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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 0305149N: <i>Cobra Judy</i>
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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	36.278	40.605	17.091	-	17.091	-	-	-	-	0.000	93.974
4021: <i>CJR System Engineering</i>	36.278	40.605	17.091	-	17.091	-	-	-	-	0.000	93.974

A. Mission Description and Budget Item Justification

Cobra Judy Replacement funds will replace the current U.S. Naval Ship (USNS) Observation Island which has become unsustainable and due to leave service in 2014. This program funds the development of a single ship-based radar suite for ballistic missile treaty verification. Cobra Judy provides monitoring and verification of specific aspects of United States treaties with other countries. It is necessary to replace the current Cobra Judy to prevent any potential gap in coverage. Prior studies have indicated that a ship-based radar replacement is the most timely and cost effective solution. This program is joint-funded.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	36.527	40.605	17.092	-	17.092
Current President's Budget	36.278	40.605	17.091	-	17.091
Total Adjustments	-0.249	-	-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	-0.249	-	-	-	-

Change Summary Explanation

Schedule:

- ME Ship Integration moved from 4th Qtr FY11 to 2nd Qtr FY 13
- Ship Delivery moved from 3rd Qtr FY11 to 2nd Qtr FY12
- Tech Eval moved from 1st Qtr FY13 to 2nd Qtr FY13

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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 0305149N: Cobra Judy				PROJECT 4021: CJR System Engineering			
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
4021: CJR System Engineering	36.278	40.605	17.091	-	17.091	-	-	-	-	0.000	93.974
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification											
Cobra Judy Replacement funds will replace the current U.S. Naval Ship (USNS) Observation Island which has become unsustainable and due to leave service in 2014. This program will fund the development of a single ship-based radar suite for ballistic missile treaty verification. Cobra Judy provides monitoring and verification of specific aspects of United States treaties with other countries. It is necessary to replace the current Cobra Judy to prevent any potential gap in coverage. Prior studies have indicated that a ship-based radar replacement is the most timely and cost effective solution. This program is joint-funded.											
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)								FY 2011	FY 2012	FY 2013	
Title: DESIGN AND RISK REDUCTION Articles: FY 2011 Accomplishments: - Completed Common Back End software development - Completed S-Band array development testing - Began Mission Equipment installation on Ship FY 2012 Plans: - Continued installation of Mission Equipment on Ship - Integration of Mission Equipment on Ship FY 2013 Plans: - Integration of Mission Equipment on Ship								24.214	30.172	10.835	
								0	0	0	
Title: SYSTEMS ENGINEERING Articles: FY 2011 Accomplishments: - Continue Ship installation of non-prime mission equipment FY 2012 Plans: - Integration of non-prime mission equipment FY 2013 Plans: - Integration of non-prime mission equipment								3.807	3.954	2.890	
								0	0	0	
Title: TEST AND EVALUATION								8.257	6.479	3.366	

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2011	FY 2012	FY 2013
Articles:				0	0	0
<i>FY 2011 Accomplishments:</i> - Radar & ship integration and test - Ship crew contracts after ship delivery <i>FY 2012 Plans:</i> - Radar & ship integration and test - Ship crew contracts after ship delivery <i>FY 2013 Plans:</i> - Radar & ship integration and test - Ship crew contracts after ship delivery						
Accomplishments/Planned Programs Subtotals				36.278	40.605	17.091

C. Other Program Funding Summary (\$ in Millions)											
Line Item	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
• 0303901N/4003: <i>Cobra Judy Replacement</i>	34.457	39.963	16.000	0.000	16.000	0.000	0.000	0.000	0.000	0.000	143.714

D. Acquisition Strategy

The acquisition strategy calls for leveraging ongoing Navy Ballistic Missile Defense (BMD) radar development, updating existing user interface/communications/data handling equipment designs from a similar operational unit and purchasing and integrating the mission equipment aboard an appropriate merchant-class hull. System design will be accomplished using in-hand technologies and commercial standards to lower schedule risk and produce a product with the lowest possible life-cycle cost.

E. Performance Metrics

- Successfully complete Design Reviews & MDA-Level Reviews
- Successfully complete Initial Operational Capability (IOC)
- Successfully complete X-Band Development
- Successfully complete S-Band Radar Development
- Successfully complete Mission Equipment String Integration
- Successfully complete ME Ship Integration
- Successfully complete Mission Communications Suite Lightoff
- Ship Delivery

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<ul style="list-style-type: none">-Successfully complete TECHEVAL/Post Delivery Test & Trails-Successfully complete Operational Test & Readiness Review (OTRR)-Successfully complete IOT&E Initial Operational Test OPEVAL		

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Exhibit R-3, RDT&E Project Cost Analysis: 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 0305149N: Cobra Judy				PROJECT 4021: CJR System Engineering					
Product Development (\$ in Millions)					FY 2012		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	
Design and Risk Reduction	Allot	NAVSEA 05C:Washington DC	0.150	0.150	Oct 2011	0.150	Oct 2012	-		0.150	0.000	0.450		
Design and Risk Reduction	C/CPIF	Raytheon:Sudbury, MA	587.742	27.772	Jan 2012	10.685	Oct 2012	-		10.685	0.000	626.199		
Shipbuilding	C/FFP	PEO Ships:Washington, DC	100.815	-		-		-		-	0.000	100.815		
Design and Risk Reduction	WR	SPAWAR:San Diego, CA	8.405	2.250	Dec 2011	-		-		-	0.000	10.655		
Design and Risk Reduction	C/CPAF	MIT/TWS:Hanscom AFB, MA	0.500	-		-		-		-	0.000	0.500		
Subtotal			697.612	30.172		10.835		-		10.835	0.000	738.619		
Support (\$ in Millions)					FY 2012		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	
System Engineering	Various	Various:Various	8.764	-		-		-		-	0.000	8.764		
System Engineering	C/CPAF	BAE:Rockville, MD	0.840	-		-		-		-	0.000	0.840		
System Engineering	C/CPAF	GTRI:Atlanta, GA	2.868	0.500	Dec 2011	0.350	Dec 2012	-		0.350	0.000	3.718		
System Engineering	C/CPFF	JHU/APL:Laurel, MD	5.790	-		-		-		-	0.000	5.790		
System Engineering	C/CPAF	MIT/LL:Hanscom AFB, MA	6.914	-		-		-		-	0.000	6.914		
System Engineering	WR	NRL:Washington, DC	2.405	0.425	Oct 2011	0.450	Oct 2012	-		0.450	0.000	3.280		
System Engineering	WR	NSWC CSS:Panama City, FL	2.942	-		-		-		-	0.000	2.942		
System Engineering	WR	NSWC DD:Dahlgren, VA	12.401	0.850	Dec 2011	-		-		-	0.000	13.251		
System Engineering	WR	NSWC PHD:Port Hueneme, CA	1.535	-		-		-		-	0.000	1.535		
System Engineering	Allot	PEO Ships:Washington, DC	3.000	-		-		-		-	0.000	3.000		
System Engineering	WR	SEG:Columbia, MD	1.195	-		-		-		-	0.000	1.195		

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Support (\$ in Millions)				FY 2012		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	WR	SPAWAR:San Diego,CA	5.659	-		-		-		-	0.000	5.659		
Systems Engineering	WR	NSWC/CRANE:Crane, IN	0.307	-		-		-		-	0.000	0.307		
System Engineering	WR	Military Sealift Command:Washington, DC	-	2.179	Feb 2012	2.090	Dec 2012	-		2.090	0.000	4.269		
Subtotal			54.620	3.954		2.890		-		2.890	0.000	61.464		
Test and Evaluation (\$ in Millions)				FY 2012		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	
Test and Evaluation	Various	Various:Various	0.295	-		-		-		-	0.000	0.295		
Test and Evaluation	C/CPAF	Raytheon:Sudbury, MA	1.200	-		-		-		-	0.000	1.200		
Test and Evaluation	MIPR	AFOTEC:Peterson AFB, CO	0.330	-		-		-		-	0.000	0.330		
Test and Evaluation	MIPR	COMOPTEVFOR:Norfolk, VA	0.315	-		-		-		-	0.000	0.315		
Test and Evaluation	MIPR	JITC:Fort Huachuca, AZ	0.225	-		-		-		-	0.000	0.225		
Test and Evaluation	WR	NSWC DD:Dahlgren, VA	2.019	-		-		-		-	0.000	2.019		
Test and Evaluation	Allot	PEO SHIPS:Washington, DC	0.452	-		-		-		-	0.000	0.452		
Test and Evaluation	C/CPAF	TSC:Silver Spring, MD	0.422	-		-		-		-	0.000	0.422		
Test and Evaluation	C/CPAF	Riverside Research:New York, NY	2.071	1.979	Jan 2012	0.750	Oct 2012	-		0.750	0.000	4.800		
Test and Evaluation	WR	Military Sealift Command:Washington, DC	4.872	4.500	Oct 2011	2.616	Oct 2012	-		2.616	0.000	11.988		

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Test and Evaluation (\$ in Millions)				FY 2012		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
Test and Evaluation	MIPR	Patrick AFB:PAFB, Florida	1.314	-		-		-		-	0.000	1.314	
Subtotal			13.515	6.479		3.366		-		3.366	0.000	23.360	

Management Services (\$ in Millions)				FY 2012		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	C/CPAF	BAE Systems:Rockville, MD	12.233	-		-		-		-	0.000	12.233	
Program Management	C/CPFF	DTI:Arlington, VA	0.435	-		-		-		-	0.000	0.435	
Contractor Engineering	C/CPAF	BAE Systems:Rockville, MD	10.611	-		-		-		-	0.000	10.611	
Contractor Engineering	C/CPAF	Computer Science Corp:Falls Church, VA	3.255	-		-		-		-	0.000	3.255	
Contractor Engineering	C/CPAF	Systems Planning and Analysis:Alexandria, VA	1.900	-		-		-		-	0.000	1.900	
Contractor Engineering	Various	Various:Various	1.687	-		-		-		-	0.000	1.687	
Travel	Allot	PEO IWS2:Washington, DC	0.896	-		-		-		-	0.000	0.896	
Subtotal			31.017	-		-		-		-	0.000	31.017	

			Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			796.764	40.605		17.091		-		17.091	0.000	854.460	

Remarks

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

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 4021</i>				
Decision Reviews & MDA-Level Reviews	1	2011	4	2013
Initial Operational Capability (IOC)	4	2013	4	2013
X- Band Development	1	2011	1	2011
S-Band Radar Development	1	2011	2	2011
Mission Equipment String Integration	1	2011	1	2011
ME Ship Integration	2	2012	2	2013
Ship Delivery	2	2012	2	2012
TECHEVAL/ Post Delivery Test & Trials	2	2013	3	2013
OTRR	3	2013	3	2013
IOT&E/OPEVAL	4	2013	4	2013