER AND NAME 0603755N/SHIP SELF DEFENSE	PROJECT NUMBER AND NAME 3160 Ocean Surveillance Initiative
<p>D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>E. ACQUISITION STRATEGY: Not Applicable</p> <p>F. MAJOR PERFORMERS: APL/Laurel, MD 11/02</p>		

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# UNCLASSIFIED

## CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: <b>FEBRUARY 2006</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME							
<b>RDT&amp;E, N / BA-4</b>			0603755N/SHIP SELF DEFENSE				3160 Ocean Surveillance Initiative							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	CPFF	APL/Laurel, MD	0.000		n/a		n/a	3.417	11/06			19.231	19.231	
Systems Engineering														
Systems Engineering														
Systems Engineering														
Systems Engineering														
Miscellaneous														
Pontoon Barrier														
Licenses														
Tooling														
GFE														
Award Fees														
Subtotal Product Development								3.417				19.231	19.231	
Remarks:														
Development Support														
Software Development														
Integrated Logistics Support														
Integrated Logistics Support														
Integrated Logistics Support														
Technical Data														
GFE														
Award Fees														
Subtotal Support														
Remarks:														

R-1 SHOPPING LIST - Item No. 70

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification  
(Exhibit R-2, page 22 of 25)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: <b>FEBRUARY 2006</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDTE, N / BA-4</b>			PROGRAM ELEMENT 0603755N/SHIP SELF DEFENSE			PROJECT NUMBER AND NAME 3160 Ocean Surveillance Initiative								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation														
Operational Test & Evaluation														
Live Fire Test & Evaluation														
Test Assets														
Tooling														
GFE														
Award Fees														
Subtotal T&E														
Remarks:														
Contractor Engineering Support														
Contractor Engineering Support														
Contractor Engineering Support														
Contractor Engineering Support														
Program Management Support														
Program Management Support														
Travel														
Labor (Research Personnel)														
Subtotal Management														
Remarks:														
Total Cost								3.417		0.000		19.231	19.231	
Remarks:														

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Exhibit R-2, RDTE Budget Item Justification  
(Exhibit R-2, page 23 of 25)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R4, Schedule Profile:																								DATE:				FEBRUARY 2006							
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME														PROJECT NUMBER AND NAME											
RDT&E, N / BA-4										0603755N/SHIP SELF DEFENSE														3160 Ocean Surveillance Initiative											
Fiscal Year						2005				2006				2007				2008				2009				2010				2011					
						1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
Develop Ocean Surveillance Prototype													Begin △											End △											

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**UNCLASSIFIED**

**CLASSIFICATION:**

[illegible]

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**Exhibit R-2, RD TEN Budget Item Justification**  
(Exhibit R-2, page 25 of 25)