CLASSIFICATION:								
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 PE 0204574N Cryptologic Direct Support				
COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Total PE Cost	1.414	1.401	1.425	1.443	1.431	9.634	12.047	
3091 / Advanced Cryptologic Systems Engineering	1.414	1.401	1.425	1.443	1.431	9.634	12.047	
Quantity of RDT&E Articles								

(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 of both ACCES and all other carry-on subsystems to meet emergent requirements.

(U)   JUSTIFICATION FOR BUDGET ACTIVITY:

This program is funded under BA-7, OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing operational systems.

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 9)

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE:
	February 2006

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA 7	PE 0204574N Cryptologic Direct Support

(U) C. PROGRAM CHANGE SUMMARY:

	FY 2005	FY 2006	FY 2007
(U) Funding:			
FY06 President's Budget Submit	1.442	1.422	1.419
FY07 President's Budget Submit	1.414	1.401	1.425
Total Adjustments	-0.028	-0.021	0.006
Summary of Adjustments			
SBIR Transfer	-0.027		
Department of Energy Transfer	-0.001		
Sec. 8125 Revised Economic Assumptions		-0.006	
Congressional Action 1% Reduction		-0.015	
Inflation Adjustment			0.006
Subtotal	-0.028	-0.021	0.006

(U) Schedule:

   Not Applicable

(U) Technical:

   Not Applicable

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CLASSIFICATION:

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 PE 0204574N Cryptologic Direct Support

(U) D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
OPN Line 3501, Cryptologic Equipment	19.505	15.984	17.616	17.416	16.798	17.160	17.543

(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.

(U) F. MAJOR PERFORMERS:
N/A

(U) G. METRICS:
Earned Value Management (EVM) is used for metrics reporting and risk management.

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

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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 PE 0204574N Cryptologic Direct Support					PROJECT NUMBER AND NAME 3091 / Advanced Cryptologic Systems Engineering		
COST ($ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost	1.414	1.401	1.425	1.443	1.431	9.634	12.047	
RDT&E Articles Qty								

(U) (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 of both ACCES and all other carry-on subsystems to meet emergent requirements.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA 7**	PROGRAM ELEMENT NUMBER AND NAME PE 0204574N Cryptologic Direct Support	PROJECT NUMBER AND NAME 3091 / Advanced Cryptologic Systems Engineering

(U) B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	
Accomplishments/Effort/Subtotal Cost	1.414	1.401	1.425	
RDT&E Articles Quantity				

Cryptologic Carry-On Equipment
FY05 - Continued to integrate, test, and document identified Commercial and Government off-the-shelf technologies and subsystems that meet emergent and on-going Fleet requirements. Developed and integrated software and/or hardware improvements to Advanced Carry-on Cryptologic System (ACCES) baseline. Efforts will support Hostile Forces Integrated Targeting Service (HITS), CAINO/BLUESTREAM subsystem and BUSHHOG systems. Initiated studies necessary to modify topside antenna configuration.
FY06 - 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. Efforts will support ATOMICRAFT and HITS subsystems. Complete studies necessary to modify topside antenna configuration.
FY07 - Continue to integrate, test, and document identified Commercial and Government off-the-shelf technologies and subsystems that meet emergent and on-going Fleet requirements. Continue with developing upgrades to existing systems and subsystems according to Fleet requirements.

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 5 of 9)

CLASSIFICATION:											

DATE: February 2006

Exhibit R-3 Cost Analysis (page 1)

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	PE 0204574N Cryptologic Direct Support	3091 / Advanced Cryptologic Systems Engineering

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
Primary Hardware Development											0.000	0.000
Ancillary Hardware Development											0.000	0.000
Systems Engineering	Various	Various	1.042	0.169	12/04	0.169	12/05	0.169	12/06	Continuing	Continuing	Continuing
Licenses											0.000	0.000
Tooling											0.000	0.000
GFE											0.000	0.000
Award Fees											0.000	0.000
Subtotal Product Development			1.042	0.169		0.169		0.169		0.000	1.549	0.000

Remarks:

Development Support											0.000	0.000
Software Development	Various	Various	0.982	1.002	12/04	1.002	12/05	1.002	12/06	Continuing	Continuing	Continuing
Training Development											0.000	0.000
Integrated Logistics Support											0.000	Continuing
Configuration Management											0.000	Continuing
Technical Data											0.000	0.000
GFE											0.000	0.000
Subtotal Support			0.982	1.002		1.002		1.002		Continuing	Continuing	Continuing

Remarks:

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**			PROGRAM ELEMENT PE 0204574N Cryptologic Direct Support				PROJECT NUMBER AND NAME 3091 / Advanced Cryptologic Systems Engineering				
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
Developmental Test & Evaluation			0.050	0.051	12/04	0.055	12/05	0.055	12/06	Continuing	Continuing	Continuing
Operational Test & Evaluation											0.000	0.000
Live Fire Test & Evaluation											0.000	0.000
Test Assets											0.000	0.000
Tooling											0.000	0.000
GFE											0.000	0.000
Subtotal T&E			0.050	0.051		0.055		0.055		0.000	0.211	0.000
Remarks:												
Contractor Engineering Support											0.000	0.000
Government Engineering Support											0.000	0.000
Program Management Support			0.178	0.149	Various	0.130	Various	0.155	Various	Continuing	Continuing	0.000
Travel			0.041	0.043	Various	0.045	Various	0.044	Various	Continuing	Continuing	0.000
Subtotal Management			0.219	0.192		0.175		0.199		Continuing	Continuing	0.000
Remarks:												
Total Cost			2.293	1.414		1.401	Various	1.425	Various	Continuing	Continuing	Continuing
Remarks:												

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile		DATE: February 2006

APPROPRIATION/BUDGET ACTIVITY **RDT&E, N / BA-7**	PROGRAM ELEMENT NUMBER AND NAME PE 0204574N Cryptologic Direct Support	PROJECT NUMBER AND NAME 3091 / Advanced Cryptologic Systems Engineering

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	1	2	3	4
Acquisition Milestones																																
Prototype Phase																																
System Development (e.g., Radar System dev.)	SDR				SDR				SDR				SDR				SDR				SDR				SDR				SDR			
Equipment Delivery (e.g., EDM Radar Delivery)			△				△				△				△				△				△				△				△	
Test & Evaluation Milestones Operational Assessment		OA △				OA △				OA △				OA △				OA △				OA △				OA △				OA △		
Production Milestones LRIP I LRIPII FRP																																
Deliveries																																

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CLASSIFICATION:

Exhibit R-4a, Schedule Detail				DATE: February 2006			
APPROPRIATION/BUDGET ACTIVITY **RDT&BA-7**	PROGRAM ELEMENT PE 0204574N Cryptologic Direct Support			PROJECT NUMBER AND NAME 3091/ Advanced Cryptologic Systems Engineering			
Schedule Profile	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Prototype Phase	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q
System Design Review (SDR)	2Q	2Q	2Q	2Q	2Q	2Q	2Q	2Q
Operational Assessment (OA)	3Q	3Q	3Q	3Q	3Q	3Q	3Q	3Q
HW/SW Delivery	3Q/4Q	3Q/4Q	3Q/4Q	3Q/4Q	3Q/4Q	3Q/4Q	3Q/4Q	3Q/4Q

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