

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					0604227N, HARPOON MODIFICATIONS			
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	22.191	42.547	68.214	33.317	5.868	0	0	
1843 HARPOON Block III	22.191	42.547	68.214	33.317	5.868	0	0	

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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 and AGM-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. It will possess total organic capability (i.e. Autonomous Surface Action Group capability). 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 and target/weapon position update (i.e. UAV, Helo, Fixed wing).

This development effort will lead to a procurement of 400 Surface Block III upgrade kits and 400 Air Harpoon Block III upgrade kits, beginning in FY 2010 for Surface and in FY 2011 for Air, that will retrofit existing Harpoon 1C, USN missile inventory.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
Previous President's Budget:	27.894	43.470	72.868
Current President's Budget:	22.191	42.547	68.214
Total Adjustments	-5.703	-0.923	-4.654

Summary of Adjustments

Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-0.398	-0.276	
Congressional Increases			
Economic Assumptions			-0.007
Miscellaneous Adjustments	-5.305	-0.647	-4.647
Subtotal	-5.703	-0.923	-4.654

Schedule: Changes reflect: Milestone B was completed 1st quarter FY08. The remainder of the schedule was subsequently adjusted.

Technical: Not Applicable

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0604227N, HARPOON MODIFICATIONS	PROJECT NUMBER AND NAME 1843, HARPOON Block III						
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1843 HARPOON Block III		22.191	42.547	68.214	33.317	5.868	0	0
RDT&E Articles Qty			4	3				

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B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Surface Harpoon Block III Design/Development	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	16.986	29.977	24.650
RDT&E Articles Qty		4	

Surface Harpoon - Funding is for Block III missile and ship kit design, prototype development and fabrication, Missile Guidance Control Unit Design and integration, data link and GPS integration and Missile Operational Flight Program (OFP) Software design and development.

Air Harpoon Block III Design/Development	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		2.852	30.957
RDT&E Articles Qty			3

Air Harpoon - Funding is for Block III missile kit design and development, prototype development and fabrication, Guidance Control Unit Design and integration, data link and GPS integration, aircraft OFP software development and integration, and (OFP) design and development.

Launch Control System Interface Design	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	5.205	9.718	12.607
RDT&E Articles Qty			

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.

APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0604227N, HARPOON MODIFICATIONS	PROJECT NUMBER AND NAME 1843, HARPOON Block III
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C. OTHER PROGRAM FUNDING SUMMARY:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost
USN OP,N BLI 522700 Harpoon Support Equipment	0.100	0.000	0.000	8.058	5.155	4.667	7.373	14.307	39.660
USN WP,N BLI 232600 Harpoon Mods	0.000	0.000	0.000	9.646	42.420	43.825	42.082	20.088	158.061

D. ACQUISITION STRATEGY:

HARPOON Block III will provide a capability upgrade consisting of a "kit" which will be installed on existing Harpoon Block 1C, RGM-84D and Harpoon AGM-84D missiles. Program insertion will be at the System Development and Demonstration phase, followed by a production and installment effort funded via Weapons Procurement, Navy. Required shipboard upgrades and support equipment will be procured using Other Procurement, Navy.

The Acquisition Program will be executed using a Government and industry IPT concept. The primary Harpoon Block III upgrade, to include all system integration efforts, is intended to be accomplished through a Sole Source, Cost-Plus, Incentive Fee contract with McDonnell Douglas (Subsidiary of Boeing), the Original Equipment Manufacturer for Harpoon.

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
RDT&E,N / BA-7		0604227N, HARPOON MODIFICATIONS				1843, HARPOON Block III						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
Aircraft Integration	WX	NAWCWD, CHINA LAKE CA				.903	Dec 2007	5.601	Nov 2008	9.000	15.503	
Aircraft Integration	SS-CPIF	Boeing/St. Louis F/A-18				7.055	Jan 2008	8.434	Nov 2008	4.521	20.010	20.010
Aircraft Integration	SS-CPIF	MCDONNELL DOUGLAS CORP, SAINT LOUIS						7.974	Nov 2008	3.713	11.687	11.687
Ancillary Hdw Development	SS-CPFF	BSC SYSTEMS INC, RESTON, VA		.405	Mar 2007	.263	Jan 2008	.400	Nov 2008	0.687	1.755	1.755
Ancillary Hdw Development	WX	NAWCWD, CHINA LAKE CA		2.382	Oct 2006	1.824	Dec 2007		Nov 2008	1.378	7.256	
Primary Hdw Development	SS-CPFF	Raytheon		7.320	Feb 2008			1.000	Nov 2008		8.320	8.320
Primary Hdw Development	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		2.517	Nov 2006						2.517	2.517
Primary Hdw Development	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		1.334	Jul 2007						1.334	1.334
Primary Hdw Development	SS-CPIF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO		3.027	Jan 2008	6.790	Jan 2008	9.402	Nov 2008	1.541	20.761	20.761
Ship Integration	WX	NSWC PHD PORT HUENEME CA		.303	Nov 2006	.977	Nov 2007	1.083	Nov 2008	0.721	3.084	
Ship Integration	WX	SPAWARSSYSCEN SAN DIEGO CA		.080	Nov 2006	.820	Nov 2007	.525	Nov 2008	0.405	1.830	
Systems Engineering	WX	NAWCAD, PATUXENT RIVER MD		.330	Nov 2006			.250	Nov 2008	0.250	0.830	
SUBTOTAL PRODUCT DEVELOPMENT				17.698		18.632		36.341		22.215	94.887	

Remarks: Target Value of Contracts represents the Program Manager's latest estimates. The \$2.5M Primary Hardware Development contract in FY07 is for Pre-SDD Risk Reduction. Numbers might not add due to rounding.

SUPPORT												
Development Support	SS-CPFF	NSWC DAHLGREN, DAHLGREN, VA		.366	Mar 2007	.259	Nov 2007	.350	Nov 2008	0.250	1.225	
Integrated Logistic Support	WX	NAWCWD, CHINA LAKE CA		.223	Nov 2006	1.818	Dec 2007	1.667	Nov 2008	1.378	5.086	
Engineering & Technical Services	WX	A&AS, DCS, & Prometheus				.505	Nov 2007	.530	Dec 2008	0.807	1.842	
Software Development	SS-CPFF	DELEX SYSTEMS INC, VIENNA,VA						1.000	Nov 2008	1.400	2.400	2.400
Software Development	SS-CPIF	MCDONNELL DOUGLAS CORP, ST LOUIS, MO		2.018	Jan 2008	13.580	Jan 2008	12.244	Nov 2008	2.132	29.974	29.974
Software Development	WX	NSWC INDIAN HEAD DIV, INDIAN HD MD		.100	Nov 2007	.339	Nov 2007	.367	Nov 2008	0.329	1.135	
SUBTOTAL SUPPORT				2.707		16.502		16.159		6.296	41.663	

Remarks: Target Value of Contracts represents the Program Manager's latest estimates. Totals might not add due to rounding.

TEST & EVALUATION												
Developmental Test & Evaluation	SS-CPIF	MCDONNELL DOUGLAS CORP, SAINT LOUIS, MO				2.263	Jan 2008	9.402	Nov 2008	3.853	15.518	15.518
Developmental Test & Evaluation	WX	NAWCWD, CHINA LAKE CA		.372	Mar 2007	1.818	Dec 2007	1.667	Nov 2008	1.378	5.235	
Developmental Test & Evaluation	WX	PEO IWS						.292	Nov 2008	0.000	0.292	
Developmental Test & Evaluation	WX	NSWC Dahlgren								0.366	0.366	
Developmental Test & Evaluation	WX	NSWC PHD PORT HUENEME CA				.800	Feb 2008	.705	Nov 2008	0.188	1.694	
Developmental Test & Evaluation	VARIOUS	VARIOUS		.594	Mar 2007	.885	Nov 2007	1.507	Nov 2008	0.200	3.186	
Operational Test & Evaluation	SS-CPFF	DELEX SYSTEMS INC, VIENNA,VA								0.300	0.300	.300
Operational Test & Evaluation	VARIOUS	VARIOUS		.497	Aug 2007	.591	Nov 2007	.787	Nov 2008	0.162	2.037	
Operational Test & Evaluation	WX	OPER T & E FOR CD 30, NORFOLK VA		.174	Feb 2008	.321	Dec 2007	.595	Nov 2008	2.405	3.495	
SUBTOTAL TEST & EVALUATION				1.637		6.678		14.956		8.852	32.124	

Remarks: Target Value of Contracts represents the Program Manager's latest estimates. Totals might not add due to rounding.

MANAGEMENT												
Government Engineering Support	WX	NAWCAD, PATUXENT RIVER MD				.585	Nov 2007	.608	Nov 2008	0.686	1.879	
Travel	TO	NAVAIR, Patuxent River, MD		.149	Oct 2006	.150	Nov 2007	.150	Nov 2008	0.150	0.599	
SUBTOTAL MANAGEMENT				.149		.735		.758		0.836	2.478	

Remarks:

Total Cost				22.191		42.547		68.213		38.199	171.151	
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Remarks:

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																							DATE: February 2008								
APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME											
RDT&E, N / BA-7										0604227N Harpoon Modifications										1843 Harpoon Block III											
Fiscal Year	2007				2008				2009				2010				2011				2012				2013						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
SURFACE & AIR - LAUNCHED Milestone DECISIONS					△ MS B								△ MS C				△ FRP														
	SYSTEM DESIGN AND DEMONSTRATION MILESTONES	Pre-SDD Risk Reduction				System Design & Demonstration										IOC ★															
▲ Pre-SDD Contract						△ SRR	△ PDR	△ CDR	Test Ship Mod																						
				△ Award SDD Contract					Missile & Surf Integrated T&E				OA OTRR				OPEVAL Report														
												F/A-18 E/F H7E Integrated T&E																			
Production Milestone											Production & Shipboard Installation																				
											40 LRIP										225				210						
											40										225				225						
											14										12				4				11		
										MSL Kit Procurement										14				12				4			
										MSL Kit Deliveries										12				11				4			
										LCS Kit Procurement										12				11				4			
										LCS Deliveries										12				11				4			

