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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification						DATE:		February 2006	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-4					R-1 ITEM NOMENCLATURE 0603609N/Conventional Munitions				
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Total PE Cost	32.258	36.385	22.385	23.214	23.561	26.207	26.773		
0363/Insensitive Munitions Advanced Development	0.000	3.061	2.608	2.962	2.971	3.074	3.185		
1821/Conventional Fuzed Warhead Package	8.273	8.863	9.858	10.242	10.600	12.973	13.282		
2299/Non-Nuclear Expendable Ordnance	23.985	24.461	9.919	10.010	9.990	10.160	10.306		

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Conventional Fuzed Warhead Package (Project 1821): The Navy requires improved lethality of air and surface launched ordnance to defeat advanced threats. This is the only Navy 6.3B RDT&E program that addresses improvements in warhead and fuze technology to meet this requirement. This program is a significant vehicle for orderly planning, and timely and effective transition of Navy 6.2 and 6.3A investments to Engineering and Manufacturing Development (E&MD) phase missile/weapon systems. This program addresses increased lethality against current and emerging threats, and is responsive to all mission areas -- anti-air, strike, defense suppression, theater defense and ship defense -- and supports development of complete ordnance sections. The current on-going projects address significant technology advancements for missile systems by developing mature physical concepts to enhance anti-air kill probability, advanced ordnance with augmented overland cruise missile defense and theater ballistic missile defense capabilities, and advanced seeker technology. The program supports the full spectrum of missile advanced development and technology improvements and in future years will continue to provide the vehicle to address emergent requirements by transitioning mature development efforts into weapon systems with minimal technical and financial risk.

Non-Nuclear Expendable Ordnance (NNEO) (Project 2299): This item addresses improvements to Navy surface launched (2T) NNEO. It supports transition of the Multi-Function Fuze (MMF) from E&MD to production.

Insensitive Munitions Advanced Development (IMAD) (Project 0363): Most Navy munitions react violently when exposed to unplanned stimuli such as fire, shock and bullet impact, thus presenting a great hazard to ships, aircraft, and personnel. This IMAD program will provide, validate, and transition technology for explosives, propellants, and ordnance to enable production of munitions insensitive to unplanned stimuli with no reduction to combat performance.

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<p>B. PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>The Guidance Integrated Fuze (GIF) program is the major constituent of the NNEO budget line. Other NNEO programs include the Multi-Function Fuze (MFF) P3I and the Extended Range Propelling Charge.</p> <p>1. FY2005 PLANS:</p> <p>GIF: Complete two additional design-build-test cycles, resulting in each contractor providing 25 (Jan 05) and 100 (Aug 05) fuzes for government evaluation. Perform the full spectrum of laboratory, simulation and gun launch tests to determine the best design. Award 1,250 fuze option to one contractor (Sep 05).</p> <p>2. FY2006 PLANS:</p> <p>GIF: 1,250 GIFs delivered (Apr 06): 150 for acceptance testing and 100 for operational assessment. The remaining 1,000 GIFs will be production representative hardware suitable for Field Training and Follow-on Test and Evaluation, as necessary.</p> <p>3. FY2007 PLANS:</p> <p>GIF: Complete qualification tests of downselected GIF design. Conduct Preliminary Design Review and Test Readiness Review in preparation for Developmental Test (DT-IIB). Conduct initial user evaluation followed by TECHEVAL.</p> <p>Advanced Shotgun Projectile (ASP): Conduct initial design-build-test cycle for ASP. Perform laboratory tests, modeling and limited ballistic tests on initial design.</p>		

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME		
RDT&E, N / BA-4	0603609N/Conventional Munitions				1821/Conventional Fuzed Warhead Package		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	8.273	8.863	9.858	10.242	10.600	12.973	13.282
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program provides for orderly planning, timely maturation, and effective transition of Navy 6.2 and 6.3A investments in ordnance technology to missile/weapon systems end item System Development and Demonstration (SD&D) phase development. It is the only Navy 6.3B RDT&E program that addresses improvements in warhead and fuze technology. It focuses on increasing effectiveness against current and emerging threats and is responsive to all mission areas -- anti-air, strike, defense suppression, theater defense, and ship defense. On-going projects make advanced fuze and warhead technology available to and reduce the time and risk for specific system development programs by performing three important functions: (1) identify technology advances with the most potential to improve generic warhead and fuze safety, reliability, and effectiveness; (2) mature the most promising technologies with a goal of achieving Technology Readiness Level 6, or preferably TRL 7, and (3) transition mature technology to specific cruise missile, surface-to-air missile, and land attack weapons system development programs. The program supports the full spectrum of missile advanced development and technology improvements and in future years will continue to provide the vehicle to address emergent requirements by transitioning mature development efforts into weapon systems with minimal technical and financial risk.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROJECT NUMBER AND NAME 1821/Conventional Fuzed Warhead Package		

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	1.100	2.230	2.292
RDT&E Articles Quantity			

Micro-Electro-Mechanical System Safe and Arm Device:

FY 05: Complete advanced development of MEMS-based distributed Safe and Arm Device. Complete testing and perform data analysis of multi-point arm and fire device. Document advance development effort, fabricate and assemble hardware and perform ordnance section all-up system test. Transition to SD&D and start integration contracting preparation.

FY06: System Development and Demonstration (SD&D) contract award. Build Safe and Arm Device. Integrate with warhead and test.

FY07: Continue SD&D.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	0.100	0.100	0.180
RDT&E Articles Quantity			

Future Standard Missile Systems (FSMS) Studies:

FY 05/06/07: Continue system engineering studies to support mid and far term strategic planning for warhead and fuze development.

	FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost	7.073	6.533	7.386
RDT&E Articles Quantity			

Advanced Fuze Technology Development:

FY 05 - Conduct risk reduction and other preparations for transitioning advanced fuze technologies to System Development and Demonstration.

FY06 - Continue to conduct risk reduction and other preparations for transition advanced fuze technologies to System Development and Demonstration.

FY07 - Implement advanced fuze technologies to System Development and Demonstration.

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603609N/Conventional Munitions	PROJECT NUMBER AND NAME 1821/Conventional Fuzed Warhead Package	
C. PROGRAM CHANGE SUMMARY:			
Funding:	FY 2005	FY 2006	FY 2007
FY06 President's Budget	8.578	8.998	12.673
FY07 President's Budget	8.273	8.863	9.858
Total Adjustments	-0.305	-0.135	-2.815
Summary of Adjustments			
Other General Provisions	-0.211	-0.135	
Below Threshold Reprogramming	-0.094		
Programmatic Changes			-2.815
Subtotal	-0.305	-0.135	-2.815
Schedule: Not Applicable			
Technical: Not Applicable			

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603609N/Conventional Munitions	PROJECT NUMBER AND NAME 1821/Conventional Fuzed Warhead Package
<p>D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>E. ACQUISITION STRATEGY: Not Applicable</p> <p>F. MAJOR PERFORMERS:</p> <p>Raytheon Company, Tucson, AZ; SM-2 Block IIIB MK 45 MOD 14 TDD development NSWC Dahlgren, Dahlgren, VA; Advanced Warhead Technology Analysis; NAWC China Lake</p>		

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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 / BA-4			0603609N/Conventional Mun		1821/Conventional Fuzed Warhead Package							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Design and Analysis	WR/WX	NSWC Dahlgren	32.009							Continuing	Continuing	
	WR/WX	NAWC China Lake	65.438	1.100	11/04	0.750	11/05	1.250	11/06	Continuing	Continuing	
	CPAF	Raytheon	26.164	6.367	11/04	5.613	11/05	5.308	11/06	Continuing	Continuing	
	PR	JHU/APL	3.372	0.506	11/04	1.000	12/06	1.000	12/06	Continuing	Continuing	
	RC	ONR	0.067							0.000		
	MIPR	MIT/LL	0.400							0.000		
	WR	SPAWAR	0.520							0.000		
	WR/WX	NSWC Port Hueneme	3.020							0.000		
	WR/WX	NSWC Indian Head	0.800							Continuing	Continuing	
	PD	Office of Special Projects	10.394							Continuing	Continuing	
Hardware Fabrication	WR	NSWC Dahlgren	6.257							Continuing	Continuing	
	WR	NAWC China Lake	8.683							Continuing	Continuing	
	CPAF	Raytheon	8.516							Continuing	Continuing	
	PD	Office of Special Projects	41.549							Continuing	Continuing	
		Raymond				0.600	11/05	1.000	11/06	Continuing	Continuing	
		KDI				0.600	11/05	1.000	11/06	Continuing	Continuing	
Subtotal Product Development			207.189	7.973		8.563		9.558		Continuing	Continuing	
Remarks:												

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APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-4			PROGRAM ELEMENT 0603609N/Conventional Mun		PROJECT NUMBER AND NAME 1821/Conventional Fuzed Warhead Package							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	NSWC Dahlgren	12.987							0.000		
	WR	NAWC China Lake	15.582							0.000		
	WR	WSMR								0.000		
	CPAF	Raytheon								0.000		
	WR	NSWC Port Hueneme	0.762							0.000		
Subtotal T&E			29.331	0.000		0.000		0.000				
Remarks:												
Program Management Support	WR	NSWC Dahlgren	2.074							0.000		
	WR	NAWC China Lake	3.360							0.000		
	C/FPI	Various	6.481	0.300	11/04	0.300	11/05	0.300	11/06	Continuing	Continuing	
	RC	NSWC Indian Head	0.160							0.000		
Travel	PD	NAVSEA Travel	0.400							Continuing	Continuing	
Subtotal Management			12.475	0.300		0.300		0.300				
Remarks:												
Total Cost			248.995	8.273		8.863		9.858		Continuing	Continuing	
Remarks:												

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA - 4		PROGRAM ELEMENT NUMBER AND NAME 0603609N Conventional Munitions			PROJECT NUMBER AND NAME 2299 Non-Nuclear Expendable Ordnance (NNEO)			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		23.985	24.461	9.919	10.010	9.990	10.160	10.306
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This budget item addresses improvements to Navy surface launched (2T) Non-Nuclear Expendable Ordnance (NNEO) outside existing operational capabilities. The commodities comprising 2T NNEO are : Major and medium caliber gun ammunition, small arms ammunition, other ship gun ammunition, pyrotechnics, and demolition items. There are no other RDT&E budget items supporting the 2T NNEO program. This project currently supports the Guidance Integrated Fuze (GIF) demonstration and incremental development program, Multi-Function Fuze (MFF) and Advanced Shotgun Projectile. These items will be used with 5" caliber gun ammunition. GIF is a "smart fuze", conforming to DoD and NATO interface requirements, that can be retrofitted on all 105mm, 5" and 155mm projectiles. While retaining all necessary conventional fuzing functions, GIF will provide GPS accuracy to the entire inventory of conventional projectiles. Multi-Function Fuze program is nearing completion, and provides performance, safety and logisitcs enhancements to the existing inventory of Navy Conventional Fuzes. The Advanced Shotgun Projectile effort consists of determining a "Best Value" approach to providing a projectile with effectiveness beyond the existing 5 inch Force Protection Rounds (HE-ET and KE-ET) with application to all 5" Guided Weapon System (GWS) mission requirements. An Analysis of Alternatives type study will be conducted to determine the feasibility of pursuing an Advanced Shotgun Projectile with mission kill capability against the entire range of 5" GWS target threats. Initial concepts will focus upon utilizing a fragmenting steel case with a high density pre-fragmented payload to minimize parasitic mass and provide guaranteed lethal fragments on target.

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B. Accomplishments/Planned Program				
		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		0.378	0.000	0.000
RDT&E Articles Quantity				
OPEVAL completion delayed from 4th quarter FY 04 to 1st quarter FY05 due to weather conditions at test range. Residual tasks in preparation for Milestone C review completed in FY05.				
		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		23.283	24.461	9.919
RDT&E Articles Quantity		10	25	100
This project currently supports the Guidance Integrated Fuze (GIF) demonstration and incremental development program. GIF is a "smart fuze", conforming to DoD and NATO interface requirements, that can be retrofitted on all 105mm, 5" and 155mm projectiles. While retaining all necessary conventional fuzing functions, GIF will provide GPS accuracy to the entire inventory of conventional projectiles.				
		FY 05	FY 06	FY 07
Accomplishments/Effort/Subtotal Cost		0.324	0.000	0.000
RDT&E Articles Quantity				
The Advanced Shotgun Projectile will provide a 5" projectile that is effective against the entire range of 5" GWS targets.				

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603609N Conventional Munitions			PROJECT NUMBER AND NAME 2299 Non-Nuclear Expendable Ordnance (NNEO)				

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Cost
BLIN 025000 5"/54 Ammunition	0.7	0	0	0	0	0	0	N/A	0.7

E. ACQUISITION STRATEGY: *

Award contracts for developing prototype GIF fuze. Award contract to develop a producible design with builds of 25 and 100. Evaluate 25 fuzes from contractor in laboratory and simulated gun launch conditions to assess guidance, navigation and control features, conventional fuzing functions and shock survivability. Complete additional design-build-test cycle, resulting in contractor providing 100 fuzes for government evaluation. Award 1,250 fuze option for full spectrum of laboratory, simulation and gun launch tests. Navy GIF program is collaborating with Army CCF program under the direction of USD AT&L.

F. MAJOR PERFORMERS: **

MFF: Contractor - Alliant Tech Systems (ATK), Janesville, WI - Awarded July 99
Gov't - Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA
5 inch Advanced Shotgun Projectile: Gov't - Naval Surface Warfare Center, Dahlgren Division, Dahlgren, MD
Guidance integrated Fuzing - Contractor - Mayflower Communications, Boston, Massachusetts
Gov't - Naval Surface Warfare Center, Dahlgren Division, Dahlgren, Virginia
Army Research, Development & Engineering Center (ARDEC), Picatinney Arsenal, Picatinney, NJ

* Not required for Budget Activities 1,2,3, and 6
** Required for DON and OSD submit only.

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APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME									
RDT&E, N / BA 4			0603609N Conventional Munitions			2299 Non-Nuclear Expendable Ordnance (NNEO)									
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s 99/04 Cost			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
Primary Hardware Development	WR	NSWC Dahlgren - MFF	1.933										1.933		
	WR	NSWC Dahlgren - ASP				0.324	Feb-05	0.445	Oct-05		Oct-06	Continuing	Continuing		
	C/CPFF	ALLIANT - MFF	1.054										1.054		
	SS/CPFF	MOTOROLA - MFF	0.336										0.336		
	WR	NSWC Indian Head - ERPC	0.600			0.439	Oct-04					Continuing	Continuing		
	CPFF	Mayflower Communications - GIF	8.197			4.573							12.770		
	CPFF	CAES - GIF	2.600			2.800	Feb-05						5.400		
	CPFF	Toyon - GIF	0.800			0.500	Mar-05						1.300		
	CPFF	TBD - GIF				3.100	Sep-05	13.462	Oct-05	3.646	Oct-06	Continuing	Continuing		
Ancillary Hardware Development													0.000		
Component Development													0.000		
Ship Integration													0.000		
Ship Suitability													0.000		
Systems Engineering	WR	NSWC Dahlgren - ASP						0.100	Oct-05				0.100		
Training Development													0.000		
Licenses													0.000		
Tooling													0.000		
GFE													0.000		
Award Fees													0.000		
Subtotal Product Development			15.520			11.736		14.007		3.646		0.000	Continuing		
Remarks:															
Development Support	WR	NSWC Dahlgren - GIF	3.103			0.318	Oct-04	0.350	Oct-05	0.250	Oct-06	Continuing	Continuing		
Development Support	WR	DOE Sandia - GIF				0.700	Dec-04	3.400	Dec-05			Continuing	Continuing		
Software Development	WR	NSWC Dahlgren - GIF	0.275			0.200	Oct-04	0.100	Oct-05			Continuing	Continuing		
Training Development	WR	NSWC Dahlgren - GIF				0.125	Oct-04					Continuing	Continuing		
	WR	NSWC Dahlgren - ASP										Continuing	Continuing		
Training Development	MIPR	ARDEC - GIF				0.350	Oct-04					Continuing	Continuing		
Integrated Logistics Support	WR	NSWC Dahlgren - GIF				0.175	Oct-04	0.175	Oct-05			Continuing	Continuing		
Integrated Logistics Support	MIPR	ARDEC - GIF				0.480	Oct-04	0.175	Oct-05	0.170	Oct-06	Continuing	Continuing		
Configuration Management	WR	NSWC Dahlgren - GIF	0.350			0.400	Oct-04	0.400	Oct-05	0.400	Oct-06	Continuing	Continuing		
Contract Support	WR	NSWC Dahlgren - GIF	0.150			0.350	Oct-04	0.250	Oct-05	0.150	Oct-06	Continuing	Continuing		
GFE													0.000		
Award Fees													0.000		
Subtotal Support			3.878			3.098		4.850		0.970		0.000	Continuing		
Remarks:															

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RDT&E, N / BA - 4				0603609N Conventional Munitions			2299 Non-Nuclear Expendable Ordnance (NNEO)							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s 99/04 Cost			FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	NSWC Dahlgren - GIF	3.178			2.018	Oct-04	1.100	Oct-05	2.408	Oct-06	Continuing	Continuing	
	WR	NSWC Dahlgren - MFF	0.472										#REF!	
	WR	NSWC Dahlgren - ASP						0.169	Oct-05			Continuing	Continuing	
	WR	NSWC China Lake - MFF	0.200										0.200	
	WR	US Army Redstone - GIF	0.800			0.800	Nov-04						1.600	
	WR	ARL - GIF	0.300			1.200	Oct-04					Continuing	Continuing	
Operational Test & Evaluation	WR	COMPTTEVFOR - MFF	0.400			0.028	Oct-04					Continuing	Continuing	
	WR	COMPTTEVFOR - GIF				0.330	Oct-04						0.330	
	WR	NSWC Dahlgren -MFF	0.128			0.050	Oct-04					Continuing	Continuing	
	MIPR	ARDEC - GIF				0.950	Oct-04	0.300	Oct-05			Continuing	Continuing	
Live Fire Test & Evaluation													0.000	
Test Assets	C/CPFF	ALLIANT - MFF	0.361										0.361	
	WR	NSWC Indian Head - GIF				0.400	Oct-04					Continuing	Continuing	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal T&E			5.839			5.776		1.569		2.408		0.000	Continuing	
Remarks:														
Contractor Engineering Support	FP	EDO - MFF	0.032										0.032	
	C/CPFF	ALLIANT - MFF	0.113										0.113	
	FP	Various	0.500			0.300	Oct-04	1.050	Nov-05	0.500	Nov-06	Continuing	Continuing	
Government Engineering Support	WR	NSWC Dahlgren - GIF	4.558			2.125	Oct-04	2.125	Oct-05	1.900	Oct-06	Continuing	Continuing	
Government Engineering Support	WR	NSWC Dahlgren - MFF	0.098			0.300	Oct-04						0.398	
Government Engineering Support	MIPR	ARDEC/ARL - GIF	0.400			0.000	Oct-04	0.400	Oct-05	0.200	Oct-06	Continuing	Continuing	
Program Management Support	WR	NSWC Dahlgren - GIF	0.443			0.650	Oct-04	0.310	Oct-05	0.295	Oct-06	Continuing	Continuing	
Program Management Support	MIPR	ARDEC - GIF	0.200			0.000	Oct-04	0.150	Oct-05			Continuing	Continuing	
Travel	WR	NSWC Dahlgren - MFF	0.020										0.020	
Labor (Research Personnel)													0.000	
SBIR Assessment	WR	Dahlgren											0.000	
Subtotal Management			6.364			3.375		4.035		2.895		0.000	Continuing	
Remarks:														
Total Cost			31.601	0.000		23.985		24.461		9.919		0.000	Continuing	
Remarks: Financial data reflects new schedule agreed to by Navy, Army and USD AT&L.														

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EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-5												0603609N Conventional Munitions												2299 Non-Nuclear Expendable Ordnance (NNEO)											
Fiscal Year					2005				2006				2007				2008				2009				2010				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							
Acquisition Milestones																																			
Prototype Phase																																			
GIF Technology Demonstration																																			
GIF System Development & Demonstration (SDD)																																			
Test & Evaluation Milestones																																			
Development Test																																			
Operational Test																																			
Production Milestones																																			
LRIP FY08																																			
FRP Decision FY09																																			
Deliveries																																			

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* Not required for Budget Activities 1, 2, 3, and 6

Note: Working under the direction of USD AT&L, the GIF program is working in collaboration with the Army's Course Correcting Fuze (CCF) program. The schedule was updated to reflect the plan agreed to by both services and USD AT&L. Acquisition milestones and production deliveries are part of CCF program.

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Exhibit R-3, Project Cost Analysis
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[illegible]

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Note: Working under the direction of USD AT&L, the GIF program is working in collaboration with the Army's Course Correcting Fuze (CCF) program.

The schedule was updated to reflect the plan agreed to by both services and USD AT&L.

Acquisition milestones and production deliveries are part of CCF program.

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Exhibit R-3, Project Cost Analysis

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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-4	0603609N/Conventional Munitions				0363/Insensitive Munitions Advanced Development		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	0.000	3.061	2.608	2.962	2.971	3.074	3.185
RDT&E Articles Qty							

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Most Navy munitions react violently when exposed to unplanned stimuli such as fire, shock and bullet impact, thus presenting a great hazard to ships, aircraft and personnel. This program will provide, validate and transition technology to all new weapon developments and priority weapon systems and enable production of munitions insensitive to these stimuli with no reduction in combat performance. The Insensitive Munitions (IM) Program is the Navy's focused effort on propellants, propulsion units, explosives, warheads, fuses and pyrotechnics to reduce the severity of cook-off and bullet/fragment impact reactions, minimizing the probability for sympathetic detonation, both in normal storage and in use, increasing ship survivability and satisfying performance and readiness requirements. Each technology area is divided into subtasks addressing specific munition/munition class IM deficiencies. Energetic materials producibility is demonstrated to assure national capability to produce and load munitions systems. The program is being closely coordinated with other Military Departments, NATO and allied countries to eliminate redundant efforts and maximize efficiency. A joint service IM requirement has been developed. Insensitive munitions are identified as a DoD critical technology requirement and considered as part of a weapon design.

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2006																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603609N/Conventional Munitions	PROJECT NUMBER AND NAME 0363/Insensitive Munitions Advanced Development																	
B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th><th style="width: 25%;"></th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">1.107</td><td style="text-align: center;">1.000</td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	0.000	1.107	1.000		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07																
Accomplishments/Effort/Subtotal Cost	0.000	1.107	1.000																
RDT&E Articles Quantity																			
Validate and assess weapon systems POA&M's for IM compliance. Compile and analyze weapon system, energetic material and generic technology IM test data.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th><th style="width: 25%;"></th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.600</td><td style="text-align: center;">0.424</td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	0.000	0.600	0.424		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07																
Accomplishments/Effort/Subtotal Cost	0.000	0.600	0.424																
RDT&E Articles Quantity																			
Demonstrate high explosives that show improved IM characteristics while maintaining or improving operational performance. Evaluate pressed and cast metal accelerating explosives. Complete qualification of high performance booster explosive for multiple weapons systems. Begin qualification of best candidate metal accelerating explosive. Accomplishments: Demonstrated high explosives that show improved IM characteristics while maintaining or improving operational performance. Evaluation of pressed metal accelerating explosives.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th><th style="width: 25%;"></th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.346</td><td style="text-align: center;">0.600</td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	0.000	0.346	0.600		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07																
Accomplishments/Effort/Subtotal Cost	0.000	0.346	0.600																
RDT&E Articles Quantity																			
Evaluate and Demonstrate IM gun propulsion systems which provide improved or comparable performance to in-service systems and have improved IM characteristics.																			

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603609N/Conventional Munitions	PROJECT NUMBER AND NAME 0363/Insensitive Munitions Advanced Development																
B. Accomplishments/Planned Program (Cont.)																		
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 15%; text-align: center;">FY 05</td><td style="width: 15%; text-align: center;">FY 06</td><td style="width: 15%; text-align: center;">FY 07</td><td style="width: 25%;"></td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.508</td><td style="text-align: center;">0.434</td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table>					FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	0.000	0.508	0.434		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	0.000	0.508	0.434															
RDT&E Articles Quantity																		
<div style="border: 1px solid black; padding: 5px;"><p>Evaluate and demonstrate IM propellants and propulsion systems which provide improved or comparable performance to in-service systems and better IM characteristics. Combine candidate IM propellants and case concepts to demonstrate compliance with IM and performance requirements. Demonstrate an insensitive multi-mission, high performance rocket motor. Evaluate options for minimum smoke propellants for shoulder launched applications.</p><p>Accomplishments: Evaluated and demonstrated IM propellants and propulsion systems which provide improved or comparable performance to in-service systems and better IM characteristics. Combined candidate IM propellants and case concepts to demonstrate compliance with IM and performance requirements.</p></div>																		
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 15%; text-align: center;">FY 05</td><td style="width: 15%; text-align: center;">FY 06</td><td style="width: 15%; text-align: center;">FY 07</td><td style="width: 25%;"></td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.500</td><td style="text-align: center;">0.150</td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table>					FY 05	FY 06	FY 07		Accomplishments/Effort/Subtotal Cost	0.000	0.500	0.150		RDT&E Articles Quantity				
	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	0.000	0.500	0.150															
RDT&E Articles Quantity																		
<div style="border: 1px solid black; padding: 5px;"><p>Evaluate ordnance and container concepts. Model applications that reduce and enhance IM warhead design. Assess the operation utility of current and projected IM improvements to determine current state of IM and prioritize future funding for IM technology.</p><p>Accomplishments: Assessed operational utility of IM improvements and demonstrated feasibility of IM optimization of weapons storage.</p></div>																		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603609N/Conventional Munitions	PROJECT NUMBER AND NAME 0363/Insensitive Munitions Advanced Development

C. PROGRAM CHANGE SUMMARY:

	FY 2005	FY 2006	FY 2007
Funding:			
FY06 President's Budget:	0.000	3.108	3.633
FY07 President's Budget:	0.000	3.061	2.608
Total Adjustments	0.000	-0.047	-1.025
Summary of Adjustments:			
General Provisions		-0.047	
Programmatic changes:			-1.000
Other misc. changes:			-0.025
Subtotal:		-0.047	-1.025

Schedule:

NOT APPLICABLE

Technical:

NOT APPLICABLE

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Exhibit R-3, Project Cost Analysis
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603609N/Conventional Munitions	PROJECT NUMBER AND NAME 0363/Insensitive Munitions Advanced Development
<p>D. OTHER PROGRAM FUNDING SUMMARY: NOT APPLICABLE</p> <p>E. ACQUISITION STRATEGY:</p> <p>NOT APPLICABLE</p> <p>F. MAJOR PERFORMERS:</p> <p>NAWC WPN DIV/China Lake - Propulsion Development and Evaluation NOSSA/Indian Head - Program Management NSWC Dahlgren - Ordnance and container concept development NSWC, Indian Head - High Explosive Development and Evaluation -Gun Propulsion Development and Evaluation</p>		

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Exhibit R-3, Project Cost Analysis
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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: February 2006				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT 0603609N/Conventional Munitions			PROJECT NUMBER AND NAME 0363/Insensitive Munitions Advanced Development								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Propulsion Dev. And Eval.	WX	NAWC WPN DIV/China Lake	86.517	0.000		0.508	11/05	0.434	11/06			0.000	87.459	NA
		NAWC WPN DIV/China Lake	10.250										10.250	
Explosives Dev. And Eval.	WX	NSWC/Indian Head Div.	69.925	0.000		0.600	11/05	0.424	11/06			0.000	70.949	NA
Ordnance Dev. And Eval.	WX	NSWC/Dahlgren Div.	19.421	0.000		0.500	11/05	0.150	11/06			0.000	20.071	NA
Pyrotechnic Dev. And Eval.	WX	NSWC/Crane Div.	6.570	0.000		0.000	11/05	0.000	11/06			0.000	6.570	NA
Gun Propulsion and Eval.	WX	NSWC/Indian Head Div.	0.000	0.000		0.346	11/05	0.600	11/06			0.000	0.946	
													0.000	
													0.000	
													0.000	
													0.000	
													0.000	
Subtotal Product Development			192.683	0.000		1.954		1.608				0.000	196.245	NA
Remarks:														
Development Support													0.000	
Software Development													0.000	
Training Development													0.000	
Integrated Logistics Support													0.000	
Configuration Management													0.000	
Technical Data													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal Support			0.000	0.000		0.000		0.000				0.000	0.000	
Remarks:														

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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2006				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT 0603609N/Conventional Munitions			PROJECT NUMBER AND NAME 0363/Insensitive Munitions Advanced Development								
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date				Total Cost	Target Value of Contract
Developmental Test & Evaluation													0.000	
Operational Test & Evaluation													0.000	
Live Fire Test & Evaluation													0.000	
Test Assets													0.000	
Tooling													0.000	
GFE													0.000	
Award Fees													0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		0.000		0.000	0.000	
Remarks:														
Contractor Engineering Support													0.000	
Program Management Support	WX	NSWC/INDIAN HEAD	29.926										29.926	
Program Management Support	WX	NOSSA	2.598	0.000		1.107	11/05	1.000	11/06			0.000	4.705	NA
Travel	WX	NOSSA											0.382	
Labor (Research Personnel)													0.000	
SBIR Assessment													0.000	
Subtotal Management			32.524	0.000		1.107		1.000				0.000	34.631	NA
Remarks:														
Total Cost			225.207	0.000		3.061		2.608		0.000		0.000	230.876	NA
Remarks:														

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