

EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY						R-1 ITEM NOMENCLATURE		
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY /						0205601N, HARM IMPROVEMENT		
BA 7								
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Total PE Cost	153.797	84.569	99.208	30.994	5.766	4.682	5.071	
1780 HARM IMPROVEMENT	1.969	3.663	1.883	2.019	1.967	2.126	2.161	
2185 AARGM	65.163	73.862	97.325	28.975	3.799	2.556	2.910	
2211 JOINT COMMON MISSILE	72.145							
3056 ADVANCED PRECISION KILL WEAPON SYSTEM	9.760	1.944						
3057 COMMON DEFENSE	3.773							
9626 SPECTRAL BEAM COMBINING FIBER LASERS	.987							
9999 CONGRESSIONAL ADDS		5.100						

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

Congressional Add of \$2.9 million in FY2005 for AARGM accelerated development of critical Integrated Broadcast Service Receiver (IBSR) interfaces, formerly known as Embedded National Tactical Receiver (ENTR) interfaces and correlation software. It also funds development of a common AGM-88 series battery that replaces the AARGM specific battery resulting in a production savings of \$2.5K per weapon.

(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 FY1983. 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 (FY1996 through FY1999) 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 FY2000. HARM Improvement includes efforts to conduct Foreign Military Exploitation (FME) 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 ACTD). An AARGM System Development and Demonstration (SD&D) commenced in FY2003. The AARGM program plans production of 1,750 missiles (75) Low Rate Initial Production (LRIP) and 1,675 Full Rate Production modification kit(s).

(U) JOINT COMMON MISSILE (JCM): Army led joint service program to replace the aging legacy Maverick, Hellfire and TOW missiles. Joint Common Missile (JCM) provides rotary/fixed wing aircraft enhanced targeting capabilities, increased lethality, extended range, and both fire-and-forget and precision point targeting modes, against moving and short dwell re-locatable target set (80% of DoN's assigned target set) in adverse weather and obscured battlefield conditions. J8 validated and Navy and USMC approved Initial Capabilities Document (ICD) and Capabilities Development Document (CDD).

(U) ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS) II: Formerly known as APKWS, the APKWS II 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 II 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 II 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. The Navy's effort on the Smart Rocket Launcher (SRL) has been terminated.

(U) COMMON DEFENSE: The Department of the Navy has a requirement to replace legacy weapons with an advanced .50 caliber crew served weapon, called the GAU-21 Common Defense Weapon System (CDWS), for assault support helicopters. Specific applications include a machine gun to replace GAU-16 and the XM-218.50 caliber machine guns that will provide a significant increase in firepower, accuracy, lethality and reliability, and will maximize survivability through suppressive fire capabilities. Funding will support requirements validation, advance technology demonstration, and prototype development.

(U) SPECTRAL BEAM COMBINING FIBER LASERS: In accordance with NAVSEA Notice 5400, Ser 09B/240, Subj: ESTABLISHMENT OF THE NAVY DIRECTED ENERGY WEAPONS PROGRAM OFFICE (PMS 405), dated 4 Jan 02 and NAVSEA Instruction 5400.101, Ser SEA 06/058, Subj: DIRECTED ENERGY AND ELECTRIC WEAPONS PROGRAM OFFICE (PMS 405) CHARTER, dated 21 Jul 04 - COMNAVSEASCOM (PMS 405) was assigned as the single Point of Contact for matters related to Directed Energy and Electric Weapons development and acquisition initiation for the Navy and for those matters being coordinated with other Federal agencies and military services.

(U) CONGRESSIONAL ADDS: Congressional Add of \$1.1 million in FY2006 for classified AARGM derivative program. Congressional Add of \$4.0 million in FY2006 for JCM technology maturation.

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

RDT&E, N /

BA 7

PROGRAM ELEMENT NUMBER AND NAME

0205601N, HARM IMPROVEMENT

PROJECT NUMBER AND NAME

1780, HARM IMPROVEMENT

COST (\$ in Millions)

FY 2005

FY 2006

FY 2007

FY 2008

FY 2009

FY 2010

FY 2011

1780 HARM IMPROVEMENT

1.969

3.663

1.883

2.019

1.967

2.126

2.161

RDT&E Articles Qty

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The High-speed Anti-Radiation Missile (HARM) is a joint service program with the Air Force (NAVY lead). The program has been in full production since 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 (FY1996 through FY1999) 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 FY2000.

HARM Improvement includes efforts to conduct Foreign Military Exploitation (FME) analysis and engineering to exploit vulnerabilities of foreign anti-radar threats. HARM Improvement includes funding for threat assessment, operational updates, and integration efforts.

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 7 0205601N, HARM IMPROVEMENT		PROJECT NUMBER AND NAME 1780, HARM IMPROVEMENT
B. ACCOMPLISHMENTS / PLANNED PROGRAM:				
	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	1.969	3.663	1.883	
RDT&E Articles Qty				
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">Conduct Foreign Military Exploitation (FME) analysis and engineering to exploit vulnerabilities of foreign anti-radar threats. HARM Improvement includes funding for threat assessment, operational updates, and integration efforts.</div>				

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

RDT&E, N /

BA 7

PROGRAM ELEMENT NUMBER AND NAME

0205601N, HARM IMPROVEMENT

PROJECT NUMBER AND NAME

1780, HARM IMPROVEMENT

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	1.736	3.719	3.792
Current BES / President's Budget:	1.969	3.663	1.883
Total Adjustments	0.233	-0.056	-1.909

Summary of Adjustments

Congressional Reductions		-0.039	
Congressional Rescissions			
Congressional Undistributed Reductions	-0.005		
Congressional Increases			
Economic Assumptions		-0.017	
Programmatic Adjustments			-1.900
Miscellaneous Adjustments	0.238		-0.009
Subtotal	0.233	-0.056	-1.909

Schedule:

Not Applicable

Technical:

Not Applicable

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EXHIBIT R-2a, RDT&E Project Justification								DATE:			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME			
RDT&E, N /			0205601N, HARM IMPROVEMENT					1780, HARM IMPROVEMENT			
D. OTHER PROGRAM FUNDING SUMMARY:			FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
WPN BLI 232700, HARM MODS			0.000	0.000	0.000	41.135	43.260	44.158	45.110	800.034	973.697
E. ACQUISITION STRATEGY:											
The HARM Block IIIB/VI Upgrade program was an ACAT III Program and consisted of three separate phases (EMD, Production, and Technology Evaluation and Assessment). The acquisition strategy for the HAR Block IIIB/VI Program was complete and was based upon a signed international Memorandum of Agreement with Germany, Italy, and U.S. Navy; a tri-national Cooperative Operational Requirements Document (CORD), and a Cooperative Test and Evaluation Master Plan (CTEMP). These three documents drove the overall acquisition approach to the HARM Block VI project. Tri-national participation in the HARM Precision Navigation Upgrade (PNU) modification program was terminated in 3Q03.											
Available resources will be applied to HARM Legacy configuration requirements.											

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Exhibit R-3 Cost Analysis (page 1)										DATE: February 2006		
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 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
PRODUCT DEVELOPMENT												
SUBTOTAL PRODUCT DEVELOPMENT												
Remarks:												
SUPPORT												
Studies & Analyses	VARIOUS	VARIOUS		.310	VARIOUS							
SUBTOTAL SUPPORT				.310								
Remarks: Funds provided for studies/analysis of threats for the existing High Speed Anti-Radiation Missile (HARM) to scope out the capabilities required if an operational update is warranted.												
TEST & EVALUATION												
Oper Test & Eval	WX	NAWCWD, CHINA LAKE CA	3.308	1.582	10/1/2004	3.513	10/1/2005	1.718	10/1/2006	Continuing	Continuing	
SUBTOTAL TEST & EVALUATION			3.308	1.582		3.513		1.718		Continuing	Continuing	
Remarks:												
MANAGEMENT												
Program Mgmt Sup	WX	NAWCAD, PATUXENT RIVER MD	.236	.076	10/1/2004	.125	11/1/2005	.140	10/1/2006	Continuing	Continuing	
Travel	TO	NAVAIR-HQ, PAXTUXENT RIVER MD	.379	.002	10/1/2004	.025	10/1/2005	.025	10/1/2006	Continuing	Continuing	
SUBTOTAL MANAGEMENT			.615	.077		.150		.165		Continuing	Continuing	
Remarks: Prior year data includes the HARM Precision Navigation Upgrade (PNU) modification program which was terminated in 3Q03.												
Total Cost			3.923	1.969		3.663		1.883		Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R4, Schedule Profile																				DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7										PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT										PROJECT NUMBER AND NAME 1780, HARM IMPROVEMENT								
Fiscal Year	FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	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																												
Developmental Test																												
Operational Test																												
Foreign Military Exploitation (FME) - continuing																												
Production Milestones																												
Deliveries																												

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[illegible]

EXHIBIT R-2a, RDT&E Project Justification

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APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME
RDT&E, N /		BA 7					0205601N, HARM IMPROVEMENT
							2185, AARGM
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
2185 AARGM		65.163	73.862	97.325	28.975	3.799	2.556
RDT&E Articles Qty			6	8	17		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Congressional add of \$2.9 million in FY2005 accelerated development of critical Integrated Broadcast Service Receiver (IBSR) interfaces, formerly known as Embedded National Tactical Receiver (ENTR) interfaces and correlation software. It also funds development of a common AGM-88 series battery that replaces the AARGM specific battery resulting in a production savings of \$2.5K per weapon.

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)) and multi-spectral sensors 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, and weapon employment with impact avoidance zone/missile impact zones.

The issue of emitter "shut-down" as a defensive tactic has been a major shortcoming in the joint suppression of enemy air defenses (J-SEAD) element of the offensive counter air mission area for the United States Navy and Air Force. Program objectives are to achieve an effective and affordable lethal DEAD (Destruction of Enemy Air Defenses) capability against mobile, relocatable, or fixed air defense threats even in the presence of emitter shutdown or other Anti-Radiation Missile (ARM) countermeasures. The multi-mode, multi-spectral technology being integrated in the AARGM program resolves the problem of "shut-down".

At Milestone B (June 2003), AARGM successfully transitioned 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. The AARGM program plans to produce 31 test articles and 1,750 missiles (75 Low Rate Initial Production (LRIP) missiles and 1,675 Full Rate AGM-88Es). In May 2004, the contract was modified to accelerate ENTR, enabling the warfighter to directly receive National intelligence data, providing additional AARGM targeting data to increase overall pilot situational awareness. The current contract value is \$229.4M.

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.

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

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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

B. ACCOMPLISHMENTS / PLANNED PROGRAM:

	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	65.163	73.862	97.325	
RDT&E Articles Qty		6	8	

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. Conducted successful System Preliminary Design Review on 05 April 2005. Contractor on track for 2Q FY06 System Critical Design Review.

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EXHIBIT R-2a, RDT&E Project Justification

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APPROPRIATION/BUDGET ACTIVITY

RDT&E, N /

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PROGRAM ELEMENT NUMBER AND NAME

0205601N, HARM IMPROVEMENT

PROJECT NUMBER AND NAME

2185, AARGM

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	63.768	74.987	97.105
Current BES / President's Budget:	65.163	73.862	97.325
Total Adjustments	1.395	-1.125	0.220

Summary of Adjustments

Congressional Reductions		-0.784	
Congressional Rescissions			
Congressional Undistributed Reductions	-1.361		
Congressional Increases			
Economic Assumptions		-0.341	
Miscellaneous Adjustments	2.756		0.220
Subtotal	1.395	-1.125	0.220

Schedule:

Preliminary Design Review (PDR) was conducted in early FY05 3Q vice late FY05 2Q as previously planned to accommodate program and personnel schedule conflicts.

Technical:

Not Applicable

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EXHIBIT R-2a, RDT&E Project Justification								DATE:		
								February 2006		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME			
RDT&E, N / BA 7		0205601N, HARM IMPROVEMENT					2185, AARGM			
D. OTHER PROGRAM FUNDING SUMMARY:		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
Budget Line Item No. 232700, HARM MODS		0.000	0.000	0.000	41.135	43.260	44.158	45.110	800.034	973.697
Program Element 0204136N, F18 SQUADRONS*										
*Portion of FY2007-FY2011 funding budgeted for procurement and integration of AARGM on F/A-18 E/F.										
E. 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:			
APPROPRIATION/BUDGET ACTIVITY									February 2006			
RDT&E, N /		PROGRAM ELEMENT				PROJECT NUMBER AND NAME						
		0205601N, HARM IMPROVEMENT				2185, AARGM						
	Contract Method & Type		Total PY s Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Cost Categories		Performing Activity & Location										
PRODUCT DEVELOPMENT												
Aircraft Integration		WX	NAWCWD, CHINA LAKE CA	3.223	.232	10/1/2004	1.298	10/1/2005	4.740	10/1/2006	.883	10.376
Primary Hdw Development - SD&D		C-CPIF	AMSC, WOODLAND HILLS CA	36.802	59.398	10/1/2004	52.146	10/1/2005	62.684	10/1/2006	18.370	229.400
Systems Eng		WX	NAWCWD, CHINA LAKE CA	22.043	2.044	10/1/2004	6.949	10/1/2005	16.453	10/1/2006	7.636	55.125
Prior Years Product Development		VARIOUS	VARIOUS	189.816							189.816	
SUBTOTAL PRODUCT DEVELOPMEN				251.884	61.674		60.393		83.877		26.889	484.717
Remarks:												
SUPPORT												
Integrated Logistics Sup		WX	NAWCWD, CHINA LAKE CA	.458	.579	10/1/2004	1.086	10/1/2005	1.200	10/1/2006	1.200	4.523
Studies & Analyses		VARIOUS	VARIOUS	.462	.249	VARIOUS	.090	VARIOUS	.485	VARIOUS	.100	1.386
Prior Years Support		VARIOUS	VARIOUS	.012							.012	
SUBTOTAL SUPPORT				.932	.828		1.176		1.685		1.300	5.921
Remarks:												
TEST & EVALUATION												
Dev Test & Eval		WX	NAWCWD, CHINA LAKE CA	2.093	1.434	10/1/2004	3.600	10/1/2005	4.100	10/1/2006	1.750	12.977
Oper Test & Eval (FME)		WX	NAWCWD, CHINA LAKE CA								5.552	5.552
Test Assets		WX	NAWCWD, CHINA LAKE CA				1.900	2/1/2006	1.900	11/1/2006		3.800
SUBTOTAL TEST & EVALUATION				2.093	1.434		5.500		6.000		7.302	22.329
Remarks:												
MANAGEMENT												
Contractor Eng Supt - Other		VARIOUS	VARIOUS	4.565	1.045	VARIOUS	1.463	VARIOUS	.970	VARIOUS	.970	9.013
Program Mgmt Sup		VARIOUS	VARIOUS	.105	.086	VARIOUS	5.250	VARIOUS	4.703	VARIOUS	1.769	11.913
Travel		TO	NAVAIR-HQ, PATUXENT RIVER, MD	.752	.096	10/1/2004	.080	10/1/2005	.090	10/1/2006	.010	1.028
SUBTOTAL MANAGEMENT				5.422	1.227		6.793		5.763		2.749	21.954
Remarks:												
Total Cost				260.331	65.163		73.862		97.325		38.240	534.921
Remarks:												

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EXHIBIT R4, Schedule Profile																								DATE: February 2006				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7												PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT												PROJECT NUMBER AND NAME 2185, AARGM				
Fiscal Year	FY 2005				FY 2006				FY 2007				FY 2008				FY 2009				FY 2010				FY 2011			
	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	PDR	▲			CDR	△							FCA PRR PCA	△ △ △														
Testing & Evaluation Milestones Development Testing Development Testing Operational Assessment Operational Testing (OTC)					DT-BI																							
									DT-B2																			
										OA																		
													OT-C															
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																												
Initial Operational Capability (IOC)																				IOC	△							

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R-1 Shopping List Item No 179

Exhibit R-2 RDTEN Budget Item Justification
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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

RDT&E, N /

BA 7

PROGRAM ELEMENT NUMBER AND NAME

0205601N, HARM IMPROVEMENT

PROJECT NUMBER AND NAME

2211, JOINT COMMON MISSILE

COST (\$ in Millions)

FY 2005

FY 2006

FY 2007

FY 2008

FY 2009

FY 2010

FY 2011

2211 JOINT COMMON MISSILE

72.145

RDT&E Articles Qty

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Army led joint service program to replace the aging legacy Maverick, Hellfire and TOW missiles. Joint Common Missile (JCM) provides rotary/fixed wing aircraft enhanced targeting capabilities, increased lethality, and extended range, both fire-and-forget and precision point targeting modes, against moving and short dwell re-locatable target set (80% of DoN's assigned target set) in adverse weather and obscured battlefield conditions. J8 validated and Navy and USMC approved Initial Capabilities Document (ICD) and Capabilities Development Document (CDD).

Program termination underway as a result of OSD direction. OSD directed the Joint Staff to leverage Joint Capability Integration and Development System (JCIDS) process to determine capability needs to equip Fixed Wing (FW), Rotary Wing (RW) and Unmanned Aerial Vehicles (UAVs) with precision Air-to-Ground Close Air Support (A/G CAS) weapons by POM 08.

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 7		PROJECT NUMBER AND NAME 0205601N, HARM IMPROVEMENT	
PROJECT NUMBER AND NAME 2211, JOINT COMMON MISSILE					
B. ACCOMPLISHMENTS / PLANNED PROGRAM:					
	FY 2005	FY 2006	FY 2007		
Accomplishments / Effort / Sub-total Cost	72.145				
RDT&E Articles Qty					
<p>At the direction of ASN(RD&A), DoN rescoped System Development and Demonstration (SDD) Phase I to include a technology maturation effort with the Army in FY 2005. The JCM Termination and Technology Maturation Plan funds the maturing of three critical technologies (multi-mode seeker, multi-purpose warhead, and combination FW/RW rocket motor). Environmental profile flight testing (noise & vibration) of the three DoN FW and RW platforms is included.</p>					

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February 2006

APPROPRIATION/BUDGET ACTIVITY

RDTE, N /

BA 7

PROGRAM ELEMENT NUMBER AND NAME

0205601N, HARM IMPROVEMENT

PROJECT NUMBER AND NAME

2211, JOINT COMMON MISSILE

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	82.016		
Current BES / President's Budget:	72.145	0.000	0.000
Total Adjustments	-9.871	0.000	0.000

Summary of Adjustments

Congressional Reductions

Congressional Rescissions

Congressional Undistributed Reductions

-1.249

Congressional Increases

Economic Assumptions

Miscellaneous Adjustments

-8.622

Subtotal	-9.871	0.000	0.000
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Schedule:

Not Applicable

Technical:

Not Applicable

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EXHIBIT R-2a, RDT&E Project Justification								DATE:		
								February 2006		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME			
RDT&E, N /		BA 7		0205601N, HARM IMPROVEMENT			2211, JOINT COMMON MISSILE			
D. OTHER PROGRAM FUNDING SUMMARY:		FY2005	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	To Complete	Total Cost
RDT&E NAVY P.E. 0205601N Congressional Add			4.000							4.000
RDT&E ARMY P.E. 0604329A		152.381	26.000							178.381
E. ACQUISITION STRATEGY:										
Continue maturing three critical technologies (multi-mode seeker, multi-purpose warhead, and combination FW/RW rocket motor).										

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 7				PROJECT NUMBER AND NAME 0205601N, HARM IMPROVEMENT	
		3056, ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS) II					
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
3056 ADVANCED PRECISION KILL WEAPON SYSTEM II	9.760	1.944					
RDT&E Articles Qty	25						
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Formerly known as the Advanced Precision Kill Weapon System (APKWS), APKWS II is an Army System Development & Demonstration (SD&D) program to develop a low cost Semi Active Laser (SAL) precision guidance section for existing 2.75 inch unguided rockets. APKWS II 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 II 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. The Navy's effort on the Smart Rocket Launcher (SRL) has been terminated.</p> <p>RDT&E articles in FY2005 are twenty five (25) prototype APKWS II guidance sections for development testing.</p>							

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 7		PROJECT NUMBER AND NAME 0205601N, HARM IMPROVEMENT	
PROJECT NUMBER AND NAME 3056, ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS) II					
B. ACCOMPLISHMENTS / PLANNED PROGRAM:					
	FY 2005	FY 2006	FY 2007		
Accomplishments / Effort / Sub-total Cost	9.760	1.944			
RDT&E Articles Qty	25				
<p>APKWS II – System Development & Demonstration (SD&D) program to develop a low cost Semi Active Laser (SAL) precision guidance section for existing 2.75 inch unguided rockets. Field activities to support APKWS II Systems Engineering, aircraft integration, test assets, and test and evaluation, requirements analysis and developmental logistics support. FY05 funding was also used for the planning for Smart Rocket Launcher (SRL) which has been terminated.</p>					

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EXHIBIT R-2a, RDT&E Project Justification				DATE:
				February 2006
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
RDT&E, N /		BA 7		0205601N, HARM IMPROVEMENT
				3056, ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS) II
C. PROGRAM CHANGE SUMMARY				
Funding:		FY2005	FY2006	FY2007
Previous President's Budget:		12.336	12.126	0.000
Current BES / President's Budget:		9.760	1.944	0.000
Total Adjustments		-2.576	-10.182	0.000
Summary of Adjustments				
Congressional Reductions			-10.127	
Congressional Rescissions				
Congressional Undistributed Reductions		-0.102		
Congressional Increases		0.003		
Economic Assumptions			-0.055	
Miscellaneous Adjustments		-2.473		
Subtotal		-2.576	-10.182	0.000
Schedule:				
APKWS II: Army ACAT II program currently in SDD, restructuring strategy is to award new contract by April 2006. Navy's plan is to participate in restructuring. Schedule changes reflect this new strategy. Smart Rocket Launcher planning initiated in FY05 has been terminated.				
Technical: Changes in APKWS II technical solutions are TBD.				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT NUMBER AND NAME

PROJECT NUMBER AND NAME

RDT&E, N / BA-7

0205601N HARM Improvement

3056 Advanced Precision Kill Weapon System (APKWS) II

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>
Related RDT&E: U. S. Army P.E. 0604802A PROJ D705 Advanced Precision Weapon System	15.289	10.625	44.742	66.670	49.824	19.014	19.666	TBD	TBD
Procurement: U. S. Army P.E. 0203802A PROJ D786*	0.000	0.000	0.000	9.562	10.425	83.592	82.460	TBD	TBD

* Army procurement numbers include unguided rockets.

E. ACQUISITION STRATEGY:

APKWS II - Army ACAT II program currently in SDD, restructuring strategy is to award new contract by April 2006. Navy plans to participate in restructured program.

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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 /		0205601N, HARM IMPROVEMENT				3056, ADVANCED PRECISION KILL WEAPON SYSTEM (APKWS) II							
	Contract Method & Type		Total PY s Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Cost Categories		Performing Activity & Location											
PRODUCT DEVELOPMENT													
Aircraft Integration	WX	VARIOUS	.196	.068	11/1/2004	.265	4/1/2006				.529		
Primary Hdw Development	C/CPFF	GENERAL DYNAMICS, BURLINGTON, VT		.221	3/1/2005						.221	.221	
Primary Hdw Development	TBD	TBD		3.329	4/25/2006						3.329		
Systems Eng	WX	NAWCWD, CHINA LAKE, CA		.614	11/1/2004	.700	9/1/2006				1.314		
Systems Eng	WX	NSWC INDIAN HEAD, MD		1.299	11/1/2004	.360	9/1/2006				1.659		
SUBTOTAL PRODUCT DEVELOPMENT			.196	5.531		1.325					7.052		
Remarks:													
SUPPORT													
Integrated Logistics Sup	WX	VARIOUS		.179	11/1/2004	.050	10/6/2006				.229		
SUBTOTAL SUPPORT				.179		.050					.229		
Remarks:													
TEST & EVALUATION													
Dev Test & Eval	WX	NAWCAD, PATUXENT RIVER MD	.409	.262	3/1/2005	.409	8/1/2006				1.080		
Oper Test & Eval	WX	OPTEVFOR	.030								.030		
Test Assets	TBD	TBD		1.400	4/25/2006						1.400		
SUBTOTAL TEST & EVALUATION			.439	1.662		.409					2.510		
Remarks:													
MANAGEMENT													
Government Eng Sup	WX	NAWCWD, CHINA LAKE, CA	.990	2.025	11/1/2005						3.015		
Program Mgmt Sup	VARIOUS	VARIOUS	.157	.361	VARIOUS	.100	VARIOUS				.618		
Travel	TO	NAVAIR-HQ, PATUXENT RIVER, MD	.074	.002	VARIOUS	.060	VARIOUS				.136		
SUBTOTAL MANAGEMENT			1.221	2.388		.160					3.769		
Remarks:													
Total Cost			1.856	9.760		1.944					13.560		
Remarks:													

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[illegible]

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		BA 7		PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT			PROJECT NUMBER AND NAME 3057, COMMON DEFENSE SYSTEM		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
3057 COMMON DEFENSE SYSTEM		3.773							
RDT&E Articles Qty									
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The Department of the Navy has a requirement to replace legacy weapons with an advanced .50 caliber crew served weapon, called the GAU-21 Common Defensive Weapon System (CDWS), for assault support helicopters. Specific applications include a machine gun to replace GAU-16 and the XM-218.50 caliber machine guns that will provide a significant increase in firepower, accuracy, lethality and reliability, and will maximize survivability through suppressive fire capabilities. Funding will support requirements validation, advance technology demonstration, and prototype development.</p>									

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 7 0205601N, HARM IMPROVEMENT		PROJECT NUMBER AND NAME 3057, COMMON DEFENSE SYSTEM
B. ACCOMPLISHMENTS / PLANNED PROGRAM:				
	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost	3.773			
RDT&E Articles Qty				
Funding will support requirements validation, advance technology demonstration, and hardware development, including integration and system qualification efforts on the H-1, H-46, and CH-53D helicopters.				

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2006

APPROPRIATION/BUDGET ACTIVITY

RDTE, N /

BA 7

PROGRAM ELEMENT NUMBER AND NAME

0205601N, HARM IMPROVEMENT

PROJECT NUMBER AND NAME

3057, COMMON DEFENSE SYSTEM

C. PROGRAM CHANGE SUMMARY

Funding:	FY 2005	FY 2006	FY 2007
Previous President's Budget:	4.790	0.000	0.000
Current BES / President's Budget:	3.773	0.000	0.000
Total Adjustments	-1.017	0.000	0.000

Summary of Adjustments

Congressional Reductions

Congressional Rescissions

Congressional Undistributed Reductions

-0.060

Congressional Increases

Economic Assumptions

Miscellaneous Adjustments

-0.957

Subtotal	-1.017	0.000	0.000
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Schedule:

Modification of current FN Herstal contract for UH-1 integration for \$400K expected to award March 2006. Milestone C review is scheduled for February 2006.

Technical:

Not applicable.

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		PROGRAM ELEMENT NUMBER AND NAME BA 7				PROJECT NUMBER AND NAME 0205601N, HARM IMPROVEMENT			
						3057, COMMON DEFENSE SYSTEM			
D. OTHER PROGRAM FUNDING SUMMARY:		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete Total Cost
APN-5, Budget Line Item No. 058100		7.664	13.581	13.656					27.900 62.801
E. ACQUISITION STRATEGY:									
<p>This is a recurring Assault Support Operational Assessment Group action item for all platforms. Funding supports the replacement of WWII era .50 caliber machine guns currently in fleet use across all USMC & USN helicopter platforms. Proposed replacement will offer enhanced reliability, safety, increased operational effectiveness, reduced life cycle costs, and commonality across all support platforms. Required funding would support outfit of all fleet helicopters to the new configuration which includes greater ammunition capacity and a soft mount system to reduce airframe fatigue.</p>									

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EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /		BA 7		PROGRAM ELEMENT NUMBER AND NAME 0205601N, HARM IMPROVEMENT			PROJECT NUMBER AND NAME 9626. SPECTRAL BEAM COMBINING FIBER LASERS		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
9626. SPECTRAL BEAM COMBINING FIBER LASERS		.987							
RDT&E Articles Qty									
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>In accordance with NAVSEA Notice 5400, Ser 09B/240, Subj: ESTABLISHMENT OF THE NAVY DIRECTED ENERGY WEAPONS PROGRAM OFFICE (PMS 405), dated 4 Jan 02 and NAVSEA Instruction 5400.101, Ser SEA 06/058, Subj: DIRECTED ENERGY AND ELECTRIC WEAPONS PROGRAM OFFICE (PMS 405) CHARTER, dated 21 Jul 04 - COMNAVSEASYS COM (PMS 405) was assigned as the sing Point of Contact for matters related to Directed Energy and Electric Weapons development and acquisition initiation for the Navy and for those matters being coordinated with other Federal agencies and military services.</p>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0205601N HARM Improvement	PROJECT NUMBER AND NAME 9626 Spectral Beam Combining Fiber Lasers																
B. Accomplishments/Planned Program <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="padding: 5px;">Spectral Beam Comb. Fiber Lasers</th> <th style="padding: 5px;"></th> <th style="padding: 5px;">FY 05</th> <th style="padding: 5px;">FY 06</th> <th style="padding: 5px;">FY 07</th> </tr> <tr> <td style="padding: 5px;">Accomplishments/Effort/Subtotal Cost</td> <td style="padding: 5px;"></td> <td style="padding: 5px;">0.987</td> <td style="padding: 5px;">0.000</td> <td style="padding: 5px;">0.000</td> </tr> <tr> <td style="padding: 5px;">RDT&E Articles Quantity</td> <td style="padding: 5px;"></td> <td style="padding: 5px;">N/A</td> <td style="padding: 5px;">N/A</td> <td style="padding: 5px;">N/A</td> </tr> </table> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>FY 05 - Funding is being used for technology development of high power lasers for Directed Energy military applications based on spectral beam combining of fiber lasers. Spectral Beam Combination (SBC), when combined with fiber lasers, allows the construction of high power lasers from an array of lower power fiber laser elements at reduced cost, size, and complexity. Funding is being utilized to accelerate the technology advancement necessary for the development of high power laser weapons. This effort will demonstrate the power scaling capability necessary for the development of a high power, electrically driven, tactical laser weapon system. Specific efforts include:</p> <ul style="list-style-type: none"> validate power scaling capability of the SBC approach to potentially achieve the 100kW power level accelerate the test and evaluation program by fabricating specialty fiber and demonstrate a multi-kW SBC fiber laser system. </div>				Spectral Beam Comb. Fiber Lasers		FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		0.987	0.000	0.000	RDT&E Articles Quantity		N/A	N/A	N/A
Spectral Beam Comb. Fiber Lasers		FY 05	FY 06	FY 07														
Accomplishments/Effort/Subtotal Cost		0.987	0.000	0.000														
RDT&E Articles Quantity		N/A	N/A	N/A														

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0205601N HARM Improvement	PROJECT NUMBER AND NAME 9626 Spectral Beam Combining Fiber Lasers	
C. PROGRAM CHANGE SUMMARY: <i>PMS 405 Portion Only</i>			
Funding:	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
Previous President's Budget: (FY 06 Pres Controls)	0.988	0.000	0.000
Current FY07 President's Budget:	0.987	0.000	0.000
Total Adjustments	-0.001	0.000	0.000
Summary of Adjustments			
Spectral Beam Combining Fiber Lasers			
Issue 74501 Department of Energy Transfer	-0.001	0.000	0.000
Subtotal	-0.001	0.000	0.000
Schedule:			
Not Applicable.			
Technical:			
Not Applicable.			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2006		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7		PROGRAM ELEMENT NUMBER AND NAME 0205601N HARM Improvement			PROJECT NUMBER AND NAME 9626 Spectral Beam Combining Fiber Lasers				
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>
0604755N Directed Energy User Scrutiny Equip.	2.417								2.417
0603582N Multiple Items	23.856								23.856
0604574N Compact Ultra Fast Laser System Development	1.973								1.973
0601108F - JTO *									
0602890F - JTO *									
0601108F - JTO *									
0602114N - ONR *									
0603114N - ONR *									
Note: * Funding from these other sources varies from year to year based on the development efforts required/funded.									
E. ACQUISITION STRATEGY:									
Not Applicable (R&D effort only)									

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EXHIBIT R-2a, RDT&E Project Justification							DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME	
RDT&E, N /		0205601N, HARM IMPROVEMENT				9999, Congressional Adds	
BA 7							
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	
9999 Congressional Adds		5.100					
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 2006

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:

2185	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost		1.100		
RDT&E Articles Qty				

Advanced Anti-Radiation Guided Missile (AARGM)
Fund development of classified AARGM Derivative Program.

2211	FY 2005	FY 2006	FY 2007	
Accomplishments / Effort / Sub-total Cost		4.000		
RDT&E Articles Qty				

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).

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EXHIBIT R-2a, RDT&E Project Justification				DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N /		0205601N, HARM IMPROVEMENT	9999, Congressional Adds	
C. PROGRAM CHANGE SUMMARY				
Funding:		FY2005	FY2006	FY2007
Previous President's Budget:		0.000	0.000	0.000
Current BES / President's Budget:		0.000	5.100	0.000
Total Adjustments		0.000	5.100	0.000
Summary of Adjustments				
Congressional Reductions				
Congressional Rescissions				
Congressional Undistributed Reductions				
Congressional Increases				
Economic Assumptions				
Miscellaneous Adjustments				
Subtotal		0.000	5.100	0.000
Schedule:				
Not Applicable				
Technical:				
Not Applicable				

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EXHIBIT R-2a, RDT&E Project Justification								DATE:		
								February 2006		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME			
RDT&E, N /		0205601N, HARM IMPROVEMENT					9999, Congressional Adds			
D. OTHER PROGRAM FUNDING SUMMARY:		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
WPN BLI 232700, HARM MODS		0.000	0.000	0.000	41.135	43.260	44.158	45.110	800.034	973.697
RDT&E NAVY P.E. 0205601N (2211)		72.145								72.145
RDT&E ARMY P.E. 0604329A		152.381	26.000							178.381
E. ACQUISITION STRATEGY:										
Not Applicable.										

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