

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: <div>February 2004</div>			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0604784N/ Distributed Surveillance System					
COST (\$ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	298.872	37.591	32.907	7.776	65.131	67.637	40.748	9.874	Continuing	Continuing
1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)	298.872	37.591	30.907	7.776	65.131	67.637	40.748	9.874	Continuing	Continuing
9402/CENTURION			2.000							2.000
										0.000
Quantity of RDT&E Articles		8	6							14
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:										
<p>The Advanced Deployable System (ADS) is a passive acoustic undersea surveillance system which will be part of the Anti-Submarine Warfare (ASW) mission module for the Littoral Combat Ship (LCS). It will be deployed by the LCS in shallow littoral waters to provide the Joint Task Force Commander (JTFC) with the complete maritime picture. It is designed to detect and track modern diesel electric and nuclear submarines, as well as provide the capability to track surface ships and detect mine-laying activities. ADS consists of four subsystems:</p> <ul style="list-style-type: none">- A Sensor Subsystem (SS) consisting of hydrophone arrays, small diameter fiber optic cable, connecting the arrays, and pressure vessel containing a power supply, electronics, and lasers for the optical telemetering of the hydrophone data to the in-water Tactical Interface Subsystem (TIS). Centurion Congressional add funds are provided for development and demonstration of all optical undersea sensors in Homeland Defense for port surveillance missions during FY04. Studies and conceptual design will culminate in a simple demonstration in Port Hueneme area. Demonstration will include data fusion of undersea sensors and radar.- A TIS where the data stream is partially processed, compressed, and transmitted to the supporting LCS.- An Analysis and Reporting Subsystem (ARS) aboard the LCS, where the received information data stream is analyzed and target information is reported to a command and control center for further distribution over tactical C4I nets as appropriate. Integrated Undersea surveillance System (IUSS) Mission Planning - These funds provide for the first increment of the Automated IUSS Mission Planning System. This effort builds on work begun in the ADS program (PE 0604784N) to automate array lay down and cable routing plans and allows the mission planner the capability to rapidly update the plan. Functional requirements for Fixed Surveillance Systems (FSS), ADS and Surveillance Towed Array Sensor (SURTASS) will be combined and prioritized with fleet input. Software will be developed as a Global Command and Control System - Maritime (GCCS-M) segment that is at least level 6 DII-COE compliant.- An Installation Support Subsystem (ISS) for rapid deployment of the SS and TIS by the LCS. <p>- RDT&E Articles decreased from ten (10) to six (6) for FY2004 due to change in Acquisition Strategy. As a result of the strategy shift, revised test plan only requires six RDT&E articles.</p>										
(U) JUSTIFICATION FOR BUDGET ACTIVITY: ENGINEERING AND MANUFACTURING DEVELOPMENT										
This program is funded under technology development because it encompasses development of new end-items prior to the System Development & Demonstration approval decision.										

R-1 SHOPPING LIST - Item No. 132

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 14)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	0604784N/ Distributed Surveillance System				PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)					
COST (\$ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	298.872	37.591	30.907	7.776	65.131	67.637	40.748	9.874	Continuing	Continuing
RDT&E Articles Qty		8	6							14

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION

The Advanced Deployable System (ADS) is a passive acoustic undersea surveillance system which will be part of the Anti-Submarine Warfare (ASW) mission module for the Littoral Combat Ship (LCS). It will be deployed by the LCS in shallow littoral waters to provide the Joint Task Force Commander (JTFC) with the complete maritime picture. It is designed to detect and track modern diesel electric and nuclear submarines, as well as provide the capability to track surface ships and detect mine-laying activities. ADS consists of four subsystems:

- A Sensor Subsystem (SS) consisting of hydrophone arrays, small diameter fiber optic cable, connecting the arrays, and pressure vessel containing a power supply, electronics, and lasers for the optical telemetering of the hydrophone data to the in-water Tactical Interface Subsystem (TIS).
- A TIS where the data stream is partially processed, compressed, and transmitted to the supporting LCS.
- An Analysis and Reporting Subsystem (ARS) aboard the LCS, where the received information data stream is analyzed and target information is reported to a command and control center for further distribution over tactical C4I nets as appropriate. Integrated Undersea surveillance System (IUSS) Mission Planning - These funds provide for the first increment of the Automated IUSS Mission Planning System. This effort builds on work begun in the ADS program (PE 0604784N) to automate array lay down and cable routing plans and allows the mission planner the capability to rapidly update the plan. Functional requirements for Fixed Surveillance Systems (FSS), ADS and Surveillance Towed Array Sensor (SURTASS) will be combined and prioritized with fleet input. Software will be developed as a Global Command and Control System - Maritime (GCCS-M) segment that is at least level 6 DII-COE compliant.
- An Installation Support Subsystem (ISS) for rapid deployment of the SS and TIS by the LCS.
- RDT&E Articles decreased from ten (10) to six (6) for FY2004 due to change in Acquisition Strategy. As a result of the strategy shift, revised test plan only requires six RDT&E articles.

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 2 of 14)

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA -5	PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System	PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)	
(U) B. Accomplishments/Planned Program			
ANALYSIS AND REPORTING SYSTEM (ARS)	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.581	5.160	0.543
RDT&E Articles Quantity			
<p>FY03 (\$2.581) Developed the Advanced Rapid COTS Insertion (ARCI) software baseline for ADS and conducted Design Verification Testing (DVT) and Final Acceptance Testing (FAT). Procured and integrated processing & display hardware for a two node system and conducted FAT and Joint Test Group (JTG) evaluation for the integrated hardware and software capability. Completed development and testing of the four node Array Laydown Planner (ALP) software.</p> <p>FY04 (\$5.160) Provided processing and analysis system for Dual Array Test (DAT). Developed modifications to ARCI for data reduction and communications. Procured and integrated processing and display hardware for an 8 node system. Conducted FAT and JTG evaluation for the integrated hardware software capability. Conducted modification to ALP software to permit planning of field installations. Conduct FAT for ALP and delivered to Commander Undersea Surveillance (CUS). Supported System Engineering and Integrated Test and Evaluation (IT&E).</p> <p>FY05 (\$0.543) Develop ARCI software for in-buoy processing. Develop a reduced power processing capability to run in-buoy processing software and interface with a communications link. Conduct System Integration Test (SIT), FAT, and JTG evaluation on the in-buoy processing software and hardware. Deliver the in-buoy processor and Workstation displays for ADS's Capability Demonstration. Support System Engineering and IT&E.</p>			
INSTALLATION SUBSYSTEM (ISS)	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	9.870	2.016	0.863
RDT&E Articles Quantity			
<p>FY03 (\$9.870) Completed Trunk Capsule Hardware Configuration Item (HWCI) detailed design for Platform B (PB) deployment. Drawings completed and released for hardware procurement. Article fabrication initiated in manufacturing DVT completed. Secured Platform B development following restructuring of program. Completed preliminary design for a surface Deck Deployment System.</p> <p>FY04 (\$2.016) Conducted preliminary design of LCS deployment prototype system, designated Rapid Two-step Array Dispenser (RTAD). Conducted DVTs of the RTAD. Deployed ADS dummy arrays for RTAD testing.</p> <p>FY05 (\$0.863) Develop and operate the installation for the TIS at Buoy Integration Test (BIT). Conduct the ISS Preliminary Design Review and initiate detailed design.</p>			

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 3 of 14)

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System	PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)	
(U) B. Accomplishments/Planned Program			
TEST AND EVALUATION (T&E)	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	3.570	4.175	0.987
RDT&E Articles Quantity			
<p>FY03 (\$3.570) Completed required system level test documentation. Monitored the developmental testing. Planned for the conduct of system level testing in FY04. Managed external relationships to Director of Test and Evaluation (DOT&E) and Commander Operational Test and Evaluation Force (COMOPTEVFOR).</p> <p>FY04 (\$4.175) Coordinated test planning, obtained supporting assets, and conducted dual array test (DAT) and participated in Undersea Dominance Exercise . Coordinated with COMOPTEVFOR to conduct a Development Test Assist (DTA) and an Early Operational Assessment (EOA).</p> <p>FY05 (\$0.987) Coordinate test planning, obtain supporting assets, conduct testing of the ADS system at the proposed Fleet Test. Coordinate with COMOPTEVFOR in the conduct of a DTA and an EOA.</p>			
TACTICAL INTERFACE SYSTEM (TIS)	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.250	6.484	0.817
RDT&E Articles Quantity			
<p>FY03 (\$0.250) Developed general architecture and conceptual design for the TIS configurations to be used during the at-sea test program. Conducted a Broad Agency Announcement (BAA) competition for concepts and developmental items that will support the production system.</p> <p>FY04 (\$6.484) Developed a communication link to transmit data from a surrogate buoy to a receiving surface platform during the at-sea test program. Conducted interface testing between the communication link's radio and the processing system aboard the surrogate buoy and between the radio and receiving display system. Conducted FAT for the communication link. Awarded contracts for selected BAA topics. Merged BAA development efforts into at-sea test program. Began design of buoy system and associated power sources. Supported System Engineering.</p> <p>FY05 (\$0.817) Modify the communication link's radio to lower system power requirements. Continue interface development and testing between radio, processor, power supply and buoy. Insert BAA technologies into the at-sea test program. Support System Engineering.</p>			

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Exhibit R-2a, RD TEN Project Justification
(Exhibit R-2a, page 4 of 14)

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004												
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System	PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)												
(U) B. Accomplishments/Planned Program														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">SENSOR SUBSYSTEM (SS)</td> <td style="width: 16.5%;">FY 03</td> <td style="width: 16.5%;">FY 04</td> <td style="width: 16.5%;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td>13.950</td> <td>3.531</td> <td>0.530</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td>8</td> <td>6</td> <td></td> </tr> </table>			SENSOR SUBSYSTEM (SS)	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	13.950	3.531	0.530	RDT&E Articles Quantity	8	6	
SENSOR SUBSYSTEM (SS)	FY 03	FY 04	FY 05											
Accomplishments/Effort/Subtotal Cost	13.950	3.531	0.530											
RDT&E Articles Quantity	8	6												
<p>FY03 (\$13.950) Successfully implemented process improvements to array manufacturing based on lessons learned during the developmental test phase. Successfully completed pressure test of arrays and other test articles in support of at sea testing. Initiated contracting approvals to procure up to six additional test articles to support program restructuring.</p> <p>FY04 (\$3.531) Executed contracting efforts to produce additional test articles. Packaged and delivered test hardware in support of the at-sea testing. Provided engineering support for the at-sea test program. Supported system engineering preparations for the Milestone B contracting effort. Revised Acquisition Strategy, resulting in a decrease in test articles from ten (10) to six (6).</p> <p>FY05 (\$0.530) Maintain support during the ADS at-sea testing. Plan for the resolution of any discrepancies identified during testing. Finalize inputs to the technical data package. Support Milestone B and prepare for production of hardware in the System Development & Demonstration (SDD) phase.</p>														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">SYSTEM ENGINEERING PROGRAM MANAGEMENT (SEPM)</td> <td style="width: 16.5%;">FY 03</td> <td style="width: 16.5%;">FY 04</td> <td style="width: 16.5%;">FY 05</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td>7.370</td> <td>9.541</td> <td>4.036</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> </tr> </table>			SYSTEM ENGINEERING PROGRAM MANAGEMENT (SEPM)	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	7.370	9.541	4.036	RDT&E Articles Quantity			
SYSTEM ENGINEERING PROGRAM MANAGEMENT (SEPM)	FY 03	FY 04	FY 05											
Accomplishments/Effort/Subtotal Cost	7.370	9.541	4.036											
RDT&E Articles Quantity														
<p>FY03 (\$7.370) Provided program management support for the ADS project office. Monitored government and contractor technical, schedule, and cost performance. Restructured program to support LCS deployment with an at sea termination. Revised Acquisition Strategy and Cost Analysis Requirements Description (CARD) based on program restructuring and designation as an Acquisition Category (ACAT) 1 program. Initiated an Independent Cost Estimate (ICE) and an Independent Cost Assessment. Commenced Integrated Logistics Support (ILS) and Environmental Assessment documentation for new program direction. Coordinated interface issues with the LCS development team.</p> <p>FY04 (\$9.541) Provided program management support for the ADS project office. Monitored government and contractor technical, schedule, and cost performance. Oversaw preparation and conduct of at-sea testing, including the fabrication and delivery of test equipment. Developed contractual and technical elements in support of system development and integration contract award. Initiated contracting efforts for at sea termination. Conducted program review with MDA to validate all documentation required for redirected program. Initiated preparations for Milestone B decision review in FY05. Coordinated with LCS program office to develop an Interface Requirements Document. Completed the Operational Concept document, System Performance specifications, and Environmental Specifications.</p> <p>FY05 (\$4.036) Continue Project Management support for the ADS project office. Monitor government and contractor technical, schedule, and cost performance. Conduct at sea capability demonstration. Continue development of documentation required for Milestone B decision. Develop contractual and technical elements in support of system development and integration contract award. Hold Milestone B decision review with MDA and gain approval to award SDD contract. Complete the System Functional Architecture, Item Performance specifications, and Equipment and Software Subsystem-level Design.</p>														

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System	PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)

(U) C. PROGRAM CHANGE SUMMARY:

	FY 2003	FY 2004	FY 2005
(U) Funding:			
FY 2004 President's Budget:	37.591	28.755	64.107
FY 2005 President's Budget:	37.591	30.907	7.776
Total Adjustments	0.000	2.152	-56.331
Summary of Adjustments			
PR 05 Program Adjustment			-56.295
Congressional Undistributed Reductions		-0.383	
Inflation Adjustments		0.000	-0.025
Schedule Delay		-2.500	
IUSS Mission Planning Congressional Add		5.100	
Miscellaneous Minor Adjustments		-0.065	-0.011
Subtotal	0.000	2.152	-56.331

(U) Schedule:

- Program restructure based on OPNAV revised requirements to develop ADS as a Littoral Combat Ship (LCS) Mission Module as approved by ASN/RDA.
- Schedule changes to MS 'B', 'C', and OPEVAL subject to MDA approval

(U) Technical:

- Development of wireless link
- In-buoy processing
- LCS deployment

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EXHIBIT R-2a, RDT&E Project Justification									DATE: February 2004	
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-5			PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System				PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)			
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name	Prior Year Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
024311N/PROJECT X9102 IUSS MISSION PLANNING	6.686	2.927	0	0	0	0	0	0	0	9.613
0204311N/PROJECT X9270 FIBER OPTIC WAVELENGTH DIVISION MULTIPLIER	0	2.529	0	0	0	0	0	0	0	2.529
<p>X9102- These funds provide for the first increment of the Automated IUSS Mission Planning System. This effort builds on work begun in the ADS program (PE 0604784N) to automate array lay down and cable routing plans and allows the mission planner the capability to rapidly update the plan. Functional requirements for Fixed Surveillance Systems (FSS), Advanced Deployable System (ADS) and Surveillance Towed Array Sensor (SURTASS) will be combined and prioritized with fleet input. Software will be developed as GCCS-M segment what are at least level 6 DII-COE compliant. Included is approximately \$800K to collect environmental and physical data for an area of high fleet interest for mission planner demonstration.</p> <p>X9270-Funds were provided for Fiber Optic Wavelength Division Multiplier . Initiated contract development efforts.</p>										
(U) E. ACQUISITION STRATEGY(AS): Draft AS to address redirected program under review by Navy Leadership. Review and approval of Acquisition Strategy is subject to MDA program review, as directed by 14OCT03 ADM to be held no later than 31Mar04.										
		FY03		FY04		FY05				
PROGRAM MILESTONES		PROGRAM REVIEW		PROGRAM REVIEW		MILESTONE B				
ENGINEERING MILESTONES		WET END SYSTEM VALIDATION REVIEW		SYSTEM REQUIREMENT REVIEW (SRR), SYSTEM FUNCTIONAL REVIEW (SFR)		PRELIMINARY DESIGN REVIEW (PDR), INTEGRATED BASELINE REVIEW (IBR)				
T&E MILESTONES		TEST READINESS REVIEW FOR DAT		DUAL ARRAY TEST, FLEET TEST		FLEET TEST/EXERCISE				
CONTRACT MILESTONES		BROAD AGENCY ANOUNCEMENT (BAA) INITIATED		BROAD AGENCY ANOUNCEMENT (BAA) AWARDED, SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) INITIATED		SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) AWARDED				

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Exhibit R-3 Cost Analysis (page 1)							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA 5			0604784N/ Distributed Surveillance System			1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Prime Mission Product Development	C/CPAF	LMFS MANASSAS, VA	89.334								89.334	89.334
Prime Mission Product Development	C/CPAF	LMFS MANASSAS, VA	32.617	17.235	05/03	10.137	11/03	1.150	11/04	Continuing	Continuing	Continuing
Government Engineering Support	WX	SSC SAN DIEGO, CA	43.455	7.859	05/03	3.319	11/03	1.334	11/04	Continuing	Continuing	Continuing
Engineering Support Services	SS/CPFF	APL/JHU LAUREL, MD	4.671	0.551	05/03	0.300	11/03	0.080	11/04	Continuing	Continuing	Continuing
Engineering Support Services	SS/CPFF	ARL/UT AUSTIN, TX	7.322	1.697	05/03	1.338	11/03		11/04	Continuing	Continuing	Continuing
Software Development	C/CPFF	ORINCON SAN DIEGO, CA	16.534			3.600	11/03				20.134	17.534
Other Contracts			17.575	0.000		2.534		0.675		Continuing	Continuing	Continuing
Other Activities			18.276	0.761		0.300		0.022		Continuing	Continuing	Continuing
Subtotal Product Development			229.784	28.103		21.528		3.261		Continuing	Continuing	Continuing
Remarks:												
Contract Engineering Support	C/CPFF	AMRON SAN DIEGO ,CA	2.763			0.644		0.740			4.147	2.763
Government Engineering Support	WX	SSC SAN DIEGO,CA	7.752	0.685	05/03	0.322	11/03	0.333	11/04	Continuing	Continuing	Continuing
Other Contracts			14.715	0.711		1.218		0.612		Continuing	Continuing	Continuing
Other Activities			4.270	1.471		0.130		0.050		Continuing	Continuing	Continuing
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Support			29.500	2.867		2.314		1.735		Continuing	Continuing	Continuing
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)								DATE:				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			February 2004						
RDT&E, N / BA 5			0604784N/ Distributed Surveillance System			1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation		OTHER CONTRACTS	7.595	0.030		0.580		0.052		Continuing	Continuing	Continuing
Developmental and Operational Test	WX	SSC-SAN DIEGO,CA	11.209	3.540	05/03	3.640	11/03	1.040	11/04	Continuing	Continuing	Continuing
Developmental and Operational Test		OTHER ACTIVITIES	4.658	0.000							4.658	4.658
Developmental and Operational Test	SS/CPFF	APL/JHU LAUREL, MD				0.145		0.117			0.262	
Developmental and Operational Test	SS/CPFF	ARL/UT AUSTIN, TX				0.190		0.170			0.360	
											0.000	
											0.000	
Subtotal T&E			23.462	3.570		4.555		1.379		Continuing	Continuing	Continuing
Remarks:												
Program Management Support	C/CPFF	AMRON, SAN DIEGO, CA	5.277								5.277	5.277
Program Management Support		OTHER CONTRACTS	8.082	3.051		0.780		0.642		Continuing	Continuing	Continuing
Program Management Support		OTHER CONTRACTS	2.767	0.000							2.767	2.767
Program Management Support		OTHER ACTIVITIES				1.730		0.759		Continuing	Continuing	
											0.000	
											0.000	
Subtotal Management			16.126	3.051		2.510		1.401		Continuing	Continuing	Continuing
Remarks:												
Total Cost			298.872	37.591		30.907		7.776		Continuing	Continuing	Continuing
Remarks:												

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EXHIBIT R4, Schedule Profile																								DATE: February 2004								
APPROPRIATION/BUDGET ACTIVITY									PROGRAM ELEMENT NUMBER AND NAME									PROJECT NUMBER AND NAME														
RDT&E, N / BA-5 BA-5									0604784N/ Distributed Surveillance System									1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)														
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009			
QTR	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				PR	PR		PR	PR	PR																							
MDA Reviews/Milestones				▲	▲		▲	▲	▲																							
Program Design Review																																
Integrated Baseline Review																																
Critical Design Review																																
Engineering Development Model																																
Test & Evaluation Milestones (Increment Alpha)																																
San Clemente Island Test								▲																								
Dual Array Test									▲																							
Undersea Dominance												△																				
At- Sea Demonstrations																△																
System Integration Test																									△							
MS (C) LRIP																										△						
TECHEVAL																											△					
OPEVAL																												△				
Production Milestones																																
Production Readiness Review																																△

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* Not required for Budget Activities 1, 2, 3, and 6

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Exhibit R-4, Schedule Profile
(Exhibit R-4, page 10 of 14)

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Exhibit R-4a, Schedule Detail					DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/ BA-5	PROGRAM ELEMENT 0604784N/ Distributed Surveillance System			PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)			
Schedule Profile	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
SENSOR SUBSYSTEM							
Gold Array (First Article) Fabrication							
At-Sea Test Production Array	Q3						
Complete production of 9 test articles		Q1					
Complete production of additional test articles		Q4					
EMD system Preliminary Design Review				Q2			
EMD system Detailed Design Review				Q3			
EMD system SIT system manufacture					Q3		
INSTALLATION SUBSYSTEM							
Launch & Control Segments Design & Build		Q1					
Prototype system spiral development			Q3				
EMD system Preliminary Design Review			Q2				
EMD system Detailed Design Review				Q1			
EMD system SIT system manufacture					Q4		
Refurbish / Repair for Fleet use							Q2
TACTICAL INTERFACE							
BAA / Concept Exploration	Q4						
Award study contracts		Q1					
Mock-up / engineering model		Q4					
Prototype system spiral development			Q3				
EMD system Preliminary Design Review			Q2				
EMD system Detailed Design Review				Q1			
EMD system SIT system manufacture					Q4		
Refurbish / Repair for Fleet use							Q2
ANALYSIS & REPORTING SUBSYSTEM							
Mission Planner Upgrade		Q1					
Prototype Interface Description			Q1				
Prototype system spiral development			Q3				
EMD system Preliminary Design Review			Q2				
EMD system Detailed Design Review				Q1			
EMD system SIT system manufacture					Q4		
Refurbish / upgrade & prepare for Fleet use							Q2
SYSTEM TESTS							
San Clemente Island Test	Q4						
Dual Array Test		Q1					
Undersea Dominance		Q4					
At- Sea Demonstration			Q3	Q3			
System Integration Test					Q4		
TECHEVAL						Q2	
OPEVAL						Q3	

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Exhibit R-4, Schedule Profile
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		0604784N/ Distributed Surveillance System			PROJECT NUMBER AND NAME 9402/ CENTURION					
COST (\$ in Millions)	Prior Years Cost	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	0.000	0.000	2.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
RDT&E Articles Qty										0
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION</p> <p>Centurion Congressional add funds are provided for development and demonstration of all optical undersea sensors in Homeland Defense for port surveillance missions during FY04. Studies and conceptual design will culminate in a simple demonstration in Port Hueneme area. Demonstration will include data fusion of undersea sensors and radar.</p>										

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Exhibit R-4, Schedule Profile
(Exhibit R-4, page 12 of 14)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004												
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA -5	PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System	PROJECT NUMBER AND NAME 9402/ CENTURION												
(U) B. Accomplishments/Planned Program <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"><tr><td style="padding: 5px;">CENTURION</td><td style="padding: 5px;">FY 03</td><td style="padding: 5px;">FY 04</td><td style="padding: 5px;">FY 05</td></tr><tr><td style="padding: 5px;">Accomplishments/Effort/Subtotal Cost</td><td style="padding: 5px;">0.000</td><td style="padding: 5px;">2.000</td><td style="padding: 5px;">0.000</td></tr><tr><td style="padding: 5px;">RDT&E Articles Quantity</td><td style="padding: 5px;"></td><td style="padding: 5px;"></td><td style="padding: 5px;"></td></tr></table> <div style="border: 1px solid black; padding: 10px; margin-top: 10px; min-height: 200px;"><p>FY04 (\$2.000) Centurion Congressional add funds are provided for development and demonstration of all optical undersea sensors in Homeland Defense for port surveillance missions during FY04. Studies and conceptual design will culminate in a simple demonstration in Port Hueneme area. Demonstration will include data fusion of undersea sensors and radar.</p></div>			CENTURION	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	2.000	0.000	RDT&E Articles Quantity			
CENTURION	FY 03	FY 04	FY 05											
Accomplishments/Effort/Subtotal Cost	0.000	2.000	0.000											
RDT&E Articles Quantity														

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2004																																	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5	PROGRAM ELEMENT NUMBER AND NAME 0604784N/ Distributed Surveillance System	PROJECT NUMBER AND NAME 9402/ CENTURION																																		
<p>(U) C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 15%; text-align: right;">FY 2003</th> <th style="width: 15%; text-align: right;">FY 2004</th> <th style="width: 15%; text-align: right;">FY 2005</th> </tr> </thead> <tbody> <tr> <td>(U) Funding:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY 2004 President's Budget:</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> <tr> <td>FY 2005 President's Budget:</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">2.000</td> <td style="text-align: right;">0.000</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;">2.000</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> </tr> <tr> <td colspan="4" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td style="padding-left: 20px;">Centurion Congressional Add</td> <td></td> <td style="text-align: right; border-top: 1px solid black;">2.000</td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Subtotal</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">2.000</td> <td style="text-align: right;">0.000</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) Schedule: - TBD</p> <p style="margin-top: 20px;">(U) Technical: - Development and demonstration of all optical undersea sensors in Homeland Defense for port surveillance missions - Studies and conceptual design will culminate in a simple demonstration to include data fusion of undersea sensors and radar.</p>						FY 2003	FY 2004	FY 2005	(U) Funding:				FY 2004 President's Budget:	0.000	0.000	0.000	FY 2005 President's Budget:	0.000	2.000	0.000	Total Adjustments	0.000	2.000	0.000	Summary of Adjustments				Centurion Congressional Add		2.000		Subtotal	0.000	2.000	0.000
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