

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7						R-1 ITEM NOMENCLATURE 0205601N, HARM IMPROVEMENT		
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Total PE Cost	97.825	43.565	31.427	5.364	5.102	5.204	5.303	
1780 HARM IMPROVEMENT	1.876	1.947	1.954	1.937	1.873	1.906	1.939	
2185 AARGM	89.991	32.178	16.373	3.427	3.229	3.298	3.364	
3056 APKWS			13.100					
9999 CONGRESSIONAL ADDS	5.958	9.440						

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) HIGH-SPEED ANTI-RADIATION (HARM) IMPROVEMENT: The High-speed Anti-Radiation Missile (HARM) is a joint service program with the Air Force (NAVY lead). The program commenced production in FY 1983. Program Element 0205601N was used until FY 1990 to develop and test one hardware and two software upgrades to the HARM (AGM-88B, Block III & AGM-88C, Block IV) as Engineering Change Proposals (ECPs). Another ECP software program (Block IIIA & V) was developed (FY 1996 through FY 1999) to modify HARM software in order to meet operational requirements. The Block V tactical software upgrade gives HARM improved geographic specificity and improved capability against advanced waveforms. HARM Block IIIA/V software was distributed to the Fleet in FY 2000. HARM Improvement includes efforts to conduct Foreign Military Assessment (FMA) analysis and engineering to exploit vulnerabilities of foreign anti-radar threats. HARM Improvement includes funding for threat assessment, operational updates, and integration efforts.

(U) ADVANCED ANTI-RADIATION GUIDED MISSILE (AARGM): AARGM is an ACAT-1C acquisition program in System Development & Demonstration (SD&D) to upgrade the AGM-88 HARM missile with multi-mode / multi-spectral guidance and targeting capability. It also incorporates the capability to receive national broadcast data and transmit weapon impact assessments (demonstrated in Quick Bolt Advanced Concept Technology Demonstration (ACTD)). An AARGM System Development and Demonstration (SD&D) commenced in FY 2003. The AARGM program plans production of 1,871 missiles: 68 Low Rate Initial Production (LRIP) and 1,803 Full Rate Production modification kits.

(U) ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS): APKWS is an Army SD&D program to develop a low cost Semi Active Laser (SAL) precision guidance section for existing 2.75 inch unguided rockets. Department of Navy participation began in FY 2004. APKWS will provide an inexpensive, small, lightweight, precision-guided weapon that is effective against soft and lightly armored targets and which enhances crew survivability with increased standoff range. APKWS offers precision, maximum stored kills per aircraft sortie, minimum collateral damage potential, and increased effectiveness over legacy unguided rockets. The guidance package can be assembled with existing unguided rocket components (warhead and rocket motor) and can be fired from existing rocket launchers. Army, Marine Corps, and recent Navy Anti-Surface Warfare (ASUW) Mission Need Statements highlighted the requirement for a weapon system capable of employment from the SH-60 to counter a swarm threat of small attack boats.

FY2008 funding totals do not include \$4.330M previously requested for current FY2008 GWOT requirements.

B. PROGRAM CHANGE SUMMARY

Funding:	FY 2007	FY 2008	FY 2009
Previous President's Budget:	99.829	34.762	7.993
Current President's Budget:	<u>97.825</u>	<u>43.565</u>	<u>31.427</u>
Total Adjustments	-2.004	8.803	23.434

Summary of Adjustments

	FY 2007	FY 2008	FY 2009
Congressional Reductions			
Congressional Rescissions			
Congressional Undistributed Reductions	-1.463	-0.281	
Congressional Increases		9.500	
Economic Assumptions			-0.020
Miscellaneous Adjustments	<u>-0.541</u>	<u>-0.416</u>	<u>23.454</u>
Subtotal	-2.004	8.803	23.434

Schedule:
HARM IMPROVEMENT- Not Applicable

AARGM- MSC has been moved from 2Q FY 2008 to 3Q FY 2008. DT-B1 and DT-B2 have been extended by two quarters. OA start has been moved from 4Q FY 2007 to 2Q FY 2008. FCA has been moved from 2Q FY 2008 to 4Q FY 2008. These schedule changes will better support MS-C and readiness for Operational Evaluation (OPEVAL). OPEVAL start has moved from 3Q FY 2008 to 1Q FY2009. PCA has been moved from 2Q FY 2008 to 3Q FY 2009 to utilize production units. LRIP 1 deliveries will begin in 3Q FY 2009 vice 2Q FY2009 to allow 12 months lead time from contract award to first delivery. IOC has subsequently been moved from 4Q FY 2009 to 1Q FY 2010 to accommodate the delivery schedule.

APKWS- R-4 Schedule reflects restart of SD&D activities with FY 2008 Congressional Add funding and continues through FY 2009.

Technical:
HARM IMPROVEMENT-Not Applicable
AARGM-Not Applicable
APKWS- Not Applicable

EXHIBIT R-2a, RDT&E Project Justification						DATE:																							
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME																							
RDT&E,N / BA-7			0205601N, HARM IMPROVEMENT			1780, HARM IMPROVEMENT																							
COST (\$ in Millions)			FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013																				
1780 HARM IMPROVEMENT			1.876	1.947	1.954	1.937	1.873	1.906	1.939																				
RDT&E Articles Qty																													
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>HIGH-SPEED ANTI-RADIATION (HARM) IMPROVEMENT: The High-speed Anti-Radiation Missile (HARM) is a joint service program with the Air Force (NAVY lead). The program commenced production in FY 1983. Program Element 0205601N was used until FY 1990 to develop and test one hardware and two software upgrades to the HARM (AGM-88B, Block III & AGM-88C, Block IV) as Engineering Change Proposals (ECPs). Another ECP software program (Block IIIA & V) was developed (FY 1996 through FY 1999) to modify HARM software in order to meet operational requirements. The Block V tactical software upgrade gives HARM improved geographic specificity and improved capability against advanced waveforms. HARM Block IIIA/V software was distributed to the Fleet in FY 2000.</p> <p>HARM Improvement includes efforts to conduct Foreign Military Assessment (FMA) analysis and engineering to exploit vulnerabilities of foreign anti-radar threats. HARM Improvement includes funding for threat assessment, operational updates, and integration efforts.</p>																													
<p>B. ACCOMPLISHMENTS / PLANNED PROGRAM:</p> <table border="1"> <thead> <tr> <th>HARM FME</th> <th>FY 2007</th> <th>FY 2008</th> <th>FY 2009</th> </tr> </thead> <tbody> <tr> <td>Accomplishments / Effort / Sub-total Cost</td> <td>1.876</td> <td>1.947</td> <td>1.954</td> </tr> <tr> <td>RDT&E Articles Qty</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Conduct Foreign Military Assessment (FMA) analysis and engineering to exploit vulnerabilities of foreign anti-radar threats. HARM Improvement includes funding for threat assessment, operational updates, and integration efforts.</p>										HARM FME	FY 2007	FY 2008	FY 2009	Accomplishments / Effort / Sub-total Cost	1.876	1.947	1.954	RDT&E Articles Qty											
HARM FME	FY 2007	FY 2008	FY 2009																										
Accomplishments / Effort / Sub-total Cost	1.876	1.947	1.954																										
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	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Complete	Total Cost																				
Not Applicable																													
<p>D. ACQUISITION STRATEGY:</p> <p>Not Applicable</p>																													

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2008		
APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7		PROGRAM ELEMENT 0205601N, HARM IMPROVEMENT				PROJECT NUMBER AND NAME 1780, HARM IMPROVEMENT						
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												
SUBTOTAL PRODUCT DEVELOPMENT												

Remarks:

SUPPORT												
Studies & Analyses	VARIOUS	VARIOUS	.680								.680	
SUBTOTAL SUPPORT			.680								.680	

Remarks:

TEST & EVALUATION												
Oper Test & Eval	WX	NAWCWD, CHINA LAKE CA	10.029	1.866	Oct 2006	1.927	Oct 2007	1.934	Oct 2008	Continuing	Continuing	
SUBTOTAL TEST & EVALUATION			10.029	1.866		1.927		1.934		Continuing	Continuing	

Remarks:

MANAGEMENT												
Program Mgmt Sup	WX	NAWCAD, PATUXENT RIVER MD	.311			.010	Oct 2007	.010	Oct 2008	Continuing	Continuing	
Travel	TO	NAVAIR, PAXTUXENT RIVER MD	.383	.010	Oct 2006	.010	Oct 2007	.010	Oct 2008	Continuing	Continuing	
SUBTOTAL MANAGEMENT			.694	.010		.020		.020		Continuing	Continuing	

Remarks:

Total Cost			11.402	1.876		1.947		1.954		Continuing	Continuing	
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Remarks:Numbers may not add due to rounding.

EXHIBIT R4, Schedule Profile																							DATE: February 2008					
APPROPRIATION/BUDGET ACTIVITY									PROGRAM ELEMENT NUMBER AND NAME									PROJECT NUMBER AND NAME										
RDT&E,N / BA-7									0205601N, HARM IMPROVEMENT									1780, HARM IMPROVEMENT										
Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 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
Acquisition Milestones																												
Test & Evaluation Milestones																												
Operational Test																												
Foreign Military Assessment (FMA) - continuing																												
Production Milestones																												
Deliveries																												

EXHIBIT R-2a, RDT&E Project Justification

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT	PROJECT NUMBER AND NAME 2185, AARGM					
COST (\$ in Millions)	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
2185 AARGM	89.991	32.178	16.373	3.427	3.229	3.298	3.364
RDT&E Articles Qty*	8	17					

*Qty reflects test article delivery.

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The AGM-88E Advanced Anti-Radiation Guided Missile (AARGM) Project transitioned a Phase III Small Business Innovative Research (SBIR) program to develop and demonstrate a multi-mode guidance section on a HARM airframe to System Development and Demonstration (SD&D) in FY2003. The AARGM SD&D program is designed to integrate multi-mode guidance (passive Anti-Radiation Homing (ARH)/active Millimeter Wave (MMW) Radar/Global Positioning system/Inertial Navigation System (GPS/INS)) on the HARM AGM-88 missile. AARGM weapon system capabilities include: active Millimeter Wave terminal guidance, counter shutdown, expanded threat coverage, enhanced anti-radiation homing receiver, netted targeting real-time feed via Integrated Broadcast Service (IBS) prior to missile launch, weapon impact assessment transmitted prior to detonation, GPS/point-to-point weapon navigation, and weapon employment with impact avoidance zone/missile impact zones.

The AARGM program transitioned the Quick Bolt Advanced Concept Technology Demonstration (ACTD) to SD&D. Quick Bolt added the capabilities to receive threat data from national assets, enlarging the target set and increasing aircrew situational awareness, and to transmit a Weapon Impact Assessment (WIA) message to assist in the critical area of Battle Damage Assessment (BDA). The Quick Bolt ACTD was completed in FY03. Quick Bolt demonstration testing successfully used Impact Avoidance Zone (IAZ) logic to distinguish between the proscribed and original target, demonstrating the ability to greatly reduce friendly fire incidents and collateral damage.

In June 2003, a successful Milestone B transitioned AARGM to a System Development and Demonstration (SD&D) Acquisition Category 1C (ACAT 1C) program. ATK Missile Systems Company (AMSC) was awarded the AARGM SD&D NAVAIR Contract N00019-03-C-0353, valued at \$222.6M. In May 2004, the contract was increased to \$231.9M to accelerate incorporation of an embedded IBS-Receiver, enabling the warfighter to directly receive National intelligence data, providing additional AARGM targeting data to increase overall pilot situational awareness. The AARGM program includes 31 test articles and 1,871 missiles (68 Low Rate Initial Production (LRIP) missiles and 1,803 Full Rate AGM-88Es).

In FY2009-2013, the AGM-88E AARGM program plans to develop and demonstrate the capability to engage and destroy non-traditional suppression of enemy air defenses (SEAD) and GWOT targets. These developments continue Future Naval Capability (FNC) Science and Technology (S&T) investments by the Office of Naval Research (ONR) initiated in FY2006.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

AARGM SD&D	FY 2007	FY 2008	FY 2009
Accomplishments / Effort / Sub-total Cost	89.991	32.178	16.373
RDT&E Articles Qty*	8	17	

*Qty reflects test article delivery.

Milestone B System Development and Demonstration (SD&D) activities, and post-Milestone B SD&D efforts. Contractor to update the Advanced Technology Demonstration (ATD)/Advanced Concept Technology Demonstration (ACTD) subsystem designs to the SD&D System Performance Specification and prepare for/conduct System Design Review, Preliminary Design Review, Critical Design Review, Contractor build-up and laboratory and field testing of the AGM-88E seeker. Field activities to support System Engineering, aircraft integration (including Software Configuration Set support), test assets, and test and evaluation requirements analysis, and developmental logistics support. Live fire testing began in FY2007 and will continue into FY2008. In FY2008, DT-B1 will be completed with integration and captive carry of AARGM on F/A-18C/D. OPEVAL will be conducted in FY2009. Development of capability to attack non-traditional SEAD and GWOT targets will continue in FY2009.

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT	PROJECT NUMBER AND NAME 2185, AARGM
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C. OTHER PROGRAM FUNDING SUMMARY:	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
WPN Budget Line Item No. 232700, HARM MODS	0.000	41.023	42.735	54.864	64.419	95.739	139.603	686.200	1,124.583
RD TEN PE 0604269N EA-18G, 3063 EA-18G Development			2.200						

D. ACQUISITION STRATEGY:

The AARGM program started as a Phase I Small Business Innovative Research (SBIR), Advanced Technology Program (ATD), evolved into a Phase III SBIR program, and transitioned into a System Development and Demonstration (SD&D) ACAT 1C program in June 2003. The AARGM SD&D will fulfill U.S. Navy operational requirements and incorporates AARGM ATD and Quick Bolt ACTD-demonstrated system requirements. Government responsibilities for SD&D include monitoring, technical assessment, and validation of contractor technology development and testing.

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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		0205601N, HARM IMPROVEMENT				2185, AARGM								
Cost Categories	Contract Method & Type	Performing Activity & Location			Total PYs 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			5.329	1.868	Oct 2006	.106	Oct 2007				7.303	
Aircraft Integration	WX	NAWCAD, PATUXENT RIVER MD				.050	Oct 2006						.050	
Primary Hdw Development - SD&D	C-CPIF	ALLIANT TECHSYSTEMS INC, WOODLAND HILLS, CA			169.624	64.365	Oct 2006	17.666	Oct 2007	5.226	Oct 2008		256.881	231.900
Primary Hdw Development - SD&D	WX	NAVY SYST MGT ACT, ARLINGTON VA			1.084					3.033	Oct 2008	10.361	14.478	
Primary Hdw Development - SD&D	MIPR	HQ SEC OF AF-FMB, WASHINGTON DC				.088	Oct 2006						.088	
Systems Eng	MIPR	HQ SEC OF AF-FMB, WASHINGTON DC				.150	Dec 2006						.150	
Systems Eng	WX	NAWCWD, CHINA LAKE CA			30.611	10.375	Oct 2006	7.365	Oct 2007	.700	Oct 2008	1.195	50.246	
Prior Years Product Development	VARIOUS	VARIOUS			199.589								199.589	
SUBTOTAL PRODUCT DEVELOPMENT					406.237	76.896		25.137		8.959		11.556	528.785	

Remarks: Total PYs costs for Primary Hdw Development-SD&D adjusted to add FY05 funding put on contract in FY06 and to reflect AARGM Quick Bolt PYs costs in Prior Years Product Development. Additional Primary Hardware Development-SD&D line splits out funding for follow-on development, including FY 2006 Congressional Add. Difference between Total Cost and Target Value of Contract represents contract variance to date. Numbers may not add due to rounding.

SUPPORT														
Integrated Logistics Sup	WX	NAWCWD, CHINA LAKE CA			2.123	1.280	Oct 2006						3.403	
Integrated Logistics Sup	VARIOUS	VARIOUS			.012	.178	Oct 2006						.190	
Studies & Analyses	VARIOUS	VARIOUS			.711			.100	Oct 2007	.200	Oct 2008	.050	1.061	
Prior Years Support	VARIOUS	VARIOUS			.012								.012	
SUBTOTAL SUPPORT					2.858	1.458		.100		.200		.050	4.666	

Remarks: Numbers may not add due to rounding.

TEST & EVALUATION														
Dev Test & Eval	WX	NAWCWD, CHINA LAKE CA			6.067	5.226	Oct 2006	3.193	Oct 2007	.400	Oct 2008	.796	15.682	
Oper Test & Eval	WX	OPER T & E FOR CD 30, NORFOLK VA			.090	.590	Oct 2006	.569	Oct 2007	6.589	Oct 2008	.250	8.088	
Test Assets	WX	NAWCWD, CHINA LAKE CA			1.960	3.334	Feb 2007	1.245	Oct 2007				6.539	
SUBTOTAL TEST & EVALUATION					8.117	9.150		5.007		6.989		1.046	30.310	

Remarks: Numbers may not add due to rounding.

MANAGEMENT														
Contractor Eng Supt - Other	VARIOUS	VARIOUS			6.759					.020	Oct 2008	.080	6.859	
ENGINEERING & TECH SRVC	VARIOUS	VARIOUS				1.932	Oct 2006	.782	Oct 2007				2.714	
Program Mgmt Sup	VARIOUS	VARIOUS			2.316	.355	Oct 2006	1.052	Oct 2007	.195	Oct 2008	.546	4.464	
Travel	TO	NAVAIR, PAXTUXENT RIVER MD			1.068	.200	Oct 2006	.100	Oct 2007	.010	Oct 2008	.040	1.418	
SUBTOTAL MANAGEMENT					10.143	2.487		1.934		.225		.666	15.455	

Remarks: Numbers may not add due to rounding.

Total Cost				427.356	89.991		32.178		16.373		13.318	579.216		
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Remarks: Total PYs Cost includes FY05 funds realigned internally in FY06 and not previously reflected. Numbers may not add due to rounding.

EXHIBIT R4, Schedule Profile																				DATE: February 2008								
APPROPRIATION/BUDGET ACTIVITY					PROGRAM ELEMENT NUMBER AND NAME										PROJECT NUMBER AND NAME													
RDT&E,N / BA-7					0205601N, HARM IMPROVEMENT										2185, AARGM													
Fiscal Year	FY 2007				FY 2008				FY 2009				FY 2010				FY 2011				FY 2012				FY 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
Acquisition Milestones							MSC	△																				
Development Preliminary Design Review Critical Design Review Functional Configuration Audit Production Readiness Review Physical Configuration Audit							PRR	△	FCA	△			PCA	△														
Testing & Evaluation Milestones Development Testing Development Testing Operational Assessment Operational Testing (OTC)																												
Production Milestones Low-Rate Initial Production LRIP 1 Low-Rate Initial Production LRIP 2 Full Rate Production							LRIP 1	△			LRIP 2	△			FRP Lot 1	△			FRP Lot 2	△								
Deliveries Low-Rate Initial Production LRIP 1 Low-Rate Initial Production LRIP 2 Full Rate											LRIP 1 Deliveries				LRIP 2 Deliveries				FRP Deliveries									
Initial Operational Capability (IOC)															IOC	△												

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APPROPRIATION/BUDGET ACTIVITY RDT&E,N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT			PROJECT NUMBER AND NAME 3056, ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS)				
COST (\$ in Millions)	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	
3056 ADVANCED PRECISION KILL WEAPON SYSTEM			13.100					
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Formerly known as the Advanced Precision Kill Weapons System (APKWS), APKWS is an Army System Development & Demonstration (SD&D) program to develop a low cost Semi Active Laster (SAL) precision guidance section for existing 2.75 inch unguided rockets. APKWS will provide an inexpensive, small, lightweight precision-kill weapon that is effective against soft and lightly armored targets, and which enhances crew survivability with increased standoff range. APKWS offers precision, maximum stored kills per aircraft sortie, minimum collateral damage potential, and increased effectiveness over legacy unguided rockets. The guidance package can be assembled with existing unguided rocket components (warhead and rockets motor) and can be fired from existing rocket launchers.

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY2007	FY2008	FY2009	FY2010
Accomplishments / Effort / Sub-total Cost			13.100	
RDT&E Articles Qty				

APKWS System Development and Demonstration (SD&D) program to develop a low cost Semi Active Laser (SAL) precision guidance section for existing 2.75 inch unguided rockets. FY 2009 funds will be used for the completion of the United States Marine Corps (USMC) led APKWS program. It will include prime contractor hardware development, engineering support, testing and evaluation, and logistic support.

C. OTHER PROGRAM FUNDING SUMMARY:

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>To Complete</u>	<u>Total Cost</u>
PANMC Budget Line Item No. 015000 Airborne Rockets	0.000	0.000	0.000	9.000	11.200	15.500	15.600	CONT	CONT

D. ACQUISITION STRATEGY:

Not Applicable

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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		0205601N, HARM IMPROVEMENT				3056, ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs 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	VARIOUS										
Primary Hdw Development	C/CPFF	BAE SYSTEMS, INC., NASUA, NH						7.000	Nov 2008		7.000	7.000
Primary Hdw Development	TBD	TBD										
Systems Eng	WX	NAWCWD, CHINA LAKE, CA						1.500	Nov 2008		1.500	
Systems Eng	WX	NSWC INDIAN HEAD, MD										
SUBTOTAL PRODUCT DEVELOPMENT								8.500			8.500	
Remarks:												
SUPPORT												
Integrated Logistics Sup	WX	VARIOUS						.200	Nov 2008		.200	
SUBTOTAL SUPPORT								.200			.200	
Remarks:												
TEST & EVALUATION												
Dev Test & Eval	WX	VARIOUS						2.500	Nov 2008		2.500	
Oper Test & Eval	WX	OPTEVFOR						.800	Nov 2008		.800	
Test Assets	TBD	TBD										
SUBTOTAL TEST & EVALUATION								3.300			3.300	
Remarks:												
MANAGEMENT												
Government Eng Sup	WX	NAWCWD, CHINA LAKE, CA						.500	Nov 2008		.500	
Program Mgmt Sup	VARIOUS	VARIOUS						.500	Nov 2008		.500	
Travel	TO	NAVAIR-HQ, PATUXENT RIVER, MD						.100	Nov 2008		.100	
SUBTOTAL MANAGEMENT								1.100			1.100	
Remarks:												
Total Cost								13.100			13.100	
Remarks:												

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT			PROJECT NUMBER AND NAME 9999, Congressional Adds			
COST (\$ in Millions)		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project Cost		5.958	9.440					
RDT&E Articles Qty								
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Congressional Adds								

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2008	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT	PROJECT NUMBER AND NAME 9999, Congressional Adds	
B. Accomplishments/Planned Program			
9855C Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 07 4.981	FY 08	FY 09
<p>Joint Common Missile (JCM) Development Funding continues JCM Technology Maturation of critical technologies (multi-mode seeker, multi-purpose warhead, and combination FW/RW rocket motor.</p>			
9999 Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 07	FY 08 9.440	FY 09
<p>Advanced Anti-Radiation Guided Missile (AARGM) Funding continues AARGM SD&D program leading to IOC and AARGM Derivative Program (ADP).</p> <p>Advanced Precision Kill Weapons Systems (APKWS) Funds APKWS System Development and Demonstration (SD&D) program to develop a low cost Semi Active Laser (SAL) precision guidance section for existing 2.75 inch unguided rockets.</p>			
9A74N Accomplishments/Effort/Subtotal Cost RDT&E Articles Quantity	FY 07 0.977	FY 08	FY 09
<p>Aircraft Composite Rocket Launcher Improvement Program Funds the design, fabrication, and demonstration of a composite rocket launcher. The composite launcher structure will incorporate an existing electronic digital fire control system to provide a lighter, more capable launcher. Increased capabilities include the ability to carry "mixed loads" of rockets and the ability to remotely set fuses from the cockpit.</p>			

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