

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7						R-1 ITEM NOMENCLATURE PE 0204574N Advanced Cryptologic Systems Engineering					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	0.000	0.000	0.000	1.466	1.468	1.470	1.469	1.469	1.469	Continuing	Continuing
X3091 / Advanced Cryptologic Systems Engineering				1.466	1.468	1.470	1.469	1.469	1.469	Continuing	Continuing
											0.000
											0.000
											0.000
											0.000
											0.000
Quantity of RDT&E Articles											0
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The Advanced Cryptologic Systems Engineering program develops state-of-the-art signal acquisition software in response to Combatant Command requirements for a quick-reaction surface, subsurface and airborne cryptologic carry-on capability. There are approximately 100 cryptologic capable surface ships in the current Navy inventory. Each of these ships is a potential user of this carry-on equipment, depending on deployment schedules and the tempo of operations. In addition, there are numerous subsurface and air platforms that are also potential users. This funding line will provide the necessary and proper resources to enable rapid transition of available Commercial Off The Shelf (COTS) and Government Off The Shelf (GOTS) technologies that apply to Fleet requirements for carry-on system functionalities. These technologies typically require various levels of integration to leverage on-board systems that provide system and mission management, product reporting and data analysis. COTS/GOTS system documentation and training materials usually requires some level of adaptation or modification to meet fleet operator requirements, or entirely new training materials may need to be developed. Before deployment for operational use, systems must be systematically tested to ensure suitable and reliable operation, tested for network vulnerabilities if connected to shipboard LANs, and tested relative to interoperability requirements. Additionally, the future Maritime Cryptologic Architecture (MCA) realized under Ships Signals Exploitation Equipment (SSEE) Increment E and subsequent increments will be procured under Cryptologic Carry-On Equipment as a future carry-on Advanced Cryptologic Carry-on Equipment (ACCES) system starting in FY04. This RDT&E will provide resources to address rapid deployment of enhancements or improvements to the common hardware and/or software baseline to meet emergent requirements.</p> <p>(U) JUSTIFICATION FOR BUDGET ACTIVITY:</p> <p>This program is funded under BA-7, OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing operational systems.</p>											

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Exhibit R-2, RDTEN Budget Item Justification
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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-7	PE 0204574N Advanced Cryptologic Systems Engineering					X3091 / Advanced Cryptologic Systems Engineering					
COST (\$ in Millions)	Prior Years Cost	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost				1.466	1.468	1.470	1.469	1.469	1.469	Continuing	Continuing
RDT&E Articles Qty											0

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

The Advanced Cryptologic Systems Engineering program develops state-of-the-art signal acquisition software in response to Combatant Command requirements for a quick-reaction surface, subsurface and airborne cryptologic carry-on capability. There are approximately 100 cryptologic capable surface ships in the current Navy inventory. Each of these ships is a potential user of this carry-on equipment, depending on deployment schedules and the tempo of operations. In addition, there are numerous subsurface and air platforms that are also potential users. This funding line will provide the necessary and proper resources to enable rapid transition of available Commercial Off The Shelf (COTS) and Government Off The Shelf (GOTS) technologies that apply to Fleet requirements for carry-on system functionalities. These technologies typically require various levels of integration to leverage on-board systems that provide system and mission management, product reporting and data analysis. COTS/GOTS system documentation and training materials usually requires some level of adaptation or modification to meet fleet operator requirements, or entirely new training materials may need to be developed. Before deployment for operational use, systems must be systematically tested to ensure suitable and reliable operation, tested for network vulnerabilities if connected to shipboard LANs, and tested relative to interoperability requirements. Additionally, the future Maritime Cryptologic Architecture (MCA) realized under Ships Signals Exploitation Equipment (SSEE) Increment E and subsequent increments will be procured under Cryptologic Carry-On Equipment as a future carry-on Advanced Cryptologic Carry-on Equipment (ACCES) system starting in FY04. This RDT&E will provide resources to address rapid deployment of enhancements or improvements to the common hardware and/or software baseline to meet emergent requirements.

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Exhibit R-2a, RDTE Project Justification
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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME PE 0204574N Advanced Cryptologic Systems Engineering	PROJECT NUMBER AND NAME X3091 / Advanced Cryptologic Systems Engineering		
(U) B. Accomplishments/Planned Program				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost			1.466	1.468
RDT&E Articles Quantity				
<p>Cryptologic Carry-On Equipment FY04 - Integrate, test and document identified Commercial and Government off-the-shelf technologies and subsystems that meet emergent and on-going Fleet requirements. Develop and integrate software and/or hardware improvements to Advanced Carry-on Cryptologic System (ACCES) baseline. FY05 - Continue to integrate, test and document identified Commercial and Government off-the-shelf technologies and subsystems that meet emergent and on-going Fleet requirements. Develop and integrate software and/or hardware improvements to Advanced Carry-on Cryptologic System (ACCES) baseline.</p>				

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Exhibit R-2a, RDTEN Project Justification
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EXHIBIT R-2a, RDT&E Project Justification				DATE:	
				February 2003	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N / BA-7		PE 0204574N Advanced Cryptologic Systems Engineering		X3091 / Advanced Cryptologic Systems Engineering	
(U) C. PROGRAM CHANGE SUMMARY:					
(U) Funding:		FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget:		0.000	0.000	0.000	0.000
Current BES/President's Budget		0.000	0.000	1.466	1.468
Total Adjustments		0.000	0.000	0.000	0.000
Summary of Adjustments					
Claimacy Transfer: NSMA to SPAWAR					
Congressional undistributed reductions					
Congressional rescissions					
SBIR/STTR Transfer					
Economic Assumptions					
Reprogrammings					
Congressional increases					
Subtotal		0.000	0.000	0.000	0.000
(U) Schedule:					
(U) Technical:					

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME PE 0204574N Advanced Cryptologic Systems Engineerin				PROJECT NUMBER AND NAME X3091 / Advanced Cryptologic Systems Engineering				
(U) D. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</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>To Complete</u>	<u>Total Cost</u>
OPN Line 3501	14.707	20.287	18.678	20.277	19.917	21.387	21.867	21.766	Continuing	Continuing
(U) E. ACQUISITION STRATEGY:										
Acquisition, management and contracting strategies are to support engineering and manufacturing development by providing funds to SSC-Charleston, SSC-San Diego and miscellaneous contractors, with management oversight by SPAWAR.										

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			PE 0204574N Advanced Cryptologic Systems Engineering			X3091 / Advanced Cryptologic Systems Engineering						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	Various	Various				0.296	12/03	0.293	12/04	Continuing	Continuing	Continuing
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	Various	Various				0.200	12/03	0.200	12/04	Continuing	Continuing	Continuing
Training Development	Various	Various				0.125	12/03	0.125	12/04	Continuing	Continuing	Continuing
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	0.000		0.621		0.618		Continuing	Continuing	Continuing
Remarks:												
Development Support											0.000	
Software Development	Various	Various				0.620	12/03	0.625	12/04	Continuing	Continuing	Continuing
Integrated Logistics Support										Continuing	Continuing	Continuing
Configuration Management										Continuing	Continuing	Continuing
Technical Data											0.000	
Studies & Analyses											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			0.000	0.000		0.620		0.625		Continuing	Continuing	Continuing
Remarks:												

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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT PE 0204574N Advanced Cryptologic Systems Engineering				PROJECT NUMBER AND NAME X3091 / Advanced Cryptologic Systems Engineering					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation						0.060	12/03	0.060	12/04	Continuing	Continuing	Continuing
Operational Test & Evaluation											0.000	
Live Fire Test & Evaluation											0.000	
Test Assets						0.040	12/03	0.040	12/04	Continuing	Continuing	Continuing
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.100		0.100		0.000	0.200	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support						0.125	12/03	0.125	12/04	Continuing	Continuing	Continuing
Travel										Continuing	Continuing	Continuing
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.125		0.125		0.000	0.250	
Remarks:												
Total Cost			0.000	0.000		1.466		1.468		Continuing	Continuing	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R4, Schedule Profile																								DATE:									
																								February 2003									
APPROPRIATION/BUDGET ACTIVITY								PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME													
RDT&E, N / BA-7								PE 0204574N Advanced Cryptologic Systems Engineering												X3091 / Advanced Cryptologic Systems Engineering													
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009				
	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																																	
Prototype Phase									<div></div>				<div></div>				<div></div>				<div></div>				<div></div>				<div></div>				
System Development									<div>△</div> SDR				<div>△</div> SDR				<div>△</div> SDR				<div>△</div> SDR				<div>△</div> SDR				<div>△</div> SDR				
HW/SW Delivery											<div>△</div>				<div>△</div>				<div>△</div>				<div>△</div>				<div>△</div>				<div>△</div>		
Software																																	
Test & Evaluation Milestones																																	
Development Test													<div>DT</div> △				<div>DT</div> △				<div>DT</div> △				<div>DT</div> △				<div>DT</div> △				<div>DT</div> △
Production Milestones																																	
Delivery																																	

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Exhibit R-4a, Schedule Detail
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