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EXHIBIT R-2, RDT&E Budget Item Justification							DATE:			
APPROPRIATION/BUDGET ACTIVITY							R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7							0604227N, HARPOON MODIFICATIONS			
COST (\$ in Millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013		
Total PE Cost		27.894	43.470	72.868	30.314	6.002	0	0		
1843 HARPOON Block III		27.894	43.470	72.868	30.314	6.002	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.

FY07-11 RDT&E funding will support full development and integration of Selected Availability Anti-Spoof Security Module (SAASM), data link integration, and test and evaluation for both Surface- and Air-Launched weapons.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget:	0.000	36.284	53.325	24.044
Current President's Budget:	<u>0.000</u>	<u>27.894</u>	<u>43.470</u>	<u>72.868</u>
Total Adjustments	0.000	-8.390	-9.855	48.824
Summary of Adjustments				
Congressional Reductions		-8.284		
Congressional Rescissions				
Congressional Undistributed Reductions		-0.106		
Congressional Increases				
Economic Assumptions			0.029	0.171
Miscellaneous Adjustments			<u>-9.884</u>	<u>48.653</u>
Subtotal	0.000	-8.390	-9.855	48.824

Schedule: Changes reflect: FY07 Congressional program reduction; PB 08 budget includes the Air variant; ACAT change from III to II because RDT&E threshold exceeded. Milestone schedule for Surface and Air have been combined as a result. Missile changes will be identical for both Surface and Air-Launched. Milestone B will be for a combined Surface and Air-Launched program, Milestone C will be for an LRIP decision, LRIP will establish an initial production base for the system and allow for the transition from FY10 LRIP quantity of 40 units to an FY11 quantity of 225 units. Milestone B decision change due to ACAT change.

Technical: Added an Air-Launched Harpoon Block III requirement with integration on F/A-18E/F.

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2007			
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 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1843 HARPOON Block III			27.894	43.470	72.868	30.314	6.002	0	0
RDT&E Articles Qty			4		3				

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FY07-11 RDT&E funding will support full development and integration of Selected Availability Anti-Spoof Security Module (SAASM), data link integration, and test and evaluation for both Surface- and Air-Launched weapons.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

Surface Harpoon Block III Design/Development	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		22.689	30.900	31.741
RDT&E Articles Qty		4		

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

Air Harpoon Block III Design/Development	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost			2.852	32.557
RDT&E Articles Qty				3

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

Launch Control System Interface Design	FY 2006	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost		5.205	9.718	8.570
RDT&E Articles Qty				

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

C. OTHER PROGRAM FUNDING SUMMARY:	FY 2006	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	0.000	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	0.000	9.646	42.514	43.883	42.103	20.088	158.234

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 (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 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 2007		
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				3.400	Jan 2008	5.505	Nov 2008	2.336	11.241	
Aircraft Integration		MCDONNELL DOUGLAS CORP, SAINT LOUIS						1.600	Nov 2008	.560	2.160	
Ancillary Hdw Development	SS-CPFF	BSC SYSTEMS INC, RESTON, VA		.268	Mar 2007	.760	Nov 2007	1.018	Nov 2008	.487	2.533	2.533
Ancillary Hdw Development	WX	NAWCWD, CHINA LAKE CA		9.406	Oct 2006	4.813	Nov 2007	6.119	Nov 2008	1.728	22.066	
Primary Hdw Development	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		2.500	Jan 2007						2.500	2.500
Primary Hdw Development	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		2.655	Jun 2007	13.197	Nov 2007	14.943	Nov 2008	1.401	32.196	32.196
Ship Integration	WX	NSWC PHD PORT HUENEME CA		.301	Dec 2006	.485	Nov 2007	1.049	Nov 2008	.325	2.160	
Ship Integration	WX	SPAWARSYSCEN SAN DIEGO CA		.500	Nov 2006	.342	Nov 2007	.454	Nov 2008	.000	1.296	
Systems Engineering	WX	NAWCAD, PATUXENT RIVER MD		.131	Jan 2007	1.122	Nov 2007	1.263	Nov 2008	.000	2.516	
SUBTOTAL PRODUCT DEVELOPMENT				15.761		24.119		31.951		6.837	78.668	

Remarks: Target Value of Contracts represents the Program Manager's latest estimates. The \$2.7M Primary Hardware Development contract in FY07 is for Pre-SDD Risk Reduction.

SUPPORT												
Development Support	SS-CPFF	SOUTHEASTERN COMPUTER CONSULTANTS I		.268	Mar 2007	.388	Nov 2007	.489	Nov 2008	.214	1.359	1.359
Integrated Logistic Support	WX	NAWCWD, CHINA LAKE CA		.209	Jan 2007	.275	Nov 2007	.336	Nov 2008	.300	1.120	
Software Development	SS-CPFF	DELEX SYSTEMS INC, VIENNA,VA				1.631	Nov 2007	1.615	Nov 2008	1.089	4.335	4.335
Software Development	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		8.694	Jun 2007	9.630	Apr 2008	17.950	Nov 2008	2.219	38.493	38.493
Software Development	WX	NSWC INDIAN HEAD DIV, INDIAN HD MD		.100	Nov 2006	.256	Nov 2007	.267	Nov 2008	.129	.752	
SUBTOTAL SUPPORT				9.271		12.180		20.657		3.951	46.059	

Remarks: Target Value of Contracts represents the Program Manager's latest estimates.

TEST & EVALUATION												
Developmental Test & Evaluation	SS-CPFF	MCDONNELL DOUGLAS CORP, SAINT LOUIS		1.085	Jun 2007	4.501	Nov 2007	8.498	Nov 2008	6.009	20.093	20.093
Developmental Test & Evaluation	WX	NAWCAD, PATUXENT RIVER MD				.228	Nov 2007	1.678	Nov 2008	.550	2.456	
Developmental Test & Evaluation	WX	NAWCWD, CHINA LAKE CA		.351	Mar 2007	.900	Nov 2007	6.685	Nov 2008	11.156	19.092	
Developmental Test & Evaluation	WX	NSWC PHD PORT HUENEME CA		.910	Dec 2006	1.292	Nov 2007	.939	Nov 2008	.234	3.375	
Developmental Test & Evaluation	Various	VARIOUS		.367	Jan 2007					.000	.367	
Operational Test & Evaluation	SS-CPFF	DELEX SYSTEMS INC, VIENNA,VA						1.618	Nov 2008	.577	2.195	2.195
Operational Test & Evaluation	VARIOUS	VARIOUS								3.815	3.815	
Operational Test & Evaluation	WX	OPER T & E FOR CD 30, NORFOLK VA						.292	Nov 2008	1.580	1.872	
SUBTOTAL TEST & EVALUATION				2.713		6.921		19.710		23.921	53.265	

Remarks: Target Value of Contracts represents the Program Manager's latest estimates.

MANAGEMENT												
Government Engineering Support	WX	NAWCAD, PATUXENT RIVER MD				.100	Nov 2007	.400	Nov 2008	.500	1.000	
Travel		NAVAIR, Patuxent River, MD		.149	Oct 2006	.150	Nov 2007	.150	Nov 2008	.150	.599	
SUBTOTAL MANAGEMENT				.149		.250		.550		.650	1.599	

Remarks:

Total Cost				27.894		43.470		72.868		35.359	179.591	
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Remarks:

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																							DATE: February 2007																								
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7								PROGRAM ELEMENT NUMBER AND NAME 0604227N Harpoon Modifications								PROJECT NUMBER AND NAME 1843 Harpoon Block III																															
Fiscal Year	2006				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	1	2	3	4															
SURFACE & AIR - LAUNCHED Milestone DECISIONS	▲ ACAT Designation				△ MS B												△ MS C				△ FRP																										
SYSTEM DESIGN AND DEMONSTRATION MILESTONES					Pre-SDD Risk Reduction				System Design & Demonstration																																						
					△ Pre-SDD Contract				△ SRR				△ PDR				△ CDR																														
					△ Award SDD Contract												Test Ship Mod																														
													Missile & Surf Integrated T&E																																		
																	△ OA				△ OTRR				△ OPEVAL Report																						
																					F/A-18 E/F H7E Integrated T&E																										
Production Milestone																								Production & Shipboard Installation																							
																								MSL Kit Procurement				40 LRIP				225				225				210							
																								MSL Kit Deliveries								40				225				225							
																								LCS Kit Procurement				14				12				4				11							
																								LCS Deliveries								14				12				4							

