

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: February 2006
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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE						
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA7		0604227N Harpoon Modifications						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost				36.284	53.325	24.044		
1843 Harpoon Block II				36.284	53.325	24.044		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
 FY 2007 New Start Program. The Harpoon Block III Weapons System is intended to upgrade and expand the capabilities of the Navy's only anti-ship, all weather missile to improve its precision in a congested, littoral environment. Modification of the RGM-84D Harpoon 1C baseline missile will provide for Global Positioning System (GPS) accuracy, target selectivity in a littoral environment, and in-flight target position update solutions as well as positive terminal control. Specific improvements provide for significant target discrimination as well as minimized target-to-shore separation capability, Battle Hit Indications (BHI), connectivity with future network architecture, and Land Blanking capability. Harpoon Block III will provide for a concept of operations which will support existing ISR Platform target detection; target & weapon position update (ie. UAV, Helo, Fixed wing), and ISR Platform to Weapon Correlation Mapping.

This development effort will lead to a procurement of 400 Harpoon Block III upgrade kits, beginning in FY 2009, that will retrofit existing Harpoon USN missile inventory.

FY07-FY09 RDT&E funding will support full development of Selected Availability Anti-Spoof Security Module (SAASM) development and integration, Data link integration, and Test and Evaluation.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA7		PROGRAM ELEMENT NUMBER AND NAME 0604227N Harpoon Modifications			PROJECT NUMBER AND NAME 1843 Harpoon Block II			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost				36.284	53.325	24.044		
RDT&E Articles Qty				4				

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B. Accomplishments/Planned Program

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost				0.846
RDT&E Articles Quantity				4

Start Block III kit design and development. Begin prototype development and fabrication.

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost				13.546
RDT&E Articles Quantity				

Start Block III Guidance Control Unit Design & Integration.

		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost				6.446
RDT&E Articles Quantity				

Start Block III missile Operational Flight Program (OFP) design and development.

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B. Accomplishments/Planned Program (Cont.)

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost			15.446
RDT&E Articles Quantity			

Harpoon Shipboard Command Launch Control Set (HSCLCS) interface design. Harpoon Embedded Trainer, (HET), Harpoon Operational Tactical Training System (HOTTS), and Harpoon Guided Missile Simulator (HGMS) Upgrade development.

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

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

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<p>C. PROGRAM CHANGE SUMMARY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 40%;"></th> <th style="text-align: right; width: 15%;">FY 05</th> <th style="text-align: right; width: 15%;">FY 06</th> <th style="text-align: right; width: 15%;">FY 07</th> </tr> </thead> <tbody> <tr> <td>Funding:</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Previous President's Budget:</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> </tr> <tr> <td> Current BES/President's Budget</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">0.000</td> <td style="text-align: right;">36.284</td> </tr> <tr> <td> Total Adjustments</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">36.284</td> </tr> <tr> <td colspan="4" style="padding-left: 20px;">Summary of Adjustments</td> </tr> <tr> <td> Congressional Reductions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Rescissions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Undistributed Reductions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Congressional Increases</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Programmatic Adjustments</td> <td></td> <td></td> <td style="text-align: right;">36.100</td> </tr> <tr> <td> Economic Assumptions</td> <td></td> <td></td> <td></td> </tr> <tr> <td> Miscellaneous Adjustments</td> <td></td> <td></td> <td style="text-align: right;">0.184</td> </tr> <tr> <td> Subtotal</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">0.000</td> <td style="text-align: right; border-top: 1px solid black;">36.284</td> </tr> </tbody> </table> <p style="margin-top: 20px;">Schedule:</p> <p style="margin-left: 20px;">New Start</p> <p style="margin-top: 20px;">Technical:</p> <p style="margin-left: 20px;">New Start</p>				FY 05	FY 06	FY 07	Funding:				Previous President's Budget:	0.000	0.000	0.000	Current BES/President's Budget	0.000	0.000	36.284	Total Adjustments	0.000	0.000	36.284	Summary of Adjustments				Congressional Reductions				Congressional Rescissions				Congressional Undistributed Reductions				Congressional Increases				Programmatic Adjustments			36.100	Economic Assumptions				Miscellaneous Adjustments			0.184	Subtotal	0.000	0.000	36.284
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R-1 SHOPPING LIST - Item No. 163

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA7	PROGRAM ELEMENT NUMBER AND NAME 0604227N Harpoon Modifications	PROJECT NUMBER AND NAME 1843 Harpoon Block II
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D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
232600 Harpoon Mods (WPN, BA2)					9.145	22.705	23.622	19.800	75.272
522700 Harpoon Support Equipment (OPN, BA-4)			0.100		7.224	8.026	5.021	3.100	23.471

E. ACQUISITION STRATEGY:

HARPOON Block III will provide a capability upgrade consisting of a "kit", which will be installed on existing Harpoon RGM-84D missiles (Formally an ACAT 1C program). Program insertion will be at the System Development and Demonstration level, followed by a production and installment effort funded in Weapons Procurement, Navy. Required support equipment will be procured using Other Procurement, Navy.

Acquisition management will be executed by the Program Manager for PMA-201 via a Government and contractor IPT concept. The primary Harpoon Block III upgrade contract, to include all system integration efforts, is intended to be Sole Source, Cost-Plus Fixed Fee with Boeing, the Original Equipment Manufacturer for Harpoon. Select RDT&E collateral efforts are being evaluated as stand-alone contract candidates in the interest of cost savings.

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2006				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA7			0604227N Harpoon Modifications			1843 Harpoon Block II						
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	SS/CPFF	Boeing, St Charles						17.084	10/06	48.269	65.353	65.353
Ancillary Hardware Development	WX	NAWC WD China Lake, CA						5.743	10/06	4.640	10.383	
Ancillary Hardware Development	WX	Port Hueneme, CA						0.400	10/06	0.300	0.700	
Ancillary Hardware Development	WX	NSWC Indian Head, MD						0.300	10/06	0.300	0.600	
Ancillary Hardware Development	WX	SPAWAR, San Diego, CA						0.400	10/06	0.300	0.700	
Ship Integration	WX	Port Hueneme, CA						0.057	10/06	0.060	0.117	
Ship Integration	WX	NSWC, Dahlgren, VA						2.700	10/06	1.200	3.900	
Ship Integration	WX	SPAWAR, San Diego, CA						1.500	10/06	1.100	2.600	
											0.000	
											0.000	
											0.000	
Subtotal Product Development			0.000	0.000		0.000		28.184		56.169	84.353	
<p>Remarks: Prime contractor software development is being accomplished on the primary development contract and is included in the Boeing cost estimate above. The China Lake Ancillary Hardware Development cost above also includes software development.</p>												
Development Support	Various	Various						2.700	11/06	6.200	8.900	
Integrated Logistics Support	Various	Various						2.400	11/06	1.600	4.000	
Integrated Logistics Support	WX	Port Hueneme, CA						0.300	10/06	0.700	1.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal Support			0.000	0.000		0.000		5.400		8.500	13.900	
<p>Remarks:</p>												

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RDT&E, N / BA7			0604227N Harpoon Modifications			1843 Harpoon Block II						
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
Integrated Test & Evaluation	WX	NAWC WD China Lake. CA						1.100	10/06	9.500	10.600	
											0.000	
											0.000	
											0.000	
											0.000	
											0.000	
Subtotal T&E			0.000	0.000		0.000		1.100		9.500	10.600	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	Various	Various						1.500	10/06	3.000	4.500	
Travel	Various	Various						0.100	10/06	0.200	0.300	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.000	0.000		0.000		1.600		3.200	4.800	
Remarks:												
Total Cost			0.000	0.000		0.000		36.284		77.369	113.653	
Remarks:												

