

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-5					R-1 ITEM NOMENCLATURE 0604784N/ Distributed Surveillance System					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY2011	Cost to Complete	Total Program
1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)	32.876	17.416	54.256	57.974	34.022	35.145	40.357	21.513	Continuing	Continuing
RDT&E Articles Qty (Sensors)	4	2	9	12	3					30
RDT&E Articles Qty (ISS)				1						1
RDT&E Articles Qty (TIS)			1	4	1					6
RDT&E Articles Qty (ARS)			1	1						2
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The Advanced Deployable System (ADS) is a rapidly deployable, passive acoustic undersea surveillance system that, as the first Increment of development, will be deployed as a module of the Anti-Submarine Warfare (ASW) mission package for the Littoral Combat Ship (LCS). This first effort of the Spiral development program is designated Increment Alpha. It will be deployed and monitored by the LCS in shallow littoral waters to provide the Joint Task Force Commander (JTFC) with data that permits rapid integration with other sources to generate an accurate and reliable maritime tactical picture. ADS is designed to detect, track and report modern diesel electric and nuclear submarines, as well as provide the capability to track surface ships and potentially detect mine-laying activities. The second development effort, designated Increment Bravo, will provide the capability to deploy ADS from an alternate platform. Increment B Development and testing will occur in FY09-FY11. For all increments, 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). - 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>(</p>										

R-1 SHOPPING LIST - Item No. 132

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-5		0604784N/ Distributed Surveillance System			PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)					
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to Complete	Total Program
Total PE Cost	32.876	17.416	54.256	57.974	34.022	35.145	40.357	21.513	Continuing	Continuing
RDT&E Articles Qty (Sensors)	4	2	9	12	3					30
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(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION

The Advanced Deployable System (ADS) is a rapidly deployable, passive acoustic undersea surveillance system that, as the first Increment of development, will be deployed as a module of the Anti-Submarine Warfare (ASW) mission package for the Littoral Combat Ship (LCS). This first effort of the Spiral development program is designated Increment Alpha. It will be deployed and monitored by the LCS in shallow littoral waters to provide the Joint Task Force Commander (JTFC) with data that permits rapid integration with other sources to generate an accurate and reliable maritime tactical picture. ADS is designed to detect, track and report modern diesel electric and nuclear submarines, as well as provide the capability to track surface ships and potentially detect mine-laying activities. The second development effort, designated Increment Bravo, will provide the capability to deploy ADS from an alternate platform. Increment B Development and testing will occur in FY09-FY11. For all increments, 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.
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- An Installation Support Subsystem (ISS) for rapid deployment of the SS and TIS by the LCS.

- RDT&E Articles decreased from six (6) to four (4) for FY2004 due to change in Acquisition Strategy. Additional two (2) articles to be purchased in FY 2005 instead. Distribution of Test Articles over FY 06 - 08 was adjusted to match recently developed Test Article Plan approved by PEO. Additional ARS test article in FY06 is needed to support the consolidated LCS Mission Package Computer Environment Integration Lab.

R-1 SHOPPING LIST - Item No.

132

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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 04	FY05	FY06	FY07
Accomplishments/Effort/Subtotal Cost	6.582	6.058	10.022	10.415
RDT&E Articles Quantity			1	1
<p>FY04 (\$6.582) 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 (\$6.058) 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. The Mission Planning Plus Up will be used to build array laydown planner and command & control mobilization processor for use on LCS. Develop laydown plans in support of user requirements and environmental input requirements definition.</p> <p>FY06 (\$10.022) Develop the detailed design for the LCS shipboard C4I, data processing and display, and installation planning necessary for the Analysis and Reporting Subsystem (ARS) of the ADS Mission Module. Conduct development and integration of the segments of the ARS of the ADS Mission Module. Provide first ARS test article to support the consolidated LCS Mission Package Computer Environment Integration Lab.</p> <p>FY07 (\$10.415) Conduct Design Verification Tests (DVT's) for the segments of the ARS of the ADS Mission Module. Integrate all ARS segments for subsystem testing and then participate in the ADS System Integration test</p>				
INSTALLATION SUBSYSTEM (ISS)	FY04	FY05	FY06	FY07
Accomplishments/Effort/Subtotal Cost	4.646	6.545	15.100	15.695
RDT&E Articles Quantity				1
<p>FY04 (\$4.646) Conducted preliminary design of LCS deployment prototype system, designated Rapid Two-step Array Dispenser (RTAD). Conducted DVTs and sea tests of the RTAD.</p> <p>FY05 (\$6.545) Complete risk reduction testing of the ISS. Conduct the ISS Preliminary Design Review and initiate detailed design. Network Centric Plus Up will be used to build and demonstrate sensor deployment alternative methods. Centurion Plus Up will be used to build and integrate new sensors into Homeland Defense port surveillance test bed in Port Hueneme area developed in FY04 & conduct additional tests.</p> <p>FY06 (\$15.100) Complete detailed design and conduct the segment Detailed Design Review. Conduct necessary risk reduction testing. Provide inputs to and conduct the System Critical Design Review. Initiate segment fabrication and conduct segment integration testing.</p> <p>FY07 (\$15.695) Continue segment fabrication and integration testing. Conduct the System Integration Test.</p>				

R-1 SHOPPING LIST - Item No. 132

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TEST AND EVALUATION (T&E)	FY04	FY05	FY06	FY07															
Accomplishments/Effort/Subtotal Cost	3.960	0.216	0.800	1.168															
RDT&E Articles Quantity																			
<p>FY04 (\$3.960) Coordinated test planning, obtained supporting assets, and conducted dual array test (DAT) and prepared for Undersea Dominance Exercise . Coordinated with COMOPTEVFOR to conduct a Development Test Assist (DTA) and an Early Operational Assessment (EOA).</p> <p>FY05 (\$0.216) Conduct Undersea Dominance Exercise. Coordinate with COMOPTEVFOR in the conduct of a DTA and an EOA.</p> <p>FY06 (\$0.800) Coordinate test planning for FY07 System Integration Test (SIT); develop and execute preliminary system deployment test.</p> <p>FY07 (\$1.168) Participate in Undersea Dominance Fleet Exercise; coordinate planning and execution of SIT.</p>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">TACTICAL INTERFACE SYSTEM (TIS)</th> <th style="width: 15%;">FY04</th> <th style="width: 15%;">FY05</th> <th style="width: 15%;">FY06</th> <th style="width: 15%;">FY07</th> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td style="text-align: center;">7.978</td> <td style="text-align: center;">2.074</td> <td style="text-align: center;">20.356</td> <td style="text-align: center;">21.234</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> </tr> </table>					TACTICAL INTERFACE SYSTEM (TIS)	FY04	FY05	FY06	FY07	Accomplishments/Effort/Subtotal Cost	7.978	2.074	20.356	21.234	RDT&E Articles Quantity			1	4
TACTICAL INTERFACE SYSTEM (TIS)	FY04	FY05	FY06	FY07															
Accomplishments/Effort/Subtotal Cost	7.978	2.074	20.356	21.234															
RDT&E Articles Quantity			1	4															
<p>FY04 (\$7.978) Developed a communication link to transmit data from a prototype buoy to a receiving surface platform during the at-sea test program. Conducted lab testing between the communication link's radio and the processing system aboard the prototype buoy and between the radio and receiving display system. 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 (\$2.074) Modify the communication link's radio to lower system power requirements. Continue interface development and testing between radio, processor, power supply and buoy. Recommend potential BAA technologies into the at-sea test program. Support System Engineering. Start spectrum certification process.</p> <p>FY06 (\$20.356) Design, breadboard, prototype and Design Verification Test (DVT) of the entire subsystem (RF radio, buoy, power, mooring, and anchor.) Develop encryption/decryption solution to satisfy security requirement. Continue spectrum certification process. Fabricate first test article for developmental test program.</p> <p>FY07 (\$21.234) Fabrication test articles to support SIT, TECHEVAL, and OPEVAL. Finalize spectrum certification approval. Support Test and Evaluation IPT.</p>																			

R-1 SHOPPING LIST - Item No. 132

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SENSOR SUBSYTEM (SS)	FY04	FY05	FY06	FY07													
Accomplishments/Effort/Subtotal Cost	4.738	1.077	6.322	7.249													
RDT&E Articles Quantity	4	2	9	12													
<p>FY04 (\$4.738) 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 (\$1.077) Maintain support during the ADS at-sea testing and refurbish test articles for additional 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> <p>FY06 (\$6.322) Trade studies to reduce system LLC based on new requirement and LCS centric. Low-cost cable, lighter and less expensive pressure vessels, cheaper array unit cost are a few high-impact candidates. Continue manufacturing test articles to support at-sea test demand.</p> <p>FY07 (\$7.249) Continue manufacturing test articles to support SIT, TECHEVAL, OPEVAL. Support T&E IPT. Investigate activation.</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%;">FY04</td> <td style="width: 16.5%;">FY05</td> <td style="width: 16.5%;">FY06</td> <td style="width: 16.5%;">FY07</td> </tr> <tr> <td>Accomplishments/Effort/Subtotal Cost</td> <td>2.974</td> <td>1.446</td> <td>1.656</td> <td>2.213</td> </tr> <tr> <td>RDT&E Articles Quantity</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			SYSTEM ENGINEERING PROGRAM MANAGEMENT (SEPM)	FY04	FY05	FY06	FY07	Accomplishments/Effort/Subtotal Cost	2.974	1.446	1.656	2.213	RDT&E Articles Quantity				
SYSTEM ENGINEERING PROGRAM MANAGEMENT (SEPM)	FY04	FY05	FY06	FY07													
Accomplishments/Effort/Subtotal Cost	2.974	1.446	1.656	2.213													
RDT&E Articles Quantity																	
<p>FY04 (\$2.974) 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 (\$1.446) 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. Conduct cost trade off studies, analyze and track technical performance measures, perform configuration and interface management, hold technical reviews and audits, conduct risk management. Continue to coordinate with LCS Mission Module and Ship program offices to refine the Interface Requirements Document.</p> <p>FY06 (\$1.656) Continue Project Management support for the ADS project office. Monitor government and contractor technical, schedule, and cost performance. Complete the detailed design and begin engineering development models and the associated component testing. Continue to conduct cost trade off studies, analyze and track technical performance measures, perform configuration and interface management, hold technical reviews and audits, conduct risk management. Continue to coordinate with LCS Mission Module and Ship program offices to develop the Interface Control Document.</p> <p>FY07 (\$2.213) Continue Project Management support for the ADS project office. Monitor government and contractor technical, schedule, and cost performance. Using witness subsystem integration testing and conduct system integration testing with the engineering development models. Continue to conduct cost trade off studies, analyze and track technical performance measures, perform configuration and interface management, hold technical reviews and audits, conduct risk management. Initiate preparations for Milestone C decision review in FY08. Continue to coordinate with LCS Mission Module and Ship program offices to develop the Interface Control Document.</p>																	

R-1 SHOPPING LIST - Item No. 132

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 5 of 11)

UNCLASSIFIED

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			February 2005	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N / BA-5	0604784N/ Distributed Surveillance System	1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)		
(U) C. PROGRAM CHANGE SUMMARY:				
	FY 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget	30.907	7.776	65.131	67.637
FY06 President's Budget	30.878	17.416	54.256	57.974
Total Adjustments	-0.029	9.640	-10.875	-9.663
Summary of Adjustments				
RCR Limit ADS Test Articles to ORD Threshold SEA SHIELD			-11.000	-10.000
Inflation Savings	-0.029		0.487	0.657
Network Centric Warfare Congressional Add		1.000		
Centurion Surveillance Congressional Add		3.900		
MSS Mission Planning Congressional Add		4.900		
Undistributed congressional reductions		-0.101		
Miscellaneous Adjustments		-0.059	-0.362	-0.32
Subtotal	0.000	9.640	-10.875	-9.663
(U) Schedule:				
- Prime contract award schedule slipped from JUL04 to SEP04				
- Milestone 'B' schedule changed from MAY05 to SEP05 due to delay in prime contract award.				
(U) Technical:				
- N/A				

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<p>(U) D. OTHER PROGRAM FUNDING SUMMARY: N/A</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Line Item No. & Name</th> <th>FY 2004</th> <th>FY 2005</th> <th>FY 2006</th> <th>FY 2007</th> <th>FY 2008</th> <th>FY 2009</th> <th>FY 2010</th> <th>FY 2011</th> <th>To Complete</th> <th>Total Cost</th> </tr> </thead> <tbody> <tr> <td>LCS OPN BLI 160000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: right;">44.742</td> <td style="text-align: right;">70.600</td> <td style="text-align: right;">67.793</td> <td style="text-align: right;">36.217</td> <td style="text-align: center;">-</td> <td style="text-align: right;">219.352</td> </tr> <tr> <td>ADS OPN PE0204311N: CLANDESTINE DEVEL.</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: right;">16.000</td> <td style="text-align: center;">Continuing</td> <td style="text-align: center;">Continuing</td> </tr> <tr> <td>LCS Mission Module RDT&E PE0603581N</td> <td style="text-align: right;">4.000</td> <td style="text-align: right;">7.000</td> <td style="text-align: right;">6.765</td> <td style="text-align: right;">4.945</td> <td style="text-align: right;">3.790</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: right;">26.500</td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>- ADS LRIP procurement scheduled to be funded by LCS Program. LRIP procurement quantities as follows: FY08 - 1 ADS System; FY09 - 2 ADS Systems; FY10 - 2 ADS Systems; FY11 - 1 ADS System</p> <p>- As the ASW Mission Module (MM), ADS is receiving RDT&E funds from LCS MM Program. Funds provided to augment ADS Systems Engineering efforts in connection with ADS integration and installation with the Littoral Combat Ship (LCS).</p> <p>- ADS OPN for FY11 provided for WCC Clandestine Procurement efforts.</p> </div>										Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost	LCS OPN BLI 160000	-	-	-	-	44.742	70.600	67.793	36.217	-	219.352	ADS OPN PE0204311N: CLANDESTINE DEVEL.	-	-	-	-	-	-	-	16.000	Continuing	Continuing	LCS Mission Module RDT&E PE0603581N	4.000	7.000	6.765	4.945	3.790	-	-	-	-	26.500	
Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost																																												
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LCS Mission Module RDT&E PE0603581N	4.000	7.000	6.765	4.945	3.790	-	-	-	-	26.500																																												
<p>(U) E. ACQUISITION STRATEGY(AS): Acquisition Strategy: ADS sole source contract awarded SEP04</p>																																																						
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th></th> <th>FY04</th> <th></th> <th>FY05</th> <th></th> <th>FY06</th> <th></th> <th>FY07</th> </tr> </thead> <tbody> <tr> <td>PROGRAM MILESTONES</td> <td></td> <td>PROGRAM REVIEW</td> <td></td> <td>MILESTONE B</td> <td></td> <td>PROGRAM REVIEW</td> <td></td> <td>PROGRAM REVIEW</td> </tr> <tr> <td>ENGINEERING MILESTONES</td> <td></td> <td>SYSTEM REQUIREMENT REVIEW (SRR), SYSTEM FUNCTIONAL REVIEW (SFR)</td> <td></td> <td>PRELIMINARY DESIGN REVIEW (PDR), INTEGRATED BASELINE REVIEW (IBR)</td> <td></td> <td>CRITICAL DESIGN REVIEW (CDR); SYSTEM DESIGN AND DEVELOPMENT</td> <td></td> <td>SYSTEM DESIGN AND DEVELOPMENT</td> </tr> <tr> <td>T&E MILESTONES</td> <td></td> <td>DUAL ARRAY TEST</td> <td></td> <td>UNDERSEA DOMINANCE</td> <td></td> <td>FLEET TEST/EXERCISE</td> <td></td> <td>SYSTEM INTEGRATION TEST (SIT)</td> </tr> <tr> <td>CONTRACT MILESTONES</td> <td></td> <td>BROAD AGENCY ANNOUNCEMENT (BAA) AWARDED. SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) INITIATED</td> <td></td> <td>SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) AWARDED</td> <td></td> <td>CONTINUE SDD</td> <td></td> <td>CONTINUE SDD</td> </tr> </tbody> </table>												FY04		FY05		FY06		FY07	PROGRAM MILESTONES		PROGRAM REVIEW		MILESTONE B		PROGRAM REVIEW		PROGRAM REVIEW	ENGINEERING MILESTONES		SYSTEM REQUIREMENT REVIEW (SRR), SYSTEM FUNCTIONAL REVIEW (SFR)		PRELIMINARY DESIGN REVIEW (PDR), INTEGRATED BASELINE REVIEW (IBR)		CRITICAL DESIGN REVIEW (CDR); SYSTEM DESIGN AND DEVELOPMENT		SYSTEM DESIGN AND DEVELOPMENT	T&E MILESTONES		DUAL ARRAY TEST		UNDERSEA DOMINANCE		FLEET TEST/EXERCISE		SYSTEM INTEGRATION TEST (SIT)	CONTRACT MILESTONES		BROAD AGENCY ANNOUNCEMENT (BAA) AWARDED. SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) INITIATED		SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) AWARDED		CONTINUE SDD		CONTINUE SDD
		FY04		FY05		FY06		FY07																																														
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Exhibit R-3 Cost Analysis (page 1)												DATE:		
February 2005														
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 04 Cost	FY 04 Award Date	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
Prime Mission Product Development	C/CPAF	LMFS MANASSAS, VA	89.334										89.334	89.334
Prime Mission Product Development	C/CPAF	LMFS MANASSAS, VA	49.852	2.972	11/03								52.824	52.824
Prime Mission Product Development	C/CPAF	LMFS MANASSAS, VA	0.000	8.000	09/04	4.123	11/04	45.500	11/05	46.500	11/06	Continuing	Continuing	Continuing
Government Engineering Support	WX	SSC SAN DIEGO, CA	51.314	1.699	11/03	0.262	11/04	2.125	11/05	2.337	11/06	Continuing	Continuing	Continuing
Engineering Support Services	SS/CPFF	UNIVERSITY LABS	14.241	1.168	11/03	2.225	11/04	1.500	11/05	2.650	11/06	Continuing	Continuing	Continuing
Software Development	C/CPFF	ORINCON SAN DIEGO, CA	16.534	4.003	11/03	3.400	04/05						23.937	23.937
Prime Mission Product Development	BAA	HARRIS/ LM PNW	0.000	2.360	11/03								2.360	2.360
Other Contracts			17.575	0.137	11/03	4.415	04/05						22.127	22.127
Other Activities			19.037			0.170							19.207	19.207
Subtotal Product Development			257.887	20.339		14.595		49.125		51.487		Continuing	Continuing	Continuing
Remarks: FY05 ORINCON funding is Congressional Plus Up. FY05 Other Contracts (.900 Proginey and 3.500 Northrup Grumman) funding is Congressional Plus Up .														
Contract Engineering Support	C/CPFF	AMRON SAN DIEGO ,CA	8.040										8.040	8.040
Government Engineering Support	WX	SSC SAN DIEGO,CA	8.437	1.321	11/03	1.431	11/04	0.930	11/05	0.980	11/06	Continuing	Continuing	Continuing
Engineering Support Services	SS/CPFF	UNIVERSITY LABS		0.390	11/03	0.002	11/04	0.300	11/05			Continuing	Continuing	Continuing
PMTO Contracts			29.326	2.037	11/03	0.272	11/04						31.635	31.635
Other Activities			5.741	0.359	11/03	0.215	11/04	0.150	11/05	0.250	11/06		6.715	6.715
Subtotal Support			51.544	4.107		1.920		1.380		1.230		Continuing	Continuing	Continuing
Remarks:														

R-1 SHOPPING LIST - 132

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Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 8 of 11)

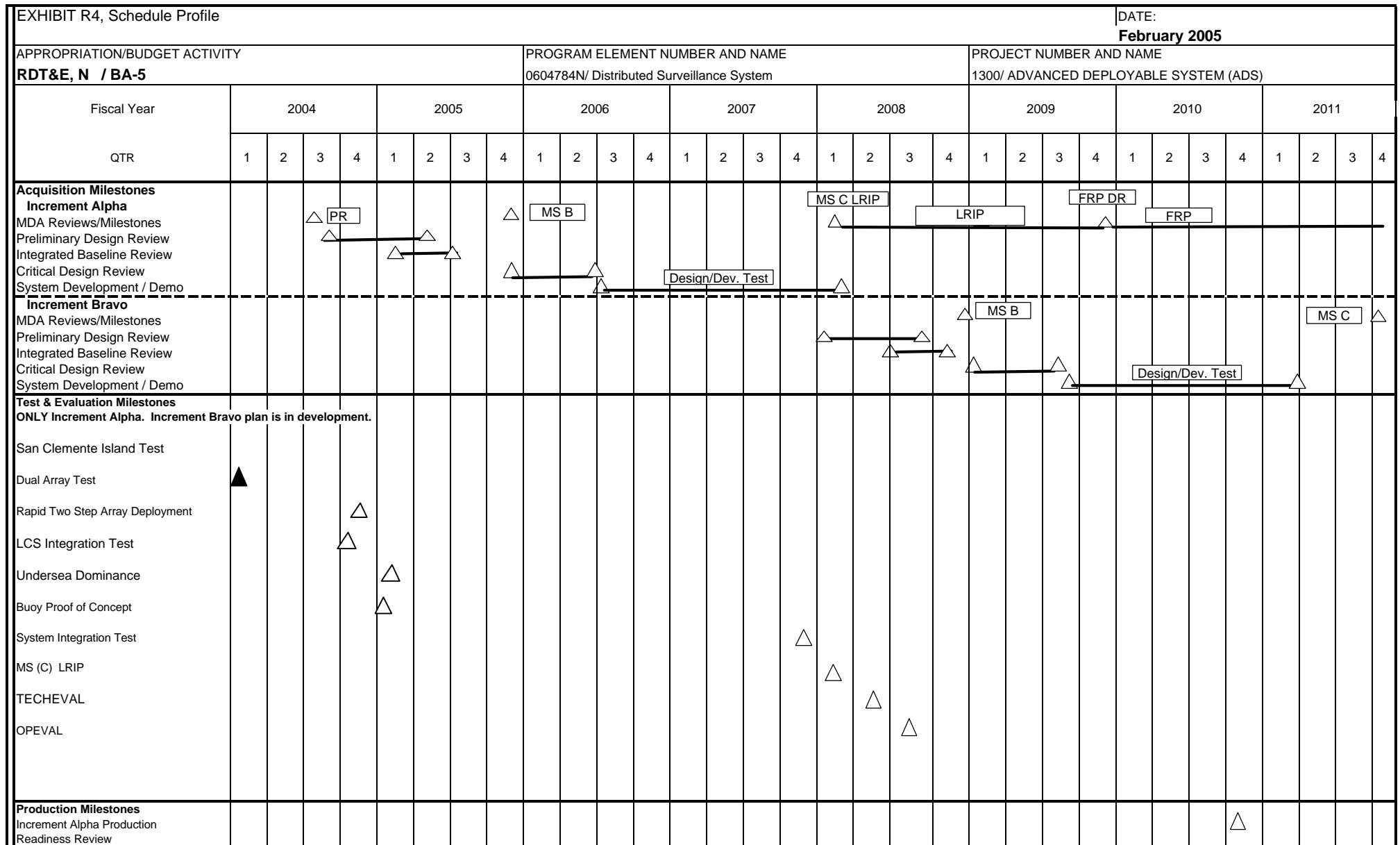
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Exhibit R-3 Cost Analysis (page 2)												DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA 5			PROGRAM ELEMENT 0604784N/ Distributed Surveillance System			PROJECT NUMBER AND NAME 1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	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		OTHER CONTRACTS	7.625			0.003	11/04						7.628	7.628
Developmental and Operational Test	WX	SSC-SAN DIEGO,CA	14.749	3.447	11/04	0.339	11/04	1.500	11/05	2.000	11/06	Continuing	Continuing	Continuing
Developmental and Operational Test		OTHER ACTIVITIES	4.658	0.120	11/04	0.021	11/04	0.170	11/05	0.170	11/06	Continuing	Continuing	Continuing
Developmental and Operational Test	SS/CPFF	UNIVERSITY LABS		1.208	11/04	0.061	11/04	1.000	11/05	1.000	11/06	Continuing	Continuing	Continuing
Subtotal T&E			27.032	4.775		0.424		2.670		3.170		Continuing	Continuing	Continuing
Remarks:														
Program Management Support		OTHER ACTIVITIES		1.657	11/03	0.477	11/04	1.081	11/05	2.087	11/06	Continuing	Continuing	
Subtotal Management			0.000	1.657		0.477		1.081		2.087		Continuing	Continuing	Continuing
Remarks:														
Total Cost			336.463	32.876		17.416		54.256		57.974		Continuing	Continuing	Continuing
Remarks:														

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R-1 SHOPPING LIST - Item No. 132

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

UNCLASSIFIED

Exhibit R-2, RDTE Budget Item Justification
(Exhibit R-2, page 10 of 11)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-4a, Schedule Detail

DATE:

February 2005

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT			PROJECT NUMBER AND NAME				
RDT&E, N/ BA-5	0604784N/ Distributed Surveillance System			1300/ ADVANCED DEPLOYABLE SYSTEM (ADS)				
Schedule Profile (Increment Alpha; Increment Bravo plan in development)	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011
SENSOR SUBSYSTEM								
Gold Array (First Article) Fabrication								
At-Sea Test Production Array								
Complete production of 9 test articles	Q1							
Complete production of additional test articles	Q4							
EMD system Preliminary Design Review			Q1					
EMD system Critical Design Review			Q2					
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 Critical Design Review			Q2					
EMD system SIT system manufacture				Q3				
Refurbish / Repair for Fleet use						Q2		
TACTICAL INTERFACE								
BAA / Concept Exploration								
Award study contracts	Q1							
Mock-up / engineering model	Q4							
Prototype system spiral development		Q3						
EMD system Preliminary Design Review		Q2						
EMD system Critical Design Review			Q2					
EMD system SIT system manufacture				Q3				
Refurbish / Repair for Fleet use						Q2		
ANALYSIS & REPORTING SUBSYSTEM								
Mission Planner Upgrade	Q1							
Prototype Interface Description		Q1						
Prototype system spiral development		Q3						
EMD system Critical Design Review		Q2						
EMD system Detailed Design Review			Q2					
EMD system manufacture to support LCS Integration Lab			Q4					
EMD system SIT system manufacture				Q3				
Refurbish / upgrade & prepare for Fleet use						Q2		
SYSTEM TESTS								
Dual Array Test	Q1							
Undersea Dominance		Q1						
At- Sea Demonstration			Q3					
System Integration Test				Q4				
TECHEVAL					Q2			
OPEVAL					Q3			
CONTRACT								
LRIP					Q1	Q1		
FRP						Q4		
PRR							Q4	

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