

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY BA-7						R-1 ITEM NOMENCLATURE 0204311N-Integrated Surveillance Systems				
COST (\$ in Millions)	Prior Years Cost	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost To Complete	Total Program
Total PE Cost	331.209	27.023	30.647	30.740	28.289	24.184	25.841	26.047	Continuing	Continuing
0766-IUSS Detection and Classification System	331.209	23.763	23.097	30.740	28.289	24.184	25.841	26.047	Continuing	Continuing
9622 Fiber Optic Fixed Surveillance System	0.000	3.260	0.000	0.000	0.000	0.000	0.000	0.000		
9999 Undistributed RDT&EN Congressional Adds	0.000	0.000	7.550	0.000	0.000	0.000	0.000	0.000		
Quantity of RDT&E Articles										

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
This Program Element (P.E.) comprises two projects - 0766 and 9622. Project 0766 provides for Integrated Undersea Surveillance Systems (IUSS) Research and Development Projects under the Maritime Surveillance Systems (MSS) Program Office (PEO LMW PMS 485). IUSS provides the Navy with its' primary means of submarine detection both nuclear and diesel. The program has undergone a major transition from emphasis on maintaining a large dispersed surveillance force keyed to detection and tracking of submarines to a much smaller force that is effective against modern diesel and nuclear submarines in regional/littoral or broad ocean areas of interest. This transition preserves the ability to continue open ocean surveillance. A portion of project 0766 (FSS) is classified, with details available at a higher classification level. Project 9622 (Fiber Optic FSS) is a Congressional Plus-Up that supports FDS All Optical development efforts for Fixed Surveillance Systems.

(U) JUSTIFICATION FOR BUDGET ACTIVITY:
The IUSS Research and Development project (0766) funds SURTASS Passive and SURTASS Low Frequency Active (LFA) developments. SURTASS provides the mobile, tactical arm of the Integrated Undersea Surveillance System, providing long range detection and cueing for tactical weapons platforms against both diesel and nuclear powered submarines. SURTASS LFA provides an active adjunct capability for IUSS passive and tactical sensors to assist in countering the quieter diesel and nuclear threats of the 1990s and beyond. The LFA tasks are directed at detection of slow quiet threats in harsh littoral waters.

(U) In order to continue with reductions in life cycle costs and continue with system-wide consolidation, a short-term goal is to develop a common IUSS processor based on NAVSEA'S Acoustic Rapid COTS Insertion (ARCI) program. The IUSS Integrated Common Processor (ICP) will have the capability to process and display data from all fixed and mobile underwater systems. The IUSS ICP will be used for all new system installations and replace the legacy systems as they reach end of life and require upgrading. Additionally, SURTASS is consolidating on the TB-29A/TL array, a variant of the Submarine TB-29A Long line array. This will reduce the number of array variants employed by SURTASS from 4 to 1, and will enable development and logistics cost savings by leveraging off the submarine TB-29A program.

(U) Future efforts will be focused on upgrading the LFA capability to the ICP baseline, support bi-static processing utilizing the TL-29A, support activation of fixed sensors, develop smaller, lighter weight acoustic

FY06 Congressional Adds
Project 9999- Funds three congressional adds: Fiber Optic Confirmed Acoustic Velocity System, IUSS Common Processor automation, workload reduction and Ultra-thin disposable fiberoptic undersea surveillance arrays.

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 16)

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems				PROJECT NUMBER AND NAME 0766: IUSS Detection and Classification System			
COST (\$ in Millions)	Prior Years Cost		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost*	331.209	0.000	23.763	23.097	30.740	28.289	24.184	25.841	26.047
RDT&E Articles Qty									

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

A. (U) The SURTASS project comprises the mobile, tactical arm of the Integrated Undersea Surveillance System, providing long range detection and cueing for tactical weapons platforms against both diesel and nuclear powered submarines. SURTASS also provides the undersea surveillance necessary to support regional conflicts and sea-lane protection. SURTASS has experienced recent passive and active success against diesel submarines operating in shallow water. SURTASS is leveraging existing developments and reducing costs by using Non-Developmental Items and commercial hardware; supporting common Navy Undersea Warfare processing and towed array developments; while increasing operator efficiency through computer aided detection and classification processing. SURTASS development efforts include: LFA improvements, common IUSS processing, twin-line array development and processing, improved detection and classification/passive automation to counter quieter threats; additional signal processing and bi-static active capability; integrated active and passive operations; improved Battle Group support; and improved information processing.

(U) LFA provides an active adjunct capability for IUSS passive and tactical sensors to counter the quieter diesel and nuclear threats of the 1990s and beyond. The LFA tasks are directed at detection of slow quiet threats in harsh littoral waters. Improvements include TL-29A/LFA integration enhancements; advanced waveforms for littoral/shallow water operations including Doppler sensitive waveforms; and processing algorithms to reduce clutter and reverberation false alarms in shallow water. The LFA task includes development and testing of a compact LFA transmit source array for SWATH-P ships, and upgrade of LFA processing capability into the IUSS Integrated Common Processing architecture. The Integrated Common Processor (ICP) is a derivative of the NAVSEA Submarine Acoustic Rapid COTS Insertion (ARCI) program, and is being augmented for IUSS requirements. Together, the LFA improvements, TL-29A, and the ICP support the Active Improvement Program being initiated by PEO LMW PMS 485.

(U) Functional improvements are delivered to the Fleet in software "Builds", while hardware improvements are delivered through the "Tech Insertion" process. Software builds are based upon the Advanced Processor Build (APB) process begun by the NAVSEA Submarine USW program. Each APB will introduce new capabilities into SURTASS systems including improved automation, normalizer techniques, adaptive beam forming, and display enhancements. SURTASS participates in the process by contributing algorithms for consideration, supplying peer group members for review of candidate algorithms, participating in test evolutions, and incorporating improved algorithms into operational systems. The "Tech Insertion" process, modelled after the NAVSEA Submarine USW hardware improvement program, delivers processing technology improvements to platforms on roughly a 4-year cycle. Hardware upgrades for active and passive arrays and communications systems will also be provided during "TI" upgrades, but not on a regular planned development cycle as for the processing upgrades.

B. (U) PEO LMW is involved with the development and maintenance of various IUSS systems. These systems include FDS, FDS-C, SDS, SURTASS, and ADS. The near-term goal is development of ICP, which will result in a single IUSS processor baseline, with minor maintenance efforts continuing on fielded systems. The existing system architecture, signal processing, contact management, and reporting requirements will be evaluated as well as the requirements for future systems. The development of the ICP will take advantage of automation advancement, array technology improvements, and IUSS, submarine, and surface USW system commonality. Additionally, a long term goal is to activate all IUSS sensors as part of a coordinated Active Improvement Program.

*A portion of project 0766 (FSS) is classified, with details available at a higher classification level.

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2006																															
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME 0766: IUSS Detection and Classification System																																
(U) B. Accomplishments/Planned Program																																		
<table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <tr> <th style="width: 30%;"></th> <th style="width: 15%;"></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>N74 ASW Study</td> <td></td> <td style="text-align: center;">0.700</td> <td style="text-align: center;">0.690</td> <td style="text-align: center;">0.700</td> </tr> <tr> <td>RDT&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>FY05: ASW Study (\$700K) – Continue conducting trade-off and mission studies to explore networked ASW system concepts, investment alternatives and development of a community-wide strategy for common performance models.</p> <p>FY06: ASW Study (\$690K) – Continue conducting trade-off and mission studies to explore networked ASW system concepts, investment alternatives and development of a community-wide strategy for common performance models.</p> <p>FY07: ASW Study (\$700K) – Continue conducting trade-off and mission studies to explore networked ASW system concepts, investment alternatives and development of a community-wide strategy for common performance models.</p> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <tr> <th style="width: 30%;"></th> <th style="width: 15%;"></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>Execution Realignment for Task Force ASW</td> <td></td> <td style="text-align: center;">7.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td>RDT&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>FY 05 - Continue development and procurement of specific anti-submarine warfare (ASW) innovative technologies, procurement of reusable test assets for specific ASW technology concepts, and continued investment in developing and testing the highest potential industry originated technology concepts for ASW .</p> </div>							FY 05	FY 06	FY 07	N74 ASW Study		0.700	0.690	0.700	RDT&E Articles Quantity							FY 05	FY 06	FY 07	Execution Realignment for Task Force ASW		7.000	0.000	0.000	RDT&E Articles Quantity				
		FY 05	FY 06	FY 07																														
N74 ASW Study		0.700	0.690	0.700																														
RDT&E Articles Quantity																																		
		FY 05	FY 06	FY 07																														
Execution Realignment for Task Force ASW		7.000	0.000	0.000																														
RDT&E Articles Quantity																																		

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME 0766: IUSS Detection and Classification System

(U) B. Accomplishments/Planned Program

		FY 05	FY 06	FY 07
TB-29A/Twin-Line		1.500	0.000	0.000
RDT&E Articles Quantity				

FY05: (\$1,500K) Complete processing improvements to support TB-29A operations and expand array interoperability.

		FY 05	FY 06	FY 07
SURTASS Active Improvement Program		10.785	18.500	18.920
RDT&E Articles Quantity				

FY05: (\$10,785) Continue development of CLFA capability. Begin transmit subsystem development and Small Waterplane Area Twin Hull-Passive (SWATH-P) SOC modifications. Begin active IUSS Common Processor development.

FY06: (\$18,500) Continue development of CLFA capability. Complete SWATH-P SOC modification designs and convert first SWATH-P platform to support CLFA system. Continue active IUSS Common Processor development. Begin Sea Test Planning and DT/OT preparations for Active Improvement Program (LFA/TL-29A/IUSS Common Processor). Begin development of Off-Board Sensor capabilities.

FY07: (\$18,920) Continue development of CLFA capability. Continue active IUSS Common Processor development to support bi-static processing and fixed sensor activation. Conduct DT/OT for Active Improvement Program (LFA/TL-29A/IUSS Common Processor). Continue development of Off-Board Sensor capabilities.

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 4 of 16)

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-7	0204311N-Integrated Surveillance Systems	0766: IUSS Detection and Classification System	
(U) C. PROGRAM CHANGE SUMMARY:			
(U) Funding:	FY 2005	FY 2006	FY 2007
FY06 President's Budget	16.772	23.453	23.192
FY07 President's Budget	23.763	23.097	30.740
Total Adjustments	6.991	-0.356	7.548
Summary of Adjustments			
Other General Provisions	-0.009	-0.110	1.05
Programmatic Changes	7.000		5.000
Rescissions		-0.246	
Warfare Center Rates			-0.027
Inflation			1.525
Subtotal	6.991	-0.356	7.548
 (U) Schedule:			
Not Applicable.			
 (U) Technical:			
Not Applicable			

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 5 of 16)

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems			PROJECT NUMBER AND NAME 0766: IUSS Detection and Classification System			
(U) D. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</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>	<u>Complete</u>	<u>Total Cost</u>
OPN 2237	7.118	3.797	4.688	1.191	23.577	24.033	1.471	Continuing	Continuing
 (U) E. ACQUISITION STRATEGY: *									
	FY 2005		FY 2006		FY2007				
Program Milestones									
Engineering Milestones			Integrated Common Processor TL-29A Variant 4/06		Integrated Common Processor LFA/CLFA/Bi-Static Variant				
T&E Milestones	TL-29A SEA TESTS				LFA/TL-29A/ICP FOT&E CLFA SEA TESTS				
Contract Milestones	Integrated Common Processor SURTASS 7/05								

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 6 of 16)

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)											DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME								
RDT&E, N / BA-7			0204311N-Integrated Surveillance Systems			0766: IUSS Detection and Classification System								
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
IUSS Common Architecture	CPFF	GDAIS/LM/ARL	41.687			0.000		0.000		0.000		0.000	41.687	41.687
Environmental Research	WR	ONR / VARIOUS	8.500			0.000		0.000		0.000		0.000	8.500	
Active Improvements/CLFA/LFA	CPFF	BAE /GDAIS/ VARIOUS	88.297			8.561	11/04	13.800	11/05	13.720	11/06	Continuing	Continuing	
C4I Integration	CPFF	VARIOUS	31.768			0.000		0.000		0.000		0.000	31.768	
N74 ASW Study	WX/PD	NUWC / APL	3.864			0.700	11/04	0.690	11/05	0.700	11/06	Continuing	Continuing	
Various	WX	VARIOUS	47.169			0.000		0.000		0.000		0.000	47.169	
Passive Signal Processing/ Sonar	CPFF	APL/GDAIS	2.202			0.000		0.000		0.000		0.000	2.202	2.202
Array Improvements	CPFF/WR	APL/SSC/VAR	2.530			0.524	11/04	0.000		0.000		0.000	3.054	
Task Force ASW		VARIOUS	0.000			7.000	03/05	0.000		0.000		0.000	7.000	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
Subtotal Product Development			226.017	0.000		16.785		14.490		14.420		Continuing	Continuing	
Remarks:														

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 7 of 16)

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)										DATE:		February 2006			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME								
RDT&E, N / BA-7			0204311N-Integrated Surveillance Systems				0766: IUSS Detection and Classification System								
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	
IUSS Common Architecture	WX	Various	1.300			0.000	11/04	0.000		0.000		0.000	1.300		
Active Improvements/CLFA/LFA	CPFF	NGC/Various	4.905			0.600	11/04	0.800	11/05	0.800	11/06	Continuing	Continuing		
C4ISR Integration	CPPF	NGC/Various	1.819			0.000	11/04	0.000		0.000		0.000	1.819		
Passive Signal Processing/ Sonar	Var/WX	Various	0.600			0.000	11/04	0.000		0.000		0.000	0.600		
Array Improvements	Var/WX	Various	0.620			0.200	11/04	0.000		0.000		0.000	0.820		
Various	Var/WX	Various	1.216			0.000	11/04	0.000		0.000		Continuing	Continuing		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		
													0.000		

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 8 of 16)

CLASSIFICATION:

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 2)

DATE:
February 2006

APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT 0204311N-Integrated Surveillance Systems			PROJECT NUMBER AND NAME 0766: IUSS Detection and Classification System								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost		FY 04	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
IUSS Common Architecture	Var/ WX	VARIOUS	1.837			0.000		0.000		0.000		0.000	1.837	
Active Improvements/CLFA/LFA	Var/ WX	VARIOUS	8.019			1.200	11/04	3.500	11/05	4.000	11/06	Continuing	Continuing	
Passive Signal Processing	Var/ WX	VARIOUS	1.300			0.000		0.000		0.000		0.000	1.300	
Array Improvements	Var/ WX	VARIOUS	0.590			0.600	11/04	0.000		0.000		0.000	1.190	
													0.000	
													0.000	
													0.000	
Subtotal T&E			11.746	0.000		1.800		3.500		4.000		Continuing	Continuing	
Remarks:														
Active Improvements/CLFA/LFA	Var/ WX	VARIOUS	2.017			0.400	11/04	0.400	11/05	0.400	11/06	Continuing	Continuing	
Passive Signal Processing	Var/ WX	VARIOUS	0.250			0.000		0.000		0.000		0.000	0.250	
Array Improvements	Var/ WX	VARIOUS	0.400			0.200	11/04	0.000		0.000		0.000	0.600	
													0.000	
													0.000	
													0.000	
Subtotal Management			2.667	0.000		0.600		0.400		0.400		Continuing	Continuing	
Remarks:														
Total Cost			250.890	0.000		19.985		19.190		19.620		Continuing	Continuing	
Remarks:														

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R4, Schedule Profile																								DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7										PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems										PROJECT NUMBER AND NAME 0766: IUSS Detection and Classification System												
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				
Acquisition Milestones Inactive ACAT II Status Eff 15 Jul 2002																																
Test & Evaluation Milestones																																
T-23 Development Testing																																
TB-29A/Twinline																																
LFA / TL-29A / ICP FOT&E																																
CLFA CERTIFICATION TESTS																																
Production Milestones																																
Integrated Common Processor																																
CLFA																																
Tech Insertion 2010																																

R-1 SHOPPING LIST - Item No. 174

FOT & E: Follow-on Test and Evaluation

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

[illegible]

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 11 of 16)

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7		PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems				PROJECT NUMBER AND NAME 9622: Fiber Optic Fixed Surveillance System			
COST (\$ in Millions)	Prior Years Cost		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.000		3.260	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty									
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>A. (U) IUSS provides the Navy with its primary means of submarine detection both nuclear and diesel. The program has undergone a major transition from emphasis on maintaining a large dispersed surveillance force keyed to detection and tracking of submarines to a much smaller force that is effective against modern diesel and nuclear submarines in regional/littoral or broad ocean areas of interest. This transition preserves the ability to continue open ocean surveillance. These systems include FDS, FDS-C, SDS, SURTASS, and ADS. This effort supports continued development of an All-Optical fixed surveillance system. Prior year funding for this effort was executed from Project 0766.</p>									

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
 (Exhibit R-2, page 12 of 16)

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA 7	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME 9622: Fiber Optic Fixed Surveillance System

(U) B. Accomplishments/Planned Program

		FY 05	FY 06	FY 07
Fiber Optic FSS Technology Development		3.260	0.000	0.000
RDT&E Articles Quantity				

FY05 (\$3,260) Modify previous All Optical component designs to allow for seamless integration with existing legacy components, produce a prototype array for validation, and test and evaluate the prototype in an operational environment.

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006																												
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME 9622: Fiber Optic Fixed Surveillance System																												
<p>(U) C. PROGRAM CHANGE SUMMARY:</p> <table><tr><td>(U) Funding:</td><td>FY 2005</td><td>FY 2006</td><td>FY 2007</td></tr><tr><td>FY06 President's Budget Submit</td><td>3.262</td><td>0.000</td><td>0.000</td></tr><tr><td>FY07 President's Budget Submit</td><td>3.260</td><td>0.000</td><td>0.000</td></tr><tr><td>Total Adjustments</td><td>-0.002</td><td>0.000</td><td>0.000</td></tr><tr><td colspan="4">Summary of Adjustments</td></tr><tr><td>Other General Provision</td><td>-0.002</td><td></td><td></td></tr><tr><td>Subtotal</td><td>-0.002</td><td>0.000</td><td>0.000</td></tr></table> <p>(U) Schedule: Not applicable</p> <p>(U) Technical: Not applicable</p>			(U) Funding:	FY 2005	FY 2006	FY 2007	FY06 President's Budget Submit	3.262	0.000	0.000	FY07 President's Budget Submit	3.260	0.000	0.000	Total Adjustments	-0.002	0.000	0.000	Summary of Adjustments				Other General Provision	-0.002			Subtotal	-0.002	0.000	0.000
(U) Funding:	FY 2005	FY 2006	FY 2007																											
FY06 President's Budget Submit	3.262	0.000	0.000																											
FY07 President's Budget Submit	3.260	0.000	0.000																											
Total Adjustments	-0.002	0.000	0.000																											
Summary of Adjustments																														
Other General Provision	-0.002																													
Subtotal	-0.002	0.000	0.000																											

R-1 SHOPPING LIST - Item No. 174

UNCLASSIFIED

Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 14 of 16)

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2006				
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N / BA-7		0204311N-Integrated Surveillance Systems			9622: Fiber Optic Fixed Surveillance System					
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</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>	<u>To Complete</u>	<u>Total Cost</u>
NONE										
(U) E. ACQUISITION STRATEGY: *										
Program Milestones										
Engineering Milestones										
T&E Milestones										
Contract Milestones										
(U) F. MAJOR PERFORMERS: **										

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-4	0204311N-Integrated Surveillance Systems	9999/ Congressional Plus-Ups : VARIOUS	

CONGRESSIONAL PLUS-UPS:

	FY 06			
9791N F				
Fiber Optic Conformal Acoustic Velocity System	3.600			

Funding to research and support fiber optic acoustic velocity systems.

	FY 06			
9792N				
IUSS Common Processor Automation, workload reduction	2.250			

Funding to research sonar automation for technical insertion into Integrated Common Processor to improve probability of detection performance.

	FY06			
9793N Ultra-thin Disposable Fiberoptic Undersea Surveillance	1.700			
Arrays				

Funding for research of feasibility of disposable arrays.