

CLASSIFICATION:

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE:	
							February 2003	
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE			
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY/BA-4					0603795N/Land Attack Technology			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Total PE Cost	140.054	124.142	63.434	57.141	18.915	17.887	11.135	10.408
32156/Naval Surface Fire Support (NSFS)	45.702	47.960	42.630	42.186	6.805	7.504	7.615	7.742
39051/Advance Medium Caliber Gun Demonstrator (AMCGD)* **	2.498	3.325	0.000	0.000	0.000	0.000	0.000	0.000
39052/Autonomous Naval Support Round (ANSR)* **	9.848	4.156	0.000	0.000	0.000	0.000	0.000	0.000
32325/Naval Fires Control System (NFCS)	37.129	24.327	6.071	6.243	3.491	2.546	1.632	1.906
K2409/Land Attack Standard Missile (LASM)	9.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32927/32871/Naval Fires Network (NFN)* **	33.797	32.298	14.733	8.712	8.619	7.837	1.888	0.760
39053/Integrated Deepwater System (IDS)*	2.071	11.000	0.000	0.000	0.000	0.000	0.000	0.000
39209/Semi-Automated Imagery Intelligence Processor (SAIP)**	0.000	1.076	0.000	0.000	0.000	0.000	0.000	0.000
Emergency Response Fund***	73.460***							
Quantity of RDT&E Articles & Cost (see attached projects)								
* Funding includes the following FY02 Adds: NFN Project 32871 - \$29.096M; AMCGD Project 39051 - \$2.498; ANSR Project 39052 - \$9.848M; IDS Project 39053 - \$2.071M								
**Includes the following FY03 Adds: NFN Project 32871 - \$7.334M, ANSR Project 39052 - \$4.156M, AMCGD Project 39051 - \$3.325, SAIP Project 39209 - \$1.076M, IDS Project 39053 - \$11.000M (Earmark)								
***ERF,D Funding \$73.460 supports full systems scheduled to be installed aboard USS BLUE RIDGE, USS LA SALLE, USS LINCOLN.								
A. (U) Mission Description and Budget Item Justification: The Land Attack Technology program element supports the Naval Surface Fire Support (NSFS) mission. In order to meet the United States Marine Corp (USMC) requirements for NSFS in support of Operational Maneuver from the Sea (OMFTS), the Navy is developing a variety of weapons systems including both gun and missile systems that can provide the required range, lethality, accuracy, and responsiveness. The NSFS program (Project 32156/32624) develops gun systems including the 5"/62 gun (a modification of the existing 5"/54 gun); a 5" Extended Range Guided Munition (ERGM) with a coupled internal Global Positioning System (GPS) and Inertial Navigation System (INS) capable of delivering a payload to a range in excess of current capability; demonstration of a Low Cost Guidance and Electronic Unit (LCGEU); and associated propelling charge improvements. The funding profile also supports the development of an Extended Range Munition (ERM) for use in existing 5"/54 MK45 Mod 2 guns. The Autonomous Naval Support Round (ANSR) (Project 39052) is a rolling airframe platform to be used to demonstrate/advance gun-launched guided projectile technologies. The Advanced Medium Caliber Gun System (AMCGS) (Project 39051) is a Phase III SBIR designed to demonstrate an advanced gun design encompassing modularity, scalability, compactness, and long range. The Naval Fires Network (NFN) (Project 32927) is a system which will automate, coordinate, and correlate, in a real time fashion, the processing of multiple tactical data streams from various surveillance/intelligence sources to provide time-critical fire control solutions for advanced weapon systems and sensors. The automation/correlation provided by NFN will provide the Navy an ability to quickly target and re-target precision weapons, greatly enhancing their effectiveness and lethality. The Semi-Automated Imagery Intelligence (IMINT) Processor (SAIP)(Project 39209) will provide an integrated suite of tools designed to provide the tactical field commander with more comprehensive and timely battlefield awareness, derived from high-volume imagery intelligence (IMINT). In order to satisfy USMC requirements for longer range, responsive fire support, the Navy is developing the Land Attack Standard Missile (LASM) (Project K2409), a variant of the proven Standard Missile. The Naval Fires Control System (NFCS) (Project 32325) develops systems that will support mission planning for 5"/62, ERGM and Land Attack Missiles. It will automate shipboard land attack battle management duties to be interoperable and consistent with joint C4ISR systems. These shipboard weapon systems will significantly improve the Navy's ability to support OMFTS. The Land Attack Technology program element also includes the transition of Advance Technology Demonstrations (ATDs) and Pre-Planned Product Improvements (P3Is) into the NSFS program. The Integrated Deepwater System (Project 39053) supports USN evaluation of Intermediate Caliber Gun Systems and associated munitions for Anti-Surface Warfare mission area capability in USN Surface Combatants and USCG Cutters.								

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Exhibit R-2, RDTEN Budget Item Justification

Exhibit R-2 (1 of 56)

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EXHIBIT R-2a, RDT&E Project Justification							DATE:	
							February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 32156/39051/39052/Naval Surface Fire Support			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	58.048	55.441	42.630	42.186	6.805	7.504	7.615	7.742
RDT&E Articles Qty				80				
*Funding includes FY 2002 Congressional Adds for NSFS: ANSR Project 39052 - \$9.848M; AMCGD Project 39051 - \$2.498M **Funding includes FY 2003 Congressional Adds for NSFS: ANSR Project 39052 - \$4.156M; AMCGD Project 39051 - \$3.325M ***Funding includes NSFS FY 2004 - FY 2005 Extended Range Munition (ERM) Add - \$35M								
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: These funds provide for the development of a 5" MK 45 gun modification which strengthens the gun to accommodate higher firing loads (18 megajoules) to fire the Extended Range Guided Munition (ERGM); ERGM, a 5" munition with a coupled Global Positioning System/Inertial Navigation System capable of delivering a unitary warhead to ranges in excess of 41NM; a demonstration of a Low Cost Guidance and Electronic Unit (LCGEU); gun fire control system which updates the MK 160 MOD 6 to a MOD 8 providing direct digital interface with the gun; and an upgraded propelling charge to provide the higher gun firing energy required to launch ERGM. This project also includes the demonstration and the advancement of gun-launched guided projectile technologies, the demonstration and advancement of long-range modular scalable gun designs, the transition of ATDs and Pre-Planned Product Improvements (P3Is), and installation of ERGM compatibility upgrades into the NSFS envelope. The funds also provide for the development of the Extended Range Munition (ERM) for use in existing 5"/54 MK45 Mod 2 guns. ERM with LCGEU from demonstration of Ballistic Telemetry Range Munition (ANSR) to meet acquisition to support new start in FY04.								

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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 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">32.078</td><td style="text-align: center;">38.297</td><td style="text-align: center;">28.554</td><td style="text-align: center;">6.107</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	32.078	38.297	28.554	6.107	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	32.078	38.297	28.554	6.107															
RDT&E Articles Quantity																			
<p>Continue development of ERGM. Complete unitary warhead development, rocket motor testing and component integration. Perform ERGM land based flight tests to support FY06 IOC. Perform CDR and develop associated Technical Data Package (FY03). Conduct DT evaluation (FY05).</p>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">9.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td style="text-align: center;">80</td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	9.000	RDT&E Articles Quantity				80
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	9.000															
RDT&E Articles Quantity				80															
<p>Procure 80 pre-production representative rounds to support OPEVAL.</p>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">4.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	4.000	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	4.000	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<p>Continue development, analysis, and testing of the LCGEU in the ERGM airframe. Conduct three guided flight tests.</p>																			

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B. Accomplishments/Planned Program (Cont.)				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	9.848	4.156	0.000	0.000
RDT&E Articles Quantity				
Begin demonstration of a LCGEU in the ANSR airframe. Conduct 3 guided flight tests.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	10.000	25.000
RDT&E Articles Quantity				
Prepare Acquisition documentation and begin development of the Extended Range Munition (ERM). ERM will provide a guided projectile capability for surface combatants with 5"/54 MK45 Mod 2 gun mounts. Develop acquisition documentation, detailed program plans, and award contract for development. Obtain MS A decision approval.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.815	0.856	0.909	0.333
RDT&E Articles Quantity				
Complete development of the EX-167 Propelling Charge. Complete Technical Data Package, qualification efforts, and initiate technical activities supporting production efforts.				

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B. Accomplishments/Planned Program (Cont.)				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	7.485	7.987	3.000	1.300
RDT&E Articles Quantity				
Continue development and testing of 5" MK 45 modification and GFM preparation. Continue test firing of the modification (including Techeval, Opeval, and Barrel Wear). Continue test firing of the modification (OPEVAL).				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	1.324	0.820	0.167	0.446
RDT&E Articles Quantity				
Complete development and testing of the Gun Fire Control Modification and required interfaces.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	2.498	3.325	0.000	0.000
RDT&E Articles Quantity				
Begin demonstration of an advanced modular, scalable, compact, long-range gun design.				

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C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)	54.989	44.766	21.917	8.120
Current BES/President's Budget (FY 04 President Controls)	58.048	55.441	42.630	42.186
Total Adjustments	3.059	10.675	20.713	34.066
Summary of Adjustments				
Advanced Medium Gun Demonstrator	0.000	3.400	0.000	0.000
Autonomous Naval Support Round	0.000	4.250	0.000	0.000
FY02 BTR (July-02)	3.168	0.000	0.000	0.000
ERGM Development Shortfalls	0.000	0.000	14.600	10.200
ERGM Interface Shortfalls	0.000	0.000	4.000	6.000
ERM Development	0.000	0.000	10.000	25.000
Other Adjustments	-0.109	3.025	-7.887	-7.134
Subtotal	3.059	10.675	20.713	34.066
<p>The Land Attack Technology PE comprises multiple programs to provide a Naval Surface Fire Support capability. The challenge is the coordinated delivery of the Mk 45 Mod 4 Gun System, the Extended Range Guided Munition, the Mk 160 Fire Control upgrades, the Propelling Charge upgrade and the Naval Fires Control System that together provide a significant enhancement to Naval Surface Fire Support. The ERGM program was restructured in FY03 to reflect a requirements change to a unitary warhead. This also led to schedule adjustments supporting an FY06 IOC. A major contract modification was also signed supporting the program revision. The contractor recently completed its third flight demonstration of ERGM on schedule which bodes well for meeting the revised contract schedule. Detailed design of the LCGEU is complete and will be demonstrated on the ERGM, and ANSR airframes in FY03. The ERM program will begin in FY04 with a planned IOC in FY08.</p>				
<p>Technical: N/A</p>				

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APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32156/39051/39052/Naval Surface Fire Support					
D. OTHER PROGRAM FUNDING SUMMARY:										
	<u>FY2002</u>	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>Complete</u>	<u>Cost</u>
PAN,MC BL, 025300	5.105	4.022	4.006	22.980	21.651	22.589	41.513	64.477		
WPN BLI:4217, E5004	21.000	1.800	4.000	6.000	6.000	8.000	8.000	12.000		
SCN BLI 212200	24.868	25.507	25.507	12.753	TBD	TBD	TBD	TBD		
E. ACQUISITION STRATEGY:										
<p>The ERGM development contract was awarded to Texas Instruments (now Raytheon Missile Systems) as a result of a competitive acquisition process. TI provided a corporate investment of \$55M that was applied to development. When full rate production commences in FY07, a competitive procurement will be awarded under a fixed price contract. The gun is being developed under a sole source arrangement with United Defense, the sole source manufacturer of the 5"/54 MK 45 MOD 2. The Fire Control (MK 160) is being developed by the Naval Surface Warfare Center, Dahlgren and the propelling charge is being developed by the Naval Surface Warfare Center, Indian Head since these system changes are modifications to current government owned/supplied equipment. The Technology demonstrations for both ANSR and the LCGEU are being executed under a BAA contract award to Draper Laboratory. The AMCGD demonstration will be awarded to AOT. The ERM acquisition strategy and subsequent development contract approach is TBD. The ERGM compatibility upgrade for the 5"62 gun will be awarded to UDLP.</p>										
F. MAJOR PERFORMERS:										
<p>Prime Contractor for ERGM development: Raytheon Missile Systems located in Tucson Arizona. Contract awarded to Texas Instruments (TI) in September 1996. Raytheon subsequently purchased TI and moved operations to Tucson location.</p>										
<p>Prime Contractor for LCGEU and ANSR development: Draper Laboratory located in Cambridge MA. LCGEU contract awarded to Draper in November 2000 to develop the LCGEU to be demonstrated in the ERGM airframe. Additionally, Draper Laboratory was awarded a contract in December 2002 to demonstrate the LCGEU in the ANSR.</p>										
<p>Primary Navy Warfare Center: Naval Surface Warfare Center located in Dahlgren, VA. Serve as the Technical Direction Agent, program management for the Integrated Product Team Leaders, and responsible for all Land Based Flight testing and evaluation.</p>										

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Exhibit R-2a, RDTEN Project Justification
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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32156/39051/39052/Naval Surface Fire Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Privatization	CPAF	UDLP, Louisville, KY	3.908									
Primary Hardware Development	CPIF/FF	UDLP, Minneapolis, MN	59.553	5.500	11/02	2.000	11/03	3.400	11/04	CONT	CONT	57.424
	CPAF/IF	Raytheon, Tucson, AZ	135.830	25.415	11/02	13.600	11/03	0.800	11/04	CONT	CONT	168.228
	WR	NSWC Dahlgren, VA	56.867							CONT	CONT	N/A
	WR	NSWC Indian Head, MD	15.088							CONT	CONT	N/A
	WR	NSWC Port Hue., CA	25.386							CONT	CONT	N/A
LRIP	CPAF/IF	Raytheon, Tucson, AZ	0.000	0.000	N/A	0.000	N/A	9.000	11/04	CONT	CONT	9.000
LCGEU	CPFF	Draper, Cambridge, MA	11.330	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	11.330
	CPAF/IF	Raytheon, Tucson, AZ	1.360									
	WR	NSWC	2.480	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	N/A
	VAR	Miscellaneous	0.734	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	N/A
ANSR Demonstration	CPFF	Draper, Cambridge, MA	8.616	1.707	N/A	0.000	N/A	0.000	N/A	CONT	CONT	10.323
	WR	NSWC	1.217	0.784	N/A	0.000	N/A	0.000	N/A	CONT	CONT	N/A
	TBD	TBD		1.669								
ERM Demonstration	TBD	TBD	0.000	0.000	N/A	9.150	TBD	22.875	TBD	CONT	CONT	TBD
AMCGD Demonstration	CPFF	AOT, Waldorf, MD	2.498	3.325	N/A	0.000	N/A	0.000	N/A	CONT	CONT	5.823
MEMS	VAR	Miscellaneous	2.000							CONT	CONT	N/A
Systems Engineering	VAR	Miscellaneous	46.678	1.413	11/02	1.466	11/03	1.100	11/04	CONT	CONT	N/A
Award Fees	CPAF/IF	Raytheon, Tucson, AZ	2.230	1.185	11/02	0.700	11/03	0.800	11/04	CONT	CONT	4.915
Subtotal Product Development			375.775	40.998		26.916		37.975		CONT	CONT	CONT
Development Support Equipment												
Software Development												
Training Development												
Integrated Logistics Support	WR/WX	NSWC	6.357	1.501	11/02	1.545	11/03	0.283	CONT	CONT	CONT	N/A
Configuration Management												
Technical Data												
GFE												
Subtotal Support			6.357	1.501		1.545		0.283	CONT	CONT	CONT	
Remarks:												

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Exhibit R-3, Project Cost Analysis
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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32156/39051/39052/Naval Surface Fire Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR/WX	NSWC	22.186	5.794	11/02	8.451	11/03	0.416	11/04	CONT	CONT	N/A
Operational Test & Evaluation												
Tooling												
GFE												
Subtotal T&E			22.186	5.794		8.451		0.416		CONT	CONT	N/A
Contractor Engineering Support												
Government Engineering Support	WR/WX	NSWC	12.918	2.875	11/02	1.726	11/03	0.284	11/04	CONT	CONT	N/A
Project Engineering Support	WR/WX	NSWC	3.012	1.354	11/02	1.132	11/03	0.424	11/04	CONT	CONT	N/A
Program Management Support	WR/WX	Various	9.080	2.819	11/02	2.760	11/03	2.704	11/04	CONT	CONT	N/A
Travel	PD	NAVSEA HQ	0.828	0.100	VAR	0.100	VAR	0.100	VAR	CONT	CONT	N/A
Labor (Research Personnel)												
Overhead												
Subtotal Management			25.838	7.148		5.718		3.512		CONT	CONT	N/A
Total Cost			430.156	55.441		42.630		42.186		CONT	CONT	CONT
Remarks:												

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Exhibit R-3, Project Cost Analysis
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EXHIBIT R-4, Schedule Profile																		DATE:																																			
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APPROPRIATION/BUDGET ACTIVITY										PROGRAM ELEMENT NAME AND NUMBER										PROJECT NAME AND NUMBER																																	
RDT&E, N / BA-4										0603795N/Land Attack Technology										32156/39051/39052/Naval Surface Fire Support																																	
D. (U) Schedule Profile:																																																					
		FY00				FY01				FY02				FY03				FY04				FY05				FY06				FY07				FY08				FY09															
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q																
Extended Range Guided Munition (ERGM)																																																					
Milestones																																																					
Design Development																																																					
Flight Tests																																																					
TECHEVAL/OPEVAL																																																					
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EX 45 5"/62 Mod 4 Gun																																																					
Milestones																																																					
Tests																																																					
Production																																																					
Tech Demos																																																					
Fire Control System Upgrade (MK 160 Mod 8)																																																					
Design Development																																																					
Tests																																																					
Propelling Charge (for ERGM)																																																					
Design Development																																																					
Shipboard Integration & Installation																																																					
DDG-81																																																					
DDG-82																																																					

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Exhibit R-3, Project Cost Analysis
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Exhibit R-4a, Schedule Detail						DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME			
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Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
ERGM								
Control Test Vehicle #2	1Q							
Guided Gun Fire #1	3Q							
Land Based Flight Test Series		3Q-4Q	1Q-4Q					
Critical Design Review (CDR)		3Q						
Unitary Warhead Flight Test		3Q						
Component & All-Up Round Qualifications		4Q	1Q-4Q	1Q				
Pre-Production Round Decision			3Q					
LRIP Decision				2Q				
Technical Evaluation (TECHEVAL)				3Q-4Q				
Operational Evaluation (OPEVAL)				4Q	1Q-2Q			
LRIP Deliveries					1Q-4Q			
MS III					4Q			
IOC					4Q			
ERM								
Milestone A			1Q					
Contract Award			3Q					
Development & Demonstration			4Q	1Q-4Q	1Q-4Q			
Critical Design Review (CDR)					1Q			
Technical Evaluation (TECHEVAL)						3Q-4Q	1Q	
Operational Evaluation (OPEVAL)							2Q-4Q	
Milestone C								1Q
LCGEU BAA (ERGM)								
Design Phase	1Q-2Q							
Flight Tests		1Q & 3Q						
ANSR								
Design Phase	4Q	1Q-2Q						
Flight Tests		2Q & 3Q						
EX 45 5"/62 Mod 4								
Developmental Testing (DT)	2Q-3Q							
Operational Test (OT)		1Q						
MS III		3Q						
AMCGS								
Demonstration Phase	4Q	1Q-4Q						
Propelling Charge (for ERGM)								
LRIP				1Q-4Q	1Q-4Q			
Shipboard Integration & Installation								
DDG-81 PSA	1Q-2Q							
DDG-82 PSA	1Q							
DDG-82 Fun & FC DT	2Q-3Q							
DDG-82 Fun & FC OT		1Q						

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Exhibit R-4a, Schedule Detail
R-4a 32156 (11 of 56)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N /Land Attack Technology				PROJECT NUMBER AND NAME 32325/Naval Fires Control System			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	37.129	24.327	6.071	6.243	3.491	2.546	1.632	1.906
RDT&E Articles Qty								

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

A. (U) Mission Description and Budget Item Justification: Naval Fires Control System (NFCS) covers the mission planning and coordination for future Naval Surface Fire Support system requirements. NFCS will plan, coordinate and manage the firing of the new Naval Surface Fires Support (NSFS) weapon systems including the 5"/62 caliber gun and Conventional Munitions. It will be available to amphibious ships, command ships, and the DD-X program if selected by the full service contractor. The NFCS phase 1 will be integrated with the Advanced TOMAHAWK Weapons Control Systems (ATWCS) in 2003 and with Tactical TOMAHAWK Weapons Control Systems (TTWCS) in FY04. Prototyping, demonstrations and developments were conducted during FY00 thru FY02.

R-1 SHOPPING LIST - Item No. 79

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Exhibit R-2a, RDTEN Project Justification
R-2a 32325 (12 of 56)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32325/Naval Fires Control System																	
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 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">14.465</td><td style="text-align: center;">9.672</td><td style="text-align: center;">2.163</td><td style="text-align: center;">2.243</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	14.465	9.672	2.163	2.243	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	14.465	9.672	2.163	2.243															
RDT&E Articles Quantity																			
Funding provides software and system engineering analysis and development, reuse and integration of government and commercial computer programs to support ERGM and other naval weapon applications.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">3.651</td><td style="text-align: center;">3.651</td><td style="text-align: center;">0.400</td><td style="text-align: center;">0.400</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	3.651	3.651	0.400	0.400	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	3.651	3.651	0.400	0.400															
RDT&E Articles Quantity																			
Funding support hardware configuration to support NFCS implementation. Support DT validation.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">3.704</td><td style="text-align: center;">4.723</td><td style="text-align: center;">0.808</td><td style="text-align: center;">0.900</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	3.704	4.723	0.808	0.900	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	3.704	4.723	0.808	0.900															
RDT&E Articles Quantity																			
Funding provides Technical Direction Agent support, joint requirements investigation, Concept of Operations (CONOPs) scenario development.																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32325/Naval Fires Control System																	
B. Accomplishments/Planned Program (Cont.)																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">1.000</td><td style="text-align: center;">1.700</td><td style="text-align: center;">0.400</td><td style="text-align: center;">0.400</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.000	1.700	0.400	0.400	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	1.000	1.700	0.400	0.400															
RDT&E Articles Quantity																			
Funding provides C4I and combat system interface investigation and analysis to include BFTT, Link 16, TTWCS and other developing C4I system and technology.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">3.500</td><td style="text-align: center;">2.581</td><td style="text-align: center;">0.300</td><td style="text-align: center;">0.300</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	3.500	2.581	0.300	0.300	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	3.500	2.581	0.300	0.300															
RDT&E Articles Quantity																			
Funding supports developmental test and evaluation, and logistics support elements development.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">2.000</td><td style="text-align: center;">2.000</td><td style="text-align: center;">2.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	2.000	2.000	2.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	2.000	2.000	2.000															
RDT&E Articles Quantity																			
Funding supports operational test and evaluation, and logistics support elements development.																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32325/Naval Fires Control System																	
B. Accomplishments/Planned Program (Cont.)																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">3.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Funding supports LAM integration design, development and integration includes modification to Vertical Launch System.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	3.000	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	3.000	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">7.020</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Funding Supports LAM Fire Control system engineering and software development including interface development with NFCS, GPS and other weapon systems.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	7.020	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	7.020	0.000	0.000	0.000															
RDT&E Articles Quantity																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.789	0.000	0.000	0.000															
RDT&E Articles Quantity																			

R-1 SHOPPING LIST - Item No. 79

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32325/Naval Fires Control System		
B. Accomplishments/Planned Program (Cont.)				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000
RDT&E Articles Quantity				
Funding supports LAM Fire Control development test and evaluation.				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05
Accomplishments/Effort/Subtotal Cost				
RDT&E Articles Quantity				

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N / BA4	0603795N/Land Attack Technology	32325/Naval Fires Control System		

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)	48.403	29.163	28.863	18.606
Current BES/President's Budget (FY 04 President Controls)	37.129	24.327	6.071	6.243
Total Adjustments	-11.274	-4.836	-22.792	-12.363

Summary of Adjustments

Adjustment for FY2002 SBIR	-1.031			
Adjustment due to LASM Cancellation		-4.263		
Adjustments to align program to support ERGM IOC (18.500) and LASM Cancellation (3.997)			-22.500	
Adjustments to align program to support ERGM IOC				-12.100
FY02 Actuals (30-Sept)	-1.584			
FY02 BTR (July-02)	-8.448			
Other Adjustments	-0.211	-0.573	-0.292	-0.263
Subtotal	-11.274	-4.836	-22.792	-12.363

Schedule:

The Land Attack Technology PE comprises multiple programs to provide a Naval Surface Fire Support capability. The challenge is the coordinated delivery of the Mk 45 Mod 4 Gun System, the Extended Range Guided Munition, the Mk 160 Fire Control upgrades, the Propelling Charge upgrade and the Naval Fires Control System that together provide a significant enhancement to Naval Surface Fire Support. Technical challenges have caused delays in the ERGM program, subsequently impacting the other programs and the NSFS capability. The government is presently negotiating a modification to the ERGM contract that reflects a requirements change to a unitary warhead from submunitions. This will cause IOC to slip from FY05 to FY06 as well as change the dates of major milestones including CDR, Opeval Round Procurement, LRIP, Techeval, Opeval and MSIII. The contractor recently completed its second flight demonstration of the ERGM on schedule which bodes well for meeting the revised contract schedule and supporting an FY06 IOC.

Technical:

N/A

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32325/Naval Fires Control System			

D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Complete</u>	<u>Total Cost</u>
O&MN 1D4D, 070812N		1.861	2.759	2.702	2.931	3.019	3.110	3.203	19.585	
OPN BL, 511200	0.587	5.571	4.301	2.864	9.222	5.050	5.141	5.235	37.971	

E. ACQUISITION STRATEGY:

A sole source contract has been awarded to GDIS for Phase 1. Phase 1 is being executed in 2 steps. Step 1 is to integrate the NFCS Phase 1 with ATWCS and Step 2 is to integrate NFCS Phase 1 with TTWCS.

F. MAJOR PERFORMERS:

PMA282 - Patuxent River, MD. Systems engineering and software development support. Awarded January 2001.

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CLASSIFICATION:

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Exhibit R-3 Cost Analysis (page 1)							DATE:					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			February 2003						
RDT&E, N / BA-4			0603795N/Land Attack Technology			32325/Naval Fires Control System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Software Development	SS/CPAF	GDIS, Arlington, VA	27.517	0.500	11/02	0.300	11/03	0.300	11/04	CONT	CONT	TBD
	SS/CPAF	LM/MDS, Valley Forge, PA	18.952	0.500	11/02	0.400	11/03	0.400	11/04	CONT	CONT	
	WR/WX	NSWC, Dahlgren, VA	2.300	4.050	10/02	1.000	10/03	1.000	10/04	CONT	CONT	
	VAR	VARIOUS	1.619							CONT	CONT	
	WR/WX	SSC/SD	2.375	1.500	10/02	0.400	10/03	0.400	10/04	CONT	CONT	
Systems Engineering	WR	SSC/SD	2.951							CONT	CONT	
	WR/WX	NSWC, Dahlgren, VA	12.405	4.311	10/02	0.500	10/03	0.672	10/04	CONT	CONT	
	SS/CP	VITRO/BAE	0.670	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	
	VAR	VARIOUS	1.804							CONT	CONT	
Ancillary Hardware Development	WR/WX	NUWC, Keyport Division	8.613	1.500	10/02	0.400	10/03	0.400	10/04	CONT	CONT	
	WR/WX	NSWC/PT HUE, CA	3.874	0.880	10/02	0.403	10/03	0.403	10/04	CONT	CONT	
	VAR	PMFATDS	1.587	2.000	10/02	0.000	N/A	0.000	N/A	CONT	CONT	
	SS/CPAF	JHU/APL	1.070	0.300	11/02	0.000	N/A	0.000	N/A	CONT	CONT	
	WR	NSWC, Dahlgren, VA	2.100	0.140	N/A	0.000	N/A	0.000	N/A	CONT	CONT	
	VAR	VARIOUS	2.541	0.000	N/A	0.000	N/A	0.000	N/A	CONT	CONT	
	LAM FC Hardware/Software Dev	SS/CPFF	LM/Baltimore, MD	4.181							CONT	CONT
TERMINATED	SS/CPAF	LM/MDS, Valley Forge, PA	12.131							CONT	CONT	
	SS/CPFF	UDLP	0.455							CONT	CONT	
	WR	NSWC, Dahlgren, VA	1.162							CONT	CONT	
	WR	SSC/SD	0.486							CONT	CONT	
LAM FC Systems Engineering	SS/CPFF	JHU/APL	0.386							CONT	CONT	
TERMINATED	WR	NSWC/PT HUE, CA	0.361							CONT	CONT	
Award Fees			3.979	0.000	TBD					CONT	CONT	
Subtotal Product Development			113.519	15.681		3.403		3.575		CONT	CONT	
Remarks:												
Development Support Equipment												
Software Development		NSWC, Panama City	0.049									
Training Development				0.500		0.000		0.000				
Integrated Logistics Support	VAR	VARIOUS	4.888	1.387	Various	0.105	Various	0.105	Various	CONT	CONT	
Configuration Management												
Technical Data												
GFE												
Subtotal Support			4.937	1.887		0.105		0.105		CONT	CONT	
Remarks:												

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Exhibit R-3, Project Cost Analysis
R-3 32325 (19 of 56)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			32325/Naval Fires Control System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR/WX	NSWC/PT HUE, CA	2.800	2.581	10/02	0.300	10/03	0.300	10/04	CONT	CONT	
	VAR	Various	1.500									
Operational Test & Evaluation	VAR	Various	1.000	2.000	10/02	2.000	10/03	2.000	10/04			
Live Fire Test & Evaluation												
Test Assets												
Tooling												
GFE												
Award Fees												
Subtotal T&E			5.300	4.581		2.300		2.300		0.000		
Remarks:												
BTR			0.000									
Contractor Engineering Support												
Government Engineering Support												
Program Management Support	VAR	VARIOUS	2.282	2.078	Various	0.213	Various	0.213	Various			
Travel	PD	NAVSEA HQ	0.305	0.100	Various	0.050	Various	0.050	Various	CONT	CONT	
Labor (Research Personnel)												
SBIR Assessment												
Subtotal Management			2.587	2.178		0.263		0.263				
Remarks:												
Total Cost			126.343	24.327		6.071		6.243				
Remarks:												

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Exhibit R-4, Project Cost Analysis
R-4 32325 (21 of 56)

February 2003

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CLASSIFICATION:

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R-1 SHOPPING LIST - Item No. 79

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Exhibit R-4a, Schedule Detail
R-4a 32325 (22 of 56)

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	9.009							
RDT&E Articles Qty								
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project funds the Land Attack Standard Missile (LASM) (SM-4) program to provide responsive, all-weather, around-the-clock Naval Surface Fire Support to Ground Combat Elements beyond that which is available from gun systems. Major efforts involved are systems integration and testing. Systems integration consists of integrating Global Positioning System/Inertial Navigation System (GPS/INS) guidance, Height of Burst (HOB) sensor(s), warhead modifications, and new flight software to optimize effects against ground targets. Testing will include ground and flight tests to demonstrate safety, range, accuracy, jamming resistance, lethality, and reliability. RDT&E,N articles include Inert Operational Missiles (IOMs) and a Dynamic Inert Missile (DIM) for ground testing and complete All Up Rounds (AURs) for flight testing.								

R-1 SHOPPING LIST - Item No. 79

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile																	
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 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">2.610</td><td></td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Integrate hardware and software.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	2.610				RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	2.610																		
RDT&E Articles Quantity																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	2.400																		
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">1.500</td><td></td><td></td><td></td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 5px; padding: 5px;">Ground testing (Battery).</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	1.500				RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	1.500																		
RDT&E Articles Quantity																			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile																	
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	1.499																		
RDTE Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.500</td><td></td><td></td><td></td></tr><tr><td>RDTE Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Validated 6-DOF modeling and simulation.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.500				RDTE Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.500																		
RDTE Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.500</td><td></td><td></td><td></td></tr><tr><td>RDTE Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Documentation and storage.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.500				RDTE Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.500																		
RDTE Articles Quantity																			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile		

C. PROGRAM CHANGE SUMMARY:

	FY 2002	FY 2003	FY 2004	FY 2005
Funding:				
Previous President's Budget: (FY 03 Pres Controls)	9.399			
Current BES/President's Budget (FY 04 President Controls)	9.009			
Total Adjustments	-0.390	0.000	0.000	0.000
Summary of Adjustments				
Congressional program reductions				
Congressional undistributed reductions				
Congressional rescissions				
SBIR/STTR Transfer	-0.160			
Economic Assumptions	-0.045			
Reprogrammings				
Congressional increases				
Reprogrammings	-0.185			
Subtotal	-0.390	0.000	0.000	0.000
Schedule:				
Not applicable				
Technical:				
Not Applicable.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	February 2003
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N / BA-4	0603795N/Land Attack Technology	K2409/Land Attack Standard Missile	
<p>D. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p>			
<p>E. ACQUISITION STRATEGY:</p> <p>Pre Engineering and Manufacturing Development (E&MD) efforts were conducted under level of effort contracts with the SM-2 Design Agent (DA). A cost-plus E&MD completion contract was awarded to the DA to develop and integrate the necessary changes and to support Development Test/Operational Test (DT/OT) of LASM.</p>			
<p>F. MAJOR PERFORMERS:</p> <p>Raytheon Standard Missile, Tucson, Az., System Engineering.</p>			

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											5.700	
Ancillary Hardware Development	WR	NSWC/Dahlgren, Va	5.700								1.600	
	WR	VAR	1.600								0.000	
Component Development											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering	WR	VAR	6.686								6.686	
	SS/CPAF	Raytheon Missile Systems, Tucson, Az	36.054								36.054	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees			3.574								3.574	
Subtotal Product Development			53.614	0.000		0.000		0.000		0.000	53.614	
Remarks:												
Development Support											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support	WR	VARIOUS	0.542								0.542	
Configuration Management	WR	VARIOUS	0.965								0.965	
Technical Data											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			1.507	0.000		0.000		0.000		0.000	1.507	
Remarks:												

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	WSMR	1.225								1.225	
	WR	VAR	1.085								1.085	
Operational Test & Evaluation	WR	NAWC/AD, PT MUGU	0.400								0.400	
	WR	VAR	0.210								0.210	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			2.920	0.000		0.000		0.000		0.000	2.920	
Remarks:												
Contractor Engineering Support	VAR	VAR	1.575								1.575	
Government Engineering Support											0.000	
Program Management Support	VAR	VAR	1.353								1.353	
Travel	PD	NAVSEA HQ	0.150								0.150	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			3.078	0.000		0.000		0.000		0.000	3.078	
Remarks:												
Total Cost			61.119	0.000		0.000		0.000		0.000	61.119	
Remarks:												

CLASSIFICATION:

EXHIBIT R4, Schedule Profile																								DATE:											
APPROPRIATION/BUDGET ACTIVITY												PROGRAM ELEMENT NUMBER AND NAME												PROJECT NUMBER AND NAME											
RDT&E, N / BA-4												0603795N/Land Attack Technology												K2409/Land Attack Standard Missile											
Fiscal Year	2002				2003				2004				2005				2006				2007				2008				2009						
	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													MS C																						
Prototype Phase																																			
Radar System Development				PDR		CDR						PRR							FCA		PCA														
EDM Radar Delivery										Lb		Flt Rel																							
Software 1XXSW Delivery 2XXSW Delivery				SSR																															
Test & Evaluation Milestones										TRR		DT-IIA		DT-IB1		DT-IIB2		DT-IIC		TEC/HEVAL															
Development Test																																			
Operational Test																																			
Production Milestones																																			
LRIP I FY 05																																			
LRIP II FY 06																																			
FRP FY 07																																			
Deliveries																																			

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

CLASSIFICATION:

Exhibit R-4a, Schedule Detail						DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-4		PROGRAM ELEMENT 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME K2409/Land Attack Standard Missile		
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Prototype Phase								
System Design Review (SDR)								
Milestone II (MSII)								
Contract Preparation								
Software Specification Review (SSR)								
Preliminary Design Review (PDR)								
System Development								
Critical Design Review (CDR)								
Quality Design and Build								
Test Readiness Review (TRR)								
Developmental Testing (DT-IIA)								
Eng Dev Model (EDM) Radar Delivery - Lab								
Software Delivery 1XXSW								
Preproduction Readiness Review (PRR)								
EDM Radar Delivery - Flt Related								
Milestone C (MS C)								
Operational Testing (OT-IIA)								
Start Low-Rate Initial Production I (LRIP I)								
Software Delivery 2XXSW								
Developmental Testing (DT-IIB1)								
Developmental Testing (DT-IIB2)								
Start Low-Rate Initial Production II								
Operational Testing (OT-IIB)								
Developmental Testing (DT-IIC)	1Q							
Functional Configuration Audit (FCA)								
Low-Rate Initial Production I Delivery								
Technical Evaluation (TECHEVAL)								
Physical Configuration Audit								
Operational Evaluation (OT-IIC) (OPEVAL)	1Q							
Low-Rate Initial Production II Delivery								
IOC								
Full Rate Production (FRP) Decision								
Full Rate Production Start								
First Deployment								

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EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4		PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	33.797	33.374	14.733	8.712	8.619	7.837	1.888	0.760
RDT&E Articles Qty								
<p>*Funding includes FY 2002 Congressional Add for NFN Project 32871 - \$29.096M</p> <p>**Funding includes FY 2003 Congressional Adds for NFN Project 32871 - \$7.334M; SAIP Project 39209 - \$1.076M</p> <p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>The Naval Fires Network (NFN) is a system which will automate, coordinate, and correlate, in a real time fashion, the processing of multiple tactical data streams from various surveillance/intelligence sources to provide time-critical fire control solutions for advanced weapon systems and sensors. The automation/correlation provided by NFN will provide the Navy an ability to quickly target and re-target precision weapons, greatly enhancing their effectiveness and lethality. The Semi-Automated Imagery Intelligence (IMINT) Processing Program (SAIP) will make imagery a more responsive surge in providing the commander with dominant battlefield awareness.</p>								

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 32 of 56)

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network																	
B. Accomplishments/Planned Program																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.903	0.360	0.000	0.000															
RDT&E Articles Quantity																			
Development of hardware for NFN.																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	2.100	1.659	0.000	0.000															
RDT&E Articles Quantity																			
Development of software for NFN.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.350</td><td style="text-align: center;">0.345</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.350	0.345	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.350	0.345	0.000	0.000															
RDT&E Articles Quantity																			
Testing of on-board and land-based facilities.																			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	8.800	2.800	0.000	0.000															
RDT&E Articles Quantity																			
Development of Tactical Dissmeination Module (TDM).																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.200</td><td style="text-align: center;">1.034</td><td style="text-align: center;">1.010</td><td style="text-align: center;">0.250</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.200	1.034	1.010	0.250	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.200	1.034	1.010	0.250															
RDT&E Articles Quantity																			
Acquistion Planning/ DoD Documentation.																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	17.609	16.000	4.300	0.000															
RDT&E Articles Quantity																			
Support hardware/software, GFE buy, installation and upgrades for existing interfaces and communications.																			

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 34 of 56)

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network																	
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	2.830	1.600	0.000	0.000															
RDT&E Articles Quantity																			
Training /Training System Development.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">1.550</td><td style="text-align: center;">0.000</td><td style="text-align: center;">1.786</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	1.550	0.000	1.786	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	1.550	0.000	1.786															
RDT&E Articles Quantity																			
P3I and future Limited Objective Experiments/ Fleet Battle Experiments. (LOE/FBE)																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">1.245</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	1.245	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	1.245	0.000	0.000															
RDT&E Articles Quantity																			
X, Ku, Phased Array Antenna System Development.																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network																	
B. Accomplishments/Planned Program (Cont.)																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.900</td><td style="text-align: center;">0.700</td><td style="text-align: center;">0.825</td><td style="text-align: center;">0.900</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.900	0.700	0.825	0.900	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.900	0.700	0.825	0.900															
RDT&E Articles Quantity																			
Program Management Support.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.950</td><td style="text-align: center;">1.139</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.950	1.139	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.950	1.139															
RDT&E Articles Quantity																			
DT/OT&E.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">2.398</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	0.000	2.398	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	2.398	0.000															
RDT&E Articles Quantity																			
Spiral Development																			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network																	
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	2.100	0.950	1.150															
RDT&E Articles Quantity																			
Acquisition Strategy, AoA, TEMP and other Rrequired Acquisition Documentation, Technical Data Collection																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.105</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.105	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.105	0.000	0.000	0.000															
RDT&E Articles Quantity																			
Portion of extramural program reserved for Small Business Innovation. Research assessment in Accordance with 15 USC 638.																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 25%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">2.100</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	2.100	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	2.100	0.000	0.000															
RDT&E Articles Quantity																			
Provides onboard ship and integrated logistics support																			

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 37 of 56)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																															
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network																																
B. Accomplishments/Planned Program (Cont.)																																		
<table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.805</td><td style="text-align: center;">4.300</td><td style="text-align: center;">3.487</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-bottom: 10px; padding: 5px;">Rqmts Definition - System Eng, Config Mgt, Architecture Support</div> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">1.076</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; padding: 5px;">Begin software development of a Semi-Automated Imagery Intelligence (IMINT) Processing Program design.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	0.805	4.300	3.487	RDT&E Articles Quantity						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	1.076	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05																														
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RDT&E Articles Quantity																																		
	FY 02	FY 03	FY 04	FY 05																														
Accomplishments/Effort/Subtotal Cost	0.000	1.076	0.000	0.000																														
RDT&E Articles Quantity																																		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N / BA-4	0603795N/Land Attack Technology	32927/32871/39209 Naval Fires Network		
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)	34.191	34.764	34.852	49.636
Current BES/President's Budget (FY 04 President Controls)	33.797	44.374	14.733	8.712
Congressional Recission Earmark		-11.000		
Total Adjustments	-0.394	-1.390	-20.119	-40.924
Summary of Adjustments				
NFN Reduction			-17.500	-25.000
Congressional Plus Up		8.600		
FY02 BTR (July-02)	-0.097			
NFCS RDTE&N Reduction due to LA		2.000	-2.000	
Naval Fire Network Transition from R&D				-15.700
Congressional Recission Earmark		-11.000		
Other Adjustments	-0.297	-0.990	-0.619	-0.224
Subtotal	-0.394	-1.390	-20.119	-40.924
Schedule:				
N/A				
Technical:				
N/A				

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 39 of 56)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4			PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network				

D. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Cost
Naval Fire Control System/ 511200				5.0	5.0	5.0	28.8	23.8	CONT	67.6
RDT&E,N: NAVAIRSYSCOM PE0204152N, FY 2001 \$5.765M										

E. ACQUISITION STRATEGY:

The Naval Fires Network (NFN) program will utilize contracting vehicles already in place for the existing Army Tactical Exploitation System (TES) program. The Navy plan is to adapt Army TES for use in NFN support of Navy Network Centric Warfare Time Critical Targeting.

F. MAJOR PERFORMERS:

HQ/SAF - Develop and Build Naval Fires Network System Hardware/Software

Naval Air Warfare Center (China Lake) - Systems Engineering and Interface Development/Test

Northrup Grumman Corporation (NGC), Electronic Sensors and Systems Division (ESSD), of Baltimore, Maryland

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development	CPFF/IF/AF	SAF/FMB/OLE (Air Force)	26.679	16.360	11/02					CONT	43.039	
Ancillary Hardware Development	CPFF/IF/AF	VARIOUS	8.800	2.800	11/02					CONT	11.600	
Component Development	CPFF/IF/AF	VARIOUS		1.245	11/02	4.300	N/A			CONT	5.545	
Ship Integration	WR	NSWC PHD, Pt. Hueneme, CA	1.270		11/02					CONT	1.270	
Ship Suitability	WR	VARIOUS								CONT	0.000	
Systems Engineering	VAR	VARIOUS		2.355	N/A	4.300	11/03	3.487	11/04	CONT	10.142	
Training Development	CPFF/IF/AF	VARIOUS	1.100	1.600	N/A					CONT	2.700	
Licenses	VAR	VARIOUS								CONT	0.000	
Tooling										CONT	0.000	
GFE	WR/MIPR	SAF/FMB/OLE (Air Force)	2.000							CONT	2.000	
Award Fees										CONT	0.000	
Subtotal Product Development			39.849	24.360		8.600		3.487		0.000	76.296	
Remarks:												
Development Support		Various		1.034	11/02	1.010	11/03	0.250	11/04		2.294	
Software Development		Various	2.100	1.659	11/02	2.398	11/03				6.157	
Software Development (SAIP)	CPFF/IF/AF	Northrup Grumman	0.000	1.076	03/03						1.076	
Training Development		Various	2.830								2.830	
Integrated Logistics Support		Various		2.100							2.100	
Configuration Management											0.000	
Technical Data		Various	0.950	2.100		0.950		1.150			5.150	
GFE		Various	0.600								0.600	
Award Fees											0.000	
Subtotal Support			6.480	7.969		4.358		1.400		0.000	20.207	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 41 of 56)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-4			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation		TBD	0.350			0.475		0.570			0.825	
Operational Test & Evaluation						0.475		0.570			0.475	
Live Fire Test & Evaluation		TBD	5.266	0.345				1.786			5.611	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			5.616	0.345		0.950		2.925		0.000	6.911	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support	VAR	VARIOUS	1.992	0.700	N/A	0.825	N/A	0.900			3.517	
Travel	PD	NAVSEA HQ	0.350								0.350	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			2.342	0.700		0.825		0.900		0.000	3.867	
Remarks:												
Total Cost			54.287	33.374		14.733		8.712		0.000	102.394	
Remarks:												

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 42 of 56)

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 43 of 56)

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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 44 of 56)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY RDTE, N/ERF,D			PROGRAM ELEMENT 0603795N/Land Attack Technology			PROJECT NUMBER AND NAME 32927/32871/39209 Naval Fires Network						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Operational Test & Evaluation		Various	13.133								13.133	
Live Fire Test & Evaluation	CPFF/IF/A	Various	2.551								2.551	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			15.684	0.000		0.000		0.000		0.000	15.684	
Remarks:												
Contractor Engineering Support			13.683								13.683	
Government Engineering Support			0.260								0.260	
Program Management Support			3.514								3.514	
Travel											0.000	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			17.457	0.000		0.000		0.000		0.000	17.457	
Remarks:												
Total Cost			73.460	0.000		0.000		0.000		0.000	73.460	
Remarks:												

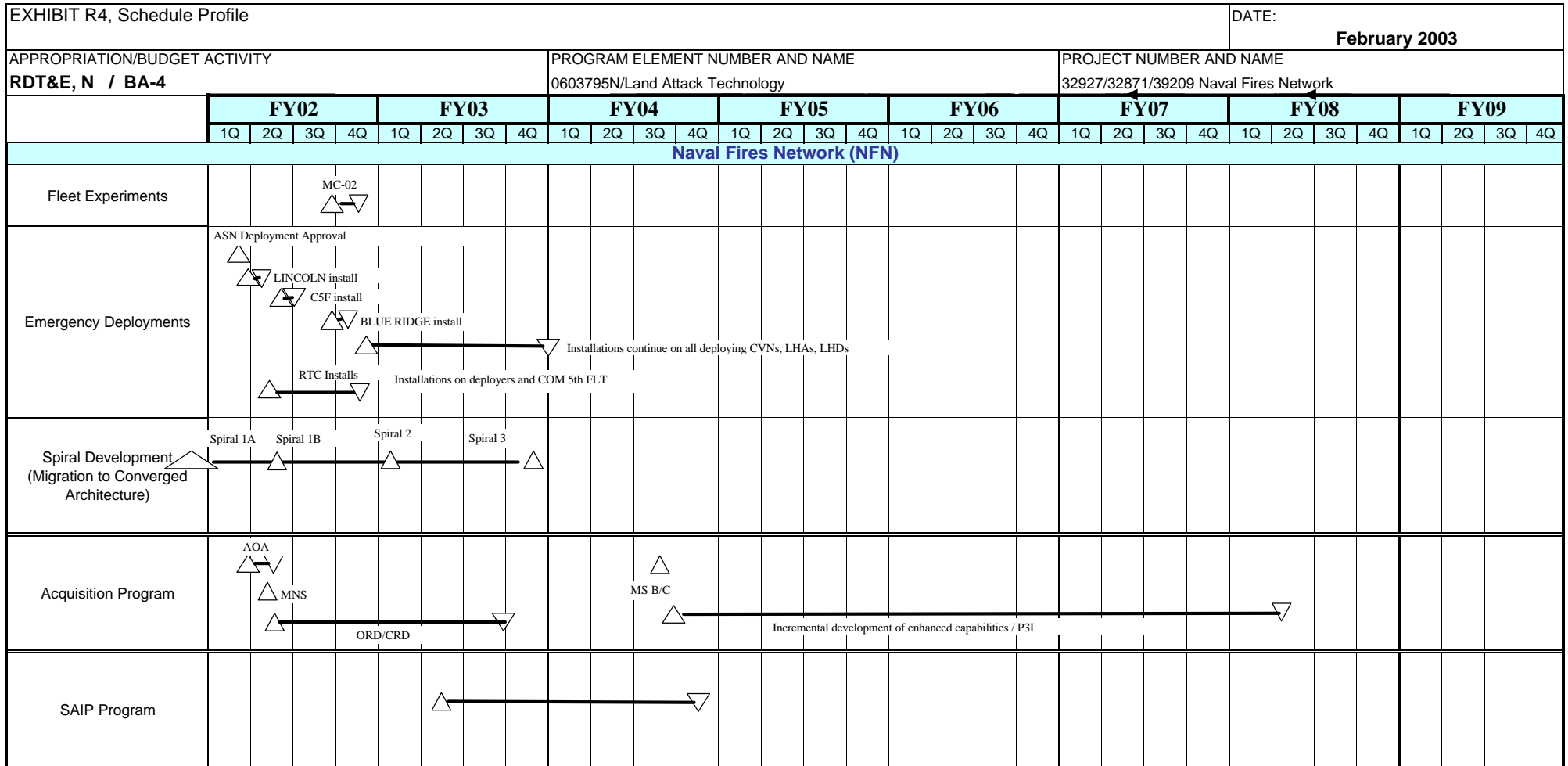
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Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 45 of 56)

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Exhibit R-4a, Schedule Detail						DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT				PROJECT NUMBER AND NAME				
RDT&E, N / BA-4	0603795N/Land Attack Technology				32927/32871/39209 Naval Fires Network				
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Fleet Experiments									
Millenium Challenge '02 (MC02)	3Q-4Q								
Emergency Deployments									
ASN Deployment Approval	1Q								
LINCOLN Install	1Q-2Q								
COMFIFTHFLT Install	2Q-3Q								
BLUE RIDGE Install	3Q-4Q								
Continuing Installs on all Deploying CVN, LHA, LHD	4Q	1Q-4Q	1Q						
RTC installations on deployers	2Q-4Q								
Spiral development (Migrationto Converged Architecture)									
Spiral 1A	1Q-2Q								
Spiral 1B	2Q-3Q								
Spiral 2		1Q-3Q							
Spiral 3		4Q							
Acquisition Program									
Analysis of Alternatives (AoA)	1Q-2Q								
Milestone B/C			3Q						
Mission Needs Statement (MNS)	2Q								
ORD/CRD	2Q-4Q	1Q-3Q							
Incremental Development of Enhanced Capabilities/P3I			3Q-4Q	1Q-4Q	1Q-4Q	1Q-4Q	1Q-2Q		

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Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 47 of 56)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2003	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology				PROJECT NUMBER AND NAME 39053/Integrated Deepwater System			
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Project Cost	2.071	11.000	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								
A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: These funds provide for evaluation of NDI Intermediate Caliber Gun Systems and interfacing fire control system for application in USCG Cutters in the Deepwater Program. The evaluation effort will include operability/maintainability demonstrations, engineering design assessment on selected intermediate caliber gun systems and planning of qualification process on selected intermediate caliber gun system and appropriate ammunition along with interfacing fire control and support systems in preparation for fleet introduction.								

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 39053/Integrated Deepwater System																	
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 02</td><td style="width: 15%; text-align: center;">FY 03</td><td style="width: 15%; text-align: center;">FY 04</td><td style="width: 15%; text-align: center;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.369</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Funding supports system architecture and design.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.369	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.369	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 15%; text-align: center;">FY 02</td><td style="width: 15%; text-align: center;">FY 03</td><td style="width: 15%; text-align: center;">FY 04</td><td style="width: 15%; text-align: center;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.857</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Funding supports the Intermediate Calibur gun system operability/maintainability demonstrations.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.857	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.857	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 30%;"></td><td style="width: 15%; text-align: center;">FY 02</td><td style="width: 15%; text-align: center;">FY 03</td><td style="width: 15%; text-align: center;">FY 04</td><td style="width: 15%; text-align: center;">FY 05</td></tr><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.435</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Funding provides for engineering design assessment.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.435	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.435	0.000	0.000	0.000															
RDT&E Articles Quantity																			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2003																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 39053/Integrated Deepwater System																	
B. Accomplishments/Planned Program (Cont.)																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.410</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Funding supports qualification planning including review of NDI gun/ammo international test results.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.410	0.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.410	0.000	0.000	0.000															
RDT&E Articles Quantity																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 02</th><th style="width: 15%;">FY 03</th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">0.000</td><td style="text-align: center;">11.000</td><td style="text-align: center;">0.000</td><td style="text-align: center;">0.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table> <div style="border: 1px solid black; height: 60px; margin-top: 10px; padding: 5px;">Funding provides for Gun/Ammo qualification test and procurement of 57mm Ammo.</div>						FY 02	FY 03	FY 04	FY 05	Accomplishments/Effort/Subtotal Cost	0.000	11.000	0.000	0.000	RDT&E Articles Quantity				
	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	11.000	0.000	0.000															
RDT&E Articles Quantity																			
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	FY 02	FY 03	FY 04	FY 05															
Accomplishments/Effort/Subtotal Cost	0.000	0.000	0.000	0.000															
RDT&E Articles Quantity																			

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			February 2003	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
RDT&E, N / BA-4	0603795N/Land Attack Technology	39053/Integrated Deepwater System		
C. PROGRAM CHANGE SUMMARY:				
Funding:	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget: (FY 03 Pres Controls)	2.081	0.000	0.000	0.000
Current BES/President's Budget (FY 04 President Controls)	2.071	0.000	0.000	0.000
Congressional Recission Earmark		11.000	0.000	0.000
Total Adjustments	-2.081	11.000	0.000	0.000
Summary of Adjustments				
Sec. 313, PL 107-206: Revised	-0.004	0.000	0.000	0.000
Economic Assumptions (SEC.813)	-0.006	0.000	0.000	0.000
Congressional Recission Earmark	0.000	11.000	0.000	0.000
Subtotal	-0.010	11.000	0.000	0.000
Schedule:				
N/A				
Technical:				
N/A				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2003
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-4	PROGRAM ELEMENT NUMBER AND NAME 0603795N/Land Attack Technology	PROJECT NUMBER AND NAME 39053/Integrated Deepwater System
D. OTHER PROGRAM FUNDING SUMMARY: N/A		
E. ACQUISITION STRATEGY: The Naval Surface Warfare Center, Dahlgren Division, is the lead agency for conducting the gun/ammo evaluation and is to develop an evaluation plan with operability /maintainability demonstrations and engineering assessment activity. The operability/maintainability demonstration is to be conducted at the NSWC Louisville facility. NSWC Dahlgren facility will develop a qualification plan for the selected gun and ammo including an assessment of international naval testing of the selected gun system and interface requirements. Upon completion of the government conducted evaluation process and architectural design assessment, the USN will recommend the appropriate ICGS for application in USCG ships. The ICGS evaluation is to be conducted by NSWC since they are responsible for all USN gunnery.		
F. MAJOR PERFORMERS: NSWC Dahlgren - Integrated Deepwater System Demonstration NSWC Louisville - Integrated Deepwater System Demonstration		

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2003				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			39053/Integrated Deepwater System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
IDS Demonstration	WR	NSWC Louisville	0.865	0.000		0.000		0.000		0.000	0.865	
	WX	NSWC Dahlgren	1.196	11.000		0.000		0.000		0.000	12.196	
Primary Hardware Development											0.000	
Ancillary Hardware Development											0.000	
Component Development											0.000	
Ship Integration											0.000	
Systems Engineering											0.000	
Training Development											0.000	
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			2.061	11.000		0.000		0.000		0.000	13.061	
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, Project Cost Analysis
R-3 39053 (53 of 56)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)									DATE: February 2003			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-4			0603795N/Land Attack Technology			39053/Integrated Deepwater System						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	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	
Remarks:												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel			0.010								0.010	
Labor (Research Personnel)											0.000	
SBIR Assessment											0.000	
Subtotal Management			0.010	0.000		0.000		0.000		0.000	0.010	
Remarks:												
Total Cost			2.071	11.000		0.000		0.000		0.000	13.071	
Remarks:												

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Exhibit R-3, Project Cost Analysis
R-3 39053 cont. (54 of 56)

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EXHIBIT R4, Schedule Profile

DATE:

February 2003

APPROPRIATION/BUDGET ACTIVITY

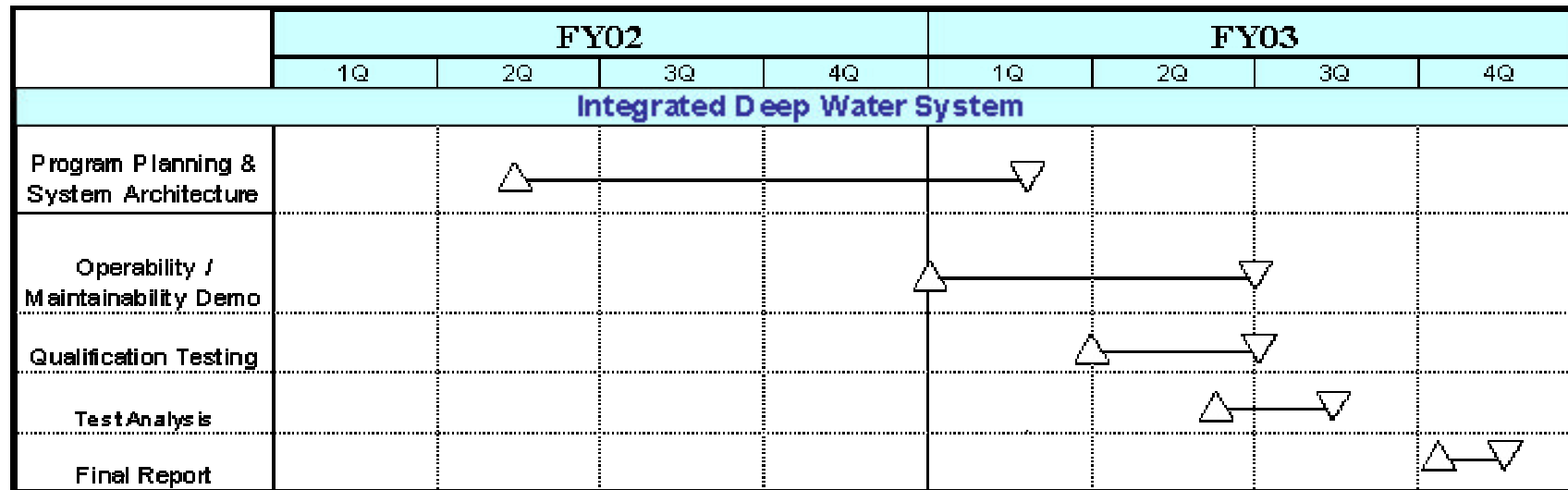
RDT&E, N / BA-4

PROGRAM ELEMENT NUMBER AND NAME

0603795N/Land Attack Technology

PROJECT NUMBER AND NAME

39053/Integrated Deepwater System



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Exhibit R-4a, Schedule Detail						DATE: February 2003		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT				PROJECT NUMBER AND NAME		
RDT&E, N / BA-4		0603795N/Land Attack Technology				39053/Integrated Deepwater System		
Schedule Profile	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Prototype Phase		1Q-3Q						
System Design Review (SDR)								
Milestone II (MSII)								
Contract Preparation								
Software Specification Review (SSR)	4Q							
Preliminary Design Review (PDR)								
System Development		1Q-2Q						
Critical Design Review (CDR)								
Quality Design and Build								
Test Readiness Review (TRR)		1Q						
Developmental Testing (DT-IIA)			2Q					
Eng Dev Model (EDM) Radar Delivery - Lab	3Q							
Software Delivery 1XXSW								
Preproduction Readiness Review (PRR)								
EDM Radar Delivery - Flt Related								
Milestone C (MS C)								
Operational Testing (OT-IIA)								
Start Low-Rate Initial Production I (LRIP I)								
Software Delivery 2XXSW								
Developmental Testing (DT-IIB1)								
Developmental Testing (DT-IIB2)								
Start Low-Rate Initial Production II								
Operational Testing (OT-IIB)								
Developmental Testing (DT-IIC)								
Functional Configuration Audit (FCA)								
Low-Rate Initial Production I Delivery								
Technical Evaluation (TECHEVAL)								
Physical Configuration Audit								
Operational Evaluation (OT-IIC) (OPEVAL)								
Low-Rate Initial Production II Delivery								
IOC								
Full Rate Production (FRP) Decision								
Full Rate Production Start								
First Deployment								

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Exhibit R-4a, Schedule Detail

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