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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b>			<b>R-1 ITEM NOMENCLATURE</b>								
0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>			PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>								
<b>COST (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	151.032	176.831	9.730	-	9.730	9.725	9.739	9.725	9.728	Continuing	Continuing
MD46: <i>Sea Based X-Band Radar (SBX) Development</i>	151.032	22.775	-	-	-	-	-	-	-	Continuing	Continuing
MX46: <i>Sea Based X-Band Radar Development Support</i>	-	146.800	9.236	-	9.236	9.235	9.264	9.246	9.236	Continuing	Continuing
MD40: <i>Program-Wide Support</i>	-	7.256	0.494	-	0.494	0.490	0.475	0.479	0.492	Continuing	Continuing

**Note**

Beginning in FY 2013, the Sea-Based X-Band Radar (SBX) will be placed in a limited test support status, recallable to active operational status when indications and warnings indicate need for enhanced discrimination.

**A. Mission Description and Budget Item Justification**

The Sea-Based X-Band Radar (SBX) is a powerful discrimination radar that augments the BMDS missile tracking sensor architecture as protection against sophisticated ICBM threats in the Pacific against the homeland. As a high-resolution X-Band radar, it provides valuable support to GMD flight tests.

Beginning in FY 2013, the Sea-Based X-Band Radar (SBX) will be placed in a limited test support status, recallable to active operational status when indications and warnings indicate need for enhanced discrimination. From a test support site in the Pacific, SBX will maintain capability to support Ground-Based Midcourse Defense (GMD) testing requiring enhanced discrimination.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>
Previous President's Budget	153.056	177.058	172.622	-	172.622
Current President's Budget	151.032	176.831	9.730	-	9.730
Total Adjustments	-2.024	-0.227	-162.892	-	-162.892
• Congressional General Reductions	-1.051	-0.227			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.973	-			
• Other Adjustment	-	-	-162.892	-	-162.892

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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

**APPROPRIATION/BUDGET ACTIVITY**  
0400: *Research, Development, Test & Evaluation, Defense-Wide*  
BA 4: *Advanced Component Development & Prototypes (ACD&P)*

**R-1 ITEM NOMENCLATURE**  
PE 0603907C: *Sea Based X-Band Radar (SBX)*

**Change Summary Explanation**

The FY 2011 decrease of \$2.024M reflects a congressional reduction (Department of Defense and Full Year Continuing Appropriation Act, Public Law 112-10) and a transfer of funds for SBIR/STTR support.

The FY 2012 decrease of \$0.227M reflects a congressional reduction (Consolidated Appropriation Act of FY 2012 (Public Law 112-74)).

The FY 2013 reduction of \$162.892M reflects a realignment of Department of Defense priorities.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Missile Defense Agency									<b>DATE:</b> February 2012		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>				<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
MD46: <i>Sea Based X-Band Radar (SBX) Development</i>	151.032	22.775	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

**Note**

Beginning in FY 2013, the Sea-Based X-Band Radar (SBX) will be placed in a limited test support status, recallable to active operational status when indications and warnings indicate need for enhanced discrimination.

**A. Mission Description and Budget Item Justification**

For FY 2011, this project provides for the operations and support of the Sea-Based X-Band (SBX) Radar and its four major sub-systems: the self-propelled vessel; the X-Band Radar (XBR); the In-Flight Interceptor Communications System (IFICS) Data Terminal (IDT); and the communications network. Support activities also include vessel and portside force protection.

For FY 2012, this project provides for the development and sustainment of SBX software. Other operations and support activities described above are provided in budget project MX46.

For FY 2013 and beyond, SBX software development and sustainment will be stopped as a cost savings measure.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<b>Title:</b> Vessel Operations and Support	102.460	-	-
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b>			
-Added SBX to BMDS Operational Baseline			
-Achieved Capability Acceptance (CA) designation by STRATCOM			
-Continued ongoing operations, upgrades, and support of the SBX, the support vessel, and support facilities			
-Supported SBX logistics replenishment by support vessel for one quarter, then by helicopter or in-port provisions for the rest of the year			
-Executed in-port maintenance period for American Bureau of Shipping (ABS) certifications (thruster seals replacement), Navy Board of Inspections and Survey (INSURV) corrections and complete items necessary for Transition and Transfer to the Navy in 2011			
-Successfully supported GMD Intercept Flight Test FTG-06a as follows:			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<ul style="list-style-type: none"> <li>-Verified and re-tested fixes directed by FTG-06 Failure Review Board (FRB)</li> <li>-Acquired target and sent track reports to GMD Fire Control</li> <li>-Transitioned to non-tactical mode to collect critical engagement conditions/empirical measurement events (CEC/EME) data for verification and validation of models and simulation</li> <li>-Continued to support operations of the Navy Transition Office (NTO)</li> <li>-Implemented Independent Readiness Review Team (IRRT) recommendations to facilitate Capability Acceptance (CA) designation by STRATCOM and transfer to Navy</li> <li>-Implemented the following reliability and suitability improvements:                             <ul style="list-style-type: none"> <li>-Added additional Inertial Measurement Unit (IMU) to XBR for on-line spare</li> <li>-In the X-Band Radar (XBR) Dual Sub Array Module, replaced integrated switching modules with lower failure-rate versions</li> <li>-Added XBR antenna redundant power source</li> <li>-Replaced diesel generator governors and changed control logic to prevent blackouts</li> <li>-Added redundant power for electrical generator control system</li> <li>-Replaced obsolete radar system controls</li> <li>-Added remote monitoring of XBR power and cooling systems</li> </ul> </li> </ul> <p><b>FY 2012 Plans:</b> -For FY 2012 and beyond, these efforts are described in Project MX46.</p> <p><b>FY 2013 Plans:</b> N/A</p>				
<p><b>Title:</b> XBR Operations and Support</p> <p><b>Description:</b> See Description Below</p> <p><b>FY 2011 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>-Continued to operate and sustain the X-Band radar and associated equipment</li> <li>-Performed mission hardware upgrades and sustainment</li> <li>-Provided and supported operations crew</li> <li>-Completed Formal Qualification Testing (FQT) for Build 3.0</li> <li>-Completed XBR upgrades during in-port period</li> </ul> <p><b>FY 2012 Plans:</b></p>		<p><b>Articles:</b></p> <p>41.345 0</p>	<p>- 0</p>	<p>- 0</p>

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
-For FY 2012 and beyond, these efforts are described in Project MX46 below.				
<b>FY 2013 Plans:</b> N/A				
<b>Title:</b> SBX Communications Operations and Support		1.786	-	-
		<b>Articles:</b> 0	0	0
<b>Description:</b> See Description Below				
<b>FY 2011 Accomplishments:</b> -Continued round-the-clock sustainment for communications capabilities for Sea-Based X-Band radar (SBX) -Continued on-site SATCOM support of fielded sites for hardware and software -Continued sustaining engineering support and integrated logistics support for fielded hardware and software -Continued space segment lease.				
<b>FY 2012 Plans:</b> For FY 2012 and beyond, funds and plans are described in Program Element 0603896C, Budget Project MD01				
<b>FY 2013 Plans:</b> N/A				
<b>Title:</b> System Force Protection		5.441	-	-
		<b>Articles:</b> 0	0	0
<b>Description:</b> See Description Below				
<b>FY 2011 Accomplishments:</b> -Continued to provide on-board and portside force protection for the SBX and its off-shore support vessel -Provided force protection including patrol boats during Seattle in-port upgrade period				
<b>FY 2012 Plans:</b> -For FY 2012 and beyond, these efforts are described in Project MX46.				
<b>FY 2013 Plans:</b> N/A				
<b>Title:</b> SBX Software Development and Maintenance		-	22.775	-
		<b>Articles:</b> 0	0	0

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2011	FY 2012	FY 2013
<p><b>Description:</b> See Description Below</p> <p><b>FY 2011 Accomplishments:</b> For FY 2011, SBX software development and sustainment (\$13.8M) is included in the XBR Operations and Support accomplishment above.</p> <p><b>FY 2012 Plans:</b> -Maintain SBX Build 3.1 configuration -Fix Level 1 and 2 BMDS Test Incident Reports (BTIR's) and Weapon System Test Reports (WSTR's)</p> <p><b>FY 2013 Plans:</b> For FY 2013 and beyond, this work is stopped as a cost savings measure.</p>			
<b>Accomplishments/Planned Programs Subtotals</b>	151.032	22.775	-

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
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
• 0603882C: <i>Ballistic Missile Defense Midcourse Defense Segment</i>	1,245.489	1,159.456	903.172		903.172	914.603	954.069	948.650	862.884	Continuing	Continuing
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	389.259	222.075	347.012		347.012	327.342	362.520	341.780	326.095	Continuing	Continuing
• 0603888C: <i>Ballistic Missile Defense Test &amp; Targets</i>	999.068	85.569	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1,084.637
• 0603890C: <i>BMD Enabling Programs</i>	401.113	415.048	362.711		362.711	339.197	373.346	395.350	394.085	Continuing	Continuing
• 0603891C: <i>Special Programs - MDA</i>	228.450	296.145	272.387		272.387	321.450	345.263	354.503	348.602	Continuing	Continuing
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management &amp; Communication</i>	454.440	363.640	366.552		366.552	376.116	383.055	358.431	364.725	Continuing	Continuing
• 0603898C: <i>Ballistic Missile Defense Joint Warfighter Support</i>	55.351	41.174	55.550		55.550	53.139	53.718	59.291	60.540	Continuing	Continuing

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>
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**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603904C: <i>Missile Defense Integration &amp; Operations Center (MDIOC)</i>	83.112	69.249	63.043		63.043	54.299	55.409	54.693	55.844	Continuing	Continuing

**D. Acquisition Strategy**

Beginning in FY 2013, the Sea-Based X-Band Radar (SBX) will be placed in a limited test support status, recallable to active operational status when Indications and warnings indicate need for enhanced discrimination.

**E. Performance Metrics**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>
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<b>Product Development (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
SBX Software Development and Maintenance Software Dev & Maintenance	SS/CPAF	Raytheon:MA	-	22.775	Dec 2011	-		-		-	40.845	63.620	79.726
<b>Subtotal</b>			-	22.775		-		-		-	40.845	63.620	79.726

**Remarks**

Software Development and Sustainment budgeted in FY 2011 in Sensors Program Element 0603884C Budget Project MD11.

<b>Support (\$ in Millions)</b>				<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Vessel Operations and Support SBX Operations and Support (Vessel)	SS/CPAF	Boeing:AL/AK/AZ/CA/CO/TX/VA/HI	160.597	-		-		-		-	0.000	160.597	144.231
Vessel Operations and Support Fuel	SS/FFP	Boeing:AL/AK/AZ/CA/CO/TX/VA/HI	19.300	-		-		-		-	0.000	19.300	19.300
Vessel Operations and Support Vessel Voyage Repairs	SS/CPAF	Boeing:AL/AK/HI	16.650	-		-		-		-	0.000	16.650	16.650
Vessel Operations and Support Navy Transition Office	MIPR	US Navy:AL, NCR	15.565	-		-		-		-	0.000	15.565	16.065
Vessel Operations and Support ABS Certification	SS/CPAF	Boeing:AL	0.697	-		-		-		-	0.000	0.697	0.697
Vessel Operations and Support Pearl Harbor Spt: Pilot/Tug, Facilities, Helicopter	SS/FFP	COMNAVREG/ HI, NAVFAC/HI, Bluehahel:AK	0.089	-		-		-		-	0.000	0.089	0.089
XBR Operations and Support XBR Operations and Support	SS/CPAF	Raytheon:AL/AK/HI	75.600	-		-		-		-	0.000	75.600	65.247
XBR Operations and Support XBR SW upgrades/Maint.	SS/CPAF	Raytheon:MA	9.327	-		-		-		-	0.000	9.327	9.327

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>
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<b>Support (\$ in Millions)</b>				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
SBX Communications Operations and Support SBX Comms O&S	MIPR	DISA:VA	3.279	-		-		-		-	0.000	3.279	1.900
SBX Communications Operations and Support SBX Terminal Relocation	SS/CPAF	Boeing:AL	0.250	-		-		-		-	0.000	0.250	0.250
System Force Protection System Force Protection	SS/CPFF	Chenega:On Vessel/AK	16.600	-		-		-		-	0.000	16.600	14.403
<b>Subtotal</b>			317.954	-		-		-		-	0.000	317.954	288.159

**Remarks**  
N/A

<b>Test and Evaluation (\$ in Millions)</b>				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
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**  
N/A

<b>Management Services (\$ in Millions)</b>				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
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**  
N/A

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2013 Missile Defense Agency							<b>DATE:</b> February 2012				
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>			<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>			<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>					
	<b>Total Prior Years Cost</b>	<b>FY 2012</b>		<b>FY 2013 Base</b>		<b>FY 2013 OCO</b>		<b>FY 2013 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	317.954	22.775		-		-		-	40.845	381.574	367.885

**Remarks**

NA

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD46: <i>Sea Based X-Band Radar (SBX) Development</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GMD Intercept Flight Test FTG-06a	1	2011	1	2011
Aegis Flight Test FTM-15	3	2011	3	2011
ABS Certification and In-Port Period	3	2011	4	2011

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</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
MX46: <i>Sea Based X-Band Radar Development Support</i>	-	146.800	9.236	-	9.236	9.235	9.264	9.246	9.236	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

**Note**

Beginning in FY 2013, the Sea-Based X-Band Radar (SBX) will be placed in a limited test support status, recallable to active operational status when Indications and warnings indicate need for enhanced discrimination.

**A. Mission Description and Budget Item Justification**

This project provides for the operations and support of the Sea-Based X-Band (SBX) Radar and its four major sub-systems: the self-propelled vessel; the X-Band Radar (XBR); the In-Flight Interceptor Communications System (IFICS) Data Terminal (IDT); and the communications network. Operations and support activities include operation and sustainment of the vessel, operation and sustainment of the X-Band Radar, improvements to reliability and suitability, and vessel and portside security.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2011	FY 2012	FY 2013
<b>Title:</b> Vessel Operations and Support	-	109.884	6.196
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b> FY 2011 plans are described in Project MD46.			
<b>FY 2012 Plans:</b> -Continue ongoing operations, sustainment, and support of the SBX, the support vessel, and support facilities -Continue to support operations of the Navy Transition Office -Transition to Navy Contracts			
<b>FY 2013 Plans:</b> -Sustain the SBX in limited test support status			
<b>Title:</b> System Force Protection	-	4.742	0.940
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b>	FY 2011	FY 2012	FY 2013
<p><b><i>FY 2011 Accomplishments:</i></b> FY 2011 plans are described in Project MD46.</p> <p><b><i>FY 2012 Plans:</i></b> -Continue to provide on-board and portside force protection for the SBX and its off-shore support vessel</p> <p><b><i>FY 2013 Plans:</i></b> -Provide force protection for SBX in limited test support status</p>			
<p><b><i>Title:</i></b> XBR Operations and Support</p> <p align="right"><b><i>Articles:</i></b></p>	-	32.174	2.100
<p><b><i>Description:</i></b> See Description Below</p> <p><b><i>FY 2011 Accomplishments:</i></b> FY 2011 plans are described in Project MD46.</p> <p><b><i>FY 2012 Plans:</i></b> -Continue to operate and sustain the X-Band radar and associated equipment -Sustain mission hardware -Provide and support operations crew -Implement reliability and suitability improvements</p> <p><b><i>FY 2013 Plans:</i></b> -Sustain the X-Band Radar (XBR) in limited test support status</p>	0	0	0
<b>Accomplishments/Planned Programs Subtotals</b>	-	146.800	9.236

**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
• 0603882C: <i>Ballistic Missile Defense Midcourse Defense Segment</i>	1,245.489	1,159.456	903.172		903.172	914.603	954.069	948.650	862.884	Continuing	Continuing
• 0603884C: <i>Ballistic Missile Defense Sensors</i>	389.259	222.075	347.012		347.012	327.342	362.520	341.780	326.095	Continuing	Continuing
• 0603888C: <i>Ballistic Missile Defense Test &amp; Targets</i>	999.068	85.569	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1,084.637

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</i>
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**C. Other Program Funding Summary (\$ in Millions)**

<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0603890C: <i>BMD Enabling Programs</i>	401.113	415.048	362.711		362.711	339.197	373.346	395.350	394.085	Continuing	Continuing
• 0603891C: <i>Special Programs - MDA</i>	228.450	296.145	272.387		272.387	321.450	345.263	354.503	348.602	Continuing	Continuing
• 0603896C: <i>Ballistic Missile Defense Command and Control, Battle Management &amp; Communication</i>	454.440	363.640	366.552		366.552	376.116	383.055	358.431	364.725	Continuing	Continuing
• 0603898C: <i>Ballistic Missile Defense Joint Warfighter Support</i>	55.351	41.174	55.550		55.550	53.139	53.718	59.291	60.540	Continuing	Continuing
• 0603904C: <i>Missile Defense Integration &amp; Operations Center (MDIOC)</i>	83.112	69.249	63.043		63.043	54.299	55.409	54.693	55.844	Continuing	Continuing

**D. Acquisition Strategy**

Beginning in FY 2013, the Sea-Based X-Band Radar (SBX) will be placed in a limited test support status, recallable to active operational status when Indications and warnings indicate need for enhanced discrimination.

**E. Performance Metrics**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</i>
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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
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**

N/A

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
Vessel Operations and Support SBX Operations & Support (Vessel)	C/FFP	IAS:HI/NJ	-	64.953	Nov 2011	2.512	Nov 2012	-		2.512	Continuing	Continuing	Continuing
Vessel Operations and Support Fuel	C/FFP	IAS:HI/NJ	-	18.968	Nov 2011	0.190	Nov 2012	-		0.190	Continuing	Continuing	Continuing
Vessel Operations and Support Vessel Voyage Repairs	C/FFP	IAS:HI/NJ	-	4.028	Nov 2011	2.760	Nov 2012	-		2.760	Continuing	Continuing	Continuing
Vessel Operations and Support Navy Transition Office	MIPR	US Navy:AL	-	5.424	Nov 2011	0.208	Nov 2012	-		0.208	Continuing	Continuing	Continuing
Vessel Operations and Support Vessel Mission Integration	C/FFP	TBD:AL/HI	-	16.511	Dec 2011	0.526	Nov 2012	-		0.526	Continuing	Continuing	Continuing
System Force Protection Force Protection	SS/CPFF	Chenega:On Vessel/AK	-	4.742	Mar 2012	0.940		-		0.940	Continuing	Continuing	Continuing
XBR Operations and Support XBR Operations & Support	SS/CPAF	Raytheon:AL/AK/HI	-	32.174	Nov 2011	2.100	Nov 2012	-		2.100	Continuing	Continuing	Continuing
<b>Subtotal</b>			-	146.800		9.236		-		9.236			

**Remarks**

N/A

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**Exhibit R-3, RDT&E Project Cost Analysis:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</i>
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<b>Test and Evaluation (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**

N/A

<b>Management Services (\$ in Millions)</b>				FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Subtotal</b>			-	-		-		-		-	0.000	0.000	0.000

**Remarks**

N/A

	Total Prior Years Cost	FY 2012		FY 2013 Base		FY 2013 OCO		FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
		Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
<b>Project Cost Totals</b>		-		146.800		9.236		9.236			

**Remarks**

NA

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<b>Exhibit R-4, RDT&amp;E Schedule Profile:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</i>

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MX46: <i>Sea Based X-Band Radar Development Support</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Navy Transition (60 days)	1	2012	1	2012
GMD Intercept Flight Test (FTG-06b)	4	2012	4	2012
FY 2014 GM Intercept Flight Test	4	2014	4	2014
FY 2015 GM SALVO Intercept Flight Test	4	2015	4	2015
FY 2016 GM Intercept Flight Test	4	2016	4	2016
FY 2017 GM Intercept Flight Test	4	2017	4	2017

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**Exhibit R-2A, RDT&E Project Justification:** PB 2013 Missile Defense Agency **DATE:** February 2012

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar</i> (SBX)	<b>PROJECT</b> MD40: <i>Program-Wide Support</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
MD40: <i>Program-Wide Support</i>	-	7.256	0.494	-	0.494	0.490	0.475	0.479	0.492	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0		0	0	0	0	0		

**Note**

In FY2013, Program Wide Support reflects a proportional decrease as a result of decreases to the Sea Based X-Band Radar (SBX).

**A. Mission Description and Budget Item Justification**

Program-Wide Support (PWS) contains non-headquarters management costs in support of MDA functions and activities across the entire Ballistic Missile Defense System (BMDS). Includes Government Civilians, Advisory and Assistance Services, and Federally Funded Research and Development contracts (FFRDC) providing integrity and oversight of the BMDS as well as, supporting MDA in enabling the development and evaluation of technologies that will respond to the changing threat. In addition, includes Global Deployment personnel and support performing deployment site preparation and activation. Other costs included provide facility capabilities for MDA Executing Agent locations (with the exception of Federal Office Building 2 after FY 2011), such as physical and technical security, legal services, travel and agency training, office and equipment leases, rents and utilities, data and unified communications support, supplies and maintenance, logistics and central property management of equipment, and similar operating expenses. Also includes legal settlements, and foreign currency fluctuations on a limited number of foreign contracts. In keeping with congressional intent, PWS is allocated on a pro-rata basis and therefore, fluctuates by year based on the total MDA budget.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	FY 2011	FY 2012	FY 2013
<b>Title:</b> Civilian Salaries and Support	-	7.256	0.494
<b>Articles:</b>	0	0	0
<b>Description:</b> See Description Below			
<b>FY 2011 Accomplishments:</b> See paragraph A, Mission Description and Budget Item Justification			
<b>FY 2012 Plans:</b> See paragraph A, Mission Description and Budget Item Justification			
<b>FY 2013 Plans:</b> See paragraph A, Mission Description and budget item justification.			
<b>Accomplishments/Planned Programs Subtotals</b>	-	7.256	0.494

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

N/A

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2013 Missile Defense Agency		<b>DATE:</b> February 2012
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 4: <i>Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0603907C: <i>Sea Based X-Band Radar (SBX)</i>	<b>PROJECT</b> MD40: <i>Program-Wide Support</i>

**D. Acquisition Strategy**

N/A

**E. Performance Metrics**

N/A