

# UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification					DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY /</b>					R-1 ITEM NOMENCLATURE 0604230N Naval Support System			
	<b>BA 5</b>							
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	1.927	5.152	2.275	2.285	2.438	1.444	1.484	1.519
4011 Naval Coastal Warfare	0.000	5.152	2.275	2.285	2.438	1.444	1.484	1.519
9370 Deployable Autonomous Distribution Systems	0.960	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9371 Integrated Condition Assessment System	0.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles								
<p><b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <p>The Naval Coastal Warfare (NCW) community consists of 22 Mobile Inshore Undersea Warfare (MIUW) units and 8 Harbor Defense Command (HDC) units operating Mobile Ashore Support Terminal IIIs (MAST IIIs). NCW also includes 14 Inshore Boat Units (IBU) comprised of 6 small craft (boats) each on which are installed C4I systems .</p> <p>The Mobile Inshore Undersea Warfare - System Upgrade (MIUW-SU), the primary system used by the NCW MIUW Units, is the only land-based and rapidly deployable mobile Navy system with the ability to conduct surface and subsurface surveillance in coastal and littoral areas. The system provides detailed contact information via various C4I systems to the tactical area commander based on radar, visual, thermal, electronic, and underwater acoustic sensor information. Missions supported with the MIUW-SU's are: OCONUS and INCONUS Force Protection, protecting port areas, high value assets, and surveilling the near shore areas. The MAST III is the C4ISR hub for the NCW Commander. MAST IIIs deploy to support Force Protection/Force Security Officer for Commander, Amphibious Group in its Harbor Defense and Coastal Sea Control missions.</p> <p>In the aftermath of the attack on USS COLE and particularly post 11 SEP, the role, structure, and utilization for the NCW program has changed appreciably and continues to evolve in the face of developing world events. However, the core competencies resident in expeditionary NCW forces to conduct surveillance, C4I and patrol/interdiction have not changed. NCW remains a specialized force constituted to accomplish specific tasks under specific conditions, but also agile enough to fill emergent and non-traditional roles. Post 11 SEP, NCW Groups and Units have been mobilized to perform force protection missions at different levels in all CinC area of responsibility (AOR)'s and within the continental United States in support of Maritime Homeland Security.</p>								

R-1 SHOPPING LIST - Item No. 90

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Exhibit R-3, Project Cost Analysis  
(Exhibit R-3, page 1 of 22)

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EXHIBIT R-2, RDT&E Budget Item Justification		DATE: <b>February 2005</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	R-1 ITEM NOMENCLATURE 0604230N Naval Support System	
<p>This RDT&amp;E exhibit supports the future direction of Naval Coastal Warfare as it is being determined externally by world events and internally by the progress of DoD initiatives to replace Cold War forces and capabilities with 21st century "transformational" forces and capabilities. NCW forces currently field legacy systems designed to counter more traditional military threats in a two Major Theater War scenario. Future NCW forces will develop into a highly effective, relatively low cost transformational force capable of operating anywhere in the world to perform a spectrum of force protection missions ranging from full scale port security/harbor defense operations during wartime to short duration point defense of high value units or facilities in operations other than war. This transformational force will be agile, tailorable, and scalable and will use applied technology to quickly detect, deter or interdict potential threats to DoN assets in the littoral environment. Next generation surface and subsurface surveillance systems, as well as enhanced C4I capabilities, are required to meet these operational objectives. These capabilities must be interoperable with higher and adjacent echelons of command (to include coalition allies) as well as with supporting elements to include joint forces.</p> <p>FY04 included two \$1M Congressional Add:</p> <ul style="list-style-type: none"><li>- Deployable Autonomous Distribution Systems (DADS) - This effort tested the DADS sensors and technologies for Naval Coastal Warfare applicability, in particular, harbor mouth tripwire against the mini-sub threat. As part of this evaluation, the contractor will develop 2 to 3 sensor prototypes for operational evaluation. If laboratory and field testing prove successful, these prototypes could be used as the pre-production engineering models for follow-on production and fielding in Naval Coastal Warfare.</li><li>- Integrated Condition Assessment System (ICAS) - This effort provides for "data mining" of ICAS data. Data mining is the processing of raw data into useful information to determine system anomalies. The funds will be used for development and testing data mining tools to extract meaningful data, develop rules for diagnostics and prognostics then present this information and results to the user in an easy to understand format using the existing ICAS system and development and testing advanced diagnostics and prognostics tools for ICAS equipped ship's machinery faults by exploiting existing data from the Navy's Maintenance Engineering Library Server (MELS). These tools will enable the reduction of maintenance requirements on auxiliary machinery and alert the crew to impending failures.</li></ul> <p>(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SYSTEMS DEVELOPMENT AND DEMONSTRATION because it encompasses development and demonstration of new end-items prior to production approval decision .</p>		

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Exhibit R-3, Project Cost Analysis  
(Exhibit R-3, page 2 of 22)

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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System			PROJECT NUMBER AND NAME 4011 Naval Coastal Warfare			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	<b>0.000</b>	<b>5.152</b>	<b>2.275</b>	<b>2.285</b>	<b>2.438</b>	<b>1.444</b>	<b>1.484</b>	<b>1.519</b>
RDT&E Articles Qty								

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

The Naval Coastal Warfare (NCW) community consists of 22 Mobile Inshore Undersea Warfare (MIUW) units and 8 Harbor Defense Command (HDC) units operating Mobile Ashore Support Terminal IIIs (MAST iiis). NCW also includes 14 Inshore Boat Units (IBU) comprised of 6 small craft (boats) each on which are installed C4I systems .

The Mobile Inshore Undersea Warfare - System Upgrade (MIUW-SU), the primary system used by the NCW MIUW Units, is the only land-based and rapidly deployable mobile Navy system with the ability to conduct surface and subsurface surveillance in coastal and littoral areas. The system provides detailed contact information via various C4I systems to the tactical area commander based on radar, visual, thermal, electronic, and underwater acoustic sensor information. Missions supported with the MIUW-SU's are: OCONUS and INCONUS Force Protection, protecting port areas, high value assets, and surveilling the near shore areas. The MAST III is the C4ISR hub for the NCW Commander. MAST IIIs deploy to support Force Protection/Force Security Officer for Commander, Amphibious Group in its Harbor Defense and Coastal Sea Control missions.

In the aftermath of the attack on USS COLE and particularly post 11 SEP, the role, structure, and utilization for the NCW program has changed appreciably and continues to evolve in the face of developing world events. However, the core competencies resident in expeditionary NCW forces to conduct surveillance, C4I and patrol/interdiction have not changed. NCW remains a specialized force constituted to accomplish specific tasks under specific conditions, but also agile enough to fill emergent and non-traditional roles. Post 11 SEP, NCW Groups and Units have been mobilized to perform force protection missions at different levels in all CinC AOR's and within the continental United States in support of Maritime Homeland Security.

This RDT&E exhibit supports the future direction of Naval Coastal Warfare as it is being determined externally by world events and internally by the progress of DoD initiatives to replace Cold War forces and capabilities with 21st century "transformational" forces and capabilities. NCW forces currently field legacy systems designed to counter more traditional military threats in a two Major Theater War scenario. Future NCW forces will develop into a highly effective, relatively low cost transformational force capable of operating anywhere in the world to perform a spectrum of force protection missions ranging from full scale port security/harbor defense operations during wartime to short duration point defense of high value units or facilities in operations other than war. This transformational force will be agile, tailorable, and scalable and will use applied technology to quickly detect, deter or interdict potential threats to DoN assets in the littoral environment. Next generation surface and subsurface surveillance systems, as well as enhanced C4I capabilities, are required to meet these operational objectives. These capabilities must be interoperable with higher and adjacent echelons of command (to include coalition allies) as well as with supporting elements to include joint forces.

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**Exhibit R-3, Project Cost Analysis**  
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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System	PROJECT NUMBER AND NAME 4011 Naval Coastal Warfare																	
<b>(U) B. Accomplishments/Planned Program</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;"></th> <th style="width: 15%;">FY 04</th> <th style="width: 15%;">FY 05</th> <th style="width: 15%;">FY 06</th> <th style="width: 15%;">FY 07</th> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.640</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td>RDT&amp;E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	0.000	0.640	0.000	0.000	RDT&E Articles Quantity				
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<div style="border: 1px solid black; padding: 5px;"> <b>FY05:</b> Perform systems engineering analysis and integration activities associated with development of an Integrated Anti-Diver System (IADS) for Expeditionary Harbor Defense Operations.         </div>																			
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<div style="border: 1px solid black; padding: 5px;"> <b>FY05:</b> Begin IADS analysis, architectural design, and design review processes. Conduct requirements tractability analysis to ensure operational requirements are adequately captured in performance and design specifications. Develop IADS acquisition strategy based on requirements. Conduct Preliminary Design Review (PDR) on hardware and software components. Test a prototype IADS against operational NCW scenarios and threats. Beginning in FY05 and continuing thru FY07, NCW will seek to leverage ongoing Home Land Security (HLS)/US Coast Guard, and Navy Shipboard Protection System (SPS) efforts in diver defense, to develop an integrated anti-diver system or IADS, tailored to the expeditionary NCW harbor defense mission.         </div>																			
<div style="border: 1px solid black; padding: 5px;"> <b>FY06:</b> Perform systems engineering analysis and integration activities to integrate IADS into the NCW C4ISR architecture. Research and develop next generation NCW surveillance and C4I systems capabilities, to include new or improved Tactical Command and Control system, Electronic Systems Management, Anti-Submarine Warfare, Data Fusion, Autonomous Sensors, Small Craft Situational Awareness/Combat ID, improved IR cameras, auto detect and track software, and improved data recording technologies. Conduct advanced concept technology demonstrations for Sea Eagle.         </div>																			
<div style="border: 1px solid black; padding: 5px;"> <b>FY07:</b> Provide system engineering and software/system integration activities with next generation C4ISR systems and sensors with an emphasis on Undersea Warfare capabilities.         </div>																			
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<div style="border: 1px solid black; padding: 5px;"> <b>FY05:</b> Perform initial development testing of hardware and software components.  <b>FY06/07:</b> Development testing of hardware and software components, with emphasis on integration of new NCW technologies into Navy and Ashore AT/FP C4ISR architecture.         </div>																			

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<p><b>(U) C. PROGRAM CHANGE SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 10%; text-align: right;">FY 2004</th> <th style="width: 10%; text-align: right;">FY 2005</th> <th style="width: 10%; text-align: right;">FY 2006</th> <th style="width: 10%; text-align: right;">FY 2007</th> </tr> </thead> <tbody> <tr> <td>(U) Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY05 President's Budget</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">5.201</td> <td style="text-align: right;">4.279</td> <td style="text-align: right;">3.272</td> </tr> <tr> <td>FY06 President's Budget</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">5.152</td> <td style="text-align: right;">2.275</td> <td style="text-align: right;">2.285</td> </tr> <tr> <td>Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">-0.049</td> <td style="text-align: right; border-top: 1px solid black;">-2.004</td> <td style="text-align: right; border-top: 1px solid black;">-0.987</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td>Other Program Adjustments</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">-0.003</td> <td style="text-align: right;">-2.004</td> <td style="text-align: right;">-0.987</td> </tr> <tr> <td>Section 8122: Assumed Management Improvements</td> <td></td> <td style="text-align: right;">-0.016</td> <td></td> <td></td> </tr> <tr> <td>Section 8131: Non-Statutory Funding Set Asides</td> <td></td> <td style="text-align: right;">-0.030</td> <td></td> <td></td> </tr> <tr> <td>Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">-0.049</td> <td style="text-align: right; border-top: 1px solid black;">-2.004</td> <td style="text-align: right; border-top: 1px solid black;">-0.987</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) Schedule: Not Applicable</p> <p style="margin-top: 20px;">(U) Technical: Not Applicable</p>						FY 2004	FY 2005	FY 2006	FY 2007	(U) Funding:					FY05 President's Budget	0.000	5.201	4.279	3.272	FY06 President's Budget	0.000	5.152	2.275	2.285	Total Adjustments	0.000	-0.049	-2.004	-0.987	Summary of Adjustments					Other Program Adjustments	0.000	-0.003	-2.004	-0.987	Section 8122: Assumed Management Improvements		-0.016			Section 8131: Non-Statutory Funding Set Asides		-0.030			Subtotal	0.000	-0.049	-2.004	-0.987
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<p><b>(U) D. OTHER PROGRAM FUNDING SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Line Item No. &amp; Name</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2004</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2005</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2006</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2007</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2008</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2009</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2010</th> <th style="text-align: right; border-bottom: 1px solid black;">FY 2011</th> </tr> </thead> <tbody> <tr> <td>OPN 8120 Naval Coastal Warfare</td> <td style="text-align: right;">32.591</td> <td style="text-align: right;">26.977</td> <td style="text-align: right;">30.876</td> <td style="text-align: right;">13.187</td> <td style="text-align: right;">12.975</td> <td style="text-align: right;">12.766</td> <td style="text-align: right;">13.039</td> <td style="text-align: right;">13.313</td> </tr> <tr> <td colspan="9" style="padding-top: 10px;">Related RDT&amp;E:</td> </tr> <tr> <td>PE 604230N/9370 Deployable Autonomous Distribution Systems</td> <td style="text-align: right;">0.960</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> </tbody> </table> <p style="margin-top: 20px;"><b>(U) E. ACQUISITION STRATEGY:</b></p> <p>Not Applicable</p> <p style="margin-top: 20px;"><b>(U) F. Major Performers:</b></p> <p>SSC San Diego and SSC Charleston are the major performers. These activities perform systems engineering analysis and integration activities associated with next generation surveillance and C4I systems with focus on integration of existing joint, service, and non – DoD systems. SSC San Diego is the primary integrator for software and COTS/GOTS equipment.</p>										Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	OPN 8120 Naval Coastal Warfare	32.591	26.977	30.876	13.187	12.975	12.766	13.039	13.313	Related RDT&E:									PE 604230N/9370 Deployable Autonomous Distribution Systems	0.960	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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<b>RDT&amp;E, N / BA 5</b>			0604230N Naval Support System			4011 Naval Coastal Warfare						
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
Product Development	WX	SSC CH/SSC SD		2.244	02/05	0.696	10/05	0.673	10/06	Continuing	Continuing	
Systems Engineering	WX	SSC CH/SSC SD		2.258	02/05	0.549	10/05	0.552	10/06	Continuing	Continuing	
Training Development	WX	SSC CH/SSC SD		0.200	02/05	0.220	10/05	0.240	10/06	Continuing	Continuing	
Subtotal Product Development			0.000	4.702		1.465		1.465		Continuing	Continuing	
Remarks:												
Technical Data	WX	SSC CH/SSC SD		0.100	02/05	0.100	10/05	0.100	10/06	Continuing	Continuing	
Subtotal Support			0.000	0.100		0.100		0.100		Continuing	Continuing	
Remarks:												

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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	
Program Management Support	WX	SSC CH/SSC SD		0.300	02/05	0.310	10/05	0.320	10/06	Continuing	Continuing		
Travel	Various	Various		0.050	02/05	0.400	10/05	0.400	10/06	Continuing	Continuing		
Subtotal Management			0.000	0.350		0.710		0.720		Continuing	Continuing		
Remarks:													
Total Cost			0.000	5.152		2.275		2.285	VARIOUS	Continuing	Continuing		
Remarks:													

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EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA 5												0604230N Naval Support System												4011 Naval Coastal Warfare											
Fiscal Year	2004				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	1	2	3	4			
Acquisition Milestones																																			
Engineering Milestones						▲		▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲	▲			▲			
						PDR		CDR	PDR			CDR	PDR			CDR	PDR			CDR	PDR			CDR	PDR			CDR	PDR			CDR			
Prototype Phase																																			
Development																																			
Delivery																																			
Test & Evaluation Milestones							▲				▲				▲				▲				▲				▲				▲				
Development Test							DT				DT				DT				DT				DT				DT				DT				
Operational Test																																			

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Exhibit R-4a, Schedule Detail						DATE: <b>February 2005</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	PROGRAM ELEMENT 0604230N Naval Support System				PROJECT NUMBER AND NAME 4011 Naval Coastal Warfare			
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Preliminary Design Review (PDR)		2Q	1Q	1Q	1Q	1Q	1Q	1Q
Critical Design Review (CDR)		4Q	4Q	4Q	4Q	4Q	4Q	4Q
Developmental Test and Evaluation		3Q	3Q	3Q	3Q	3Q	3Q	3Q

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Exhibit R-3, Project Cost Analysis  
(Exhibit R-3, page 10 of 22)

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification					DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System			PROJECT NUMBER AND NAME 9370 Deployable Autonomous Distribution Systems			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.960	0.000	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

### (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Deployable Autonomous Distribution Systems (DADS) - This effort tested the DADS sensors and technologies for Naval Coastal Warfare applicability, in particular, harbor mouth tripwire against the mini-sub threat. As part of this evaluation, the contractor developed a sensor prototype for operational evaluation. If laboratory and field testing prove successful, these prototypes could be used as the pre-production engineering models for follow-on production and fielding in Naval Coastal Warfare.

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Exhibit R-3, Project Cost Analysis  
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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>																
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System	PROJECT NUMBER AND NAME 9370 Deployable Autonomous Distribution Systems																	
<b>(U) B. Accomplishments/Planned Program</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 15%; text-align: center;">FY 04</td> <td style="width: 15%; text-align: center;">FY 05</td> <td style="width: 15%; text-align: center;">FY 06</td> <td style="width: 15%; text-align: center;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.119</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> </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;"> <p><b>FY04:</b> Performed systems engineering analysis and integration activities associated with next generation surveillance and C4I systems with focus on integration of existing joint, service, and non – DoD systems. Refined configuration management baselines and acquisition strategy to ensure cost effective solutions are transitioned into production.</p> </div>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	0.119	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	0.119	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 15%; text-align: center;">FY 04</td> <td style="width: 15%; text-align: center;">FY 05</td> <td style="width: 15%; text-align: center;">FY 06</td> <td style="width: 15%; text-align: center;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.771</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> </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;"> <p><b>FY04:</b> Began analysis, architectural design, and design review processes. Conducted requirements traceability analysis to ensure operational requirements are adequately captured in performance and design specifications. Developed acquisition strategy based on requirements. Conducted Preliminary Design Review (PDR) on hardware and software components. Utilized analysis, architectural design, and design review processes to design, develop, document, and implement surface / surveillance sensors and C4I system upgrades. Conducted Critical Design Review (CDR) on hardware and software components.</p> </div>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	0.771	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	0.771	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 15%; text-align: center;">FY 04</td> <td style="width: 15%; text-align: center;">FY 05</td> <td style="width: 15%; text-align: center;">FY 06</td> <td style="width: 15%; text-align: center;">FY 07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">0.070</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> </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;"> <p><b>FY04:</b> Performed initial development testing of hardware and software components.</p> </div>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	0.070	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	0.070	0.000	0.000	0.000															
RDT&E Articles Quantity																			

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UNCLASSIFIED

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System	PROJECT NUMBER AND NAME 9370 Deployable Autonomous Distribution Systems		
<b>(U) C. PROGRAM CHANGE SUMMARY:</b>				
(U) Funding:	FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget	0.988	0.000	0.000	0.000
FY06 President's Budget	0.960	0.000	0.000	0.000
Total Adjustments	-0.028	0.000	0.000	0.000
Summary of Adjustments				
FY04 Non-pay Inflation Savings	-0.001			
FY04 SBIR	-0.027			
Subtotal	-0.028	0.000	0.000	0.000
(U) Schedule:				
Not Applicable				
(U) Technical:				
Not Applicable				

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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System			PROJECT NUMBER AND NAME 9370 Deployable Autonomous Distribution Systems			
<b>(U) D. OTHER PROGRAM FUNDING SUMMARY:</b>								
<u>Line Item No. &amp; Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
OPN 8120 Naval Coastal Warfare	32.591	26.977	30.876	13.187	12.975	12.766	13.039	13.313
Related RDT&E:								
PE 604230N/4011 Naval Coastal Warfare	0.000	5.152	2.275	2.285	2.438	1.444	1.484	1.519
<b>(U) E. ACQUISITION STRATEGY:</b>								
Not Applicable								
<b>(U) F. Major Performers:</b>								
SSC San Diego is the prime with USSI the subcontractor under this funding, and the award was made in 2Q of FY04, following receipt of funds in December 2003. Funds were provided via Congressional Add to provide for upgrade of Mobile Inshore Undersea Warfare units with Deployable Autonomous Distributed Systems.								

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>			PROGRAM ELEMENT 0604230N Naval Support System				PROJECT NUMBER AND NAME 9370 Deployable Autonomous Distribution Systems						
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	
Product Development	Cost Plus	USSI	0.799								0.799		
Systems Engineering	WX	SSC SD	0.040								0.040		
Training Development	WX	SSC SD	0.010								0.010		
Subtotal Product Development			0.849	0.000		0.000		0.000		0.000	0.849		
Remarks:													
Development Support	WX	SSC SD	0.030								0.030		
Software Development	WX	SSC SD	0.009								0.009		
Configuration Management	WX	SSC SD	0.020								0.020		
Technical Data	WX	SSC SD	0.010								0.010		
Subtotal Support			0.069	0.000		0.000		0.000		0.000	0.069		
Remarks:													

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E, N / BA 5			0604230N Naval Support System				9370 Deployable Autonomous Distribution Systems						
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	WX	SSC SD	0.042										
Subtotal T&E			0.042	0.000		0.000		0.000		0.000	0.042		
Remarks:													
Total Cost			0.960	0.000		0.000		0.000		0.000	0.960		
Remarks:													

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE:											
																								February 2005											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA 5												0604230N Naval Support System												9370 Deployable Autonomous Distribution Systems											
Fiscal Year	2004				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	1	2	3	4			
Acquisition Milestones																																			
Engineering Milestones			▲ PDR			▲ CDR																													
Prototype Phase																																			
Development																																			
Delivery																																			
Test & Evaluation Milestones						▲																													
Development Test						DT																													
Operational Test																																			

# UNCLASSIFIED

## CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 5		PROGRAM ELEMENT 0604230N Naval Support System				PROJECT NUMBER AND NAME 9370 Deployable Autonomous Distribution Systems		
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Preliminary Design Review (PDR)	3Q							
Critical Design Review (CDR)		2Q						
Developmental Test and Evaluation		2Q						

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Exhibit R-3, Project Cost Analysis  
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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>		PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System				PROJECT NUMBER AND NAME 9371 Integrated Condition Assessment System				
COST (\$ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost		0.967	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
RDT&E Articles Qty										
<p><b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <p>Integrated Condition Assessment System( ICAS) \$1.0M Congressional Add provides for "data mining" of ICAS data. Data mining is the processing of raw data into useful information to determine system anomalies. The funds will be used for:</p> <p>Development and testing data mining tools to extract meaningful data, develop rules for diagnostics and prognostics then present this information and results to the user in an easy to understand format using the existing ICAS system. Development and testing advanced diagnostics and prognostics tools for ICAS equipped ship's machinery faults by exploiting existing data from the Navy's Maintenance Engineering Library Server (MELS). These tools will enable the reduction of maintenance requirements on auxiliary machinery and alert the crew to impending failures.</p>										

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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification (Page 1)			DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604230N - RDT&E,N Warfare Support System	PROJECT NUMBER AND NAME 9371 - RDT&E Integrated Condition Assessment System (ICAS)		
<b>B. Accomplishments/Planned Program</b>				
	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.967	0.000	0.000	0.000
RDT&E Articles Quantity				
<p>The FY04 ICAS \$1.0M R&amp;D (SPAWAR cognizance) is for "data mining" of ICAS data. "Data mining" is the processing of raw data into useful information to determine system anomalies. The funds will be used for: Development and testing data mining tools to extract meaningful data, develop rules for diagnostics and prognostics then present this information and results to the user in an easy to understand format using the existing ICAS system. Development and testing advanced diagnostics and prognostics tools for ICAS equipped ship's machinery faults by exploiting existing data from the Navy's Maintenance Engineering Library Server (MELS). These tools will enable the reduction of maintenance requirements on auxiliary machinery and alert the crew to impending failures.</p>				
	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000
RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000
RDT&E Articles Quantity				

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# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System	PROJECT NUMBER AND NAME 9371 - RDT&E Integrated Condition Assessment System (ICAS)		

**(U) C. PROGRAM CHANGE SUMMARY:**

(U) Funding:	FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget	0.988	0.000	0.000	0.000
FY06 President's Budget	0.967	0.000	0.000	0.000
Total Adjustments	-0.021	0.000	0.000	0.000
Summary of Adjustments				
FY04 Non-pay Inflation Savings	-0.001			
FY04 SBIR	-0.020			
Subtotal	-0.021	0.000	0.000	0.000

  

(U) Schedule:  
Not Applicable

  
  
  

(U) Technical:  
Not Applicable

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>					
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 5</b>	PROGRAM ELEMENT NUMBER AND NAME 0604230N Naval Support System	PROJECT NUMBER AND NAME 9371 - RDT&E Integrated Condition Assessment System (ICAS)						
<b>(U) D. OTHER PROGRAM FUNDING SUMMARY:</b>								
<u>Line Item No. &amp; Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
N/A								
Related RDT&E:								
N/A								
<b>(U) E. ACQUISITION STRATEGY:</b>								
Not Applicable								
<b>(U) F. Major Performers:</b>								
NSWC, Philadelphia								

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