

# UNCLASSIFIED

## CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE:		February 2005	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY /						R-1 ITEM NOMENCLATURE 0204311N-Integrated Surveillance Systems					
BA-7											
COST (\$ in Millions)	Prior Years Cost	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to Complete	Total Program
Total PE Cost	317.092	14.117	20.034	23.453	23.192	20.023	21.472	23.692	24.051	Continuing	Continuing
0766-IUSS Detection and Classification System	240.987	9.903	12.958	19.486	19.529	16.231	17.584	19.702	19.959	Continuing	Continuing
Z0766 Fixed Surveillance Systems- Note 1	76.105	4.214	3.814	3.967	3.663	3.792	3.888	3.990	4.092	Continuing	Continuing
9622 Fiber Optic Fixed Surveillance System	0.000	0.000	3.262	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.262
Quantity of RDT&E Articles											0.000
(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This Program Element (P.E.) comprises three projects - 0766, 9622, and Z0766. 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. Project Z0766 (FSS) is a classified project, 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 (Q0766) 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 Common Processor will have the capability to process and display data from all fixed and mobile underwater systems. The IUSS Common Processor 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 IUSS Common Processor baseline, support bi-static processing utilizing the TL-29A, support activation of fixed sensors, develop smaller, lighter weight acoustic sources for augmentation of small SWATH platforms, and for replacement of aging LFA sources. Together these efforts support an Active Improvement Program within IUSS.											
Note 1 -- Details available at a higher classification.											

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Exhibit R-2, RDTEN Budget Item Justification  
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EXHIBIT R-2a, RDT&E Project Justification								DATE: <b>February 2005</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems					PROJECT NUMBER AND NAME <b>0766: IUSS Detection and Classification System</b>					
COST (\$ in Millions)	Prior Years Cost	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to Complete	Total Program
Project Cost	<b>240.987</b>	<b>9.903</b>	<b>12.958</b>	<b>19.486</b>	<b>19.529</b>	<b>16.231</b>	<b>17.584</b>	<b>19.702</b>	<b>19.959</b>	<b>Continuing</b>	<b>Continuing</b>
RDT&E Articles Qty											<b>0</b>
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b> <p>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.</p> <p>(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 Common Processing architecture. The IUSS Common Processor 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 IUSS Common Processor support the Active Improvement Program being initiated by PEO LMW PMS 485.</p> <p>(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.</p> <p>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 to develop 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 IUSS processor 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.</p>											

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Exhibit R-2a, RDTEN Project Justification  
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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 7</b>	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME <b>0766: IUSS Detection and Classification System</b>		
<b>(U) B. Accomplishments/Planned Program</b>				
	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>T-23 Development Testing</b>	1.073	0.000	0.000	0.000
RDT&E Articles Quantity				
<b>FY04:</b> T-23 DT (\$1.073K) – Complete certification testing. Correct software issues uncovered during testing in preparation for operations.				
	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>FY 07</b>
<b>Common Acoustic Processor</b>	2.000	0.000	0.000	0.000
RDT&E Articles Quantity				
<b>FY04:</b> Common Acoustic Processor (\$2,000K) – Complete software development for Twin-Line processing in the ARCI architecture. Transition Common Acoustic Processor to MSS Active Improvement Program.				
	<b>FY04</b>	<b>FY05</b>	<b>FY06</b>	<b>FY 07</b>
<b>Active Acoustics</b>	0.659	0.000	0.000	0.000
RDT&E Articles Quantity				
<b>FY04:</b> Active Acoustics (\$659K) - Continue implementation of a multi-year sea test program focused on CONOPS and the physics of shallow water. Continue development of improvements for LFA operations in shallow water. Continue sea test program to support system improvements and demonstrate/validate operational concepts. Transition Active Acoustics efforts to MSS Active Improvement Program.				

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<b>(U) B. Accomplishments/Planned Program</b>				
	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>LFA Environmental</b>	0.000	0.000	0.000	0.000
RDT&E Articles Quantity				
<b>No Activity--Funding transferred to ONR beginning in FY04.</b>				
	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>N74 ASW Study</b>	0.700	0.700	0.700	0.700
RDT&E Articles Quantity				
<b>FY04:</b> N74 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. <b>FY05:</b> N74 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. <b>FY06:</b> N74 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. <b>FY07:</b> N74 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.				
	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>ASW C4I</b>	0.125	0.000	0.000	0.000
RDT&E Articles Quantity				
<b>FY04:</b> ASWC4I (\$125K) – Continue performing engineering, analysis and trade-offs; conduct proof of concept testing to support IUSS integration into the Navy's C4I architecture, including IT-21 implementation. Transition ASW C4I to MSS Active Improvement Program.				

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 7</b>	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME <b>0766: IUSS Detection and Classification System</b>

**(U) B. Accomplishments/Planned Program**

	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>System Engineering</b>	0.125	0.000	0.000	0.000
RDT&E Articles Quantity				

**FY04:** IUSS System Engineering (\$125K) – Continue to provide system level engineering across IUSS programs. Translate Fleet requests into system level design solutions for IUSS Common Processor. Transition System Engineering to MSS Active Improvement Program.

	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>Passive Processing &amp; Automation</b>	1.095	0.000	0.000	0.000
RDT&E Articles Quantity				

**FY04:** (\$1,095K) – Continue development of algorithms and software for signal processing and automation associated with unique SURTASS requirements and environments. Participation in SDWG and related working groups. Focus future efforts on SURTASS Active Improvement Program.

	<b>FY 04</b>	<b>FY 05</b>	<b>FY 06</b>	<b>FY 07</b>
<b>SURTASS System Eng &amp; Shore Support</b>	1.000	0.000	0.000	0.000
RDT&E Articles Quantity				

**FY04:** (\$1,000K) Complete development of SURTASS ARCI interfaces with IUSS legacy systems. Complete implementation of Common OMI.

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<b>(U) B. Accomplishments/Planned Program</b>				
<b>TB-29A/Twin-Line</b>	<b>FY 04</b> 1.740	<b>FY 05</b> 1.500	<b>FY 06</b> 0.000	<b>FY 07</b> 0.000
RDT&E Articles Quantity				
<p><b>FY04:</b> (\$1,740K) Continue processing improvements to support TB-29A operations and expand array interoperability. Develop across platform telemetry architecture. Continue development of Twin-Line modifications to basic TB-29A architecture.</p> <p><b>FY05:</b> (\$1,500K) Complete processing improvements to support TB-29A operations and expand array interoperability.</p>				
<b>SURTASS Active Improvement Program</b>	<b>FY 04</b> 1.386	<b>FY 05</b> 10.758	<b>FY 06</b> 18.786	<b>FY 07</b> 18.829
RDT&E Articles Quantity				
<p><b>FY04:</b> (\$1,386K) Initiate design of Compact Low Frequency Active (CLFA) array suspension and handling system. Investigate compatible CLFA acoustic source variants.</p> <p><b>FY05:</b> (\$10,758) 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.</p> <p><b>FY06:</b> (\$18,786) 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.</p> <p><b>FY07:</b> (\$18,829) 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.</p>				
	<b>FY 04</b> 0.000	<b>FY 05</b> 0.000	<b>FY 06</b> 0.000	<b>FY 07</b> 0.000
RDT&E Articles Quantity				
No Activity.				

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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 2004	FY 2005	FY 2006	FY 2007
FY05 President's Budget		9.903	13.138	14.060	16.309
FY06/07 President's Budget		9.903	12.958	19.486	19.529
Total Adjustments		0.000	-0.180	5.426	3.220
Summary of Adjustments					
Congressional Undistributed Adjustments			-0.177		
Programmatic/Other Adjustments			-0.003	5.426	3.220
Subtotal		0.000	-0.180	5.426	3.220
(U) Schedule:					
Not Applicable.					
(U) Technical:					
Not Applicable					

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**Exhibit R-2a, RD TEN Project Justification**  
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EXHIBIT R-2a, RDT&E Project Justification								DATE:		
								February 2005		
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) D. OTHER PROGRAM FUNDING SUMMARY:										
Line Item No. & Name		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total Complete Cost
OPN 2237 OMN Omitted per instructions		15.009	7.123	3.848	3.477	1.186	1.405	1.437	1.471	Continuing Continuing
E. ACQUISITION STRATEGY										
		FY 2004			FY 2005			FY 2006		FY2007
Program Milestones										
Engineering Milestones		ARCI TB29/TL VARIANT 8/04			IUSS Common Processor TL-29A Variant 7/05					IUSS Common Processor LFA/CLFA/Bi-Static Variant
T&E Milestones		T-23 SEA TESTS TB-29A/TL SEA TESTS			TL-29A SEA TESTS					CLFA SEA TESTS
Contract Milestones		TB-29A/TL VARIANT 6/04			IUSS Common Processor SURTASS 7/05					

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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-7			0204311N-Integrated Surveillance Systems			0766: IUSS Detection and Classification System									
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	
IUSS Common Architecture	CPFF	GDAIS/LM/ARL	38.998	2.689	11/03	0.000		0.000		0.000		0.000	41.687		
Environmental Research	WR	ONR / VARIOUS	8.500	0.000		0.000		0.000		0.000		0.000	8.500		
Active Improvements/T-23 DT-OT	CPFF	BAE /GDAIS/ VARIOUS	86.685	1.612	11/03	8.558	11/04	14.086	11/05	13.629	11/06	Continuing	Continuing		
C4I Integration	CPFF	VARIOUS	31.693	0.075	11/03	0.000		0.000		0.000		0.000	31.768		
N74 ASW Study	WX/PD	NUWC / APL	2.841	1.023	11/03	0.700	11/04	0.700	11/05	0.700	11/06	Continuing	Continuing		
Various	WX	VARIOUS	47.169	0.000		0.000		0.000		0.000		0.000	47.169		
Passive Signal Processing/ Sonar	CPFF	APL/GDAIS	1.707	0.495	11/03	0.000		0.000		0.000		0.000	2.202		
Array Improvements	CPFF/WR	APL/SSC/VAR	1.650	0.880	11/03	0.500	11/04	0.000		0.000		0.000	3.030		
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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 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
IUSS Common Architecture	WX	Various	1.150	0.150	11/03	0.000	11/04	0.000		0.000		0.000	1.300	
LFA Improvements /Active Acoustic	CPFF	NGC/Various	4.505	0.400	11/03	0.600	11/04	0.800	11/05	0.800	11/06	Continuing	Continuing	
C4ISR Integration	CPPF	NGC/Various	1.769	0.050	11/03	0.000	11/04	0.000		0.000		0.000	1.819	
Passive Signal Processing/ Sonar	Var/WX	Various	0.500	0.100	11/03	0.000	11/04	0.000		0.000		0.000	0.600	
Array Improvements	Var/WX	Various	0.300	0.320	11/03	0.200	11/04	0.000		0.000		0.000	0.820	
Various	Var/WX	Various	1.216	0.000	11/03	0.000	11/04	0.000		0.000		Continuing	Continuing	
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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
IUSS Common Architecture	Var/ WX	VARIOUS	1.551	0.286	11/03	0.000		0.000		0.000		0.000	1.837	
LFA Improvements	Var/ WX	VARIOUS	7.366	0.653	11/03	1.200	11/04	3.500	11/05	4.000	11/06	Continuing	Continuing	
Passive Signal Processing/ Sonar	Var/ WX	VARIOUS	0.950	0.350	11/03	0.000		0.000		0.000		0.000	1.300	
Array Improvements	Var/ WX	VARIOUS	0.250	0.340	11/03	0.600	11/04	0.000		0.000		0.000	1.190	
													0.000	
													0.000	
													0.000	
Subtotal T&E			10.117	1.629		1.800		3.500		4.000		Continuing	Continuing	
Remarks:														
LFA Improvements /C4ISR	Var/ WX	VARIOUS	1.887	0.130	11/03	0.400	11/04	0.400	11/05	0.400	11/06	Continuing	Continuing	
Passive Signal Processing/ Sonar	Var/ WX	VARIOUS	0.100	0.150	11/03	0.000		0.000		0.000		0.000	0.250	
Array Improvements	Var/ WX	VARIOUS	0.200	0.200	11/03	0.200	11/04	0.000		0.000		0.000	0.600	
													0.000	
													0.000	
													0.000	
Subtotal Management			2.187	0.480		0.600		0.400		0.400		Continuing	Continuing	
Remarks:														
Total Cost			#REF!	#REF!		#REF!		#REF!		#REF!		Continuing	Continuing	
Remarks:														

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Exhibit R-3, Project Cost Analysis  
(Exhibit R-3, page 11 of 17)

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME														PROJECT NUMBER AND NAME									
RDT&E, N / BA-7										0204311N-Integrated Surveillance Systems														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 / CP FOT& E																																	
Production Milestones IUSS Common Processor																																	
CLFA																																	
Tech Insertion 2010																																	

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

FOT & E: Follow-on Test and Evaluation

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Exhibit R-4, Schedule Profile  
(Exhibit R-4, page 12 of 17 ]

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**Exhibit R-4, Schedule Profile**  
(Exhibit R-4,13 page 13 of 17)

[illegible]

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA 7	0204311N-Integrated Surveillance Systems					9622: Fiberoptic Fixed Surveillance System					
COST (\$ in Millions)	Prior Years Cost	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Cost to Complete	Total Program
Project Cost	0.000	0.000	3.262	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.262
RDT&E Articles Qty											0

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

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.

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Exhibit R-2a, RDTEN Project Justification  
(Exhibit R-2a, page 14 of 17)

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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>																
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA 7</b>	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME <b>9622: Fiberoptic Fixed Surveillance System</b>																	
<b>(U) B. Accomplishments/Planned Program</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th></tr></thead><tbody><tr><td><b>Fiber Optic FSS Technology Development</b></td><td style="text-align: center;">0.000</td><td style="text-align: center;">3.262</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&amp;E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 04	FY 05	FY 06	FY 07	<b>Fiber Optic FSS Technology Development</b>	0.000	3.262	0.000	0.000	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
<b>Fiber Optic FSS Technology Development</b>	0.000	3.262	0.000	0.000															
RDT&E Articles Quantity																			
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	FY 04	FY 05	FY 06	FY 07															
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RDT&E Articles Quantity																			
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## CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2005</b>																																														
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N / BA-7</b>	PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems	PROJECT NUMBER AND NAME <b>9622: Fiberoptic Fixed Surveillance System</b>																																															
<p><b>C. PROGRAM CHANGE SUMMARY:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 35%;"></th> <th style="text-align: right; width: 15%;">FY 2004</th> <th style="text-align: right; width: 15%;">FY 2005</th> <th style="text-align: right; width: 15%;">FY 2006</th> <th style="text-align: right; width: 15%;">FY 2007</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FY05 President's Budget</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td>FY06/07 President's Budget</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">3.262</td> <td style="text-align: right;">0.000</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;">3.262</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> </tr> <tr> <td colspan="5" style="padding-top: 10px;">Summary of Adjustments</td> </tr> <tr> <td style="padding-left: 20px;">Other Adjustments</td> <td></td> <td style="text-align: right;">3.300</td> <td></td> <td></td> </tr> <tr> <td style="padding-left: 20px;">Congressional Undistributed Adjustments</td> <td></td> <td style="text-align: right;">-0.038</td> <td></td> <td></td> </tr> <tr> <td style="padding-top: 10px;">Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">3.262</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> </tr> </tbody> </table>   <p>(U) Schedule:</p> <p style="padding-left: 20px;">Not applicable</p>   <p>Technical:</p> <p style="padding-left: 20px;">Not applicable</p>						FY 2004	FY 2005	FY 2006	FY 2007	Funding:					FY05 President's Budget	0.000	0.000	0.000	0.000	FY06/07 President's Budget	0.000	3.262	0.000	0.000	Total Adjustments	0.000	3.262	0.000	0.000	Summary of Adjustments					Other Adjustments		3.300			Congressional Undistributed Adjustments		-0.038			Subtotal	0.000	3.262	0.000	0.000
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0204311N-Integrated Surveillance Systems			PROJECT NUMBER AND NAME 9622: Fiberoptic Fixed Surveillance System						
<b>D. OTHER PROGRAM FUNDING SUMMARY:</b>											
<u>Line Item No. &amp; Name</u>		<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	To Complete	Total Cost
NONE											
Related RD TEN: (U) PE 0604784N Advanced Deployable System		32.876	17.416	54.256	57.974	34.022	35.145	40.357	21.513	Continuing	Continuing
<b>E. ACQUISITION STRATEGY:</b>											
Program Milestones Engineering Milestones T&E Milestones Contract Milestones											
<b>F. MAJOR PERFORMERS: **</b>											

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