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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2007			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY , BA-5					R-1 ITEM NOMENCLATURE 0604784N/ Distributed Surveillance System					
COST (\$ in Millions)	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	Cost to Complete	Total Program
Total PE Cost	50.854	59.049	0.000	0.000	0.000	0.000	0.000	0.000	0.000	109.903
1300 Advanced Deployable System (ADS)	50.854	58.053	0.000	0.000	0.000	0.000	0.000	0.000	0.000	108.907
9999 Undistributed RDT&E Congressional adds		0.996								0.996
RDT&E Articles Qty (SS)										
RDT&E Articles Qty (ISS)										
RDT&E Articles Qty (TIS)										
RDT&E Articles Qty (ARS)										

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

The Advanced Deployable System (ADS), Project 1300, is a rapidly deployable, passive acoustic undersea surveillance system that will be deployed and monitored by a rental craft at a System Integration Test (SIT) in the first quarter of Fiscal year 2008. 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. ADS consists of three subsystems coordinated by the Prime Contractor who develops the Prime Mission Product (PMP) and who acts as the system integrator for all subcontract activities:

- The String, which incorporates the Sensor Subsystem (SS) and the Tactical Interface Subsystem (TIS). SS consists of four acoustic arrays, small diameter fiber optic (SDFO) cable which connects the arrays, and a pressure vessel (PV). The PV contains a battery power supply, electronics, and lasers. The lasers serve to optically telemeter the hydrophone data to the in-water TIS via SDFO cable. The TIS consists of a self-powered buoy, housing computers (to partially process and compress the SS data stream), a radio and an antenna to transmit the data to a 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 the rental craft for monitoring and data collection.
 - An Installation Support Subsystem (ISS) for rapid deployment of the SS and TIS by the LCS.
- Following SIT, the ADS program will be terminated as directed by the Assistant Secretary of the Navy (Research, Development and Acquisition) in an Acquisition Decision Memorandum dated 5 October 2006.

FY07 Congressional add: Funding for Off-Board Sensor

(U) JUSTIFICATION FOR BUDGET ACTIVITY:

TECHNOLOGY DEVELOPMENT (TD) AND SYSTEM DEVELOPMENT DEMONSTRATION (SDD)

This program is funded under technology development because it encompasses development of new end-items. Milestone B approved December 2005.

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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. PROGRAM CHANGE SUMMARY:					
		FY06	FY07	FY08	FY09
FY07 President's Budget Submit		55.842	58.273	34.234	35.312
FY08 President's Budget Submit		50.854	58.053	0.000	0
Total Adjustments		-4.988	-0.220	-34.234	-35.312
Summary of Adjustments					
Congressional Adjustments		-2.400			
Undistributed General Reductions		0.040	-0.220		
Reprogrammings		-2.628			
Cancellation of ADS				-34.234	-35.312
		-4.988	-0.220	-34.234	-35.312
(U) Schedule:					
Milestone B approved 22 Dec 05. Only SIT remains funded for completion.					
(U) Technical:					
N/A					

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COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost	50.854	58.053	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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(U) B. Accomplishments/Planned Program

ANALYSIS AND REPORTING SYSTEM (ARS)	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	8.733	4.318	0.000	0.000
RDT&E Articles Quantity				

FY06 Develop the detailed design for the LCS shipboard C4I, data processing, display, in buoy processor, and installation planning necessary for the ARS of the ADS Mission Module. Conduct development of the segments of the ARS of the ADS Mission Module. Procure hardware for first ARS test article to support the consolidated LCS Mission Package Computer Environment Integration Lab. Prepare for the System Critical Design Review (CDR).

FY07 Conduct System CDR and DVTs for the segments of the ARS of the ADS Mission Module. Integrate all ARS segments for subsystem testing and then participate in ADS System Integration Test (SIT).

INSTALLATION SUPPORT SUBSYSTEM (ISS)	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.619	2.317	0.000	0.000
RDT&E Articles Quantity				

FY06 Complete detailed design and conduct the segment Detailed Design Review. Conduct necessary risk reduction testing. Prepare for the System CDR. Oversee segment fabrication and conduct segment integration testing.

FY07 Conduct System CDR. Continue segment fabrication and integration testing. Procure hardware for ISS test article in support of the System Integration Test (SIT).

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(U) B. Accomplishments/Planned Program

TEST AND EVALUATION (T&E)	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.162	0.665	0.000	0.000
RDT&E Articles Quantity				

FY06 Oversee a series of Design Verification Tests/Developmental Tests (DVT/DT) during SDD Phase to facilitate and validate system design, minimize risk, and verify the accomplishment of remaining technical performance requirements.

FY07 Coordinate test planning for SIT. Following a favorable Critical Design Review, DT will focus on the demonstration of system integration with final SIT aboard a surface vessel to validate system end-to-end performance.

String	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	0.360	1.238	0.000	0.000
RDT&E Articles Quantity			0	

FY06 Oversee the design, breadboard, prototype and Design Verification Test (DVT) of the entire subsystem (RF radio, buoy, power, mooring, and anchor) as well as development of the encryption/decryption solution to satisfy security requirements. Continue spectrum certification process. Manage fabrication of first test article for developmental test program. Trade studies to reduce system life cycle cost based on new requirement and LCS centric concept: low-cost cable, lighter and less expensive pressure vessels, cheaper array unit cost are a few high-impact candidates. Prepare for System CDR.

FY07 Conduct Buoy Installation Assembly (BIA) risk reduction test. Conduct System CDR. Continue DVT of subsystem components. Fabricate test articles to support SIT. Finalize spectrum certification approval.

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(U) B. Accomplishments/Planned Program

Prime Mission Product (PMP)	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	39.855	45.033	0.000	0.000
RDT&E Articles Quantity				

FY06 Develop ADS prime mission product hardware and software. Provide prime contractor funding to act as system integrator. Conduct System PDR. Manufacture test articles to support developmental tests.

FY07 Develop ADS prime mission product hardware and software. Provide prime contractor funding to act as system integrator. Conduct System CDR. Continue manufacturing test articles to support SIT. Refurbish SIT gear and conduct all efforts required to terminate program following refurbishment of SIT gear.

SYSTEM ENGINEERING PROGRAM MANAGEMENT (SEPM)	FY06	FY07	FY08	FY09
Accomplishments/Effort/Subtotal Cost	1.125	4.482	0.000	0.000
RDT&E Articles Quantity				

FY06 Continue Project Management support for the ADS project office. Monitor government and contractor technical, schedule, and cost performance. Prepare for the System CDR 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 refine the Interface Control Document. Hold Milestone B decision review with the Milestone Decision Authority (MDA) and gain approval to award SDD contract.

FY07 Continue Project Management support for the ADS Program Office. Monitor government and contractor technical, schedule, and cost performance. Witness subsystem integration testing and prepare for conduct of 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 and conduct risk management. Conduct System CDR. Continue to coordinate with LCS Mission Module and Ship program offices for radio and antenna integration. Oversee refurbishment of SIT gear and cancellation of the program following SIT.

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(U) C. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY2012</u>	<u>FY2013</u>	To <u>Complete</u>	Total <u>Cost</u>
LCS RDT&E PE0603581N	4.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.400

As part of the LCS ASW Mission Module (MM), ADS received FY06 RDT&E funds from LCS MM Program Office. Funds provided to augment ADS Systems Engineering efforts in connection with ADS integration and installation with the LCS.

(U) D. ACQUISITION STRATEGY (AS):

Acquisition Strategy (Approved by ASN/RDA Apr04) addresses redirected program under review by Navy Leadership. Strategy takes ADS to sole source contracting strategy, and the contract was awarded SEP 04.

		FY06		FY07		FY08
PROGRAM MILESTONES		MILESTONE B				
ENGINEERING MILESTONES				CRITICAL DESIGN REVIEW (CDR)		
T&E MILESTONES		DEVELOPMENTAL TEST EVENTS		DEVELOPMENTAL TEST EVENTS		CONDUCT SIT
CONTRACT MILESTONES		SYSTEM DEVELOPMENT AND DEMONSTRATION (SDD) OPTION FUNDED				CANCEL PROGRAM FOLLOWING SIT

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CONGRESSIONAL PLUS UPS

	FY06	FY07	FY08	FY09
9A57				
Off Board Sensor		0.996		

Funds to provide a systems approach to the development of the Wet-end Installation System Element (WISE) which deploys sensors using expendable underwater vehicles. The system will provide wide area surveillance and real-time target information from deployable surveillance sensors to the tactical commander in the Littoral environment without the need to connect to the sensors."
