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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Navy	DATE: April 2013
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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)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	796.764	40.605	17.091	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	854.460
4021: <i>CJR System Engineering</i>	796.764	40.605	17.091	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	854.460

MDAP/MAIS Code(s): 365

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

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 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	40.605	17.091	0.000	-	0.000
Current President's Budget	40.605	17.091	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

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 2014 Navy									DATE: April 2013			
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)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
4021: CJR System Engineering	796.764	40.605	17.091	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	854.460
Quantity of RDT&E Articles	0	0	0	0		0	0	0	0	0		
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
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 2012	FY 2013	FY 2014	
Title: DESIGN AND RISK REDUCTION									30.172	10.835	0.000	
Articles:									0	0		
FY 2012 Accomplishments:												
- Continued installation of Mission Equipment on Ship												
- Integration of Mission Equipment on Ship												
FY 2013 Plans:												
- Integration of Mission Equipment on Ship												
Title: SYSTEMS ENGINEERING									3.954	2.890	0.000	
Articles:									0	0		
FY 2012 Accomplishments:												
- Integration of non-prime mission equipment												
FY 2013 Plans:												
- Integration of non-prime mission equipment												
Title: TEST AND EVALUATION									6.479	3.366	0.000	
Articles:									0	0		
FY 2012 Accomplishments:												
- Radar & ship integration and test												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)							FY 2012	FY 2013	FY 2014		
- 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							40.605	17.091	0.000		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• 0303901N/4003: <i>Cobra Judy</i>	39.963	16.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	143.714
<i>Replacement</i>											
Remarks											
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 -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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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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	0.000	0.150	Oct 2011	0.000		0.000		-		0.000	0.000	0.150	
Design and Risk Reduction	C/CPIF	Raytheon:Sudbury, MA	579.893	27.772	Jan 2012	0.000		0.000		-		0.000	0.000	607.665	
Shipbuilding	C/FFP	PEO Ships:Washington, DC	100.815	0.000		0.000		0.000		-		0.000	0.000	100.815	
Design and Risk Reduction	WR	SPAWAR:San Diego, CA	6.823	2.250	Dec 2011	0.000		0.000		-		0.000	0.000	9.073	
Design and Risk Reduction	C/CPAF	MIT/TWS:Hanscom AFB, MA	0.500	0.000		0.000		0.000		-		0.000	0.000	0.500	
Subtotal			688.031	30.172		0.000		0.000		0.000		0.000	0.000	718.203	
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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		0.000		0.000		-		0.000	0.000	8.764	
System Engineering	C/CPAF	BAE:Rockville, MD	0.840	0.000		0.000		0.000		-		0.000	0.000	0.840	
System Engineering	C/CPAF	GTRI:Atlanta, GA	2.368	0.500	Dec 2011	0.250	Mar 2013	0.000		-		0.000	0.000	3.118	
System Engineering	C/CPFF	JHU/APL:Laurel, MD	5.790	0.000		0.000		0.000		-		0.000	0.000	5.790	
System Engineering	C/CPAF	MIT/LL:Hanscom AFB, MA	6.914	0.000		0.000		0.000		-		0.000	0.000	6.914	
System Engineering	WR	NRL:Washington, DC	1.980	0.425	Oct 2011	0.000		0.000		-		0.000	0.000	2.405	
System Engineering	WR	NSWC CSS:Panama City, FL	2.942	0.000		0.000		0.000		-		0.000	0.000	2.942	
System Engineering	WR	NSWC DD:Dahlgren, VA	11.551	0.850	Dec 2011	0.000		0.000		-		0.000	0.000	12.401	
System Engineering	WR	NSWC PHD:Port Hueneme, CA	1.535	0.000		0.000		0.000		-		0.000	0.000	1.535	

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Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering	Allot	PEO Ships:Washington, DC	3.000	0.000		0.000		0.000		-		0.000	0.000	3.000	
System Engineering	WR	SEG:Columbia, MD	1.195	0.000		0.000		0.000		-		0.000	0.000	1.195	
Systems Engineering	WR	SPAWAR:San Diego,CA	5.659	0.000		0.220	Jan 2013	0.000		-		0.000	0.000	5.879	
Systems Engineering	WR	NSWC/CRANE:Crane, IN	0.407	0.000		0.014	Jan 2013	0.000		-		0.000	0.000	0.421	
System Engineering	WR	Military Sealift Command:Washington, DC	0.000	2.179	Feb 2012	3.128	Jan 2013	0.000		-		0.000	0.000	5.307	
Subtotal			52.945	3.954		3.612		0.000		0.000		0.000	0.000	60.511	
Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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		0.000		0.000		-		0.000	0.000	0.295	
Test and Evaluation	C/CPAF	Raytheon:Sudbury, MA	1.200	0.000		0.000		0.000		-		0.000	0.000	1.200	
Test and Evaluation	MIPR	AFOTEC:Peterson AFB, CO	0.415	0.000		0.318	Oct 2012	0.000		-		0.000	0.000	0.733	
Test and Evaluation	MIPR	COMOPTEVFOR:Norfolk, VA	0.315	0.000		0.000		0.000		-		0.000	0.000	0.315	
Test and Evaluation	MIPR	JITC:Fort Huachuca, AZ	0.225	0.000		0.000		0.000		-		0.000	0.000	0.225	
Test and Evaluation	WR	NSWC DD:Dahlgren, VA	2.019	0.000		0.000		0.000		-		0.000	0.000	2.019	
Test and Evaluation	Allot	PEO SHIPS:Washington, DC	0.452	0.000		0.000		0.000		-		0.000	0.000	0.452	

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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Evaluation	C/CPAF	TSC:Silver Spring, MD	0.422	0.000		0.000		0.000		-		0.000	0.000	0.422	
Test and Evaluation	C/CPAF	Riverside Research:New York, NY	2.071	1.979	Jan 2012	0.750	Jan 2013	0.000		-		0.000	0.000	4.800	
Test and Evaluation	WR	Military Sealift Command:Washington, DC	11.069	4.500	Oct 2011	4.151	Jan 2013	0.000		-		0.000	0.000	19.720	
Test and Evaluation	MIPR	Patrick AFB:PAFB, Florida	4.459	0.000		5.986	Oct 2012	0.000		-		0.000	0.000	10.445	
Test and Evaluation	MIPR	ARMY RESEARCH LAB:Adelphi, MD	0.084	0.000		0.084	Mar 2013	0.000		-		0.000	0.000	0.168	
Subtotal			23.026	6.479		11.289		0.000		0.000		0.000	0.000	40.794	
Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	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		0.000		0.000		-		0.000	0.000	12.233	
Program Management	C/CPFF	DTI:Arlington, VA	0.435	0.000		0.000		0.000		-		0.000	0.000	0.435	
Contractor Engineering	C/CPAF	BAE Systems:Rockville, MD	10.611	0.000		0.000		0.000		-		0.000	0.000	10.611	
Contractor Engineering	C/CPAF	Computer Science Corp:Falls Church, VA	3.255	0.000		0.000		0.000		-		0.000	0.000	3.255	
Contractor Engineering	C/CPAF	Systems Planning and Analysis:Alexandria, VA	3.595	0.000		2.190	Jan 2013	0.000		-		0.000	0.000	5.785	

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Management Services (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor Engineering	Various	Various:Various	1.687	0.000		0.000		0.000		-		0.000	0.000	1.687	
Travel	Allot	PEO IWS2:Washington, DC	0.946	0.000		0.000		0.000		-		0.000	0.000	0.946	
Subtotal			32.762	0.000		2.190		0.000		0.000		0.000	0.000	34.952	

	All Prior Years	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	796.764	40.605		17.091		0.000		0.000		0.000	0.000	854.460	

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Navy

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

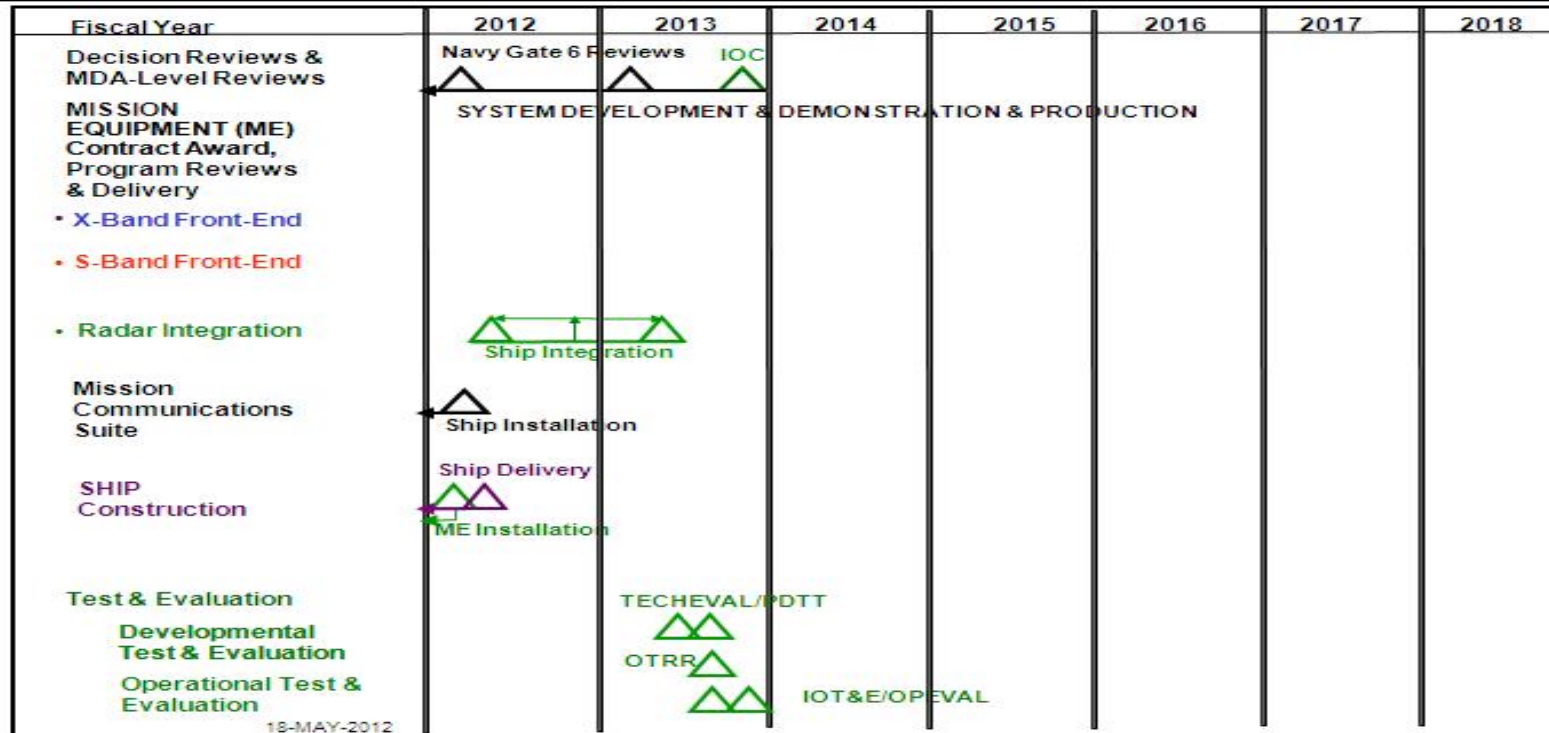
1319: Research, Development, Test & Evaluation, Navy
BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0305149N: Cobra Judy

PROJECT

4021: CJR System Engineering



CDR – Critical Design Review
DT&E – Developmental Test and Evaluation
GFE – Gov't Furnished Equipment
I&T – Integration and Test
IBR – Integrated Baseline Review
IPR – Interim Program Review
IOC – Initial Operational Capability

IOT&E – Initial Operational Test and Evaluation
ME – Mission Equipment
MS – Milestone
OPEVAL – Operational Evaluation
OTRR – Operational Test Readiness Review
PDR – Preliminary Design Review

PDTR – Post Delivery Test and Trials
SDR – System Design Review
SFE – S-Band Radar Front End
TECHEVAL – Technical Evaluation
TIF – Test and Integration Facility
XFE – X-Band Radar Front End

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Navy			DATE: April 2013
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>	PROJECT 4021: <i>CJR System Engineering</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Proj 4021</i>				
Decision Reviews & MDA-Level Reviews	1	2012	4	2013
Initial Operational Capability (IOC)	4	2013	4	2013
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