Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0204574N: Cryptologic Direct Support

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	1.511	1.447	1.756	-	1.756	1.792	1.827	1.860	1.891	Continuing	Continuing
3091: Advanced Cryptological Sys Eng (CCOP)	1.511	1.447	1.756	-	1.756	1.792	1.827	1.860	1.891	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Advanced Cryptologic Systems Engineering - Cryptologic Carry On 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 115 cryptologic capable surface ships in the current Navy inventory, and each is a potential user of this carry-on equipment, depending on deployment schedules and the tempo of operations. In addition, numerous subsurface and air platforms are potential users. This funding line will provide the 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. Before deployment for operational use, systems must be tested to ensure suitable and reliable operation, tested for network vulnerabilities if connected to shipboard Local Area Networks, and tested relative to interoperability requirements. Certification testing is conducted to meet Office of Naval Intelligence security requirements and network testing is conducted in accordance with Information Technology (IT)-21 requirements to allow connection to Navy networks. Funding will also provide resources to address rapid deployment of enhancements or improvements to the common hardware and/or software baseline of all other carry-on subsystems to meet emergent requirements.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.519	1.447	1.757	-	1.757
Current President's Budget	1.511	1.447	1.756	-	1.756
Total Adjustments	-0.008	-	-0.001	-	-0.001
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
 SBIR/STTR Transfer 	-	-			
 Rate/Misc Adjustments 	-	-	-0.001	-	-0.001
 Congressional General Reductions Adjustments 	-0.008	-	-	-	-

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DATE: February 2012

PE 0204574N: Cryptologic Direct Support

Navy

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0204574N: Cryptologic Direct Support					
Change Summary Explanation Technical: Not applicable. Schedule: Not applicable.						

PE 0204574N: Cryptologic Direct Support Navy

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		2 20 10 1141										
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development					IOMENCLA 4N: <i>Cryptolo</i>			PROJECT 3091: Advanced Cryptological Sys Eng (CCOP)				
		FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost		
3091: Advanced Cryptological Sys	1.511	1.447	1.756	-	1.756	1.792	1.827	1.860	1.891	Continuing	Continuing	

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A. Mission Description and Budget Item Justification

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Eng (CCOP)

Quantity of RDT&E Articles

Exhibit R-2A RDT&E Project Justification: PB 2013 Navv

The Advanced Cryptologic Systems Engineering - Cryptologic Carry On Program 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 115 cryptologic capable surface ships in the current Navy inventory, each 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 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 require 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 Local Area Networks, and tested relative to interoperability requirements. Certification testing is conducted to meet Office of Naval Intelligence security requirements and network testing is conducted in accordance with Information Technology (IT)-21 requirements to allow connection to Navy networks. Funding will also provide resources to address rapid deployment of enhancements or improvements to the common hardware and/or software baseline of all other carry-on subsystems to meet emergent requirements.

FY13 funds will continue to integrate, test, and document identified COTS and GOTS technologies and subsystems that meet emergent and on-going Fleet requirements as specified in the Signals of Interest (SOI) and target threat list. Funds will continue to develop upgrades to existing systems and subsystems according to Fleet requirements. Additional funds will aid in the development of new SOI algorithms in support of cryptologic systems.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Advanced Cryptological Sys Eng (CCOP)	1.511	1.447	1.756
Articles:	0	0	0
FY 2011 Accomplishments: Continued to integrate, test, and document identified COTS and GOTS technologies and subsystems that met emergent and on-going Fleet requirements as specified in the FY11 SOI and target threat list. Developed upgrades to existing systems and subsystems according to Fleet requirements.			
FY 2012 Plans:			

PE 0204574N: Cryptologic Direct Support

Navy

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DATE: February 2012

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0204574N: Cryptologic Direct Support	PROJECT 3091: Advanced Cryptological Sys Eng (CCOP)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continue to integrate, test, and document identified COTS and GOTS technologies and subsystems that meet emergent and on-going Fleet requirements as specified in the Signals of Interest (SOI) and target threat list. Funds will continue to develop upgrades to existing systems and subsystems according to Fleet requirements.			
FY 2013 Plans: Continue to integrate, test, and document identified COTS and GOTS technologies and subsystems that meet emergent and on-going Fleet requirements as specified in the Signals of Interest (SOI) and target threat list. Funds will continue to develop upgrades to existing systems and subsystems according to Fleet requirements. Additional funds will aid in the development of new SOI algorithms in support of cryptologic systems.			
Accomplishments/Planned Programs Subtotals	1.511	1.447	1.756

C. Other Program Funding Summary (\$ in Millions)

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	OCO	<u>Total</u>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
OPN / 3501: Cryptologic	12.764	10.173	10.112	0.000	10.112	10.240	10.389	10.588	10.780	Continuing	Continuing
Communications Equipment											

D. Acquisition Strategy

Acquisition, management, and contracting strategies are to support engineering and manufacturing development by providing funds to Space and Naval Warfare (SPAWAR) Systems Centers Atlantic and Pacific, and miscellaneous contractors with management oversight by SPAWAR.

E. Performance Metrics

Cryptologic Carry On Program (CCOP) will deliver state-of-the-art signal acquisition software for CCOP systems in response to Combatant Command requirements for a quick-reaction surface, subsurface and airborne cryptologic carry-on capability. There are approximately 241 CCOP systems in inventory.

PE 0204574N: Cryptologic Direct Support

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0204574N: Cryptologic Direct Support

PROJECT

3091: Advanced Cryptological Sys Eng (CCOP)

DATE: February 2012

Product Development	Product Development (\$ in Millions)					FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering	Various	Various:Various	1.915	-		-		-		-	Continuing	Continuing	Continuing
Systems Engineering	C/CPFF	Classified Contract:Classified Contract	0.197	0.230	Dec 2011	0.260	Dec 2012	-		0.260	Continuing	Continuing	Continuing
	Subtotal 2.112					0.260		-		0.260			

Support (\$ in Millions)	Support (\$ in Millions)				FY 2012		FY 2013 Base		FY 2013 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Software Development	Various	Various:Various	6.109	-		-		-		-	Continuing	Continuing	Continuing
Software Development	C/CPFF	Classified Contract:Classified Contract	0.552	0.517	Feb 2012	0.674	Dec 2012	-		0.674	Continuing	Continuing	Continuing
Software Development	WR	SSC PAC:San Diego, CA	0.310	0.340	Jan 2012	0.407	Nov 2012	-		0.407	Continuing	Continuing	Continuing
Software Development	WR	SSC LANT:Charleston, SC	0.165	0.180	Jan 2012	0.223	Nov 2012	-		0.223	Continuing	Continuing	Continuing
		Subtotal	7.136	1.037		1.304		-		1.304			

Test and Evaluation (\$ in Millions)					FY 2012		FY 2013 Base		FY 2013 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	Various:Various	0.333	-		-		-		-	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	NPGS:Monterey, CA	0.054	0.050	Feb 2012	0.055	Nov 2012	-		0.055	Continuing	Continuing	Continuing
Developmental Test & Evaluation	WR	OPTEVFOR:Norfolk, VA	0.012	0.030	Feb 2012	0.037	Dec 2012	-		0.037	Continuing	Continuing	Continuing
	Subtotal 0.399					0.092		-		0.092			

PE 0204574N: Cryptologic Direct Support Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0204574N: Cryptologic Direct Support

DATE: February 2012

PROJECT

3091: Advanced Cryptological Sys Eng (CCOP)

Management Services	lanagement Services (\$ in Millions)					FY 2013 Base		FY 2013 OCO		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	Various	Various:Various	0.958	-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	WR	SSC PAC:San Diego, CA	0.180	0.100	Feb 2012	0.100	Nov 2012	-		0.100	Continuing	Continuing	Continuing
Travel	WR	SPAWAR:San Diego, CA	0.315	-		-	Oct 2012	-		-	Continuing	Continuing	Continuing
		Subtotal	1.453	0.100		0.100		-		0.100			
Total Prior Years Cost		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract		
	Project Cost Totals 11.100			1.447		1.756		-		1.756			

Remarks

PE 0204574N: Cryptologic Direct Support

Navy

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT		
1319: Research, Development, Test & Evaluation, Navy	PE 0204574N: Cryptologic Direct Support	3091: Advanced Cryptological Sys Eng (CCOP)		
BA 7: Operational Systems Development				

PE 0204574N: Cryptologic Direct Support Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 7: Operational Systems Development

DATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0204574N: Cryptologic Direct Support
3091: Advanced Cryptological Sys Eng (CCOP)

Schedule Details

Events by Sub Project	Sta	Start		End	
	Quarter	Year	Quarter	Year	
Proj 3091					
Prototype Phase - 2011	1	2011	4	2011	
Prototype Phase - 2012	1	2012	4	2012	
Prototype Phase - 2013	1	2013	4	2013	
Prototype Phase - 2014	1	2014	4	2014	
Prototype Phase - 2015	1	2015	4	2015	
Prototype Phase - 2016	1	2016	4	2016	
Prototype Phase - 2017	1	2017	4	2017	
System Design Review (SDR) - 2011	2	2011	2	2011	
System Design Review (SDR) - 2012	2	2012	2	2012	
System Design Review (SDR) - 2013	2	2013	2	2013	
System Design Review (SDR) - 2014	2	2014	2	2014	
System Design Review (SDR) - 2015	2	2015	2	2015	
System Design Review (SDR) - 2016	2	2016	2	2016	
System Design Review (SDR) - 2017	2	2017	2	2017	
Software Delivery - 2011	3	2011	4	2011	
Software Delivery - 2012	3	2012	4	2012	
Software Delivery - 2013	3	2013	4	2013	
Software Delivery - 2014	3	2014	4	2014	
Software Delivery - 2015	3	2015	4	2015	
Software Delivery - 2016	3	2016	4	2016	
Software Delivery - 2017	3	2017	4	2017	

PE 0204574N: *Cryptologic Direct Support* Navy

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DATE: February 2012 Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy PE 0204574N: Cryptologic Direct Support 3091: Advanced Cryptological Sys Eng (CCOP)

BA 7: Operational Systems Development

	Start		End	
Events by Sub Project	Quarter	Year	Quarter	Year
Operational Assessment (OA) - 2011	3	2011	3	2011
Operational Assessment (OA) - 2012	3	2012	3	2012
Operational Assessment (OA) - 2013	3	2013	3	2013
Operational Assessment (OA) - 2014	3	2014	3	2014
Operational Assessment (OA) - 2015	3	2015	3	2015
Operational Assessment (OA) - 2016	3	2016	3	2016
Operational Assessment (OA) - 2017	3	2017	3	2017